

# memorandum

DATE: August 23, 2010 Audit Report Number: OAS-L-10-08

REPLY TO:

ATTN OF: IG-32 (A10OR006)

SUBJECT: Final Report on "National Nuclear Security Administration's Contracts for the Down-Blending of Highly Enriched Uranium"

TO: Assistant Deputy Administrator for Fissile Materials Disposition, NA-26  
Director, Office of Acquisition and Supply Management, NA-63

## INTRODUCTION AND OBJECTIVE

To support nonproliferation objectives, the National Nuclear Security Administration (NNSA) manages a program for converting surplus highly enriched uranium (HEU) to low enriched uranium (LEU) suitable for use in commercial nuclear reactors. Under this program, NNSA entered into agreements with a private contractor to produce LEU by blending HEU with natural uranium. Since 1994, NNSA has declared 209 metric tons of HEU as surplus to national security needs and has disposed of 132 metric tons.

NNSA awarded WesDyne International, LLC (WesDyne), a wholly owned subsidiary of Westinghouse Electric Company, LLC (Westinghouse), two fixed-price contracts to down-blend 29.5 metric tons of HEU and store the resulting LEU. The combined value of these contracts, issued in 2007 and 2009, was \$314 million. Under both contracts, WesDyne functions as the project manager, overseeing down-blending work performed by its subcontractor Nuclear Fuel Services, Inc. (NFS). The Government's LEU is stored at a Westinghouse facility in Columbia, South Carolina. Both contracts are based on fixed-price bartering arrangements, in which NNSA compensates WesDyne with goods rather than money, transferring title (ownership) to a portion of the LEU generated. In total, the contracts are expected to generate about 510 metric tons of LEU, approximately 397 metric tons, worth over \$900 million at current market values, will be Government-owned. The remainder will be bartered to WesDyne as payment for down-blending the HEU. Attachments 2 and 3 describe the organizations involved and the amount of LEU generated in more detail.

Because of the value of the LEU generated and stored, we initiated this audit to determine if NNSA's management of the WesDyne contracts fully protects Government interests.

## CONCLUSIONS AND OBSERVATIONS

NNSA's management of certain insurance and financial guarantees associated with the WesDyne contracts may not fully protect the Government from potential losses.

Specifically, NNSA had not reviewed insurance covering the Government's LEU and had not secured a financial guarantee for the 2009 down-blending contract, factors that increased Government risk.

### Insurance Coverage

NNSA had not ensured that insurance coverage provided by the contractor was adequate to protect the Government's financial interest in LEU. As part of its bartering contracts, NNSA required the contractor to maintain insurance to protect the Government-owned LEU against risk of loss. Although Westinghouse, WesDyne's corporate parent provided the required insurance coverage, NNSA had not determined whether there were any special terms or conditions that could limit the indemnification of any Government loss. Specifically, NNSA relied on evidence of insurance coverage provided by WesDyne that outlined general provisions of coverage, but did not identify all terms, conditions, limitations, exclusions, and cancellation provisions that may exist in the policy. NNSA officials confirmed that they did not know whether there were any provisions to the Westinghouse-provided insurance that could limit indemnification of any loss to the Government. However, when we pointed out the lack of information on policy exclusions, NNSA, to its credit, requested and received additional clarification on exclusions. For example, recent correspondence clarified that the policy excludes losses caused by "disappearance" or an "inventory shortage." We concluded that NNSA's lack of knowledge about specific provisions of the insurance coverage increased the risk that the Government's interest in the LEU may not be adequately protected.

Further, we found that changes to the policy had not been communicated to NNSA by WesDyne, Westinghouse or the insurance provider and therefore, had not been reviewed by NNSA. In 2009, without notification, Westinghouse increased the deductible of its blanket corporate policy from \$6 million to \$25 million. NNSA officials were unaware of the increase until we brought it to their attention. Subsequently, the contractor informed NNSA that the deductible had been decreased to \$5 million.

NNSA did not have adequate information about insurance coverage because the contracts with WesDyne for the down-blending lacked a provision required by the Federal Acquisition Regulation (FAR). Specifically:

- NNSA's down-blending contracts lacked a FAR provision stating the Government must be notified before any material changes to insurance policies protecting Government property take effect. Specifically, FAR 28.302 states, "When the Government requires the contractor to provide insurance coverage, the policies shall contain an endorsement that any cancellation or material change in the coverage adversely affecting the Government's interest shall not be effective unless the insurer or contractor gives written notice of cancellation or change as required by the contracting officer." Once we notified NNSA of the missing provision, the contracting officer directed WesDyne to include the FAR 28.302 required endorsement in the insurance policy; however, WesDyne had not, to date, added the required language to the insurance policy. WesDyne stated that since the requirement was not included in the contract, it chose to add an alternative notice of change and

cancellation to the policy. The new policy endorsement states, "In the event of any material change or cancellation of this insurance, Insurer will endeavour to give the United States of America (Department of Energy) 30 days written notice, but will not be held liable for any failure so to do." Although the endorsement commits the insurance provider to "endeavour" to notify the Department of Energy about material changes or cancellation of the policy, it does not, as required by the FAR, prohibit such changes or cancellation from taking effect until the Department is notified.

- NNSA did not have a current Certificate of Insurance (Certificate) disclosing the existing terms of the policy. The Certificate on file had lapsed nine months prior to our review. Consequently, the most current information concerning insurance coverage had not been reviewed. When we notified NNSA of the lapse, officials took immediate action to obtain a current Certificate.

Finally, we noted that NNSA did not have formal policies or procedures in place to periodically assess the adequacy of insurance coverage, increasing the risk that Government LEU is not adequately insured. The Certificate indicated that the insurance policy, which covered all property owned or in the possession of Westinghouse, had an indemnity limit of \$800 million. While the amount of insurance coverage in effect may be sufficient during the early stages of the two WesDyne contracts, it may become insufficient as the volume of LEU in storage increases. In fact, when all HEU down-blending operations are complete, Westinghouse will have about \$900 million of Government-owned LEU in storage, or \$100 million more than the \$800 million annual indemnity limit that covers all Westinghouse property. According to procurement officials, the NNSA Service Center had little experience in awarding contracts financed via bartering agreements wherein LEU is provided as payment for services.

#### Financial Guarantee

NNSA had required WesDyne to provide the Government with a financial assurance guarantee on the 2007 HEU down-blending contract but had not required this additional protection on the 2009 contract. The Toshiba Corporation, corporate parent of Westinghouse and WesDyne, had provided NNSA with an unconditional financial assurance on the 2007 contract, stating it would pay the Government the full market value for LEU in Westinghouse's possession that was not available for any reason according to the terms of the contract. This guarantee provided additional assurance that the corporate parent would cover WesDyne's liability in the event the company could not fulfill its obligations to deliver LEU.

NNSA officials stated that the decision to forego a guaranty on the 2009 contract was based on their belief that there was no financial risk or risk of loss due to risk mitigation safeguards in place. Specifically, they stated that WesDyne had been performing successfully under the 2007 contract; the 2009 contract's performance period was limited to nine years; a use for the down-blended material had been identified; and, the Nuclear Regulatory Commission closely monitors LEU. We recognize the judgment involved in deciding whether a corporate financial assurance is warranted. However, given the size and value of the assets involved, we

concluded that incorporation of a financial guarantee in the 2009 contract would serve to further reduce risks to the Government.

### Increased Risk

To its credit, NNSA had implemented several positive controls related to the oversight of the down-blending contracts. For example, title (ownership) of HEU and the derived LEU, remains with the Government. Also, NNSA receives detailed nuclear material reconciliation reports and invoices to monitor progress. Nonetheless, the problems we identified in this report increase the risk that high value Government assets may not be fully protected.

### SUGGESTED ACTIONS

Because of the importance of ensuring adequate insurance coverage for the Government's LEU, we suggest that the Assistant Deputy Administrator, Office of Fissile Materials Disposition, work with the contracting officer to modify both WesDyne contracts to incorporate the requirement that procurement officials be notified prior to any cancellation of, or material change to, insurance policies protecting Government interests. In addition, we also suggest that the Director, Office of Acquisition and Supply Management develop formal procedures for reviewing the adequacy of insurance policies protecting high value Government assets.

No formal recommendations are being made in this report and a formal response is not required. We appreciate the cooperation of your staff that provided information or assistance.



Joanne Hill, Director  
Energy Audits Division  
Office of Inspector General

### Attachments

cc: Associate Director, Office of Business Services, NNSA Service Center  
Director, Policy and Internal Controls Management, NA-66  
Audit Liaison, NNSA Service Center  
Director, Office of Risk Management, CF-80  
Team Leader, Office of Risk Management, CF-80  
Audit Resolution Specialist, Office of Risk Management, CF-80

## SCOPE AND METHODOLOGY

The audit was performed from October 2009 through July 2010, at National Nuclear Security Administration's (NNSA) Office of Fissile Materials Disposition in Washington, DC, the Y-12 National Security Complex in Oak Ridge, TN, and the NNSA Service Center in Albuquerque, NM. The scope of the audit was limited to highly enriched uranium (HEU) down-blending and storage contracts awarded to WesDyne International, LLC (WesDyne) in 2007 and 2009.

To accomplish the audit objective, we:

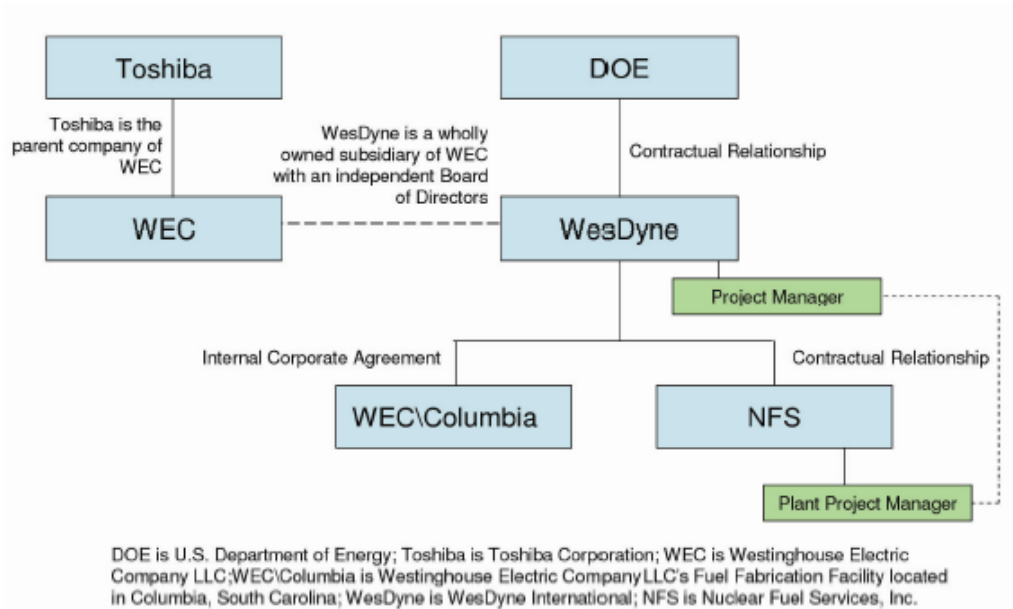
- Reviewed the Department of Energy's 2008 excess uranium inventory policy and management plan;
- Analyzed NNSA's June 2007 and July 2009 contracts with WesDyne for down-blending 17.4 and 12.1 metric tons of HEU respectively and the long term storage of the resulting low enriched uranium (LEU);
- Reviewed WesDyne's insurance certificates;
- Calculated the current value of the resulting LEU;
- Reviewed the WesDyne bids and NNSA's evaluations for both contracts; and,
- Discussed the contract award and administration process with NNSA and contractor personnel.

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those Standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. The audit included tests of controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. Also, we examined NNSA's compliance with the Government Performance and Results Act of 1993 and found NNSA established performance measures related to achieving nonproliferation objectives. Finally, we did not rely on computerized data to accomplish the audit objective.

NNSA waived the exit conference.

Organizational Relationships

As shown below, WesDyne International, LLC (WesDyne) is a wholly owned subsidiary of Westinghouse. WEC\Columbia is a Westinghouse fuel fabrication facility. The Toshiba Corporation, as the parent company of Westinghouse, is also the parent of WesDyne.



Source: WesDyne contract proposal

Nuclear Fuel Services, Inc. is the company down-blending the Government's highly enriched uranium for WesDyne.

WEC\Columbia is the company responsible for the long term storage of the Government's low enriched uranium inventory under these two contracts.

Contract Amounts

As shown below, National Nuclear Security Administration's (NNSA) two highly enriched uranium (HEU) down-blending contracts will generate about 397 metric tons of Government-owned low enriched uranium (LEU). This is equivalent to about 875,000 pounds. The contracts require that 80 metric tons of LEU will be available for rapid delivery. The remaining 317 metric tons will be commingled with Westinghouse's working stock at a fuel fabrication facility in Columbia, South Carolina.

**Amounts of HEU Down-Blended and LEU Stored  
(In Metric Tons)**

	<u>Contract 1</u>	<u>Contract 2</u>	<u>Total</u>
HEU being down-blended	17.4	12.1	39.5
Total LEU being generated	290	220	510
LEU bartered as compensation	<u>51</u>	<u>62</u>	<u>113</u>
Remaining Government-owned LEU	239	158	397
LEU stored for rapid delivery	<u>40</u>	<u>40</u>	<u>80</u>
LEU in commingled long-term storage	<u>199</u>	<u>118</u>	<u>317</u>

## CUSTOMER RESPONSE FORM

The Office of Inspector General has a continuing interest in improving the usefulness of its products. We wish to make our reports as responsive as possible to our customers' requirements, and, therefore, ask that you consider sharing your thoughts with us. On the back of this form, you may suggest improvements to enhance the effectiveness of future reports. Please include answers to the following questions if they are applicable to you:

1. What additional background information about the selection, scheduling, scope, or procedures of the inspection would have been helpful to the reader in understanding this report?
2. What additional information related to findings and recommendations could have been included in the report to assist management in implementing corrective actions?
3. What format, stylistic, or organizational changes might have made this report's overall message more clear to the reader?
4. What additional actions could the Office of Inspector General have taken on the issues discussed in this report which would have been helpful?
5. Please include your name and telephone number so that we may contact you should we have any questions about your comments.

Name \_\_\_\_\_ Date \_\_\_\_\_

Telephone \_\_\_\_\_ Organization \_\_\_\_\_

When you have completed this form, you may telefax it to the Office of Inspector General at (202) 586-0948, or you may mail it to:

Office of Inspector General (IG-1)  
Department of Energy  
Washington, DC 20585

ATTN: Customer Relations

If you wish to discuss this report or your comments with a staff member of the Office of Inspector General, please contact Felicia Jones at (202) 586-7013.



This page intentionally left blank.

The Office of Inspector General wants to make the distribution of its reports as customer friendly and cost effective as possible. Therefore, this report will be available electronically through the Internet at the following address:

U.S. Department of Energy Office of Inspector General Home Page  
<http://www.ig.energy.gov>

Your comments would be appreciated and can be provided on the Customer Response Form.