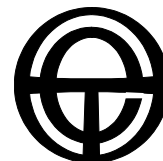


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SUBMISSION

Expert Panel Review of Revenue and Network Pricing across the Energy Market

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1. Introduction

1.1 The Energy Market Reform Program

Although Total Environment Centre (TEC) welcomes the opportunity for further input to this Review as part of the Energy Market Reform Program, it seems that there has been little coordination of the different sectors at the national level who are also investigating economic regulation.

In the last few months, TEC has submitted papers to the AEMC/MCE on:

- Decision making in the gas and electricity regulatory frameworks;
- Proposed framework schedule for transfer of distribution and retail functions;
- Transmission revenue requirements; and
- Transmission pricing.

Furthermore, in the next few weeks we will be responding to a similar issues paper on the national framework for distribution and retail regulation.

Then there will be the options paper to be released by the expert panel in early February.

Since the role of the expert panel is to develop a common set of arrangements for pricing principles, regulatory guidance and other changes to established regulatory processes, we refer the Expert Panel to our previous (and imminent) submissions.

This release regarding revenue and network pricing contains very wide-ranging issues, with only a very short timeframe to develop a reasonable argument. Again – as with the framework schedule for distribution and retail – this is a pre-emption of responses to the full paper on distribution and retail (as we mentioned in our submission on the framework schedule). In the rush to develop a consistent system across electricity and gas, the process is pre-empting community opinion (as well as commercial interests) and consequent reassessment of the NEM.

We also reiterate our previous position that the approach to the Review is a piecemeal one. In order to include the interests of end users it is necessary to first consider energy services from their perspective – what do they need and how can these needs be delivered at the lowest cost (including environmental and social costs)? Such a review should work its way up through retail, distribution and transmission networks and generation to comprehend how best these can be regulated to deliver the desired outcomes. This whole process, in contrast, has been from the top down.

1.2 Demand management and the NEM

The national energy market is inappropriately focused on supply at the expense of the delivery of coherent energy services, including demand side or other non-network approaches. In the electricity sector, this focus has resulted in:

- disregard of consumer interests;
- enormous costs of inefficient network investment;
- the absence of accurate price signals throughout the NEM;
- barriers to distributed generators and demand management (DM) providers; and,
- a greenhouse gas emission intense electricity system that brings with it a disproportionate risk of future carbon liabilities.

Demand management (DM¹) in all its forms must be recognised as a viable alternative to current attitudes and actions throughout the NEM because of the benefits that it delivers to consumers. The NEL Objective is set up to cater for "the long term interests of consumers"; this is not being done.

A report for Energy SA² gives a useful list of examples of demand side management opportunities:

- energy efficiency programs
- load shifting
- load curtailment
- tariff structures and metering
- embedded generation, including fuel switching issues
- distribution network constraints, which provide opportunities for DM

The report goes on to suggest that, "Demand Side Management activities have the potential to provide a low cost alternative to generation and transmission investments, and are often the only effective short term tool for overcoming supply side and distribution system inadequacies."³

At the national level, DM has been accorded significance but little has been done to implement it in practice. For instance, at the second NEM Ministers Forum in 2001, it was stated that, "Attending Ministers recognised that the prospects for a more active role in the NEM for demand side initiatives had not been fully investigated. It was agreed to develop a more comprehensive understanding of the potential for demand side management and participation in the NEM, and to identify potential impediments to the emergence of efficient and innovative forms of demand side participation within the NEM." Yet this intent has not been fully activated.

The position papers coming from the national level still give very little weight to demand management. In the AEMC papers on transmission pricing and revenue there were only a few mentions of "demand side, non-network solutions and alternative energies". The Gilbert + Tobin and NERA paper on distribution and retail (and consequently the framework schedule released by the SCO) recommends that environmental issues be dealt with in "Jurisdictional Directions", that is, peripheral to the main business of the NEM.

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.

² Energy SA, *Demand Side Management – Benefits to Industry & the Community*, 2001, p 5

³ *Ibid.*, p 5

Economic efficiency is central to the NEM. To achieve this there must be equal emphasis on demand and supply as the basis of standard economic regulation. DM and energy efficiency must therefore be given high priority and be integrated in uniform national regulation.

The problem was outlined by NERA in a report for TransGrid:

In contrast, the ACCC has not made any firm statement in relation to the treatment of DSM expenditure. The issue of the inclusion of non-network expenditure is not explicitly covered in the ACCC's Draft Statement of Principles for the Regulation of Transmission Revenues. The ACCC's decisions in relation to transmission network service providers (TNSPs) have noted only that the ACCC is 'mindful' that alternatives to capex proposals can include DSM alternatives, and have not explicitly addressed the issue of how expenditure on such alternatives will be recovered.

*Any uncertainty as to the regulatory treatment of DSM-related expenditure by TNSPs has the potential to undermine the practical consideration of such alternatives. We would recommend that the ACCC include a statement in its final Statement of Principles as to how expenditure on DSM will be recovered, in order to remove the current uncertainty.*⁴

The most important solutions for establishing a robust demand-side presence in the electricity market – and which must be given proper consideration in this review – include:

- establish a DM funding mechanism
- establish a DM code of practice
- ensure networks investigate and implement DM as an alternative to network augmentation where cost effective
- establish incentives throughout the NEM for the implementation of DM and the use of small, local generators based on alternative energies
- ensure networks disclose information on impending constraints in a timely manner
- transparency of pricing in relation to demand and constraints – end users are currently unaware of the true price of their electricity
- enable genuine open access for embedded generation and alternative energies.

1.3 Scope of this submission

We have addressed the three main points listed in Energy Market Reform Bulletin No. 56 "Expert Panel Review", but restricted ourselves to comments on the National Electricity Market (NEM), that is, we have not included gas in our comments. Our submission has to be regarded as a preliminary position paper only, given the timeline available. We will expand on it once the Expert Panel releases their Options paper. The points considered here are:

- Distinction and commonality
- Possible alternatives to current regulatory methodologies
- Regulatory discretion.

⁴ National Economic Research Associates for TransGrid, *Augmentation of Supply to the Western Area: Preliminary Cost Effectiveness Analysis*, May 2003, p 40

The primary concerns of the Expert Panel have been considered in regard to these issues, that is,

- pricing principles
- regulatory guidance
- changes to established regulatory processes.

We have also attached the NSW Demand Management Code of Practice for your information, as TEC considers this represents on critical aspect of current best DM practice in Australia. It was developed for distribution networks and is a requirement for licensing in NSW, but is easily adaptable for transmission and distribution networks at the national level. It should also be mandated practice in some form other than licensing.

TEC's report produced with Next Energy, *Demand Management and the National Electricity Market*, has been attached as well, since it sets out a number of recommendations for reform of, and supplements to, the National Electricity Law and its Rules.

2. Distinction and commonality

The extent to which technology, market circumstances or other differences between the electricity and gas sectors (and transmission and distribution within each sector) may best be reflected within a common regulatory framework and whether, and is so how, distinctions need to be reflected in separate provisions.

TEC's recommendation is that in a national system it is essential that there be a **genuine** common regulatory framework that avoids the lowest common denominator. As many details as possible should be dealt with at the national level to a high standard, mainly because in a competitive system companies will have interests across the jurisdictions – and electricity itself moves between the jurisdictions. To promote transparency and clarity it is critical that there be a uniform system with clear provisions and prescriptions. Arguments about spheres of influence, with each government seeking to maintain control and each business protecting its own interests, only weakens the whole system.

The major proviso here is that any demand-side and environmental gains made at the jurisdictional level not be lost in the move up to a national level (for distribution and retail), but instead should be improved upon. "Differences in market circumstances", as well as between transmission and distribution, are only exacerbated by a fragmented and unstable system, as it is at the moment.

One example is that the revenue of TNSPs is capped by the national regulator and it is important that transmission prices continue to be regulated at the national level, particularly in a national system. There is the opportunity for TNSPs to operate across jurisdictions – either as transmission providers or market network service providers – and fairness of decision making dictates that there be consistency in pricing decisions.

As TEC has stated previously, it is not sufficient to leave transmission revenue and pricing issues to the AER's discretion as this can lead to greater inconsistency; the same argument applies to distribution revenue and pricing. The Rules are a substantial and sophisticated set of directions for the NEM; it would be an oversight not to include transmission pricing within their ambit, with details set out as far as is practicable. TNSPs, in part due to the scale of the investment necessary, form natural monopolies and are

thus anti-competitive in essence. This is contrary to the spirit of the NEM, and therefore to reduce regulation of the TNSPs would allow the further entrenchment of their inefficient monopoly behaviours. The form of regulation should be retained, at the very least. TEC is in favour of clear directions being set out in the Rules with limited discretionary powers for the AER, to promote certainty for all stakeholders. For the same reason the Rules should be neutral as to classes of users. A transparent decision-making system depends on consistency of approach.

Some useful mechanisms clearly may not be suited to being included within the NEL or the Rules and should be considered by this Review Panel to be established through separate provisions. For instance, the NSW Government has instituted an Energy Savings Fund of \$200 million over 5 years, with the prospect of continuance into the future. Similar Funds exist in over 25 US states, resulting in more efficient electricity systems that avoid inefficient network augmentations by delivering energy savings services for consumers. Such a Fund should be considered at the national level in Australia, with \$1 billion, a small proportion of expected infrastructure investment due to spiralling demand, set aside over 5 years as a start.

3. Possible alternatives to current regulatory methodologies

3.1 Scope of regulation

Within a common regulatory framework all services, from generator down to retailer, need to be regulated, including in regards to revenue and pricing. The original rationale for regulation – natural monopolies and provision of essential services – has proven to be reasonably successful, notwithstanding the failure of the framework to consider the demand side of the market, with abysmal consequences for consumers and the environment. To decide at this point to step away from such a system seems self-defeating, with the introduction of a competitive system insufficient reason for destabilising the system. Regulation of revenue and pricing need not adversely affect the intended competitive nature of the NEM, rather, it would strengthen it by enabling a more dynamic market with equal emphasis on supply and demand. Without such regulation, consumers would be at the mercy of a supply-focused system, with massive incentives to sell electricity and no demand-side market to provide alternatives to wasteful and inefficient consumption.

It should be noted too that at the transmission level there is still basically one or two TNSPs per jurisdiction plus a few market network service providers (MNSPs). At the distribution level our understanding is that there are in fact geographic monopolies developing, with DNSPs basically carving up each jurisdiction between them. The only level which is close to being truly competitive is the retail area.

The Panel is empowered to investigate high-level policy, but some important matters indicate a more detailed assessment. One issue we consider integral to the regulation of TNSP revenue and pricing, is the planning processes that TNSPs are required to undertake under the Rules. Currently, TNSPs are not obligated to solicit proposals for alternative non-network solutions before expansion of their networks. This creates a natural barrier for cost-effective non-network solutions and forecloses on the potential for networks to operate more efficiently by avoiding unnecessary or premature network augmentations, and thereby create savings for consumers. Instead, TNSPs should be

required to investigate non-network solutions and implement them where cost effective. To facilitate this process, the AEMC and the AER should promote a comprehensive approach through mandatory DM codes of practice for network service providers.

The Panel's terms of reference state that: "The MCE's objective is consistency and harmonisation between the electricity and gas access regimes such that investment in, and use of, energy is not distorted by differing regulatory regimes." This is a laudable and sensible aim, one that TEC supports. The flaw in it is that investment comes first, placing the user as being of secondary importance. We reiterate that the system should be designed from the user up, with **an equal emphasis on the demand side**, which would be assisted by a uniform regulatory framework for transmission and distribution.

3.2 Alternatives to building blocks

The regulation of transmission networks has occurred because networks are natural monopolies. As such, obtaining greater efficiencies from their investment and operation must be a principal goal of regulation. The current form of regulation addresses this intent in the form of regulation of a revenue cap applying the CPI-X building block approach to maximum allowable revenue. We support this form of the regulation, if not all the details therein. While the revenue cap provides a greater overall incentive than a price cap for DM, there should be more incentives provided to encourage DM.

The Public Interest Advocacy Centre have argued succinctly for the retention of the building blocks methodology: "The building blocks approach ... is readily understood by end-users. To put this another way, it is an approach which consumers have come to accept and support. The reasons for any change need to be argued clearly. ... the building block approach offers regulatory certainty both to the regulated entities and end-users."⁵ They add that other methods "are lacking in transparency".

3.3 Revenue versus price

The guidance appropriate on the form of the control over prices, including the relative merits of capping prices versus capping revenue and the circumstances in which each is most appropriately applied.

Total Environment Centre fully supports the retention of the revenue cap method of assessment for transmission, since it is an important means of encouraging networks to carry out their investments prudently. Without such a cap, networks have a reduced incentive to carry out their operations within budget, and would instead seek to encourage greater, and more wasteful, consumption of electricity. Moreover, the same methodology should be applied to distribution network service providers (DNSPs) as well. There is no reasonable argument for using different methodologies within a coherent framework. Equally, revenue capping provides benefits lacking with price capping.

Some of the disadvantages of price capping have been explained by electricity industry expert, Gavan McDonnell.⁶

⁵ Public Interest Advocacy Centre, *Submission on Transmission Revenue Requirements: Issues Paper*, November 2005

⁶ Gavan McDonnell, *COAG's Quandary: What to do with the Energy Markets Reform Program?* February 2005, p 35 (his emphasis)

One of the most deficient aspects of price cap regulation is that it *provides the incentives to increase the transport of energy through the grid*, since the greater the quantity of energy moved, the greater the revenue and hence the opportunity for profits. That is, *this system of regulation provides direct incentives both to increase industry's economic costs and to encourage greater household demand.*

Total Environment Centre has consistently supported a revenue cap with extra incentives for DM, such as the facility for a set-aside percentage for demand management. A revenue cap provides greater incentive for consideration of non-network solutions since the network can absorb the savings of augmentation deferrals, while allowing for flexibility in pricing. A price cap, in contrast, rewards networks for more electricity sales, and does not impose limitations on network augmentations even when more cost-effective alternatives are available.

A revenue cap alone will not necessarily increase the uptake of cost-effective DM opportunities: added incentives for DM are needed. Before TNSPs undertake major network augmentations, they should be required to solicit proposals for alternative non-network solutions. This would involve clear protocols for information disclosure, specification of constraints, requests for proposals, and evaluation of proposals.

As a second preference, any price cap system **must** include incentives for DM to counter the massive incentives and cultural bias for TNSPs and DNSPs to sell more electricity. Such incentives should ensure that networks are able to recoup revenue for both the cost of carrying out demand management and for the lost revenue of sales that would have been made had an augmentation gone ahead. The purpose is to promote consideration of more efficient non-network solutions and, conversely, to reduce the incentive for the networks to encourage excessive consumption (that is, by selling more electricity). If there is a change in the system from a revenue cap to a price cap, then a further incentive must be provided for TNSPs and DNSPs to investigate and implement demand management. There is a useful model in NSW, the "D-factor". NSW DNSPs are also required to investigate and report on cost-effective non-network solutions to network constraints. TEC strongly supports this approach to DNSP and TNSP regulation.

The national regulator should adopt these reporting requirements – whether a revenue or price cap is applied – to improve the consideration of non-network solutions and, in turn, reduce unnecessary costs for consumers. In addition, the regulator should improve on these requirements by ensuring that networks **implement** DM opportunities when they are found to be more cost-effective than network expansion. In a competitive market, the failure of networks to weigh up non-network and alternative generation options goes against the intentions of the National Electricity Law and adds unnecessary costs for consumers.

In addition, for an efficient system under the NEM Objective, there should be price signals at all levels. In the broad framework of prescription (with only limited discretion for the networks and the AER), dynamic efficiency would better suit the NEM Objective, with the potential for price signals. A consistent methodology for time-of-use charges should be devised for all sectors to ensure that DM approaches are better utilised to respond accordingly, with potential price benefits for end users. A more prescribed system for pricing could also reduce variation across jurisdictions.

4. Regulatory discretion

The level of regulatory discretion/guidance that should be provided to the Australian Energy Regulator when setting or assessing regulated prices and to the Australian Energy Market Commission when assessing changes to the 'Rules' for electricity and gas.

TNSPs wield considerable market power and form natural monopolies, thus creating barriers to alternatives such as embedded generation and the range of demand management options. There is little constraint in the opposite direction. Therefore, to reduce regulation of the TNSPs – and give greater discretionary powers to the AER and the AEMC – would allow the further entrenchment of their monopoly. The form of regulation should be retained, and expanded to cover DNSPs as well. As a general principle, matters of importance ought to be addressed within the Rules, rather than left to the discretion of the AER and the AEMC. Overly light-handed regulation can lead to a lack of certainty for stakeholders. The Rules should therefore give precise guidelines to the AER and the AEMC in their decision-making capacities.

To ensure transparency and certainty, there needs to be a consistent application of principles to decisions. This is not only reassuring for consumers but also respects the needs of business. In addition, certainty is essential for those contemplating future investment in an industry that involves high capital and operating expenditures. It is preferable to go through the process of a formal Rule change, with all its checks and balances, where the matter is deemed sufficiently significant. This would increase the level of accessibility and public involvement in key regulatory decision making. Although the current system as a whole is already fairly prescriptive, there remain significant barriers to non-network solutions and the wider entry of embedded generation and renewable energy technologies. Thus TEC would argue for greater delineation of expectations, rather than less. Leaving decisions to be made by the AER on the basis of outcomes and principles leaves us with the status quo, and also contributes to a climate of uncertainty.

Whatever powers the AER and AEMC are vested with, the opportunity for an open merits review of their decisions should be provided. Since they have been established as government entities within a legal framework, there is the potential for judicial review (for instance under the Commonwealth *Administrative Decisions (Judicial Review) Act 1977*). An additional provision for independent merits review would give greater accountability for a specialist and evolving subject to a wider public, who may not have access to the judicial system in terms of finances and/or standing.

It is equally essential that there be provision for wider public comment once any proceedings have commenced. Review of decisions could be regarded as the most basic practical and legal safeguard available to both the industry and the public. That is, review of decisions can benefit not only end users (consumers) but also the providers. Rather than being a limited review, there should be the potential for *any* person to initiate proceedings.

There is a precedent for this in the process for changes in the National Electricity Rules, that is, a Rule Change may be initiated by, "Any other person – any stakeholder or interested person such as end use customers not registered or stakeholder groups." (AEMC briefing) This still allows industry members to initiate proceedings if they consider they have been excluded from the decision-making process.

The review system itself may change in the future because of the possible establishment of a consumer advocacy body (in the light of the MCE's consideration of consumer advocacy mechanisms). If such a body is set up then it should also be given standing to initiate proceedings under a merits review system. Review is particularly important while new systems are being set in place. The restructuring of the National Electricity Market (NEM) will clearly take some time to achieve, considering that the Rules themselves have only just taken effect in their new form. Moreover, it is clear that the whole area of distribution and retail coming under the sphere of the AER and the AEMC – not to mention the addition of the regulation of gas – will inevitably lead to some upheaval within the administration of the new system. This possibility is exacerbated by the current differential in context across the jurisdictions.