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Submission

Proposed Framework Schedule for Transfer of Distribution and Retail Functions

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1. Introduction

1.1 Pre-emption of deliberations

The release of the proposed framework for regulation of distribution and retail functions (proposed framework) is pre-empting comment on the more substantive paper *Public Consultation on a National Framework for Energy Distribution and Retail Regulation*[1] (the Gilbert and Tobin paper). The Gilbert and Tobin paper has been given a number of months for comment; the skeletal proposed framework only one month. Moreover, the proposed framework has no flesh on it - there is no context presented with it whatsoever. It means that major decisions – the scheme for the division of functions between the different levels of government – are required from those who wish to comment within an unreasonably short space of time.

Total Environment Centre's (TEC's) submission must therefore be regarded only as an interim comment, since it is not possible to address all of the broader issues raised within the both papers at this time, or within the framework presented in the proposed Schedule. TEC intends to continue its interaction with the process as the position further develops to Ministerial level.

1.2 Demand management must be central to the national distribution and retail regulation framework

The achievement of economic efficiency is central to the NEM. To create economic efficiency, there must be equal emphasis on demand and supply as the basis of standard economic regulation. Demand management (DM) [2] and energy efficiency must therefore be given high priority and be integrated in uniform national regulation. It is of major concern that DM has been largely overlooked in the proposed framework.

The importance of enhancing DM in the NEM has been repeatedly highlighted by the Council of Australian Governments (COAG) and the Ministerial Council on Energy (MCE) over many years. As early as 1992, the National Grid Management Protocol recognised the importance of DM as integral to the creation of an efficient and cost-effective electricity system.[3] In 2002 the Parer Report[4] again emphasised the importance of demand management and recommended several measures to improve demand-side participation. Subsequent MCE communiqués over 2004 and 2005 have specifically highlighted the need for greater energy efficiency. More recently, the Commonwealth has also

[1] Gilbert + Tobin and NERA Economic Consulting, *Public Consultation on a National Framework for Energy Distribution and Retail Regulation,* May 2005.
[2] DM in this submission can be read to include 'demand response', 'demand-side management', '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.
[3] National Grid Management Council, *National Grid Protocol*, First Issue, December 1992.
[4] Commonwealth of Australia (2002) *Towards a Truly National and Efficient Energy Market*, p. 33

emphasised the importance of DM: "To improve Australia's energy efficiency performance, the Australian Government will: improve price signals for demand side management as part of reforming Australia's energy markets …" [5]

Finally, the National Electricity Rules state that: "The regulatory regime to be administered by the AER must … also have regard to the need to:

> (1) provide Transmission Network Service Providers with incentives and reasonable opportunities to increase efficiency;
>
> (2) create an environment in which generation, energy storage, demand side options and network augmentation options are given due and reasonable consideration" [6]

The proposed framework does not consider demand side approaches adequately at a national level. Rather, the paper relegates 'the consideration of demand-side management'[7] to the Jurisdictional Directions while elsewhere mentioning that a regulator may '…consider the extent to which the distributor has taken into account appropriate alternatives to network augmentation (eg, for electricity this may include DSM measures)'.[8] These approaches appear to be contradictory.

Demand management is a critical means of meeting capacity requirements more cost-effectively than building new generation, transmission and distribution infrastructure. It also reduces ongoing costs including operation and maintenance, fuel and greenhouse gas emissions costs. As part of the NEM's objective to '… promote efficient investment in, ***and efficient use of***, electricity services for the long term interests of consumers...', it is in the long term interests of consumers to reduce the costs through the implementation of DM. DM also serves to increase system security by managing critical peaks.

The proposed framework should specifically include DM in the standard form of economic regulation rather than leave it to the discretion of individual jurisdictions. DM should be given priority alongside supply considerations at the national level.

The MCE User Participation Working Group has presented a balanced overview of the advantages of demand management, including:

- *Avoided capital costs of new generation and network capacity;*
- *Avoided variable costs of energy generation; …*
- *Improved operational network management including near real-time measurement of network losses;*

[5] Commonwealth of Australia (2004) *Securing Australia's Energy Future.* p 105
[6] National Electricity Rules, Section 6.2.3
[7] Gilbert + Tobin and NERA Economic Consulting, *Public Consultation on a National Framework for Energy Distribution and Retail Regulation,* May 2005, 92.
[8] Gilbert + Tobin and NERA Economic Consulting, *Public Consultation on a National Framework for Energy Distribution and Retail Regulation,* May 2005, 22.

- *Reduced greenhouse gas emissions from a reduction in peak demand (where there is not a shift in consumption to more emission intensive generation at another time of day); …*
- *Pricing flexibility and accuracy; …*
- *Remote connection and disconnection capability; and*
- *Premise outage detection and event record and communication.* [9]

These benefits more than adequately demonstrate that DM must be given primary consideration in national distribution and retail regulation.

Establishing the presence of DM in network regulation is not a matter of starting from scratch. There are several precedents already in existence at the jurisdictional level. To assist with the consideration of DM as an integral part of distribution regulation we append as Appendix 1 the NSW Code of Practice for Demand Management for Electricity Distributors (NSW DM Code of Practice).[10]

1.3 Division of functions

The questions posed in *Energy Market Reform Bulletin No. 50* referring to the Proposed Framework Schedule are:

- "which functions should be transferred to the new governance arrangements;
- whether the functions should be uniform or jurisdiction-specific;
- whether any functions should remain with jurisdictional regulators (apart from general safety, environmental and similar functions not part of standard economic regulation);
- whether any existing economic regulation functions would be redundant under a national framework; and
- the appropriate timing of any transfers."

The basic premise of the schedule is that specific functions will be divided between the national regulator and the individual jurisdictions. There is the additional proposal that certain functions would be abolished. It is presumed that the functions to be abolished would be addressed by "Jurisdictional Directions" (a concept presented in the full consultation paper) – although it is not stated as such in the Schedule – therefore our observations are offered on that basis.

[9] User Participation Working Group, *Common Principles for the Assessment of Interval Meters:Overview paper – Report to the Ministerial Council on Energy Standing Committee of Officials,* June 2005, pp. 7- 8.
[10] NSW Department of Energy, Utilities and Sustainability, NSW Code of Practice for Demand Management for Electricity Distributors, May 2004.

With the exception of the failure to adequately deal with DM as a central aspect of economic regulation, simplification of a regulatory regime is a practical response to the difficulties of national regulation within a federal system. Abolition of features of licensing and taxes referring to environmental obligations needs to be approached with care, however, and can only be dealt with at a detailed level rather than in an all-encompassing short list as is presented in the framework.

The matter of environmental obligations being subject to Jurisdictional Direction is examined below.

1.4 Environmental obligations

It is encouraging that environmental obligations are recognised, if minimised, in the overall framework for distribution and retail regulation. Environmental laws, licences, levies regulations and incentives will increasingly have an impact on the operation of the NEM, on individual market participants and on consumers.

COAG has repeatedly described the relationship between the environment and the NEM. *Towards a National Energy Policy* [11], for example, states that one of the objectives of the national policy is, "Mitigating local and global environmental impacts, notably greenhouse impacts, of energy production, transformation, supply and use." [12] and that, "… effective operation of an open and competitive energy market contributes to improved economic and environmental performance …" [13] To argue that the NEM is a purely economic market is to overlook the synergy between markets and environmental effects.

In this context, it is essential that there is a facility for the jurisdictions to maintain and amplify environmental obligations (point 29) such as licensing, levies, regulations and incentives. It is presumed that these would be incorporated in the proposed "Jurisdictional Directions", which would be acceptable to Total Environment Centre as it gives the States additional options to fulfil environmental policy objectives.

The recognition that environmental obligations are significant, however, reveals a resounding lack of information and investigation into the environmental impacts of the NEM and the effects of jurisdictional environmental obligations on the NEM. A multitude of environmental obligations currently interact with the NEM. In NSW alone these programs include the NSW Greenhouse Gas Abatement Scheme and programs that link greenhouse gas emissions and DM such as the Energy Savings Fund and the Demand Management Code of Practice for Electricity Distributors.

It is clear that significant research is required to facilitate the bi-directional information flow of impacts and influences to ensure optimal outcomes for consumers.

[11] COAG, *Towards a National Energy Policy,* June 2001
[12] Ibid, Attachment 2
[13] Ibid, Attachment 1

1.4 Timing and process for transfer to national regulation

The precise timing of the transfer is not as important as the process leading up to the transfer. The Standing Committee of Officials (SCO) and the MCE have not clarified their position in relation to the Gilbert + Tobin and NERA paper, but have instead stated, "This also does not represent a settled view of SCO or the MCE."

It is essential that extensive public consultation is offered before decisions on a transfer take place. The lack of research, consultation and transparency in previous NEM processes has seriously diminished the reputation of NEM and SCO operations. This must be improved for any processes going forward.

2. Framework

Some of the points are beyond our purview at this stage, so we are commenting here only on a selection.

2.1 National

1. Scope of distribution price regulation

The current scope of distribution price regulation inappropriately excludes demand management from its considerations. DM must be considered equally alongside augmentation options in the regulation of distribution pricing.

2. Price cap regulation for distribution services

The national regulator should consider a revenue cap for distribution services. Total Environment Centre has consistently supported a revenue cap with 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, while allowing for flexibility in pricing. A price cap form, 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 also encourages prudent investment. Without such a cap, networks have a reduced incentive to carry out their operations within budget, and could instead seek to make up for shortfalls by encouraging greater consumption of electricity.

As a second preference, any price cap system must include incentives for DM to counter the massive incentives and cultural bias for Distribution Network Service Providers (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 again is to give an incentive to consider non-network solutions, and conversely

reduce the incentive for the networks to encourage excessive consumption (that is, by selling more electricity).

Clarity and transparency of network pricing structures also need to be established to accurately signal the cost of meeting peak demand to both the networks and consumers. This would help to reduce costs for consumers created by premature investment in large infrastructure and the resulting under-utilisation of that infrastructure. Time-of-use tariffs and locational pricing are another essential component in the pricing suite. Further details of network pricing guidance will be following in our submission to the Gilbert and Tobin paper.

There is currently a lack of clarity from regulators regarding the recovery of DM spending. This creates uncertainty for networks considering DM solutions to network constraints. The national regulator should therefore clearly set out the circumstances in which networks can recover the costs of implementing DM.

5. Information disclosure

The national regulator should ensure that adequate information disclosure is delivered by distribution and retail businesses. All DNSPs need to publicly provide clear information on areas facing constraints in a reasonable time-frame to allow DM providers to offer alternatives to augmentation. DNSPs should also provide information on their expenditure on demand management, alongside opportunities they have investigated and the potential value of deferrals of augmentation. The model of a Disclosure Protocol from the DM Code[14] in NSW should be applied at a national level. It is intended to ensure that distributors provide all necessary information in a clear and consistent form, without wasting effort in providing unnecessary information. Such information should be required in order to encourage the uptake of cost-effective non-network alternatives to network augmentation to ensure least cost provision for consumers and an efficient NEM. Current jurisdictional differences regarding standards of information disclosure can inhibit new entrants to the market as well as throwing in doubt the accuracy of the information.

In relation to embedded generators, it is similarly essential that the networks disclose planning information so generator proponents can evaluate potential investment opportunities to provide network support as an alternative to augmentation. Total Environment Centre recommends the Disclosure Protocol established by the NSW DM Code of Practice is used as a model for network information disclosure.

10. Distributor interface with embedded generators

The national regulator should articulate clear, standardised provisions for connection by small/embedded generators into the distribution network system. As discussed above, generalised suggestions are presented in the Rules but there are no firm provisions

[14] NSW Department of Energy, Utilities and Sustainability, NSW Code of Practice for Demand Management for Electricity Distributors, May 2004, p. 10.

presented. To date, embedded generators have been paying the costs of deep connection, whilst existing generators benefit from the network enhancements paid for by the embedded generator. Embedded generators also suffer from inadequate compensation for the benefits that they provide for avoided distribution and for reducing overall network load, particularly at peak times.

It is unreasonable to expect that small, embedded generators would be able to negotiate on equal terms with a large, monopoly network. It is therefore recommended that standard offers are made available to small generators by distribution networks. Standard offers specify the conditions for the provision of capacity in advance, and are usually made on fixed prices, take it or leave it, first come first served basis. It is recognised that embedded generation can provide long term network benefits, not only when the system constraint occurs. This is because the demand reduction provided by embedded generation close to the end-user can reduce the need for future network augmentation.

For larger embedded generators, there should be standard negotiation guidelines and connection agreements developed.

13. Network planning

National regulation must ensure that demand management is fully investigated before the undertaking of network expansions, and implemented where it is found to be more cost effective. This issue should be addressed in network expansion rules and in network planning rules. The assessment of costs and benefits from the deferral of network expansions should include:

- Annual operating cost of the deferred augmentation
- Total annual net cost of servicing the capital expenditure of the deferred augmentation, such as financing charges and capital depreciation.

NSW currently requires distribution networks to investigate and report on cost-effective non-network solutions to network constraints. The guidance for compliance with this licence condition is provided by the NSW DM Code of Practice.

The national regulator should improve on these requirements by ensuring that network monopolies investigate, report on ***and implement*** DM opportunities when they are more cost-effective than network augmentation. This should be an integral aspect of network regulation that ensures the least cost outcome for consumers and efficiency in the use of electricity.

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.

As with small, embedded generators it is unreasonable to expect that DM providers would be able to negotiate on equal terms with a large, monopoly network when offering network support. It is therefore recommended that the national regulator ensure that standard offers are made available to DM providers by distribution networks. Standard offers specify the conditions for the provision of capacity in advance, and are usually made on fixed prices, take it or leave it, first come first served basis. It is recognised that DM providers can provide long term network benefits, not only when the system constraint occurs.

As Total Environment Centre has stated before, "This would involve clear protocols for information disclosure, specification of constraints, requests for proposals, and evaluation of proposals."[15]

14. Metering

Response: The national regulator should ensure that DNSPs install a standardised system of interval metering across the NEM. It is critical to install state-of-the-art technology that has the capacity for remote control technologies and communications as meters are replaced, since retrofitting in the future addsd a significant cost for consumers and create another unnecessary barrier to DM. Advanced interval meters (or "smart meters") allow for remote communication which can give the end user up-to-date information on their consumption. Smart meters also provide the capacity to have targeted systems and appliances to be shut down when necessary (remote load control). They therefore allow for both demand management and load shifting, and thus a potential reduction in the need for augmentation of the whole system to deal with peaks.

Interval meters are an essential component of an effective and efficient NEM by enabling accurate information on the interaction between demand and supply. As a tool for remote load control, their potential to reduce network costs and improve system reliability is enormous. It is therefore essential that the national regulator ensures that consistent and up-to-date technology is adopted across the NEM.

19. Retailer: Small end customer marketing

Response: Marketing of so-called "Green Power" requires some intervention on the basis that retailers and distributors should clearly identify:

- the type of generation the electricity is sourced from,
- on what basis it is being defined as "green", and
- the extent to which the product is increasing the amount of renewable energy in the NEM.

[15] Total Environment Centre & Next Energy, *Demand Management and the National Electricity Market*, February 2004, p. 31.

23. Merits and judicial review

Response: Total Environment Centre has provided a submission to the MCE supporting the need for an open merits review (November 2005), alongside existing avenues for judicial review. Since the Australian Energy Regulator (AER) was established as a government entity within a legal framework, the potential for judicial review already exists An independent 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 Total Environment Centre's preferred option, since it is important that there is improved public access to decision making.

2.2 States/Territories

29. Environmental obligations

This point is obscured by the terminology of "demand side response", which usually refers specifically to responses to peak loads and congestion in the electricity supply; the reference in the full paper is to "demand side management" which we have taken to refer to the overall principle of demand management. Nonetheless, as we have explained above, it is insufficient and irresponsible to sideline an essential element of economic regulation to the Jurisdictions. It is appropriate to set the standard for the national system at the national level.

2.3 Abolish

See the discussion above under "Division of functions".