Interested Parties
CMRR Presentation
September 25, 2012
Welcome to our 14th Meeting!
Be Inspired!

This is the 14th semi-annual public meeting required as part of a 2005 settlement between NMED DOE/LANL and an network of these community groups:

- Concerned Citizens for Nuclear Safety
- Embudo Valley Environmental Monitoring Group
- Loretto Community
- New Mexico Environmental Law Center
- Nuclear Watch New Mexico
- Peace Action New Mexico
- Tewa Women United
Welcome to our 14th Meeting!
Be Inspired!

Topics to be covered in this Chemistry and Metallurgy Research Replacement Project (CMRR) presentation:

1. 2013 Budget and CMRR Deferred
2. Funding Terminated
3. Use of Existing Facilities
4. Closeout Schedule
5. Questions
6. Clean Up Don’t Build Up
DOE/LANL Budget Priorities
FY2013

Los Alamos National Laboratory FY2013 Congressional Budget Request Compared to Previous Years
(Percent of Lab’s FY2013 Request Are Given. Amounts Are In Millions of $s.)

Nuclear Weapons Activities (59.1%)
Work For Others (14.5%)
Defense Environmental Cleanup (10.6%)
Defense Nuclear Nonproliferation (9.9%)
Science (3.5%)
Nuclear Energy (1.9%)
Other (0.5%)
Renewable Energy (0.09%)

FY2013 Request - ($1.89 billion total)
FY2012 Appropri. - ($1.95 billion total)
FY2011 Appropri. - ($2.17 billion total)

Numbers based on DOE’s FY 2013 Laboratory Tables except Work For Others, which is estimated for 2013. February 14, 2013

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CUTS: CMRR-NF FACILITY

The Obama Administration proposed deferring the construction of the CMRR-NF facility and meeting plutonium requirements by using existing facilities in the nuclear complex.
CMRR Project Design Cost

- Prior Spent: $425,832,000
- FY2011: $214,550,000
- FY2012: $200,000,000
- Total: $840,382,000
- RLOUB Building: ($165,000,000)
- RLUOB “Equipment”: ($199,000,000)
- Total CMRR-NF Design: $476,382,000
Reasons and a Memo

The Chemistry and Metallurgy Research Replacement (CMRR) project was started as a 2004 Project to support the NNSA plutonium-based missions.

- The initial scope for the project was based on a 2003 Conceptual Design Report.
- At Critical Decision 0 in July 2002, the estimate range for the project was $420M-$955M with a planned completion date of 1Q2011.
- At Critical Decision 1 in July 2005, the estimate range for the project was $745M-$975M with a planned completion date of 2013.
- The 2009 President's Budget Request noted that the Total Project Cost would exceed $2,000M.
- The 2012 President's Budget Request included a planned cost range of $3.7B-$5.8B. Reasons for the estimate growth include:
  - Project duration effectively doubled as a result of the government decision process and changes in project assumptions.
  - Nuclear facility construction was delayed at least 5 years from original expectation.
  - Requirements changed during project evolution.

The requirement for NNSA to produce 50-80 pits per year is documented in the Memorandum of Agreement between SecDef and SecEnergy in 2010.
DoD / DOE MOA

The requirement for NNSA to produce 50-80 pits per year is documented in the Memorandum of Agreement between SecDef and SecEnergy in 2010.

- Exact Rational was not stated in MOA.

2. As noted in Attachment 1, DOE agrees to use this transferred budget authority to supplement NNSA funding in order to fully fund the following:

- Complete the design and begin construction of the Chemistry and Metallurgy Research Facility Replacement (CMRR) nuclear facility (NF) at Los Alamos National Laboratory (LANL) – a facility that conducts plutonium research and development and provides analytical capabilities in support of pit surveillance and production. Plan and program to complete construction by 2020, and ramp up to full operations in 2022.

- Increase pit production capacity and capability at the adjoining PF-4 facility (part of the main plutonium facility) at LANL to demonstrate pit reuse by 2017 and production by 2018-2020. Plan and program to ramp up to a minimum of 50-80 pits/year in 2022.
Congress Terminates CMRR-NF

Shortly after 1:00 a.m. ET on Saturday morning (September 22), Congress effectively terminated an expanded nuclear weapons production complex at the CMRR-NF at the Los Alamos National Lab in New Mexico.
Congress Terminates CMRR-NF

Not mentioned in the 30-page long “Continuing Resolution” passed by the Senate Saturday morning was any language that provides additional funding the Chemistry and Metallurgy Research Replacement (CMRR) Nuclear Facility. The bill extended funding for the first six month of the budget year for the federal government, through March 2013. The House of Representatives had earlier passed an identical bill, and the measure now goes to the president, who will sign the bill.
Congress Terminates CMRR-NF

The defeat of the CMRR-NF was due to the hard work of many local and national organizations in New Mexico and Washington, DC.

Public Participation was essential!
FY2013 Budget to Optimize Use of Existing Infrastructure

Because the CMRR-NF is deferred for at least 5 years, Defense Nuclear Facilities Safety Board requested that LANL provide a final plan that includes:

A plan to substantially complete CMRR-NF design by the end of FY 2012 including design close-out activities to ensure project documentation is available for potential future use.
Use of Existing Facilities

DNFSB requested that LANL provide a final plan that includes:

• Maintain required material characterization capabilities using the Plutonium Facility and Building 332 at Livermore, CA, as a Hazard Category 2, Security Category 3 nuclear facility.

• Minimize nuclear material at the Plutonium Facility by processing, packaging, and shipping excess materials including a plan and estimated timeline to stage bulk quantities at the Device Assembly Facility (NV).
Use of Existing Facilities

Possible approach to meeting a 30-ppy production schedule
# NF Closeout Schedule

## Interim Activities for Substantially Complete

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<tr>
<th>Activity ID</th>
<th>Design</th>
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<tr>
<td>ENGR  W - LANL Engineering &amp; Design</td>
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<td>30-Oct-12</td>
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<tr>
<td>LLMS1120</td>
<td>NF Project Closeout Document Issued</td>
<td>30-Oct-12</td>
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<td><strong>SL-FDX-4  W - Final Design Schedule - S&amp;L</strong></td>
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<td>MS6005</td>
<td>Issue Structural Calc (Seismic) (SAP-2000)</td>
<td>24-Jul-12</td>
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<td>MS6003</td>
<td>Module Freeze (50%) - (17 of 34 Modules Design Frozen)</td>
<td>30-Jul-12</td>
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<td>MS6001</td>
<td>Issue Scope Books (50%) - (18 of 37 Scope Books Issued)</td>
<td>29-Aug-12</td>
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<td>MS6006</td>
<td>Issue Single Lines - (Last of the 5 Groups)</td>
<td>11-Sep-12</td>
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<td>MS6004</td>
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<td>MS6002</td>
<td>Issue All Scope Books (100%) - (37 Scope Books Issued)</td>
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**MER-FD-22  W - I3 and SFE Remaining Design 04FEB10 Mer (ID-3 Working)**  

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<td>Submit MTS Prototype Reliability Test Report</td>
<td>11-Jul-12</td>
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<td>MF00000545</td>
<td>Submit Enclosure Design Freeze Deliverable</td>
<td>13-Jul-12</td>
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<td>MF00000555</td>
<td>Submit Assay Lab 1 Design Freeze Deliverable</td>
<td>1-Aug-12</td>
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<td>MF00000525</td>
<td>Submit Assay Lab 1 Material Takeoff Deliverable</td>
<td>18-Sep-12</td>
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<td>MF00000575</td>
<td>Issue All Scope Books (100%) - (24 Scope Books Issued)</td>
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# Proposed schedule to execute revised Pu strategy

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Los Alamos National Laboratory
EST. 1943

Operated by Los Alamos National Security, LLC for NNSA

UNCLASSIFIED
Pu Increases at RLUOB

- Please describe “RLUOB Startup at 6g.” Why does it take two years?

- Please describe any increased equipment needs and staffing activities. Please be specific about the activities that will be conducted during the almost two year period of time. Please provide a timeline. Please be specific about the activities that will be conducted during the almost two year period of time. Please provide a timeline.
Pu Increases at RLUOB

- Please describe “RLUOB Equipment install for 26g.” Why does it take seven years?

- Please describe any increased equipment needs and staffing activities.

- Please be specific about the activities that will be conducted during the almost seven year period of time. Please provide a timeline.
NF Closeout Schedule
March 2012 GAO Report

Recommends that NNSA “conduct a comprehensive assessment of needed plutonium-related research, storage, and environmental testing needs for nuclear weapons stockpile activities as well as other missions currently conducted at other NNSA and DOE facilities.”

**What is the timeline for the assessment?**
As noted in the report, “NNSA’s decision to defer construction of the CMRR will give it sufficient time to conduct this assessment.”
“Concerns remain with overall RLUOB settlement costs in addition to recent deficiencies in Glovebox procurement and installation.”

What is meant by RLUOB settlement costs? Where they resolved? Who were the parties?

What are the concerns with the RLUOB settlement costs? How were they resolved?

What are the deficiencies in glovebox procurement and installation?
Questions

- What is the current final estimated cost range for the NF?
- When will the baseline estimate be released?
- What are the final estimates for costs of the deep option?
- What are the final estimates for costs of the shallow option?
- What is the current and future status of the design?
Questions

- How much was spent on CMRR-NF design?
- When will the design of the NF be 90% complete?
- What is the current percent of design completion?
- Where does the Critical Decision Process stand?
Increases to Air Permit

- Has NNSA/LANS done an analysis about whether the quadruple increase in the amount of plutonium allowed to be used in the RLUOB requires a modification to the Rad NESHAPs permit issued by the Environmental Protection Agency (EPA)? If so, please provide the documentation.

- What was the decision-making process that NNSA/LANS used to increase the amount of plutonium in the RLUOB. Please cite DOE orders.

- Please describe the public process associated with each.
Restore the LANL CMRR Website

- The Interested Parties respectfully request that the CMRR website, which contains the Settlement Agreement and documents pertaining to the semi-annual meetings, including the transcripts of the meetings, be kept current on the LANL website.

- The settlement agreement remains in effect since NNSA has not explicitly cancelled the CMRR-NF.
The Next Steps

- The Interested Parties request a meeting with the New Mexico Environment Department (NMED), Department of Energy (DOE) and Los Alamos National Laboratory (LANL) to discuss next steps with respect to the Settlement Agreement.

- The CMRR air permit, the subject of the Settlement Agreement, remains operative. The conditions of the Settlement Agreement, therefore, should remain in effect until the CMRR-NF is cancelled.

- For example, RLUOB upgrades to increase plutonium inventory need to be updated for the public.
• Many feel that the completion of the Consent Order is at risk.

• DOE/LANL/LANS should put construction of new projects, including CMRR, on hold until all the requirements of the Consent Order are funded first.

• Public Participation will continue to be essential.

Clean Up, Don’t Build Up!
References

LA-UR-12-21832 Approved for public release; distribution is unlimited. Title: Los Alamos National Laboratory Weapons Program Laboratory Director Update LANS/LLNS Mission Committee Author(s): Ventura, Jonathan S Intended for: LANS/LLNS Mission Committee (unclass conf call, 2012-06-04 (Los Alamos, New Mexico, United States)

LA-UR-12-22260 Approved for public release; distribution is unlimited. Title: CMRR Background Briefing to Senate Foreign Relations StaffAuthor(s): Leasure, Craig Intended for: Brief to Senate Foreign Relations Staff, 2012-06-19 (Los Alamos, New Mexico, United States)