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Energy Metals

18 July 2008

Company Announcements Office Australian Stock Exchange Limited Exchange Centre Level 4, 20 Bridge Street Sydney NSW 2000

Via electronic lodgement

Dear Sir/Madam,

Please find the following announcement for immediate release to the market. This announcement is made on behalf of the Bigrlyi Joint Venture partners being Energy Metals Limited with 53.7%, Valhalla Uranium Limited (a subsidiary of Paladin Energy Limited) with 42.1% and Southern Cross Exploration NL with 4.2%\*.

Yours faithfully,

LINDSAY DUDFIELD **Executive Director.** 

<sup>\*</sup> Southern Cross Exploration claims to hold a 5% interest in the Bigrlyi Joint Venture. Energy Metals and Paladin Energy dispute this assertion, with the matter currently subject to arbitration between the parties.

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Via electronic lodgment

## POSITIVE RESULTS FROM UPDATED BIGRLYI SCOPING STUDY

Energy Metals, as manager of the Bigrlyi Joint Venture, is pleased to announce the results of an in-house Updated Scoping Study recently completed at the Bigrlyi Uranium and Vanadium Project in the Northern Territory. This study is based on the current resource announced 12 March 2008 (23.4M lbs U<sub>3</sub>O<sub>8</sub> and 43.7M lbs V<sub>2</sub>O<sub>5</sub>) and supersedes the Initial Scoping Study for Bigrlyi announced 12 November 2007.

The Updated Scoping Study demonstrates substantially improved results compared with the Initial Scoping Study, including:

- Uranium production increased from 8.4M lbs to 16.2M lbs (up 93%)
- Vanadium production increased from 7.0M lbs to 14.5M lbs (up 107%)
- Mine life increased from 8 to 12 years, with improved plant utilisation

## **Discussion**

An Updated Scoping Study has been completed into the development of the Bigrlyi Project. The study was conducted by mining engineer Andrew Hutson from Paladin Energy Limited and was based on the enlarged resource announced by Energy Metals on 12 March 2008, as summarised below:

## **Indicated and Inferred Resources**

Cut Off	Mt	U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>	U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>	U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>
(ppm U <sub>3</sub> O <sub>8</sub> )		(ppm)	(ppm)	(t)	(t)	(MIb)	(Mlb)
500	7.56	1,396	2,616	10,555	19,780	23.4	43.7
1000	4.01	1,993	3,367	7,996	13,510	17.6	29.8

Tonnes are metric (2204.62 pounds, t may not total due to round-off errors).

Assumptions used in the study include a uranium ( $U_3O_8$ ) price of US\$75 per lb (below the current long term price of US\$80 – US\$85 per lb), a vanadium ( $V_2O_5$ ) price of US\$4 per lb (also below current spot prices of around US\$17 per lb) and an Australian dollar rate of US\$0.75. Other key assumptions include a treatment rate of 0.5Mt per annum,  $U_3O_8$  and  $V_2O_5$  metallurgical recoveries of 90% and 50% respectively and a 5% gross royalty. Energy Metals considers the assumed recovery rates to be reasonable based on the results of independent metallurgical test work as announced to the market on 19 June 2008.



For the purposes of the study, a mine plan involving six open pits at three deposits (A2/3, A4 and A15) was chosen. These pits range in size from 0.8Mt to 74.7Mt. The open pits included in the scoping study deliver a total of 4.93Mt to the Run-of-Mine (ROM) stockpiles at an average grade of 1,537 ppm  $U_3O_8$  and 2,529 ppm  $V_2O_5$ , recovering 15.0M lbs  $U_3O_8$  and 13.7M lbs  $V_2O_5$  over ten years.

Scheduled ROM tonnages are estimated assuming dilution and recovery of 5% and 95% respectively. The open pit operations are quite robust to changes in most costs, although the narrow nature of the resource lenses will require mining selectivity.

The study also assessed underground resource exploitation below conceptual pit designs using conventional decline access and stoping methodologies (principally Bench and Uphole Retreat stoping) with a minimum mining width of 4 metres. Utilising these parameters one underground mine was designed at A15, producing 0.48Mt ROM at 1,214 ppm  $U_3O_8$  and 1,496 ppm  $V_2O_5$  to recover an additional 1.2M lbs  $U_3O_8$  and 0.8M lbs  $V_2O_5$  over two years.

## **Conclusions**

The Updated Scoping Study (which will be independently reviewed) demonstrates that the Bigrlyi Project is economically attractive and based on current resources and assumptions has the potential to produce 16.2M lbs of  $U_3O_8$  and 14.5M lbs  $V_2O_5$  over a mine life of 12 years. The identification and inclusion of additional resources since the Initial Scoping Study has significantly improved projected returns.

As the Bigrlyi mineralisation remains open adjacent to open pit and underground mining positions evaluated by the study, Energy Metals considers that there remains excellent scope to delineate additional resources, which would further enhance Bigrlyi's economics. Ongoing metallurgical and engineering studies are also expected to identify opportunities to extend mine life and further improve project economics.

Furthermore the Project is located in the Northern Territory, a jurisdiction which supports the development of new uranium mines.

The next drilling campaign will commence at Bigrlyi in August 2008 and is expected to continue until the end of the field season.

LINDSAY DUDFIELD

**Executive Director.** 

The information in this report relating to mineral resource estimates is based on information compiled by Arnold van der Heyden BSc, MAusIMM. Mr van der Heyden has more than five years relevant experience in estimation of mineral resources and the mineral commodity uranium. Mr van der Heyden is a full time employee of Helman & Schofield and takes responsibility for the resource estimation. Mr van der Heyden has sufficient experience relevant to the assessment of this style of mineralisation to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code".

The information in this report is based on information compiled by Andrew Hutson BE (Mining), MAusIMM. Mr Hutson is a full time employee of Paladin Energy Limited and has sufficient experience relevant to the assessment of this style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code".

Each of the above named consents to the inclusion of the information in the report in the form and context in which it appears.