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### **Submission to Distributed Generation Inquiry Stage 2: Draft report**

United Energy (UE) welcomes the opportunity to make this submission to the Essential Services Commission of Victoria's (ESC) Distributed Generation inquiry Stage 2 Draft report: *Network Value of Distributed Generation (DG)*. The commission's report is a follow up to the Proposed Approach published in Dec 2015 and a companion piece to its Stage 1 Draft report on the energy value of Distributed Generation (DG).

UE supports the ESC's view that based on well-defined conditions, there is a benefit that DG provides to the network. As highlighted in the report, UE has recognised these benefits and has undertaken demand- response and demand-management initiatives & trials to unlock those benefits for our customers.

UE also supports the ESC's attempt to assess the quantifiable value of DG and agrees with the high level methodology based on the Long Run Marginal deferred costs associated to network augmentation and maintenance.

In keeping with the ESC's view that there is a quantifiable value from the benefit that DG provides, UE would like address the following points in our submission (Appendix A):

1. NSP is best placed to understand and identify the benefit as it does in the DAPR:
2. The AEMC review arrived at the conclusion that the existing mechanisms are sufficient
3. Costs associated to a DG connection not fully captured
4. The future state and the ENA/CSIRO Electricity Networks Transformation Roadmap

Further details on this submission are provided in Appendix B. (answers to questions) below.

UE is looking forward to having further discussions on this inquiry in the future.

If you have any queries on our submission please contact me by email

or

Kind Regards,

Mathew Abraham  
Regulatory Analyst

## **Appendix A. Submission**

The ESC's inquiry is driven by a terms of reference from the Victorian Government to support the election promise of creating a renewable economy with 4,000 jobs and \$2.5 billion investment in the sector by 2025. The government has indicated a commitment to Victorian renewable energy generation targets of 25 per cent by 2020 and 40 per cent by 2025. In summarising the terms of reference for this inquiry, the ESC intends to explore the effectiveness of the current framework by:

- Enabling a market for future renewable services either through regulatory reform and policy intervention and;
- Exploring avenues for the value identification and remuneration for small scale EGs, primarily house-hold solar EG
- Understanding the future state of the Electricity industry and the possible drivers of value creation that will influence consumer behaviour

In conducting this review, the ESC has produced a methodology that assigns the value to the benefit that small scale EG provides to both the electricity networks (Network value) and the wholesale price of electricity (Energy Value). The outcome of the inquiry so far has been to advise the Victorian government to institute a tariff to recover the energy value of DG (begins July-2017) & propose not to introduce a broad based tariff to recover the network value.

Before answering the questions posed by this draft report (see Appendix B) UE would like to address the points raised in the accompanying letter to this submission.

### **Assessing the value of DG**

UE believes that it is best placed to understand and calculate the value that DG provides to our network. The information can be accessed from our DAPR, EDPR, RIT-D submissions and RINs. This point is more relevant given:

- The value calculated by the ESC is acknowledged to be predicated on areas of constraint and planning of capex
- In our DAPR we highlight those areas in a heat map and assign a value to the constraint if interested parties are looking to participate in alleviating it. More importantly the economic value assigned to it aligns within the existing regulatory framework where UE is required to be efficient and optimal with its capex. This ultimately serves the community at large by naturally limiting any potential economic distortionary effects.
- Our VPP, Summer Saver and RIT-D projects recognise a remunerable value for the benefits provided to the network

In each of these documents, UE understands and identifies the area of constraint that require augmentation and also assign a value to it in the form of the capital expenditure that would be required to alleviate this constraint. Additionally the DAPR identifies the solution to the constraint at more granular level than at a Zone substation level that the ESC have noted in their draft report.

### **AEMC LGNC draft decision**

The AEMC in its draft decision findings highlight the following:

- It does not recommend a recovery mechanism for the benefit that DG provides the network
- The mechanisms currently existing within the regulatory framework provides DG customers with an avenue to access the value from energy they feed into the network.
- A systems limitations report would be helpful in understanding the areas of constraint within the network, which UE's DAPR already provides at a granular level.

The AEMC view on this issue therefore is categorical, there is value but there is no requirement to introduce nor assess the value of that benefit as the mechanisms in place allow the DG to access that value under the right conditions.

### **Costs associated to the DG connection**

The costs to connect a small scale DG customer is set under the NER Chapter 5A framework. Within this framework, a Basic Connection customer with DG cannot be charged augmentation costs whilst undertaking this connection. With the increasing proliferation of DG, this presents an inequitable situation for consumers as:

- Any additional costs recovered for the purposes of augmenting the network due to DG is recovered through the tariffs
- The DG customer does not pay DUOS for feed in to the network and hence obtains the benefit paid for by the wider customer base.

The ESC draft states that any costs required to augment the network from DG is recovered through the EDPR allowance. This however is a very broad interpretation of the costs recovered under the category of connection costs in our capex submission. The Connections category of capex is related to the broader planning of the network's requirements based on a forward that is not targeted at specific DG connections.

### **Future state of the Network and the ENA/CSIRO Roadmap**

The ESC's inquiry represents a subset of the the work conducted by the ENA/CSIRO but with a Victorian focus. The ENA/CSIRO, in undertaking this roadmap project, is well advanced with a national focus and has the required resources to pursue an exercise of this magnitude. Whilst this does not question the relevance of the work the ESC is undertaking, it does highlight the nature of such repetitive works being undertaken by multiple regulatory bodies when it can be a collaborative effort with minimal input from the LNSP.

To highlight this point, the inquiries into the future state of the electricity networks in the NEM and the drivers that will impact the framework that governs it are:

- ENA/CSIRO Electricity Network Transformation Roadmap
- ESC inquiry into the True Value of DG following the Victorian Govt.'s terms of reference
- AEMC's Distribution Market Model project and Electricity Network Economic Regulatory Framework Review (initiated by COAG)

The ESC would be better served in understanding and meeting the objectives of its terms of reference through collaboration with the above mentioned bodies rather than undertaking an independent review in achieving the same outcome.

## Appendix B. Questions to be answered as part of the inquiry

### Market for Grid Services

#### **Q.1 What are the appropriate means to measure the effectiveness of the market for grid services in Victoria?**

The question almost alludes to wanting key performance indicators for demand management and demand response mechanisms. Within the context of this paper, there is no real measure for effectiveness other than reduction in network congestion.

Additionally, the market for grid services is essentially just that - a market, albeit one that doesn't exist. It has to be created rather than defined. Hence unfortunately, there is no means to "appropriately measure its effectiveness".

#### **Q.2 What are the appropriate principles to guide the on-going development of the market for grid services in in Victoria, including any regulatory interventions that might be considered?**

Aside from the principles stated as part of the study in New York, which are quite broad, there are no other examples that can be referenced but more so applied.

The assertion that regulatory intervention is required for a market to be created in this space doesn't seem justified. As the AEMC in its draft report on the LGNC has categorically stated, the regulatory mechanisms are already in place for the consumers to participate in the wider markets without further regulatory intervention required. The Small Generation Aggregator Framework, the DAPR, RIT-D requirements, Demand Response and Network support payments are those in place today.

#### **Q.3 What opportunities or circumstances exist in Victoria to support the emergence of a well function market for grid services?**

Within on the context of this study, the only opportunity exists in areas of network constraint. The AMI meters are nothing more than enablers to identify & monitor those areas of opportunity.

Outside of this study, it is innovators who can cater to the needs of consumers that will drive the use of regulator mechanisms currently in place to support the emergence of a well-functioning market for Grid Services.

#### **Q4. What are the practical measures that might be considered to enable small scale grid service providers to participate in the market for grid services, to the extent they are capable of delivering value in the market?**

The question is predicated on the assumption that small scale generators require "practical measures" to participate in the market. Value delivery will be proportionate to whether DGs can satisfy the needs of the network constraint to an equivalent level of network service.

### Environmental and Social Value of DG

#### **Q5. Is there additional data and analyses that the Commission should consider in assessing the environmental and social benefits of DG with respect of electricity networks, specifically the terms of identifying, quantifying and valuing those benefits of DG?**

There is no further data.