

Interested Parties CMRR Presentation September 23, 2009



Interested Parties

Who we are:

- Concerned Citizens for Nuclear Safety
- Embudo Valley Environmental Monitoring Group
- Loretto Community
- Peace Action New Mexico
- TEWA Women United
- New Mexico Environmental Law Center
- Nuclear Watch of New Mexico

» www.nukewatch.org

Welcome to Our 8th Meeting!

- Public Involvement as Per Settlement Agreement
- Outline of Our Presentation
 - CMRR-Nuclear Facility Design Issues
 - Other Project Costs
 - RLUOB Equipment costs
 - Empty Space in the RLUOB

No Congressional Funding For NF Construction

- FY2010 budget request does not include a placeholder for construction
- “A future decision to proceed with construction of the Nuclear Facility and associated equipment has been deferred pending the outcome of the current ongoing Nuclear Posture Review and other strategic decision making. “
 - FY 2010 Congressional Budget Request, Vol.1, P. 215

CMRR Design Issues

- The CMRR project is now in its seventh year of planning and design.
- In 2002, the mission need appeared to be much larger than it is now.
- Today's mission need is not clear.

CMRR Cost Increases As Need Decreases

- The CMRR project was first introduced in the FY02 Budget to begin “planning”
- FY03 Estimated Cost for Design \$55M
- FY03 Preliminary Full Total Estimated Cost Projection \$350M to \$500M
- FY04 Total Project Cost Est. = \$600M
- FY05-07 estimates = ~ \$830M
- Current Estimate = over \$2 billion

CMRR Lab Space Decreases As Cost Increases

FY05 budget net lab space requirements:

- RLUOB = 20,000 net sf of lab space.
- NF = 45,000 net sf of lab space.
- FY05 Total Project Cost Estimate = \$600M
 - FY05 Congressional Budget Request, RTBF, PDF Pg. 222

FY06 budget net lab space requirements:

- RLUOB = 20,000 net sf of lab space.
- NF = 22,500 net sf of lab space.
- FY06 Total Project Cost Estimate = \$838M
 - FY06 Congressional Budget Request, RTBF, PDF Pg. 273

Senate Questions CMRR Size

FY2010 Senate Authorization Committee:

- “The committee continues to believe that replacing the existing facility is essential but the ***CMRR has significant unresolved issues including the appropriate size of the facility.*** Some of these decisions will not be made until the Nuclear Posture Review is completed at the end of the year.”

- Senate Report 111-035 - National Defense Authorization Act For FY2010

CMRR–NF design still supports annual production of 20–80 pits.

- The Complex Transformation Record of Decision (ROD) claims there is little difference in the size of a facility needed to support production rates between 1 and 80 components per year.
- Nowhere does the ROD say that the CMRR-NF is needed for less than 20 pits per year.
- NNSA has not identified a need to manufacture pits beyond about 2010.

Yet NF Design Work Continues

The Need for the NF is Not Urgent

- No RRW or new designed warheads
- Pit lifetimes study found pits last at least 85 years
- Thousands of pits in storage
- Existing Stockpile Certified Annually

Defense Nuclear Facilities Safety Board (DNFSB)

- Congressionally Mandated
- Independent
- Weekly Reports
- www.dnfsb.gov

Limitation on Funding Due to Seismic Issues

The 2009 National Defense Authorization Act required the Defense Nuclear Facilities Safety Board (DNFSB) and DOE to submit a certification to the congressional defense committees that the seismic concerns raised by the Board were resolved before certain funds for CMRR are made available.

Complex Geologic Setting Beneath CMRR

Hydrogeologic Synthesis Report

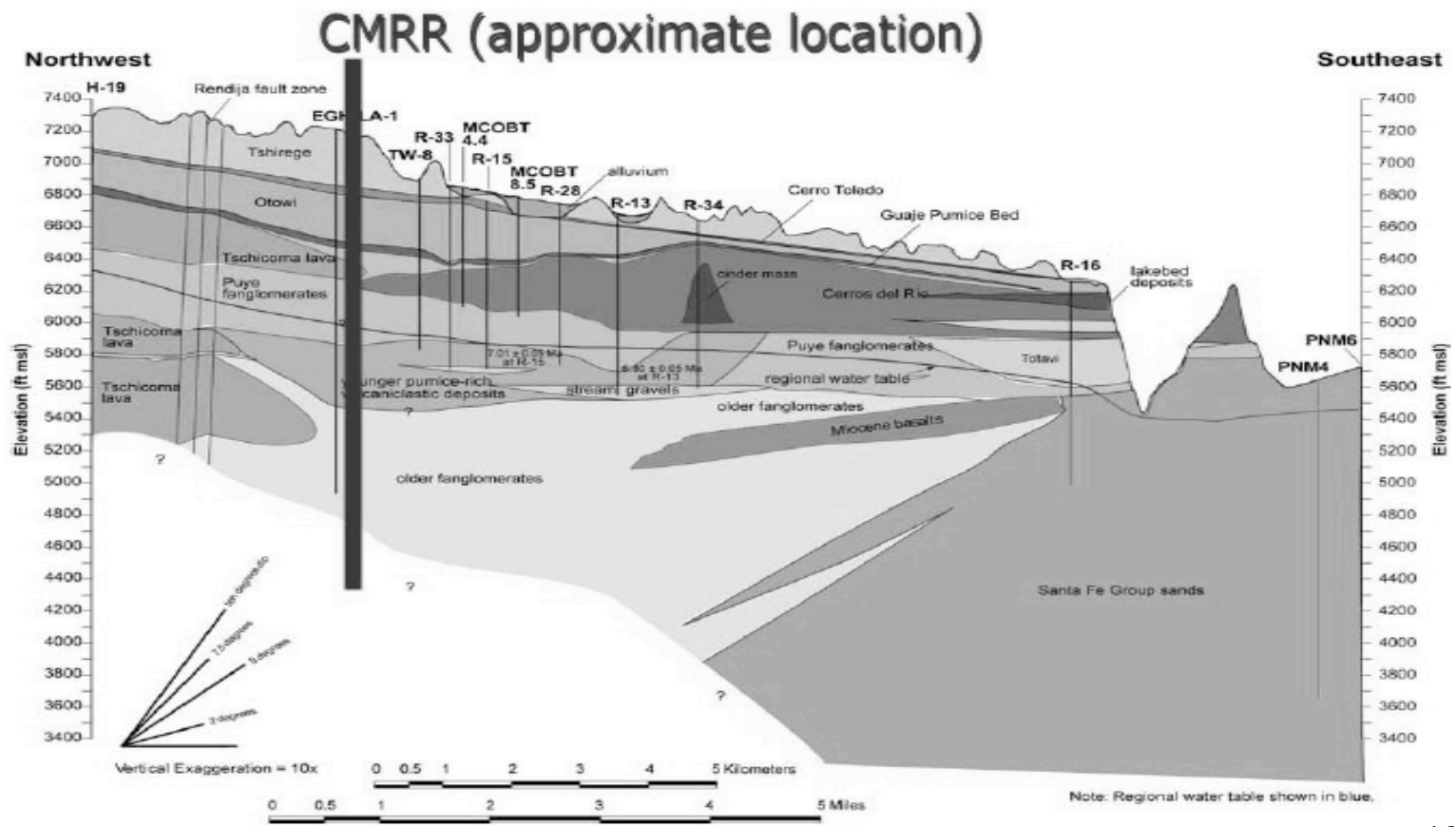


Figure 2-13. Conceptual cross-section for Mortandad Canyon. Regional water table is shown in blue.

Safety Board Signs Off

On August 26th, the DNFSB signed off on ongoing seismic and safety issues

This allows around \$50 million in funding to be released for its further design.

The Board had identified five certification findings ranging from structural and equipment seismic concerns to safety-related document and controls issues.

Safety Board Signs Off

- Just because CMRR-NF *can be built* is no reason that it *should be built*.
- Yet, the design for the Nuclear Facility pushes on.

Will NNSA Design a Smaller NF?

- What effects would a re-designed NF have on DNFSB certification?
- Can taxpayers money be saved on the NF project?
- What other options has NNSA explored?

350 New Fissile Material Operations? - LA-UR-09-03562

Phase II – CMRR Nuclear Facility

- **CMRR Nuclear Facility**
 - Hazard Cat. 2, Security Cat. 1 facility
 - Single building with ~22,500 ft² of lab space
 - Operations include
 - Actinide chemistry and materials characterization
 - Actinide R&D activities
 - SNM vaults
 - 306 glovebox enclosures
 - Extensive material transfer system
 - ~350 new fissile material operations



Other Costs - Move Road

Supplement Analysis/LANL Site-Wide EIS, Pajarito Road Realignment

- Current design of the CMRR Nuclear Facility, service road, and security standoff distance will require the realignment of Pajarito road.
 - DOE NEPA Status Chart Sept. 2009

Other Costs - Tunnel

CMRR-NF will be connected to PF-4 by an underground tunnel

- Original intent was to tap into an existing section of tunnel
- But, the existing tunnel will be occupied longer than originally assumed
- This likely require the CMRR project to design a new tunnel
 - DNFSB Los Alamos Report for Week Ending October 17, 2008

Other Costs - CMR

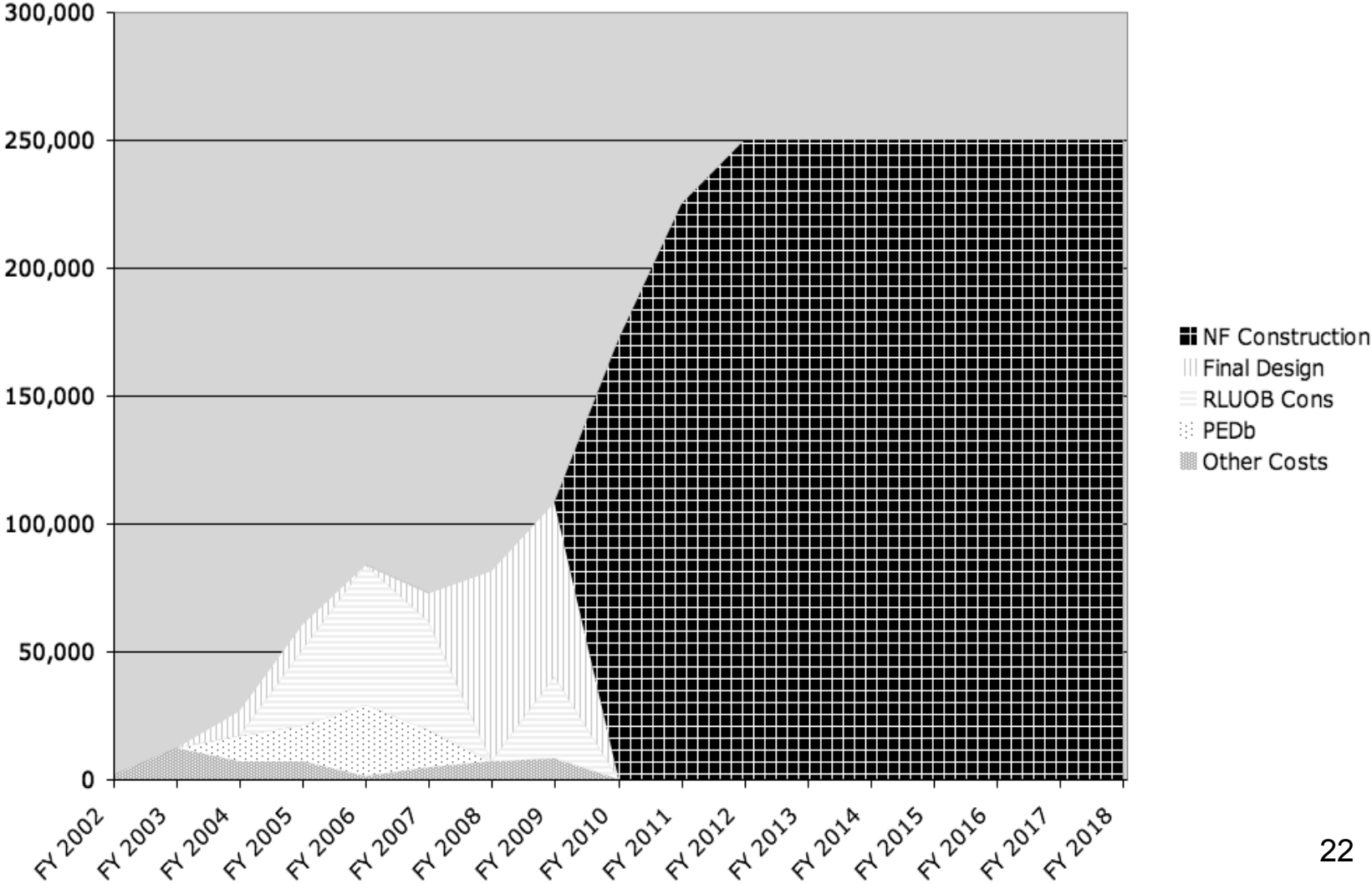
- LA-UR-09-04491 – NNSA commitment to Decontaminate and Decommission the old CMR upon CMRR completion.
 - Execution in the 2018 -202X timeframe
- Is NNSA planning on demolishing the old CMR?

Appropriations Through FY2009

- Preliminary Engineering and Design - \$65 million
- Final Design - \$129 million
- RLUOB Construction - \$199 million
- Other Costs - \$45 million
- Total Project Cost - \$438 million
- Total estimated cost (NF & RLUOB) - \$2.6 billion

CMRR Total Projected Costs

Chart by Nukewatch from FY10 CBR



RLUOB Lessons Learned

LA-UR-09-04491 UNCLASSIFIED

Energy Facilities Contractors Group Project Management Working Group

Chemistry and Metallurgy Research Building
Replacement (CMRR) Project
Los Alamos National Laboratory (LANL)
Construction Experience

Rick Holmes, PMP
CMRR Project Manager

July 21, 2009



UNCLASSIFIED



RLUOB Equipment Costs = \$199M

LA-UR-09-04491 UNCLASSIFIED

RLUOB Equipment Installation (REI) Performance Baseline – What happens next

Scope

Work elements include:

- Radioactive liquid waste tie-in
- Fuel oil storage tank
- Laboratory Floor build out and laboratory equipment
- Furniture
- Telecommunication services
- Radiation Protection Health Physics Equipment
- Physical security features (sensor field panels, card readers, installation tie-in, etc.)
- Parking for occupants

Cost

- TEC w/contingency - \$152.9M
- OPC w/contingency - \$46.5M
- TPC \$199.4M

Schedule

- Conditional Beneficial Occupancy (staff move-in) 1QFY12
- Final Facility Systems and System readiness achieved 3QFY13
- Contingency (\$41.6M, 26%)
summary – confidence level at 85%

Defining Equipment

- FY10 CBR - Equipment installation includes gloveboxes, hoods, AC/MC instrumentation, security and communication hardware, and final facility tie-ins and operational readiness/turnover activities.
- Furniture?
- Parking Lot?

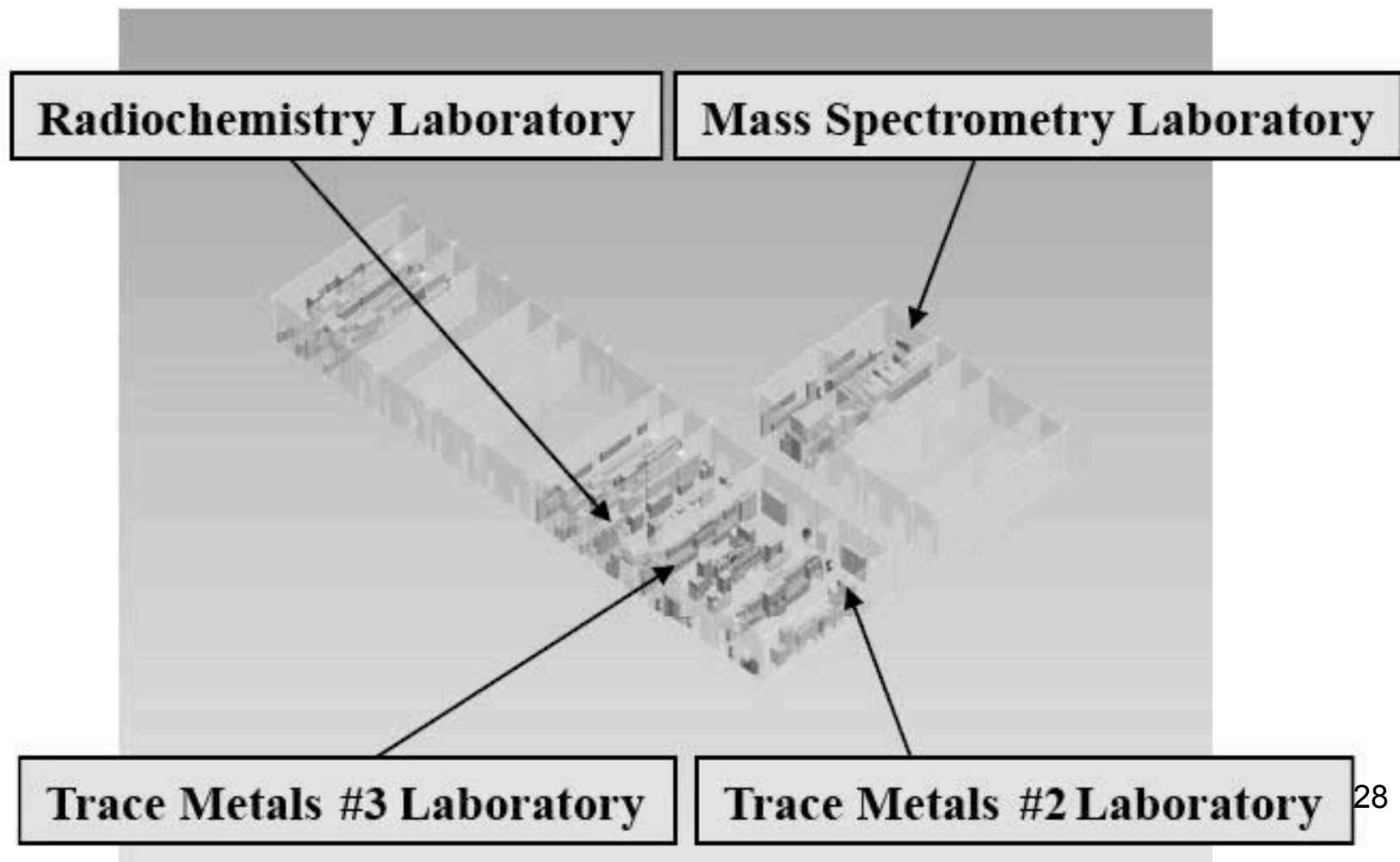
Old CMR Exit Plan

- In August 2008, NNSA stated its intent to transition all program activities out of the Old CMR facility as soon as practicable.
- This guidance directed development of a Old CMR exit plan that assumed that Building PF-4 at TA-55 and the CMRR - RLUOB would be available while the CMRR- NF would not.
- This could mean up to a nine-year gap between CMR closure and CMRR completion.

Empty Space in the RLUOB

- The Lab is still only planning to equip 4 of 26 lab modules in the RLUOB.
 - FY2010 CBR Vol. 1

Artist Rendering Shows Unused RLUOB Space



The Nuclear Facility stands in the way of LANL's future

- To build the CMRR-NF or not is ultimately about future mission diversification or not at LANL.
- LANL should be seeking a slice of the mission diversification pie rather than building for further retrenchment in the shrinking nuclear weapons business.

“We will complete a Nuclear Posture Review that opens the door to deeper cuts, and reduces the role of nuclear weapons.”

~ Remarks of President Barack Obama

Address to the United Nations General Assembly

September 23, 2009