

13 May 2011

**Response to AEMC discussion paper entitled “Strategic Priorities for Energy Market Development”  
by Infratil Energy Australia**

The Infratil Energy Australia group of companies (“IEA”) invests in the Australian energy sector, and retails electricity and gas to over 400,000 customers across Victoria, New South Wales, South Australia and Queensland under the Lumo Energy brand. IEA also owns and operates 4 power stations located in South Australia and NSW which have a combined installed capacity of 165 MW, and recently purchased the Bamarang Power Station development site as part of the electricity asset sale conducted by the Government of New South Wales. IEA is looking to identify and develop other new generation investment opportunities within the NEM.

With regard to Strategic Priority Three within the discussion paper, IEA agrees that ensuring the transmission framework delivers efficient and timely investment is essential and, in particular, that if the transmission framework interacts effectively with the competitive generation market it will help allow for the minimisation of total system costs. IEA submits that more can be done to provide for the effective interaction between the competitive generation market and the regulated transmission sector.

Many factors must be considered by a generator when seeking to identify and capture the site for a new power station development. Key amongst these are:

- an appropriate planning scheme, or the ability to procure a planning scheme amendment;
- sufficient separation from neighbouring properties in order to comply with EPA noise guidelines;
- cost-effective access to a reliable supply of fuel;
- cost-effective access to unconstrained electricity transmission capacity; and
- access to sufficient and cost-efficient supplies of water and waste-water disposal facilities.

In assessing the potential of a site, a developer will need to carry out certain studies in order to evaluate each of these key factors. In the preliminary stage of considering a site’s feasibility for development as a power station, a developer does not want these studies to cost much money nor, in particular, take much time.

The greatest uncertainty, and the one that takes the longest time and the most money to assess, is the unconstrained electricity transmission capacity of the transmission network at the proposed point of connection. Increasingly, IEA is finding this to be the single longest lead-time task in determining power station site feasibility. In the past, finding sites with suitable connection capacity and low connection cost has been reasonably easy due to spare network capacity remaining from when the entire electricity businesses were State-owned enterprises

and transmission capacity and new generation capacity were developed in tandem. However, following the implementation of the National Electricity Market, transmission development has largely occurred independently of new generation. Consequently, much of the existing spare capacity in the transmission networks has been utilised. It is now much more difficult to find suitable connection points for new generation developments and connection costs are increasing due to the need for more substantial network augmentation in order to provide for constraint-free connection. This problem will be exacerbated in the future as greater rates of connection of new power stations are required to meet demand growth and fuel switching imperatives.

Assessment of a site's connection suitability utilises specialist computer software which requires, as input, snapshots of forecasts of transmission network loadings under various critical system supply/demand scenarios. These forecasts of transmission network loadings are only available from AEMO and/or Network Service Providers who manage the system planning processes which are reflected in such publications as the ESOO and various TSNP's Annual Planning Reports. It is IEA's experience that production of these snapshots by the relevant provider can often take an extended period which unreasonably extends the time required to complete the feasibility study of the connection.

IEA would like to see the development and implementation of a planning tool, published annually, which provides a broad assessment of the ability of the transmission and distribution networks to connect generation capacity throughout the networks. This assessment could identify:

- any network constraints which limit generator connection capacity;
- system conditions under which the constraints are likely to arise, including weather conditions, network contingency events, generator outputs and levels of system demand; and
- a scope of transmission works required to alleviate the constraints.

IEA believes that the implementation of such a planning tool would contribute substantially to ensuring that the capacity in the existing networks is used as efficiently as possible. IEA would be happy to meet with representatives of AEMC to further discuss and expand on this proposal.

Yours faithfully



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