

18 March 2009

Mr Chris Pattas
Australian Energy Regulator
General Manager - Network Regulation South
GPO Box 520
Melbourne VIC 3001

Dear Mr Pattas,

Approval Process for Distribution Loss Factor (DLF) for Prominent Hill

I am writing in response to your 26 November 2008 letter to Dave Thomas on this subject.

customer is supplied from this connection. Billiton Olympic Dam Corporation operations 132 kV system at Olympic Dam. No other The OZ Minerals (formerly Oxiana) Prominent Hill electricity supply is connected to the BHP

methodology. the Prominent Hill connection point which has been calculated in accordance with the attached BHP Billiton Olympic Dam Corporation requests that you approve a DLF of 1.056 for 2009/10 for As the non-registered network service provider associated with the Oxiana metering installation

agreed between the parties to this Agreement. Connection and Access Agreement. This Agreement will end in July 2018 (if not terminated The DLF has been fixed at 1.056 for the life of the Oxiana - Olympic Dam Corporation Therefore, the attached methodology and the DLF of 1.056 will remain until otherwise

assurance/certification as suggested in your letter appears unnecessary. As this factor has been mutually agreed between Oxiana and Olympic Dam Corporation, a positive

Kind regards

Peter Lindner Utilities Manager, Olympic Dam

CC: Mick Wilkes, OZ Minerals

## METHODOLOGY FOR CALCULATING DISTRIBUTION LOSS FACTORS (DLF) FOR SUPPLY FROM THE BHP BILLITON OLYMPIC DAM OPERATIONS ELECTRICITY SUPPLY SYSTEM

## Background

fundamental consideration is that ODO will be no worse off as a result of the new must consider the impact of the additional electrical losses caused by the third party. The its electricity supply system on fair and reasonable terms. In connecting third parties ODO NER, BHP Billiton Olympic Dam Operations (ODO) is required to connect third parties to Under the terms of its exemption to register as a Network Service Provider under the

The existing ODO metering installation is located at Davenport Substation some 260 km electrical distance from the Olympic Dam installation. As a consequence, it is necessary determining the marginal increase in electrical losses and attributing these to the attributable to that connection. Because of the "no-harm" requirement this involves electricity infrastructure that takes into account the increases in losses that are to apply a Distribution Loss Factor (DLF) to any party that connects to the Olympic Dam connecting party.

## **DLF Calculation Methodology**

The following methodology has been used to calculate the DLF for the Oxiana metering installation which is located at the Olympic Dam West substation.

- The ODO load is set at its June 2007 Agreed Maximum Demand (AMD) of supply system calculated from a load flow analysis. 125 MW at Davenport and the line losses associated with the ODO electricity
- 12 The Oxiana load is set at its AMD of 48.5 MW at Olympic Dam West and the total load supplied at from the ODO connection point recalculated using load flow
- ω the ODO AMD of 125 MW from the total load (including incremental losses) attributable to the Oxiana connection at Olympic Dam is determined by subtracting The incremental load supplied from the ODO connection point at Davenport
- 4. plus losses determined in step 3 by the Oxiana AMD of 48.5 MW The DLF for the Oxiana load is calculated by dividing the attributable Oxiana load
- 5 No DLF weightings are applied because of the high load factors of both ODO and Oxiana and the forecast lack of load diversity between the two sites
- 0 unchanged until such time as Oxiana request a change in AMD. The DLF calculated using this methodology is 1.056. This DLF will remain