

# Mello states his case

Editor:

Your Dec. 5, 1997, issue contained an article under the mysterious headline "Lab says LA Study Group misunderstood." Most of the article was devoted to T.J. Trapp's disputations of previously published Department of Energy/Los Alamos National Laboratory cost figures for pit production. Dr. Trapp directs the pit production effort in the Nuclear Materials Technology (NMT) Program. It is quite unlikely that DOE published its earlier estimates without his input.

It is disturbing that you attributed the DOE/LANL cost figures to me. My only contribution was to present DOE/LANL's ballooning estimates, with documentation, for your convenience.

In July of 1996, DOE and LANL estimated the total "transition" cost of establishing pit production capacity at LANL to be \$312M, plus \$30M/year for operations thereafter.

The \$312M LANL cost did not include related necessary but so-called "independent" facility upgrades. I and others disputed this at the time, to no avail. The study included — or said it included — "operating costs" in their total "transition cost" (see graph, p. 26, "Stockpile Management Preferred Alternatives

Report").

Yet the DOE is now telling Congress that acquiring pit production capacity will cost about \$1.1 billion, about three and one half times as much as last year's published numbers.

The increase has three components. The first is the misleading earlier omission of many "independent" projects, which are now finally counted as part of the project. The second is increases in cost for specific projects — the estimated cost of the CMIP itself increased from \$300M to \$601M, and there was an eight-fold increase in ancillary "non-nuclear" pit production-related costs. The third is a huge increase in the incremental operating costs to be incurred prior to project completion.

It was initially in DOE and LANL's perceived interest to exclude projects from the pit production mission, since those projects would then have required more analysis under the National Environmental Policy Act (NEPA) prior to construction. And inclusion could have adversely affected DOE's current litigation on the stockpile stewardship and management program.

The selection of LANL for the pit mission over the Savannah River Site was predicated on the resulting low estimates.

Massive cost inflation is not unusual for large projects at LANL. According to DOE and LANL sources, the CMR project has increased in estimated cost from \$195M (all three phases) to \$224M (just the first two phases); the pit-related portion of the non-nuclear reconfiguration has skyrocketed from \$14M in 1995 to an estimated \$116M today; the Nuclear Materials Storage Facility renovation has increased from \$13M in 1992 to \$57M today (not counting \$19M in 1987 dollars sunk into the original unusable facility); and total DARHT costs have increased from an estimated \$53M in 1993 to at least \$250M today. Dr. Trapp's organization is heavily involved in three of these four projects.

Finally, and inconsistently, Dr. Trapp claims that many of the costs included in the \$1.1 billion are for tasks the lab "must do independently of whether we're doing pit manufacturing or not." The source of this \$1.1 billion is a recent DOE report to Congress on the cost of "plutonium pit production and remanufacturing" ONLY....

This situation calls for a careful EXTERNAL investigation. If history is any guide, plans and budgets will change again before the first pit is built.

Monitor  
1/9/98

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## Edition--Journal North Date--01/22/1998 Page-- 3

### Coalition Report Hits Pit Production

#### Journal Staff and Wire Report

Nuclear weapons production and waste disposal in New Mexico fell among 71 federal projects that public-interest groups denounced Wednesday as wasteful and environmentally damaging.

In their annual "Green Scissors" report, a coalition of 26 environmental groups and taxpayer advocates found \$49 billion in federal spending cuts they said also could save the environment.

Corporate and government organizations continue to "bring home the bacon, while the taxpayer gets fried in the pan," said Brian Cohen, campaign coordinator of New Mexico Public Interest Research Group.

The biggest slice of \$1.6 billion in savings in and near New Mexico would come from eliminating Los Alamos National Laboratory's plan to make plutonium pits, the grapefruit-sized hearts of nuclear weapons.

The latest report to Congress puts the eventual price tag of pit production at \$1.1 billion, the majority for renovating aging labs at LANL to handle the work.

"Green Scissors" authors -- led by the U.S. Public Interest Research Group, Friends of the Earth and Taxpayers for Common Sense -- said the project is unnecessary and poses the danger of plutonium fires and contamination as occurred at the defunct Rocky Flats Site near Denver.

The Los Alamos Study Group in Santa Fe and Physicians for Social Responsibility nominated pit production for the report.

A classified fraction of the 10,000 unused plutonium pits stored in Texas and New Mexico can be used as replacements for the nation's nuclear arsenal of 12,500 weapons, said the study group's Greg Mello.

Weapons scientists concede they have found no problems with weapons pits for their first 20 to 30 years of shelf life. Activists such as Mello argue the government should wait until a clearer need for new pits arises.

"The laboratory has adopted the Orwellian line that if we're just allowed to make more weapons, this will help disarmament. It sounds like an alcoholic," Mello said. "We think it would be far more prudent to wait until there is some need before investing hundreds of millions of dollars in new infrastructure for an arsenal we are required by treaty to downsize and then eliminate."

Also targeted in and near New Mexico:

\*The \$503 million Animas-La Plata project aimed at settling water-rights claims by the Southern Ute and Ute Mountain Ute Indian tribes while supplying water to northwestern New Mexico, the Navajo tribe, the city of Durango, Colo., and more than 50,000 acres of farmland. It involves pumping water from the Animas River in Colorado to a reservoir more than 1,000 feet uphill, then sending it down to the La Plata River before it is used.

\*A road-building policy for national forests that largely benefits logging companies. The Forest Service has been reviewing the roads system since last summer, when Assistant Agriculture Secretary James Lyons identified roads as the single biggest cause of ecological damage to national forests.

\*The \$85 million marketing budget for the proposed Waste Isolation Pilot Plant that would bury plutonium-contaminated waste in the ancient salt beds near Carlsbad. Rather than spending money promoting the program, the money should go for safety and research, NMPIRG's Jeanne Bassett said.

**Paper: Albuquerque Tribune, The (NM)**  
**Title: N.M. anti-nuclear groups go nationwide**  
**Date: February 3, 1998**

Three New Mexico anti-nuclear groups are among 33 activist groups that have formed a national coalition that will focus attention on the nation's nuclear policies.

"Our concerns cover the entire U.S. nuclear legacy," said Susan Gordon in Seattle, who is director of the organization Alliance for Nuclear Accountability.

Gordon cited the "horrible health effects of uranium mining" in New Mexico and "current schemes to rob the Department of Energy cleanup budget to fund pointless weapons research and production," notably at Los Alamos National Laboratory.

The three New Mexico groups are Concerned Citizens for Nuclear Safety and the **Los Alamos Study Group**, both in Santa Fe, and the Southwest Research and Information Center in Albuquerque.

They are among 39 groups that earlier this month asked a federal judge to jail Secretary of Energy Federico Pena and two other DOE officials, saying they violated federal environmental laws and court orders.

The groups also asked the court to halt the opening of DOE's Waste Isolation Pilot Plant near Carlsbad and fine the department \$5 million in punitive damages and \$5,000 per day until it complies.

DOE issued a statement contending the groups' claims are without merit. A hearing is scheduled for Feb. 20 in Washington, D.C. DOE plans to open WIPP in May if the Environmental Protection Agency grants a final permit, which is expected.

Apart from supporting the suit, the alliance aims to monitor the DOE's changing nuclear-weapons complex by developing and acting on a "collective agenda."

It will publicly challenge continued research in and production of nuclear weapons at sites such as New Mexico's Los Alamos and Sandia national laboratories.

"The alliance, I think, reflects a new level of organizational maturity on this issue," said Greg Mello of the alliance's **Los Alamos Study Group** in Santa Fe.

Mello said the alliance will "harmonize local interests and concerns into a nationwide policy critique."

He said the alliance's chief asset will be enhancing "communication between groups, these tiny groups that are trying to fight through the labyrinth of the huge DOE bureaucracy and (weapon-complex) documents that describe and prescribe the future of our communities."

One of the alliance's major concerns is the government's plan to dispose of nuclear wastes at WIPP and at Yucca Mountain at the Nevada Test Site in Nevada.

WIPP was cited by alliance spokesman Bob Schaeffer as an example of the alliance's new focus, which is "collective self-interest and the need to work together."

"People in New Mexico can't stop WIPP by themselves," Schaeffer said, noting that nuclear waste is not a New Mexico problem.

He said an alliance campaign in April will try to focus national attention on the issue of transporting nuclear wastes.

Current plans "will involve roads in 44 states, practically every state, and that presents risks nationally," he said.

New Mexico's two nuclear-weapons labs, each of which has an annual budget of about \$1 billion, are monitored by the three local organizations in the alliance. The three groups are among the most vocal opponents of WIPP.

The three groups also oppose the expansion at Los Alamos of the capability to manufacture plutonium pits, or triggers, for thermonuclear bombs.

They consider the activity unnecessary in the aftermath of the Cold War, dangerous to workers and area residents and a threat to the environment. DOE contends the work is essential to maintain the nation's warheads.

Meanwhile, the alliance groups complain, Los Alamos and other DOE sites have faced cuts in their programs to clean up environmental hazards from past nuclear-weapon activities.

Several organizations in California similarly monitor programs at Lawrence Livermore National Laboratory, east of San Francisco.

The nation's other nuclear-weapons lab, Livermore, is where DOE has begun construction on a controversial \$1 billion laser intended to simulate nuclear-weapon blasts.

That project and others are being challenged in the court case by the groups, which contend the project and DOE's nuclear-weapon Stockpile Stewardship and Management Program violate the U.S. Environmental Policy Act.

The groups got indirect support last year when several prominent nuclear-weapon scientists told The Albuquerque Tribune they have serious reservations about the laser. Several doubted it can achieve its fundamental scientific goals.

Schaeffer said the formation of the alliance will not affect the suit against the DOE, which will independently continue in Washington, D.C.

The anti-nuclear plaintiffs lost the first round, a motion to get an injunction to stop the Livermore laser. But they filed the contempt motion, at the invitation of the judge, asking the court to hold DOE in contempt for failing to abide by federal environmental law and the court's previous orders in the case.

Last year, Washington, D.C., federal District Judge Stanley Sporkin ordered a thorough DOE analysis of America's nuclear-weapons cleanup program. The coalition, including New Mexico's **Los Alamos Study Group**, claimed "neglect, failure and willful refusal to comply with and obey" Sporkin's order.

There is no chance Pena will be sent to prison, however, said Marc Johnston, deputy DOE general counsel.

"This motion to have the department held in contempt is absolutely without merit. The department has not violated any court order, and we will contest this vigorously," Johnston said from Washington.

Sporkin had urged the parties to negotiate a settlement over DOE's multibillion dollar nuclear cleanup program, which has suffered budget cuts in recent years even as DOE has ramped up budgets for nuclear weapons.

On Jan. 16, DOE informed U.S. Magistrate Alan Kay in Washington, D.C., who had overseen the Washington talks, of the agency's withdrawal. The letter says DOE can't accept the plaintiffs' settlement proposals and that the two sides are so far apart that a counterproposal is pointless.

"Under these circumstances, it does not appear to DOE that it would be fruitful for the court to conduct a settlement conference on January 28, 1998," the letter says.

Last week, the coalition sent its own letter to Kay, complaining about DOE's "abrupt" withdrawal.

The new alliance, which has grown out of the former Military Production Network, is headquartered in Seattle and has a Washington, D.C., office.

The 33 member organizations act as public watchdogs of DOE sites in Colorado, Ohio, Washington, Idaho, California, Nevada, Tennessee, Kentucky, Texas, Massachusetts, Oklahoma and South Carolina.

Two of the organizations are American Indian, based at reservations in Oklahoma. One was formed out of concerns over the nuclear power industry's efforts to gain access to tribal lands for nuclear-waste storage or disposal.

One such effort at the Mescalero Apache reservation in south-central New Mexico failed when it became a contentious political issue within the reservation.

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*Page: A5*

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# Lab Chief Promises Revamp

5/20/98

## LANL Asking Congress For Construction Funds

BY IAN HOFFMAN  
Journal Staff Writer

Plagued by "a systematic problem" of construction delays and cost overruns, Los Alamos National Laboratory is revamping the way it builds everything from labs to offices to computer centers, the lab's chief told a Senate committee in Washington, D.C., on Thursday.

Lab director John C. Browne promised to assemble a panel of outside experts in construction and project management to recommend changes in the lab's work.

"I personally am reviewing the status of our projects at my bimonthly business and operations meetings," Browne told members of a Senate strategic-arms committee.

The timing of Browne's testimony is crucial: LANL is asking Congress for up to \$800 million in new construction money over the next eight years. And its track record on construction has drawn sharp criticism in recent years.

"This problem has resulted in ... cost growth through insufficient institutional oversight and lack of a common project management system," Browne said.

A House committee last year turned aside the lab's request for \$15 million to renovate its Chemistry and Metallurgical Research building, where cost overruns have stalled work since last spring.

Committee members pointed out the lab ran through



EDDIE MOORE/FOR THE JOURNAL

**WASHINGTON TESTIMONY:** Los Alamos National Laboratory director John Browne testified before a Senate strategic arms committee Thursday in Washington, D.C.

See LAB on PAGE 3

from PAGE 1

its \$51.3 million budget for the first part of the renovations and still had untold millions of dollars of work left to do.

The lab and its overseer, the U.S. Department of Energy, are still investigating the project. But investigators said the lab grossly underestimated the amount of expensive electrical work and de-contamination to bring the 1950s-vintage lab building up to modern safety standards.

A recent report by the Defense Nuclear Facilities Board said the U.S. Department of Energy itself suffers from a lack of construction and engineering expertise.

"It's a case of the blind leading the blind on these projects," said Jay Coghlan, a program director for Concerned Citizens for Nuclear Safety, a nuclear watchdog group.

Lab officials now are mulling whether to scale back the CMR renovations to emergency maintenance work and ask Congress for a new nuclear facility capable of handling large quantities of plutonium.

Congress rejected lab plans for a new \$385 million plutonium facility in 1990 after environmentalists and peace activists mounted a vigorous campaign against it. They promise more of the same if the lab resurrects the idea.

"The laboratory can look forward to a firestorm of protest if it attempts to build yet another industrial facility for handling plutonium," said Greg Mello of the Santa Fe-based Los Alamos Study Group. "The protests will be local, they will be national and they will be international."

Another project, the Nuclear Materials Storage Facility, never

opened due to design flaws. Investigators found, for instance, that highly radioactive, weapons-grade materials would have had to pass through the facility's offices to reach the storage vault. Originally priced at \$15 million, fixing NMSF is expected to cost more than \$50 million.

Lab plans call for five other multi-million dollar construction or renovation projects over the next few years. Browne said he will name a project manager to run each of them and report directly to top lab executives.

The new external panel will review each project to make sure it fits the lab's needs and can be finished in time, Browne said. He said he will find a chairman for the panel among executives of "our nation's largest industrial project management organizations."

# SF anti-nuclear group says DOE planning new weapons

SANTA FE (AP) — An anti-nuclear group is blasting the U.S. Department of Energy over plans for replacing weapons in the nation's aging stockpile, but the DOE says its program meets federal requirements.

The Santa Fe-based Los Alamos Study Group contends a newly declassified 1997 DOE report proves the agency's stockpile stewardship program, aimed at maintaining the arsenal, also is in the business of developing new weapons.

The report reveals "a shocking disregard for U.S. commitments, especially those enshrined in the Nuclear Nonproliferation Treaty to end the nuclear arms race," said Greg Mello, director of the watchdog group.

The DOE says its program meets stockpile management guidelines mandated by the 1994 National Defense Authorization Act.

According to that law, the program is meant "to ensure the preservation of the core intellectual and technical competencies of the United States in nuclear weapons, including weapons design, system integration, manufacturing, security, use, control, reliability assessment, and certification."

John Gustafson, a spokesman for

Los Alamos National Laboratory, said the report reveals nothing that DOE officials haven't said all along. The lab is involved in the stewardship program.

"The lab is not currently developing new weapons and the stockpile stewardship program has always been clear on the need for eventual replacements of weapon components and even entire weapons systems," he said.

DOE officials in Albuquerque are out of the office until later this week and were not available to comment.

The report to Congress, "Stockpile Stewardship and Management Plan: First Annual Update," spells out plans to gradually replace existing weapons with modified or new ones, develop new nuclear options for emerging threats and maintain the facilities and technology to build new weapons at Cold War levels in case of a national emergency.

The department released a declassified version to a federal court in Washington in a lawsuit that seeks to stop the DOE from producing nuclear weapon triggers at Los Alamos and building a National Ignition Facility in Liver-

(Please see WEAPONS, Page 8)

## WEAPONS

(from Page 1)

more, Calif. The lawsuit was filed by a consortium of 39 disarmament and environmental organizations, including the Los Alamos Study Group.

Much of the report remains classified.

Among the items in the declassified version:

- A program to provide a "continuum of warhead design options" to replace warheads on the Navy's submarine fleet and a provision for manufacturing the warheads.

- A lab program to design and replace warheads for existing weapons that will be producible and certifiable without a nuclear test.

- Maintain the capability to resume nuclear testing. President Clinton signed the Comprehensive Test Ban Treaty in 1996, committing the United States to a moratorium on testing. A presidential directive requires the DOE to maintain the capability to conduct a nuclear test within 24 to 36 months of a request from the president.

Monitor 3/21/98

**Access World News**

**Paper: Washington Post**  
**Title: OUR GROWING NUCLEAR STOCKPILE**  
**Date: April 26, 1998**

In his April 2 news story, "Lab to Make More Triggers for H-Bombs," Walter Pincus reprints the Department of Energy's stated reasons for resuming manufacture of plutonium pits ("triggers"): to ensure the "reliability" of the nuclear stockpile and to "prepare a reserve supply." But Mr. Pincus fails to mention that the United States already has a reserve supply of approximately 12,000 plutonium pits -- already tested and certified -- many of which can be reused if needed.

According to DOE and Los Alamos managers, none of these pits has become less reliable with time and will not do so for decades to come.

With its current equipment, Los Alamos can manufacture 10 to 20 new pits per year. To increase this rate to 50 pits per year would cost well in excess of \$1 billion, according to DOE's estimate. Worse, this billion-dollar project is described by DOE as merely a "demonstration module" for a facility six to 10 times larger. This year's budget request includes a down payment of \$67 million on this unnecessary and dangerous endeavor, the estimated costs of which already have more than tripled.

Those of us who have studied DOE's "stockpile stewardship" program hope that someone in Congress wakes up before signing off on this enormous folly.

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*Page: C6*  
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**Paper: Santa Fe New Mexican, The (NM)**  
**Title: Main**  
**Date: May 5, 1998**

After the end of U.S-Soviet arms race, activists fear new era of proliferation, but scientists say research is the essential to keep nuclear arsenal safe

For anti-nuclear activists like Marylia Kelley, the government's stockpile stewardship program presents a perception problem.

In the 1980s, it was relatively easy to drum up opposition to President Reagan's "Star Wars" dream of a space-based nuclear shield against Soviet missiles. In the 1990s, with the Soviet Union gone, the concern about nuclear holocaust has given way to less apocalyptic preoccupations such as El Nino, Microsoft stock and Bill Clinton's sex life.

But Kelley, who heads up the group Tri-Valley Cares out of her small apartment less than a mile from the gates of Lawrence Livermore National Laboratory, is doing all she can to spread the word: Nothing has changed.

The Cold War may be long gone. Almost 10,000 warheads may have been dismantled. And President Clinton may have signed an international treaty banning nuclear testing.

But the U.S. and Russia still have thousands of nukes pointed at each other. And American nuclear weapons labs like Los Alamos and Sandia in Albuquerque are still coming up with new ways to enhance the country's nuclear arsenal.

"It's a problem perception-wise," Kelley says, referring to the widespread public ignorance of the stewardship program and to the fact that one of its central goals is to keep the arsenal in a state of hair-trigger readiness.

"But when we tell people (about the program) they're outraged. They'll say 'I thought Livermore was converting (to nonweapons work).'"

That's why it's so hard for people like Kelley to see why nuclear weapons labs like Los Alamos and Sandia in Albuquerque are still working to enhance the U.S. nuclear arsenal.

As with so many other hotly debated issues connected to the Energy Department's stockpile stewardship program, the answer to why nuclear weapons should continue to be refined in the post Cold War-era depends on who's doing the explaining.

To nuclear weapons officials, the continued weapons work is critical to meeting what they say is the main purpose of stewardship: maintaining the safety and reliability of an aging arsenal in the absence of underground testing.

They say it is also crucial to ensuring that the nation maintain a cadre of skilled weapons scientists.

"Who will maintain the weapons if we don't have weapons scientists particularly 30 years from now when we're way beyond testing?" asked Vic Reis, DOE's man in charge of stewardship.

To nuclear critics, the weapons work is aimed at furthering evolution of the nuclear arsenal and as such flies in the face of the Comprehensive Test Ban Treaty, designed to halt the arms race.

"You can maintain expertise, but stewardship is about enhancing expertise," said Christopher Paine of the Natural Resources Defense Council, a Washington, D.C., organization opposed to stewardship.

The issue of ongoing weapons work is perhaps the most fiercely debated aspect of stewardship, the 10-year, \$45 billion effort to keep America's nuclear arsenal in a state of readiness.

At the heart of the debate are deep divisions over what is a "new" weapon, what constitutes weapons "development" and what is the best way to maintain the stockpile as weapons age beyond their design life.

The debate also raises this fundamental question: Should weapons scientists play only a custodial role over the existing stockpile? Or should they be free to make substantial changes, up to and including giving a bomb a new military capability?

A question of semantics

Officials at DOE and the weapons labs adamantly insist they are not developing new nuclear weapons.

What they mean is they don't have any formal orders from the Pentagon to develop new weapons. They also mean they aren't making changes to the nuclear explosive package that gives nuclear bombs their terrifying power.



Significant weapons work that falls outside these definitions is going on, however.

One new, or at least different, weapons system was deployed last year. While its nuclear core is unchanged, its casing has been modified so that it has an earth-penetrating capability. That weapon, the B-61-11, was jointly developed by Los Alamos and Sandia.

Sandia is also working on a follow-up earth penetrator that would have a new guidance system and would soar on wings like a glider after its release from a bomber. The purpose would be to enable a bomber to release the bomb from farther away, thus increasing crew safety.

Finally, Los Alamos and Sandia are seeking to craft a possible replacement for warheads carried by nuclear submarines, the first full-scale development of a nuclear weapon design since the end of the Cold War.

Part of this project involves a Los Alamos effort to determine whether a new warhead design can be introduced into the arsenal without undergoing full-scale nuclear testing.

Los Alamos spokesman Jim Danneskiold said this study is consistent with stewardship's goal of maintaining the arsenal.

"To do stewardship, the labs have to evaluate aging weapons components. At some point, aging effects may render components substantially less worthy of confidence than some sort of potential replacement."

Nuclear critics warn that all of these projects threaten to render the Comprehensive Test Ban Treaty moot which could lead other countries to decide that ratification is not in their national interest. India has already said it won't join the test ban because it believes the United States is flouting it.

"The CTBT is what keeps other countries from fielding nuclear weapons and if the world believes the treaty has become illegitimate because we are evading it, then other countries will not ratify it," said Greg Mello of the **Los Alamos Study Group**, a Santa Fe organization that has uncovered details about the weapons work.

Stewardship, CTBT: Can we have both?

The new weapons research is a particularly sensitive issue at the moment because the U.S. Senate may debate the CTBT later this year.

By banning nuclear explosive tests the only proven way of demonstrating that a bomb works the treaty seeks to halt the further development of nuclear weapons.

Nuclear critics say the weapons work clearly undermines this goal.

Last August, NRDC said in a report called End Run that the stewardship program including the weapons work "consciously seeks to render the CTBT a less effective constraint on the development and qualitative improvement of nuclear weapons than it otherwise would be."

Paine of NRDC said President Clinton's goal of having a robust stewardship program and a CTBT are fundamentally incompatible.

"The Clinton administration wants to have it both ways," Paine said in an interview. "They want to have a CTBT and have the weapons program continue full-steam ahead."

It is the stated policy of the White House, the DOE and even the military that no new nuclear weapons are needed in the post Cold War era.

Laboratory and DOE officials say they are not developing new weapons, just modifying existing ones. Such modifications are critical, the officials say, since without testing, weapons systems must remain in the arsenal beyond their design life.

As a result, the weapons work doesn't undermine the treaty, officials say, but actually makes U.S. participation in the treaty possible. The work enables the weapons labs to meet Clinton's requirement of a healthy nuclear deterrent under a test ban.

"The CTBT has a number of objectives, but the U.S. has not said that one of them is to reduce the reliability of its own weapons," said Kent Johnson, a top weapons scientist at Livermore.

Reis said the claim that ongoing weapons work undermines the CTBT is backward.

"This will allow us to do the CTBT," he said.

He said criticism about the weapons work is exaggerated because regardless of what the weapons labs do, a test ban can't help but significantly slow development work.

Stewardship supporters also say criticism ignores the fact that without testing the weapons labs would never certify new designs and the military would never deploy them.

To counter the claim that the weapons labs would never certify an untested weapon, activists point to the Los Alamos project to develop a plutonium "pit," or trigger, that could be certified without underground testing.

### Labs and new weapons designs

This debate is particularly heated partly because the labs and the DOE have been reticent about the weapons development work.

That's where the anti-nuclear groups stepped in.

By piecing together information, Mello's study group brought the B-61-11 story to light. Mello's group also made an issue of the labs' work in crafting a replacement warhead for the nuclear submarine fleet.

More information came to light with the release last year of DOE's Green Book, which along with a newer version of the same document made public in April provides the most detail yet on planned weapons projects. The existence of this document was known to very few outside classified government circles until late 1996, when NRDC obtained the minutes of an August 1996 meeting that mentioned it.

Despite DOE talk of openness a buzzword under former Energy Secretary Hazel O'Leary information has trickled out about the weapons work. That has led to charges that the weapons labs are initiating weapons development projects on their own in the absence of Defense Department requirements.

There have been a couple of indications of this. One came in 1996, when an Internet document indicated that scientists at Los Alamos, Sandia and Livermore were engaged in new nuclear weapons work that was not being requested by the Pentagon.

According to the document, "concepts under consideration range in complexity from relatively minor modifications in the components of existing weapons to major changes in warhead subsystems, or to entirely new physics designs for a proposed or candidate weapon."

In other words, despite the stated policy against new weapons work, the labs were apparently dreaming up new designs just in case anyone was interested.

After the media found out about the document, DOE pulled it off the Internet.

Another indication that the labs are proceeding with weapons work is a letter last fall from Reis to the directors of the three weapons labs. The letter reminds the directors that they are under a statutory requirement to submit "weapons concepts and significant warhead modifications or development concepts" to a joint Defense Department and Energy Department panel.

When asked why Reis would write such a letter if the labs weren't working on new weapons projects, high-ranking DOE officials said in March that the purpose of the letter was merely to remind the labs of the statute. They insisted that the letter was not written in response to any specific lab projects.

Activists like Paine and Mello are skeptical. They believe the letter was written after Sandia pushed too far with its glide bomb project which they say did not originally have a specific DOD request to justify it.

Earl Whiteman, an official at DOE's Albuquerque Operations Office, said Sandia scientists merely did a "conceptual study" on the glide bomb "which is what we pay them to do."

Whiteman said the glide bomb project is presently dormant.

"There is no planned activity beyond the work (done) a year or two ago," Whiteman said.

### Finding the center

While anti-nuclear activists and the weapons community are clearly polarized on the issue of ongoing weapons work, some observers are staking out some middle ground.

Ray Kidder, a retired weapons scientist from Lawrence Livermore National Laboratory in California and a prominent critic of the stewardship program, draws the line at giving a weapon a new military capability.

"If you're talking about providing new military characteristics, then I would say that's not within the intent of the CTBT," Kidder said.

Nevertheless, Kidder said he's willing to accept the B61 earth-penetrating modification because work on that began before Clinton signed the CTBT in September 1996.

"That was sort of grandfathered in," Kidder said.

Kidder said that as long as no new military capability goes along with it, he supports a plan to install a new kind of high explosive in Trident warheads to make them less accident-prone.

Kidder said that designing weapons and putting them on the shelf if needed could be beneficial. He said such work tends to be challenging and interesting and would allow weapons designers to exercise their skills and increase the chances that the weapons labs can attract a new generation of talented scientists.

"It would keep people on board doing things, chewing on a challenging problem, not just spinning their wheels. And I think it would help the labs get some pretty good people to come" on board in the future, Kidder said.

### Continuing the fight

Meantime, Marylia Kelley isn't going to back off in her long fight to curb or even eliminate weapons work at Livermore the lab legendary physicist Edward Teller helped create in the 1950s to serve as a rival weapons lab to Los Alamos.

Maybe her fierce opposition has to do with the fact that when her 30-year-old son was a boy back in the late '70s, he used to play in an arroyo that Kelley later learned carried contaminated storm water from the lab when it rained.

Or maybe it's because Kelley now knows that a park that her boy used to romp in contains elevated levels of plutonium in the top 2 inches of dirt.

Or maybe it's not personal at all. Maybe it's simply that she says continuing to design "new" types of nuclear weapons when the United States is the only superpower is so obviously unneeded so obviously an effort to keep big money flowing to the weapons labs.

"I'd love to see stewardship defeated and then have the debate be on how many weapons do you want in the stockpile and how reliable do you want them to be," said Kelley, working from the kitchen of her apartment.

"Right now, we almost can't have that debate because stewardship is such an aggressive program."

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*Author: KEITH EASTHOUSE, with photos by Clyde Mueller*

*Section: Main*

*Page: A-1*

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# DOE Eyes New Lab Weapons Facility

## Renovations Costing More Than Expected

BY IAN HOFFMAN  
Journal Staff Report

7/1/98

A squat fortress of a nuclear chemistry lab — the largest building at Los Alamos National Laboratory — could be mothballed inside of 12 years and replaced by a new lab

at unknown cost.

Government nuclear-weapons managers are thinking about trying to sell Congress on a less ambitious version of a controversial 1984 proposal, the \$350 million Special Nuclear Materials Laboratory.

"It was a Cold War-era facility," said Earl Whiteman, a DOE weapons official in Albuquerque. Today, "the workload for it isn't near what it was when we had the Cold War going. But these are capabilities we need to support our (weapons) mission, and

nowhere else can provide them."

Lab executives resurrected the idea this spring for a new "nuclear chemistry and materials building" after a \$225 million fix-up of the Chemistry and Metallurgical Research Building ran into dire troubles.

Built in the early 1950s, the CMR building is a blockish, 550,000-square-foot monument of Cold War weapons research, then the largest construction project in New Mexico.

Its specialty today is actinide chemistry,

the analysis of plutonium, uranium and other materials in nuclear-weapons parts. CMR scientists also fashion uranium weapons parts and perform a smattering of other research on nuclear waste and energy.

Workers renovating CMR last year found the 46-year-old building was more contaminated, its electrical and safety systems more antiquated, than originally suspected. The result: a \$15 million overrun in the renovation's first phase, mostly replacing old

electrical circuits.

"The difficulties of identifying the building's deficiencies and estimating the cost to overcome them ... has drawn serious criticism," reported the lab's Actinide Research Quarterly, "and essentially a vote of 'no confidence' that actinide work within the building can be done safely with long-term consistency."

Having spent almost \$60 million, the lab and the U.S. Department of Energy la

See DOE on PAGE

## DOE Eyes New Lab Weapons Facility

from PAGE 1

year halted the work, intended to keep the building working 25 or 30 more years.

"We're saying, are we best off trying to put everything into this facility that's almost 50 years old or should we do something different?" said Whiteman, assistant manager for technology and site programs at DOE's Albuquerque Operations Office.

"The thing's almost as old as I am. You just wonder, does it really make sense?" Whiteman said.

Lab executives in March proposed the government close the building in 10-12 years. It was part of a plan to join operations of CMR and Technical Area 55, home of the lab's top-security plutonium facility, under new management.

The plan was driven partly by a

series of safety violations at CMR, the worst leading to a November 1996 explosion that wrecked a lab room. Lab managers later shut down the building's operations for almost six months. The latest proposal calls on the DOE to give the building more time than the rest of the laboratory to come into compliance with some safety requirements.

Lab critics discovered the proposal recently through a Freedom of Information Act request.

"The DOE has been telling Congress since 1990 that this upgrade (of CMR) is required for the whole building," said Greg Mello, head of the Los Alamos Study Group in Santa Fe. "So the DOE has been singing one song to Congress for this entire decade, and now the DOE says they haven't made the decision about what to do with this building."

The DOE's contractors admit they did not foresee the full amount of work required for the renovations.

Activists also doubt the need for a new building to replace CMR.

"The questions the prudent taxpayer might be asking is how many millions more will be pumped into this building before it is abandoned and how many millions more will be pumped into the next building for dubious purposes," Mello said.

The DOE's Whiteman said the actinide chemistry related to weapons work at the Chemistry and Metallurgical Research building is unique.

"There are capabilities that exist at CMR that don't exist anywhere else in the United States," he said.

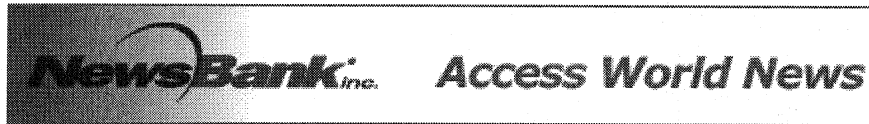
No decision on CMR is likely until at least December, when the lab is to deliver detailed studies to the government on each safety system

in the building and on the potential for earthquakes nearby — a factor that could boost the cost of continued renovations.

If the Energy Department chooses to operate the building only for 10 or 12 more years, Whiteman said, "we would be spending significantly less on upgrading it. I can't give you an estimate, but it would be significantly less."

The new nuclear chemistry and materials research lab, if built, probably would be sited near or at Technical Area 55, closer to the plutonium facility. The CMR building at Technical Area 3 ultimately would be decontaminated and possibly demolished.

"If we were to leave CMR, we would need to clean up behind ourselves," Whiteman said.



**Paper: Santa Fe New Mexican, The (NM)**  
**Title: LANL may build new chemistry building**  
**Date: September 2, 1998**

Officials at Los Alamos National Laboratory and the Department of Energy are exploring the possibility of building a new nuclear chemistry building at the lab.

The new building which would replace the 45-year-old Chemistry and Metallurgical Research Building would not be built anytime soon. DOE and lab officials are talking about it becoming operational no sooner than 10 to 15 years from now.

The lab is in the middle of upgrading the CMR building so that it can play a role in the lab's new mission of building plutonium "pits" or triggers to replace aging pits in the nation's nuclear stockpile.

The original plan was to upgrade CMR at a cost of \$225 million. But the project has been plagued with difficulties, leading lab and DOE officials to consider carrying out a smaller upgrade to keep CMR functional for the next 10 year and then turning to a new facility.

Lab officials had previously indicated that building a new facility would be a preferable option than pouring large amounts of money into sprucing up the aging CMR building.

Information that the lab and DOE are actively considering a new facility is contained in government documents from this past spring that were uncovered by a Freedom of Information Act request filed by the **Los Alamos Study Group**, a Santa Fe activist organization.

The new facility is reminiscent of a controversial lab proposal in the 1980s to build a "Special Nuclear Materials Laboratory." The proposal was eventually shelved by Congress as being too expensive.

In an interview last week, DOE official Earl Whiteman said the new facility would be a scaled-down version of the nuclear materials lab.

Whiteman also said that lab and DOE officials are gathering information about the CMR facility including its ability to withstand earthquakes and will probably make a decision in about six months about the extent to which CMR will be upgraded.

If a decision is made to eventually go with a new building, a formal proposal to Congress for funding is probably about three to four years away, Whiteman said.

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*Author: BY KEITH EASTHOUSE The New Mexican*  
*Section: Local*  
*Page: B-3*  
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# Legislative committee OKs \$4.3 billion for nuclear weapons-testing program

► The money will provide nearly all the money the DOE needs to operate its stockpile stewardship program

By KEITH EASTHOUSE  
The New Mexican

The U.S. Department of Energy will get 95 percent of what it wanted in the upcoming federal fiscal year for its ambitious stockpile stewardship nuclear weapons program.

A House-Senate conference committee on Friday approved \$4.3 billion in 1999 funding for stewardship. That's about \$200 million less than the DOE requested, but it's about \$100 million above current funding.

President Clinton is expected to approve the funding levels for stewardship, an ambitious effort to maintain the nation's nuclear arsenal in a state of readiness in the absence of underground testing.

"The bulk of this bill is designated to keep our nuclear stock-

pile safe and secure in this era of underground test bans. Los Alamos and Sandia share in the national responsibility for keeping our aging stockpile safe and reliable, and as such will share in using the funding in this bill," Domenici said in a prepared statement.

The continued strong funding of the stewardship program came as no surprise to nuclear critics.

"Last spring my feeling was that Congress would use an X-acto knife rather than an axe (on the stewardship budget). That's about what happened," said David Culp of Plutonium Challenge, a Washington D.C.-based group.

In terms of Los Alamos National Laboratory, the X-acto knife did some damage to a couple of stewardship-related projects.

The ongoing effort to upgrade the 45-year-old Chemistry and Metallurgy Research building so that it can play a major role in supporting work related to manufacturing plutonium triggers for nuclear bombs received a major setback.

Instead of the \$16 million that the lab had been hoping for in 1999, only \$5 million will be made available for the upgrades. The funding reduction is a reflection of congressional impatience with a project that has been plagued

by delays due to poor lab management of the project and the unexpected difficulty of sprucing up the aged facility.

Another project — this one to renovate the nuclear materials storage facility — also was targeted for cuts. Instead of getting \$9.2 million for 1999, the lab will receive only \$3.8 million — less than half of what was requested.

On a more positive note, the flagship stewardship facility at the lab — the \$260 million Dual Axis Radiographic Hydrotest Facility, a giant X-ray camera — is being fully funded.

So is the National Ignition Facility, a football-field sized laser complex being built at Los Alamos' sister lab, Lawrence Livermore National Laboratory in California.

Culp predicted that funding for stewardship will also be secure in the 2000 federal fiscal year, which begins next October. He said that Republicans are

planning on boosting defense spending next year. With money less tight than it was this year, stewardship is more likely to receive full funding.

Nonetheless, Culp said that Congress has made it clear that it won't blindly give DOE what it wants — \$4.5 billion for 10 years.

DOE officials "are going to have to come up here every year and make the case" for stewardship programs, Culp said.

\* We have written & briefed staff on these projects, apparently with some success.

# Won't Make Enough Nuke Triggers

12/12/98

BY IAN HOFFMAN  
Journal Staff Writer

Even with \$1.1 billion to work with, U.S. nuclear weaponeers won't be making enough plutonium triggers to insure the nation's arsenal forever against possible breakdown, a new congressional report found.

So far, however, U.S. Department of Energy weapons scientists haven't seen the need for a larger and vastly more expensive weapons manufacturing plant such as the government operated during the Cold War.

Some Pentagon officials worry small-scale production of plutonium triggers at Los Alamos National Laboratory might not be enough to preserve the nuclear stockpile against failure, Congressional investigators with General Accounting Office say in a recent report.

Yet a multibillion-dollar research program of experimental machines, non-nuclear explosions and the world's most powerful supercomputers has not shown such a breakdown is imminent.

Scientists remain confident the grapefruit-sized plutonium triggers — the tiny A-bombs at the heart of modern thermonuclear weapons — will work as designed for at least 30 years and perhaps longer.

"We don't have any reason to believe through measured evidence that these weapons components are going to fall apart," said Dana Christensen, a chemical engineer and deputy director of the Nuclear Materials Technology Division at LANL.

"But these materials are live materials: They're radioactive. So we know at some point they will (fall apart)," Christensen said.

The GAO report exposes divisions over caretaking of U.S. nuclear weapons between the civilian agency that builds them and some of the military officials responsible for the nation's nuclear deterrent.

The Energy Department stopped making its so-called "war reserve" plutonium triggers, or pits, at the Rocky Flats plant near Denver in 1989. Some defense officials would like to see a plant nearly as large operating again as soon as possible, the GAO report stated.

Original plans called for Los

## Report: U.S. Won't Make Enough Nuke Triggers

from PAGE 1

Alamos in 2005 to start making as many as 50 war-reserve pits a year. But the Energy Department since has scaled those plans back, to 20 pits a year by 2007.

A team at Los Alamos has so far fashioned two demonstration pits for the W88 warhead, one of two nuclear tips on U.S. submarine-launched missiles. Building the first war-reserve pit is slated for 2001. These pits must be certified to highly precise specifications — "diamond stamped," in weapons lingo.

"Our job is not to put in a major production line but to re-establish the capability," Christensen said

Friday. "We've demonstrated we can cast and machine very close to war reserve specification."

The Energy Department is considering a plan to build a much larger plutonium-pit factory, able to turn out 150-500 pits a year, at either its Pantex plant near Amarillo or its Savannah River Site near Aiken, S.C. No cost estimates are available for such a factory, but they likely will run to several billion dollars.

Aiken is the hometown of Sen. Strom Thurmond, R-S.C., chairman of the Senate Armed Services Committee, who requested the GAO study of pit manufacturing.

"There's nothing wrong with the pits we have," said Greg Mello, a

Santa Fe disarmament activist. The GAO report "is nothing more than Strom Thurmond trying to get a bigger billion-dollar program for Savannah River."

The GAO report found that some Pentagon officials prefer building the factory now but acknowledge they don't know what its production level should be without further research by Energy Department scientists.

The DOE plans are awaiting research primarily on the shelf life of plutonium pits and high explosives, as well as surrounding components whose nature is classified, the GAO report said.

It is also unclear what number of pits might be needed. The U.S.

nuclear arsenal, roughly 9,000 fielded weapons, could be reduced by half or more through treaty negotiations.

To account for those uncertainties, the Energy Department is engaged in a massive research program to detect and predict problems in aging nuclear weapons. At the same time, workers at Los Alamos are relearning the roughly 100 steps and processes to make war-reserve pits.

"My personal opinion is the (Energy) Department is hosting a very responsible program," Christensen said. "Those pieces of information are necessary to determine what the ultimate (pit manufacturing) capacity should be."