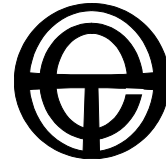


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SUBMISSION

Expert Panel on Energy Access Pricing

Draft Report

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1. Introduction

1.1 The Energy Market Reform Program

Total Environment Centre (TEC) welcomes another opportunity for input to the Energy Market Reform Program, and we refer to our previous submission to the Expert Panel concerning the “Review of Revenue and Network Pricing across the Energy Market” (Attachment A). Our comments from that submission in section 1.2 on demand management and section 3 on regulatory methodologies remain pertinent to the Panel’s draft report on network access pricing. Our submission to the Ministerial Council on Energy (MCE) arguing for open merits review (Attachment B) is relevant here to Chapter 5 of the draft report.

Yet again there are flaws in the consultation program, in particular the time allowed for development of comment: for this phase of the program there was only three weeks in which to develop a response. For private individuals and non-government community organisations (such as ours) with limited resources, this is insufficient time to develop a full and closely reasoned argument. As we stated in our previous submission, “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 have restricted our recommendations in this submission to electricity access and the National Electricity Market (the NEM), in particular:

- The Rules should refer to a Demand Management (DM) Code of Practice for distribution and transmission networks, with the NSW model to be adopted as a minimum (including the protocol for disclosure of information); networks to be obligated to *implement* non-network solutions where more cost effective than augmentation.
- Retain a revenue cap for transmission network revenue.
- Retain the building block method (CPI-X) for network pricing determinations. Total factor productivity in itself is an unclear and uncertain method, and leaving the decision as to which method would be applied up to the AER only increases uncertainty for business and consumers.
- Distribution services should be regulated at a national level as far as possible. In the interests of consistency, certainty, equity and transparency, best-practice minimum requirements must apply across the NEM for it to be a genuinely national system.
- Promote a revenue cap for distribution networks since they essentially form geographic monopolies. Where a price cap is in place, generous incentives should be developed to encourage cost-effective network DM. DNSPs should be required to earmark a specific minimum spending level for DM: between 10% and 25% of the projected network capital expenditure should be set aside for cost-effective

DM projects, on "use it or lose it" terms. Alternatively a "D" factor system could be applied, as in NSW, which is intended to promote DM by networks through the use of incentives; that is, the DNSP must demonstrate that its DM implementation costs are less or equal to the avoided distribution costs before it can pass through any costs to customers.

- TEC opposes a blanket exemption from regulation of large greenfields projects given the greater potential for adverse environmental outcomes; the necessity for such projects could potentially be offset through demand management initiatives or renewable energy sources. Moreover, this recommendation in the draft report is anti-competitive – and inequitable – in spirit since the proponents would be exempted from conditions that apply to other regulated businesses.
- There is already a version of judicial review available for regulatory decision, and we would support the provision for an open merits review. An open merits review gives greater accountability for a specialist and evolving subject to a wider public.
- In summary, we recommend price control model; building block CPI-X methodology; and a revenue cap for both transmission and distribution.

1.2 Demand management and the NEM

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"; without effective DM this is not being achieved.

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

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

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

efficiency must therefore be given high priority and be integrated in uniform national regulation.

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
- provide transparency of pricing in relation to demand and constraints – end users are currently unaware of the true price of their electricity.

1.3 Scope of this submission

As stated above, we have restricted our comments to electricity matters, since this is where there is the greatest impact in terms of greenhouse gas emissions.

We have also addressed only those findings and recommendations with which we take particular issue (that is, for chapters 4, 5 and 6).

2. Chapter 4 – Selection of the form of regulation

2.1 Regulatory model

TEC would argue for the control model (versus negotiate/arbitrate or monitoring) as so much market power is wielded by each Transmission Network Service Provider (TNSP) and Distribution Network Service Provider (DNSP), with genuine competition really only evident in the retail sector. Networks essentially form natural monopolies; for instance, there is only a handful of DNSPs in each State, and these businesses also operate in more than one state.

TEC takes issue with the failure of regulators to acknowledge DNSPs as natural monopolies in contrast with the treatment of TNSPs, which are understood to be such monopolies. DNSPs do form monopolies, by a number of criteria:

- Although capital investment in distribution networks is not as lumpy as for transmission, nonetheless there are high capital costs (poles, wires, transformers, sub-stations).
- There are physical reasons for geographic monopolies, that is, it would be counter-productive and inefficient to duplicate the physical infrastructure: there are economies of scale which cannot be replicated.
- Distributed/embedded generation (DG) does not counter this market power, since the electricity generated is injected into the existing infrastructure via a distribution network.
- Customers (effectively retailers or embedded generators) have limited power over the service provider and access costs are largely hidden, except perhaps for large consumers.

- For electricity the alternatives are generally limited and virtually all households in Australia have electricity. In many areas there is no gas provision; there are some alternatives for heating (space and water) but substitution is limited for many uses (lighting, appliances).

These arguments apply whether a price cap or a revenue cap method is followed. Thus the control model would better address the concerns presented in the draft report:

- barriers to entry
- network externalities
- countervailing market power
- substitution possibilities
- information asymmetry.

Moreover, to leave it to the regulator to decide on which form to use (that is, control model versus the alternatives) will only increase the costs of regulation. It is not sufficient to leave major decisions about issues of distribution and transmission of electricity to the AER's discretion as this can lead to greater inconsistency than already exists. The Rules have been established as a substantial and sophisticated set of directions for the NEM; it would be an oversight not to include these matters within their ambit, with details set out as far as is practicable.

DM and DG were cited in the report as limits to the monopoly power of the networks – however, there are so many barriers, and the uptake has been so limited, that they virtually wield no market power. For example, renewable energy feeds into the distribution network, and over 90% of electricity generation still relies on fossil fuels⁴ thus “Renewable energy sources, such as wind, hydroelectricity and solar energy constituted around [only] 4 per cent of electricity consumption ...”⁵

3. Chapter 5 – Framework for regulatory decision making

3.1 Conference model

The conference model for addressing pricing determinations would not adequately represent small and medium consumers. It is not practicable to expect adequate representation for consumers, particularly considering the inequitable distribution of resources between industry and consumers. The only circumstance in which a conference model would be acceptable would be if consumer groups were resourced to a level equivalent to the resources available to networks being represented at such a conference.

In addition conferences would need to:

- have open access, not just registered market participants
- be held before submissions are due, to allow parties to clarify the issues
- allow for sufficient time for interested parties to prepare their cases (for instance, three weeks is insufficient time; some direction here could be provided by the Rule Change process)
- provide for an independent chair, not a registered market participant

⁴ H. Saddler, M. Diesendorf, R. Denniss, *A Clean Energy Future for Australia – A Study by Energy Strategies for the Clean Energy Future Group*, March 2004

⁵ *Ibid.*, p 5

- call for written submissions as well, to allow access for those who cannot attend.
- be held at a central location to ensure accessibility.

3.2 Greenfields projects

The Panel has recommended that there should be an exemption for “certain major greenfields projects ... from price regulation ... to overcome an undue regulatory risk ...” There is no real support given in the draft report for this conclusion, apart from “the risks and costs of regulatory error are likely to be greater ...” and the main concern seems to be deterrence of potential investors. Since the NEL Objective refers to “long term interests of consumers” there can be no justification for exempting projects because of the potential for uncertainty investment for investors – the interests of consumers have not been factored in here at all. Regulators potentially are de facto representatives of consumers and other users of the system (including regulated businesses), which is why the determinations on pricing are in their hands.

A large-scale project has a greater potential to be not only for, but also *against* consumers’ interests if it fails, since a regulated business can ultimately recoup its losses from consumers. Greenfields projects may also present an opportunity for demand management initiatives or renewable energy alternatives to be implemented. These are not likely to be the easy road for investors – nor the obviously profitable route – so such alternatives run the risk of being ignored.

The primary argument against this exemption, though, is that it runs against the notion of competition – it excludes small generators from the system and is inequitable for other regulated business who are subject to price regulation. Such an arrangement is anti-competitive has the potential to destroy the integrity of the system which is meant to be non-discriminatory in terms of forms of generation. There must, therefore, be intervention by the regulator in any preliminary decisions and TEC is opposed to any such type of blanket exemption.

3.3 Merits review

Since the Australian Energy Regulator (AER) was established as a government entity within a legal framework, the potential for judicial review already exists (for instance under the Commonwealth *Administrative Decisions (Judicial Review) Act 1977*). An open merits review, however, gives 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 essential that broader matters be brought to bear, as a myopic economic or legal interpretation of policy will simply bring the regulatory system into disrepute over time, given the range of impacts it can have.

A wider merits review – in contrast to a limited merits review – is TEC's preferred option, since it is important that there is improved public access to decision making. It is also 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. As was stated in a discussion paper released by the MCE, “2.22 Merits review will provide a more extensive type of review than judicial review, and enable correction of a greater range of regulatory errors that may have significant adverse consequences on participants, including network and

service providers."⁶ That is, review of decisions can benefit not only end users (consumers) but also the providers.

There is a precedent for this is 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.

4. Chapter 6: Application of price control

4.1 Total factor productivity versus building block

The building block methodology is already in general use across the NEM. It is a relatively clear and understandable methodology, which means it is accessible to interest groups, industry and the regulator. For instance, the Public Interest Advocacy Centre noted that: "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."⁷ They add that other methods "are lacking in transparency".

In addition, the total factor productivity methodology is problematical to use: "The calculation of total factor productivity is difficult in practice since the proportions of the different factor inputs do not remain constant over time and their individual contribution to output change is difficult to disentangle" (*Penguin Dictionary of Economics*, 1998). Industry-wide costs would need to be established, alongside demand and efficiency trends, on a regular basis. This entails costs in setting up the system; costs to industry which may need to change their reporting systems; and costs in keeping the information up to date.

It is possible that a TFP methodology may optimise benefits for both network businesses and consumers⁸, however the extent of these is uncertain within the Australian system. The degree of benefit also depends on which form of TFP is applied (for example, the level of "true up" to observed costs). At this stage it is pre-emptive to direct the AEMC or the AER to determine which methodology to apply (between TFP or building block) since the ramifications within the Australian NEM are unknown – more research needs to be undertaken⁹. The Expert Panel states it aims to ensure balance, "between exercise of market power, and the efficiency costs of regulation." However, leaving the choice of methodology – total factor productivity (TFP) versus building block – to the AEMC/AER to decide may increase the costs of regulation, since the regulator then needs to weigh the two methods for each situation. It is more efficient to have a clear, consistent methodology prevailing across the whole system, and currently there is insufficient reason to opt for TFP as the preferred methodology.

⁶ Ministerial Council on Energy, Standing Committee of Officials, *Review of Decision-Making in the Gas and Electricity Regulatory Frameworks – Discussion paper*, October 2005

⁷ Public Interest Advocacy Centre, *Submission on Transmission Revenue Requirements: Issues Paper*, November 2005

⁸ Pacific Economics Group, LLC, *Incentive Power and Regulatory Options in Victoria*, May 2005

⁹ The Victorian Essential Service Commission is currently investigating alternatives to the building block methodology; see for instance, L. Kaufmann, *Incentive power and the design of regulatory regimes*, "network", February 2006, which presents a summary of the PEG report cited above.

4.2 Revenue versus price

The draft report supports a revenue cap for TNSPs and TEC would agree, as long as there are clear protocols for implementing DM as an alternative to augmentation. 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 all network service providers.

The revenue cap method of assessment for transmission 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 the incentive 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.

The application of a price cap for distribution networks has been accepted by the Expert Panel with very little discussion presented in the draft report. The failure by regulators to acknowledge DNSPs as natural monopolies has led to the retrograde step of reverting to a price cap form of regulation. In contrast to a revenue cap, the price cap form reduces incentives for efficiency, in breach of the NEL Objective: "efficiency in the *use* of electricity. Therefore, any price cap system *must* include incentives for DM to counter the massive incentives and cultural bias for 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 (there is a useful model in NSW, the "D-factor"). 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).

An alternative method to promote DM is for generous incentives to be developed to encourage cost-effective network DM. DNSPs could be required to earmark a specific minimum spending level for DM: between 10% and 25% of the projected network capital expenditure could be set aside for cost-effective DM projects, on "use it or lose it" terms.

Since the requirement for either of these would be to implement DM where cost effective, such incentives in fact promote efficiency within the NEM. 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.