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Mr Richard Owens
Australian Energy Market Commission
Level 5, 201 Elizabeth Street
Sydney NSW, 2000
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online: http://www.aemc.gov.au

17 November 2011

Dear Richard,

**National Electricity Amendment (Potential Generator Market Power in the NEM Rule 2011)**

TRUenergy welcomes the opportunity to provide comments on the Australian Energy Market Commission (AEMC) Potential Generator Market Power Rule Change Discussion Paper.

TRUenergy is a generation developer, owner and operator as well as one of the largest retailers in the NEM.

The Proposed Rule Change has a direct impact on our business. As a generation developer the Proposed Rule Change dilutes the case for developing new generation facilities, as an owner and operator of existing plant the Proposed Rule Change impacts significantly on the pricing and sale of electricity from our sites, impacting on the revenue of the business. Finally as a retailer (who at time has exposure to high prices) this proposal seeks to undermine legitimate hedging strategies we invested significant time and resources into developing, including a number of exotic financial products, and the development of demand response options.

In summary we have a number of key points that we seek to raise in our submission. These are:

1. Definition of relevant market;
2. Application of the SSNIP test;
3. Calculation of the Long Run Marginal Cost;
4. Time frame for assessment;
5. Assessment of modelling output; and
6. Contract Price Information.

**Definition of relevant 'market'**

The relevant market that the AMEC needs to consider is already defined in statute, the National Electricity (South Australia) Act 1996 (NEL). Defining an alternative view of "market" is likely to create confusion. The NEL clearly defines the national electricity market as:

> (a) the wholesale exchange operated and administered by AEMO under this Law and the Rules; and
> (b) the national electricity system.

The national electricity system is defined as:

(a) the generating systems and other facilities owned, controlled or operated in the participating jurisdictions connected to the interconnected national electricity system; and
(b) the interconnected national electricity system.

And the interconnected electricity system is defined as:
the interconnected transmission and distribution system in this jurisdiction and in the other participating jurisdictions used to convey and control the conveyance of electricity to which are connected—
(a) generating systems and other facilities; and
(b) loads settled through the wholesale exchange operated and administered by AEMO under this Law and the Rules.

These definitions support the concept of a single NEM-wide interconnected electricity system. The definitions do not contemplate separate sub markets within the NEM that are interconnected; instead the definitions focus on the electrical systems that are interconnected. This is in contrast to the multiple interconnected markets that exist in the eastern half of the United States. This NEM wide definition is also consistent with legal precedents.

**Application of the SSNIP test**
In the interests of transparency TRUenergy requests that the AEMC make available a detailed document outlining the methodology that the SSNIP test will be using, such that it can be replicated. We would also request making available the assumptions used as well the full datasets and the process and assumptions used to calculate LRMC. TRUenergy would also welcome the ability to comment on any material released by the AEMC.

*Hypothetical monopolist is not a credible counterfactual*
TRUenergy believes that the fundamental application of a test involving a "hypothetical monopolist" is flawed. This is because a hypothetical monopolist is not a credible counterfactual to measure the definition of a market. Also the incentive for a hypothetical monopolist to achieve super profits year on year is tempered by the threat of regulatory intervention. Is the hypothetical monopolist operating in an environment with a similar legal and regulatory environment to Australia, or does it have the unfettered freedom from any potential government intervention? If an objective test was to be developed it needs to consider a credible counterfactual, one that would be possible, and one that operates in a legal and regulatory environment consistent with Australia.

*Hedging the hypothetical monopolist*
In the instance where a hypothetical monopolist is used for the SSNIP, the issue of the hedging needs to be considered. If this monopolist is 100% hedged (or greater) then the ability to profitably gain from strategically setting high prices in the spot market becomes irrelevant as any income received from the spot market is paid out through contract for difference payments. Is it realistic to assume that the monopolist has 100% spot exposure, even though this does bring about the maximum incentive to profit from the spot market? Typically it can be expected that both the shareholders and debt holders in the hypothetical monopolist would expect some forward contracting to reduce the level of revenue *volatility*. The issue of regulatory risk discussed above needs to be considered. Customers of the hypothetical monopolist are probably also wanting to hedge against forward prices, therefore there is likely to be some demand for hedging. The hedge prices would be subject to downward price pressure from suppliers outside of the region via the interconnection arrangements. In modelling the hypothetical monopolist it would be reasonable to assume that 75-85% of future generation output would be hedged.

*Distinguishing profitability from "market power" and "scarcity conditions"*
It is likely that a hypothetical monopolist could make significant profits in certain market conditions without exercising market power, and results from any modelling should attempt to differentiate between the root causes of high prices. Market power is not the sole determinant of high prices, even if the high prices result in increased profitability.
In the event that demand is high, prices will be expected to rise to high levels. The clearing price in the market may well be set by interstate generators offering via the interconnector while the hypothetical monopolist is fully dispatched. Furthermore the hypothetical monopolist own prices offered to the market will also be high to reflect (1) the additional cost associated with dispatching generation at its upper limit; (2) the costs to procure additional fuel including the costs associated with the flexibility for additional fuel use (or the costs associated with storing fuel for scarcity conditions); (3) the additional risk premium required for generators to cover the risk of plant tripping at higher output levels and not being able to cover the existing contracted volumes during periods of high demand. Additionally prices

are automatically set to the market price cap when demand is shed. Clearly it would be expected for prices higher than the LRMC threshold to occur under these conditions. As such these events should be identified.

High prices are also a function of the level of supply; both within and outside of an interconnected region. Supply constraints can take the form of forced outages and fuel constraints (for example low wind days, gas pipeline outages, mine flooding, and drought conditions). The elasticity in a supply curve decreases with higher levels of generation dispatch, thus even small volume changes produce significant price changes. Prices higher than the LRMC threshold that are caused by genuine supply constraints should be identified.

Transmission has as significant impact on market prices. In a perfect world, transmission would be very cost effective and able to transmit energy at low loss factors. Additional transmission would be able to be built quickly and at a cost less than the benefits gained. Unfortunately this is not reflective of real world conditions and transmission constraints should be expected to produce high prices in the NEM design.

The issue raised by transmission constraints is that the market does see the very real cost of transmission constraints in the market in the form of both very high and very low prices (however these costs are not exceeded by benefits under a regulatory investment test). Identification of excess profitability gained by the hypothetical monopolist caused by transmission should be identified. Any development of models that develop and improve the methodology of the market based costs caused by transmission constraints would be particularly welcome by the market and transmission service providers to assess potential benefits of investments.

Any model that attempts to look at market outcomes needs to include the impact of the co-optimisation of ancillary services, particularly raise services when large importing interconnector flows are present. High levels of raise requirements increase the level of supply scarcity in the market. One of the common flaws in electric modelling is the failure to take into account the level of ancillary services. This is critical during periods of high interconnector flows as well periods where large generating units are operating at full load. The level of supply provided in the market at this time needs to satisfy both demand and raise services. At these times scarcity exists in the market.

**Calculation of the Long Run Marginal Cost**

*LRMC to reflect the costs faced by generation investors*

TRUenergy is firmly of the view that any calculation of LRMC needs to be anchored with the realities of investment decisions. Any theoretical calculation about "what LRMC should be" without full consideration of the actual costs and risks faced by organisations that actually invest in generation assets is likely to create unrealistic expectations over the future price of electricity and the likelihood of future investment, and consequently expectations about security and reliability of power systems into the future.

The cost needs to consider more than the "sum of the parts" from a physical build, but also allow for an appropriate risk adjusted return that reflects the needs of both debt providers and shareholders, as well account for the regulatory uncertainty prevalent in the current investment environment. It is noted that retail regulators have used LRMC approaches for some time and these approaches are quite different from the approach proposed by NERA. This discrepancy needs to be reconciled.

**Time frame**

*Timeframe needs to be consistent with generation and transmission development*

NERA notes that the time frame needs to be consistent so that all variables of production are variable. In assessing this length the time, consideration needs to be given to more than the time required to physically build an asset. In the case of transmission the time begins when a potential need to upgrade or invest is identified, followed by internal development of options, and ultimately to a successful RIT-T outcome. Similarly for generation there is a considerable lead time required to identify sites, procure land options, and obtain planning permission before a final investment decision can be made. It would be erroneous to assume the time to begin development commences with public announcement of a project as there is often a minimum of 12-18 months of internal development time prior to this. For example TRUenergy's Tallawarra station began with land procurement in 2001, and finished with eventual commissioning in 2009. The initial land purchase was a real option for power station development, the exercise of that option for full development occurred sometime in 2004/5, a period of 4-5 years prior to commissioning.

The other factor in considering the relevant time frame. NERA notes that this is also a function of demand. Demand does not grow linearly and is largely a function of economic activity. Economic cycles are also years in duration. A two- three year boom period followed by a recessionary period may give rise to low levels of demand over several years. While the hypothetical monopolist may be able to strategically game power prices during a combination of an economic boom period with high demand caused by weather conditions, their ability will be severely curtailed in recessionary years. This strengthens the need for any party to hedge to reduce volatility as discussed above. Hedging effectively gives away the upside benefits in order to reduce downside benefits. Performing a test during a boom years is likely to overstate market power while performing a market power test in recessionary periods is likely to underestimate market power.

TRUenergy recommends a test period of 5 years, this is consistent with the time frame to manage both variations in demand and the time frame required to vary factors of production.

**Assessment of modelling output**

The modelling proposed by the AEMC is intended to effectively assess if revenues in the market are sufficient to attract new investment. In the case where the AEMC finds the revenues gained by current generators are in excess of new investment the AEMC needs to consider

(a) Are the excess revenues due to generators exercising market power?
(b) Are the excess revenues due to other market conditions? and
(c) Are their barriers to new entry preventing any response to market power?

The proponents rule change hypothesis is that excess revenues are being received and that this is due to excess market power. If items (b) and (c) are true then does a positive cost benefit case exist for resolving these other issues? Cleary the process for the Proponents Rule change would end as indicated by the AEMC. However other participants (and potential participants) maybe keen to see what measures can be developed to facilitate the mitigation of other market conditions and barriers to new entry.

The above paragraphs consider the situation where excess revenues are gained, if the modelling shows that revenues are not sufficient to attract new investment, then in the long run the market would need to consider what measures could be taken to ensure that price signals are sufficient to attract investment.

Recent examples of this type of intervention include FERC Oder 719, made in 2008 to ensure pricing reflects scarcity by requiring that all the US RTO's and ISO's have policies to prevent market price suppression during periods of scarcity to ensure that new investment and innovation (incl. demand side) is attracted to the sector. The New Zealand Electricity Commission made rule changes under urgency during 2009 to ensure that tight supplies of ancillary services were reflected in wholesale energy prices to protect long term investment signalling, and the New Zealand Electricity Authority has gazetted the introduction of electricity floor prices during scarcity periods. In the carbon sector the UK has introduced a carbon floor price to support investment decision in low carbon technologies (especially in the generation sector).

**Contract price information**

*Information availability*

The AEMC also seeks to compare LRMC prices to contract prices but notes that this information is not freely available.

There are several sources of potential information and care needs to be taken to ensure that comparisons are appropriate.

The ASX futures price, while not freely traded in all regions does provide a proxy. If large discrepancies between the futures price in a region and OTC prices emerge (that are not due to differing cash flow and security arrangements) arbitrage opportunities do exist for some parties to make a profit. Trading arbitrage opportunities provides pressure to close any price gaps and it only takes one vigilant trader to do this, i.e. it does not rely on the entire market to act to close a pricing mismatch. TRUenergy has observed this is aligned with actual outcomes.

AFMA is also a source of price relating to OTC price information. Subscriptions are available for information relating to electricity products. There are some issues with OTC data that should be recognised that include non-standard contract terms, and contracts can only be traded between parties that have an established ISDA arrangement. AFMA does remove outliers that may account for non

standard terms that impact on prices. The contracts reported on a flat 10MW swaps, therefore volume and price adjustments are needed to convert to a "equivalent volume weighted shaped" contract.

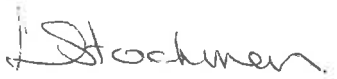
In the case where large volumes of energy contracts are not available in a region, a proxy price can be derived by using prices in adjacent regions in combination with settlement residue action (SRA) clearing prices. The SRA approach is likely to underestimate a regional contract price due to the non-firm nature of the SRA.

A further source of information can be obtained directly from customer's contracts, although these prices can be bespoke and are a function of contract term, credit worthiness, the nature of any strategic relationship between parties, the degree of flexibility for supply, and the contract prices also include a cost to serve component, and therefore not always reflective of a "clean" underlying wholesale price. TRUenergy retails to the industrial and commercial market. Our experience is that the majority of customers (or their brokers) use a competitive tender process often obtaining quotes from at least 3 suppliers. This is a very competitive and price sensitive part of the market; and deals can be won and lost on the back of very small margins.

While it may appear unfortunate there is not one standard reference contract price, it is this very issue around differing price views that contributes to market liquidity. Market participants (in the broader sense to include financial participants) have teams that are focused on pricing energy products, and use sophisticated models and analysis to form a view on price. It is when one party believes a product to be worth more than another when the selling and buying takes place (the party with the higher valuation will buy from the party with the lower valuation).

Finally TRUenergy thanks AEMC for the opportunity to provide a submission on this very topical issue and looks forward to working constructively with AEMC on ensuring that Australia has an efficient energy market. Please feel free to contact me on (03) 8628 1632 should you wish to further discuss this submission.

Yours Sincerely,



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