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SECRETARY OF ENERGY INITIATES ADDITIONAL REVIEW OF UPF, CMRR -NF

Six-Week Study to Take Hard Look at Requirements for Multi-Billion-Dollar Facilities

Coming on the heels of reviews by Department of Energy and Pentagon cost analysis specialists, Energy Secretary Steven Chu is in the process of initiating his own independent study on the National Nuclear Security Administration's two biggest construction projects, the agency said last week. The independent review of the requirements for the Uranium Processing Facility planned for the Y-12 National Security Complex and the Chemistry and Metallurgy Research Replacement-Nuclear Facility that is to be built at Los Alamos National Laboratory is set to kick off Nov. 22 and last six weeks, examining the requirements for the facilities as senior DOE officials try to zero in on accurate cost ranges for the projects in advance of the Administration's Fiscal Year 2012 budget request. "NNSA and DOE leadership is using best available information from the contractors and independent review teams to update estimated cost range estimates for both projects, which will be publicly available when the President submits his FY12 budget request to Congress in early February," NNSA spokeswoman Jennifer Wagner told *NW&M Monitor*.

NW&M Monitor has learned that at least seven respected experts in the nuclear weapons field are slated to participate in the study, including former DOE/NNSA officials and current consultants Earl Whiteman and Steve Guidice, former Under Secretary of Energy and MIT professor Ernest Moniz, former Los Alamos National Laboratory Director Siegfried Hecker, nuclear weapons expert Dick Garwin, UC Berkeley professor Raymond Jeanloz, and University of Texas-Austin professor and JASON Defense Advisory Group chair Roy Schwitters.

There has been no shortage of reviews of the projects in recent years, a testament both to their complexity and importance to efforts to modernize the nation's nuclear weapons complex. UPF will replace aging facilities at Y-12—primarily the 9212 production complex—while CMRR-NF would shift LANL's analytical chemistry, material characterization and actinide research and development work at the lab in support of the agency's plutonium research and pit surveillance activities out of the 1940s-era Chemistry and Metallurgy Research Facility. The Chu-directed study is expected to complement other completed and ongoing reviews of the projects and take a hard look at whether or not current plans match the capabilities that are needed for the facilities, which has a direct impact on the cost of the projects. "It's a way to provide a realistic assessment in a relatively short amount of time to the secretary, especially given the cost of the two facilities and how much attention they've been getting," one official with knowledge of the study told *NW&M Monitor*.

Costs Unclear

Both facilities are expected to be completed in 2020 and operational by 2022, but their price tags have been the subject of intense speculation among Congress, government, and industry officials. According to a three-year-old

cost range, the UPF is estimated to cost between \$1.4 and \$3.5 billion, but most officials expect that the facility could cost much more. Sen. Bob Corker (R-Tenn.) suggested earlier this year that the cost of UPF could land between \$4 and \$5 billion. Fiscal Year 2011 budget documents indicated that the CMRR-NF could cost more than \$4 billion, but like UPF, most officials believe the cost of the facility could be much higher, exceeding \$5 billion.

Don Cook, the NNSA's Deputy Administrator for Defense Programs, this summer initiated a review of the facilities' costs and requirements by DOE's Office of Cost Analysis (OCA) and the Pentagon's Cost Analysis and Performance Evaluation (CAPE) group—reviews that were preceded by reviews of the projects by the M&O contractors at Y-12 and Los Alamos. According to the NNSA, DOE's Office of Cost Analysis has completed its review of UPF costs and its report is being prepared. The OCA is planning to review CMRR-NF later this year. The Pentagon review of the projects hasn't begun yet, the agency said. Former National Ignition Facility project director Scott Samuelson also led an internal NNSA review earlier this year of the cost estimating processes for each project, and an independent review last year, while a review last year by former Defense programs chief Everet Beckner of UPF found that the facility was mostly sized appropriately for the nation's needs.

Increased Scrutiny Driving Reviews

Still, there has been significant pressure on the Administration to ensure that the facilities are sized appropriately and that officials have a solid grasp on their potential costs, considering the facilities are key to efforts to modernize the nation's weapons complex and have become a touchstone in the debate over the Senate's ratification of the New Strategic Arms Reduction Treaty with Russia. Senate Republicans have pushed the Administration for adequate funding to modernize the weapons complex and arsenal, and while the Administration earlier this year committed \$80 billion over the next decade for the effort, Vice President Joseph Biden acknowledged last month that more resources would be needed for the modernization effort and promised to update the Administration's plans later this fall. Cook suggested in a previous interview with *NW&M Monitor* that he didn't believe much could be trimmed from the highly analyzed facilities, but the increased scrutiny has necessitated additional reviews, one official said, commenting on the rationale for the new study. "It's really to see based on their current design is it based on what is absolutely essential to carry out NNSA's mission, as opposed to what might be needed capability in the future that would be desirable to have but is not necessary," the official said. "The point is could they make some minor design changes to reduce the cost and stay within schedule and achieve savings without affecting the primary mission and scope of those facilities?" —*Todd Jacobson*

AS NEW ENVIRO. REVIEW OF CMRR -NF STARTS, FED SAYS NEPA BASE STRONG

A federal official involved in the planning of Los Alamos National Laboratory's Chemistry and Metallurgy Research Replacement-Nuclear Facility conceded last week that the National Nuclear Security Administration probably moved too quickly to complete an environmental analysis of what has become a multi-billion-dollar project. However, the official's comments at a scoping meeting for a new environmental analysis suggest that the agency isn't likely to make any significant changes to its plans. "We tried to have our NEPA [National Environmental Policy Act] work early on, and maybe a bit too early," said Steve Fong, a member of NNSA's federal project team for the CMRRNF. "We did that in 2003 when we were in conceptual design, but at a time when there was debate about whether CMRR was the right thing for the nation."

Fong said taking a look at project's growth factor was an important question, but the site selection grew out of the previous NEPA foundation. "Yeah, we should probably be conservative and take a look at how we've grown and take a serious look, but we have a strong NEPA basis as of today," he said.

Enviro. Groups Help Spur New Review

Spurred in part by a push from New Mexico nuclear watchdogs—including an ongoing lawsuit by the Los Alamos Study Group—the NNSA has embarked on a new environmental review of the project, analyzing changes to planned facility since an Environmental Impact Statement was completed in 2004. The Supplemental Environmental Impact Statement (SEIS) will include an analysis of new nuclear safety requirements and modifications to accommodate changed understanding of seismic risks at the site, and the need to use more steel and concrete. But the study will also include an examination of the alternative of not building the project at all, but rather modifying the existing Chemistry and Metallurgy Research building so that it could continue to be used to meet the agency's programmatic needs. The Administration has said it needs the new facility, which could cost more than \$4 billion according to estimates, to help revitalize the lab's analytical chemistry, material characterization and actinide research and development work at the lab in support of the agency's plutonium research and pit surveillance activities.

A Fair Analysis of Alternatives?

Herman LeDoux, the federal project director for CMRRNF, deferred to NNSA headquarters when asked about whether it was possible to make an objective decision about alternatives so late in the process, when so much of the design was already committed to the current location. "Hopefully we get a lot of input and that's what we're looking for," he said, noting that most of the critical questions coming from the public have to do with program issues, not the kind of design and safety issues that his group is dealing with on the ground. "They're better answered by the program guys in Washington, D.C.," he said.

The NNSA held two scoping meetings on the new project last week—one in White Rock, N.M., Oct. 19, and a second in Pojoaque, N.M., Oct. 20—drawing nuclear watchdogs, young activists, representatives of religious organizations and many long-time lab critics who turned out to propose alternatives to the project, object to the process and register their dissatisfaction with LANL's primary mission, especially its plans to expand nuclear weapons activities over the next 10 years.

While the White Rock meeting was largely informational in nature, opponents of the project outnumbered supporters 20 to 1 at the Pojoaque meeting. Marlene Parrot, a Sister of Mercy and a member of the Partnership for Spirituality, was typical of those who condemned the environmental legacy of the laboratory and expressed dissatisfaction with the limited scope of the new environmental process. "We need a whole new environmental impact statement," she said. "I think we have to have hearings and I think the priority of the Energy Department should be clean up and restoration."

The deadline for public comment is Nov. 1. Officials said they hoped to complete the SEIS within nine months, by the end of July 2011, including an additional period of public comment after the draft document is released. The SEIS hasn't persuaded the Los Alamos Study Group to drop its lawsuit to halt work on the project. The group has argued that the 2004 Environmental Impact Statement bears so little resemblance to the project that is now underway that only a new and complete EIS can meet the requirements of the National Environmental Policy Act. —*From staff reports*