Ref.:

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Mr John Tamblyn Chairman Australian Energy Market Commission P O Box H166 AUSTRALIA SQUARE NSW 1215

Email: submissions@aemc.gov.au

Dear Mr Tamblyn



# **Congestion Management Review**

Ergon Energy Pty Ltd (Ergon Energy) appreciates the opportunity provided by the Australian Energy Market Commission (AEMC) to comment on the *Congestion Management Review: Issues Paper* (Issues Paper). This submission is made by Ergon Energy in its capacity as an electricity retailer in the National Electricity Market (NEM).

Network congestion is a key concern for Ergon Energy given the associated costs incurred through enhanced trading risks and increased electricity purchase costs. The need to address these inefficiencies had been acknowledged internationally, as most established electricity markets have either commenced or are considering redesigning transmission pricing arrangements to improve market efficiency and signals for investment.

Each of the issues addressed in our submission are in number order as detailed in the Issues Paper.

2. Given the development of the NEM and the recommendations of reviews undertaken to date, what are the significant priority issues for this Review?

In addition to addressing the existence, frequency and overall management of congestion, consideration should be given to market incentives, the pricing of transmissions services and the rules for new transmission investment. These issues are critical to the delivery of an efficient supply of energy. In particular, we see the essential elements of the market's framework to include:

- mechanisms to prevent network congestion;
- where congestion occurs, a mechanism to build it out (where efficient to do so) and an incentive regime to encourage Transmission Network Service Providers (TNSPs) to act in a way which reduces the financial impact of these points of congestion;
- the costs of congestion are appropriately allocated among participants, where possible, to those who cause it; and
- were efficient congestion remains, a mechanism to price it explicitly.

Ergon Energy believes particular attention should be given to the first two elements identified above given the mechanisms available to minimise congestion are more efficient and have less associated risks for retailers than any interventionist mechanism to manage congestion such as constraint support pricing/constraint support contract (CSP/CSC).

As such, the procedural order outlined in the regional boundary review is not supported. Specifically, the proposal to include a congestion management regime for cases were material congestion emerges. Such an arrangement will dilute or remove (if rolled out to all points of congestion) market signals for investment and will reduce the efficiency and effectiveness of the current NEM through increased risk and reduced market liquidity.

## Prevention of Material Network Congestion

It is acknowledged there are a number of related proposed Rule changes currently under consideration by the AEMC. However, we are concerned the Issues Paper does not explicitly address actions that can be taken to reduce the prevalence or frequency of network congestion. This review should give consideration to preventative measures as well as the alternative mechanisms for managing the material congestion issues canvassed in the Issues Paper. Ergon Energy believes material network congestion should be primarily addressed through transmission network investment over any alternative interventionist market mechanism.

The importance of transmission investment and non-entrepreneurial transmission was acknowledged in the Ministerial Council on Energy's December 2003 communiqué. Ergon Energy believes that if we do not achieve the right mix of transmission capacity in the NEM an economically efficient mix of generation will not result. Furthermore, increased locational price will not improve long term dispatch efficiency. By getting the signals for efficient and timely transmission right the NEM should be largely unconstrained. This position is well established both in theory and in practice. That is, locational pricing cannot facilitate investment in optimally sized AC transmission investments due to economies of scale and the difficulties in protecting property rights.

For these reasons Ergon Energy would encourage the AEMC to consider the merits of developing a national transmission planning and coordination body. Ideally, this body would be an independent organisation that coordinates and plans transmission investment based on efficiency criteria but does not own transmission assets itself. VENCorp in Victoria, where transmission assets have been privatised, provides a starting point for such this model. However, we propose an extension of the VENCorp model, with the new NEM organisation planning new transmission assets and then using an auction or tender process to determine a licensed Transmission Network Service Provider (TNSP) to design, build, and maintain the asset. The NEM transmission organisation would be responsible for operating the asset.

Ergon Energy believes an improved transmission investment model will address the transmission constraint issues in the NEM more effectively, more reliably, and at a significantly lower risk than varying regional boundaries or using constraint support prices.

### Incentives

Transmission assets in the NEM have a major influence on the setting of energy/ancillary service prices and new investments in generation and demand side initiatives. With continuing growth in customer demand this influence will undoubtedly grow creating increased intra-regional congestion. This congestion will need to be addressed by efficient investment in the market by generation, transmission, demand side or other initiatives. Hence transmission investment cannot be separated from the market. As such it is essential TNSP performance measures and incentives ultimately reflect the market impact, in particular financial impacts of TNSP activities.

The requirement of incentives for TNSPs has been a longstanding issue for industry. Over the past four years industry has participated in both informal and formal working groups established to discuss the development of transmission service standards. Ergon Energy is supportive of the development of commercial incentives for TNSPs that facilitate efficient and effective energy market competition through the free flow of electricity within and between States. These incentives need to be directed at market outcomes that benefit electricity users and should explicitly recognise:

- the economic cost of transmission performance borne by network users and market participants as a result of network constraints and outages;
- that both the timing of a transmission failure and the relative importance of the particular transmission asset to the effective operation of the wider market are of critical importance; and
- the need for symmetry in the incentive mechanism developed, such that the TNSP is exposed to financial consequences for non-performance, not just rewarded for meeting or exceeding the performance target.

It is acknowledged that many of these issues have or will be adopted through the *Review of the Electricity Transmission Revenue and Pricing Rules* or subsequent regulatory processes. For example, the draft requirement for the Australian Energy Regulator (AER) to develop and publish an incentive scheme by 31 December 2006.

- 13. Does the current design of IRSR units impact the ability of participants to efficiently manage inter-regional price risk?
- 24. To what extent will firming-up IRSRs facilitate inter-regional trade? What is the best approach to firming up IRSRs and how would this work?

Settlement residue auctions (SRAs) are a method of hedging across regional boundaries currently used by retailers. These hedges return a fixed percentage of the settlement residue on an interconnector, reflecting the fact the flow capacity of the interconnector is not static, but changes with security and stability constraints. This percentage allocation is seen as limiting by retailers who are trying to hedge fixed quantities of energy. A further limitation is that if the transmission asset is unavailable in a given dispatch period, SRAs return no revenue and therefore no hedge. In this respect SRAs are clearly 'non-firm'.

Given the limitations of the current tools for managing risk, Ergon Energy proposes that firm Financial Transmission Rights (FTRs) be introduced. The FTR would essentially be a regional reference node to regional reference node right defined in terms of a fixed MW capacity. The FTRs would be made available or 'balanced' in such a manner as to ensure settlement surpluses matched the payments that need to be made to those holding the FTRs.

Whilst we support firmer arrangements we do not support firming via artificial means such as via a customer 'uplift' charge which would create an unhedgeable risk to retailers.

If a regime similar to constraint support pricing/constraint support contract (CSP/CSC) is implemented at points of congestion there are a number of resultant financial impacts which need to be considered.

### Risk Management

In the present market, retailers can purchase energy contracts at their regional reference nodes and use fixed and relatively predictable loss factors to translate the contract price to their local nodes. This regime gives retailers certainty and is not overly complex nor does it involve significant transaction costs.

If retailers are exposed to price variations, such as different reference prices within the same jurisdiction, then firm and known transmission hedging instruments become critical. On the other hand, if retailers see just one price within a jurisdiction while generators see something close to full nodal pricing, then generators face a range of risk management issues themselves. Although it is proposed address these risks via the use of constraint support contracts, it seems to us that the process of setting constraint support contract levels is likely to be an imperfect art. Especially since contract support prices will be based on fixed factors that may not reflect actual power flow conditions at any particular time. Thus these arrangements are likely to be as, if not more, controversial and contentious as setting loss factors has been in the past.

Ergon Energy is not comfortable with any proposal that exposes retailers to locational price risk, even if it is via cost pass through by generators.

## **Liquidity**

Increased regionalisation or increased locational pricing will not create more players in the market. The major change will be that there will be more transmission paths to hedge, with fewer players trading on those paths. This will inevitably lead to a drop in hedge market liquidity and in turn a reduction in competition.

- 18. Is the proposed 'staged approach' to congestion management an appropriate framework? Is it the most effective response to those problems? Is it technically and commercially feasible?
- 21. What triggers should be considered for the introduction of various congestion management tools under a staged approach? Which institutions should be responsible for recommending and approving the introduction of congestion management tools at each stage?

As noted above, Ergon Energy does not support the use of congestion management tools for points of congestion. In the case of CSP/CSC, if this arrangement was applied to all constraints, then all generators would see nodal pricing while loads would see a single regional reference price. This approach is effectively introducing nodal pricing by stealth.

Full nodal pricing is an approach that has already been widely rejected by the market. Full nodal pricing is considered to complicate market trading as there are more locations to trade at with fewer participants trading at those locations. With participants buying and selling at a wide variety of locations it becomes important to be able to hedge against uncertainty in these price differences. In practice, it is very difficult to fully hedge such risks.

Furthermore, the MCE Statement of NEM Electricity Transmission (May 2005) states that the 'MCE accepts CRA's advice that no material efficiency benefits would be gained from a nodal pricing approach at this stage of market development'.

38. How can the Commission best draw no the partial Snowy CSP/CSC trial to evaluate the costs and benefits of the use of a CSP/CSCs? How can the Commission best draw on the Snowy CSP/CSC trial to consider modifications to the proposed design of CSPs and CSCs?

The scope of issues identified in the Issues Paper is an appropriate foundation for any assessment on the success of the Snowy trial. However, this criterion should be expanded to also take into account the financial impacts of the trial, such as contract liquidity and the availability of hedges. Consideration should also be given to any perverse market impacts such increased generator market power.

We would welcome the opportunity to discuss our comment with you at your convenience. Please feel free to contact me on (07) 3228 7536 should you wish to discuss any aspect of Ergon Energy's submission.

Yours sincerely

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