

27 March 2012

Mr Tim Hobson Commercial General Manager Moranbah North Coal Mine PO Box 172 Moranbah QLD 4744

Dear Tim,

## REVIEW OF MORANBAH NORTH COAL MINE DISTRIBUTION LOSS **FACTOR FOR 2012/13**

Intelligent Energy Systems Pty Ltd has undertaken a review (audit) of the Distribution Loss Factor (DLF) for 2012/13 financial year calculated by Hill Michael Consulting for Moranbah North Coal Mine Network Service Provider (MNCMNSP). MNCMNSP has been registered and admitted by NEMMCO as a Distribution Network Provider, MNCMNSP owns and operates a 66kV network which supports its mine operation in central Queensland. The network is connected to Ergon Energy's distribution network at its Moranbah substation.

Energy Developments Ltd has established a 45MW power station on the Moranbah North mining lease which is dependent on the mine for fuel (coal seam methane). The embedded generation owned and operated by Energy Developments Ltd will be the only customer on the MNCMNSP network. As stipulated by the Rules', the registered power station requires a site specific DLF.

Hill Michael Consulting submitted for review a spreadsheet that details the results of its load flow studies, the workings of the DLF calculation, and the final DLF value. A report titled "Network Service Provider Distribution Loss Factor 2012/13" was also submitted by Hill Michael Consulting for review. Both the report and spreadsheet were well structured and concise and allowed an audit of the calculated DLF to be examined in a logical manner.

IES confirms that the Energy Developments Ltd embedded generator meets the Rules' requirements for a site specific DLF, that is, its generation is expected to exceed 10 MW during financial year 2012/13.

Intelligent Energy Systems Pty Ltd ACN 002 572 090 ABN 51 002 572 090

The Australian Energy Regulator requires that DNSPs must determine their DLFs in accordance with their respective published methodologies. The relevant published methodology operating in Queensland as at 31 December 2011 is the methodology as described in Report NCM 17699 Determination of Distribution Loss Factors for Embedded/Local Generators. A copy of this report is provided in the Hill Michael Consulting submission.

The DLF proposed for the Energy Developments Ltd Moranbah North embedded generator is 0.9969. IES is of the opinion that the value of 0.9969 has been calculated in accordance with the published methodology and is an appropriate DLF value to use for the Energy Developments Ltd Moranbah North generator.

Yours Sincerely

Bryan Whitlock

Senior Energy Analyst