

# **Conference Title: Exploring the Roles of Hiroshima, Nagasaki and Japan in the Wake of the 3/11 Nuclear Power Plant Disaster**

## **Section 2: How Does the International Community See Nuclear Energy and Weapons?**

### **Presentation Title: U.S. Nuclear Policy in the Age of Obama and Fukushima**

**Presented By: Marylia Kelley, Executive Director since 1983, Tri-Valley CAREs (Communities Against a Radioactive Environment), Livermore, California, USA**

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Good day. I am honored to be part of this important symposium to discuss nuclear weapons and nuclear power in the wake of the still-ongoing tragedy at the Fukushima Daiichi nuclear power plant. To start, I will offer a short analysis of U.S. nuclear weapons policy and share some information about what is going on inside the U.S. nuclear weapons complex, which my organization has been closely monitoring for nearly 30 years. Then, I will say a few words about the contamination in my community that comes from nuclear weapons activities at Livermore Lab. I will also briefly touch on the links between nuclear weapons and nuclear power and what analysts and activists in the U.S. are doing to move our country toward a nuclear weapons and power-free future. Finally, I will conclude with some thoughts on the role of Hiroshima, Nagasaki and Japan in achieving a more safe, secure and nuclear-free world.

### **Part One: U.S. Nuclear Weapons Policy - A Study in Internal Contradictions**

In his now famous April 5, 2009 Prague speech, President Obama clearly declared "America's commitment to seek the peace and security of a world without nuclear weapons." However, in the same speech, he also said (1) that it might not happen in his lifetime, and (2) that for as long as nuclear weapons exist, the U.S. will maintain a "safe, secure and effective arsenal."

U.S. nuclear weapons policy continues to uncomfortably bridge the chasm between those very different statements, as the first one places a nuclear weapons-free future at the center of national policy and the others focus on the primacy of maintaining U.S.

nuclear weapons.

The potentially irreconcilable difference between those statements is further complicated by the fact that the nuclear weapons laboratories are the entities that define what it means to "maintain" U.S. nuclear weapons. Indeed, the weapons laboratories are currently "enhancing" and "modifying" the U.S. nuclear stockpile in the name of "maintaining" it. Further, in order to enable this enterprise, the U.S. is "modernizing" its entire nuclear weapons complex, including the construction of new bomb plants. In so doing, the U.S. is actually moving the nation and the world in the opposite direction from its declared goal of nuclear disarmament.

One year after the Prague speech, the Obama Administration released its "Nuclear Posture Review," or NPR. Laudably, it does contain language reiterating the long-term goal of a nuclear weapons-free world and it does state that the U.S. will not develop "new" nuclear weapons. However, among other weaknesses, the NPR fails to define what constitutes a "new" nuclear weapon.

Instead, the NPR calls for full funding of programs that will result in substantially new U.S. nuclear weapons, including a "Life Extension Program" for the submarine-launched W76 warhead that gives it new military capabilities. The NPR also calls for funding novel variants of the B61 nuclear bomb and the W78 ICBM (intercontinental ballistic missile) warhead that will make them essentially new nuclear weapons. Additionally, the Obama NPR endorses a major rebuilding of the nuclear weapons complex under the rubric of "modernization."

Also in April 2010, Presidents Obama and Medvedev of Russia signed the New Strategic Arms Reduction Treaty, which my group characterized as a "modest" and "small" step forward. The big problem with New START is not with the words that are written on paper, but, rather, with what President Obama promised to the nuclear "hawks" in the Senate and in the weapons laboratories in order to obtain the votes necessary for ratification of the treaty. Those promises include an escalating budget request for nuclear warhead research and development (R&D) activities, rising from the 2010 level of \$6.4 billion to \$7 billion in 2011 and continuing upward to \$9 billion per year by 2018. New START was ratified in December 2010, and the Obama Administration's budget request for nuclear warhead R & D has risen accordingly.

Before I detail some of the dangerous programs that are being pursued with those funds, let me say a word about the overall U.S. nuclear weapons budget. The nuclear weapons complex, warhead R&D costs and select other nuclear weapons programs are funded through the U.S. Department of Energy. Other program costs, including major expenditures for missiles, submarines and bombers to carry the nuclear weapons, are funded through the Department of Defense budget. Nowhere in the U.S. budget process is there a clear number each year attributed to the totality of nuclear weapons programs across the different Departments. Therefore, analysts must impute an overall number by determining which program elements support the U.S. nuclear stockpile. When viewed as a whole, the annual budget for U.S. nuclear weapons totals about \$61 billion. When the

increases that Obama promised are taken into account, the U.S. is projected to spend about \$700 billion on its nuclear weapons programs over the coming ten years.

## **Part Two: U.S. Policy in Action - A Glimpse Inside the Nuclear Weapons Complex**

The U.S. Department of Energy's National Nuclear Security Administration runs the eight major sites that comprise the active U.S. nuclear weapons complex. Major new construction (so-called "modernization") of nuclear bomb research and production facilities undermines U.S. nuclear disarmament goals and threatens global progress toward curbing proliferation and achieving a nuclear weapons-free world.

Dangerous and proliferation-provocative new bomb facilities include: (1) the planned Chemistry and Metallurgy Research Replacement project at Los Alamos Lab in New Mexico (to enable production of new plutonium bomb cores); (2) the planned Uranium Processing Facility at Y-12 in Oak Ridge, Tennessee (to produce new "secondaries," i.e., the H-bomb component); (3) a wholly new Kansas City Plant in Missouri (to produce the non-nuclear components for nuclear weapons); and (4) the recently constructed National Ignition Facility at Livermore Lab in California (to train a new generation of nuclear weapons designers).

New nuclear weapons require four basic ingredients: a new or modified design, and, for warhead production, a fission "primary" or core, a uranium "secondary" and a variety of non-nuclear components. It is immediately noticeable that the U.S. is building new facilities for each of these main operations. This, in and of itself, belies any notion that the country is moving with appropriate haste toward a nuclear weapons-free future. Moreover, the new bomb factories being built at Los Alamos and Y-12 will not be completed until 2022 - or later. Operations in them will take place for multiple decades following their completion. In plain language, this means that the U.S. is planning to produce nuclear weapons for the next forty years or more.

Warhead "Life Extension Programs," or LEPs, are also expanding in scope. My organization has been documenting and decrying the mission shift in this program since the mid-1990s. This shift has accelerated in the age of Obama, and the LEPs are moving far beyond "refurbishing" some of the parts in a nuclear warhead to what the weapons designers call "reuse" and "replacement" LEPs. The latter two terms describe major changes in U.S. nuclear weapons that any logical onlooker might call "new designs" or "new nuclear bombs."

The W76 submarine-launched nuclear warhead has been getting a new fuze that can make it explode closer to the ground and a reentry vehicle with improved accuracy. Thus, through the LEP process, it is transformed into a warhead that can be used to preemptively destroy hardened deeply buried targets.

A LEP will transform the B61 tactical nuclear bomb deployed in NATO countries. The weapons laboratories plan to "mix and match" components from up to four different versions of the weapon into a new, highly-modified bomb called the B61-12.

Additionally, the weapons labs plan to incorporate new mechanisms into the nuclear explosive portion of the weapon. The new bombs are scheduled to roll off the production line until 2023. This is yet another signal that the U.S. is proceeding toward nuclear disarmament at a glacial pace, if at all.

A LEP for the W78 warhead may combine two different warhead types (the W78 ICBM and the submarine-launched W88) into a third, essentially wholly new, design. This joint warhead option raises important questions about just how far U.S. nuclear weapons designers will go in changing the U.S. stockpile. This new weapon will not be finished for decades, again signaling that the U.S. intends to keep its nuclear weapons far into the future.

With these new LEPS, the question of nuclear disarmament is being left behind and it's "off to the races" for new design features. At best, this stymies global progress toward a nuclear weapons-free world and provides cover for other nations' investments in "modernizing" (or obtaining) nuclear stockpiles. At worst, these expanded LEPS could also lead the U.S. to resume full-scale nuclear testing. This is because the new weapons' reliability could become doubtful due to the massive changes they incurred in the LEP process.

### **Part Three: The Radioactive and Toxic Impact on Communities**

At the Livermore Lab where I live, 89% of its more than 1.2 billion dollars will be spent on nuclear weapons activities in the coming year. The dangers of nuclear development are not limited to the money it consumes. There are other devastating impacts. Our air, our land and the groundwater aquifer beneath our homes have all been contaminated by nuclear bomb activities. The Livermore Lab is on a special government list of the most contaminated locations in the nation. Things are so heavily contaminated that cleanup is expected to take 70 more years. And, at the place where Livermore Lab does high-explosive testing, officials have admitted that the area can never be completely cleaned up. This toxic and radioactive mess will be forever.

There are 7 million people living within 50 miles of Livermore Lab and all are potential radiation victims. Tri-Valley CAREs had been able to document that accidents at Livermore Lab have released one million curies of radiation into the air. One single curie is a large amount of radiation, equal to 37 billion radioactive disintegrations per second. That radiation has gone wherever the winds have carried it. Livermore Lab scientists have told me that they have tracked radiation from Lab accidents 200 miles away.

I humbly stand here in solidarity with the victims of the U.S. atomic bombing of Japan, with the victims of the radiation still spewing out of the Fukushima Daiichi nuclear power plant, with the victims of uranium mining and the nuclear cycle all around the U.S. and world-wide.

### **Part Four: The Nuclear Weapons-Nuclear Power Nexus and Actions Toward their**

## **Elimination**

Nuclear weapons and nuclear power are inextricably linked because the end product of a nuclear power plant contains plutonium-239, the beginning stage of a nuclear weapon. Further, uranium ore is enriched slightly for nuclear fuel and by the same processes can be further enriched to make a bomb. And, the connections go on. In recognition of this nexus, countries with nuclear power and enrichment technologies are sometimes referred to as "latent proliferators" and those known to possess nuclear weapons as "active proliferators."

It is for this reason, among others, that many analysts and activists in the U.S., and indeed globally, seek the elimination of both nuclear weapons and nuclear power. In the U.S., however, these two movements have matured somewhat separately, in part because the necessary combination of expert knowledge, political strategies, action tactics, local facility sites, etc. is different for nuclear weapons and power, albeit not completely so.

In the wake of the disaster of 3/11, the U.S. movements to end nuclear weapons and nuclear power have moved closer together. The tragedy at the Fukushima Daiichi nuclear power plant has touched our hearts and lives in the U.S. In its aftermath, Fukushima has galvanized public sentiment against nuclear power according to some national polls. In addition, it has drawn the activist groups together. There are many examples of this across the country. One is in my home state of California, where a new network has formed to address our state's two operating nuclear power plants, Diablo Canyon and San Onofre. Both of these nuclear plants are on or overlooking the Pacific Ocean - and both are sited very near major, active earthquake faults.

The movement to eliminate nuclear weapons is also showing healthy growth in the U.S. I am certain that many of you here today have met some of my esteemed colleagues and know of much of their - and our collective - work. I will name only a few developments. Notably, at the 2010 Non-Proliferation Treaty (NPT) Review Conference, the movement among non-governmental organizations and some countries to catalyze action on a Nuclear Weapons Convention to eliminate all nuclear weapons within a time-bound framework gained momentum.

And, we in the U.S. were all uplifted by the thousands of Japanese people who led the march in New York that preceded the official opening of the Conference - and who brought petitions and participated in various venues at the United Nations. That energy is continuing to reverberate in all of our work in communities across the U.S.

This year a new campaign to cut the U.S. nuclear weapons budget has been launched by the Ploughshares Fund in coalition with national groups in Washington, DC and key organizations near nuclear weapons sites, including my own. I am optimistic that the focused and sustained attention that this new campaign can bring to the budget debate in a time of financial crisis in the U.S. will lead to reductions in both the numbers of nuclear weapons we keep and in their overall budget. To be clear, I do not expect this to be a short-term project. The U.S. nuclear weapons laboratories and their cronies in the

Congress and in other positions of power are extremely entrenched. Dislodging them will be no easy task, but it is one that must be accomplished if we and our children are to enjoy a world free of the nuclear weapons.

### **Part Five: The Role of Hiroshima, Nagasaki and Japan in Eliminating Nuclear Technologies**

A role that Hiroshima and Nagasaki have played time and again is that of catalyst to action for nuclear weapons abolition. Your steadfast spirit infuses the global movement, even more than you may realize. Additionally, initiatives like Mayors for Peace, are important vehicles for education and action in the U.S. and around the world. For all these roles and more, I thank you.

I offer these thoughts as a citizen of the United States as well as the world. I am keenly aware that it was my country that dropped two nuclear bombs on Japan, and that my work at home must speak this truth to power. In this regard, I will mention that my group, along with colleague organizations in the San Francisco Bay Area, organizes demonstrations each year at the gates of the Livermore nuclear weapons laboratory on the anniversaries of Hiroshima and Nagasaki. And, to the courageous and inspiring Hibakusha who have graced our Livermore event with their testimonies over the years, and who are present here today, let me again say thank you.

On August 6 of this year, our commemoration concluded with a live skype between the demonstrators in Livermore and two gentlemen from your City, Mr. Keijiro Matsushima and Mr. Steve Leeper. We discussed the leadership role that Japan could play in making progress on achieving a Nuclear Weapons Convention. I am convinced that Japan's moral authority in this matter could make a real difference globally, and so I offer this as one of my thoughts regarding an additional role that Japan should consider.

I also want to share that a number of activists and experts in the U.S. oppose reprocessing and are aware of the reprocessing facility at Rokkoshu. Like many nuclear projects, the reprocessing facility at Rokkoshu is over budget and rife with technical problems - and its environmental and health problems could become extreme. Less well known is that Japan is believed to possess a significant amount of U.S.-supplied 92% plutonium in the form of "critical assemblies" for earlier testing in fast reactors. There may be an opportunity for American and Japanese activists to work together on these issues.

I want to conclude by stating that U.S. advocates working for the elimination of nuclear weapons and nuclear power, including my organization, look forward to continuing a close and mutually beneficial relationship with our Japanese counterparts. I believe that by working together, and with all of the other incredible people throughout the world, we will achieve a more safe, sane and secure world. It will be a world in which our grandchildren will ask us with genuine disbelief in their voices, "grandma and grandpa, in the olden days, did people really boil water and make bombs with nuclear

materials?" This is the better world I seek. Thank you all for taking up that journey too and for lighting my way along its path. ###