



Advanced Reactor Concepts (ARC) and Centrus Energy Sign Letter of Intent for HALEU Supply

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WASHINGTON and BETHESDA, Md., April 28, 2020 /PRNewswire/ -- Advanced Reactor Concepts, LLC, and Centrus Energy Corp. (NYSE American: LEU) have signed a letter of intent to cooperate in supporting deployment of U.S. uranium enrichment capacity to produce High Assay, Low Enriched Uranium (HALEU) – an advanced nuclear fuel that could power both existing and next-generation nuclear reactors, including ARC's innovative sodium-cooled fast reactor design, the ARC-100. While the letter is non-binding and non-exclusive, it reflects the parties' long-term commitment to enter into a purchase agreement that would enable Centrus to supply commercial HALEU that ARC needs to deploy its reactor technology in the late 2020s.



"We are pleased to be working with ARC to find a path forward that will allow Centrus to be ARC's HALEU supplier and for ARC to be a strong commercial customer for the HALEU production capability we are working to develop," said Larry Cutlip, Centrus Senior Vice President for Field Operations.

"ARC is excited for the opportunity to work with Centrus as a prospective HALEU supplier. The timing of their production capability would support our requirements in order to meet our 2028 commercialization timeline," said Robert C. Braun, ARC Senior Vice President and Chief Operating Officer.

A report from the White House Nuclear Fuel Working Group [released last week](#) identifies establishing a domestic HALEU production capability as a key priority in restoring America's competitive advantage in nuclear energy. To that end, since 2019, Centrus has been working under a three-year, \$115 million cost shared contract with the U.S. Department of Energy to deploy sixteen of its AC-100M centrifuges to demonstrate production of HALEU with U.S. technology in Ohio. The demonstration program goes through 2022, at which point Centrus expects to have a fully licensed, operable HALEU production capability at a small scale that could be expanded modularly to meet commercial and/or government requirements for HALEU. ARC expects to deploy its reactors starting in late 2028, with the first fuel needed by 2027.

Despite its many advantages as a nuclear fuel, HALEU is not commercially available today, nor are any HALEU-fueled reactors in commercial operation. The lack of available HALEU constrains the deployment of advanced reactors and advanced fuels, and vice-versa. This is the "chicken and egg" dilemma that must be resolved for the United States to establish itself as the global leader in building and fueling the next generation of reactors around the world, which is critical to U.S. influence on nonproliferation. Many of the foreign reactor developers that compete against American companies may not face the same dilemma because they are backed by large, state-owned uranium enrichment enterprises. Centrus and ARC are committed to working together with other stakeholders in industry and government to find a solution to this dilemma.

What is HALEU?

When uranium ore is extracted from the earth, the concentration of the fissile isotope Uranium-235 is less than one percent. Most existing reactors in the United States and worldwide operate on Low-Enriched Uranium (LEU) fuel that has been enriched to increase the concentration of the U-235 isotope to slightly less than 5 percent. High Assay, Low Enriched Uranium is further enriched so that the U-235 concentration is between 5 percent and 20 percent. While this is still far below the levels needed to produce weapons or power U.S. Navy vessels, HALEU offers unique advantages as an advanced nuclear fuel for both existing and next generation reactors, including greater power density, improved reactor performance, fewer refueling outages, improved proliferation resistance, and smaller volumes of waste.

What is the ARC-100 Reactor?

The inherent safety features and passive decay heat removal capabilities of the ARC-100 reactor, combined with the improved power density of HALEU, allows for a smaller, simpler, less-capital intensive reactor design. Unlike existing light water reactors,

which must be refueled with LEU every 18 to 24 months, the HALEU core of the ARC-100 will allow the reactor to operate at full power for 20 years without refueling.

About Centrus Energy

Centrus Energy is a trusted supplier of nuclear fuel and services for the nuclear power industry. Centrus provides value to its utility customers through the reliability and diversity of its supply sources – helping them meet the growing need for clean, affordable, carbon-free electricity. Since 1998, the Company has provided its utility customers with more than 1,750 reactor years of fuel, which is equivalent to 7 billion tons of coal. With world-class technical and engineering capabilities, Centrus is also advancing the next generation of centrifuge technologies so that America can restore its domestic uranium enrichment capability in the future. Find out more at www.centrusenergy.com.

About Advanced Reactor Concepts LLC (ARC)


Founded in 2006, Advanced Reactor Concepts, LLC. is a privately held company formed with many of the nuclear energy pioneers who played key roles in the Experimental Breeder Reactor -II program (EBR-II). This U.S. Government program operated the EBR-II sodium fast reactor supplying electricity into the grid for 30 years at Idaho Falls, Idaho. The EBR-II experience base serves as the prototype for the ARC-100 nuclear power plant. These ARC engineers are today regarded as leading authorities in small fast reactor technology. ARC's mission is to commercialize its 100 MWe nuclear power plant and produce safe, economically competitive, carbon-free energy for the global energy market, with a design that can also offer a viable solution to the problem of nuclear waste.

Forward Looking Statements:

This news release contains "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934 – that is, statements related to future events. In this context, forward-looking statements may address our expected future business and financial performance, and often contain words such as "expects", "anticipates", "intends", "plans", "believes", "will", "should", "could", "would" or "may" and other words of similar meaning. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For Centrus Energy Corp., particular risks and uncertainties that could cause our actual future results to differ materially from those expressed in our forward-looking statements include: risks related to our significant long-term liabilities, including material unfunded defined benefit pension plan obligations and postretirement health and life benefit obligations; the continued impact of the March 2011 earthquake and tsunami in Japan on the nuclear industry and on our business, results of operations and prospects; the impact and potential extended duration of the current supply/demand imbalance in the market for LEU; risks associated with our reliance on third-party suppliers to provide essential products and services to us; the impact of government regulation including by DOE and the U.S. Nuclear Regulatory Commission; uncertainty regarding our ability to commercially deploy competitive enrichment technology; risks and uncertainties regarding funding for the American Centrifuge project and our ability to perform under our agreement with DOE to demonstrate the capability to produce HALEU; the potential for further demobilization or termination of the American Centrifuge project; risks related to our ability to perform and receive timely payment under agreements with the DOE, including risk and uncertainties related to the ongoing funding of the government and potential audits; the competitive bidding process associated with obtaining a federal contract; risks related to our ability to perform fixed-price contracts, including the risk that costs could be higher than expected; risks that we will be unable to obtain new business opportunities, achieve market acceptance of our products and services or that products or services provided by others will render our goods or services obsolete or noncompetitive; risks that we will not be able to timely complete the work that we are obligated to perform; the competitive environment for our products and services; changes in the nuclear energy industry; the impact of financial market conditions on our business, liquidity, prospects, pension assets and insurance facilities; the risks of revenue and operating results fluctuating significantly from quarter to quarter, and in some cases, year to year; and other risks and uncertainties discussed in this and our other filings with the Securities and Exchange Commission, including under Part 1. Item 1A – "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2018 and quarterly reports on Form 10-Q.

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