U.S. Department of Energy Releases HALEU Enrichment Request for Proposal (RFP)

10 January 2024

Silex Systems Limited (Silex) (ASX: SLX) (OTCQX: SILXY) is pleased to advise that the U.S. Department of Energy (DOE) has released the Request for Proposal (RFP) for acquisition of High Assay Low Enriched Uranium (HALEU) – a higher grade of nuclear fuel that will be required to fuel next generation advanced reactors, including many Small Modular Reactors (SMRs). We commend the DOE on its issuance of the RFP and urge the expedited publication of further funding opportunities for innovative technologies under the HALEU Availability Program. As a leading uranium enrichment technology provider, Silex supports the many recent bipartisan initiatives in support of the U.S. nuclear fuel industry, including appropriations for the Nuclear Fuel Security Act, which could significantly increase funding opportunities for new and existing nuclear fuel producers.

Funding for the HALEU RFP was included in a US$700 million package under the Inflation Reduction Act, which was authorised by the U.S. Congress in August 2022. Specifically, US$500 million has been authorised for commercial HALEU enrichment and deconversion production, which the DOE intends to administer in the form of “indefinite delivery/indefinite quantity” (IDIQ) contracts, among other measures. Further, we expect a US$100 million funding opportunity to be published later this year to support innovative fuel technology. We hope DOE moves expeditiously to publish all available funding opportunities to create a competitive, diverse U.S. fuel supply chain and to pivot from Russian supply.

Global Laser Enrichment (GLE) is the exclusive licensee of the SILEX uranium enrichment technology. GLE has the potential to supply critically needed new U.S. capacity to produce natural uranium (including conversion), low enriched uranium (LEU), and HALEU. GLE will review the RFP and recommend a course of action to its owners, Silex and Cameco Corporation.

Authorised for release by the Silex Board of Directors.

Further information on the Company’s activities can be found on the Silex website: www.silex.com.au or by contacting:

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Forward Looking Statements and Risk Factors:

About Silex Systems Limited (ASX: SLX) (OTCQX: SILXY)

Silex Systems Limited ABN 69 003 372 067 (Silex) is a technology commercialisation company whose primary asset is the SILEX laser enrichment technology, originally developed at the Company's technology facility in Sydney, Australia. The SILEX technology has been under development for uranium enrichment jointly with US-based exclusive licensee Global Laser Enrichment LLC (GLE) for a number of years. Success of the SILEX uranium enrichment technology development program and the proposed Paducah commercial project remain subject to a number of factors including the satisfactory completion of the engineering scale-up program and nuclear fuel market conditions and therefore remains subject to associated risks.

Silex is also at various stages of development of additional commercial applications of the SILEX technology, including the production of 'Zero-Spin Silicon' for the emerging technology of silicon-based quantum computing. The 'Quantum Silicon' project remains dependent on the outcomes of the project and the viability of silicon quantum computing and is therefore subject to various risks. Silex is also conducting research activities in its Medical Isotope Separation Technology (MIST) Project, which is early-stage and subject to numerous risks. The commercial future of the SILEX technology in application to uranium, silicon, medical and other isotopes is therefore uncertain and any plans for commercial deployment are speculative.

Additionally, Silex has an interest in a unique semiconductor technology known as 'cREO®' through its 100% ownership of subsidiary Translucent Inc. The cREO® technology developed by Translucent has been acquired by IQE Plc based in the UK. IQE has paused the development of the cREO® technology until a commercial opportunity arises. The future of IQE's development program for cREO® is very uncertain and remains subject to various technology and market risks.

Forward Looking Statements

The commercial potential of these technologies is currently unknown. Accordingly, no guarantees as to the future performance of these technologies can be made. The nature of the statements in this announcement regarding the future of the SILEX technology as applied to uranium enrichment, Zero-Spin Silicon production, medical and other isotope separation projects, the cREO® technology and any associated commercial prospects are forward-looking and are subject to a number of variables, including but not limited to, unknown risks, contingencies and assumptions which may be beyond the control of Silex, its directors and management. You should not place reliance on any forward-looking statements as actual results could be materially different from those expressed or implied by such forward-looking statements as a result of various risk factors. Further, the forward-looking statements contained in this Announcement involve subjective judgement and analysis and are subject to change due to management's analysis of Silex's business, changes in industry trends, government policies and any new or unforeseen circumstances. The Company's management believes that there are reasonable grounds to make such statements as at the date of this Announcement. Silex does not intend, and is not obligated, to update the forward-looking statements except to the extent required by law or the ASX Listing Rules.

Risk Factors

Risk factors that could affect future results and commercial prospects of Silex include, but are not limited to: ongoing economic and social uncertainty, including in relation to the impacts of the COVID-19 pandemic; geopolitical risks, in particular relating to Russia's invasion of Ukraine and tensions between China and Taiwan which may impact global supply chains, among other risks; uncertainties related to the effects of climate change and mitigation efforts; the results of the GLE/SILEX uranium enrichment pilot demonstration program; the market demand for natural uranium and enriched uranium; the outcome of the project for the production of Zero-Spin Silicon for the emerging technology of silicon-based quantum computing; the outcome of the MIST program; the potential development of, or competition from alternative technologies; the potential for third party claims against the Company's ownership of Intellectual Property; the potential impact of prevailing laws or government regulations or policies in the USA, Australia or elsewhere; whether IQE's commercialisation program for cREO® is resumed, the results from the program and the market opportunities for cREO® products; actions taken by the Company's commercialisation partners and other stakeholders that could adversely affect the technology development programs and commercialisation strategies; and the outcomes of various strategies and projects undertaken by the Company.