OHIO, CENTRUS and the SAUDI NUCLEAR BOMB

The Centrus High Assay Low Enriched Uranium (HALEU) project will be located on the Portsmouth Nuclear Site at Piketon, Ohio. This is the 3,777-acre site in Southern Ohio where uranium was enriched from the 1950s until 2001 – first to make nuclear weapons and later to make fuel for commercial nuclear power.

In November, 2019, the uranium enrichment company Centrus announced the finalizing of a 3-year contract with the U.S. Department of Energy (DOE) to demonstrate HALEU production. HALEU is said to be needed for yet-to-be developed and built “small modular” or “advanced” nuclear reactors. The $115-million, no-bid contract is for a pilot plant of 16 centrifuges that would enrich uranium up to 19.75% of its fissionable isotope U-235. Why this precise figure? Uranium enriched to 20% is considered weapons usable. This is a legal, not a scientific, difference. The doublespeak agreement states that HALEU is for civilian use, while at the same time justifying a no-bid contract on the basis that a domestically-owned source of enriched uranium is required for defense purposes. We discuss the claimed need for a domestically-owned source below.

There are already two sources of HALEU for domestic use: U.S. commercial nuclear reactors use uranium that is enriched to between 3 and 5%. Urenco is the only commercial producer of low-enriched uranium in the U.S. Their foreign-owned facility in New Mexico can meet all U.S. commercial needs. Urenco will soon be producing HALEU for its U-battery small modular reactor. HALEU can also be obtained from Idaho National Labs which has tons of it stockpiled.

In July 2019 the Arms Control Association published an article: No Rush to Enrich: Alternatives for Providing Uranium for U.S. National Security Needs, noting that Urenco’s plans to produce HALEU in New Mexico would be at a much lower price than the Energy Department’s proposed small, expensive Centrus facility that could cost $10 billion or more.

BACKGROUND: Failed USEC becomes Centrus: The private entity USEC, Inc. put about $2.5 billion, much of it taxpayer money, into the failed American Centrifuge Plant (ACP) at the Portsmouth Nuclear Site. Citizen interventions to stop ACP licensing maintained that the technology was outdated and unworkable. Of 11,500 centrifuges planned, 120 were completed. Six centrifuges crashed in 2011, spewing radioactive contamination. DOE gave USEC hundreds of millions of dollars for the ACP after USEC stock became junk-rated. USEC’s attempts to get a $2 billion DOE loan guarantee, championed by Ohio’s governor and senators on both sides of the aisle, eventually failed. USEC declared bankruptcy in 2014. In 2015 DOE ended funding, closing ACP operations. USEC emerged out of the ashes of bankruptcy with a new name: Centrus.

Daniel Poneman, Centrus CEO: In April, 2015 the Project on Government Oversight wrote a scathing article The Revolving Door Goes Nuclear about how Poneman, who served as the number two official at DOE, became president and CEO of Centrus in less than six months after leaving DOE. Poneman has DOE inside knowledge and connections for getting deals for Centrus. His total compensation was $2,404,724 in 2018.

Centrus gets no-bid contract at Piketon: In November 2019, Reuter’s published the article U.S. lawmakers question why Centrus awarded federal uranium contract. Four U.S. Representatives (two Republicans and two Democrats) from the House Subcommittee on Investigations and Oversight and the House Subcommittee on Energy have asked Secretary Rick Perry how Centrus won the $115-million Dept. of Energy contract to demonstrate HALEU production. Their letter asks how the contract was funded, why other companies were not allowed to compete for the award, and whether there is a need for HALEU at the present time. They asked that the requested records be submitted by Dec. 3, 2019. They also note that if the HALEU project is for defense purposes, agencies other than the Department of Energy should pick up the funding. continued on page 2
Domestically-owned enrichment needed for nuclear bombs? For decades, DOE and others have maintained that a treaty requires that enriched uranium for U.S. nuclear bombs come from a domestically-owned source. This has been widely quoted, but no one seems to be able to pinpoint this requirement. In justifying a no-bid contract with Centrus, DOE staff indicated that the 1992 Treaty of Washington, which governs uranium enrichment activities in the U.S., requires domestically-owned enrichment. The U.S. House Committee on Oversight and Reform is now asking DOE to pinpoint this requirement, which DOE has so far not done.

Centrus, HALEU and Saudi Arabia: The U.S. House Committee on Oversight and Reform is investigating secretive negotiations between the White House and Saudi Arabia to export nuclear reactors and related technology to Saudi Arabia. These negotiations were initiated in 2016 by a group of retired military officers, including former National Security Advisor and retired Lt. General Michael Flynn, and have since been taken up by the White House and an industry consortium called IP3 International, one of whose commercial partners is Centrus. In January, 2017, four IP3 leaders and the chief executives of six companies – one of whom was Poneman from Centrus – had signed a letter to Crown Prince Mohammed bin Salman. The letter expressed a desire to create a long term government to government and commercial to commercial partnerships between the U.S. and Saudi Arabia.

The Oversight Committee published its first report, entitled Whistleblowers Raise Grave Concerns with Trump Administration’s Efforts to Transfer Sensitive Nuclear Technology to Saudi Arabia in February 2019, documenting the conduct of the negotiations, which allegedly involve violations of the Atomic Energy Act. In July the Oversight Committee published its second report entitled Corporate and Foreign Interests Behind White House Push to Transfer U.S. Nuclear Technology to Saudi Arabia.

In January 2019, John Barrasso, R-WY, chair of the Senate Environment and Public Works Committee, slammed the proposed sole source HALEU contract to Centrus over Centrus’ alleged ties to Russia. Centrus buys enriched uranium from the Russian state-owned firm TENEX.

In a February, 2019, Midwest Energy News article Nuclear watchdogs warn against blurring energy, military uses at Ohio fuel plant, Peter Bradford, a former member of the Nuclear Regulatory Commission, Tim Judson of the Nuclear Information and Resource Service and Ed Lyman from the Union of Concerned Scientists shared concerns about the dangers of crossover and comingling between military and civilian nuclear activities.

In April 2019, the Nuclear Information and Resource Service (NIRS) submitted a Freedom of Information Act request to DOE for documents related to two potentially related DOE activities:

- A recently-awarded no-bid contract with one of the IP3 partner companies (Centrus) to carry out a uranium enrichment pilot project.
- DOE’s new strategic plan to advance the U.S. nuclear energy industry.

DOE is often unresponsive to information requests.

Centrus will develop HALEU in these buildings on the Portsmouth Nuclear Site at Piketon, Ohio

The Sierra Club Board of Directors voted in 2017 to support the United Nations Treaty on the Prohibition of Nuclear Weapons. In 2018 the Club became a partner organization with the International Campaign to Abolish Nuclear Weapons (ICAN), recipient of the 2017 Nobel Peace Prize. The last thing that the world needs is more nuclear weapons. Nor does the world need to risk stimulating the desire of currently non-nuclear nations to enrich uranium themselves and build nuclear weapons.

Ohio Sierra Club Nuclear Free Committee  Pat Marida, chair patmarida@outlook.com  January 2020
This paper with hyperlinks is online at the Sierra Club Grassroots Network under the Nuclear Free Campaign team.