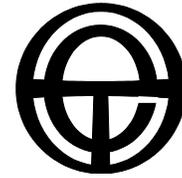


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**SUBMISSION**  
**to**  
**Australian Energy Regulator**  
**on**  
**Draft decision Victorian electricity distribution network service  
providers 2011–2015**

24 August 2010

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## Summary

In its draft Distribution Determination 2011-1015, the Australian Energy Regulator (AER) has failed to appropriately consider the extent to which non-network solutions should have been utilised to defer expensive augmentations, thereby ignoring significant efficiency gains for consumers.

The AER should immediately commission a supplementary DM report to investigate in detail the savings that could be achieved if the Victorian distribution network businesses properly harnessed non-network solutions such as demand management (DM) and distributed generation (DG).

Further, the AER should require the networks to spend a certain percentage (we suggest starting at 2% and eventually reaching around 10%) on non-network solutions which should include demand-side response, load control, energy efficiency and distributed generation. These activities should fit within a Smart Grid strategic envelope. Spending on non-network alternatives should be amortised across the 5 year period into roughly equal amounts per year.

We provide more a more detailed response to the draft Determination below.

### **1. AER's rejection of distribution network opportunism**

The AER is correct to have rejected Victorian Distribution Network Service Providers' (DNSP) over-blown proposals for a 66% rise in capital expenditure (capex) and a 36% rise in operating expenditure (opex). Basing this decision on the most recent actual capital expenditure most accurately represents an efficient cost base. Compared to expenditure over the last few years, the DNSPs have not provided convincing justification for the need for the proposed rises.

It appears that the Victorian DNSPs attempted to game the regulatory system by:

- under-estimating overall electricity sales (GWh) to secure a higher per-unit price for electricity sold through their networks
- over-estimating peak demand growth (GW) to enable greater capital investments upon which future revenue could be earned.

We support the AER's decision to reject these distortions. We note, however, that similarly opportunistic behaviour was not rejected by the AER in its decision on the NSW Distribution Network Determination. This is a deeply troubling inconsistency, particularly for NSW consumers who have now been locked into paying for vast amounts of premature and unnecessary infrastructure.

## 2. AER's failure to adequately assess or support non-network opportunities

The AER's achievement in calling the bluff of the Victorian networks is undercut by its failure to adequately support non-network solutions. Rejecting the networks' overblown claims does not solve the problem of chronic, peak-driven grid inefficiency. Unless the AER ensures that DNSPs implement the most cost-effective solution by requiring the full consideration of demand management, inefficient capex will continue to cater for avoidable peak demand – just at a later date. Consumers will suffer from this inefficiency and will also have to pay for the resulting expensive generation and carbon costs if demand management solutions are not implemented. This is counter to the long term interests of consumers.

The AER has failed consumers on non-network solutions from every angle, including:

- failing to consider the extent to which non-network solutions should have been utilised to defer expensive augmentations
- Failing to assess – **or even mention** – most of the networks' (albeit inadequate) DM proposals
- Claiming ex-post assessment is 'beyond the scope of the AER's role'
- dismissing network and consumer submissions on the Demand Management Incentive Allowance (DMIA)
- failing to provide an adequate DMIA level

As TEC has noted previously, the Victorian distribution network proposals are seriously deficient in their failure to adequately consider non-network solutions. For example:

- Powercor proposed to spend just \$700,000 on DM, amounting to 0.044% of its claim for \$1.6 billion in capex.
- Jemena ignored all various DM opportunities and allocated zero capex for DM
- United Energy allocated just 1.1% of their proposed capex on DM
- SP AustNet proposed \$17.04 million for non-network solutions

The AER has failed to consider the little DM that has been proposed. Even worse, it appears to have rejected much of the proposed DM without apparent explanation

or justification. The Nuttall Consulting report<sup>1</sup> on capex has not properly considered DM, contradicting the AER's claim that the report involved 'examining whether each Victorian DNSP had considered, and made provision for, efficient non-network alternatives.'<sup>2</sup>

Instead, only one proposed DM project has been considered by the Nuttall report, discussed below.<sup>3</sup> It is sadly ironic that while Nuttall and the AER conclude that many of the proposed augmentations were overblown and premature and could be deferred, there has been no consideration of whether these and other augmentations could be further deferred by DM. Such DM-driven deferrals could deliver a massive dividend for consumers. Unfortunately, however, the AER and Nuttall Consulting have failed to consider these opportunities.

In the case of opex, it is bewildering how the AER has failed to even mention significant DM DNSP proposals targeted at deferring expensive infrastructure, yet comment in detail on other opex proposals such as for \$200,000 for NGERs reporting and \$100,000 for Crime Stopper logos.

### **3. SP AusNet's non-network proposals**

In the absence of any assessment by the AER of SP AusNet's DM proposals, TEC notes the following.

SP AusNet has proposed spending \$17.04 million on non-network solutions. This comprises a mere fraction of total spending and falls well below the level needed to ensure that the vast potential of DM and DG are utilised and the long term interests of consumers are maximised.<sup>4</sup> However, SP AusNet's efforts to articulate an approach to DM that strengthens institutional capacity and seeks out cost-effective DM to defer expensive network augmentations should be supported by the AER.

#### **3.1 Proposal for non-network capacity building<sup>5</sup>**

It is clear that SP AusNet has attempted to articulate its non-network strategy without the aid of mature skills and technical capabilities. Its proposal to spend \$3.75 million on capacity building is therefore most urgent.

As SP AusNet points out, institutional capacity building will be necessary with the implementation of the AEMC's new National Framework for Distribution Planning and Expansion.

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<sup>1</sup> Nuttall Consulting, *Capital Expenditure Victorian Electricity Distribution Revenue Review*, 4 June 2010, at: <http://www.aer.gov.au/content/item.phtml?itemId=737052&nodeId=de290badbe24fcd3b63dde9da98046d&fn=Victorian%20distribution%20draft%20decision%202011-2015%20-%20Nuttall%20Consulting%20Final%20report%20-%20Capital%20expenditure.PDF>

<sup>2</sup> AER, *Draft decision Victorian electricity distribution network service providers Distribution determination 2011–2015*, June 2010, p. 286

<sup>3</sup> Nuttall Consulting, *Capital Expenditure Victorian Electricity Distribution Revenue Review*, 4 June 2010, p. 210-212.

<sup>4</sup> SP AusNet, *AMS – Electricity Distribution Network 20-12 Capacity*, Nov 2009, p. 240-253

<sup>5</sup> SP AusNet, *Electricity Distribution Price Review 2011-2015 Regulatory Proposal*, Nov 2009, p. 49.

More importantly however, SP AusNet has signaled its intention to deliver improved performance on DM and as such will need to establish a team to deliver these outcomes. In particular, it will need to increase its non-network team from an apparent zero to four team members. We therefore recommend that the AER approve the \$3.75 million SP AusNet has proposed for staff and other non-network capacity building within the network.

### 3.2 Proposals to defer capex

In the current regulatory period, non-network solutions by SP AusNet have demonstrated phenomenal cost-savings for consumers, including:

- spending of \$320,000 to adjust hot water time clocks and meters to defer \$14.6 million worth of reconductoring capex, and;
- investment of \$75, 000 in distributed generation to defer \$6.4 million worth of network augmentation capex

This enormous windfall for consumers demonstrates that the potential for cost-effective non-network solutions remains untapped.

SP AusNet has proposed to build on these savings in its regulatory proposal by spending \$2.43 million of opex to defer six projects worth \$21.7 of capex. This would be through standby generator agreements, embedded generation or voluntary load curtailment agreements. The most advanced of these projects is \$1.1million opex spend at Euroa to defer \$7.4 million capex.

The remaining five projects entail a \$1.3 million opex spend for a capex deferral value of \$1.4 million. There are some limitations with these proposals, including:

- the focus on feeders to the exclusion of sub-stations
- lack of clarity on the type of non-network solution to be used, along with costs and benefits (adding weight to the call for SP AusNet's call for internal non-network capacity to be bolstered)
- SP AusNet's claim that DM costs range from 'approximately \$1200 -1400 per kWh dispatched'<sup>6</sup>
  - o this may be an overestimation of actual market costs for reliable non-network support. We note that if this is the case, then SP AusNet's DM would be even *more* cost-effective, delivering consumers an

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<sup>6</sup> SP AusNet, *Electricity Distribution Price Review 2011-2015 Regulatory Proposal*, Nov 2009, p. 240.

even better benefit to cost ratio and allowing the network to defer potential augmentations for even longer periods.

While all projects indicate significant savings, they also offer reduced peak demand driven risks for constrained areas.

In light of the significant potential of the SP AusNet proposal, it should be approved or improved upon rather than disregarded, as the draft Determination has done. We recommend that the AER either approves this expenditure or directs SP AusNet to undertake a more thorough examination of the range of non-network options for these nominated constraints and expand the scope to include constrained sub-stations. This may require the conditional approval of opex to enable SP AusNet to improve its proposal.

### **3.3 Hot water load control project**

SP AusNet's proposal to defer capex through hot water system load control is estimated to cost \$1.25 million opex for a deferral of \$7.1 million capex by reconductoring the Wangaratta-Myrtleford line. This demonstrates a significant benefit for consumers. As SP AusNet notes, its credentials in this area have been proven in the current regulatory period by the spending of \$320,000 to deliver a capex deferral of \$14.6 million for the South Gippsland network.

Clearly, the roll-out of smart meters will enable the future remote switching of hot-water loads. This will provide even more flexibility and efficiency. Where smart meters are currently installed, SP AusNet should utilise this technology. However, in the absence of smart meters these reductions should be secured as soon as possible to capture the identified savings.

### **3.4 Direct load control (DLC)**

SP AusNet has proposed to spend \$2.2 million to deliver an overall reduction of 1-2MW of peak demand using DLC. While not an alternative to specific deferrals in the forthcoming regulatory period, we strongly support this proposal as an investment in future deferrals. Unless peak demand is driven down over time, network constraints will continue to emerge. It is sensible for the AER to allow the 'cherry-picking' of such long-term deferrals while also enabling greater experience and familiarity with advanced load control systems as both will benefit consumers in the long term.

### **3.5 Non-network solution and technology trials**

SP AusNet has proposed spending a total of \$6.2 million on non-network solutions and technology trials with the DMIA contributing \$3 million of this. We strongly support both the joint storage project with CSIRO and the Vic Urban smart network

project. These projects will build critical experience and institutional capacity for DM, as well as build the foundation for significant future DM.

### **3.5 TOU tariffs linked to smart meters**

SP AusNet proposes to spend \$1.32 million opex to implement innovative tariffs that will enable the capture of the significant potential of smart meters. We strongly support the utilisation of smart meter technology in this way.

## **4. CitiPower's West Melbourne Terminal Station DM proposal**

As noted above, the AER and Nuttall Report (which it commissioned) are highly deficient in only assessing one proposed DM project and failing to review whether any of the proposed augmentations could be deferred or avoided by non-network solutions. The one assessment made highlights the extreme bias and hypocrisy of this draft Determination in regards to non-network solutions in general.

There has been no attempt to analyse what the costs of the proposed DM program are compared to the cost of a black-out, which the project is seeking to avoid. As such, the AER has ignored the interests in consumers of reducing serious risks to supply.

The Nuttall report notes, however, that this problem was met in 2009-10 through the use of voltage reduction, which indicates that CitiPower has been successful, to date, in implementing effective demand-side approaches to reduce risk.<sup>7</sup> It is odd that this achievement has not been acknowledged by the AER and used as evidence that non-network solutions such as the one proposed can remove these risks to supply.

CitiPower is then criticised for providing the details of only one demand-side service provider. Rather than reflecting CitiPower's lack of rigor, this demonstrates the exact problem that the AER is exacerbating by its appalling approach to non-network solutions – the absence of a mature demand-side provider market in the NEM due to the failure of energy market structures to encourage such a market. To TEC's knowledge there is only one provider of demand-side response with the capacity to deliver this kind of program. It is unfair to lay all the blame on CitiPower for this situation.

But the real irony is the criticism that CitiPower has *not considered other options* to address the energy at risk. On these grounds, the AER has excluded the DM expenditure. Such an approach only draws attention to the fact that almost all augmentation proposals have not considered other, more cost-effective options,

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<sup>7</sup> Nuttall Consulting, *Capital Expenditure Victorian Electricity Distribution Revenue Review*, 4 June 2010, p. 275-276.

such as DM and DG. It beggars believe that this methodology can be used to exclude a DM project but is applied to zero augmentation projects.

## 5. Demand Management Incentive Allowance

As we have noted previously, the DMIA is grossly undersized to meet the need for an appropriate level of DM. We note that United Energy has stated that its allowance of \$400 000 per year is insufficient to enable it to undertake even small scale demand management projects and has proposed an increase in the amount of the DMIA to a total of \$10 million for United Energy over the forthcoming regulatory control period.<sup>8</sup> SP AusNet's proposal for an extra \$3.2 million above the DMIA for technology trials also demonstrates the inadequacy of the DMIA. The phenomenal cost-effectiveness of SP AusNet's DM programs in the current regulatory period, noted above, is ample evidence of the benefit to consumers of expanding this program.

It is disappointing that the AER has ignored the calls by the only consumer representative submissions on this issue, from Total Environment Centre, the Central Victorian Greenhouse Alliance and the Victorian Employers Chamber of Commerce and Industry, which all called for an increase to the DMIA.

## 6. AER ignores the NERs

The failure of the AER and its consultants to properly review DM proposals suggests that the AER is in breach of the National Electricity Rules (NER) which refer to matters relevant to the making of regulatory determinations. In particular, the sections below where the AER must have regard to:

6.5.6(e)(1) and 6.5.7(e)(1): the information included in or accompanying the building block proposal

and

6.5.6(e)(10) and 6.5.7(e)(10): the extent the DNSP has considered, and made provision for, efficient non-network alternatives.

This situation should be immediately rectified by the commissioning of a supplementary DM report to investigate in detail the savings that could be achieved if the Victorian distribution network businesses properly harnessed non-network solutions such as demand management (DM) and distributed generation (DG).

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<sup>8</sup> AER, *Draft decision Victorian electricity distribution network service providers Distribution determination 2011–2015*, June 2010, p. 730.