The Department of Energy Budget Request for Livermore Lab for Fiscal Year 2020 (FY20) has been released. The pie chart shows the Trump Administration’s priorities in action at Livermore Lab – and it includes more money for the development of new and modified nuclear weapons.

The one bright spot in the budget request involves new funding to address heavily contaminated buildings that had been left to rot and leak, thereby threatening worker and public health (called “High Risk” facilities in a report by the Inspector General).

Here are a few details to go along with the pie chart we created from the numbers in the DOE FY20 budget “Laboratory Tables.”

The overall DOE budget request for Livermore Lab in FY20 is $1,841,887,000 (i.e., about $1.842 billion). The request is $278,535,000 (i.e., about $279 million) more than the Lab received for the same programs last year.

Nearly $167 million (the lion’s share) of that increase is for Nuclear Weapons Activities. As you can see in the pie chart, the FY20 request for Nuclear Weapons Activities is $1,511,576,000 (more than $1.5 billion).

Indeed, Nuclear Weapons Activities comprise more than 82% of all the money requested for Livermore Lab in FY20. Compare that to the budget request for Science at the Lab, which is not quite 2% of the total. Research on Energy Efficiency and Renewables doesn’t even crack 1% of the request. And Defense Nuclear Non-Proliferation is struggling toward the 8% mark.

This is a budget request that supports and accelerates a new global nuclear arms race, in line with the Trump Nuclear Posture Review released last year.

We did promise you one bright spot, and here it is.

Last year only $25 million was allotted to the Defense Environmental Cleanup budget in order to tackle the huge challenge of Decontaminating & Decommissioning abandoned, heavily contaminated buildings at Livermore Lab.

For context, visualize an old, contaminated nuclear reactor located just within the fence line off Vasco Road and Westgate Drive, and now visualize growing cracks in the walls and shielding that can be seen with the naked eye. That’s just one of the “High Risk” buildings on site.

The FY20 request for Livermore Lab to address these buildings is $128 million, an increase of $103 million over last year. For some years now, Tri-Valley CAREs members have raised the alarm in Washington, DC and locally about the “High Risk” buildings at Livermore Lab and other sites in the nuclear weapons complex. It’s gratifying to see this increase.

True, $128 million is only a start. And, it’s small potatoes compared to the Nuclear Weapons Activities budget.

The FY20 request for Livermore Lab to address these buildings is $128 million, an increase of $103 million over last year. For some years now, Tri-Valley CAREs members have raised the alarm in Washington, DC and locally about the “High Risk” buildings at Livermore Lab and other sites in the nuclear weapons complex. It’s gratifying to see this increase.

We have a long way to go in transforming Livermore into a “Green Lab” dedicated to a civilian science mission and the moral obligation to clean up the environment from decades of nuclear weapons programs. And, changing what gets funded at Livermore Lab is central to changing its mission. Join us!
container with four sealed radioactive sources) were missing. The employee immediately notified FedEx and LLNL management. A damage report was made with FedEx requesting that FedEx search for the missing container. FedEx immediately began a search for the tungsten container in all facilities, focusing on those the drum was known to have been transported.

The tungsten container with the four sealed radioactive sources was found intact at one of the FedEx sorting facilities on October 3. Surveys of the container matched those taken by LLNL prior to shipment; there was no indication of any contamination or other damage. LLNL’s Packaging and Transportation Safety (PATS) worked with FedEx personnel to repackage the container and ship it back to LLNL, where it was received on October 4. All sources were found inside the tungsten container with no damage.

This incident further highlights the vulnerability of shipping radioactive material using FedEx.

• On October 25, 2018, a Building 331 Facility Manager determined that a Tritium Room Monitor had failed and was in a degraded condition. Tritium is radioactive Hydrogen, and is easily inhaled or ingested. The Tritium Room Monitors are a Safety Significant System when the tritium room inventory is over a specific threshold; tritium room inventory was over the threshold at the time of the occurrence. The Report does not indicate if workers were checked for tritium exposure.

These occurrences highlight the ongoing dangers at Livermore Lab. Additionally, the Lab plans significant expansion of its “Nuclear Weapons Activities” in the coming years. With more radioactive material, more new workers, and rushed deadlines, the risk of worker exposures is increasing, as is the risk to the surrounding public. Tri-Valley CAREs will continue to monitor these incidents, report on them, and take them to our members of Congress to ask for common sense constraints on weapons expansion.

Follow the Money: No New Bombs

The Fiscal Year 2020 budget request for the National Nuclear Security Administration is $16.5 billion, greater than the $15.2 billion requested for all other parts of the Energy Department combined, including funding for science and nuclear pollution cleanup nationwide. Moreover within NNSA nuclear weapons activities are slated to get $12.4 billion.

The Trump Administration has sent this budget request to Congress, which has the power of the purse strings. We call on Congress to exercise its constitutional power and deny NNSA funding for novel warhead designs and new military capabilities.

Background: The country’s current stockpile of more than 5,000 nuclear weapons has been extensively tested and certified reliable and will be for decades to come. The escalating cost of maintaining the stockpile is not due to the difficulty of the task or the effects of aging. It is caused by increasingly elective changes introduced into the stockpile as part of the Life Extension Program.

The desire to modify and develop new warheads is a primary factor in the push to upgrade other parts of the nuclear enterprise. The cost of “modernizing” the stockpile, including infrastructure and delivery systems, was estimated to be $1.7 trillion over 30 years with a modest rate of inflation.

Then the 2018 Nuclear Posture Review (NPR) added two new warheads and halted the planned retirement of the B83, while also expanding the role of nukes and the circumstances under which they could be launched. Thus, we are confronted with new dangers and a runaway program that may reach $2 trillion.

FY2020 Budget: Tri-Valley CAREs’ team will soon be going to DC to discuss wasteful spending on new nukes, including the following:

• $10 million in FY20 to complete the more “usable” low-yield, submarine-launched warhead, called the W76-2, that popped up in the Trump NPR and reduces the threshold for starting a nuclear conflict. Its deployment should be canceled. This is the nuclear weapon that the “Hold the LYNE Act” would stop (see insert).

• $112 million in FY20 to develop the W87-1 previously called the Interoperable Warhead 1. The W87-1 is intended replace the W78, and will sit atop a new land-based missile, called the Ground Based Strategic Deterrent (GBSD) system. The W87-1’s annual costs will rise to more than $500 million. Its novel design may complicate certification and add to pressures to resume nuclear explosive testing. The W87-1 will feature a new plutonium core, which is a key driver for expanded plutonium pit production. Eliminating the warhead would save $15 billion; eliminating GBSD would save another $17 billion.

• $899 million in FY20 for the W80-4 for a new air-launched Long-Range Stand Off (LRSO) missile designed to fly under radar for a sneak nuclear attack. Eliminating this program would save $30 billion or more.

• $794 million in FY20 to begin production of the B61-12. Not deploying this nuclear bomb as currently planned in five NATO countries would save $17 billion.

• $51.5 million in FY20 to maintain the B83 megaton-class bomb. The NPR halts its planned retirement. Keeping it in the stockpile will cost more than $4 billion for short-term maintenance alone.

An alternative to runaway spending on elective weapons systems would be a strict “Curatorship” approach to managing the stockpile. This approach, detailed by Tri-Valley CAREs in numerous reports over the past three decades, if adopted, would forego all elective changes to “improve” warheads, save billions of taxpayer dollars each year, stop dangerous arms racing, and bring the country into better conformity with its nonproliferation goals.
A team of advocates from Tri-Valley CAREs will be in Washington, DC from May 19th through the 22nd to participate in “DC Days,” an annual event that draws organizations from across the nation whose members are directly affected by nuclear weapons and the health and environmental consequences of their production.

“Our delegation aims to stop U.S. nuclear expansion in this time of heightened volatility,” said Marylia Kelley, the group’s executive director who resides in Livermore. “We will tell Congress to fund nuclear cleanup at home and diplomacy abroad.”

Kelley noted that the Tri-Valley CAREs team will join scores of colleagues from a dozen states who, like us, are downwind and downstream from nuclear bomb plants. “Together we will conduct upwards of 80 scheduled meetings with our Senators, other members of Congress, leaders of congressional committees that oversee nuclear issues, and top Administration officials,” she said.

“Tri-Valley CAREs is bringing a great team this year,” Kelley added.

Vecky Elliott became active in Tri-Valley CAREs to protect her community of Tracy from pollution caused by open-air bomb blasts and related activities at Livermore Lab’s high explosives testing range, called Site 300. She participated with Tri-Valley CAREs in DC Days 2016 and will return this year with the experience she has gained working on local and national political campaigns and for an incumbent member of Congress in the interim.

Elliott said, “I will advocate for funds to clean up the toxic and radioactive pollution at Livermore Lab and other nuclear sites across the country. I will also tell members of Congress to halt all funding for proposed bomb activities that threaten additional contamination of our air, land and water.”

Inga Olson has been active in Tri-Valley CAREs for three decades, and served as the group’s program director for several years. She is also a retired senior policy analyst for the State of California. Olson noted, “My life has been deeply touched by my contact with Livermore Lab workers who have fallen ill, and many who have died, due to their on the job exposures.”

Olson continued, “I will help members of Congress see the human face of nuclear development. I will also advocate that Congress stop funding new warheads. Instead, the money should be used to meet human needs and to fund civilian science.”

Barbara Dyskant joined Tri-Valley CAREs in the 1990’s after learning of leaking radioactive wastes at the neighboring Livermore Lab. She first attended DC Days in 2000. The mother of a leukemia survivor, Dyskant is determined to prevent nuclear pollution and its impacts on public health.

Dyskant said, “I will focus on bills in the House and Senate that change U.S. policy including to institute ‘No First Use’ of nuclear weapons. I will also advocate for legislation that moves us toward elimination of these weapons. Further, I am appalled that our country is producing ‘more usable’ low-yield warheads. While in DC, I will press for passage of the ‘Hold the LYNE (Low Yield Nuclear Explosive) Act’ to prevent their deployment.”

Now in its 31st year, DC Days is organized annually by the national Alliance for Nuclear Accountability and its members groups including ours. One of the key coordinators for DC Days 2019 is Joseph Rodgers, who in years past has served as an intern and then an analyst for Tri-Valley CAREs while earning his Masters in Nonproliferation at Monterey’s Middlebury Institute of International Studies.

It will be great to spend time with Joseph and with our current senior policy consultant in Washington, Kathy Crandall Robinson, who likewise is playing a key role in bringing this year’s DC Days event to life.

Your Tri-Valley CAREs team and scores of other amazing activists from around the country will make a difference together in the nation’s capital - and in the communities to which we will return.
Dear Tri-Valley CAREs supporter,

First, how are you? I want to acknowledge we are living in volatile times and, yes, nuclear dangers are on the rise. But rising, too, are you and I and millions like us.

I can assure you that Tri-Valley CAREs has never been busier! Our nearly 36 years of independent research, analysis, advocacy, and grassroots organizing is experiencing peak demand.

As I write this, Tri-Valley CAREs is preparing to go to Washington to speak truth to power about nuclear weapons to congressional leaders. Before our 80-plus scheduled meetings, I will help conduct an all-day training for activists from around the country using some of the analysis that you will find here in your copy of Citizen’s Watch.

I invite you to participate - and to conduct advocacy with us - by calling your elected officials this week using information in these pages as a basis for your recommendations.

I also ask you to contribute financially to Tri-Valley CAREs.

Your gift is tax-deductible - and it makes all of our work possible. Individual donations like yours comprise nearly 40% of our budget. We are a team. We cannot do this without you!

Tri-Valley CAREs is deep into preparations to go to South Carolina to stop expanded plutonium bomb core production. We are also planning a Peace Camp in Livermore on August 4th and 5th and the big rally, march and peaceful protest at the gates of Livermore Lab on Hiroshima Day, August 6th.

With Tri-Valley CAREs, you and I are making a difference locally, nationally and globally. I invite you to “keep on keeping on” with our excellent work – at the gates of Livermore Lab, in the halls of Congress, and by contributing financially to our continued success. For all you do, I thank you!

In peace,

Marylia Kelley
Executive Director

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Tri-Valley CAREs
4049 First Street, Suite 1 39 A, Livermore, CA 94551

YES! Here is my tax-deductible donation of

| ____ | ____ | ____ | ____ | ____ |
| $50  | $25  | $100 | $500 | $1000  |

Name __________________________
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Phone _________________________
Email _________________________
City __________________________
WE HAVE THEIR ATTENTION:

CONGRESS IS CONSIDERING 7 BILLS TO CHANGE U.S. POLICY AND REDUCE OR ELIMINATE NUCLEAR WEAPONS

Alert! Your Calls are Needed Now!

The 116th Congress is underway with new vision and energy – including a freshly awakened interest in U.S. nuclear weapons policy. Two things are clear at the outset: First, this welcome congressional spark must be fanned by grassroots action in order to grow into full-fledged policy change. And, second, public involvement at this juncture can create real progress toward nuclear disarmament.

With this in mind, Tri-Valley CAREs has been working with DC colleagues and with legislators in the House and Senate to introduce key bills to move the country away from the dangerous escalation outlined in Donald Trump's Nuclear Posture Review.

We ask for your help to enable seven newly introduced congressional bills to acquire enough co-sponsors to move forward, pass and become law. To read the full text of any of the bills, and to get further information, go to Congress.gov and type in the bill number.

Here are the details you need to make calls – and make a difference!

**The capitol switchboard is (202) 224-3121**

**HOLD THE LYNE**

**In the House** - Rep. Ted Lieu (D-CA-33) has introduced **H.R. 1086** - the Hold the LYNE (low-yield nuclear explosive) Act of 2019. This bill would prohibit the production and deployment of a “more usable,” low-yield sub-launched nuclear warhead (called the W76-2) that was given the go-ahead in last year’s Nuclear Posture Review. H.R. 1086 has 30 co-sponsors including 7 from California (Garamendi, Lee, Speier, Lowenthal, Cisneros, Thompson and Panetta). According to Trump, this low-yield option will make a U.S. nuclear strike more “credible,” which means more likely to occur. This lowers the threshold for a conventional military conflict to become a nuclear war.

**ACTION:** Call your Representative and ask him/her to co-sponsor H.R. 1086. If your member of Congress is already on board, call and say “thank you”.

**In the Senate** – Senator Ed Markey (D-MA) introduced **S. 401** - the Hold the LYNE (low yield nuclear explosive) Act of 2019. S. 401 has 7 co-sponsors, including CA Senator Dianne Feinstein. Senator Kamala Harris is not a co-sponsor.

**ACTION:** Call both CA Senators; thank Senator Feinstein and ask Senator Harris to cosponsor.

**RESTRICTING A PRESIDENT FROM FIRST USE**

**In the House** - Rep. Ted Lieu (D-CA-33) introduced **H.R. 669** - the Restricting First Use of Nuclear Weapons Act of 2019. This bill would prohibit the President from launching a first-use of nuclear weapons without an expressed declaration of war by the Congress. This bill addresses the need for checks and balances that are presently lacking.

This bill is gathering additional co-sponsors (and power) with 55 presently in the House including 18 from California (Panetta, Eshoo, Lee, Khanna, Speier, Garamendi, Lofgren Thompson, DeSaulnier, Waters, Lowenthal, Takano, Carbajal, Napolitano, Sherman, Chu, Porter and Cisneros.)
**ACTION:** Call your Representative and ask him/her to co-sponsor H.R. 669. Please thank the offices that have co-sponsored – and ask those who have not to get on board today and co-sponsor this piece of legislation.

**In the Senate** – Senator Ed Markey (D-MA) introduced **S. 200** – Restricting First Use of Nuclear Weapons Act of 2019. The bill has 13 co-sponsors, including CA Senator Dianne Feinstein. Senator Kamala Harris is not a co-sponsor.

**ACTION:** Call both CA Senators; thank Sen. Feinstein and ask Senator Harris to cosponsor.

**NO FIRST USE POLICY**

**In the House** - Rep. Adam Smith (D-WA-9) introduced **H.R. 921** to Establish the Policy of No First Use of Nuclear Weapons. This bill broadly changes U.S. policy. H.R. 921 has garnered 30 co-sponsors in the House including 9 from California (Lieu, Garamendi, Khanna, Lofgren, DeSaulnier, Thompson, Eshoo, Huffman and Cisneros).

**ACTION:** Call your Representative and ask him/her to co-sponsor H.R. 921. If your member of Congress is already on board, call and say “thank you”.

**In the Senate** – Senator Elizabeth Warren (D-MA) introduced **S. 272** to Establish the Policy of No First Use of Nuclear Weapons. It has 6 co-sponsors, including CA Senator Dianne Feinstein. Senator Kamala Harris is not a co-sponsor.

**ACTION:** Call both CA Senators; thank Sen. Feinstein and ask Senator Harris to cosponsor.

**Note:** The No First Use bill is complementary to the Restricting First Use bill – but also unique. The text of this bill is one-line: “It is the policy of the United States to not use nuclear weapons first.” Indeed, if you poll the general public, many believe that is U.S. policy, but it is not so. This bill seeks to remedy that situation and establish that the U.S. will not be the first to launch a nuclear weapon.

Many of the same elected officials are on both bills, which makes sense.

**IN SUPPORT OF NUCLEAR DISARMAMENT**

**In the House** – Rep. James McGovern (D-MA-2) introduced **H.Res. 302**, a resolution calling for the prohibition of nuclear weapons, rejection of first strike policy, and cancelation of the program to upgrade and modernize the U.S. nuclear weapons stockpile. H.Res. 302 also calls on the President and Secretaries of State and Defense to embrace the goals and provisions of the Treaty on the Prohibition of Nuclear Weapons, signed by 122 countries at the UN on July 7, 2017. H.Res. 302 has 3 co-sponsors, including 1 from California (Lee). There is no companion bill in the Senate.

**ACTION** - Call your Representative and ask him/her to co-sponsor H.Res. 302; thank Rep. Barbara Lee.

The capitol switchboard is (202) 224-3121

If you would like to know more about these and other bills and/or help Tri-Valley CAREs create change in U.S. nuclear and foreign policy, you can visit us on line at [www.trivalleycares.org](http://www.trivalleycares.org), come to our next monthly meeting, contribute financially with a tax-deductible donation, or call our offices for more information at 925.443.7148.

We appreciate all that you do for peace, justice and a healthy environment. Thank you!

Alert updated 5-3-19

<marylia@trivalleycares.org>
Subcritical Nuclear Tests Raise New Dangers

On February 13, 2019 Livermore and Los Alamos Labs conducted a subcritical nuclear test in Nevada that breached the steel containment vessel that was supposed to contain it, according to the Defense Nuclear Facilities Safety Board. On March 12, the cleanup of plutonium released in the accident was completed. Soon thereafter, the Trump budget request for the coming year was released. It includes no information about the subcritical accident but is chock full of funding to conduct more frequent subcritical tests while enhancing the diagnostic equipment and the potential data recovery.

Subcritical tests are conducted in an underground chamber at the Nevada Nuclear Security Site, previously known as the Nevada Test Site where more than a thousand above and below ground full-scale nuclear tests were detonated before 1992. Subcritical experiments use weapons grade plutonium but the small amounts involved do not reach a self-sustaining “critical” fission chain reaction, or nuclear explosive yield.

The Fiscal Year 2020 budget request for nuclear weapons activities describes a ramp up in subcritical testing in two programs. One is called “Enhanced Capabilities for Subcritical Experiments” (ESCE). The budget justification for ESCE states, “the stockpile is inherently moving away from the Underground Test (UGT) database through aggregate influences of aging, modern manufacturing techniques, modern materials, and evolving design philosophies” (emphasis added; in plain language this means the weapon labs want to create novel designs and new military capabilities).

Further, the budget request notes that “Data from ECSE will help the certification of the W80-4 LEP and the W87-1 Modification Program.” The W80-4 and W87-1 warheads are both being developed at Livermore Lab and the so-called “evolving design philosophies” are hugely in evidence here. Livermore’s design for the W80-4 is becoming increasingly more complex than the weapon it will replace. The W87-1 is a full-on new warhead design that will require a new-design pit among other new components. It’s these novel design features that “require” more subcritical tests and ESCE.

Last year the ESCE program received $50 million. For FY 2020, the request is $145 million, with projections rising in later years to $170 million in FY21; $173 million in FY22; and nearly $187 million in FY23. Total program cost approaches $1 billion by fiscal 2024.

The second ramp up in subcritical tests is called the “U1a Complex Enhancements Project” (UCEP). UCEP will include “an increased operational cadence of subcritical weapons experiments using plutonium” to include 2-3 subcritical experiments per year. For reference, U1a is the name of the underground subcritical test complex. Two to three tests annually represents a major increase in the rate of subcritical nuclear testing. We call on Congress to reel in this program now, before billions are spent and new warheads are created.

(A longer version of this article is on our website with live links and photographs.)

Save the Date – August 6th at 8am

Commemorate Hiroshima & Nagasaki at Livermore Lab to say “never again” to the use of nuclear weapons. Join us for a rally with speakers and music on Tuesday, August 6 at 8am, followed by a march, Japanese bon dance and, for those who choose, a peaceful action in the gates.

There will be a peace camp before the action on Aug. 4-5 at a lake near Livermore. More information on Facebook and at www.trivalleycares.org

Tri-Valley CAREs meeting
7:30 – 8:30 PM, TVC Office
4049 1st St. Suite 139A, Livermore
(925) 443-7148 for details

Tri-Valley CAREs’ monthly meeting is a chance to get issue updates, celebrate our progress and successes, meet new friends, and discuss upcoming events. We will meet in the First Floor Conference Room. Snacks and refreshments served.

Thursday, June 20

Letter to the Editor Writing Party
5:30- 7:00 PM, TVC Office
4049 1st St. Suite 139A, Livermore
(925) 443-7148 for details

Write a letter to the editor of your favorite newspaper in a friendly and supportive environment. We welcome beginners and experienced letter writers alike. We will have handouts on various topics to spark ideas. Snacks and refreshments served.
When an incident occurs at Livermore Lab (or any of the DOE National Nuclear Security Administration sites) that has the potential to hurt workers (including any radiation release, toxic chemical spill, etc.), or did in fact result in an injury, an “Unusual Occurrence Report” must be created. As part of our work monitoring the Lab, Tri-Valley CAREs recently reviewed the Lab’s 34 Unusual Occurrence Reports from 2018. Here is an excerpt of those we found most alarming...

- In May 2018 it was determined that the ventilation system for Building 132 was recirculating air in areas where “benchtop chemical operations” occur. In other words, in areas where chemical fumes are released into the air in the room, the ventilation system was sucking up the fumes and spewing them back into the same area without filtering. This condition has existed for “some time” and workers had complained about strong chemical odors, but nothing was done about it prior. The Lab has concerns that “benchtop operations are being performed without adequate ventilation in other facilities” thereby exposing workers to dangerous fumes in multiple places at the Lab. Benchtop work was indefinitely paused in Building 132 and other buildings are being evaluated. No indication was given as to whether worker exposures were being evaluated.

- In September 2018, a Class III curium-244 source (a radioactive material) in Building 194 could not be located and it was determined to be missing since June. (It took the lab three months to notice that 384 micro-curies of radioactive material was missing!) The material has not been located.

- In November 2018, Livermore Lab’s Site 300 High Explosives Testing Facility near Tracy was inspected by the San Joaquin County Department of Environmental Health. The inspection identified six separate violations: 1) Failure to completely label containers or portable tanks of hazardous waste; 2) Failure to properly close tanks when making a claim of permanently closed; 3) Failure to implement the Spill Prevention, Control and Counter Measures Plan; 4) Failure to keep records of procedures, inspections or integrity tests for three years. 5) Failure to complete and/or submit a site map with all required content. 6) Failure to establish and/or submit emergency response procedures for a release or threatened release.

These six violations are alarming given that just two years ago the site underwent an extensive hazardous waste permit renewal process with the California Department of Toxic Substances in which the Lab repeatedly assured compliance with all state and federal laws would be strictly upheld, including those identified as lacking in the inspection.

- On Thursday September 27, 2018, an LLNL employee prepared LLNL sealed radioactive sources as a limited quantity package and shipped them via FedEx to Florida. On Monday, October 1, 2018, the LLNL employee on official laboratory travel attempted to pick up that shipment at a FedEx station in Florida and discovered that the shipping drum was damaged and that the top was taped closed. Upon inspection, it was determined that the contents inside the damaged shipping drum (a tungsten