Centrus

Fueling the Future of Nuclear Power

Meeting America's Enriched Uranium Requirements

March 6, 2023

Centrus Energy:

America's Uranium Enrichment Company

Nuclear Fuel Supplier

World's most diversified supplier of enriched uranium fuel to utilities in North America, Asia, and Europe – with a **$1 billion long-term order book through 2030.**

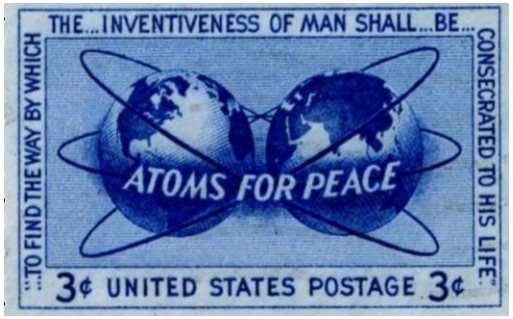
Advanced Fuel Pioneer

Building the only U.S. uranium enrichment plant licensed to produce HALEU – a **premium nuclear fuel** that may soon be needed for existing and next generation reactors worldwide.

National Security Partner

The only deployment-ready technology suitable to meet **U.S. national security requirements** for uranium enrichment.

Longstanding Partner to U.S. Government & Industry



- Centrus traces its roots to the Manhattan Project and Atoms for Peace.
- Became a publicly-traded company in the 1990s when the U.S. privatized its uranium enrichment enterprise.
- Safely operated U.S. government's enrichment plants for decades, fueling civilian nuclear energy at home and abroad
- Served as U.S. government's executive agent on Megatons to Megawatts – the most successful disarmament program in history.
- Working to deploy a new American enrichment capability in Piketon, Ohio to meet the full range of commercial and national security requirements, including LEU for existing reactors and HALEU for advanced reactors.

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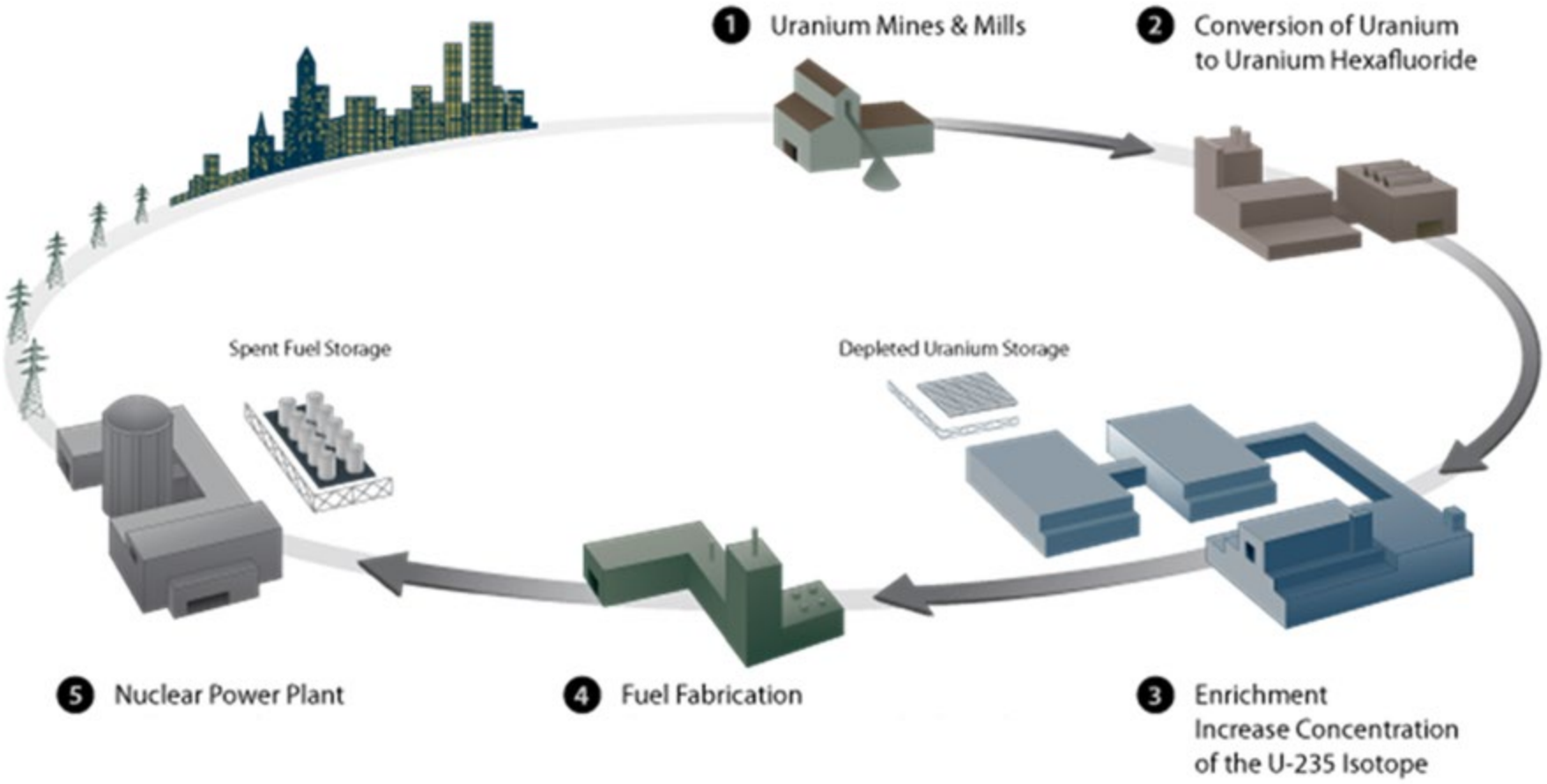
The Nuclear Fuel Supply Chain



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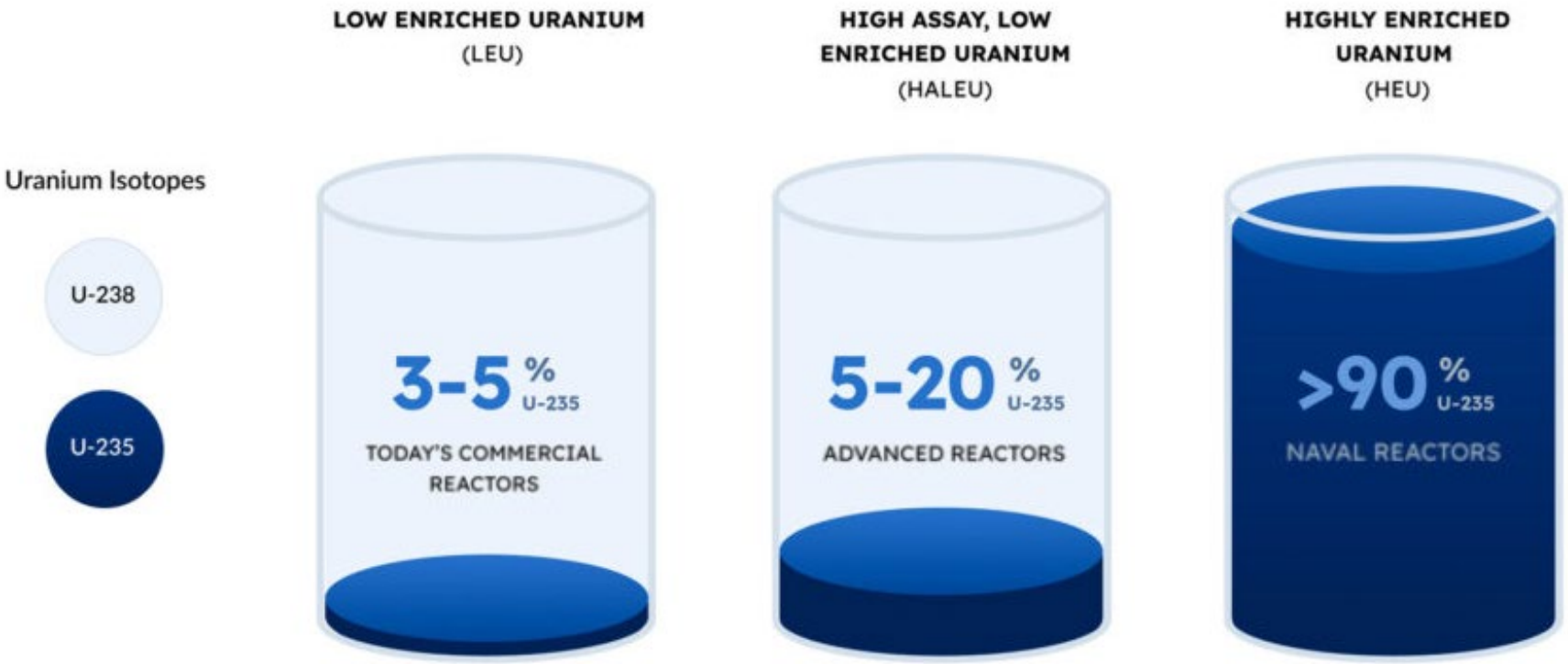
LEU vs. HALEU



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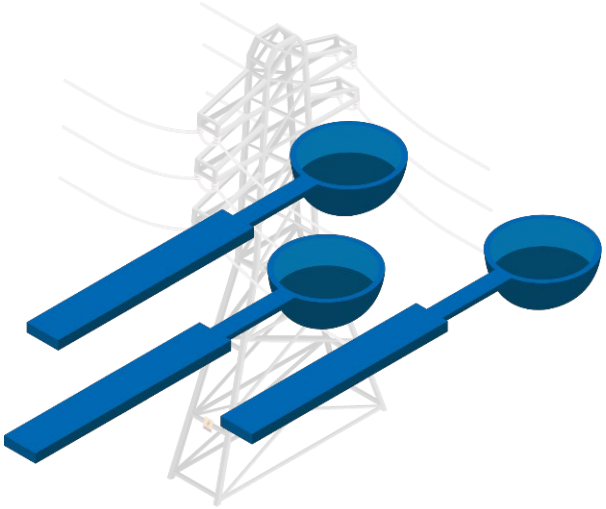
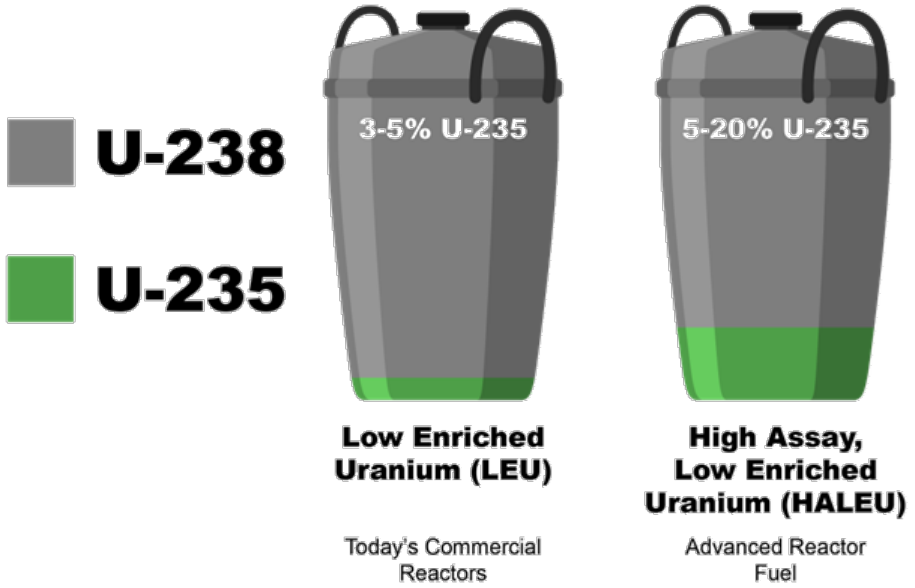
A Lifetime of Electricity in 3 Tablespoons



Just 750 grams of HALEU, or about 3 tablespoons, can meet your electricity needs for life.

Higher U235 concentration = smaller fuel cores, smaller reactors, more efficient fuel consumption, and reduced waste production.



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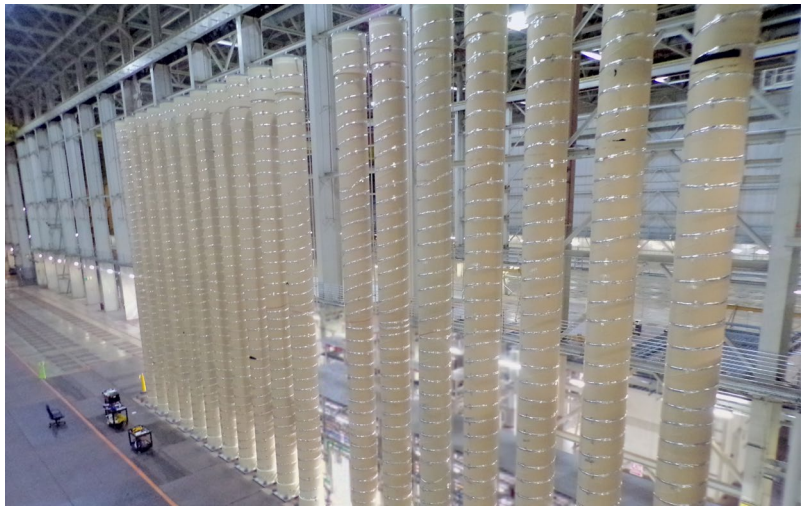
Centrus: Restoring America's Enrichment Capacity

- Under contract with Department of Energy, Centrus is building a small cascade of centrifuges that will demonstrate HALEU production by late 2023.
  - First new, U.S.-owned enrichment plant since the 1950s.
  - Only U.S. site licensed for HALEU production.


American Centrifuge Plant -- Piketon, Ohio

- Modest initial capacity but can be scaled up to any level of production <u>if sufficient funding and/or offtake commitments can be secured.</u>



- Goal: expand to meet the full range of commercial and national security requirements for LEU and HALEU.

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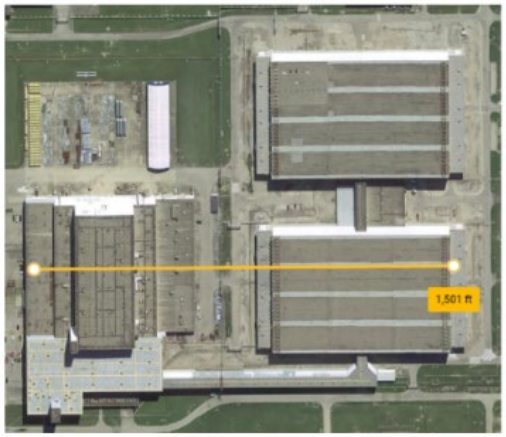
American Centrifuge Plant

- 2,000,000 square foot facility
  - Roughly same footprint as the Pentagon
- Purpose-built for U.S advanced centrifuge operations.
- Skilled workforce of experienced centrifuge operators.

American Centrifuge Plant



The Pentagon

- Only site licensed by the NRC for HALEU production. License also covers LEU and LEU+.
- Only NRC-licensed enrichment site in the U.S. suitable for both national security missions and commercial enrichment.

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U.S. Government Needs Enrichment

- U.S. government requirements include LEU, HALEU, and eventually HEU.
- Longstanding U.S. policy and binding nonproliferation agreements prohibit the use of foreign enrichment technology for national security missions. Only a U.S.-origin technology can be used.
- The last of the U.S. government's Cold-War era enrichment plants shut down in 2013, leaving the U.S. without an enrichment capability suitable for national security missions for the first time since WWII.

U.S. Government Enriched Uranium Requirements

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Public Private Partnership Needed

- Advancing the Piketon facility from demonstration project to an enduring, sustainable domestic enrichment facility requires greater scale and public-private partnership.
- Commercial demand for HALEU is still subject to uncertainty and a "chicken vs. egg" problem.
- Support for a U.S. enrichment technology is critical in the face of competition from established, state-owned enterprises that control the entire market today.
- The best way to jumpstart construction of U.S. capacity is to leverage U.S. government requirements for enrichment.

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A Deployment-Ready Nuclear Fuel Solution

- ✓ **Ready to Deploy:**
  - >3.5 million machine hours of successful operations.
    - 2012-2016: Built and operated a full cascade (120 machines) of centrifuges with a full suite of support systems and successfully demonstrated LEU enrichment.
  - Existing U.S. site that is already NRC-licensed for production of LEU, LEU+, and HALEU.
- ✓ **Fast:**
  - Initial LEU production within 36 months of project start.
  - HALEU production within 42 months of project start.
- ✓ **Supply Diversity:** Brings needed price competition and enhanced supply security.
- ✓ **All-in-One Solution:** Leverage U.S. government requirements to establish new commercial production.

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