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“Our world faces a crisis as yet unperceived by those possessing the power to make great decisions for good or evil. The unleashed power of the atom has changed everything save our modes of thinking and we thus drift toward unparalleled catastrophe. We scientists who unleashed this immense power have an overwhelming responsibility in this world life and death struggle to harness the atom for the benefit of mankind and not for humanity’s destruction.”
Albert Einstein, 1946

Dear Ms. Nelson,

Sierra Club supports the “No Action” alternative EIS for Plutonium Pit Production, Savannah River Site

There is no rationale for building a Plutonium Bomb Plant at Savannah River Site, South Carolina.

1. Savannah River Site has no experience or expertise in the manufacture of plutonium pits. By authorizing SRS to produce plutonium pits NNSA would repeat the mistakes made in building the MOX, mixed oxides plant at SRS, squandering at least $10 Billion.  
2. NNSA’s assertion that the current U.S. stockpile of plutonium pits is degraded and degrading is not corroborated by independent studies, including the JASON 2019 review. Currently there are over 20,000 plutonium pits stored at the Pantex facility near Amarillo TX. The sheer volume of these plutonium pits, which could be re-used, poses an enormous environmental and fiscal burden.

3. Pit production would produce a host of chemical and nuclear waste streams and it is unacceptable that dumping of low-level nuclear waste in unlined trenches at SRS is being considered.

4. Pit production could distract from the main mission of the site and the largest amount of funding - cleaning up tens of millions of gallons left over from production of plutonium and nuclear weapons materials.

5. Producing new-design nuclear weapons, the justification of which is doubtful, and replacing pits in the entire stockpile, which appears to be the unstated goal, could stimulate a costly new nuclear arms race.

6. Please discuss how producing pits for 80 or more nuclear weapons per year until all pits are replaced in all nuclear weapons complies with the legal requirements in the Nuclear Non-Proliferation Treaty “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.”

7. Discuss exactly what new-design weapons pits would be for must be discussed, including the W87-1-like and W93 warheads. Under what circumstances would new-design weapons and new pits be subjected to underground nuclear testing?

8. The draft EIS waves off “reuse” of existing pits - some 15,000 or more of them are in storage at DOE’s Pantex site in TX - and it is imperative that pit reuse and refurbishment be thoroughly analyzed.

9. The discussion of the exact technology to be used to purify plutonium at SRS is lacking, as are the environmental and health impacts associated with this.

10. As plutonium was stranded at SRS when the MOX project collapsed, what would prevent more plutonium ending up at SRS if the pit project was terminated mid-stream or halted due to an accident?

11. Before “repurposing” of the ill-constructed MOX plant is considered, there must be investigations into potential waste, fraud, abuse and mismanagement at the MOX debacle. Please provide evidence that the MOX plant construction problems can be remediated and the facility used for pit production, for which it was not designed.

12. The impact of pit production on the legally mandated cap on the capacity of the Waste Isolation Pilot Plant to receive transuranic (plutonium) waste must be reviewed, along with the scheduling impact of receipt of TRU waste from the pit facility and other DOE sites.
13. Details of the role of the Y1-2 National Security Complex in providing HEU or other support for pit production must be fully discussed.

14. I support preparation of an over-arching, legally mandated Programmatic Environmental Impact Statement (PEIS) which would examine the need for expanded pit production and the role in pit design, pit production and waste handling at DOE sites across the country, including SRS, Los Alamos, Pantex, Y-12, the Waste isolation Pilot Plant, Sandia, the Nevada Nuclear Security Site, and the Kansas City National Security Campus (where non-nuclear components are managed). The PEIS must be completed before the final EIS on SRS pit production is finalized.

**United States remains in violation of the Nuclear Non-Proliferation Treaty**

By “modernizing” the U.S. nuclear arsenal, including the manufacture of Plutonium Bomb Pits at Savannah River Site and Los Alamos NM, the United States is violating the spirit and letter of the legally binding Treaty on Non-Proliferation of Nuclear Weapons NPT Article VI, ratified in 1970 and extended indefinitely in 1995. NSSA must take into consideration the legally ratified and binding NPT and how production of new plutonium pits for newly designed nuclear weapons will violate the NPT.

**NPT  Article VI**

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

NSSA must consider the ramifications of designing new plutonium pits at SRS for inclusion in a new generation of nuclear weapons. Would these weapons require testing? And, as seems the case, would such nuclear weapons testing violate the Comprehensive Nuclear Test Ban Treaty? We assert that indeed such new weapons testing would.

**The Comprehensive Nuclear Test Ban Treaty**

On 29 May 2018, the Secretary-General launched “Securing our Common Future: An Agenda for Disarmament.” The Agenda highlights the norm against testing nuclear weapons of a measure that serves both disarmament and non-proliferation objectives. In that context, the Secretary-General appealed to all remaining States whose ratifications are required for the Comprehensive Nuclear-Test-Ban Treaty (CTBT) to enter into force to commit to sign the Treaty at an early date if they have not already done so, and to accelerate the completion of their ratification processes.

**United Nations Treaty on the Prohibition of Nuclear Weapons, TPNW**

The United Nations General Assembly in 2017 adopted the Treaty on the Prohibition of Nuclear Weapons. The TPNW would make illegal the production, deployment, development or stockpiling of nuclear weapons, once fifty (50) nation states ratify the Treaty. Currently 37 states have ratified the TPNW. It appear likely that the United Nations will deem illegal nuclear weapons world-wide, before a single plutonium pit could be produced at Savannah River Site. NSSA should consider the geo-
political and security consequences of pursuing a Plutonium Bomb Plant at SRS which much of the world community considers abhorrent and illegal.

Sierra Club supports the U.N. Treaty on the Prohibition of Nuclear Weapons.

https://www.un.org/disarmament/wmd/nuclear/tpnw/

Sincerely,

Mark Muhich
For Sierra Club Nuclear Free Core Team

Lori Dunn, Director
Sierra Club South Carolina

Included please find official Sierra Club polices regarding nuclear weapons dating to 1961, and “Nuclear Budgets by Country” compiled by the International Committee for the Abolition of Nuclear Weapons, ICAN.
Nuclear Weapons

Sierra Club endorsement of Back from the Brink call to Prevent Nuclear War:

We call on the United States to lead a global effort to prevent nuclear war by:
* renouncing the option of using nuclear weapons first;
* ending the sole, unchecked authority of any US president to launch a nuclear attack;
* taking US nuclear weapons off hair-trigger alert;
* cancelling the plan to replace the entire US nuclear arsenal with enhanced weapons; and
* actively pursuing a verifiable agreement among nuclear armed states to eliminate their nuclear arsenals.

Position endorsed Aug. 13, 2019 by National Program co-leads Ramon Cruz and Debbie Sease

Sierra Club Support for UN Treaty on Nuclear Weapons

History proves that the production and testing of nuclear weapons poses grave environmental risks. The cost to human life and health and the environmental devastation caused by the use of nuclear weapons is unthinkable. Sierra Club applauds the efforts of the International Campaign to Abolish Nuclear Weapons, recipient of the 2017 Nobel Peace Prize, and supports global ratification and implementation of a verifiable, binding UN treaty with the goal of reducing and eliminating nuclear weapons.


UN website with background information: https://www.un.org/disarmament/ptnw/index.html

Adopted by the Board of Directors, November 8, 2017

Minimum Deterrence Policy

Because of the massive overkill capability of existing nuclear arsenals, the danger of nuclear war from accident or miscalculation, the risk of proliferation, and the environmental hazards of nuclear weapons production, the United States, with the Soviet Union and all other states, should no longer test any nuclear weapons. Furthermore, over a period of the next ten years, no new nuclear weapons should be produced or deployed. Negotiations should be initiated
among the nuclear powers to achieve a minimum level of arsenals essential for mutual
deterrence as a first step toward the ultimate goal of non-nuclear security systems.

*Adopted by the Board of Directors, March 16-17, 1991*

**Moratorium on Production of Weapons-Grade Fissile Materials**

Recognizing the dangers of nuclear proliferation and the immediate threats to public health
and environmental safety from the continuous production of fissile materials, the Sierra Club
urges the United States government to negotiate a global, verifiable moratorium on the
production of plutonium and highly enriched uranium.

*Adopted by the Board of Directors, May 7, 1988*

**No-First-Use of Nuclear Weapons**

Owing to devastating environmental effects of nuclear weapons, the Sierra Club urges the
United States to adopt and announce a policy of no-first-use of nuclear weapons and to base
its military plans, training programs, defense budgets, weapons deployments, and arms
negotiations on the assumption that it will not use nuclear weapons first.

*Adopted by the Board of Directors, November 14-15, 1987*

**Deployment of Weapons in Space**

Because of the grave threat to Earth's environment from space-based weapons and because
the Sierra Club believes that outer space should be preserved for peaceful cooperation,
exploration, and scientific discovery, the Sierra Club opposes any development, testing, or
deployment of space-based weaponry. Consequently, the Sierra Club:

1. Opposes the unilateral pursuit of space-based weapons systems beyond basic
research to keep current on what is and what is not feasible;
2. Calls upon Congress to limit appropriations for the Strategic Defense Initiative
accordingly;
3. Opposes any abrogation of relevant arms control agreements;
4. Calls upon the Soviet Union, the United States, and all other nations to expand the
1967 Outer Space Treaty and negotiate a mutually verifiable, multilateral ban on the
production, testing, and deployment of weapons in space.

The Sierra Club's position is based on the following considerations:

1. The risk of nuclear war and nuclear winter with their potential for initiating mass
extinction of life on Earth would be increased by the possible pre-emptive (first-strike)
use of space-based weapons and by the likelihood that pursuing them would remove
all current restraints to the arms race, such as the ABM Treaty of 1972, the SALT II

2. Radioactive and/or other debris from space based weapons testing and orbiting nuclear reactors used for weapons application may contaminate the extra-atmospheric space environment and damage life on Earth.

3. Pursuing the Strategic Defense Initiative would drain financial resources and scientific talent badly needed for the solution of pressing environmental problems and other socially beneficial programs.

Adopted by the Board of Directors, January 15, 1986

Non-Proliferation

The Sierra Club reaffirms its support for the nuclear non-proliferation treaty and urges all nations to sign and adhere to it. Stricter enforcement of it and attendant international inspection is needed to prevent diversion of nuclear materials for weapons purposes. Realization of its aim will be enhanced by the negotiation of a verifiable, comprehensive test ban treaty that would impede the development of nuclear weapons by more countries.

The Club urges the United States and the Soviet Union to take the lead in negotiating such a treaty and including other nations to accede to it. Once in force, these two countries should conscientiously carry out their obligations under it, and in addition, they would provide an example of nuclear arms control by substantially reducing their stockpiles of nuclear weapons.

They should also use their influence with nations that have not signed the non-proliferation treaty to induce them to abstain from developing and stockpiling nuclear weapons, employing both positive and negative incentives. They should withhold exporting weapons-grade materials themselves to any nation and should impose restrictions which are as tight as feasible on exports of materials that could be used for nuclear weapons.

Moreover, the U.S. and the Soviet Union should apply pressure on other nations, which may be supplying such materials, to stop exports to countries which they cannot influence directly, and to impose much stricter controls on the export and use of technology that could be used for nuclear weapons. The Sierra Club encourages its environmentally minded colleagues in other nations to press for these reforms in their countries.

Adopted by the Board of Directors, September 14, 1985

1. The Sierra Club supports a general bilateral nuclear freeze.
2. The Sierra Club is opposed to programs that appropriate or expend public funds for any further testing, production or deployment of destabilizing nuclear weapons systems.

Adopted by the Board of Directors, January 28-29, 1983
Because the use of nuclear weapons in modern warfare would result in unprecedented destruction to the global environment on which human and all life depends for survival, the Sierra Club expresses grave concern over the lack of progress in completing nuclear arms reduction agreements and urges all nations by bilateral and multilateral agreements to halt any further development, testing, and further deployment of nuclear weapons. We urge all nations to develop a long-term program to reduce nuclear weapons stockpiles. We hope that progress on these issues can be made at the 1982 U.N. Disarmament Conference.

Adopted by the Board of Directors, November 21-22, 1981

Nuclear Testing

The Sierra Club supports an international ban on all nuclear testing of bombs, including explosions underground.

Adopted by the Board of Directors, January 27, 1972

Amchitka Testing

The Sierra Club opposes further use of Amchitka Island for nuclear testing.

Adopted by the Board of Directors, September 15, 1969

Project Chariot

The Sierra Club commends and supports the Governor of Alaska for his stand in opposition to Project Chariot -- the controversial proposal for a nuclear test excavation in the region of Cape Thompson, Alaska -- pending a more complete study of the total effects, including damage to native people, wilderness and wildlife.

Adopted by the Board of Directors, May 6, 1961

Total World Spending on Nuclear Weapons 2019

As the accompanying chart illustrates the world’s total spending for nuclear weapons in 2019 was $73 Billion, with almost 20% expended on the U.S. nuclear arsenal; three times the nuclear expenditure of the nuclear budget of next closest rival, China, at $10.4 Billion. Such an enormous differential between U.S. nuclear weapons expenditures and any other nuclear power must call into question the necessity and legitimacy of funding and building a Plutonium Bomb plant, at SRS or anywhere.
2019: WHO SPENT WHAT ON NUCLEAR WEAPONS?

$73 billion

USA $35.4 billion
China $10.4 billion
France $4.8 billion
India $2.3 billion
Israel $1 billion
North Korea $0.6 billion
Pakistan $1 billion
Russia $8.5 billion
UK $8.9 billion

Source: ICAN. "Enough Is Enough: Global Nuclear Weapons Spending 2020"