We are pleased to report that Tri-Valley CAREs and allied groups may be on the verge of a major victory in our efforts to prevent the government from creating a new warhead, specifically the so-called “interoperable” W78/88-1, according to key congressional aides and the Global Security Newswire.

Amid sky-high cost estimates, multiple technical uncertainties, management problems and growing questions about the nuclear policy aims that underlie the “interoperable” warhead concept, the continued development of this novel weapon faces a 5-year delay. If the Obama Administration does institute a formal delay, or if Congress refuses to fund it, the outcome could be termination of the present project and a fresh look at alternatives that would not result in, essentially, a new warhead design. This would be good news indeed for global nonproliferation as well as our pocketbooks.

Livermore Lab is in charge of designing the W78/88-1 “interoperable” warhead. Reportedly, the new design would use some elements from the land-based W78, some from the sub-based W88 and the core from a third design, the W87. This “mash up” of three different warheads into one would create the ultimate, untested “Frankenbomb.”

If Livermore Lab gets its way, the “interoperable” design would replace the Air Force’s W78 and the Navy’s W88. Under this plan, the U.S. would still retain both its intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles; however the new-design nuclear explosive package would replace the existing ones atop both missiles.

Fortunately, it’s starting to be a bumpy ride for this new warhead idea. And, we at Tri-Valley CAREs are proud to have caused some of the bumps this project is now feeling.

In previous editions of Citizen’s Watch, we told you about two “official use only” memos that Tri-Valley CAREs and Nuclear Watch New Mexico obtained and made public. The first memo revealed that the Navy objected to a new “interoperable” warhead replacing its W88 due to costs and technical uncertainties associated with such a radical design change. The Navy memo further noted that it is not scheduled to pursue or fund a Life Extension Program (LEP) for the W88 until the 2020 time frame, but the “interoperable” warhead LEP would require significant Navy financing beginning in 2013.

The second memo from the Nuclear Weapons Council showed the DOE National Nuclear Security Administration (NNSA) essentially doing an end-run around the controversy (and the Navy) by promising to produce two warhead designs; Livermore Lab’s preferred “interoperable” W78/88-1 design concept and a second design based on the current W78, and not involving the Navy’s W88.

The two memos have heightened congressional scrutiny of the entire project. Why are NNSA and Livermore Lab pushing a radical new warhead concept on a reluctant Navy “customer”? That’s bump number one.

Next, the NNSA published its Fiscal Year 2014 Stockpile Stewardship and Management Plan (SSMP), a twenty-five year proposal to modernize the nuclear weapons complex and every nuclear weapon in the U.S. arsenal. In it, the NNSA estimated its “interoperable warhead-1” (i.e., the W78/88-1) would cost taxpayers roughly $14 billion. This would be followed by “interoperable warheads-2 and 3” for another $14 billion and $12 billion respectively.

Knowledgeable weapons experts in the Administration and Congress told us that the real costs for developing these “interoperable” warheads would likely double if not triple. By comparison, the earlier 2012 SSMP put the cost of refurbishing the W78 at under $5 billion, and Tri-Valley CAREs noted at the time that NNSA could downscale that proposal and save even more money. No need to go down the incredibly expensive new warhead path. Meet bump number two.

In September 2013, the Government Accountability Office (GAO), the investigative arm of Congress, released its report looking at the “interoperable” warhead concept from the perspective of its impact on the Air Force ICBM program. GAO found that neither the Air Force nor the NNSA had prepared a cost estimate for the entire system. Nor was any agency planning to do so. Thus, the NNSA’s $14 billion price tag only buys the warhead, as in “ICBM sold separately.”

Moreover, as we noted, the $14 billion currently estimated for Continued on Page 2...
Dangerous & Explosive. The Department of Energy Inspector General (IG) found that Lawrence Livermore National Laboratory was not adequately protecting its dangerous high explosives, according to a September 2013 report.

The IG report focused on security at the High Explosives Application Facility (HEAF), located in the northwest corner of the Lab’s main site. First, the IG discovered that Livermore Lab management deliberately loosened controls on who could enter the HEAF unescorted “to accommodate construction activities taking place in that area.” As a result, Lab workers with a high security badge, but no programmatic reason to be at the HEAF, could access the facility. Further, investigators observed an unlocked rear door leading directly into the explosives workrooms. The IG also found deficiencies in procedures to ensure that safety training requirements were met before allowing unescorted access to the facility’s explosive workrooms.

Moreover, the IG discovered that “most explosive workrooms had an erasable white marker board at the entrance as the primary method to account for explosives.” The report notes that high explosives were left out on workbenches. Most of the 56 workrooms do not have doors (as a safety feature in case of accidents), increasing the visibility of explosives. The workrooms have an explosive storage capacity that ranges from a few grams to a maximum of 10 kilograms (22 pounds).

The IG report further states that a system “capable of tracking and accounting for explosives acquired, stored, and expended at HEAF from acquisition to disposition did not exist.” Thus, if an individual were to remove high explosives from the facility, it could go unnoticed. The high explosives are types used to detonate nuclear weapons.

The Lab is taking action to address security problems in the HEAF.

Progress... Cont. from Page 1

Further, the GAO report documents the Navy’s continuing unease with the “interoperable” warhead concept, citing the Navy’s “concerns about [NNSA and Livermore Lab] introducing changes to the design of Navy warheads,” and that these changes “would introduce uncertainty into the weapon’s design.” The Navy further told GAO that because the “interoperable” warhead would “involve a new design, it would require extensive flight testing and certification.” Recurring bump.

Weapons experts we interviewed inside and outside the government have also told us that the “interoperable” warhead will result in a new design but that the new design(s) will not be completely “interoperable,” meaning the new warhead won’t be fully interchangeable between land-based ICBMs and sub-launched ballistic missiles, which has been NNSA and Livermore Lab’s big selling point. All that time and treasure and it may turn out to have been overhyped all along. Yet another bump.

In addition to cost and technical issues, Tri-Valley CAREs and allied groups are raising the question of how this new warhead would look to the rest of the world. Even the Navy calls the W78/88-1 a “new design,” so protestations to the contrary by NNSA and Livermore Lab that this is merely an expanded LEP will not be credible to the international community.

A number of countries’ elected officials have already expressed opposition to the expanding scope of another U.S. Life Extension Program underway, that of the B61 nuclear gravity bomb. The B61 LEP, which Tri-Valley CAREs also opposes, would combine parts from three tactical (short range) variants of the B61 and one strategic (long-range) variant to create the new B61-12.

Therefore, the even more radical design changes planned for the W78/88-1 may elicit even more strenuous objections from global leaders. To the world, the U.S. is developing new nuclear weapons and thus violating President Obama’s pledge not to do so. As Tri-Valley CAREs has stated on numerous occasions, a hypocritical nonproliferation policy is one that is doomed to failure. And, the penalty for failure to stem proliferation and achieve global nuclear disarmament could be annihilation.

Congress appears to be taking note. In their as yet unfinished authorization and spending bills, both the House and Senate told NNSA to continue to study the option of a LEP for the W78 alone, cutting off the possibility that Livermore Lab could veer away from that option entirely.

The Senate Armed Services Committee bill would prevent the W78/88-1 “interoperable” warhead LEP from going into the next phase of development without a cost comparison to individual LEPs for the W78 and W88. The Senate Appropriations Committee likewise wants a cost comparison. Further, it asked NNSA to provide documentation for claims the agency has made linking its development of the W78/88-1 with reductions...
A Sampler of Accomplishments

On the happy occasion of our 30th anniversary, we invite you to contemplate 30 of our successes through the years.

1. We conducted original research and produced reports that have been cited by delegates to the United Nations, U.S. members of Congress, major media outlets and others. Examples include our seminal critique of the U.S. Stockpile Stewardship program, analyses of U.S. nuclear posture and policy, and reports on the National Ignition Facility and the dangers of pursuing new nuclear weapons such as the Reliable Replacement Warhead.

2. We have produced annual, reader-friendly analyses of the Dept. of Energy (DOE) National Nuclear Security Administration’s budget request for nuclear weapons activities, along with our recommendations for Congress and the Administration.

3. We held special briefings for, and conducted numerous meetings with, members of Congress, their staff and Administration officials with oversight responsibilities for the U.S. nuclear weapons complex.

4. We persuaded Congress to eliminate funding for a new, bunker-busting nuclear weapon that Livermore Lab was developing for use in the “war on terror,” called the Robust Nuclear Earth Penetrator bomb. Tri-Valley CAREs played a lead role in a national coalition that prevented this bomb from becoming a reality.

5. We followed our victory over the nuclear bunker-buster by countering the next new weapons scheme, the Reliable Replacement Warhead (RRW). Tri-Valley CAREs helped win funding cuts to the RRW, briefed then-candidate Barack Obama’s point person on it, and, with allied groups, succeeded in shutting down the program.

6. We played a pivotal role in exposing security deficiencies at Livermore Lab, including its failure in “force on force” tests, during which mock terrorists gained access to nuclear materials. Tri-Valley CAREs mobilized the community and pressed DOE to remove thousands of pounds of plutonium and highly enriched uranium from Livermore Lab. This victory constrains Livermore Lab’s nuclear weapons design capability, and we are hard at work to protect it from being rolled back.

7. We have been invited to testify before the California legislature and the U.S. Congress on the nuclear weapons complex and Livermore Lab’s activities.

8. We were instrumental in stopping Livermore Lab from developing a new method to produce nuclear weapons-grade plutonium using lasers to separate the isotopes. More recently, the Lab tried to revive the plan and we quashed it again.

9. We raised awareness about the DOE’s Complex Transformation plan to revitalize the nuclear weapons complex. Tri-Valley CAREs prepared an in-depth analysis and submitted alternatives that even DOE officials said significantly impacted the plan. New bomb plants that were proposed for Livermore Lab were stopped, including an annex to the High Explosives Application Facility.

10. With colleagues, we prevented construction of numerous nuclear weapons projects across the country, including the Modern Pit Facility that would have...
produced up to 450 plutonium bomb cores annually. More recently Tri-Valley CAREs helped win a delay of 5-years or more to the Chemistry and Metallurgy Research Replacement - Nuclear Facility, another multi-billion-dollar proposal to produce plutonium cores for new-design nuclear weapons.

11. We brought grassroots voices from our community to Washington, DC each year for three decades to speak truth to power in meetings with Congress and the Administration. We offer first-hand experiences to inform the policy debates on nuclear weapons and waste.

12. We regularly informed and activated thousands of our members and numerous allies so that they may more effectively raise their authentic voices to create positive social and political change.

13. Internationally, we participated at the United Nations in the Review and Extension Conference for the Non-Proliferation Treaty, and in numerous NPT meetings since. By sharing our research we have aided countries that have chosen not to develop nuclear weapons in their efforts to hold the U.S. and other nuclear weapons states accountable to the disarmament obligations that are central to the treaty.

14. We led a campaign that stopped the DOE and Livermore Lab from building a massive toxic and radioactive waste incinerator. And we permanently shut down the Lab’s existing incinerator, too.

15. We were the first group in the western U.S. to win an EPA Technical Assistance Grant, which we used to monitor the Superfund cleanup at Livermore Lab. Then, we became the first community-based organization in the country to win a recognition award from EPA Headquarters for

16. We have achieved numerous improvements in Livermore Lab’s program to clean up soil and groundwater contaminated by nuclear weapons research. For example, Tri-Valley CAREs halted a plan to send millions of gallons of contaminated groundwater emanating from Livermore Lab into the San Francisco Bay untreated. Instead, we pressed the government to send the water back to the Lab for treatment on-site in a specially built facility, which is operating today.

17. We chair regular daylong meetings on the Superfund cleanup with the EPA, DOE, the state Department of Toxics, Regional Water Quality Control Board, and Livermore Lab. This process has led to innovative cleanup strategies that meet the needs of the public.

18. Tri-Valley CAREs played a lead role in preventing government sites like Livermore Lab from doing an end run around the Superfund law by enacting variances through a process called Risk Based End States.

19. We were among the first organizations in the country to bring litigation against the DOE using state and federal environmental laws. Our first such lawsuit in the mid-1980s brought the California Environmental Quality Act to bear on Livermore Lab activities, subsequent litigation won additional review and transparency at Livermore Lab and other sites under the National Environmental Policy Act (NEPA). One NEPA lawsuit in which we played a key role resulted in disclosures regarding contamination and waste management at DOE sites while also establishing a $6.25 million settlement fund for technical assistance to hundreds of community groups and tribes around the country directly affected by DOE’s polluting activities.

20. We filed landmark litigation, with colleagues, to force DOE to comply with federal environmental standards before constructing bio-warfare agent research facilities at its Livermore and Los Alamos Labs. Our lawsuit succeeded in compelling an analysis of the environmental impacts of a terrorist attack on the biological facilities. It also resulted in DOE promulgating the agency’s first-ever requirement for such reviews nationwide. Further, DOE agreed to prepare a full Environmental Impact Statement and hold public hearings for its planned biological activities at Los Alamos Lab, although not for those at Livermore.
21. We then defeated a Dept. of Homeland Security (DHS) proposal to build a major bio-warfare agent research complex at Livermore Lab’s Site 300, located in the hills near Tracy. After we vigorously organized against it, the DHS website attributed the agency’s decision to abandon its plan for Site 300 to a lack of “community acceptance.”

22. With allied organizations, we pioneered federal legislation to aid workers at Livermore Lab and other sites made ill by on-the-job exposures. Since the law’s enactment, Tri-Valley CAREs’ work has improved the law and increased worker access to the compensation it provides. For example, we garnered congressional support and funding for a Resource Center to inform workers about their rights and we facilitate a support group for sick workers and their families.

Successes Enhancing Community Empowerment and the Right to Know

23. We helped initiate a process to involve the community in deciding what to do about the plutonium-contaminated sludge from Livermore Lab that was given to residents for use in their lawns and gardens. We worked with state and county health agencies and other organizations to establish a plutonium sludge task force.

24. We successfully sued the government a dozen times using the Freedom of Information Act and other open-government laws. Examples include legal victories to force public disclosure of Livermore Lab’s nuclear weapons activities and to stop DOE from shipping plutonium from its Rocky Flats plant in Colorado to Livermore Lab. Moreover, our victory in that lawsuit prevented DOE from shipping plutonium across the country in DT-22 containers that had failed a simple “crush test.”

25. We have conducted a longstanding truth-telling campaign around Livermore Lab’s largest single project, and one of the DOE’s biggest boondoggles, the National Ignition Facility mega-laser. Tri-Valley CAREs compelled declassification of plans to use plutonium in NIF, and has forestalled those experiments so far. We have revealed NIF’s 8-fold soaring costs. Our campaign disclosed illegal overhead cost shifting at NIF, which was terminated due to our efforts. Tri-Valley CAREs is widely recognized for its NIF research, and was quoted extensively following the mega-laser’s recent failure to reach ignition.

26. We submitted an innovative, multi-volume proposal to run Livermore Lab when its management contract was put up for bid. Our plan would have moved Livermore Lab away from nuclear weapons to civilian science initiatives. Although we never expected that DOE would award the contract to us (indeed, a consortium of Bechtel Corporation, the University of California and other military-industrial partners got the contract) we succeeded in our goal of bringing local and national attention to the Lab management issue. We changed the terms of the debate by showing what Livermore Lab could become and illuminating the direction that management should lead it.

27. We have enhanced community empowerment by organizing numerous vigils and demonstrations at the gates of Livermore Lab. Working with allied groups throughout the Bay Area, on Hiroshima Day and at other times we have mobilized hundreds of peace advocates - and sometimes thousands - to say “NO” to nuclear weapons and “YES” to nonviolent solutions.

28. We brought much-needed attention to an anthrax release caused by Livermore Lab. Our community right to know advocacy forced the Lab to come clean with details surrounding the release. We also used the Freedom of Information Act to obtain additional information about this occurrence, which resulted in workers being placed on the antibiotic Cipro due to exposure risks.

29. We publish a newsletter, “Citizens’ Watch,” that has kept our members and the community informed about activities at Livermore Lab and throughout the DOE nuclear weapons complex for three decades. Our membership has grown from 450 to 5,600 families.

30. We provide a website that includes fact sheets, reports, upcoming events, a “what’s new” blog and other important materials. Thousands each week, and about a half-million people annually, visit us at www.trivalleycares.org

These 30 successes provide a snapshot of our work together. Each of our successes has been a collaborative endeavor. You continue to make it all possible.

We thank you for your participation and hope you will join us on December 10 to celebrate 30 years of work for peace, justice and a healthy environment.
Come Celebrate With Us!

What: Tri-Valley CAREs 30th Anniversary Party
When: Tuesday, December 10th from 5:30 - 8:30 pm
Where: Livermore Public Library
        Community Rooms A & B
        1188 S. Livermore Ave.

At this free event, we will celebrate 30 years of accomplishment and will debut a short documentary film about Tri-Valley CAREs. There will be delicious food and drinks, music and great company.

Everyone is invited!
Letter to the Editor writing party
5:30 PM – 7 PM, Tri-Valley CAREs
2582 Old First St., Livermore
(925) 443-7148 for details

Come and write a letter to the editor of your favorite newspaper in a friendly and supportive environment. Our suggested topic will be nukes & money. We will offer a short briefing and handouts to get you started. Or, you may choose to write on a different topic. Snacks and refreshments served.

Tri-Valley CAREs meets
7:30 PM – 9 PM, Livermore Library Community Room A
1188 South Livermore Ave.
(925) 443-7148 for details

This is our last meeting of 2013! Our monthly meetings are open to new and longtime members alike. Get the latest news on nuclear weapons and related topics, meet great people and help change the world. Snacks included.

Monthly Livermore Peace Vigil
7 AM – 8 AM, Livermore Lab East Gate, Located on Greenville Road
(925) 443-7148 for details

Vigil leaders are Chelsea Collonge and Marcus Page. The monthly vigils are a practice of peace. Lab workers are encouraged to stop and discuss nuclear weapons and their abolition. Additional vigil participants are welcome.

Tri-Valley CAREs 30th Anniversary Party
5:30 PM – 8:30 PM, Livermore Library Community Rooms, 1188 S. Livermore Ave.,
(925) 443-7148 for details

Everyone is invited! At this free event, we will celebrate 30 years of accomplishment and debut a short documentary film about Tri-Valley CAREs. There will be delicious food and drinks, music and great company. See Insert for more.

Plutonium Transport Petition Continues
We have collected over 2500 signatures on our petition to stop the shipment of plutonium bomb cores between Livermore Lab and Los Alamos in New Mexico. Livermore Lab continues to push for this plan. Please download & sign at www.trivalleycares.org

Progress... Cont. from Page 2

to the “hedge” arsenal, which consists of weapons the U.S. keeps at the ready but does not count as deployed.

The House Armed Services Committee did ask NNSA to study a range of options, although it was willing to authorize lavish funding for the W78/88-1. In contrast, the House Appropriations Committee bill would cut about 30% from the NNSA’s Fiscal Year 2014 budget request for the program.

Whether the Congress passes a regular spending bill this year or, more likely, a set of Continuing Resolutions, funding will be constrained for the W78/88-1 LEP in the coming year. We are encouraged, too, that members of Congress and committee staff are asking tough questions.

In this context, we celebrate the news that the Obama Administration may be poised to impose a 5-year delay in the “interoperable” warhead program. A significant delay could yield good results. For example, the weaponeers at Livermore Lab could be reassigned to more positive endeavors, such as more rapidly dismantling retired U.S. nuclear weapons. A delay could also support efforts to move forward domestically and internationally with further reductions in nuclear forces.

On the other hand, we will remain vigilant to ensure that (a) the W78/88-1 “interoperable” warhead is not only delayed but is cancelled outright, and (b) the weaponeers at Livermore Lab do not place similar exotic and costly new-design features into the next warhead Life Extension Program. Tri-Valley CAREs is dedicated to keeping its “eyes on the prize” of global nuclear disarmament even as we savor each victory along the way!

We wish to acknowledge the Federation of American Scientists’ blog for the graphic on page 1 and also note the Union of Concerned Scientists’ October 2013 report, Making Smart Security Choices, which cautions against U.S. development of “new weapon types,” such as the W78/88-1 “interoperable” warhead.
New Fukushima Dangers. TEPCO (Tokyo Electric Power Company) will soon begin the delicate and dangerous operation of removing the spent fuel from the Fukushima Daichi nuclear power plant Reactor No. 4. The fuel sits in a pool 100 feet off the ground in a badly damaged building that is tilting, sinking and could easily come down in the next earthquake, if not on its own. While it is critical to remove the spent fuel, the potential for a mishap is underscored by a spate of recent worker exposures, leaks and other problems caused by human error at the plant. On October 9, six workers were doused with highly radioactive water when they removed the wrong pipe. Additionally, workers recently overfilled a contaminated waste water storage tank, causing a leak, possibly to the sea. In August, TEPCO reported a 300-ton leak of contaminated water from another storage tank. Additional contaminated groundwater has been seeping into the ocean at a rate of 300 tons a day for some time. According to the Associated Press, Japan’s Nuclear Regulation Authority Chairman Shunichi Tanaka said repeated mishaps could be a sign of the harsh work environment.

Sick Workers Get Support. Representative Eric Swalwell (CA-15-D), whose district includes Livermore Lab, recently agreed to cosponsor legislation to improve implementation of the Energy Employees Occupational Illness Compensation Program Act, which was enacted in 2000. The new bill, known as the Nuclear Workers Health Advisory Board Act, or H.R. 2905, seeks to strengthen the quality control measures in place for all lung disease claims and establish a much needed advisory board on implementation of the law’s section regarding claims made for illnesses from exposures to toxic substances, known as Part E. This bill, if passed by Congress, will help hundreds of workers from Livermore Lab and Sandia - Livermore who have had claims denied improperly, as well as thousands of others across the nuclear weapons complex.

Lab Shake Up. Penrose “Parny” Albright suddenly stepped down as director of the Lawrence Livermore National Laboratory, effective at the end of the October, just two years after he took the job. He cited plans to pursue "broader interests" relating to national security. He is also stepping down as president of Lawrence Livermore National Security LLC, the entity that manages the Lab for the National Nuclear Security Administration. Rumor is that his departure has to do with the National Ignition Facility. The Lab reports that Albright will be replaced with "interim director" Bret Knapp, a nuclear weapons engineer and principal associate director of the Los Alamos National Laboratory in New Mexico. Knapp had worked at Livermore for 26 years before moving to the Los Alamos Lab in 2006.

Nobel Peace Winners for Disarmament. On October 23, Nobel Peace Prize laureates called on world leaders to bring about the "universal, legal and verifiable elimination of nuclear weapons." The official statement came at the end of an annual three-day gathering of peace prize winners that took place in Warsaw, Poland. The laureates who attended include Shirin Ebadi of Iran, Continued on Page 2...