



8 December 2006

Bill Scales
Chair
Energy Reform Implementation Group
Email erig@industry.gov.au

Dear Mr Scales,

Re: [ERIG Discussion papers](#)

Total Environment Centre (TEC) and the Alternative Technology Association (ATA) have joined with other non-government organisations, as members of the NEM Consumers Roundtable, in a separate submission on the ERIG Discussion papers. We have some additional comments to make about demand side participation and greenhouse gas emissions. We would also like to raise the point that TEC submitted a response to the ERIG Issues paper in August 2006, with a focus on demand side participation (however, our submission was not referred to in the Discussion papers even though the issue of demand side failures in the NEM is referred to across many sections of the papers).

Demand side participation

The ERIG Discussion papers seem to be positing that a combination of the installation of interval meters and the removal of price regulation will automatically solve demand management¹ (DM) barriers in the NEM. Firstly, there is no guarantee that all jurisdictions will remove price caps. Additionally, while it is clear that the rollout of interval meters across the NEM is inevitable now it has been mandated by COAG, to reap the full benefits for demand management and accurate pricing that advanced metering can bring, there are a number of factors which must be incorporated in the rollout. The first of these is the type of interval meter. It is pointless to install meters which do not allow for remote communication. If the benefits of meters are to be fully utilised, they should have the capacity to allow remote load control, as well as being able to convey to consumers information on how much they are actually consuming, at what time of day and at what price. The facility for the communication of critical price periods is also necessary to enable utilities to fully harvest the savings available during peak periods. To install meters without these facilities severely limits the potential for demand savings.

¹ DM in this submission can be read to include 'demand response', 'demand side management', 'demand side response', 'energy efficiency' and 'non-network solutions'. In general, DM can include both the management of peak loads and energy efficiency as a way of meeting capacity requirements most cost effectively. It includes a diverse array of activities that meet energy needs, including cogeneration, standby generation, fuel switching, interruptible customer contracts, and other load shifting mechanisms.

Flexible tariffs are also a critical companion for interval meters, to better assist consumers to manage their demand. If based on real time pricing, flexible tariffs additionally offer the potential to avoid inefficient augmentation of the system purely to deal with the rare occurrences of critical congestion. Tariffs must be offered that provide incentives to avoid high price spikes. Simple removal of price caps will not lead per se to development of flexible tariffs, and thus this is not in itself a solution for better development of demand side participation.

Another method which has been applied to some effect in NSW with distribution networks under a price cap is the use of the D-factor. This is essentially an incentive arrangement via IPART for DNSPs to promote the consideration of DM in network planning, and could be transferred up to the national level. One of the requirements is that, "the DNSPs must demonstrate to the Tribunal that its demand management implementation costs are less or equal to the avoided distribution costs before it can pass through any costs to customers."² A similar, but more limited, principle could be also applied at a transmission level under a revenue cap. The AER could allow the TNSP to earn extra revenue of a value up to the specified costs of DM implementation. The potential for an increase in price by passing through costs to customers would be offset by the long-term benefits to all stakeholders of increased realisation of DM potential and the encouragement of greater network familiarity with DM.

To develop a more over-arching approach to demand management and energy efficiency in the NEM, TEC has been proposing the establishment and funding of a National Energy Savings Fund. The NSW Government has instituted such a fund for its own jurisdiction, for \$200 million over 5 years, with the prospect of continuance into the future. The Fund is expected to deliver savings of 900,000 MWh per year while saving consumers a total of \$370 million on their electricity bills. This will be achieved by providing direct incentives for energy savings while stimulating the embryonic energy savings provider industry.

Similar Funds exist in over 25 states in the USA, resulting in more efficient electricity systems by avoiding inefficient network and generation augmentations. Such a Fund should be considered at the national level in Australia, with \$700 million – a small proportion of expected infrastructure investment due to spiralling demand – set aside over 5 years as a start. It would provide a major contribution towards dealing with greenhouse gas emissions and climate change.

Greenhouse gas emissions

A major point raised in the Discussion papers was that of uncertainty for participants in the NEM – which we would emphasise includes consumers, not just investors – on the basis of widely differing policies and regulations across the NEM in regards to greenhouse gas abatement schemes. The obvious solution for variable renewable energy targets across the states would be the establishment of a rigorous Federal Mandatory Renewable Energy Target of 20% by 2015, and 30% by 2020. This should replace the current static target of 5,900 GWh (effectively 10.5% from both existing and new renewable energy). Such a target would preclude the need for individual states to develop their own targets and would be one of a suite of programs that could ameliorate the impacts of climate change and reduce greenhouse gas emissions significantly.

² Independent Pricing and Regulatory Tribunal of New South Wales, *Guidelines on the Application of the D-factor in the Tribunal's 2004 NSW Electricity Distribution Pricing Determination*, April 2005, p 1

The current lack of coherent policies for carbon pricing is also referred to in the ERIG papers as producing uncertainty (once again, this applies to consumers and investors alike). This needs to be adequately addressed at a national level via the institution of an emissions trading scheme with caps to deliver emissions reductions of 30% by 2020 and at least 80% by 2050. Again in the absence of Federal action, the states have led the way with the National Emissions Trading Scheme (NETS). With key NEM states on board, NETS has the potential to deliver a consistent carbon price and effective greenhouse reductions through emissions trading. An open invitation for the Commonwealth to join the scheme has existed since its inception; however the Federal Government has yet to take up the offer. The recent announcement of the Federal Government's intention to investigate emissions trading, while a step in the right direction, is however no guarantee of an effective scheme, and the need for state-based action is still therefore very much on the agenda.

An effective emissions trading scheme could provide a whole new suite of investment opportunities that deliver the shift to a low-carbon economy. By addressing the currently hidden costs of provision of electricity the NEM objective would be better met, both by ensuring a more efficient system and by better meeting the long term interests of consumers, who would otherwise suffer from both the environmental effects of climate change and would endure the higher costs of delayed action, as outlined in the Stern Report³ and the Australian Business Roundtable on Climate Change⁴. The scheme architecture must also be sound, with safeguards against the over-allocation of permits, limits to international off-sets and effective penalty prices with make-good provisions to ensure compliance.

Yours faithfully,



Jeff Angel
Director

TOTAL ENVIRONMENT CENTRE INC.

PO BOX A176, SYDNEY SOUTH 1235

Ph: 02 9261 3437 Fax 02 9261 3990

www.tec.org.au



Brad Shone
Energy Policy Manager

ALTERNATIVE TECHNOLOGY ASSOCIATION

LEVEL 13, 39 LITTLE COLLIN ST, MELBOURNE VIC 3000

Ph: 03 9631 5406 Fax 03 9639 5814

www.ata.org.au

³ Stern, N, *Stern Review: The Economics of Climate Change*, Cambridge University Press, November 2006

⁴ Australian Business Roundtable on Climate Change, *The Business Case for Early Action*, April 2006