

23 November 2012

Our Ref No: 10-547-PO-LET-0027

Economic Regulation Authority  
PO Box 8469  
PERTH BC WA 6849

Attention: Lincoln Flindell - Senior Project Officer

Dear Lincoln

**Request by WPC to the ERA for a Derogation of the Service Level for the Port of Geraldton's Requests for an 11.65 MVA Load Increase**

Asia Iron Australia Pty Ltd through its 100% subsidiary, Extension Hill Pty Ltd (EHPL), has made many submissions to the ERA on projects and issues with respect to power transmission infrastructure developments in the Midwest.

EHPL supports the requested derogation, as it believes it is the only means available to ensure that the poor state of the Midwest transmission network does not unduly delay regional development.

EHPL understands that at present:

- Demand north of Mungara is approximately 110MW;
- Transmission system capacity north of Mungara is thermally limited to 122MW;
- Transmission system capacity between Mungara and Three Springs to the south is thermally limited to 85MW;
- To meet the 110MW demand north of Mungara, it is necessary to operate the old inefficient Mungara gas turbines out of merit to overcome the transmission capacity limitations from Three Springs.

The inability of the current transmission system north of Three Springs to meet existing demand, let alone projected short term growth, without derogation reflect poorly on the transmission planning and infrastructure delivery functions of WPC.

In earlier submissions, 20 Dec 2010, 10-547-PO-PAP-0003 and 13 Sept 2011, 10-547-PO-LET-0016\_11, EHPL has referred to the exponential response of electrical transmissions systems to load increases. As a consequence of this law of physics, the impact of additional small incremental loads on transmissions systems operating at or near their capacity is greatly amplified.

This in turn increases the likelihood of system collapse and EHPL contends that it is unwise for WPC or the ERA to allow capacity expansion triggers for a major regional transmission system to be delayed until such a small excess load capacity is reached.

EHPL respectfully asks the ERA to consider transmission systems capacity enhancements differently when transmissions systems are operating at or near their capacity as is the case in this instance. We suggest that the ERA prepare and publish its approach to transmission system enhancement that –

- Provides a definition of a transmission system capacity; and
- The define load projection principles it accepts in determining the need for the enhancement.

EHPL strongly urges the ERA to approve transmission capacity expansion of the north MWEP feeder area as a matter of priority to avoid unnecessary delays to new customers and to overcome the need for further derogation approvals and reductions in transmission network reliability standards.

Yours sincerely  
EXTENSION HILL Pty Ltd

**Matt Duxbury**  
**Manager - Infrastructure Services**