United States Government Department of Energy

Memorandum

DATE: DEC 2 0 2010

ATTN OF: NE-32

SUBJECT: Delegation of Acquisition Executive (AE) Authority for the Material Security and Consolidation Project (08-D-702)

TO: Richard B. Provencher, Manager, Idaho Operations Office

In accordance with the requirements of Department of Energy Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, and pursuant to my responsibilities as AE, I hereby delegate to you AE authority for the Material Security and Consolidation Project. The attached project scope/direction is to be utilized throughout the project, beginning with the preparation of Critical Decision 1, *Approve Alternative Selection and Cost Range*, project documentation.

If you have any questions, please contact me or have your staff contact Michael Worley at (301) 903-9496.

Dennis M. Miotla
Deputy Assistant Secretary
for Nuclear Facility Operations
Office of Nuclear Energy

Attachment

cc: T. Bishop, NE-32
M. Worley, NE-31

MATERIAL SECURITY AND CONSOLIDATION PROJECT DIRECTION

PROJECT SCOPE

Additional onsite material storage is essential to address the expanded research and development activities at Idaho National Laboratory and to open up research complexes to a broader audience. Additional onsite storage capabilities are also essential to support planned disposition activities to reduce the site's inventory of spent nuclear fuel as required by the 1995 Settlement Agreement between the State of Idaho and the Department of Energy.

ALIGNMENT

The Idaho National Laboratory views its unique nuclear R&D capabilities and infrastructure as national assets to be available to universities, industry, national laboratories, international research organizations, and other federal agencies. DOE-NE seeks to involve the best experts from across the nuclear energy community in its research, including national and international partners from the government, as well as private and education sectors. The INL seeks to offer its capabilities and related nuclear science and engineering infrastructure to these experts to advance DOE-NE research goals.

To achieve the vision of a laboratory-wide user facility, the INL must enhance the accessibility of INL capabilities to outside users. The number of uncleared, on-site visitors and collaborative partners has grown over the past few years and will continue to grow into the foreseeable future, increasing the need for unrestricted access to experimental capabilities in an open campus environment. Additionally, work utilizing nuclear materials for research and development purposes as well as the disposition of unwanted materials is projected to grow, resulting in increased demands to utilize and access limited nuclear work space and storage areas.

DRIVERS

The primary internal and external drivers to establish additional onsite material storage areas at the INL are growth of R&D programs and personnel requiring access to nuclear material, increased material disposition campaigns, and the 1995 Settlement Agreement between the State of Idaho and the Department of Energy.

CAPABILITY GAP

Per the Settlement Agreement between the State of Idaho and the Department of Energy dated October 16, 1995 DOE is required to remove all spent fuel not being maintained for purposes of testing from the INL by 2035 with an interim milestone of removing all fuel from wet storage by 2023. In order to fulfill this agreement, the INL has developed a focused campaign aimed at reducing the Laboratory's liability associated with continued storage of highly enriched sodium bonded fuel. This campaign will disposition 2.3 metric tons of EBR-II fuel over the next 6-7 years. This campaign will recover uranium product with a purity level and physical form that will facilitate disposition via the commercial fuel cycle. The INL does not currently have adequate storage capacity to meet the needs of this campaign. Existing storage space is limited

and collocated with R&D and material disposition activities. Utilization of the existing storage facilities will hinder R&D activities and material disposition operations and stress space restrictions associated with special nuclear material storage. An alternate storage facility for the recovered uranium product is necessary in order to support this campaign which is required to begin meeting the obligations of the 1995 Settlement Agreement.

Project Risks

1. Project utilizes existing technology and techniques resulting in low technical project risk.
2. Project will utilize appropriated funds resulting in a low cost and schedule project risk.
3. The risk of injury or death to workers would be similar to that of workers in an industrial environment, resulting in a low to medium project safety risk.

Importance of Mission Need and Impact if Not Approved

Disposition of excess nuclear material is mandated under the 1995 Settle Agreement between the State of Idaho and the Department of Energy and supports Department of Energy Strategic Goal for Nuclear Security. The Material Security and Consolidation project is Congressionally mandated. If this project is not successfully completed the INL's ability to support expanded research and development and material disposition activities will be severely impacted which will also constitute an adverse impact on the Site's ability to fulfill the obligations set forth in the 1995 Settlement Agreement.

APPROACH

Alternatives to be Evaluated

1. No Action
2. Reactivate CPP-651
3. CPP-691

Applicable Assumptions, Conditions and Interfaces

1. Achieving the vision of a laboratory-wide user facility at INL is appropriate to achieve the goals set forth in the NE Road Map and is of high-priority.
2. Impact to ongoing research and development and material disposition activities must be minimized.
3. Applicable Safeguards and Security requirements must be implemented and personnel consulted to determine a recommended alternative.
4. The project will be completed by a federal and contractor team comprised of members from DOE-NE, DOE-ID and BEA

RESOURCE REQUIREMENTS AND SCHEDULE

ROM: $15M-$25M

Fiscal Year 2008, Consolidated Appropriations Act, Public Law 110-161, provided $14.713M in Line Item Capital Project Funding be authorized for a Material Security and Consolidation project at Idaho National Laboratory, under National Nuclear Security Administration (NNSA) "Weapons Activities" and Public Law 109-103 provided $4.9M be transferred from "Other Defense Activities" to "Weapons Activities" for special nuclear material consolidation activities associated with safeguards and security."

Schedule: CD-1 January 2011
CD-2/3 Beginning Fourth Quarter FY2011
CD-4 First Quarter FY2012