

11 August 2008

Australian Securities Exchange Limited Exchange Plaza 2 The Esplanade PERTH WA 6000

Attn: The Manager - Companies

Dear Sir

# PhosEnergy Revised Funding Arrangements and Pilot Plant Update

### **Highlights**

- A revised Technology Development Agreement (TDA) has been executed between Urtek LLC ('Urtek'), and its partner ("Partner"), a major producer of phosphoric acid, to undertake pilot plant test work on the PhosEnergy Process.
- The amended agreement provides for the Partner to sole fund up to US\$2.5M in third party expenses to advance the development of the PhosEnergy Process through a pilot plant test work stage.
- Construction of the pilot plant is nearing completion and commissioning is scheduled to commence in mid August 2008.

#### The PhosEnergy Process and Urtek

Urtek (Uranium Equities Limited is a 30% shareholder with the right to increase to 90%) is developing new technology to extract uranium from wet phosphoric acid streams ("the PhosEnergy Process") produced in the production of fertilizers from phosphate rock.

The PhosEnergy Process holds the potential to substantially reduce the capital and operating costs when compared to existing technologies and to improve the operability of the process and reduce production of radioactive waste products.

#### **Revised Technology Development Agreement**

Urtek and its Partner have agreed to replace the August 2007 joint Technology Development Agreement ("TDA") with a new amended and restated TDA.

The revised TDA is similar to the original agreement with the exception that the Partner has agreed to fund up to US\$2.5 million of all third party costs associated directly with the construction and operation of a pilot plant facility.

As announced on 5 August 2008, an application for a Provisional Patent covering certain aspects of the PhosEnergy Process has been filed in the United States of America.

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#### **Pilot Plant Update**

Construction of the pilot plant facility to treat live phosphoric acid at a former producing uranium site is well advanced. Commissioning is planned for mid to late August 2008 and testing of the various flow sheet components will follow. Fully integrated operation is anticipated in October 2008.

Successful operation of the plant will enable determination of the next steps. This could include continued operation of the existing facility, an increase in size of the piloting facility and/or potentially moving into a more detailed engineering study phase. No time-table has been set for commercial application of the technology, however commercial application could potentially be as early as 2011 depending upon results.

## **Historical Situation & Opportunity**

Historically, significant uranium production has been derived from phosphoric acid with global production peaking at more than 4.5 m lbs U<sub>3</sub>O<sub>8</sub> per annum in the period 1978 to 1983. The majority of production was in the USA.

Production from such by-product sources substantially ceased globally in the late 1990's as the price of uranium declined below US\$20 per pound. The prevailing extraction technologies, with their high capital and operating costs, failed to compete with more conventional sources of uranium.

Currently, it is estimated that nearly 20 m lbs U<sub>3</sub>O<sub>8</sub> per annum could theoretically be recovered from wet phosphoric acid plants world-wide. The Managing Director of Uranium Equities, Mark Chalmers, said:

"Significant progress has been made on a number of fronts with the PhosEnergy Process over the past year. We are very pleased with the revised funding arrangement, the progress on construction of the pilot plant and protection of the exciting Intellectual Property."

Details of these and other company activities are located on our website www.uel.com.au

MARK CHALMERS

**Managing Director** 

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## BOOST FOR URANIUM EXTRACTION PROJECT

Adelaide-based Uranium Equities Limited has increased its equity in a US-based consortium developing new technology for the extraction of uranium from phosphoric acid in superphosphate fertilisers.

Uranium Equities, a specialist uranium company with a number of uranium exploration projects in Australia, today reported new funding arrangements for the PhosEnergy project involving the injection of \$2.5 million by a third party.

The PhosEnergy project is being developed through US-registered company Urtek and its phosphoric acid producer partner.

Uranium Equities also announced that construction of a pilot plant in the US was nearing completion with commissioning expected later this month.

This follows the lodging of a provisional patent application in the US earlier this month by Urtek and its partner to protect their Intellectual Property rights.

The patency application triggered an option for Uranium Equities to nearly double its equity from 16 per cent to 30 per cent, which was subsequently approved by the Board.

The technology involves extraction of uranium from phosphoric acid streams generated in the production of superphosphate fertilisers from phosphate rock.

Uranium Equities Managing Director Mr Mark Chalmers said the key focus of the technology was reducing capital and operating costs over past technologies, improving operability of the process and reducing quantities of radioactive waste products produced.

The pilot plant is located on the site of a former uranium producing site. If successful, Urtek will consider increasing the size of the pilot facility and moving into a more detailed engineering study. Commercial application could be as early as 2011, however there is no timetable set as yet.

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"Significant progress has been made on a number of fronts with the PhosEnergy Process over the past year," Mr Chalmers said.

"We are very pleased with the revised funding arrangements with the partner, progress on construction of the pilot plant and protection of the exciting Intellectual Property that is under development."

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