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ASP Isotopes Inc. Provides Update on Plans to Spin-Out its Wholly Owned Subsidiary, Quantum Leap Energy

- ASP Isotopes plans to spin a portion of Quantum Leap Energy's common equity to ASP Isotopes' stockholders as of a future record date, in a tax efficient manner.

- ASP Isotopes licenses rights to technology related to the enrichment of nuclear fuels to Quantum Leap Energy. ASPI to receive a 10% perpetual royalty on all revenues of Quantum Leap Energy.

- ASPI and QLE continue to work with potential customers to help resolve the current nuclear fuel supply chain issues. At current prices, ASPI and QLE has customer interest in over \$30 billion of HALEU.

WASHINGTON, Feb. 16, 2024 (GLOBE NEWSWIRE) -- ASP Isotopes Inc. NASDAQ: ASPI ("ASP Isotopes" or "ASPI" or the "Company"), an advanced materials company dedicated to the development of technology and processes for the production of isotopes for use in multiple industries, announced today an update on its previously disclosed intention to spin-out its wholly owned subsidiary, Quantum Leap Energy LLC ("QLE"), as a separate public company. ASPI is planning to list QLE on a national exchange and distribute a portion of QLE's common equity to ASPI's stockholders as of a future record date, anticipated to be completed by year-end, in each case subject to obtaining applicable approvals and consents and complying with applicable rules and regulations and public market trading and listing requirements.

The regulatory landscape and supply chain for nuclear fuel production differs significantly from that of medical isotopes, hence ASPI and QLE have different business models and we believe that both companies would benefit if QLE is independently managed and financed from ASPI.

In connection with the anticipated spin-out, ASPI has entered into a number of agreements with QLE, including a License Agreement, pursuant to which QLE has licensed from ASPI the rights to produce enriched Uranium 235 and Lithium 6 in exchange for a perpetual royalty in the amount of 10% of all future QLE revenues, and an EPC Services Framework Agreement, pursuant to which the parties have agreed ASPI will provide services for the engineering, procurement and construction of one or more turnkey Uranium-235 and Lithium-6 enrichment facilities in locations to be identified by QLE and owned or leased by QLE, and commissioning, start-up and test services for each such facility, subject to the receipt of all applicable regulatory approvals, permits, licenses, authorizations, registrations, certificates, consents, orders, variances and similar rights.

In addition, ASPI has assigned to QLE the two MOUs with U.S.-based small modular reactor companies for the use of Quantum Enrichment for the production of High-Assay Low Enriched Uranium (HALEU), which were entered into during 2023. The MOUs provide for substantial financial support for the development of HALEU production facilities that should be capable of supplying metric ton quantities of HALEU by 2027. The Company's discussions with potential customers in both the United States and international regions indicate a potential demand for over \$30 billion⁽¹⁾ of HALEU at recent market prices by 2037. The Company has initiated discussions with multiple governments regarding the location of their first nuclear fuel facility.

ASP Isotopes recently started the construction of the first Quantum Enrichment isotope facility, which is expected to enrich kilogram quantities of ytterbium-176 and nickel-64, two isotopes that are used in the medical industry and are in short supply. This first plant, which is in South Africa, is expected to be completed during 2025 and management believes that the thermodynamic similarities between ytterbium, nickel, lithium, and uranium will mean that the successful construction of this facility would significantly reduce the time required to construct a HALEU facility.

Ocean Wall Limited is acting as an advisor to the Company.

"Nuclear fuel has one of the most severely compromised supply chains of any material in the world. We believe that in order for long-term climate goals to be achieved, an alternative supplier of fuel is needed," said Paul Mann, Chairman and CEO of ASPI and Chairman and CEO of QLE. *"Over the last several decades, the scientists at ASPI have developed what we believe to be the most advanced isotope enrichment technologies and we look forward to accelerating these to support long-term climate goals."*

HALEU will be required to enable many nuclear reactors, such as SMRs (small modular reactors), to operate in the future. Currently, there are no Western producers of HALEU in commercial quantities, and many SMR companies worldwide face substantial delays until this fuel supply issue is resolved. The Nuclear Energy Institute estimates that there may be a HALEU supply demand of approximately 3,000 metric tons by 2035⁽²⁾. ASPI believes their Quantum Enrichment process will be able to produce HALEU at an attractive price, allowing new nuclear energy to become available at a "green discount" to carbon-intensive electricity production processes. This "green energy cost advantage" is expected to help accelerate the global adoption of new nuclear energy, with a corresponding benefit to climate goals. The Quantum Enrichment Process, an isotope enrichment method under development by our scientists, is a laser-based enrichment method, which we believe will have both the lowest levelized cost of HALEU production, the lowest cash operating cost of HALEU production, low capital expenditure, and efficient construction cycles. Management believes that the Quantum Enrichment Process can enrich previously depleted uranium tails, which is essentially waste from other enrichers. In addition to providing a substantial cost advantage over traditional enrichment methods, globally, over 1.7 million metric tons of depleted uranium tails are becoming an environmental hazard.

In summary, management believes that QLE will offer an environmental solution for uranium tails whilst providing the lowest cost HALEU supply, which will be essential for the commercialisation of SMRs.

About ASP Isotopes Inc.

ASP Isotopes Inc. is a pre-commercial stage advanced materials company dedicated to the development of technology and processes to produce isotopes for use in multiple industries. The Company employs proprietary technology, the Aerodynamic Separation Process (“ASP technology”). The Company’s initial focus is on producing and commercializing highly enriched isotopes for the healthcare and technology industries. The Company also plans to enrich isotopes for the nuclear energy sector using Quantum Enrichment technology that the Company is developing. The Company has isotope enrichment facilities in Pretoria, South Africa, dedicated to the enrichment of isotopes of elements with a low atomic mass (light isotopes).

There is a growing demand for isotopes such as Silicon-28, which will enable quantum computing, and Molybdenum-100, Molybdenum-98, Zinc-68, Ytterbium-176, and Nickel-64 for new, emerging healthcare applications, as well as Chlorine-37, Lithium-6, and Uranium-235 for green energy applications. The ASP Technology (Aerodynamic Separation Process) is ideal for enriching low and heavy atomic mass molecules. For more information, please visit www.aspisotopes.com.

Forward-Looking Statements

This press release contains forward-looking statements regarding the Company’s current expectations. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Factors that could cause actual results to differ include, but are not limited to, risks and uncertainties related to the Company’s proposed spin off of Quantum Leap Energy LLC, or factors that result in changes to the Company’s anticipated results of operations related to its products and technologies. These and other risks and uncertainties are described more fully in the section captioned “Risk Factors” in the Company’s Annual Report on Form 10-K filed with the SEC. Forward-looking statements contained in this announcement are made as of this date, and the Company undertakes no duty to update such information except as required under applicable law.

1. <https://www.uxc.com/p/tools/FuelCalculator.aspx>
2. Korsnick, M. (2021, December 20). Updated Need for High-Assay Low Enriched Uranium. Nuclear Energy Institute

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