

Submissions - network exemption guideline review

Brisbane Airport Corporation Pty Limited

Dated 10 October 2016

1. Introduction

- 1.1 In August 2016 the Australian Energy Regulator (**AER**) published an Issues Paper - Draft Amendments to the Electricity Network Service Provider Registration Exemption Guideline August 2016 (**Issues Paper**) along with Draft Guideline Exemption from registration as a Network Service Provider 18 August 2016 (the **draft Network Exemption Guidelines**).
- 1.2 In the Issues Paper, the AER invited written submissions to be provided to the AER by close of business 10 October 2016.
- 1.3 Brisbane Airport Corporation Pty Limited (**BAC**) as the lessee and operator of an embedded electricity network at Brisbane Airport in Queensland, and as a holder of an Individual Network Exemption granted by the AER under the National Electricity Law (**NEL**) and National Electricity Rules (**NER**), has a direct interest in the outcomes of the Issues Paper and the draft Network Exemption Guideline.
- 1.4 This document sets out BAC's submissions to AER in response to the AER's invitation to make submissions contained in the Issues Paper. Please note that where relevant these submissions refer to the corresponding section or questions in the Issues Paper or draft Network Exemption Guideline, as the case may be. In some cases the submissions address issues relevant to principles set out in the Issues Paper or draft Network Exemption Guideline, rather than the specific questions contained in the Issues Paper.

2. Background to BAC operations

- 2.1 BAC supplies and sells electricity to the tenants of Brisbane Airport through its embedded electricity supply network.
- 2.2 Brisbane Airport covers an area of 2700 hectares and the electrical distribution network is unique and does not fit the typical embedded network profile of a shopping centre or large building. While BAC occupies some parts of Brisbane Airport itself, the majority of premises are subleased to a diverse range of office, industrial and commercial tenants. BAC currently supplies electricity to over 300 individual customers through its own fully maintained embedded network system.

2.3 [REDACTED]

2.4 The operation of an embedded electricity network is a physical reality of conducting an airport business and is not undertaken with a view to aggregating customers for profit. BAC itself is supplied its electricity through the embedded network. This distinguishes it from conventional embedded networks. As a consequence, airport businesses that have been privatised may be in a position where, unlike shopping centres, the internal embedded network costs have not been included as part of the customer rent (ie the rent does not reflect the initial development costs of the embedded network).

2.5 BAC's core business (and primary obligation under its lease with the Commonwealth) is to operate, maintain and further develop a world class international airport and the supply of electricity is one ancillary service element to this primary business. Whilst the BAC electricity network is a substantial embedded network, the cost and complexity of formal registration with the AER as a network service provider and maintaining that authorisation is disproportionate to the scale of BAC's business and network.

2.6 As outlined above, BAC's embedded network has a substantial number of large customers and small customers. However, unlike more conventional embedded network supply arrangements, given the nature of the airport business and the importance of continuity of supply, BAC offers additional benefits and services to customers such as back up generation, the ability to island the embedded network from external network interruptions, an embedded network generation supply mix including renewables and airport services support including for utilities. The obligations contained in the draft Network Exemption Guideline, including for the appointment or registration of an embedded network manager and the general requirement for embedded network owners to absorb network charges place a disproportionate financial and administrative burden on BAC notwithstanding that BAC's network is at the larger end of the embedded network scale.

3. Principles

3.1 BAC has included this principles section to provide context to BAC's submissions to the AER.

3.2 Despite having many customers spanning a wide range of customer sizes, BAC considers that a single, clear methodology should apply to all embedded networks and customers. The draft Network Exemption Guideline should clearly state what is required for each condition, and should be developed in a way that can be practically and efficiently implemented by embedded network owners and operators.

- 3.3 BAC accepts that embedded commercial customers should have the ability to access retailer of choice.
- 3.4 BAC considers that no open access principles are to apply to embedded networks and that this should be explicitly stated for clarity.
- 3.5 The appointment of an embedded network manager is likely to facilitate the management of network metering, meter reading, meter information transfer including between the Retailer of Choice and network owner. However, due to the size and complexity of BAC's network, the embedded network manager will increase costs to the embedded network owners and these costs are administrative costs and are for the benefit of the embedded customers and AEMO. These costs should be "market costs", charged to AEMO and recovered as "market charges" from Retailers and customers or alternatively must be able to be passed through, at a minimum, to embedded network commercial customers.
- 3.6 The metering obligations including obligations on retailers and network owners to install compliant interval metering, need to be clearly expressed.
- 3.7 For ease of reconciliation, all meters installed for a customer who has secured a third party supply must be capable of half hour capture of data otherwise it is not possible to reconcile energy and load data against the bulk supply meter with any accuracy. Accuracy is required so that the embedded network owner can show how charges are levied and hence that it is compliant with other requirements of the proposed rule change and the NER. In BAC's view, adopting this approach would simplify the process of embedded network customers accessing supply from third party retailers in an efficient and streamlined manner.
- 3.8 Interval child meters should only be required to be installed after a customer has chosen a third party supplier (Retailer) and that Retailer should pay for the cost of the meter. This is consistent with operations in the wider electricity market.
- 3.9 As an alternative, where the embedded network owner is required to change meters as a consequence of the introduction of parent/child metering, the costs of those meters (including upgrade/replacement costs) installed by an embedded network owner should be recoverable from embedded network commercial customers.
- 3.10 Metering information must be able to be obtained by the network owners from retailers for all customers to ensure the proper functioning of the embedded network and for accurate and clear charging purposes.
- 3.11 External network charges and internal network charges should be recoverable by the embedded network owner from embedded network customers, provided the customer is not charged twice for the same service or infrastructure usage.

- 3.12 Separation of the network costs (and network related costs such as network manager costs) from the energy component is important. The embedded network customer should receive network and energy accounts. Whilst BAC appreciates the desire for Customers to receive a single combined bill for their metered electricity usage, combined energy and network tariffs do not assist transparent network charging for embedded network customers nor do they permit the embedded network owner to have certainty that they are regulatory compliant. They also have potential to make administration of network billing more difficult for embedded network managers and network owners.
- 3.13 Embedded network costs should be separated into wires costs and connection asset costs so that appropriate costs can be allocated to relevant customers.
- 3.14 The embedded network connection asset costs should be charged to commercial/large customers as these costs are significant.
- 3.15 Embedded network losses to be charged (ie recoverable) where the network exceeds a specified threshold limit.
- 3.16 The separation of the network and energy charges for embedded customers assists in the apportionment of costs and benefits of embedded generation, storage and inverters between embedded customers and the embedded network owner.
- 3.17 Any proposed methodology to permit embedded customers to choose their retailer including cost recovery by the network owner must be reasonable in circumstances where all embedded customers are supplied by third party Retailers.
- 3.18 There must be a clear process for the recovery of unpaid embedded customer network charges and a clear process of disconnection in the circumstance where the embedded customer does not pay the network component of their bill otherwise the embedded network owner has a financial risk that cannot be managed.

4. Submissions

- 4.1 BAC's submissions in relation to the Issues Paper and draft Network Exemption Guidelines, reflect the above principles and are set out below.

5. Application of the draft Network Exemption Guideline to individual exemptions

Issue

- 5.1 Part 2.1 of the draft Network Exemption Guideline states:

"individual exemptions granted by the AER and published on the AER's website are unaffected by changes to this Guideline. All other exemptions must comply with this guideline including,

when required, registration of the network in the 'registrable' exemption category as provided for in this Guideline."

5.2 BAC notes that the current Network Guideline states:

"all existing individual exemptions granted prior to 1 January 2012 and published on the AER's website remain in place and are unaffected by the issue of this Guideline."

5.3 The proposed wording is unclear. It has potential to mean either of the following:

- (a) individual exemptions are not intended to be subject to the draft Network Exemption Guideline and instead remain subject to the conditions in the existing Network Guideline;
- (b) holders of individual exemptions do not need to comply with the draft Network Exemption Guideline and instead remain only subject to the conditions contained within the individual exemption instrument; or
- (c) it is the grant of the individual exemption itself that is unaffected by the draft Network Exemption Guideline, however, the holder is not excluded from and must comply with the draft Network Exemption Guideline unless inconsistent with specific AER determined conditions.

5.4 The draft Network Exemption Guideline contains provisions that specifically apply to individual exemption holders. For example, section 3.3 draft Network Exemption Guideline states that *"Conditions 4.1 - 4.9 of Part B of the Guideline apply to all individual network exemptions unless specifically varied by a decision of the AER"*. It appears from this wording, that:

- (a) the AER intends the draft Network Exemption Guideline to apply to all individual exemption holders and the individual exemption conditions specifically determined by the AER for the holder of that individual exemption are not amended by virtue of the introduction of the draft Network Exemption Guideline; and
- (b) the individual exemption Part B conditions contained in the draft Network Exemption Guideline will continue to apply unless inconsistent with the specific AER conditions.

Submission

5.5 BAC submits that the application and operation of the draft Network Exemption Guideline to holders of individual exemptions be clarified.

6. Embedded Network Pricing

Reference

- 6.1 The following comments on embedded network pricing are in response to Questions 2 to Question 6 and Question 28 of the Issues Paper and involve the operation of condition 4.6 'Pricing' in the draft Network Exemption Guideline.

Issue

- 6.2 The draft Network Exemption Guideline wording at condition 4.6.4 provides that the *"Exempt embedded network service provider must:*
- (a) *not impose any network charge on an exempt customer that would not be charged by the relevant local area distributor to that customer if the customer were directly connected to the distributor and subject to a standard distribution connection contract..."*
- 6.3 The embedded network owner cannot unravel the bundled network and energy charges from a third party retailer and still meet the requirements of the AER for maximum charges (shadow pricing charges) as a combined tariff of network and energy cannot be distilled down to the elements and the network owner is under a regulatory requirement to meet certain maximum costs.
- 6.4 As the embedded network owner has the shadow price as a maximum value and has an obligation to use network tariffs when determining network charges for the contestable customer (see draft Network Exemption Guideline condition 4.6.4.), then the AER must publish a connection charge for all customer types and sizes otherwise the embedded network owner cannot meet its regulatory obligations.

Submission

- 6.5 BAC supports the position that the charges under condition 4.6.4 can be directly linked to the AER approved tariff schedule published by the relevant local distributor, however, BAC submits that for this condition to be effective and transparent it is necessary that the local area distributor be under an obligation to clearly publish costings for all relevant items of charge including network charges and connection fees for each class of embedded network customer load. For example, distributors in Queensland do not currently publish these segregated charges for loads in excess of 4GWh.
- 6.6 BAC submits that an alternative to the AER publishing a network tariff for the large embedded customers is that the AER approves a methodology for the embedded network owner to follow that will enable the calculation of these network charges. This would result in the embedded

network owner being confident that its network charges are compliant under the proposed Guideline.

Issue

- 6.7 The draft Network Exemption Guideline wording at condition 4.6.3 when referencing embedded networks at airports states that "*a charge for network services is not appropriate as it may result in the customer being charged twice for the same facility*" and accordingly no charge is permitted for energy network services except where there is agreement with the large customer or large corporate entity, for example if the network charges are factored into lease payments or fit-out charges. However, for non-conventional embedded networks such as airports, the internal embedded network costs may not be included as part of the lease payments, and are therefore unable to be recovered.
- 6.8 In circumstances such as airports there may be extensive energy networks in place that require constant operation and maintenance as well as upgrade and extension to ensure a very high level of safety and availability for all embedded customers whether existing or proposed. As a consequence, it is necessary to be able to charge these commercial embedded network customers for the energy network services including a component for separate internal network charges.

Submission

- 6.9 BAC submits that embedded network owners, in particular airports, should be able to charge embedded network customers for the energy network services including a component for separate internal network charges.

Issue

- 6.10 The Charge Groups C and D contained in condition 4.6 (in particular condition 4.6.1) of the draft Network Exemption Guideline make reference to "*individual exemptions approved by the AER in accordance with section 5.3 of this Guideline*" and "*new individual exemptions only*". Given the changes to the wording in the Group C and D it is not clear whether individual exemptions previously granted by the AER are automatically caught by Charge Group C or D or whether an application would be required by those individual exemption holders to charge in accordance with Charge Group C or D.

Submission

- 6.11 BAC submits that the draft Network Exemption Guideline needs to be amended to be clear which individual network exemptions are captured in each of these statements and hence Charge Groups.

- 6.12 BAC submits that the AER should include specific wording to explain what is included in 'network charges', as the current alternative references to 'network charges', 'network development costs' and 'charge for network services' are somewhat unclear and it is difficult to ascertain what specific charges may and may not be passed on including whether those charges relate to internal or external network charges.

Issue

- 6.13 The Charge Groups A and B contained in condition 4.6 (in particular condition 4.6.1) of the draft Network Exemption Guideline make reference to the way embedded customers can be charged. All charge options of network only, energy only and a combination of both are permitted.

Submission

- 6.14 BAC submits that when exempt on selling by the embedded network owner is not occurring, then a 2 part bill must be issued to the embedded customers to cover separately the network charges and the energy charges. Accordingly, Groups A and B should be amended to take this into account.

7. Distribution loss factors (DLF)

Reference

- 7.1 The below comments relate to condition 4.5 of the draft Network Exemption Guideline.

Issue

- 7.2 The options provided in the draft Network Exemption Guideline for the calculation of the DLF for private networks with large loads or generators are:

- (a) use the methodology published by the local Distribution Network Service Provider;
or
- (b) use an alternative methodology approved by the AER upon application by the parties, including the customer.

- 7.3 These options may not result in an appropriate methodology for the actual network losses within an embedded network. This needs to be addressed as the cost of lost energy within the embedded network is unlikely to reflect the costs associated with the distribution network losses. The alternative of adopting an application to the AER that involves a customer may be inappropriate in circumstances where the customer is unwilling to take part in that application.

Submission

- 7.4 BAC submits that instead of approving a methodology for the calculation of the DLF upon application, the AER adopt a methodology that is comprised of a reconciliation by the embedded network owner of the embedded network losses and cost of those losses relevant to each customer or class of customer. Otherwise there is a risk that the non-contestable customers connected to the embedded network will pay for some portion of the losses accrued by the large contestable customers.

8. Embedded Network Manager (ENM) appointment

Reference

- 8.1 The following comments relate to Questions 11 and 12 in the Issues Paper.

Issue

- 8.2 An individual exemption holder is not required to appoint an ENM until a large customer or small customer has entered into a relevant market retail contract (and following 1 December 2017 or commencement in the Jurisdiction, for example, Queensland). There is no reasonable time frame specified within which an ENM can be retained and appointed following the relevant trigger event.

Submission

- 8.3 BAC submits that:
- (a) a reasonable time frame be specified within which an ENM can be retained and appointed following the relevant trigger event; and
 - (b) if an individual exemption holder appoints an ENM notwithstanding that a relevant trigger event has not occurred (ie in advance in order to facilitate anticipated retailer of choice), then the ENM will be treated as validly appointed and the parties will comply with the Guideline in respect to the ENM; and
 - (c) that the AER or AEMO should publish a list of ENM providers from which the embedded network owner (if it is not registered as an ENM itself) can select and appoint an ENM and make subsequent appointments/reappointments.

9. Embedded Network Manager costs

Reference

9.1 The below comments and questions relate to Questions 14 to 19 in the Issues Paper.

Issue

9.2 The draft Network Exemption Guideline sets out a position whereby the costs of an ENM will be absorbed by the exempt embedded network service provider.

9.3 This position is not reasonable for embedded networks such as airports and the network owner should be entitled to pass on these costs to its commercial customers (tenants, whether taking on-supply from BAC or purchasing from a retailer of choice). If all customers elect to receive supply from a retailer of choice, and there is no embedded network electricity on-sale to customers, it would be unreasonable for the embedded network owner to absorb all of the ENM costs.

9.4 It is currently not possible to make specific submission on the anticipated ENM costs because the scope and detail of the ENM services and obligations that are required to be performed are still to be accurately defined and could vary significantly depending on the ENM's liability exposure and whether the role involves both administrative and technical functions.

Submission

9.5 BAC submits that Option 1, as described in the Issues Paper, that *"the exempt embedded network service provider must absorb the costs of ENM Services"* is inappropriate and non-commercial, and that it is not reasonable to expect an embedded network owner such as an airport to absorb these costs.

9.6 BAC submits that the cost of the ENM:

- (a) being essentially an administrative function for the benefit of the embedded network customer, their Retailer and AEMO, should initially be paid by AEMO and then recovered as "market charges" from the Retailers and customers; or
- (b) must be able to be passed on to, and recovered from, the embedded network customer by the embedded network owner and that Option 3, as set out in the Issues Paper, is the most appropriate methodology of passing the cost of the ENM on to embedded network customers.

10. **Metering Costs**

Reference

- 10.1 This response applies to Questions 7, 8 and 9 identified in the Issues Paper and condition 4.2.2.3 of the draft Network Exemption Guideline.

Issue

- 10.2 Part 3 of the draft Network Exemption Guideline deals with metering types and access arrangements.
- 10.3 It provides that only costs associated with upgrading existing non-compliant metering installed pre 1 January 2012 can be passed on to the customer.
- 10.4 The market retailer and customer have a right to purchase, lease or replace a child meter on its terms with no compensation payable to the embedded network owner for the unrecovered cost of the meter.
- 10.5 The proposal that all meters are to be upgraded to the NEM standard would place a high and an unnecessary cost on embedded network owners as all internal meters would have to be NEM compliant even in situations when the embedded customer may not be receiving a supply from a retailer of choice.

Submission

- 10.6 BAC submits that the costs of any metering replacement, upgrade, maintenance or servicing should be able to be passed on to all customers regardless of when that work is incurred.
- 10.7 BAC submits that meters should only be installed after a customer has chosen a third party supplier (Retailer) and that Retailer should pay for the cost of any meter changes or upgrades. This is consistent with the operations in the wider electricity market.
- 10.8 BAC submits that there should be no automatic right of a market retailer or customer to purchase lease or replace a child meter on terms the retailer or customer sees fit without adequate compensation being paid to the embedded network owner for the unrecovered cost of any replaced meter. BAC submits that the embedded network owner should be entitled to full replacement value of the meter that has been replaced by a Retailer meter.

11. Metering arrangements

Reference

11.1 The below comments are in response to Questions 7 to 9 identified in the Issues Paper.

Issue

- 11.2 The minimum standard for the embedded customer meter should be an interval meter capable of calculating demand and energy in a half hour period so that the network and energy costs can be reconciled at the bulk supply meter of the embedded network owner. Without this, the process is open to too much interpretation and the embedded network owner is exposed to regulatory non-compliance.
- 11.3 New condition 4.3 requires embedded network operators to stand in the shoes of the responsible person under the NER and apply schedule 7.3 of the NER to the meters they own, operate or control.
- 11.4 As the meter installations for contestable embedded customers will most likely be the property of their retailer, then the retailer needs to be the "responsible person". For other meters including the bulk supply meters, the embedded network owner should be the party required to ensure that a "responsible person" is appointed to manage the meter installation. The AER proposition that the embedded network owner is the "responsible person" for the embedded network meters is not a practical approach.

Submission

- 11.5 BAC submits that:
- (a) metering obligations need to be clear; and
 - (b) metering information must be able to be obtained by the embedded network owners from retailers for all customers to ensure the proper functioning of the embedded network and for accurate and clear charging purposes.
- 11.6 BAC submits that for ease of reconciliation, all meters installed for a customer who has secured a third party supply must be capable of half hour capture of data otherwise it is not possible to reconcile energy and load data against the bulk supply meter with any accuracy. Accuracy is required so that the embedded network owner can show how charges are levied and hence that it is compliant with other requirements of the proposed rule change and the NER.

- 11.7 BAC submits that the Retailer should install the meter after they “win” the customer as occurs in the wider market and the Retailer should also appoint the Responsible Person for the meter that they have installed.
- 11.8 BAC submits that the embedded network owner should be the party required to ensure that a “responsible person” is appointed to manage the bulk supply meter installation.
- 11.9 BAC submits that the Retailer should be the party required to ensure that a “responsible person” is appointed to manage the contestable embedded customer’s meter installation.
- 11.10 BAC submits that making the embedded network owner the “responsible person” for the embedded network meters is not a practical approach.

12. **Embedded Generation**

Reference

- 12.1 The below comments relate to condition 4.2.3 of the draft Network Exemption Guideline.

Issue

- 12.2 The Guideline should address embedded generation, storage and inverters that are connected to an embedded network but electricity is not exported to the external distribution network as is the case for BAC.
- 12.3 BAC's future plans include the installation of [REDACTED] of solar generation and this generation will be utilised within its network and will not be exported.
- 12.4 The benefits of the embedded generation should be able to be accrued to the relevant party who pays for any renewable generation, storage or embedded generation. The separation of network and energy charges and half hour metering permits this allocation to occur in a transparent and efficient manner.
- 12.5 The splitting of the network and energy charges for the contestable embedded customers would provide the best information upon which to ensure that the benefits of the embedded generation, storage and inverters can be applied to the appropriate party. There is a need to avoid the situation where benefits are spread on a simple allocation method amongst embedded customers with the outcome that some customers receive more benefit than is appropriate (ie a "free ride" occurs).

Submission

- 12.6 BAC submits that the Guideline should incorporate a reference to embedded generation, storage and inverters that is not exported to the external distribution network. That is, there should be recognition that any embedded network owner is permitted as part of its exemption

to install embedded generation, storage and inverters within the embedded network without requirement to make any further application for any additional exemption where the following concepts apply:

- (a) the embedded generation, storage and inverters are not used for export to the external distribution network;
- (b) appropriate interval meters are installed to record the electricity sent out or taken from the embedded network;
- (c) the network and energy charges are separated;
- (d) the embedded generator, storage and inverter should be permitted to operate for safety and emergency needs (particularly when the network is not supplying the appropriate amount of electricity), demand side management and for management of efficient supply within the embedded network;
- (e) appropriate safety mechanisms are in place with the distribution network provider; and
- (f) is otherwise approved or exempt under the NEL and NER as a generator, storage or inverter.

13. Access to retail competition

Reference

- 13.1 This comment is in response to Question 29 of the Issues Paper.

Issue

- 13.2 Condition 4.1.12.1(e) requires an exempt embedded network service provider or agent must not alter the electrical supply arrangement to a customer or tenant in a private network directly connected to a registered distributor without the written consent of that customer, resident or tenant, freely given.

Submission

- 13.3 BAC submits that the words "not alter the electrical supply arrangement" have broad application and could capture any network upgrades, enhancements, maintenance and improvements which would result in an unworkable situation for the embedded network owner. BAC submits that Condition 4.1.12.1(e) should be deleted as customers are adequately covered by Condition 4.1.12.1 (f).

14. Minor comments

14.1 We draw the AER's attention to the following for correction:

- (a) an additional full stop at the end of paragraph 1 in part 2.4.4. of the draft Network Exemption Guideline.
- (b) a cross-referencing error in the third paragraph of part 5.5.
- (c) a cross-referencing error to conditions 4.1.12(e) and 4.1.12(f) in the opening paragraph of Condition 4.9 which should be references to 4.1.12.1(e) and 4.1.12.1(f).
- (d) in condition 4.5, the sub-numbering should be updated to ensure consistency with other headings of that level, ie for conditions 4.5.1, 4.5.2 and 4.5.3.

End.

