

APPENDIX I I

Aurora Energy, Response to the AER regarding Transend connection projects, January 2009





Contact:

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Our Ref:

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6 January 2009

Mr Steve Edwell Chairman Australian Energy Regulator GPO Box 520 MELBOURNE VIC 3001

Attention:

Vani Rao

Dear Mr Edwell

TRANSEND CONNECTION PROJECTS - 1 JULY 2009 TO 30 JUNE 2014

Thank you for your letter of 16 December regarding Transend Networks Pty Ltd transmission proposal for the next regulatory control period and the significant capital allowance for projects to meet the connection requirements of Aurora.

Aurora appreciates the concerns raised by a number of stakeholders at the predetermination conference regarding the impact of changes in the economic conditions on Transend's capital expenditure proposal and provides the following information regarding the requirement for the proposed Aurora connection expenditures.

Network configuration within Tasmania requires Aurora to maintain a continuous joint planning process with Transend and as such Aurora has worked closely with Transend on the development of the proposals for the Aurora connection expenditure. The delivery of these projects is critical to Aurora's ability to deliver the outcomes necessary within Aurora's current regulatory control period.

Aurora faces a number of supply constraints and reliability issues within its network that are a result of increased loading on the distribution feeder network and protection co-ordination issues at older Transmission connection points.

Aurora's load forecasts for the last five (5) years have consistently highlighted a capacity constraint within the distribution network and at the transmission connection points in the following areas:

- Hobart Eastern Shore (Hobart Eastern Shore substation);
- Kingston (Kingston Substation);
- Launceston (Newstead Substation):
- West of Burnie to Wynyard (Wynyard Substation);
- East of Burnie to Penguin (Penguin Substation);
- Devonport/Port Sorell (Wesley Vale Substation); and
- St Helens/East Coast (St Mary's Substation).

From the Office of the **Chief Executive Officer**

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These distribution network constraints cannot solely be addressed with distribution augmentation and/or investment and have therefore identified a necessity for the establishment new terminal substations in those areas.

Failure by Aurora to address these capacity issues within Transend's next regulatory control period will place a number of additional constraints on Aurora's ability to deliver a reliable and secure electricity supply to all its customers. The delivery of the Transend projects in the foreshadowed transmission work program is critical in the ability of Aurora to rectify its own distribution network issues.

Aurora has just completed its annual 10 year consumption and maximum demand load forecasts. The completion of these forecasts has incorporated a downgrade of the medium term growth forecast from last year's statewide forecast of 2.4% p.a. to 1.8% p.a. However, whilst the forecasts foreshadow a lessening in overall load growth the above areas still experience localised significant growth. These particular areas have for several years experienced high growth rates and as such constraints within the distribution, and transmission connection points have emerged. All these areas are supplied by terminal substations, which have existing or imminent capacity constraints where the required distribution transfer capability requirements of the connection point exceed the firm load capacity of the existing transformers at each substation.

Whilst changes in economic conditions within Tasmania will impact upon future load growth within the distribution network and ultimately the requirements for associated and/or supporting transmission projects, Aurora has identified the above areas where infrastructure works are necessary for management of existing issues. These changes in economic condition will be factored into the longer term 5-10 year plans jointly addressed by Aurora and Transend.

Immediate action is necessary to ensure timely solutions are delivered to meet customer's capacity requirements and ensure adequate system capability and acceptable reliability performance levels. Distribution reliability and/or security can be compromised when projects are deferred, creating a requirement to establish additional distribution infrastructure to operationally manage the load balance across the distribution network.

As part of the Aurora Pricing Determination handed down by the Office of the Tasmanian Economic Regulator in November 2007, the Regulator included a new Guaranteed Service Level (GSL) scheme that included reliability standards that are based upon discrete communities across mainland Tasmania. Aurora had worked closely with the Regulator, prior to the Pricing Investigation, on the establishment of this new scheme and had included a level of network expenditure in its pricing proposals that would bring Aurora into compliance by the end of Aurora's current regulatory control period.

A key component of Aurora's performance improvement strategies include improvements in the co-ordination of overall feeder protection. This work is aimed at ensuring minimal interruption is experienced by the least number of customers in the event of a fault on the distribution network.



The Regulator has allowed the majority of Aurora's proposed expenditure for addressing reliability issues and a number of Aurora's reliability programs are dependent upon an ability to sectionalise long, heavily loaded feeders into manageable lengths. Aurora's ability to co-ordinate this sectionalisation is dependent upon modern protection systems throughout the distribution feeder network, particularly at the transmission connection points, feeder circuit breaker, that will prevent whole feeder trips in the event of a feeder fault.

The asset boundary between transmission and distribution assets in Tasmania is at the distribution load side of the feeder circuit breaker. This means that the protection devices and controls of each distribution feeder are owned and maintained by Transend. This protection equipment and their settings are critical to the operational and reliability performance of the distribution network. Many of these particular assets have not undergone an upgrade or modernisation since the establishment of the individual terminal substations. To provide adequate co-ordination with downstream modern distribution network protection devices a need exists for this critical equipment to be replaced and improved capability installed. Specific requirements for this protection include sensitive earth fault, monitoring equipment and finer setting adjustments.

In summary, Aurora has worked closely with Transend to maintain a continuous joint planning process and accordingly Aurora has reviewed all of Transend's connection projects identified in its revenue proposal taking into account the recently revised demand forecasts. Aurora concludes that all connection projects will be required to be delivered in the stated timeframes contained in Transend's revenue proposal to meet Aurora's reliability and security obligations.

If you seek further information please contact Mr Ian Gibb on the above number.

Yours sincerely

Peter L. Davis

Chief Executive Officer