## TOTAL ENVIRONMENT CENTRE INC.

LEVEL 4, 78 LIVERPOOL STREET, SYDNEY, NSW 2000 PO BOX A176, SYDNEY SOUTH 1235 Ph: 02 9261 3437 Fax 02 9261 3990 www.tec.org.au



### **SUBMISSION**

to

### **Australian Energy Regulator**

on

# Victorian electricity distribution network service providers' regulatory proposals

11 February 2010

For further information contact:

Tee Lim or Jane Castle Ph: 02 9261 3437 Email: tee.lim@tec.org.au

# Victorian electricity distribution network service providers' regulatory proposals

Although Total Environment Centre (TEC) appreciates the opportunity to comment on the regulatory proposals of the Victorian electricity distribution network service providers (DNSPs), the failure of the AER, Ministerial Council on Energy, and the Australian Energy Market Commission to put in place a regulatory framework that prioritises demand management (DM) above inefficient infrastructure expansion remains a core problem in the National Electricity Market (NEM).

TEC is concerned that the five Victorian DNSPs have vastly underutilised the potential of DM to meet and reduce demand and have instead opted for an inefficient, peak-driven, asset-based expansion program.

The underutilisation of DM is both inefficient and irresponsible in the context of both unnecessary electricity price increases and Australia's rising greenhouse emissions, driven largely by the supply of carbon intensive electricity. The failure to implement large-scale DM is a lost opportunity for both reduced electricity bills for consumers and the least expensive greenhouse emissions reductions – energy efficiency and demand management – and places the inappropriate burdens of climate change and increased carbon costs on present and future generations.

Despite network DM having a proven track-record of being almost four times more costeffective than augmentation,<sup>1</sup> all Victorian DNSPs bar United Energy are proposing to spend less than 1% of their net capex on DM. Because no proposals for non-network alternatives were received, Jemena have ignored all various DM opportunities they have available to them and allocated zero capex for DM.<sup>2</sup> Powercor have proposed to spend just \$700,000 on DM – an embarrassing 0.044% of its claim for \$1.6 billion in capex. United Energy has allocated just 1.1% of their proposed capex on DM. Clearly, Victorian DNSPs are once again offering only token commitment to DM.

It is the responsibility of the Australian Energy Regulator (AER), acting in the long term interests of consumers, to ensure that the most cost-effective solution to meeting demand growth is selected by the networks. DM is by far the most cost-effective approach, despite its under-use by the networks. DM's cost-effectiveness is further enhanced when compared to the carbon costs payable by consumers that will continue to rise, particularly after the introduction of a carbon price in Australia.

The historic underutilisation of DM and the current supply-heavy proposals give weight to the case for sweeping reforms to regulation to change network culture and dramatically increase the amount of DM being undertaken. TEC believes the AER should require networks to implement DM as a first choice over network augmentation where equal to or more cost effective than building new infrastructure, and recommends that demand management targets should be mandated for peak demand on networks.

Below are a range of approaches that have been proposed by the Institute for Sustainable Futures (ISF) to ensure that a more appropriate level of DM is utilised by DNSPs.

<sup>&</sup>lt;sup>1</sup> ISF. 2008. Win Win Win Regulating Electricity Distribution Networks for Reliability, Consumers and the Environment -Review of the NSW D-Factor and Alternative Mechanisms to Encourage Demand Management, p. 6. Source:

http://www.tec.org.au/tec/reports-and-submissions/393?task=view

<sup>&</sup>lt;sup>2</sup> Jemena. *Regulatory Proposal 2011-15*, p.122

#### **ISF Recommendations**<sup>3</sup>

#### 1. Clarify government policy intent regarding efficient Demand Management

In recognition of the scope of demand management (DM) both to advance the long-term interests of consumers and to enhance environmental sustainability, State, Territory and Federal Governments should ensure that the National Electricity Law and the National Electricity Rules:

- explicitly require the Australian Energy Regulator (AER) to make efficient regulatory determinations in relation to DM
- explicitly require Distributors to undertake all cost-effective DM, prior to network augmentation.

#### 2. Align network incentives with consumer and public interest

In making regulatory determinations, the AER should avoid creating incentives that set the financial interests of the Distributors in conflict with the interest of their customers. In particular, incentives against DM should be avoided in relation to:

- short-term incentives (within regulatory periods) associated with price/revenue control formulae (see Recommendations 3 to 8)
- long-term incentives (between regulatory periods) associated with prudence review and the incorporation of capital expenditure into the capital base and mechanisms for sharing efficiency benefits between shareholders and consumers (see Recommendations 9 to 11)
- network system development and planning requirements (see Recommendations 12 and 13).

#### 3. "Decouple" Distributor profit from electricity sales

In setting its year-to-year price control formula, the AER should as a key priority, decouple Distributor revenue and profit from electricity sales volume. That is, the AER should ensure that the profitability of a Distributor is not linked to the amount of electricity carried through its network and consumed by its customers.

#### 4. Use Revenue caps to decouple network profit from electricity sales

In order to decouple electricity consumption and Distributor revenue and profitability, the AER should apply a revenue cap in preference to a price cap in regulating Distributors.

#### 5. Link revenue cap to economic growth

In applying a revenue cap, the AER should consider applying adjustment factors to insulate Distributors from large divergence of actual peak demand from forecast peak demand. This could, for example, be applied by linking the annual revenue cap to movements in measures of economic activity, such as Gross State Product.

<sup>&</sup>lt;sup>3</sup> ISF. op. cit. p. 7-10.

#### 6. Use D-factor if revenue cap precluded

In circumstances where it is not possible to apply a revenue cap (for example, where a commitment to a price cap has already been made, as in Victoria for the forthcoming regulatory period), other revenue decoupling or "lost revenue adjustment" mechanisms should be applied (such as the NSW D-factor).

#### 7. Create a "use it or lose it" component in the D-factor

Where a "lost revenue adjustment" mechanism (such as the D-factor) is established, it should be applied with a default ex ante allocation on a "use it or lose it" basis that assumes some (non-trivial) level of DM will be undertaken by the Distributor. A D-factor of at least 2% of annual proposed capital expenditure could provide a reasonable default ex ante allocation.

#### 8. Allow recovery of long-term DM costs in D-factor

Distributors should be permitted to recover, through the D-factor, costs associated with low cost "long-term DM" opportunities that would otherwise be lost if they are delayed until a local network capacity constraint emerges.

#### 9. Allow Distributor savings from DM to be carried forward

The AER should ensure that Distributors are permitted to carry over efficiency benefits from DM, such as deferral or avoidance of capital expenditure, from one regulatory period to the next, on no less favourable terms than they are able to continue to earn a return on network capital investment from one period to the next.

#### **10. Ensure balanced prudence review of capital expenditure**

Recognising that short-term incentives are likely to have little impact unless complemented by longer-term incentives, the AER should ensure that the review of prudence of past and projected capital expenditure involves a thorough all-sources assessment of the opportunities for deferring capital expenditure through DM, conducted by experts with a demonstrated balanced understanding of the theory and practice of DM.

#### 11. Require Distributors to demonstrate efforts to procure DM

The AER should require Distributors to demonstrate that they have undertaken reasonable efforts to identify and procure cost effective DM, particularly in the context of anticipated network constraints and proposed new network investment. Such efforts should include DM direct offers to consumers, DM programs developed by the Distributor and DM proposals solicited from other parties.

#### 12. Inform the DM market

The AER should seek to inform the market for DM options by requiring Distributors to publish detailed information annually about the current capacity of the distribution network, current and projected demand and possible options to address any emerging constraints. (The NSW DM Code of Practice for Distributors and the South Australian Guideline 12 provide sound precedents for such information disclosure.)

#### 13. Ensure consistent Distributor DM performance reporting

The AER should require Distributors to report annually on DM activities undertaken in relation to: expenditure, peak demand and energy consumption reductions, value of electricity sales foregone, value of capital and operating expenditure avoided or deferred, and efforts to identify and procure cost effective DM. Such reports should be publicly available. The AER should issue a pro forma to encourage consistency in DM reporting. Reporting to the AER should be harmonised with any other DM reporting requirements.

#### 14. Conduct and publish annual AER DM Reviews

In recognition of the relatively underdeveloped state of DM in Australia, the AER should monitor DM data provided by Distributors and publish a consolidated annual review to encourage mutual learning and allow comparison of different policies and approaches between jurisdictions. (This will also assist in building understanding of DM potential within the regulatory community and among stakeholders.)

#### 15. Apply complementary transitional measures to accelerate DM

Recognising that the above measures are designed simply to address existing barriers to efficient DM in the economic regulatory environment, and that the DM market in Australia is currently underdeveloped, Federal, State and Territory Governments should establish complementary transitional measures to create positive incentives to develop DM quickly.

#### Headberry and Lim Findings

TEC has previously commissioned a major report with the assistance of the Consumer Advocacy Panel which investigates the type and depth of regulatory disincentives to network DM. The report, "Does current electricity network regulation actively minimise demand side responsiveness in the NEM?" identifies chronic, deep rooted and multifaceted barriers to DM in regulation that is otherwise perceived as 'neutral'.<sup>4</sup> This report is attached as an appendix to this submission, and the major disincentives to DM inherent in current network regulation are outlined below, as identified in the report.

#### The building block approach

#### • The rate of return of capital (WACC)

This approach has embedded in it all of the base profit that the network receives for providing the service. Compared to this, the allowance for opex is provided for only at cost, and does not include any profit to the network for spending on any element included in the opex allowance. As many DM programs are opex based rather than network based, there is an active disincentive embedded in the building block approach against DM.

#### • Ex-ante approach

The ex-ante capex program provides networks with the ability to spend capital within the regulatory allowance, but with no subsequent assessment of its economic efficiency or prudency. This provides no oversight to ensure the network has implemented DM when equal to or more cost-effective than augmentation.

<sup>&</sup>lt;sup>4</sup> Headberry Partners and Bob Lim & Co. 2008. *Does current electricity network regulation actively minimise demand side responsiveness in the NEM?*, Prepared for Total Environment Centre.

#### 2.3 Price caps versus revenue caps

Once revenue is determined under a price cap form of regulatory recovery, the network develops a set of tariffs which in theory will recover the allowed revenue based on the demand and consumption expected in the network over the regulatory period. If the demand and consumption vary then the network accepts the risk and/or benefits for such variation. This leads to the situation where any approach which is likely to reduce the total amount of electricity carried by the network will be considered by a network to be against its commercial interests. A price cap therefore incentivises the network to increase demand and consumption of electricity to raise its profitability, and to reduce unit costs to consumers, and is therefore a strong disincentive against DM.

The revenue cap, in contrast, appears to be more neutral to DM, notwithstanding the inbuilt disincentive to DM in the building block approach. This is because a revenue cap form of regulated recovery merely requires the network to develop a set of tariffs which will return the allowed amount of revenue. Tariffs change from year to year to allow the network to recover the allowed amount of revenue and this insulates the network from any variation in demand or consumption within the network. A revenue cap, therefore, of itself does not incentivise or disincentivise the network to provide DM approaches.

Yours faithfully,

Jeff Angel Executive Director