2 March 2007

Company Announcements Office Australian Stock Exchange Limited Exchange Centre Level 4, 20 Bridge Street Sydney NSW 2000 Energy Metals Limited ABN 63 111 306 533 Level 2 18 Kings Park Road West Perth WA 6005 PO Box 1033 West Perth WA 6872 Western Australia

Telephone: (08) 9322 6904
Facsimile: (08) 9321 7950
Email: enquiry@energymetals.net
Web: www.energymetals.net



Via electronic lodgment

## Significant Resource Upgrade at Bigrlyi Uranium Deposit

Energy Metals, as manager of the Bigrlyi Joint Venture (Energy Metals 53.3%, Valhalla Uranium 41.7% & Southern Cross Exploration 5%), is pleased to announce the results of a recently completed resource estimate for the Bigrlyi uranium and vanadium deposit in the Northern Territory. This resource estimate incorporates the results from 43 holes drilled in the December 2006 quarter and builds on the initial Bigrlyi resource announced on 23 July 2006.

Indicated and Inferred Resources

| Cut Off | Tonnes    | U3O8 | V <sub>2</sub> O <sub>5</sub> | U3 <b>O</b> 8 | <b>V</b> <sub>2</sub> <b>O</b> <sub>5</sub> |
|---------|-----------|------|-------------------------------|---------------|---|
| (%)     |           | (%)  | (%)                           | (Kt)          | (Kt)  |
| 0.10    | 2,430,000 | 0.21 | 0.20                          | 5.00          | 4.95  |
| 0.05    | 4,530,000 | 0.14 | 0.16                          | 6.50          | 7.41  |

The resources were estimated using ordinary kriging by Hellman & Schofield Pty Ltd ("H&S") and are shown at 0.10% and 0.05% cut-off grades. Energy Metals considers that the 0.05% lower cut-off grade best approximates the economic cut-off grade considering the style of the mineralization and the current uranium price.

At a cut-off grade of  $0.05\%~U_3O_8$  the Bigrlyi resource now totals 14.3 million pounds (lb) of  $U_3O_8$  and 16.3 million lbs of  $V_2O_5$ , representing a 26% increase in uranium and a 17% increase in vanadium compared with the July 2006 resource. Furthermore the price of uranium has increased from US\$45.5/lb in July 2006 to US\$85/lb currently.

Most of the resources lie within 200m of the surface and are considered potentially accessible via open-pit mining. Metallurgical test work conducted to date has indicated recoveries of up to 98-99% of the uranium and up to 70% of the vanadium using acid leach and fine grinding.

There is good potential to increase resources at depth and along strike at all of the current resource areas and a substantial drilling program is planned for the 2007 field season.

LINDSAY DUDFIELD Executive Director.



## Resource Estimation & Methodology

The resource estimates were jointly compiled by Energy Metals and H&S. Energy Metals completed digital data compilation, validation, QA/QC and sample quality assessment and geological interpretations. H&S completed independent resource estimates, as well as providing advice on modelling methods, geostatistics and wireframe modelling of the mineralisation domains. At the 0.05%  $U_3O_8$  cut-off grade H&S report 43% of the resource tonnage and 50% of the contained uranium metal (or 3.25 Kt  $U_3O_8$ ) to the Indicated Resource category. A tabulation of Indicated and Inferred Resources is provided in Table 1 (below).

TABLE 1 - SUMMARY OF RESOURCES

## Indicated Resources

| Cut Off | Tonnes    | 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> |
|---------|-----------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| (%)     |           | (%)                           | (%)                           | (Kt)                          | (Kt)                          |
| 0.10    | 1,200,000 | 0.23                          | 0.23                          | 2.71                          | 2.79                          |
| 0.05    | 1,940,000 | 0.17                          | 0.19                          | 3.25                          | 3.78                          |

## Inferred Resources

| 1111011100 1100001000 |           |          |                               |          |                               |  |  |
|-----------------------|-----------|----------|-------------------------------|----------|-------------------------------|--|--|
| Cut Off               | Tonnes    | $U_3O_8$ | V <sub>2</sub> O <sub>5</sub> | $U_3O_8$ | V <sub>2</sub> O <sub>5</sub> |  |  |
| (%)                   |           | (%)      | (%)                           | (Kt)     | (Kt)                          |  |  |
| 0.10                  | 1,230,000 | 0.19     | 0.18                          | 2.29     | 2.16                          |  |  |
| 0.05                  | 2,590,000 | 0.13     | 0.14                          | 3.26     | 3.63                          |  |  |

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

The resource estimates are based on the interpretation of 459 historic drill holes (222 percussion and 237 pre-collared diamond holes) and 43 holes (14 percussion and 29 pre-collared diamond holes) drilled by Energy Metals between October and December 2006. Drill holes are nominally spaced at between 20-50m along strike in the main resource areas of Anomalies 15, 4, 7 and 2 increasing to a nominal 200m spacing in peripheral areas. Assays were derived from predominantly chemical methods (XRF) in significant ore zones, and calibrated radiometric methods in surrounding and less significant zones.

Wire frame models were digitized on north-south cross sections using an approximate 100ppm ( $U_3O_8$ ) and an approximate 500 ( $V_2O_5$ ) boundary to model multiple mineralised lenses outcropping at surface. The lenses generally occur within mineralised horizons within the Mt Eclipse Sandstone. The two major horizons are located at the contacts of the Units B and C and Units C and D. Additional horizons at Anomalies 4, 7 and 15 are seen within Units D and B. The mineralised lenses are generally narrow (true width 2-5m) and strike east-west. Dips of the mineralised lenses are sub vertical and predominantly dip south at 70-88 degrees. The modeled block dimensions are 15m along strike, 15m down dip and 2m width. These have been chosen to best reflect the geometry of the mineralisation.

The information in this report relating to mineral resources is based on information compiled by Lorry Hughes BSc, MAusIMM and Arnold van der Heyden BSc, MAusIMM, both of whom have more than five years relevant experience in estimation of mineral resources and the mineral commodity uranium.

Mr Hughes is a full time employee of Energy Metals Limited and takes responsibility for the quality of the data and geological interpretations provided to H & S. Mr van der Heyden is a full time employee of H & S and takes responsibility for the resource estimation.

Mr Hughes and Mr van der Heyden have 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". Each of the above named consents to the inclusion of the information in the report in the form and context in which it appears.