

16 December 2015



Mr Chris Pattas  
General Manager  
Network Investment and Pricing  
Australian Energy Regulator  
GPO Box 520  
Melbourne Vic 3001

Dear Mr Pattas,

## **ENERGEX APPLICATION FOR A RING-FENCING WAIVER UNDER THE ELECTRICITY DISTRIBUTION RING-FENCING GUIDELINES**

Energex Limited (Energex) is writing to the Australian Energy Regulator (AER) to seek a waiver from section 1(b) of the Final Determination Electricity Distribution Ring-Fencing Guidelines, September 2000 (the Ring-Fencing Guidelines) issued by the Queensland Competition Authority.

Clause 11.14.5 of the National Electricity Rules provides for jurisdictional Ring-Fencing Guidelines to continue to apply, following regulatory responsibility transferring to the AER, until such time as the new guidelines are developed.

Section 1(b) of the Ring-Fencing Guidelines states “a Distribution Network Service Provider (DNSP) that provides prescribed distribution services in Queensland must not carry on a related business within that legal entity”. A related business is defined as “the business of producing, purchasing or selling electricity”.

Energex’s waiver application relates to a Battery Energy Storage System (BESS) pilot project with solar photovoltaic (PV) generation.

### **Background**

Rapid technological changes are challenging the traditional electricity supply chain and require distribution businesses to develop intellectual capability to support its role, including the integration of new technologies with existing network assets. As such, Energex is planning to undertake three BESS pilot projects to enhance our understanding of technology applications. These pilot projects will provide Energex with a better understanding of how the installation of batteries used in conjunction with solar PV will impact Energex’s future network load profile and power quality. While these pilot projects are primarily to inform Energex of the potential network operational issues, they may provide some insights for future capital investment and tariff reform decisions.

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The battery pilot projects are focussed on simulating the installation and operation of a BESS in conjunction with solar PV at a domestic, small scale commercial and large scale commercial premise. All three projects involve solar PV generation on site and are expected to involve negligible exports of electricity from the solar PV panels or the batteries. The domestic BESS pilot project is the most progressed, in that a site has been identified (namely Energex's Rocklea training facility) and different BESS configurations have been finalised to test the performance of different installations. Energex plans to have the domestic BESS pilot project operating early in 2016 with the small and large scale commercial pilot projects operational later in the year. Energex intends to fund these pilot projects through Energex's Demand Management Innovation Allowance as proposed in Energex's regulatory proposal. Specific details of the domestic BESS pilot project only are set out in Attachments 1 and 2.

### **Waiver Requirements**

Section 22 of the Ring-Fencing Guidelines allows distribution network service providers to request the AER issue a notice under section 21. Under section 21 the AER may waive any obligations provided that the DNSP can demonstrate that the administrative cost to the DNSP and its associates of complying with the obligation outweighs the benefit or any likely benefit to the public.

Energex has considered the Ring-Fencing Guidelines in developing the BESS pilot projects. While the BESS pilot projects involve the generation of electricity from the solar PV panels and/or the withdrawal of electricity from the BESS, Energex does not consider this constitutes carrying on a related business. This is because Energex is not in the business of producing electricity as there is no intention to make a profit. Energex is only producing electricity for the purposes of the pilot projects and expects the vast majority of the electricity to be used onsite. To the extent that there is any net export, customers will be the beneficiaries through reduced losses. Energex considers these activities are being undertaken as part of our carrying on a distribution business.

However, Energex is aware of AER's intention to develop national ring-fencing guidelines during 2016 to ensure consistency across jurisdictions and to accommodate structural and technological changes in the electricity industry. Energex understands that the AER may consider the BESS pilot projects not only in the context of the current guidelines but also in terms of the development of national ring-fencing guidelines. Energex appreciates that the AER in developing national guidelines will likely contemplate the treatment of electricity withdrawn from a BESS. Given this, Energex does not wish to pre-empt the AER's deliberations and findings, and therefore is seeking a waiver for the first BESS pilot project only. Note that at some future time, Energex will seek a waiver for the small and large scale commercial BESS pilot projects when these have been sufficiently progressed.

### **Grounds for seeking a Waiver**

Energex considers the administrative costs of complying with section 1(b) outweighs the benefit or likely benefit to the public given that the pilot projects facilitate integration of new technology, which some customers will wish to adopt, with the existing network assets.

Energex does not consider that the establishment and operation of this pilot projects:

- has any impact on the national electricity market given the negligible capacity of the pilot projects;
- constitutes entering the generation or retail markets; and
- interferes in any way with Energex's legislative requirements.

Based on the above rationale, Energex considers that the criteria for issuing of a waiver are met. If you have any queries in relation to the information provided, please do not hesitate to contact Nicola Roscoe, Network Regulation Manager on (07) 3664 5891.

Yours sincerely



Kevin Kehl  
Executive General Manager  
Strategy, Regulation & Governance

## Attachment 1 – Battery Energy Storage System Domestic Pilot Project

Site	Energex's Rocklea Training Facility, 103 Marshall Road
Purpose	To gain a better understanding of: <ul style="list-style-type: none"> <li>• the technology impacts of potential increased levels of solar PV penetration with Battery Energy Storage System (BESS) take up on the electricity network;</li> <li>• what options are available with load control of BESS and how Energex integrates it.</li> <li>• Integration of Energex's Distribution Management System third party battery control software platforms.</li> </ul>
Estimated Cost	Approximately \$440,000
Length of Trial	3 years
Installation 1	6kW solar PV systems, Tesla BESS Total generation installed – 6kW Total storage available – 11.65kW Inverter size – 6.8kW
Installation 2	3kW solar PV systems, SunVerge BESS Total generation installed – 3kW Total storage available – 11.65kW Inverter size – 6kW
Installation 3	6kW solar PV systems, Redflow BESS Total generation installed – 6kW Inverter size (solar PV) – 3kW Total storage available – 10kW Inverter size (BESS) – 3kW
Estimated Export to grid	Negligible. Based on the historical site demand data generation is expected to exceed site load for approximately 26 percent of the time. The worst case export capability of installed PV and batteries is 18kW. The site load is approximately 140kW.
Funding	Demand Management Innovation Allowance
Configuration of installments	See attachment 2

# Attachment 2 - Battery Energy Storage System Domestic Pilot Project

