



EnergyAustralia

EnergyAustralia Pty Ltd
ABN 99 086 014 968

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Mr James Clinch
Essential Services Commission of Victoria
Level 37, 2 Lonsdale Street
Melbourne VIC 3000

energyaustralia.com.au

Submitted Electronically to DGinquiry@esc.vic.gov.au

Dear Mr Clinch

Network Value of Distributed Generation

EnergyAustralia welcomes the opportunity to comment on ESC's Draft Report on the Network Value of Distributed Generation. We are one of Australia's largest energy companies, with over 2.5 million household and business customer accounts in NSW, Victoria, Queensland, South Australia and the Australian Capital Territory. We also own and operate a multi-billion dollar portfolio of energy generation facilities across Australia, including coal, gas and wind assets with control of over 4,500MW of generation in the National Electricity Market.

EnergyAustralia agrees with the ESC's finding that distributed generation can provide quantifiable network benefits. We further agree that these benefits are highly dependent on a number of factors, including the time and location at which the distributed energy is generated. These factors do not lend themselves to compatibility with a broad based feed-in-tariff as this would create cross subsidies and would fail to deliver compensation for the benefit of the distributed generation to where it accrues.

Having established this, we believe that a broader issue of cost reflectivity is at the heart of this consultation. The question of network value of distributed generation is inextricably linked to ensuring that the net impact (positive or negative) of each individual connection to the system is appropriately reflected and allocated. This appears consistent with Victorian Government Policy of transitioning customers on to cost reflective network tariffs. This also appears to be consistent with the high level rationale for the inquiry, namely to ensure that positive impact that distributed generators have on networks is recognized.

Recognising the True Value

In order to reflect total impact (positive or negative) on the network, it is crucial that frameworks are designed so that incentives are appropriate and no one is able to 'double-dip'.

We are concerned that the direction to “not consider the policy and regulatory frameworks governing the costs of connecting distributed generation to the network,” included in the Terms of Reference, has been interpreted in such a way that it will increase the possibility of inefficient allocation of resources.

EnergyAustralia’s believes that the Terms of Reference quite unambiguously state that it is the “policy and regulatory frameworks governing the costs...” which are not under consideration. The actual costs which arise are undoubtedly relevant and a decision on a fair value for distributed generation cannot be made without consideration of these. Failure to take these into account will lead to a situation where any negative impacts which may arise from the connection of distributed generation will be borne by all Victorian customers while the positive impacts will be directed back to the generator. This appears to be entirely inconsistent with broader government policy.

Another important consideration is to ensure that distributed generators are only compensated for the actual value which they deliver to the grid. It would be inappropriate to remunerate distributed generators on the basis of potential network impacts which may not in fact occur. Expected network benefits may not eventuate, or may arise as a result of factors not necessarily related to the distributed generated and ex-ante payments may overcompensate distributed generators if they did not actually generate on the expected basis (for example if solar panels were removed or damaged), or if potential constraints were resolved through demand response or simply did not arise as forecast.

Given that retailers are precluded from passing on additional costs to small scale distributed generators, it is crucial that any compensation be settled on an ex-post basis directly with the network business to ensure that the costs doing so are not borne by all Victorian customers.

Findings from other jurisdictions

The impact of distributed generation on networks has been investigated in a number of jurisdictions. Notable recent inquiries into this issue have been the Queensland Productivity Commission’s (QPC) Solar Feed-in Pricing review and the Australian Energy Market Commission’s (AEMC) Local Generation Network Credits Rule Change Proposal. Although the scope of these reviews varied somewhat from the ESC’s Terms of Reference, sufficient overlap exists to suggest that the findings are of direct relevance to this inquiry.

The QPC Inquiry finds that “Where network benefits exist, they are best harnessed through mechanisms that can efficiently and effectively target these benefits, rather than paying all solar PV owners a uniform feed-in tariff unrelated to network impacts. A number of mechanisms exist and the AEMC is considering whether any additional mechanisms are required.”

EnergyAustralia agree with this finding, and, while the ESC has concurred that a broad based feed-in tariff mechanism is not necessary, the view that additional work may be required to ensure that a fully functioning market for grid services exists appears to be at odds with this QPC view that this matter is more appropriately determined by the AEMC.

Similarly the AEMC’s findings from the Local Generation Network Credits rule change proposal suggests to us that the means exist to capture the grid benefits of distributed generation. In the AEMC’s draft decision it states, “Following rule changes made in recent years, the NER

now contain a number of mechanisms to incentivise efficient investment in and use of distributed energy resources (including embedded generation). These include:

- cost-reflective distribution consumption network tariffs;
- network support payments and avoided transmission use of system charges;
- the regulatory investment tests for distribution and transmission (RIT-D/T);
- the capital expenditure sharing scheme (CESS) and the efficiency benefit sharing scheme (EBSS); and
- the demand management incentive scheme (DMIS) and demand management incentive allowance (DMIA).

The AEMC has recently reaffirmed this view in its final decision.

Barriers to realizing the benefits of Distributed Generation.

While household scale distributed generators may not have ready access to all of these mechanisms, we do not consider that any barriers exist to the establishment of aggregation facilities to ensure that any value which arises. In fact, given the fairly marginal value of any benefits in some locations, aggregation facilities will be able to offer economies of scale to ensure that benefits are captured in a more efficient manner.

This view is supported by the AEMC's finding that a significant number of network support and avoided TUoS payments are currently being made to embedded generators and other providers of non-network solutions by DNSPs in the NEM. For example, from 2011 to 2015, the Victorian DNSPs CitiPower and Powercor made avoided TUoS payments to 18 different embedded generators totalling over \$10 million. Payments to some individual generators during this period exceeded \$1 million per year.

While it could be argued that the quantum of payments reflects the existence of barriers which prevent smaller scale generators from accessing the market, we do not consider that ESC has proven this to be the case. EnergyAustralia considers that the establishment of the small generator aggregation framework has obviated any need to reduce these barriers. Any move to create a mechanism which allows household scale generators to directly access grid service markets would likely cost more to implement and administer than the value which would accrue.

Alternative Solutions to Network Constraints

We recognise that the Victorian Government is looking to ensure that parties who have invested in distributed generation are adequately compensated for the value they provide to the network. While we have discussed the inherent inefficiency of ignoring the costs which they impose on the system, EnergyAustralia believes that a particular focus on this subset of customers creates a further inefficiency. Demand side participation through active response to price signals, or simply the installation of more efficient appliances and equipment can play the same role in easing network congestion. We question why one group of consumers is being recognized for their contribution while others are not.

The Victorian Energy Efficiency Target scheme lowers the cost of energy efficiency activities for consumers, however, there is no recognition of the positive network impacts that these

activities can create. This appears to be a significant policy inconsistency which must be addressed if a mechanism to benefit distributed generators is developed.

If the ESC finds that additional work is required to enhance the market for grid services, we believe that it must allow equal opportunities for other approaches to be compensated. This includes demand response and energy efficiency in particular. We also consider it crucial that it be aligned with other policies and mechanisms (such as the VEET scheme and cost reflective network tariff policies) to ensure that costs and benefits are allocated efficiently. We consider that the single greatest barrier to creating a more effective market for grid services is the lack of transparency around network constraints, and the opportunities which exist to for investment to address them. Addressing this issue would ensure that the most efficient response to any particular constraint is deployed.

Summary

EnergyAustralia supports the role of distributed generation in the energy market and recognises the importance of ensuring that appropriate investment signals exist so that decisions which lead to the efficient allocation of capital and resources are made. We believe that mechanisms to provide these signals largely exist.

Any attempts to regulate an outcome where the value of distributed generation is recognized and compensated at a more granular level is likely to increase the costs that distributed generators impose on Victorian consumers. While the ESC does not consider these costs to be relevant, we believe that they must be considered to facilitate the efficient operation of the market. This is needed to guarantee that all Victorians benefits from the mechanisms established to enable an efficient market.

If the ESC determines that there is scope to enhance the market for grid services, we consider it crucial that a thorough consultation be taken to ensure that the market is accessible not only to grid services delivered through distributed generation, but to other solutions such as demand response. A secondary process of this nature should also consider any costs which should be taken in account if the ESC maintains that it is precluded from doing so under the current Terms or Reference.

If you require any further information with regard to this submission, please contact me on

Yours sincerely,

Joe Kremzer
Industry Regulation Lead