



## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT 10<sup>th</sup> July 2008

### MT THIRSTY COBALT–NICKEL-MANGANESE RESOURCE INCREASED BY 38%

#### Highlights

- **Extensional drilling increases Indicated and Inferred JORC resource estimate to 29 million tonnes from 21 million tonnes.**
- **Resource contains 162,000 tonnes of Nickel, 35,000 tonnes of Cobalt and 255,000 tonnes of Manganese.**
- **Single shallow 1,300m orebody with potential to extend a further 600m.**
- **Newly formed 50/50 Joint Venture with Fission Energy Limited.**
- **Conceptual flow designs for metal extraction almost complete.**
- **Fast tracked development program in place.**

Fission Energy Limited ("Fission" or "the Company") is pleased to announce the results of further independent in-situ Resource estimations of the Mt Thirsty Cobalt-Nickel-Manganese deposit located 20 kilometres north-northwest of Norseman, Western Australia. This upgrade is on the back of the recently announced 50/50 joint venture between Barra Resources Limited ("**Barra**") and Meteore Metals Limited, a 100% owned subsidiary of ASX listed Fission Energy Limited ("**Fission**") (collectively referred to as the "Joint Venture").

Independent mining and geological consulting firm Golder Associates Pty Ltd has estimated a JORC compliant Indicated and Inferred Resource of **29,030,000 tonnes grading 0.12% Cobalt, 0.56% Nickel and 0.88% Manganese**. The total Indicated and Inferred Resource contains approximately **162,000 tonnes of nickel, 35,000 tonnes of cobalt and 255,000 tonnes of manganese**.

Metallurgical recovery optimisation is being undertaken by Bateman Engineering Pty Ltd ("Bateman") with results of this testwork program due for release to the market in the coming weeks. Pilot testing utilising existing facilities in Ontario Canada is scheduled for November. The Joint Venture is now working rapidly to **develop** and **mine** this valuable resource.

The Indicated and Inferred Resource is confined to a single orebody at shallow depths extending over a strike length of approximately 1,300 metres, between 7,600N and 6,300N sections, with an average width approaching 850 metres (See Figure 1).

#### **Resource Summary**

This updated resource estimate incorporates the Joint Venture's recent southern and western extensional aircore drilling, including previously announced resource work and drilling programs undertaken over the past twelve months. The update also incorporates seven recently completed PQ diamond drill holes that were designed to further define the bulk density of the Mt Thirsty ore profile. The classification of this near surface resource is shown in the following table at varying cobalt cut-off grades with a summary of the estimation methodology utilised included at the end of this ASX announcement.

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**Table 1: Mt Thirsty Resource at varying cobalt cut-offs (calculated within mineralised envelope)**

Resource at Varied cut-offs	Indicated Resource Category		Inferred Resource Category		Total Resource	
	Cobalt	Tonnage	Co%/Ni%/Mn%	Tonnage	Co%/Ni%/Mn%	Tonnage
0.06%	14,800,000	0.14/0.59/0.99	14,230,000	0.11/0.52/0.77	29,030,000	0.12/0.56/0.88
0.08%	12,510,000	0.15/0.60/1.08	11,100,000	0.12/0.53/0.84	23,610,000	0.14/0.57/0.97
0.10%	9,610,000	0.17/0.61/1.21	7,320,000	0.14/0.54/0.96	16,930,000	0.15/0.58/1.10
0.20%	1,950,000	0.27/0.67/1.98	570,000	0.27/0.59/1.96	2,520,000	0.27/0.65/1.97
0.30%	490,000	0.38/0.73/2.71	120,000	0.38/0.67/2.91	610,000	0.38/0.71/2.75

Note: The table above show rounded tonnages. This may cause some apparent computational discrepancies.

<sup>1</sup> The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Resources Committee, The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia as at 9 March 2005.

### **Extensional and Infill Drilling Programs**

Between February-April a total of 100 aircore holes were drilled for 3,605m (MTAC222 to 321). The holes were drilled to expand the existing indicated and inferred resource further south along strike beyond the 6,500N section and out approximately 800m to the west (see Figure 1). The program was highly successful identifying significant Ni-Co mineralisation west of the current resource. The newly discovered zones appear identical in nature to the existing Mt Thirsty deposit in terms of both mineralogy and overall thickness of the ore profile.

Concurrently 7 Diamond holes totalling 337.5m (MTDD1 to 7) were drilled to attain more accurate metallurgical and geological information (particularly specific gravity data) to better estimate the resources at Mt Thirsty. A preliminary comparison of the assays returned for the PQ diamond drill holes with that of aircore holes they twinned suggests good repeatability between drill holes. The bulk density data extracted from the diamond drilling program has been incorporated into the new resource calculations. Further information on bulk density is included in the resource estimation summary.

### **Further Potential**

There is very good potential to expand the Resource further south along strike to the tenement boundary, a distance of some 600m, as mineralisation remains open beyond the 6,300N section. The overall dimensions of the Mt Thirsty orebody, including this latest upgrade, is approaching 1,300 metres in strike, 850 metres in width and averaging approximately 12 metres in thickness.

### **Fast Tracked Development Program**

The Company has been working closely with consultancy firms over the past 12 months to fast track the Project Management Plan and Mining Proposal for the Mt Thirsty deposit.

Both flora and fauna surveys have been carried out over the entire project area including areas covered by miscellaneous licence applications. No endangered species of flora or rare forms of fauna were identified within the survey area.

Native title heritage surveys have also been completed with no areas of tribal significance identified within the project area at this stage. The company is about to commence negotiations with the overlying claimant group.

### **Resource Estimation Summary**

The Mt Thirsty resource is based on aircore and PQ core drill hole data provided to Golder Associates Pty Ltd on the 14 May 2008.

Mineralisation and geological interpretations were carried out by the Joint Venture parties, in conjunction with Golder Associates Pty Ltd, on 50 metre spaced sections in the eastern half of the deposit and on 100 metre spaced sections in the newly drilled western half. The cut-off grades used to define the mineralised

envelopes are slightly lower than those used for the previous model. These were digitized and wireframed in 3D using Vulcan software. The major domain is a sub-horizontal high Ni-Co-Mn domain. A less continuous domain of high Ni with low Co and Mn occurs around this main domain.

Internal waste was also interpreted and wireframed. Domain codes were assigned to each wireframe. The wireframes were used to capture the 1 metre drill hole assays within each domain code. The domain codes were also assigned to a geological block model built using the wireframes.

The block model utilized a block size of 25 metres wide by 25 metres long by 5 metres high. Sub-blocks with dimensions 5 metres wide by 5 metre long by 1 metre high were also used when required.

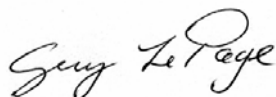
Domain statistics were generated and the influence of high Co and Mn grades was restrained during estimation. Variography was conducted on the main domain and the defined search orientations were also applied to the other less continuous domains

The Mt Thirsty resource was estimated using the ordinary kriging method. The elements estimated were Ni, Co, Mn, Fe and Mg.

Bulk densities were based on data collected from the PQ diamond core holes. Average densities were applied on a domain basis. This resulted in an average bulk density of about 1.89 for the mineralized domains which is a significant reduction on that used for the previous model.

The resource estimate has been classified based on data quality, data density, geological continuity and confidence in the estimation.

Yours sincerely



Guy T Le Page  
Director  
Fission Energy Limited

The information in this report which relates to the Mt Thirsty Mineral Resource is based on information compiled by Alan Miller, a full time employee of Golder Associates Pty Ltd and who is a member of the Australasian Institute of Mining and Metallurgy. Alan Miller has sufficient experience which is relevant to the 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 January 2005 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Resources Committee, the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Mineral Council of Australia." Alan Miller consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Guy Le Page who is a Member of the Australasian Institute of Mining and Metallurgy. Guy Le Page is a full-time employee of the Company. Dean Goodwin has sufficient experience which is relevant to the 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 2005 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dean Goodwin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

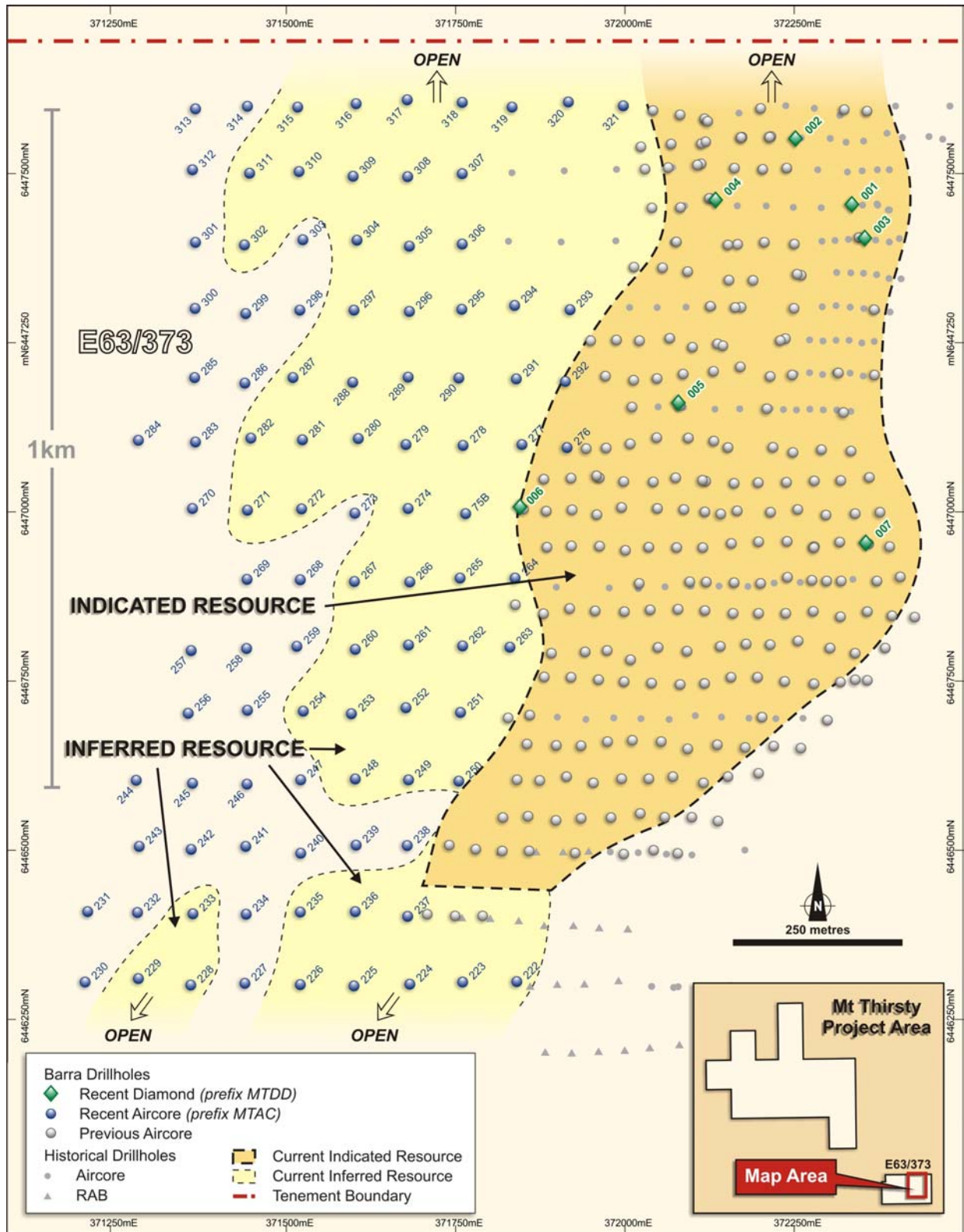


Figure 1: Mt Thirsty Deposit indicated and inferred resource outline.