

ADVISERS RAISE ISSUES TO CHU ABOUT CONSTRUCTION SEISMIC STANDARDS

The National Nuclear Security Administration is considering changes to the seismic standards that are being used to design the Chemistry and Metallurgy Research Replacement-Nuclear Facility as a result of recommendations from a group of advisers assembled by Energy Secretary Steven Chu to weigh in on the agency's two biggest construction projects, *NW&M Monitor* has learned. Scaling back the seismic standards for the facility could reap considerable savings at a facility that has seen its price tag balloon in recent months, forcing the NNSA to take a hard look at the requirements for Los Alamos National Laboratory's CMRR-NF, as well as for the other major construction project needed to modernize the nation's weapons complex, the Uranium Processing Facility slated for the Y-12 National Security Complex.

The recommendation was one of the most significant that was generated by five advisers assembled by Chu to examine the requirements and design parameters for UPF and CMRR-NF. Though the NNSA in the fall described the effort as a six-week review, the agency has since painted a more informal picture of the effort, and spokesman Damien LaVera said last week that the experts assembled by Chu received briefings on the projects from key program managers and personally expressed their views to Chu without delivering any formal report or recommendations.

NNSA Mum on Response to Recommendations

Chu initially asked seven nuclear weapons experts to take part in the review, but former DOE/NNSA officials Earl Whiteman and Steve Guidice, as well as former Under Secretary of Energy Ernest Moniz, dropped out of the effort. That left former Los Alamos National Laboratory Director Siegfried Hecker, nuclear weapons expert Dick Garwin, UC Berkeley professor Raymond Jeanloz, University of Texas-Austin professor and JASON Defense Advisory Group chair Roy Schwitters, and former Oak

Ridge National Laboratory director and Battelle executive Bill Madia, a late addition to the panel, to take part.

The NNSA declined to say what actions the agency has taken as a result of the input from the experts, but *NW&M Monitor* has learned that the seismic issues were a significant topic of discussion. Work done by Los Alamos geophysicists and others in the 1990s led to the conclusion that the area upon which the lab is built has been more seismically active in the recent past than was previously understood, increasing the credible earthquake threat bounding the safety envelope at CMRR-NF and other similar lab facilities. Those revelations drove changes in the design of the project, increasing costs as planners expanded the size of the facility's walls, increased the amount of concrete and reinforcing bar needed, and expanded efforts to ensure the ground beneath the facility would withstand a major earthquake. Seismic issues have been a significant point of contention between DOE and the Defense Nuclear Facilities Safety Board, which has pushed the Department toward a more conservative design approach.

Savings Unclear

Several members of the panel suggested that the seismic standard issue could be revisited, without any impact on safety, and NNSA officials have been contemplating whether or not that's feasible in recent weeks. It's unclear exactly how much money could be saved through changes. When asked specifically about potential changes to the seismic standards used to design the facilities, LaVera declined to comment, saying only that the "conversations" provided "helpful feedback that will inform our thinking as the design of each facility continues to mature." The facilities are nearing the 50 percent design point, but there's still a wide range of cost estimates for the facilities. In November, the NNSA said the UPF could cost between \$4.2 and \$6.5 billion, up from the previous range of \$1.4 to \$3.5 billion, and that CMRR-NF could cost between \$3.7 and \$5.8 billion. Previous budget estimates had pegged the cost of CMRR-NF around \$4 billion. However,

ExchangeMonitor Publications' Editorial Staff

Martin Schneider, Editor-in-Chief

Tel.: 202-296-2814 ext. 105
schneider@exchangemonitor.com

Mike Nartker, Associate Editor

WC Monitor

Tel.: 202-296-2814 ext. 106
nartker@exchangemonitor.com

Nuclear Weapons & Materials Monitor is a weekly (50 issues a year) publication covering all the activities of the U.S. National Nuclear Security Administration, including the stockpile stewardship program, complex transformation and disposition of weapons grade materials. Also includes insight on programs with Russia and other nuclear states.

Todd Jacobson, Reporter

NW&M Monitor

Tel.: 202-296-2814 ext. 107
jacobson@exchangemonitor.com

Edward L. Helminski Publisher
Kelli Watson Hughes Office Manager

Kenneth Fletcher, Reporter

NNB Monitor

Tel.: 202-296-2814 ext. 108
fletcher@exchangemonitor.com

Sarah Anderson, Reporter

RadWaste Monitor

Tel.: 202-296-2814 ext. 110
anderson@exchangemonitor.com

Tamar Hallerman

GHG

Tel.: 202-296-2814 ext. 112
hallerman@exchangemonitor.com

Weapons Complex Monitor ■ *Nuclear Weapons & Materials Monitor* ■ *RadWaste Monitor* ■ *Nuclear New Build Monitor* ■ *GHG Transactions & Technologies*

the Administration doesn't plan to commit to a firm cost or schedule estimate for the facilities until the projects reach the 90 percent design threshold, which is likely to come in 2013.

—Todd Jacobson

LANL DIRECTOR MICHAEL ANASTASIO TO LEAVE LABORATORY IN JUNE

Michael Anastasio, the Lawrence Livermore veteran who shepherded Los Alamos National Laboratory in its transition from university to corporate management, announced Jan. 5 that he will step down in June after five years at the helm of the laboratory. "It has been a great privilege to serve as your Laboratory Director during some of the most gratifying, as well as, challenging years of my career," Anastasio said in a message to lab staff. Anastasio also will step down as president of Los Alamos National Security, LLC (LANS), the corporate entity led by Bechtel and the University of California that took over lab management in 2006.

Anastasio arrived at the laboratory in June of 2006 at a time of chaos and poor morale at Los Alamos. Just two years before his arrival, Los Alamos was shut down completely by previous director Pete Nanos as a result of accusations of safety and security problems, and what Nanos called a "cowboy culture" of behavior among lab employees. The shutdown and ensuing poor morale led to an exodus of lab staff. But Anastasio seems to have steadied the ship, with far less controversy and employee angst during his tenure. "He provided tremendous leadership at a time when LANL was shifting to new management, helping ensure a smooth transition," said Sen. Jeff Bingaman (D-N.M.).

Achievements, Challenges During Tenure

At the time of his arrival, some feared that Los Alamos was losing its science focus, collapsing into a core of nuclear weapons work with little else to broaden its technical base. But during his tenure, non-weapons work in energy, health and other science work grew from approximately \$160 million in 2006 to \$260 million in the fiscal year just completed. Meanwhile nuclear weapons spending also increased at the lab, from \$1.4 billion in 2006 to an estimated \$1.6 billion in the current fiscal year. The lab's accident rate—a major point of controversy during the Nanos era—has declined by 54 percent since Anastasio and LANS took over in 2006, according to lab data.

But Anastasio's tenure also spanned a period of continued difficulties with construction project cost management, most notably with the Chemistry and Metallurgy Research Replacement-Nuclear Facility project, which was estimated to cost \$800 million as recently as 2007 and now carries a \$3.7 billion to \$5.8 billion price tag. The estimated cost of replacing the lab's Radioactive Liquid Waste Treatment Facility also rose from \$100 million to \$300 million during the time Anastasio was in charge.

Questions About Search

In a Jan. 5 message to lab employees lauding Anastasio for his tenure at the lab, LANS Board of Governors chairman Norman Pattiz said a search for Anastasio's successor will begin immediately, and weapons complex observers expect the selection of the lab's next director to fuel debate over the laboratory's future. The lab has a long history of picking its leaders from a pool of former weapons physicists, like Anastasio, but the evolving role of the lab could dictate otherwise. "The key question is how much of a 'weaponeer' do you need?" one industry observer told *NW&M Monitor*. "It really reflects where Los Alamos is going as a laboratory. Is it the quintessential weapons lab, or is it a much broader imprint, and do you want a weaponeer in charge, or somebody else that appreciates the weapons program but could also expand the lab's portfolio?"

Industry experts expect current Los Alamos weapons program head Charles McMillan, Lawrence Livermore National Laboratory weapons chief Bruce Goodwin and Nevada National Security Site President Steve Younger, a Los Alamos alum, to earn consideration for the post, especially if officials look toward the weapons program for Anastasio's successor.

A Key Player in Stockpile Stewardship

Anastasio began his career in the weapons program at Livermore in 1980, and rose to head that lab's nuclear weapons program, where he was a key player in the 1990s evolution of the stockpile stewardship program that grew up to replace nuclear weapons testing in the post-Cold War era. He rose to be director of Livermore before moving to Los Alamos five years ago. In his message to lab employees, he said he planned to "relax, enjoy my family, and explore more of New Mexico." He added: "It has been a great privilege to serve as your Laboratory director during some of the most gratifying, as well as challenging, years of my career. Every day as Lab director has afforded me the opportunity to encounter brilliant science and dedicated people committed to the great responsibilities the country has entrusted to us."