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AEMC

Online submission

Dear Sir / Madam,

RE: ERC0179 consultation on embedded network determination

Overview

In principle the proposed changes are supported as they promote and facilitate customer choice. The issue is that they do little to promote the development of microgrids, particularly microgrids embedded in urban electricity networks. Microgrids will:

- open up the embedded network market
- reduce energy prices to consumers
- safely integrate renewable generation and battery storage into the NEM
- protect existing consumers
- increase grid resilience against events such as storms
- enable safe off-grid operation where appropriate.

There is a need for changes to the Rules and AER exemption guidelines in order to recognise microgrids as a new and separate class of embedded network.

E2Designlab is currently involved in over \$50m worth of microgrid developments, the majority grid-connected.

We recently organised the first microgrid conference in Australia, with 150 attendees from Australia and overseas (www.microgridconference.com). Carbon neutral microgrids, hybrid systems and large infrastructure savings were all identified at the conference. We would be happy to expand this industry group and continue to work with AER, CER, AEMO and AEMC on the emerging microgrid market.

Response to the draft rule change

The NER and the proposed rule changes focus on embedded networks that typically depend on the local distribution network as the primary (and usually only) source of electricity supply. An embedded network comprised of distributed energy resources capable of operating in island mode has several features that align with the National Electricity Objective (NEO). In particular, efficient operation and use of electricity services is promoted. The quality, safety and reliability of the service have the potential to match or exceed levels provided by the local distributor. Such a facility will also serve the long-term interests of the wider community if located in areas that will allow the LNSP to defer network augmentation that would otherwise be required meet the demands of the load supplied by the embedded generation network.

It is suggested that the requirement for an Embedded Network Manager (ENM) not apply to an embedded network comprised of distributed energy resources. The proposed changes and indeed the current rules do not contribute significantly to the objectives of the NEO for this type of network. Rather, they act as barriers to an innovative service with widely recognised benefits. Instead, the current AER network and retail exemption guidelines should be amended to recognise this class of embedded network. Assigning this class of embedded network operator as the person responsible for the metrology procedure under Chapter 7 of the NER will facilitate access to retailer of choice by the individual customer.

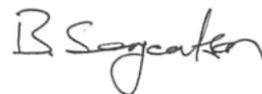
Yours sincerely,



Simon Evans
Principal Energy
Strategist



Toby Roxburgh
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Byron Serjeantson
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