Revised Plutonium Strategy – Supplemental Information for the President’s FY 2013 Budget Request

NNSA has taken steps to ensure the Nation has a capabilities-based nuclear security enterprise focused on needs and solutions. We view this constrained budget environment as an additional incentive to ask ourselves how we can re-think the way we’re operating, how we can innovate, and how we can get better.

To that end, NNSA has decided to adjust our plutonium strategy by deferring construction of the CMRR nuclear facility (CMRR-NF) project at Los Alamos National Laboratory for at least five years. Instead we are focusing on how to ensure our plutonium needs are met by using the capabilities and expertise found at existing facilities. Utilizing existing facilities will allow us to ensure uninterrupted plutonium operations while focusing on other key modernization projects.

NNSA is fully committed to being responsible stewards of taxpayer dollars and doing our part in a time of fiscal austerity. Our decisions related to CMRR-NF are designed to ensure that NNSA is building a capabilities-based enterprise focused on needs and solutions while achieving President Obama’s nuclear security objectives.

Summary

- Construction for the CMRR-NF project is being deferred for at least five years.
- NNSA remains committed to ensuring continuity of required plutonium capability and mission functions, to include analytical chemistry, material characterization, and storage functions.
- The decision to defer CMRR-NF construction was made in close coordination with DoD.
- NNSA is conducting additional analysis to determine the most effective way to provide analytical chemistry and materials characterization capabilities originally slated for the CMRR-NF through the use of existing infrastructure, including use of the newly constructed and equipped Radiological Laboratory and Utility Office Building (RLUOB).
- NNSA will continue to reduce material at risk in PF-4 by looking at additional options. This budget request includes an additional $35M in FY 2013 to process, package, and ship excess nuclear material and maximize the use of existing day vault capacity in PF-4.
- In parallel, NNSA will continue the planned orderly phase out of program activities from the CMR building, concluding in approximately 2019.
- The work already done on the design of CMRR-NF will be substantially completed this fiscal year, with full documentation available for potential future use.

What is the plan for CMRR-NF FY2012 Funding?

- In FY 2012, Congress appropriated $200M of $300M requested for the CMRR project. NNSA plans to:
Complete RLUOB Equipment Installation (REI) – cost is approximately $35M

Use remaining appropriated funds to achieve a substantially complete design for the CMRR-NF by the end of FY 2012. While previous NNSA metrics targeted 90% design this year, this level of design maturity would require detailed design information from long-lead equipment vendors. With construction deferred for at least five years, NNSA has decided that procuring long lead equipment designs is not a prudent use of appropriated funding.

The significant amount invested in the CMRR-NF design will not be wasted. There are several immediate and future benefits resulting from development of a substantially complete design, including:

- Improved understanding of LANL seismology and the impacts to structural design and the design of facility safety systems. This information is of use to current projects in design and future Los Alamos projects, including the TRU Waste project and the Radioactive Liquid Waste Treatment Facility project.
- Improved understanding of the safety equipment requirements of a Hazard Category 2 Nuclear Facility for any future Hazard Category 2 facilities.
- Future and current projects benefit from lessons learned during CMRR-NF design and the design, construction, and equipment installation of the RLUOB.

**Revised Plutonium Strategy Highlights**

- CMRR-NF was not intended to produce the pits necessary for Life Extension Programs. CMRR-NF has been designed to provide several plutonium support functions, including analytical chemistry, material characterization, and plutonium storage capabilities.
- With the delay in CMRR-NF construction, NNSA will maintain the Nation’s plutonium capability using existing infrastructure and capabilities.
- NNSA will request LANL conduct detailed analysis to determine the most effective options to provide CMRR-NF capabilities using existing infrastructure, including:
  - optimized analytical chemistry equipment and processes within the new RLUOB, using recently approved NNSA guidance that allows up to four times the quantity of special nuclear material in the RLUOB,
  - consideration for sharing material characterization workload between PF-4 and the use of Building 332 at Livermore (Superblock) as a Hazard Category 2, Security Category 3 nuclear facility, and
  - consideration for staging bulk quantities of plutonium needed for future use in the Device Assembly Facility at the Nevada National Security Site.