

US Department of Energy Selects GLE for Future Operations at its Paducah, Kentucky Site

GLE proposal involves potential construction and operation of a tails processing plant utilising SILEX laser enrichment technology

28th November, 2013

Key Points:

- *GLE selected by the US Department of Energy to enter into exclusive negotiations for future operations at the Paducah site*
- *GLE proposal includes construction and operation of a commercial processing plant using SILEX technology to enrich 'high assay uranium tails' stockpiles*
- *The processing plant could be equivalent to one of the world's largest uranium mines operating for up to 40 years*
- *Silex potentially entitled to a perpetual royalty of between 7 – 12% on revenues generated by GLE from any future laser enrichment operations at Paducah.*

Silex Systems Limited (ASX:SLX) (OTCQX:SILXY) ('Silex'), advises that the US Department of Energy (DOE) has announced that the non-binding proposal submitted to the DOE on the 14th August, 2013 by GE-Hitachi Global Laser Enrichment (GLE) for the potential establishment of a commercial uranium tails processing facility, has been selected for future operations at the Paducah, Kentucky uranium enrichment site. The DOE and GLE will now enter a period of commercial contract negotiations to detail the terms of an agreement under which the proposal could be realised over the next few years. These negotiations are expected to be completed in early 2014, with the advancement of the project contingent on a number of factors, including satisfactory terms being agreed between the DOE and GLE.

Dr Michael Goldsworthy, CEO and Managing Director of Silex Systems said "This is a key turning point for the commercialisation of the SILEX laser enrichment technology. The Paducah opportunity is a very exciting development which will provide the project team even greater focus and drive in commercialising the world's first and only third generation laser enrichment technology" he added.

Chris Monetta, President and CEO of GLE said in a statement today "We are excited about entering exclusive negotiations with the DOE for the Paducah facility and the prospect of tapping into the highly-skilled nuclear workforce in the area. We are equally as excited about potentially playing an important role in securing our nation's energy future with a reliable, US-based supply of natural uranium for years to come."

Subject to successful negotiations and finalisation of agreement documentation, GLE will focus on detailed planning for the potential establishment of the Paducah Laser Enrichment Facility (PLEF). The laser enrichment technology is based upon the process developed by Silex that was exclusively licensed to General Electric in 2006 (and subsequently to GLE in 2007 – a business venture between GE (51%), Hitachi (25%) and Cameco (24%)) and is currently being scaled to support potential commercial deployment. Under this license, Silex would be entitled to a perpetual royalty of between 7 – 12% (depending on plant capital costs) on revenues generated by GLE from any future commercial laser enrichment operations at the PLEF.

The proposal for the Paducah Laser Enrichment Facility involves upgrading depleted uranium tails left over from previous enrichment activities using first generation gaseous diffusion plants. The resulting product would be natural grade uranium for potential sale in the US and globally. Depending on the production rate, this tails processing plant could be equivalent to one of the world’s largest uranium mines operating for up to 40 years.

If the final agreement is successfully concluded, GLE would work towards submitting an application to the US Nuclear Regulatory Commission (NRC) for a license to construct and operate the proposed Paducah Laser Enrichment Facility. It is anticipated that this application could be submitted in 2014 after which the NRC would undertake an evaluation similar to that undertaken for the Wilmington, North Carolina laser enrichment plant license which was finalised and announced in September 2012. In parallel with this, GLE plans to continue with Phase II of the commercialisation program focusing on engineering scale-up and economic validation of the technology.

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

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About Silex

Silex Systems Limited (ASX: SLX) (OTCQX: SILXY) is a world leader in research, development and commercialisation of leading edge technologies in key strategic markets, including nuclear power, solar power, semiconductor materials and instrumentation. Silex is a member of the S&P/ASX 300 index and operates four divisions:

Silex has licensed its 'SILEX' laser-based uranium enrichment technology to Global Laser Enrichment (GLE), a business venture comprising GE (51%), Hitachi (25%) and Cameco (24%). Silex and GLE are commercialising the technology for potential deployment in the USA.

Solar Systems has developed ultra-high efficiency concentrating photovoltaic (CPV) technology based on its proprietary 'Dense Array' dish concentrator system, targeting deployment of utility-scale solar power stations in key global markets.

Translucent has developed novel semiconductor materials based on the 'rare earth oxide' family for application to the manufacturing of next generation devices in the semiconductor, power electronics and solar industries; and

ChronoLogic has developed the world's first high precision timing and control products based on the ultra-low cost USB-inSync™ platform, targeting applications in the electronic instrumentation markets.

For more information on Silex Systems Limited, please visit www.silex.com.au.

Forward Looking Statements and Business Risks

Silex Systems is a research and development Company whose assets are its proprietary rights in various technologies, including, but not limited to, the SILEX technology, Solar Systems technology and business, Translucent technology and ChronoLogic technology. Several of the Company's technologies are in the development stage and have not been commercially deployed, and therefore are high-risk. Accordingly, the statements in this announcement regarding the future of the Company's technologies and commercial prospects are forward looking and actual results could be materially different from those expressed or implied by such forward looking statements as a result of various risk factors.

Some risk factors that could affect future results and commercial prospects include, but are not limited to: results from the SILEX uranium enrichment commercialisation program; the demand for enriched uranium; the risks associated with the development of Solar Systems technology and related marketing activities; the outcomes of the Company's interests in the development of various semiconductor, photonics, instrumentation and alternative energy technologies; the time taken to develop various technologies; the development of competing technologies; the potential for third party claims against the Company's ownership of Intellectual Property associated with its numerous technologies; the potential impact of government regulations or policies; and the outcomes of various commercialisation strategies undertaken by the Company.