Nuclear Watch New Mexico

Talking Points on the CMRR Draft Supplemental Environmental Impact Statement

Introduction:

In 2003, pursuant to the National Environmental Policy Act (NEPA), the Department of Energy's semi-autonomous National Nuclear Security Administration (NNSA) completed an Environmental Impact Statement for its proposed Chemistry and Metallurgy Research Replacement (CMRR) Project at the Los Alamos National Laboratory (LANL). Simply put, **CMRR** is a huge new plutonium facility for expanded nuclear weapons production.

CMRR's first phase, the 185,000 square-feet "Radiological Laboratory, Utility and Office Building" (RULOB or "Rad Lab"), was completed in September 2009, costing \$400 million (including equipment), but will not handle large quantities of "special nuclear materials," like plutonium. For that purpose, the CMRR's final phase is the proposed "Nuclear Facility." The Nuclear Facility (NF) will provide crucial "materials characterization" and "analytical chemistry" in direct support of plutonium pit production.

If built, the Nuclear Facility will be located next door to Plutonium Facility-4 (PF-4), LANL's existing pit production facility, and the two will be physically linked to each other via underground tunnel. The NF will also supply PF-4 and LANL's plutonium complex with a vault to store up to six metric tons of plutonium. As such the NF will be the keystone to an expanded plutonium complex at LANL capable of quadrupling the current production capability of 20 pits per year to up to 80.

Design of the Nuclear Facility has already cost nearly a half billion dollars and is still only $\sim 50\%$ complete. Because of the recognition of greater seismic risks and a proposed 50% increase in size, NNSA was compelled by citizen pressure to prepare a supplemental EIS, which was released on April 22.

The draft CMRR-Nuclear Facility Supplemental Environmental Impact Statement is available at < http://nnsa.energy.gov/nepa/cmrrseis>. Written public comment will be accepted by the NNSA until June 28 and should be e-mailed to mailto:nepalaso@doeal.gov>. Nuclear Watch NM will have sample comments at www.nukewatch.org by June 21.

Conclusion:

The hastily prepared draft Supplemental EIS is incomplete, inadequate and should be withdrawn until a more thorough Supplement or a completely new EIS can be prepared.

The Draft CMRR-Nuclear Facility SEIS is deficient because:

Purpose and need is not reexamined. The Draft SEIS claims, "The purpose and need for NNSA action [to build the Nuclear Facility] has not changed since issuance of the 2003 *CMRR EIS*. NNSA needs to provide the physical means for accommodating the continuation of mission-critical AC [analytical chemistry] and MC [materials characterization] capabilities at LANL

beyond the present time in a safe, secure, and environmentally sound manner." Summary page 8 (S-8).

But the NNSA's own recently released FY 2011 Strategic Plan states, "Many things have changed since the last National Nuclear Security Administration (NNSA) Strategic Plan was published in 2004," immediately pointing to President Obama's April 2009 Prague speech in which he called for a future world free of nuclear weapons. Thus, on a broad level the purpose and need of the Nuclear Facility, slated to operate as long as "toward the end of the twenty-first century" (S-16), should be examined in how it helps or obstructs to reach that lofty goal.

At the same time, Obama's Prague speech called for rigorous interim maintenance of the U.S. nuclear stockpile, and his April 2010 Nuclear Posture Review (NPR) specifically endorsed constructing and operating the CMRR-Nuclear Facility as one of "the following key investments [that] were required to sustain a safe, secure, and effective nuclear arsenal." However, one thing the NPR did not do was to raise LANL's level of plutonium pit production from the currently sanctioned level of up to 20 plutonium pits per year, despite repeated attempts by the NNSA to do so. Nevertheless, the Nuclear Facility is to be built with 22,500 sq. ft. of plutonium processing space, the size of which a 2007 NNSA-commissioned study explicitly linked to a future production rate of 50-80 plutonium pits per year. That same study also assumed that new design nuclear weapons, the so-called Reliable Replacement Warheads (RRWs), would be produced, requiring expanded plutonium pit production.

NNSA's FY 2011 Strategic Plan further states (p. 10), "As requirements for new or expanded capabilities emerge, our reinvestment strategy will use accepted life cycle management standards to integrate maintenance and replacement schedules with needs for new facilities and capabilities."

So what are these needed new or expanded capabilities, if indeed we are seeking a future world free of nuclear weapons? If these needs exist, NNSA must explain why plutonium pit production must be expanded? If expanded production is not needed, then why is the CMRR-Nuclear Facility needed?

Current and proposed "Life Extension Programs" seek to extend the service lives of the W76 and W78 ballistic missile warheads and the B61 bomb. But these programs are scheduled for completion before the CMRR-NF's operational date of 2022, so the facility is of no use to them. Taxpayer money misdirected into the CMRR-Nuclear Facility would be better put into maintenance and upgrades of existing facilities and programs.

The Draft SEIS for the CMRR-NF fails to offer and analyze realistic alternatives.

After careful reevaluation of NNSA's contemporary purpose and need for plutonium pit production, a new document should be prepared that analyses a broader set of alternatives for meeting that purpose.

Two of the Alternatives given in this April 2011 draft are unworkable, which automatically skews analysis in favor of the NNSA's preferred alternative.

A reasonable alternative to consider is to not build the Nuclear Facility; continue to perform analytical chemistry, material characterization, and actinide research and development activities in the old CMR Building; and make facility upgrades to that building that are needed to sustain programmatic operations for another 20 to 30 years. Crucial to the validity of this alternative is an analysis of the impacts of all current and proposed projects to extend the life of the CMR, including roofing work, exhaust fans, HEPA filters, structural and safety systems, and elevator repairs.

The CMR upgrade alternative was included in NNSA's Notice of Intent to prepare the supplemental EIS, but was not considered in the draft. The cost of CMR upgrades was offered in the 2003 EIS as the reason why the CMR upgrade alternative would not be considered. But costs for the replacement Nuclear Facility have now skyrocketed such that it is now eminently reasonable to make a business case for upgrading the old CMR Building (which would also push back costs for decontaminating and demolishing it) and not build the Nuclear Facility.

Nuclear Watch NM's preferred alternative, which we have already proposed in our Scoping Comments on this SEIS, is to <u>not build</u> the Nuclear Facility; D&D the old CMR Building; and consolidate CMR missions in the new 185,000 square-feet Rad Lab and PF-4. In addition to arguing that this is the appropriate alternative for NNSA to follow we also that it meets the test of being a reasonable alternative such that NNSA must analyze it.

A possible option to our preferred alternative: The CMRR-NF is being designed with a vault for safe and secure storage of up to 6 metric tons of special nuclear materials (SNM). NNSA's claimed need for the Nuclear Facility should be de-linked from any possible need for a new SNM vault. NNSA should consider not building the Nuclear Facility while building a standalone vault. That vault could perhaps free up floor space at PF-4 (further obviating the need for the Nuclear Facility) and help de-inventory both it and the old CMR Building of materials at risk in a seismic event. Materials characterization and analytical chemistry could then be performed in PF-4 and the Rad Lab.

To be a credible analysis the NNSA must develop a greater spectrum of reasonable alternatives, which could include various combinations of the following:

- Do not construct the CMRR-NF.
- Continue to perform analytical chemistry, material characterization, and actinide research and development activities in the CMR Building, but making extensive facility upgrades needed to sustain CMR programmatic operations for another 20 to 30 years.
- Do not continue to use the old CMR.
- D&D the half of the CMR that was determined to be over a seismic fault.
- Keep the nuclear materials inventory in the CMR low enough so that seismic requirements are less stringent. Operate it as a DOE Hazard Category 3 facility meaning that it has under 900 grams of plutonium-239 equivalent.
- Do not build the Nuclear Facility but do build a standalone SNM vault. This could help free up floor space at PF-4 and CMR and lower the amounts of "materials at risk" in the event of accidents or seismic events.

• Consider the most efficient use of the new 185,000 square-feet Rad Lab (which will be ready for operations in less than two years) and PF-4 for relocating old CMR activities.

This draft SEIS should be withdrawn until the details of the Shallow Excavation Option are better understood. The cost-saving Shallow Option, in which the foundation would be constructed in a geologic layer <u>above</u> the poorly welded tuff layer, is not a mature concept, and it is not yet known if this option is safe. The draft SEIS fails to accurately analyze how impacts to the environment from this option may be different.

There are more new seismic investigations currently underway at the Lab. This draft SEIS must be withdrawn and rewritten after the results of these new investigations are known. Proceeding with design before seismic risks are better known will only repeat the process that led to the need for this Supplemental EIS.

Final Note: Although proponents of the CMRR-Nuclear Facility constantly point to the benefits of job creation, the SEIS itself states the socioeconomic impact of this new facility is minimal.

Concerning construction jobs, "Peak direct (790 workers) plus indirect (450 workers) employment would represent less than 1 percent of the regional workforce and would have little socioeconomic effect." (S-39, parentheses in the original.) The average number of construction jobs is 420 over nine years. (From Table2-1, Summary of CMRR-NF Construction Requirements, p. 2-15.)

Facility personnel would not change from existing levels, just their location, "Approximately 550 workers would be at the CMRR Facility (Modified CMRR-NF and RLUOB); they would come from the CMR Building and other facilities at LANL so the facility would not increase employment or change socioeconomic conditions in the region." (S-39, parentheses in the original)

Nuclear Watch NM argues that far more jobs could be created through other efforts, and not through a ~\$6 billion dollar plutonium investment that will lock in Los Alamos' future to the hopefully shrinking business of nuclear weapons research and production.



LANL's Technical Area-55 with the plutonium pit production facility "PF-4" on the right and CMRR "Rad Lab" on the left, with the excavation for the future "Nuclear Facility" behind it. *Photo: Scott Kovac, Nuclear Watch New Mexico*