



Review of electricity network operators'  
licences

# Final Report

September 2022

Energy >>

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## Energy Networks Regulation Committee Members

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## The Independent Pricing and Regulatory Tribunal (IPART)

We make the people of NSW better off through independent decisions and advice. IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from [IPART's website](#).

## Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders, past, present and emerging.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

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# 1 Executive summary

Following a direction from the then Minister for Energy and Environment (Minister)<sup>1</sup>, we have conducted a review of the licences in force under the *Electricity Supply Act 1995* (NSW) (ES Act). This includes the licences held by Ausgrid, Endeavour Energy, Essential Energy and Transgrid (Network Operators).

We have conducted this review to assess whether the Network Operators' existing licences remain appropriate by ensuring that the licences reflect current public expectations and regulatory practice.<sup>2</sup> We have investigated issues that have arisen since the licences came into force and recommended changes to the licences to address these issues.

We have provided a complete list of recommendations to amend, remove and include new licence conditions below. We have also provided our recommended licences for each network operator in the Appendices of this report. Please note that licence conditions shown in light text in the recommended licences are recommended for deletion.

If the Minister amends the licences, we will publish the amended licences on our website. We will also draft revisions to certain reporting manuals that reflect any amendments made to the licences.

## 1.1 Complete list of recommendations

### Recommendations

1.	Remove the licence condition that states Endeavour Energy will be taken to have satisfied condition 9.2(a) for the duration of the period set out in an approved plan if it:	9
-	has a plan approved by the Minister, in the case of a plan approved as of the first issue of the licence, or any other plan or amended plan approved by the Tribunal subsequent to the first issue of the licence (each an <i>approved plan</i> ); and	
-	it is at the relevant time undertaking the steps that are required to be undertaken in that approved plan.	
2.	Remove the existing licence condition from the licences of Ausgrid, Endeavour Energy and Transgrid about service providers holding, using and accessing information if a transition plan is in place.	9
3.	Amend the note under the 'Commonwealth Representative' definition in the Network Operators' licences to reflect the Cyber and Infrastructure Security Centre's current name and department.	9

<sup>1</sup> Since directing us to perform the review, the Minister has become the Treasurer, and the Minister for Energy.

<sup>2</sup> The Minister has excluded distribution reliability and performance conditions from the review. Refer to section 2.2 for further details.

4.	Amend the Transmission Reliability Standard to:	11
	<ul style="list-style-type: none"> <li>– include a Bulk Supply Point (BSP) definition</li> <li>– provide that the BSP definition applies to a new BSP, except if Transgrid and all the distributors and directly connected customers to whom supply would be provided through the new BSP agree in writing that the new BSP may be taken not to be a BSP</li> <li>– provide that BSP obligations for service reliability do not apply to a single new customer on a negotiated load connection agreement where that customer is the sole party connected at a load supply point</li> </ul>	
5.	Amend the existing licence conditions to allow Ausgrid, Endeavour Energy and Essential Energy to agree and authorise operation outside of distribution districts in writing.	14
6.	Amend the existing licence conditions to require Ausgrid, Endeavour Energy and Essential Energy to keep a record of an agreement to operate outside of distribution districts and make the record available to IPART on request.	14
7.	Remove the licence condition requiring Transgrid to submit an annual demand forecast to AEMO.	15
8.	Remove the requirement for the Network Operators to notify IPART of proposed significant changes to the Asset Management System (AMS).	18
9.	Amend the licence condition requiring Ausgrid and Endeavour Energy to have and maintain an AMS within two years of the date of their licences by removing the two-year requirement.	18
10.	Amend the licence condition requiring Essential Energy to have and maintain an AMS within three years of the date of its licence by removing the three-year requirement.	18
11.	Amend the licence condition requiring Essential Energy to certify its AMS by removing reference to the obligation applying in future (i.e. by the time it is required to have and maintain an AMS after three years).	18
12.	Amend the licence condition requiring Essential Energy to maintain certification of its AMS by removing reference to the obligation applying in future (i.e. by the time it is required to have and maintain an AMS after three years).	18
13.	Amend the relevant standard in the licences of Ausgrid, Endeavour Energy and Transgrid to <i>AS ISO 55001:2014 Asset management - Management systems - Requirements</i> .	18
14.	Amend the conditions in the licences of Ausgrid, Endeavour Energy and Transgrid that require them to have, maintain and certify their AMS by allowing them to request the Tribunal to approve use of an alternative asset management standard.	18
15.	Remove from the licences, the requirement for the Network Operators to notify IPART of proposed significant changes to the Environmental Management System (EMS).	19
16.	Amend the licence condition requiring Ausgrid and Endeavour Energy to have and maintain an EMS within two years of the date of their licences by removing the two-year requirement.	19

17.	Amend the licence condition requiring Essential Energy to have and maintain an EMS within three years of the date of its licence by removing the three-year requirement.	19
18.	Amend the licence condition requiring Essential Energy to certify its EMS by removing reference to the obligation applying in future (i.e. once certification has been attained within three years).	20
19.	Amend the licence condition requiring Essential Energy to maintain certification of its EMS by removing reference to the obligation applying in future (i.e. once certification has been attained within three years).	20
20.	Amend the relevant standard in the licences of Ausgrid, Endeavour Energy and Transgrid to <i>AS/NZS ISO 14001:2016 Environmental management systems - Requirements with guidance for use</i> .	20
21.	Amend the conditions in the licences of Ausgrid, Endeavour Energy and Transgrid that require them to have, maintain and certify their EMS by allowing them to request the Tribunal to approve use of an alternative environmental management standard.	20
22.	Remove the employment guarantee licence conditions from the licences of Ausgrid, Endeavour Energy and Transgrid.	22
23.	Replace the licence condition requiring Ausgrid, Endeavour Energy and Essential Energy to comply at their own expense with any request from the Tribunal to audit their compliance with the Public Lighting Code, with a general auditing power.	25
24.	Include a general audit power in the Network Operators' licences.	27
25.	Include a condition in the Network Operators' licences requiring audits to be conducted at the expense of the relevant network operator.	27

## 2 Review context

### 2.1 We have summarised how we approached this review

#### 2.1.1 We have considered the Best Practice Licensing Framework

We have considered the Best Practice Licensing Framework<sup>3</sup> to ensure that we design conditions in the recommended licences appropriately.

**Box 1 The Best Practice Licensing Framework consists of the following 4 stages:**

1. Consider whether licensing is appropriate.
2. Consider whether licensing is well-designed.
3. Assess whether the licence can be administered effectively and efficiently.
4. Confirm that licensing is the best response, comparing its costs and benefits where we have identified other options.

While we have used the Best Practice Framework to guide our thinking, we have not calculated the costs and benefits that arise from compliance with some of the licence obligations under review. Ideally, robust cost and benefit data would be used for quantitative cost benefit analysis to determine whether a licence obligation was in the best interests of customers. In this review, we found that data was not readily available, or the collection of the data itself imposed significant costs. Instead, we have taken a qualitative approach and weighed up:

- the significance of any likely additional costs that Network Operators will incur, against
- the likely benefits compliance might bring to the network operator or the community.

#### 2.1.2 We have reviewed stakeholder submissions

Following informal consultation with key stakeholders, we published for consultation our combined Issues Paper and Draft Report (Draft Report), including draft licences, on our website in January 2022. We notified 'energy' website subscribers and other stakeholders who we considered may be interested in the consultation and invited them to provide a submission.

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<sup>3</sup> IPART, *A best practice approach to designing and reviewing licensing schemes*, prepared by PricewaterhouseCoopers, March 2013.

The [Draft Report](#)<sup>4</sup> explained our draft positions and recommendations. We received 6 submissions in total - from [Ausgrid](#), [Endeavour Energy](#), [Essential Energy](#), [Transgrid](#), [Southern Lights NSW](#) and the [Southern Sydney Regional Organisation of Councils](#). The Draft Report and stakeholder submissions are available on our website.<sup>5</sup>

Following the Draft Report submission deadline, we undertook further informal consultation with stakeholders where necessary to inform our final recommendations.

We have summarised the licence review milestones below.

Table 1 Electricity licence review milestones

Date	Milestone
11 January 2022	IPART releases combined Issues Paper and Draft Report (Draft Report) including draft licences, and invites submissions
11 February 2022	Stakeholders' submissions on Draft Report due
August 2022	IPART provides the Minister with the final report and recommended licences

## 2.2 What is excluded from the scope of the review?

The Minister has excluded distribution reliability and performance licence conditions from the scope of the review.<sup>6</sup> These licence conditions are the subject of a separate review referred to the Tribunal by the Premier ([Reliability Review](#)). If the Minister adopts our recommendations for the Reliability Review, the amended reliability and performance licence conditions will come into effect on 1 July 2024.

As noted in the Draft Report, we are also responsible for monitoring Network Operators' compliance with safety obligations under the [Electricity Supply \(Safety and Network Management\) Regulation 2014 \(ES\(SNM\) Regulation\)](#).<sup>7</sup> Given that the ES(SNM) Regulation is a separate piece of legislation that does not fall under the Network Operators' licence conditions, the ES(SNM) Regulation has not formed part of our review.

<sup>4</sup> The Draft Report also provides additional background information, which has not been repeated in this report, but may be of interest.

<sup>5</sup> <https://www.ipart.nsw.gov.au/Home/Industries/Electricity/Review-of-electricity-network-operators-licences>.

<sup>6</sup> Conditions 4, 5, 6 and 7 of the Ausgrid, Endeavour Energy and Essential Energy licences.

<sup>7</sup> The ES(SNM) Regulation requires the Network Operators to have in place, and implement, a safety management system that complies with Australian Standard AS 5577-2013 *Electricity network safety management systems*.



## 3 Critical infrastructure and transmission reliability

### 3.1 We recommend some minor changes to critical infrastructure licence conditions

After considering stakeholder comments, we recommend making some minor changes to critical infrastructure licence conditions to remove redundant provisions and update terminology, including:

- removing a condition from Endeavour Energy's licence relating to its approved plan, as suggested by Endeavour Energy (this licence condition is redundant because the transition plan provision for Endeavour Energy has expired)
- removing a condition from the licences of Ausgrid, Endeavour Energy and Transgrid about service providers holding, using and accessing information if a transition plan is in place (this condition is redundant because the transition plan provisions for these network operators have expired)
- amending the note under the 'Commonwealth Representative' definition in the Network Operators' licences to reflect the Cyber and Infrastructure Security Centre's (CISC) current name and department.

### 3.2 We recommend not amending other critical infrastructure licence conditions

We do not recommend further amendments to critical infrastructure licence conditions at this time for the following reasons:

- The CISC supports a review of the critical infrastructure licence conditions after national rules pertaining to the Risk Management Program under the *Security of Critical Infrastructure Act 2018* (Cth) (SOCI Act) have been implemented (recognising that there is a grace period for Network Operators to comply with each obligation within the Draft Rules). We consider it would be more efficient to complete a full review of the critical infrastructure licence conditions once the Draft Rules have been finalised and are in force, given that they may partly or entirely replace critical infrastructure licence conditions.
- We consider that there are some emerging issues with critical infrastructure licence conditions that would be best addressed as part of holistic review in light of changes to critical infrastructure obligations resulting from the national reforms.

#### 3.2.1 Our Draft Report position on critical infrastructure licence conditions

In our Draft Report we noted the CISC advised us that:

- The CISC is currently involved in national critical infrastructure reforms to the SOCI Act.
- These reforms involve a co-design process with the electricity sector (and other sectors) to develop rules pertaining to critical infrastructure security.

- The rules developed during the co-design process may, to some extent, replace state-based critical infrastructure licence conditions in the future.
- Due to these reforms, the CISC recommends that we do not review critical infrastructure licence conditions at this time.

We therefore proposed not to review critical infrastructure licence conditions because national critical infrastructure reforms to the SOCI Act may, to some extent, replace critical infrastructure licence conditions. We also stated in our Draft Report that we may reconsider our preliminary position if stakeholders provide compelling reasons for changing critical infrastructure licence conditions.

### 3.2.2 We have provided an update on national critical infrastructure reforms

We note that the SOCI Act has been amended in parallel to the licence review, with legislation passed by parliament<sup>8</sup> imposing new security obligations on entities that own or operate critical infrastructure assets in Australia. Most of the new SOCI Act obligations require 'rules' to come into force before the new obligations become active.

Under the reforms, the Commonwealth Department of Home Affairs has also published principles-based draft rules pertaining to critical infrastructure security titled *draft Risk Management Program Rules* (Draft Rules). The Draft Rules include grace periods for each obligation. Before the Draft Rules are made, the Federal Minister for Home Affairs must publish a notice setting out the Draft Rules and inviting submissions about the Draft Rules for a minimum of 28 days.

We consider that most of the SOCI Act amendments supplement critical infrastructure licence conditions rather than duplicate existing obligations. We also consider the Draft Rules have the most relevance to the licence review and that the Draft Rules (or a future variation of them) may, to some extent, replace the critical infrastructure licence conditions.

### 3.2.3 It would be more efficient to review these conditions once Commonwealth reforms have been implemented

We have summarised the Network Operators' submissions on critical infrastructure licence conditions below:

- Ausgrid recommended reviewing critical infrastructure licence conditions and suggested amendments to the explanatory note under condition 9.2 of its licence. Ausgrid's suggestion related to allowing offshore service providers (or local service providers using cloud solutions hosted overseas) to access localised field equipment to provide technical support under certain circumstances.
- Endeavour Energy recommended reviewing critical infrastructure licence conditions and sought review on the following matters:

<sup>8</sup> The SOCI Act has been amended by the *Security Legislation Amendment (Critical Infrastructure) Act 2021* (Cth) and the *Security Legislation Amendment (Critical Infrastructure Protection) Act 2022* (Cth).

- clarity around 'best industry practice' in licence condition 9.2(a), suggesting it to be based around the risk exposure by applying appropriate risk management standards
  - clarity around the definition and scope of 'electricity network data'
  - clarity around licence condition 10.1(a) for associated ICT infrastructure or a clear definition for the scope of 'associated ICT infrastructure' such that cloud based technologies can be safely adopted to support modern networks
  - an amendment to licence condition 10.1(a) to extend to any systems or data that pertains to the electricity network infrastructure, as defined by AEMO
  - removing licence condition 9.2(c), which relates to complying with an approved plan
  - amending licence condition 11 so that it refers to IPART's Electricity networks audit guideline – Critical infrastructure licence conditions audits.
- Essential Energy supported our preliminary position but requested that when critical infrastructure licence conditions are reviewed "...the resultant conditions are written in a way that makes them easy to interpret and apply".<sup>9</sup>
  - Transgrid agreed in part with our preliminary position and suggested an amendment to condition 7.2(d) of its licence to allow Transgrid employees to access certain data from outside Australia under certain circumstances.

We have recommended making some minor changes to the licences to remove redundant provisions (including condition 9.2(c) from Endeavour Energy's licence) and to update terminology.

We do not consider that Endeavour Energy's suggestion to amend licence condition 11 to include specific reference to the *Electricity networks audit guideline – Critical infrastructure licence conditions audits* (Audit Guideline) is necessary as part of those minor changes. This is because we consider it would reduce licence condition flexibility as it may require us to recommend subsequent amendments to the licence condition to reflect any future changes to the name of our audit guidelines.

We acknowledge stakeholders' other suggestions to clarify existing terms or add flexibility to the licence conditions. However, we consider there are emerging issues that would be best addressed as part of holistic review of these conditions in light of changes to critical infrastructure obligations resulting from the Commonwealth reforms.

Please refer to Appendix 2 of the attached recommended licences for Ausgrid, Endeavour Energy and Essential Energy and Appendix 1 of the attached recommended licence for Transgrid for wording of the note we recommend amending.

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<sup>9</sup> Essential Energy submission, p2.

## Recommendations



1. Remove the licence condition that states Endeavour Energy will be taken to have satisfied condition 9.2(a) for the duration of the period set out in an approved plan if it:
  - has a plan approved by the Minister, in the case of a plan approved as of the first issue of the licence, or any other plan or amended plan approved by the Tribunal subsequent to the first issue of the licence (each an *approved plan*); and
  - it is at the relevant time undertaking the steps that are required to be undertaken in that approved plan.
2. Remove the existing licence condition from the licences of Ausgrid, Endeavour Energy and Transgrid about service providers holding, using and accessing information if a transition plan is in place.
3. Amend the note under the 'Commonwealth Representative' definition in the Network Operators' licences to reflect the Cyber and Infrastructure Security Centre's current name and department.

### 3.3 Transmission reliability

We maintain our preliminary position to make the following amendments to the *NSW Electricity Transmission Reliability and Performance Standard 2017* (Transmission Reliability Standard):

- define Bulk Supply Point (BSP), and
- provide that the BSP definition applies to a new BSP, except if Transgrid and all the distributors and directly connected customers to whom supply would be provided agree that the new supply point is not a BSP as defined.

We also recommend adopting Transgrid's suggestion to include the application of clause 7(f) of the Transmission Reliability Standard (Appendix 2 of the draft Transgrid licence) to instances where a single customer on a negotiated supply agreement is the sole party connected at a load supply point.

### 3.3.1 We have summarised stakeholder submissions on the Transmission Reliability Standard

Essential Energy and Transgrid supported our proposed changes. In addition, Transgrid stated:

When Transgrid directly connects a load customer to its network, such connections are always under a negotiated supply agreement where such agreements generally allow for supply disruption in limited, negotiated circumstances. Transgrid is of the view that a single negotiated customer connecting at a load supply point, where that load supply point is not servicing other customers or a distributor, should not be considered a BSP.<sup>10</sup>

To reflect its comment above, Transgrid suggested that we consider further clarifying the treatment of such connections in its licence so that:

- the BSP definition applies to a point of connection where supply is provided to more than one directly connected customer, or
- the requirement for Transgrid to submit a proposal to the Tribunal<sup>11</sup> before entering into any contract for the construction a new BSP does not apply when a single customer on a negotiated supply agreement is the sole party connected at a load supply point.

### 3.3.2 We agree with Transgrid that the Transmission Reliability Standard should be further clarified

If a new BSP is established, certain obligations for service reliability are automatically invoked. We consider this may be appropriate if multiple customers are connected to the BSP, or if the customer is a network operator supplying other end users. However, we agree with Transgrid that a load supply point connected to a single customer under a negotiated supply agreement that allows for supply disruption in limited negotiated circumstances, should not be considered a BSP.

We therefore recommend addressing Transgrid's comments by amending clause 7(f) of the Transmission Reliability Standard to ensure that BSP obligations for service reliability<sup>12</sup> do not apply to a load supply point connected to a single new customer on a negotiated supply agreement.<sup>13</sup>

Please refer to Appendix 2 of the attached recommended licence for Transgrid for wording of the licence conditions.

<sup>10</sup> Transgrid submission, p4.

<sup>11</sup> Under condition 7(d) of the Transmission Reliability Standard.

<sup>12</sup> As specified under clause 7(d) of the Transmission Reliability Standard.

<sup>13</sup> Instead of using the term 'negotiated supply agreement', we have used the term 'negotiated load connection agreement' in Transgrid's licence.

## Recommendations



### 4. Amend the Transmission Reliability Standard to:

- include a Bulk Supply Point definition
- provide that the BSP definition applies to a new BSP, except if Transgrid and all the distributors and directly connected customers to whom supply would be provided through the new BSP agree in writing that the new BSP may be taken not to be a BSP
- provide that BSP obligations for service reliability do not apply to a single new customer on a negotiated load connection agreement where that customer is the sole party connected at a load supply point

## 4 Distribution districts, business continuity and national electricity market obligations

### 4.1 Distribution districts

We maintain our preliminary positions to:

- allow network operators to agree with each other in writing to operate outside of their distribution districts without requiring agreement and authorisation from IPART
- require the network operators to keep records of agreements (to operate outside of their distribution district) and make them available to IPART on request.

Ausgrid, Endeavour Energy and Essential Energy supported our preliminary position to allow network operators to agree with each other in writing to operate outside of their distribution districts without requiring agreement and authorisation from IPART. However, Endeavour Energy questioned whether the existing instruments of agreement to operate outside of distribution districts would be maintained, or whether approval from other distribution network operators would need to be sought.<sup>14</sup>

Endeavour Energy also stated “there might be merit” in retaining the obligation for IPART to maintain a register of agreements between distribution network operators to operate outside of distribution districts.<sup>15</sup> Endeavour Energy made this suggestion on the basis that IPART “...can act as a transparent and single source of truth and avoid any dispute between DNSPs”.<sup>16</sup>

We asked stakeholders whether there are any other risks associated with operation outside of distribution districts that need to be managed through licence conditions. In response to this question, Endeavour Energy stated:

We request consideration be given for a similar condition to be placed on Transmission Networks and their application to distribution networks (under the definitions within the National Electricity Rules).<sup>17</sup>

We have addressed the stakeholders' comments below.

<sup>14</sup> Endeavour Energy submission, p1.

<sup>15</sup> Endeavour Energy submission, p2.

<sup>16</sup> Endeavour Energy submission, p2.

<sup>17</sup> Endeavour Energy submission, p2.

#### 4.1.1 Under our proposal network operators would need to create new agreements to operate outside of a distribution district

Addressing Endeavour Energy's question, the existing instruments of agreement, which provides the Tribunal's approval for operation outside of a distribution district in some circumstances, would be rescinded if our recommendation is accepted. However, the network operators would need to continue to seek agreement from each other, or continue any existing arrangements, to operate in a neighbouring distribution district.

#### 4.1.2 We recommend removing the requirement for the Tribunal to maintain a register of agreements

We note Endeavour Energy's comment about there being merit in IPART maintaining a register of agreements to act as a single source of truth and avoid disputes between network operators. However, we recommend removing the requirement for the Tribunal to maintain a register of agreements for the following reasons:

- IPART could not guarantee the accuracy of a register of outside of distribution district operation, as the register could only be developed based on information reported by network operators. If a network operator failed to report its operation outside of its distribution district, IPART's register would not be accurate. However, a network operator may claim that the register is inaccurate because IPART was not diligent in maintaining the register.
- We consider that accurate records of approval for activities outside an area of operation can most efficiently be retained and be made available by the relevant network operators.
- We consider that the risk of network operators disputing operation outside of a legislated distribution district where an agreement is in place to do such, is low.
- If there is a question about whether distribution district obligations have been complied with, we could request the relevant instrument of agreement from the responsible network operators.

#### 4.1.3 We have not addressed Endeavour Energy's suggestion about imposing distribution district requirements on transmission network operators

We also note Endeavour Energy's comment about imposing distribution district licence conditions on transmission network operators. We understand that in some limited circumstances, directly connecting customers to the transmission network may be appropriate. We have not seen evidence that the issues Endeavour Energy has raised would justify a change to existing distribution district obligations. We are therefore not recommending an extension of the distribution districts licence conditions to transmission networks at this time.

Please refer to condition 1 of the attached recommended licences for Ausgrid, Endeavour Energy and Essential Energy for wording of the licence condition.



## Recommendations

5. Amend the existing licence conditions to allow Ausgrid, Endeavour Energy and Essential Energy to agree and authorise operation outside of distribution districts in writing.
6. Amend the existing licence conditions to require Ausgrid, Endeavour Energy and Essential Energy to keep a record of an agreement to operate outside of distribution districts and make the record available to IPART on request.

## 4.2 National electricity market obligations

We have discussed the Network Operators' licence condition requirements for national electricity market registration, technical and prudential criteria, and annual demand forecasts below.

### 4.2.1 National electricity market registration and technical and prudential criteria

We recommend retaining the licence conditions that require the Network Operators to:

- be registered or exempt from the requirement to be registered as a Network Service Provider under the National Electricity Rules (NER)
- hold any equivalent authorisation or right of participation in any national electricity market (NEM)
- satisfy the technical and prudential criteria that each entity is required to meet as a condition of its registration or exemption, or equivalent authorisation or right of participation in any national electricity market (as specified above).

We have therefore revised our preliminary position in the Draft Report, in which we proposed to remove these licence conditions.

### 4.2.2 There are benefits to retaining licence conditions on NEM registration and technical and prudential criteria

After receiving submissions to the Draft Report, we further considered our preliminary position to remove these licence conditions. We consider that there would be negative consequences to removing the licence conditions. We note:

- In the absence of these licence conditions, the Minister's ability to exercise step-in rights following a breach of NER obligations may be deprived.<sup>18</sup> Currently, the Minister's and Tribunal's step-in powers may be available if these licence conditions are breached. Removing these licence conditions would remove access to these step-in powers (for example, in the event the licence holder is deregistered from the NEM).

<sup>18</sup> Step in rights are detailed in Part 6A of the ES Act.

- Removing the licence conditions would reduce IPART's ability to gather information on the Network Operators' compliance with NER obligations.

As a result, we consider that these licence conditions prevent harm and provide a net benefit to society. We also note that the reporting obligations are the minimum necessary.<sup>19</sup>

We therefore recommend retaining the licence conditions containing obligations relating to NEM registration and technical and prudential criteria.

### 4.2.3 Annual demand forecasts

We recommend maintaining our preliminary position to remove the licence conditions requiring Transgrid to submit an annual demand forecast to the Australian Energy Market Operator (AEMO).

Essential Energy and Transgrid supported the removal of these licence conditions, and Endeavour Energy did not have concerns with our proposal.

We consider that the proposed change would remove an obligation that is duplicative with the NER<sup>20</sup> and which, in our opinion, does not mitigate any significant risk.

## Recommendations



7. Remove the licence condition requiring Transgrid to submit an annual demand forecast to AEMO.

## 4.3 Business continuity and disruptions

We maintain our preliminary position for Network Operators to have, implement and comply with their business continuity plan.

Endeavour Energy, Essential Energy and Transgrid supported our position in the Draft Report.

We have made this recommendation on the basis that the ES Act requires that licences include conditions for ensuring that a network operator has arrangements in place to identify, assess and manage business continuity risks and business disruptions. In addition, we consider that the current licence conditions are well designed, noting that reporting obligations are the minimum necessary.

<sup>19</sup> In line with general licence condition annual reporting requirements, Network Operators need only report non-compliances with licence conditions by exception annually.

<sup>20</sup> The NER also includes obligations for providing forecasts to AEMO.

Please refer to condition 4 of the attached recommended licences for Ausgrid, Endeavour Energy and Essential Energy, and condition 5 of the attached recommended licence for Transgrid for wording of the licence condition.

## 5 Management systems, reporting manuals and audit guidelines

### 5.1 Management systems

We have discussed the Network Operators' licence condition requirements for having an Asset Management System (AMS) and Environmental Management System (EMS) below.

#### 5.1.1 AMS

We maintain our preliminary positions to:

- remove the obligation for Network Operators to notify IPART of any significant changes they propose to make to their AMS.
- removing from the licences of Ausgrid and Endeavour Energy the requirement to have and maintain an AMS within a certain period after the date of their licences.
- requiring Ausgrid, Endeavour Energy and Transgrid to comply with Australian Standard AS 55001: 2014 *Asset management - Management systems - Requirements*.
- including a condition in the licences of Ausgrid, Endeavour Energy and Transgrid allowing them to request the Tribunal to approve use of an alternative asset management standard.

Endeavour Energy, Essential Energy and Transgrid supported our preliminary positions.

After receiving submissions to the Draft Report, we also recommend amending the licence conditions requiring Essential Energy to:

- have and maintain an AMS within three years of the date of its licence. We recommend removing the three-year requirement because this obligation no longer applies (given that the three-year period elapsed in February 2022)
- certify its AMS. We recommend removing reference to the obligation applying in future (i.e. by the time it is required to have and maintain an AMS after three years). This would reflect the recommended amendments described in the dot point above
- maintain certification of its AMS. We recommend removing reference to the obligation applying in the future (i.e. by the time it is required to have and maintain an AMS after three years). This would reflect the recommended amendments described in the first dot point above.

We consider that retaining the requirement for Network Operators to have an AMS would provide a net positive benefit, as a certified AMS will assist Network Operators' compliance with safety, reliability and other regulatory obligations at a minimal additional cost. We also consider that the certification obligation should be retained as certification provides us with a level of assurance that the Network Operators' AMS are being maintained to a certain standard.

We consider that the other proposed changes remove unnecessary regulatory burden and promote consistency between, and flexibility within the licences.

Please refer to condition 7 of the attached recommended licences for Ausgrid, Endeavour Energy, Essential Energy and condition 4 of the attached recommended licence for Transgrid for wording of the licence conditions.

## Recommendations

8. Remove the requirement for the Network Operators to notify IPART of proposed significant changes to the AMS.
9. Amend the licence condition requiring Ausgrid and Endeavour Energy to have and maintain an AMS within two years of the date of their licences by removing the two-year requirement.
10. Amend the licence condition requiring Essential Energy to have and maintain an AMS within three years of the date of its licence by removing the three-year requirement.
11. Amend the licence condition requiring Essential Energy to certify its AMS by removing reference to the obligation applying in future (i.e. by the time it is required to have and maintain an AMS after three years).
12. Amend the licence condition requiring Essential Energy to maintain certification of its AMS by removing reference to the obligation applying in future (i.e. by the time it is required to have and maintain an AMS after three years).
13. Amend the relevant standard in the licences of Ausgrid, Endeavour Energy and Transgrid to *AS ISO 55001:2014 Asset management - Management systems - Requirements*.
14. Amend the conditions in the licences of Ausgrid, Endeavour Energy and Transgrid that require them to have, maintain and certify their AMS by allowing them to request the Tribunal to approve use of an alternative asset management standard.

### 5.1.2 EMS

We maintain our preliminary positions to:

- retain the licence conditions requiring the Network Operators to have an EMS and to certify their EMS
- remove the requirement for the Network Operators to notify IPART of proposed significant changes to the EMS
- amend the licences of Ausgrid, Endeavour Energy and Transgrid by replacing the International EMS standard with the Australian standard

- include a condition in the licences of Ausgrid, Endeavour Energy and Transgrid allowing them to request the Tribunal to approve the use of an alternative environmental management standard.

Endeavour Energy, Essential Energy and Transgrid supported our preliminary positions.

After receiving submissions to the Draft Report, we also recommend amending the licence conditions requiring Essential Energy to:

- have and maintain an EMS within three years of the date of its licence. We recommend removing the three-year requirement because this obligation no longer applies (given that the three-year period elapsed in February 2022)
- certify its EMS. We recommend removing reference to the obligation applying in future (i.e. by the time it is required to have and maintain an EMS after three years). This would reflect the recommended amendments described in the dot point above
- maintain certification of its EMS. We recommend removing reference to the obligation applying in the future (i.e. by the time it is required to have and maintain an EMS after three years). This would reflect the recommended amendments described in the first dot point above.

We consider that our preliminary positions to retain the licence conditions requiring the Network Operators to have an EMS and to certify their EMS would ensure that the Network Operators:

- have an EMS to assist them to protect the environment and meet other environmental regulatory obligations, and
- provide us with assurance that they are maintaining their EMS to a certain standard.

We consider that our other proposed changes to the licence conditions would remove unnecessary regulatory burden and promote consistency between, and flexibility within the licences.

Please refer to condition 7 of the attached recommended licences for Ausgrid, Endeavour Energy, Essential Energy and Transgrid for the final licence conditions.

## Recommendations



15. Remove from the licences, the requirement for the Network Operators to notify IPART of proposed significant changes to the EMS.
16. Amend the licence condition requiring Ausgrid and Endeavour Energy to have and maintain an EMS within two years of the date of their licences by removing the two-year requirement.
17. Amend the licence condition requiring Essential Energy to have and maintain an EMS within three years of the date of its licence by removing the three-year requirement.

18. Amend the licence condition requiring Essential Energy to certify its EMS by removing reference to the obligation applying in future (i.e. once certification has been attained within three years).
19. Amend the licence condition requiring Essential Energy to maintain certification of its EMS by removing reference to the obligation applying in future (i.e. once certification has been attained within three years).
20. Amend the relevant standard in the licences of Ausgrid, Endeavour Energy and Transgrid to *AS/NZS ISO 14001:2016 Environmental management systems - Requirements with guidance for use*.
21. Amend the conditions in the licences of Ausgrid, Endeavour Energy and Transgrid that require them to have, maintain and certify their EMS by allowing them to request the Tribunal to approve use of an alternative environmental management standard.

## 5.2 Reporting manuals and audit guidelines

We maintain our preliminary positions to require Network Operators to prepare and submit reports in accordance with any reporting manuals issued by the Tribunal and comply with any audit guidelines issued by the Tribunal. The ES Act provides that the Minister may impose a licence condition requiring the Network Operators to exercise their functions under the ES Act in accordance with specified guidelines or subject to specified restrictions.<sup>21</sup>

Endeavour Energy, Essential Energy and Transgrid supported our preliminary positions. Endeavour Energy also encouraged IPART to keep reporting manuals and audit guidelines current.<sup>22</sup> In addition, Essential Energy stated:

We suggest that there is also a focus on streamlining of the reporting manuals and audit guidelines across State regulators. This would minimise reporting of completely different information for NSW, QLD and ACT regulators.<sup>23</sup>

We consider there is a clear rationale to retain the reporting manual and audit guideline licence conditions as they facilitate IPART in performing our compliance monitoring functions.

We note Endeavour Energy's comment about keeping reporting manuals and audit guidelines current and we will continue to endeavour to do so in future. We also acknowledge Essential Energy's comment about streamlining reporting and auditing requirements across jurisdictions. We intend to engage QLD and ACT regulators to determine if there is scope to streamline these requirements but note that opportunities for streamlining may be limited by the different legislative frameworks and reporting obligations that exist in each jurisdiction.

<sup>21</sup> *Electricity Supply Act 1995* Schedule 2, s 6, cl (2)(b).

<sup>22</sup> Endeavour Energy submission, p4.

<sup>23</sup> Essential Energy submission, p4.

Please refer to conditions 14 and 15 of the attached recommended licences for Ausgrid, Endeavour Energy and Essential Energy, and conditions 11 and 12 of the attached recommended licence for Transgrid for wording of the licence conditions.

## 5.3 Compliance management systems

We maintain our preliminary position to retain the licence condition requiring the Network Operators to ensure that internal systems are developed and maintained that are capable of effectively managing compliance with their licence. The ES Act does not require the Network Operators' licences to include conditions for requiring development of systems to manage compliance with licence conditions. However, given that network operators need to comply with licence conditions, the ES Act, the ES(SNM) Regulation and other statutory obligations, we consider it would be good business practice for them to have a system to assist them to manage compliance.

Essential Energy and Transgrid supported our preliminary position. Endeavour Energy stated:

Endeavour Energy note that this licence condition is open for interpretation. There is no definition of 'internal system' (i.e. whether that be an automated or manual system). In the case of an audit being imposed on this licence condition, we are seeking inclusion of a definition for 'internal system'.

We have not addressed Endeavour Energy's suggestion to include a definition for 'internal system' because we do not consider it to be a significant issue.

Please refer to condition 11 of the attached recommended licences for Ausgrid, Endeavour Energy, Essential Energy and Transgrid for wording of the licence condition.



## 6 Statistical obligations, employment guarantees, Public Lighting Code and licence fees

### 6.1 Statistical obligations and compliance information

We maintain our preliminary position to retain the licence condition requiring Network Operators to provide operating statistics and performance indicators as may be required from time to time by the Tribunal. The ES Act does not require the Network Operators' licences to include conditions for requiring provision of operating statistics and performance indicators, and information on compliance. However, we consider this licence condition is necessary for us to be able to adequately review Network Operators' performance, investigate compliance issues and assess the Network Operators' compliance. We also consider that the licence conditions are well-designed and impose minimal cost.

Endeavour Energy and Essential Energy supported our preliminary position.

Please refer to conditions 12 and 13 of the attached recommended licences for Ausgrid, Endeavour Energy, Essential Energy, and Transgrid for wording of the licence condition.

### 6.2 Employment guarantees

We maintain our preliminary position to remove employment guarantee licence conditions from the licences of Ausgrid, Endeavour Energy and Transgrid.

Endeavour Energy and Essential Energy supported our preliminary position.

The ES Act does not require the licences of Ausgrid, Endeavour Energy and Transgrid to include a condition for requiring information on employment guarantees compliance. In addition to this, we consider that there is no ongoing need for regulation in this area as the employment guarantees period has ended. We consider the recommended change would streamline the licences by removing an obligation which has ended.

### Recommendations



22. Remove the employment guarantee licence conditions from the licences of Ausgrid, Endeavour Energy and Transgrid.

## 6.3 NSW Public Lighting Code

We maintain our preliminary positions of:

- retaining the licence condition requiring Ausgrid, Endeavour Energy and Essential Energy to comply with the *NSW Public Lighting Code* (Public Lighting Code).
- replacing the licence condition requiring Ausgrid, Endeavour Energy and Essential Energy to comply at their own expense with any request from the Tribunal to audit their compliance with the Public Lighting Code, with a general auditing provision.<sup>24</sup>

The ES Act does not require the licences of Ausgrid, Endeavour Energy and Essential Energy (defined as Service Providers under the Public Lighting Code) to include a condition requiring compliance with the Public Lighting Code. However, we consider retaining this licence condition is necessary to ensure that IPART is able to hold the Service Providers accountable for their compliance with the Public Lighting Code.

### 6.3.1 We have summarised stakeholders' submissions on the Public Lighting Code

In summary:

- Endeavour Energy, Essential Energy, Southern Lights NSW and the Southern Sydney Regional Organisation of Councils (SSROC) supported our preliminary position to retain the licence condition requiring compliance with the Public Lighting Code. Ausgrid generally supported retaining the licence condition, but recommended changes.
- Endeavour Energy and Essential Energy supported replacing the Public Lighting Code auditing power with a general auditing power. However, Southern Lights NSW and the SSROC did not support our preliminary position.
- In addition, Southern Lights NSW and SSROC suggested that IPART review and simplify the Public Lighting Code's reporting requirements.

We have discussed the stakeholders' submissions in the sections below.

### 6.3.2 We recommend retaining the licence condition requiring Service Providers to comply with the Public Lighting Code

Ausgrid stated the following in relation to the licence condition that requires Service Providers to comply with the Public Lighting Code:

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<sup>24</sup> Please refer to section 7.1 of this report for details of the general auditing condition.

"...we recommend amendments to the relevant licence conditions so that it is not a breach of our licence if network businesses do not always adhere to every public lighting maintenance target specified in the Code. From time to time there will be situations when we are unable to comply with a maintenance target, for example, when one light has not been repaired within a given timeframe, due to a need to respond to a network safety issue. A breach should be limited to situations where a network demonstrates systematic non-compliance with the target and an IPART-endorsed remediation plan is not in place."<sup>25</sup>

Similarly, Essential Energy noted the issues raised in the review of the Public Lighting Code in relation to the severity of breaches, and the suggestions raised to align breaches with something similar to the AER breach framework.<sup>26</sup>

The Office of Energy and Climate Change (OECC) is currently reviewing the Public Lighting Code. As part of that review, the OECC is considering a range of potential changes to the Public Lighting Code, including whether there should be any change to thresholds for compliance with the Public Lighting Code. As this review is still underway, it would be premature to recommend changes to thresholds for compliance with the Public Lighting Code in the licence. We recommend the licence condition requiring Service Providers to comply with the Public Lighting Code be retained in its current form.

### 6.3.3 We recommend replacing the Public Lighting Code auditing power with a general auditing power

Southern Lights NSW did not agree with replacing the Public Lighting Code auditing power with a general auditing power, stating the proposed amendment "...will effectively reduce the emphasis on the importance of accounting for service provision in this area and we are concerned that this will water-down compliance with the Code." SSROC submitted that its position "...aligns entirely with that of the Southern Lights Group in not supporting the replacement of the current licence condition with any lesser condition."

As discussed later in this report, we recommend including a general auditing power in the Network Operators' licences. If a general auditing power is included in the Network Operators' licences, there would be no need for the licences of Ausgrid, Endeavour Energy and Essential Energy to contain a specific Public Lighting Code audit power. Therefore, we recommend removing the Public Lighting Code audit power from the licences. We note that making this change would have no impact on the rigour we apply when monitoring compliance with the Public Lighting Code.

<sup>25</sup> Ausgrid submission, p2.

<sup>26</sup> Essential Energy submission, p4.

### 6.3.4 We consider it would be more appropriate to review reporting requirements as part of the review of the Public Lighting Code

We note the suggestions of Southern Lights NSW and SSROC to review and simplify the Public Lighting Code's reporting requirements. However, we have not reviewed the Public Lighting Code's reporting requirements because we consider it would be more appropriate for these suggestions to be considered as part of the review of the Public Lighting Code.

Please refer to condition 16 of the attached recommended licences for Ausgrid, Endeavour Energy and Essential Energy, and condition 15 of Transgrid's recommended licence for wording of the licence conditions.

## Recommendations

- 23. Replace the licence condition requiring Ausgrid, Endeavour Energy and Essential Energy to comply at their own expense with any request from the Tribunal to audit their compliance with the Public Lighting Code, with a general auditing power.

## 6.4 Licence fees

We maintain our preliminary positions of retaining the licence conditions requiring the Network Operators to:

- pay fees (annual or otherwise) in connection with holding their licence as may be determined by the Minister from time to time
- pay the fees referred to above in the manner and within the period specified by the Tribunal.

The ES Act provides that the Minister may impose a licence condition requiring a licence holder to pay an annual licence fee of such amount as may be determined by the Minister. We consider that these licence conditions are necessary as they enable the NSW Government to recover IPART's costs of regulating the Network Operators.

Endeavour Energy, Essential Energy and Transgrid supported our preliminary positions. In addition, Endeavour Energy suggested the following:

With the recent fee methodology review implemented, we request inclusion in these two licence conditions, that fees be paid in accordance with IPART's fee methodology.<sup>27</sup>

Although we expect that the Minister will continue to determine fees generally in accordance with IPART's methodology, we do not agree with Endeavour Energy's suggestion because we consider it would reduce the Minister's ability to determine licence fees.

<sup>27</sup> Endeavour Energy submission, p5.

Please refer to condition 16 of the attached recommended licences for Ausgrid, Endeavour Energy and Essential Energy, and condition 15 of Transgrid's recommended licence for wording of the licence condition.

## 7 Consideration of new conditions

### 7.1 General auditing condition

We recommend maintaining our preliminary position to include a general audit power in the Network Operators' licences.

This would enable IPART to use audits to investigate emerging and current compliance issues under certain licence obligations that do not currently include an audit power<sup>28</sup>, and in turn provide IPART with more flexibility to perform its compliance monitoring functions.

We considered submissions from the Network Operators, including concerns raised by Ausgrid and Endeavour Energy about the cost and resources required to conduct audits. The Network Operators suggested IPART release multi-year audit plans to allow them to better prepare for audits and reduce administration and procurement costs.

We will consider this suggestion under the development of our Energy Networks Regulation Strategic Plan<sup>29</sup>, which we are currently developing in consultation with the Network Operators (and other stakeholders) outside of the licence review.

We note that IPART's intention would be to use the general audit power on a risk basis to investigate emerging and current compliance issues. Therefore, should we release a multi-year audit plan as part of our Strategic Plan, we consider we may not be able to include details of audits using this audit power, or may only be able to include limited details.

Please refer to condition 15 of the attached recommended licences for Ausgrid, Endeavour Energy and Essential Energy, and condition 14 of the attached recommended licence for Transgrid for wording of the licence condition.

### Recommendations



24. Include a general audit power in the Network Operators' licences.
25. Include a condition in the Network Operators' licences requiring audits to be conducted at the expense of the relevant network operator.

<sup>28</sup> The Network Operators' current licences include (annual) audit obligations under distribution reliability licence conditions (which apply to Ausgrid, Endeavour Energy and Essential Energy) and critical infrastructure licence conditions. In addition, The Tribunal may direct audits of compliance with the Transmission Reliability Standard and the Public Lighting Code.

<sup>29</sup> The Energy Networks Regulation Strategic Plan is a plan developed using a risk-based approach for regulating electricity network operators' safety and licence obligations.

# Appendices



## A Recommended Licence - Ausgrid



**INSTRUMENT OF VARIATION OF CONDITIONS OF DISTRIBUTOR'S LICENCE**  
***ELECTRICITY SUPPLY ACT 1995 (NSW)***

**1 Variation of conditions of distributor's licence**

I, Matthew Kean, Minister for Energy, pursuant to clause 7 of Schedule 2 of the *Electricity Supply Act 1995*, hereby vary the Licence held by the Licence Holder.

This is the third instrument of variation issued for the Licence.

**2 Commencement**

This Instrument of Variation commences on the day this Instrument is signed.

**3 Definitions**

In this Instrument of Variation:

**Licence** means the distributor's licence granted under section 14 of the *Electricity Supply Act 1995* to the Licence Holder to operate a distribution system that is a transacted distribution system under the *Electricity Network Assets (Authorised Transactions) Act 2015* effective on 1 December 2016.

**Licence Holder** means:

**Ausgrid Operator Partnership**, a partnership carried on under that name by:

- (a) **Blue Op Partner Pty Ltd** (ACN 615 217 500) as trustee for the **Blue Op Partner Trust**;
- (b) **ERIC Alpha Operator Corporation 1 Pty Ltd** (ACN 612 975 096) as trustee for **ERIC Alpha Operator Trust 1**;
- (c) **ERIC Alpha Operator Corporation 2 Pty Ltd** (ACN 612 975 121) as trustee for **ERIC Alpha Operator Trust 2**;
- (d) **ERIC Alpha Operator Corporation 3 Pty Ltd** (ACN 612 975 185) as trustee for **ERIC Alpha Operator Trust 3**; and
- (e) **ERIC Alpha Operator Corporation 4 Pty Ltd** (ACN 612 975 210) as trustee for **ERIC Alpha Operator Trust 4**.

**Previous Licence Conditions** means all the conditions of the Licence as in force immediately before the commencement of this Instrument of Variation.

**4 Variation of licence**

- (1) Omit the Previous Licence Conditions and substitute Schedule A.
- (2) Clause 4(1) does not:
  - (a) revive anything not in force or existing at the time this Instrument of Variation takes effect;
  - (b) affect the previous operation of the Previous Licence Conditions or anything done or begun, under or in accordance, with the Previous Licence Conditions; or
  - (c) affect a right, privilege or liability acquired, accrued or incurred under the Previous Licence Conditions.

**Date:**

**The Hon. Matthew Kean  
Minister for Energy**

## SCHEDULE A

### MINISTERIALLY IMPOSED LICENCE CONDITIONS FOR THE OPERATOR OF A TRANSACTED DISTRIBUTION SYSTEM

This schedule provides a list of conditions which the *Minister* has determined to impose pursuant to clause 6(1)(b) of Schedule 2 of the *Electricity Supply Act 1995* (the *Act*) on the operator of a *transacted distribution system* under the *Electricity Network Assets (Authorised Transactions) Act 2015*.

In addition to Ministerially-imposed conditions, licensees are subject to obligations imposed by the *Act*, *Regulations* and associated regulatory instruments which include (without limitation) an obligation to comply with requirements imposed by or under regulations made pursuant to section 5.6 of the *Environmental Planning and Assessment Act 1979*.

#### GENERAL CONDITIONS

##### 1 Operate within distribution district

- 1.1 At all times this *Licence* is in force, the *Licence Holder* must ensure that it and all other network operators of its *distribution system* only operate a *distribution system*:
- (a) within its *distribution district* as set out in Schedule 3 of the *Act*;
  - (b) within:
    - i. such other areas outside of its *distribution district* in which the *Licence Holder* operated a *distribution system* as at 1 December 2016; or
    - ii. any areas notified by the *Licence Holder* to the *Tribunal* and included on the register maintained by the *Tribunal* between 1 December 2016 and the date of commencement of the third instrument of variation issued for this *Licence*; and
  - (c) within such other *distribution district* outside of its *distribution district*, as agreed with the *distributor* for the other *distribution district*.
- 1.2 Where the *Licence Holder* has obtained agreement from another *distributor* to operate in the *distribution district* of such other *distributor*, the *Licence Holder* must:
- (a) make a record of the agreement which includes sufficient details to allow all assets that operate or are to be operated outside the *Licence Holder's distribution district* to be uniquely identified and located; and
  - (b) where the *Licence Holder* permanently removes or disconnects assets that were operating outside of its *distribution districts*, remove details of these assets from the record referred to in condition 1.2(a).

##### 2 National Electricity Market registration

At all times this *Licence* is in force, the *Licence Holder* must ensure that it and all other network operators of its *distribution system*:

- (a) are registered or exempt from the requirement to be registered as a Network Service
- (b) Provider under the National Electricity Rules; or
- (c) hold any equivalent authorisation or right of participation in any national electricity market, granted by the person responsible for the granting of such an authorisation

or right of participation under any legislation enacted for the purpose of introducing such a market.

### **3 Technical and prudential criteria**

The *Licence Holder* must, for the duration of this *Licence*, ensure that it and all other network operators of its *distribution system* satisfy the technical and prudential criteria that each entity is required to meet as a condition of its registration or exemption, or equivalent authorisation or right of participation in any national electricity market, referred to in condition 2.

### **4 Business continuity and disruptions**

- 4.1 The *Licence Holder* must have a documented system to ensure that it has adequate arrangements in place to identify, assess and manage business continuity risks and manage business disruptions relating to the operation of its *distribution system* (a *Business Continuity Plan*).
- 4.2 The *Licence Holder* must ensure that it and any other network operator of its *distribution system* implements and complies with the *Business Continuity Plan*.

### **5 Reliability and performance**

The *Licence Holder* must ensure that it complies with the *Reliability and Performance Standards*.

### **6 Critical infrastructure**

The *Licence Holder* must ensure that it and all other network operators of its *distribution system* comply with the *Critical Infrastructure Licence Conditions*.

## **CONDITIONS RELATING TO MANAGEMENT SYSTEMS**

### **7 Maintenance of certified management systems**

- 7.1 The *Licence Holder* must have and maintain:
  - (a) an asset management system that is consistent with *Australian Standard AS ISO 55001:2014 Asset Management – Management Systems – Requirements* (as in force from time to time) or other standard approved by the *Tribunal* on request of the *Licence Holder*; and
  - (b) an environmental management system that is consistent with *Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management system – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*,which comply with this condition 7.
- 7.2 The *Licence Holder* must ensure that:
  - (a) its asset management system is certified by an appropriately qualified person to be consistent with *Australian Standard AS ISO 55001:2014 Asset Management – Management Systems – Requirements* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*; and
  - (b) its environmental management system is certified by an appropriately qualified person to be consistent with *the Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management systems – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*.

- 7.3 The *Licence Holder* must ensure that the certification of its asset management system and its environmental management system in accordance with condition 7.2 is maintained for the duration of the *Licence*.

## **8 Implementation of management systems**

The *Licence Holder* must ensure that its asset management system and environmental management system are fully implemented, and all relevant activities undertaken by it or any other network operator of its *distribution system* are carried out in accordance with the relevant management system.

## **CONDITIONS RELATING TO COMPLIANCE, REPORTING AND FEES**

### **9 Reporting in accordance with Reporting Manuals**

The *Licence Holder* must prepare and submit reports in accordance with any *Reporting Manuals* issued by the *Tribunal*.

### **10 Complying with Audit Guidelines issued by the Tribunal**

The *Licence Holder* must comply with any *Audit Guidelines* issued by the *Tribunal*.

### **11 Compliance management systems**

The *Licence Holder* must ensure internal systems are developed and maintained that are capable of effectively managing compliance with its *Licence*.

### **12 Compliance with statistical operating obligations**

The *Licence Holder* must provide to the *Tribunal* such operating statistics and performance indicators as may be required from time to time by the *Tribunal*. The *Tribunal* will provide the *Licence Holder* with reasons for its request when the initial request is made and after that when a request relates to operating statistics and performance indicators that are of a materially different type or category to that provided under the initial or subsequent request.

### **13 Information about compliance with Licence Conditions**

The *Licence Holder* must provide to the *Tribunal* (at such times and in respect of such periods as the *Tribunal* may determine and in the manner and form specified by the *Tribunal*) such information as the *Tribunal* may determine, to enable the *Tribunal* to ascertain whether or not the *Licence Holder* is complying with the conditions of its *Licence*, the *Act* or the *Regulations*.

### **14 Compliance with Public Lighting Code**

The *Licence Holder* must ensure that it and all other network operators of its *distribution system* comply with the NSW Public Lighting Code published by the Department of Planning, Industry and Environment, as amended from time to time.

### **15 Compliance with audit directions**

- 15.1 The *Tribunal* may at any time direct the *Licence Holder*, by written notice, to engage an *Approved Auditor* at the expense of the *Licence Holder* to conduct an audit of, and prepare a report on, the *Licence Holder's* compliance with conditions imposed on it by this *Licence*, the *Act* or *Regulations*.
- 15.2 The *Licence Holder* must comply with any direction issued by the *Tribunal* under condition 15.1.
- 15.3 The *Licence Holder* must provide the *Approved Auditor's* report to the *Tribunal* by the date specified in the direction issued by the *Tribunal* under condition 15.1.

## 16 Licence fees

- 16.1 It is a condition of this *Licence* that the *Licence Holder* pay such fees (annual or otherwise) in connection with the holding of the *Licence* as maybe determined by the *Minister* from time to time.
- 16.2 The *Licence Holder* must pay the fees referred to in condition 16.1 in the manner and within the period specified by the *Tribunal*.

## INTERPRETATION AND DEFINITIONS

### Interpretation

In these *Licence* conditions, unless the context requires otherwise:

- (a) the singular includes the plural and vice versa;
- (b) headings are used for convenience only and do not affect the interpretation of these *Licence* conditions;
- (c) a reference to a document includes the document as modified from time to time and any document replacing it;
- (d) a reference to a person includes a natural person and any body or entity whether incorporated or not; and
- (e) references to conditions are references to conditions in these *Licence* conditions.

### Definitions

Expressions used in these *Licence* conditions that are defined in the *Act* or the *Regulations* have the meanings set out in the *Act* or the *Regulations*.

In these *Licence* conditions:

Act	means the <i>Electricity Supply Act 1995</i> .
Approved Auditor	means an auditor who has been approved by the <i>Tribunal</i> in accordance with any <i>Audit Guidelines</i> issued by the <i>Tribunal</i>
Approved Critical Infrastructure Auditor	means an auditor who has been approved by the <i>Tribunal</i> as having the necessary independence, experience, and expertise in system security or has otherwise demonstrated to the <i>Tribunal's</i> satisfaction the capability to audit compliance with the <i>Critical Infrastructure Licence Conditions</i> and who is independent of the <i>Licence Holder</i> .
Associate	has the meaning given to that term in the <i>Corporations Act 2001</i> (Cth).
Audit Guidelines	means any document setting out audit requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.
Bulk Personal Data Records	means any holdings or files of personal information (within the meaning of the <i>Privacy Act 1988</i> (Cth)) about multiple individuals which contain fields or categories.
Business Continuity Plan	has the meaning given to it condition 4.1.
CBD Sydney feeder	means a <i>feeder</i> forming part of the triplex 11kV cable system supplying predominantly commercial high-rise buildings, within

	the City of Sydney.
Commonwealth Representative	means the First Assistant Secretary, with responsibility for critical infrastructure security within the Commonwealth or equivalent level in a subsequent agency with responsibility for critical infrastructure security. <i>Note: At the time of varying this Licence, the Commonwealth Representative is the First Assistant Secretary responsible for the Cyber and Infrastructure Security Centre within the Commonwealth Department of Home Affairs.</i>
Connection point	means in relation to the premises of a <i>customer</i> or a class of <i>customers</i> , the point of connection to an electrical installation supplying electricity to the premises as determined in accordance with the <i>Service and Installation Rules of New South Wales</i> , as in force from time to time, published by the Department of Planning, Industry and Environment.
Critical Infrastructure Licence Conditions	means the conditions set out in Appendix 2 to these conditions.
Customer	means a wholesale or retail customer who is supplied electricity through a <i>connection point</i> on an electricity distributor's system.
Customer service standards	means the <i>customer service standards set out</i> in condition 4 of Appendix 1 to these conditions.
Distribution district	has the meaning given to it in the Dictionary to the <i>Act</i> .
Distribution system	means the <i>distribution system</i> of which the <i>Licence Holder</i> is a network operator.
Distributor	has the meaning given to it in the Dictionary to the <i>Act</i> .
Emergency service organisation	has the same meaning as section 3 of the <i>State Emergency and Rescue Management Act 1989</i> .
Excluded interruptions	means excluded interruptions listed in Appendix 1 to these Conditions (see 6.3 'Excluded Interruptions').
Feeder	means a high-voltage line operating at over 1kV and generally at or below 22 kV that connects between a zone substation and a distribution substation.
Feeder type	means a <i>CBD Sydney feeder, long rural feeder, short rural feeder or urban feeder</i> as the case may be.
Financial year	means the period commencing on 1 July and ending 30 June the following calendar year.
First issue of this Licence	or <i>First issue of these conditions</i> refers to the date of the first issue of this <i>Licence</i> being 1 December 2016.
Individual customer standards	means the individual customer standards in Table 8 of Appendix 1 to these conditions.
Individual feeder standards	mean the individual feeder standards in Tables 3 and 4 of Appendix 1 to these conditions.

Interruption	means any temporary unavailability of electricity supply to a <i>customer</i> associated with an outage of the <i>distribution system</i> including outages affecting a single premises but does not include disconnection.
Interruption duration standards	means the interruption duration standards set out in Appendix 1 to these conditions (see 6.4, 'Customer Service Standards').
Interruption frequency standards	means the interruption frequency standards set out in Appendix 1 to these conditions (see 6.4, 'Customer Service Standards').
Licence	means the distributor's licence authorising the <i>Licence Holder</i> to operate its <i>distribution system</i> .
Licence Holder	means a person who is the holder of a <i>Licence</i> .
Load Data	means data as to the quantum of electricity delivered (both historical and current load demand from or to any one or more sites (or their <i>connection points</i> ) which satisfies each of the following criteria: <ul style="list-style-type: none"> <li>i. it is not historical load data older than 30 days;</li> <li>ii. it is not fault data;</li> <li>iii. it describes a location that allows a <i>customer(s)</i> or <i>connection point(s)</i> to be identified;</li> <li>iv. it describes the date and time of the data record; and</li> <li>v. it describes a duration - a length of time that allows for a quantum to exist.</li> </ul>
Local government area	has the same meaning as 'area' in Chapter 9 of the <i>Local Government Act 1993</i> .
Long rural feeder	means a <i>feeder</i> with a total <i>feeder</i> length greater than 200 km which is not a <i>CBD Sydney feeder</i> or an <i>urban feeder</i> .
Major event day	has the meaning given in Appendix 1 to these conditions (see 6.5, 'Major Event Day').
Metropolitan	means the areas comprising the <i>local government areas</i> and <i>suburbs</i> listed in Tables 6 and 7 of Appendix 1 to these conditions, but only to the extent that the <i>Licence Holder</i> may operate a <i>distribution system</i> in the relevant areas in accordance with condition 1.
Minister	means the Minister responsible for administering the <i>Act</i> .
Minutes interrupted	means the total number of minutes from any <i>interruption</i> to a <i>customer</i> over the relevant 12 month period.
Network overall reliability standards	means the requirements imposed under condition 1 of Appendix 1 to these conditions.
Non-metropolitan	means areas in NSW other than areas defined as <i>metropolitan</i> .
Number of interruptions	means the total number of times there is an <i>interruption</i> to a <i>customer</i> over the relevant 12 month period.
Planned interruption	means an <i>interruption</i> that has been planned by the <i>Licence Holder</i> .



Protocol	means a document of the type referred to in conditions 1.1 and 1.2 of Appendix 2 to these conditions, that is required by the Commonwealth and which must be agreed to between the <i>Commonwealth Representative</i> and the <i>Licence Holder</i> . The document may set out (among other things) the: <ul style="list-style-type: none"> <li>i. specified purposes for which maintenance of <i>distribution system</i> equipment may be conducted offshore and the circumstances in which it may be conducted offshore;</li> <li>ii. methodology and activities to be undertaken to allow for maintenance and repairs of <i>distribution system</i> equipment to be carried out involving remote access from offshore;</li> <li>iii. the exceptional circumstances in which the <i>Protocol</i> applies; and</li> <li>iv. activities and processes which achieve requisite levels of cyber-security.</li> </ul>
Quarter	means a period of three months commencing 1 January, 1 April, 1 July and 1 October and concluding on the following 31 March, 30 June, 30 September and 31 December dates respectively.
Regulations	means regulations made under the <i>Act</i> .
Relevant Person	means the <i>Licence Holder</i> , any other network operator of the <i>distribution system</i> , and any person who is contracted or sub-contracted by the <i>Licence Holder</i> to work on the <i>distribution system</i> .
Reliability and Performance Standards	means the conditions set out in Appendix 1 to these conditions.
Reporting Manual	means any document setting out reporting requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.
SAIDI	means the average derived from the sum of the durations of each sustained customer interruption (measured in minutes), divided by the total number of <i>customers</i> (averaged over the <i>financial year</i> ) of the <i>Licence Holder</i> .
SAIDI average standards	means the standards set out in Table 1 of Appendix 1 to these conditions.
SAIFI	means the average derived from the total number of sustained customer interruptions divided by the total number of <i>customers</i> (averaged over the <i>financial year</i> ) of the <i>Licence Holder</i> .
SAIFI average standards	means the standards set out in Table 2 of Appendix 1 to these conditions.
Short rural feeder	means a <i>feeder</i> with a total <i>feeder</i> route length less than 200 km, and which is not a <i>CBD Sydney feeder</i> or an <i>urban feeder</i> .

Suburb	means an area defined by boundaries determined and gazetted by the Geographical Names Board of New South Wales.
Transacted distribution system	means a transacted distribution system under the <i>Electricity Network Assets (Authorised Transactions) Act 2015</i> .
Tribunal	means the Independent Pricing and Regulatory Tribunal of New South Wales established under the <i>Independent Pricing and Regulatory Tribunal Act 1992</i> .
Urban feeder	means a <i>feeder</i> with actual maximum demand over the reporting period per total <i>feeder</i> route length greater than 0.3 MVA/km and which is not a <i>CBD Sydney feeder</i> .

## APPENDIX 1 – RELIABILITY AND PERFORMANCE STANDARDS

### 1 Network overall reliability standards

- 1.1 A Licence Holder must not, when *excluded interruptions* are disregarded, exceed in a financial year the SAIDI average standards that apply to its feeder types.
- 1.2 A Licence Holder must not, when *excluded interruptions* are disregarded, exceed in a financial year the SAIFI average standards that apply to its feeder types.

### 2 Individual feeder performance

- 2.1 This condition 2 of this Appendix 1 applies where one or more of the *feeders* of a Licence Holder exceed the relevant *individual feeder standards* for any 12 month period ending at the end of March, June, September or December, when *excluded interruptions* are disregarded.
- 2.2 A Licence Holder must:
- (a) investigate the causes for each *feeder* exceeding the *individual feeder standards*;
  - (b) by the end of the *quarter* following the *quarter* in which the *feeder* first exceeded the *individual feeder standards*, complete an investigation report identifying the causes and as appropriate, any action required to improve the performance of each *feeder* to the *individual feeder standards*;
  - (c) complete any operational actions identified in the investigation report to improve the performance of each *feeder* against the *individual feeder standards* by the end of the third *quarter* following the *quarter* in which each *feeder* first exceeded the *individual feeder standards*;
  - (d) except as permitted by condition 2.2(e) of this Appendix 1, where the investigation report identifies actions, other than operational actions, required to improve the performance of each *feeder* to the *individual feeder standards*, develop a project plan, including implementation timetable, and commence its implementation by the end of the second *quarter* following the *quarter* in which the *feeder* first exceeded the *individual feeder standards*;
  - (e) consider non-network strategies which provide reliable outcomes for *customers*. Where found by the investigation report to be equal or more cost-effective than the lowest cost feasible network option such strategies shall be adopted rather than network augmentation options;
  - (f) ensure that the implementation timetable for the project plan or alternative non-network solutions is as short as is reasonably practicable; and
  - (g) where all reasonable steps to improve supply reliability have been taken, the costs of further actions to rectify the non-compliance must be subject to a cost benefit analysis. Where such analysis does not provide a positive benefit, no further action will be taken to improve the *feeder's* performance and the ongoing non-conformance with the *individual feeder standards* will be reported to the Minister by the Licence Holder.
- 2.3 The investigation report is to include a documented rectification plan where action is found to be justified in order to improve the performance of a *feeder* to the *individual feeder standards*. The action that is required may involve work to other network elements or may involve only repair or

maintenance work where capital works are not warranted and take into account any one-off events and previous performance trends.

### **3 Reliability provided to individual customers**

- 3.1 This condition 3 of this Appendix 1 does not apply to a *connection point* supplied by a *Licence Holder's feeder* to which condition 2 of this Appendix 1 applies.
- 3.2 Where the *minutes interrupted* exceed the relevant *individual customer standards* in any 12 month period ending at the end of March, June, September or December, when *excluded interruptions* are disregarded, the *Licence Holder* must comply with condition 3.4.
- 3.3 Where the *number of interruptions* exceed the relevant *individual customer standards* in any 12 month period ending at the end of March, June, September or December, when *excluded interruptions* are disregarded, the *Licence Holder* must comply with condition 3.4.
- 3.4 A *Licence Holder* must:
- (a) investigate the causes for the *minutes interrupted* or *number of interruptions* (as the case may be) exceeding the *individual customer standards*;
  - (b) by the end of the *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) first exceeded the *individual customer standards*, complete an investigation report that must:
    - (i) identify the causes for exceeding the *individual customer standards*;
    - (ii) as appropriate, identify any action required to improve performance against the *individual customer standards*; and
    - (iii) consider the terms of the connection contract (including network security arrangements) agreed with the *customer* of the affected *connection point*, including when the *customer* was connected to the *distribution system*;
  - (c) complete any operational actions identified in the investigation report to improve performance against the *individual customer standards* by the end of the third *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) first exceeded the *individual customer standards*;
  - (d) except as permitted by condition 3.4(e) of this Appendix 1, where the investigation report identifies actions, other than operational actions, required to improve performance against the *individual customer standards*, develop a project plan, including implementation timetable, and commence its implementation by the end of the fourth *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) exceeded the *individual customer standards*;
  - (e) consider non-network strategies which provide reliable outcomes for *customers*. Where found by the investigation report to be equal or more cost-effective than the lowest cost feasible network option such strategies shall be adopted rather than network augmentation options;
  - (f) ensure that the implementation timetable for the project plan or alternative non network solutions is as short as is reasonably practicable; and

- (g) where all reasonable steps to improve supply reliability have been taken, the costs of further actions to rectify the non-compliance must be subject to a cost benefit analysis. Where such analysis does not provide a positive benefit, no further action will be taken to improve the *minutes interrupted* or *number of interruptions* (as the case may be) and the ongoing non-conformance with the *individual customer standards* will be reported to the *Minister* by the *Licence Holder*.
- 3.5 The investigation report is to include a documented rectification plan where action is found to be justified in order to improve the *minutes interrupted* or *number of interruptions* (as the case may be) against the *individual customer standards*. The action that is required may involve work to other network elements, or may involve only repair or maintenance work where capital works are not warranted and take into account any one-off events and previous performance trends.
- #### 4 Customer service standards
- 4.1 A *Licence Holder* must pay the sum of \$80 to a *customer* on each occasion when the *Licence Holder* exceeds the *interruption duration standard* at the *customer's* premises and the *customer* has made a claim to the *Licence Holder* within three months of the *interruption* ceasing.
- 4.2 A *Licence Holder* must pay the sum of \$80 to a *customer* where the *Licence Holder* exceeds the *interruption frequency standard* at the *customer's* premises in a *financial year* and the *customer* has made a claim to the *Licence Holder* within three months of the end of the *financial year* to which the *interruptions* relate.
- 4.3 A *Licence Holder* must determine a claim for payment under this condition 4 of this Appendix 1, and notify the *customer* of the determination in writing, within one month of receipt of a claim. For *customers* eligible for payment, the notice of determination must include the amount to be paid, the manner of payment and the timing of payment. Where the claim is not paid (whether in part or in full), the notice of determination must include reasons for the decision.
- 4.4 A *Licence Holder* is required to take reasonable steps to make *customers* aware of the availability of payments on the terms set out in this condition 4 of this Appendix 1. Reasonable steps include, as a minimum, publication of information on the *Licence Holder's* website and annual newspaper advertisements. On request from a *customer*, a *Licence Holder* must provide written information on the availability of payments on the terms set out in this condition 4 of this Appendix 1.
- 4.5 A *Licence Holder* is required to make only one payment of \$80 to a *customer* per premises in a *financial year* for exceeding the *interruption frequency standard*.
- 4.6 A *Licence Holder* is required to pay no more than \$320 under this condition 4 of this Appendix 1 to a *customer* per premises in any one *financial year*.
- 4.7 A payment under this condition 4 of this Appendix 1 does not:
- (a) in any way alter or diminish any rights that a *customer* may have against any person under any trade practices or other applicable legislation, common law or contract;
  - (b) represent any admission of legal liability by the *Licence Holder*; or
  - (c) alter, vary or exclude the operation of section 119 of the *National Electricity Law* or any other statutory limitations on liability or immunities applicable to a *Licence Holder*.

- 4.8 *Customers* who are eligible for payments under this condition 4 of this Appendix 1 are limited to those *customers* who are supplied electricity through a metered *connection point* on an electricity *distributor's* system.

## 5 Performance monitoring and reporting

### Network overall reliability standards report

- 5.1 A *Licence Holder* must submit a *network overall reliability standards* quarterly report to the *Tribunal* within one month of the end of each *quarter*.
- 5.2 Each *network overall reliability standards* report must include the following matters for the previous 12 month period to the end of that *quarter*:
- (a) performance against the *SAIDI average standards* and *SAIFI average standards* by *feeder type*, disregarding *excluded interruptions*;
  - (b) reasons for any non-compliance by the *Licence Holder* with the *network overall reliability standards* and plans to improve performance; and
  - (c) any other matter notified by the *Tribunal* in writing.

### Individual feeder standards report

- 5.3 A *Licence Holder* must submit, within one month of the end of each *quarter*, a quarterly *individual feeder standard* report to the *Tribunal* on *feeders* that exceeded the relevant *individual feeder standards* during the previous 12-month period to the end of that *quarter*, together with, for each *feeder*:
- (a) the date at which the *feeder* first exceeded the relevant *individual feeder standard*, together with the actual *SAIDI* and *SAIFI* performance of the *feeder* for the 12-month period;
  - (b) details of the remedial action that the *Licence Holder* intends taking, or has taken, to improve the performance of those *feeders*;
  - (c) either of the following:
    - (i) the date of completion, or the date of planned completion, of the remedial action plan; or
    - (ii) details of the investigation and action proposed or undertaken leading to the decision to advise the *Tribunal* that it is not economically justifiable to bring the *feeder* performance into compliance with the *individual feeder standards*; and
  - (d) any other matter notified by the *Tribunal* in writing.

### Individual customer standards report

- 5.4 A *Licence Holder* must submit, within one month of the end of each *quarter*, a quarterly *individual customer standards* report to the *Tribunal* on instances where conditions 3.2 and/or 3.3 of this Appendix 1 applied, together with the following details:
- (a) the date at which the *minutes interrupted* or *number of interruptions* (as the case may be) exceeded the *individual customer standard*, together with the actual *minutes interrupted* or *number of interruptions* for the affected *connection point* for the 12 month period;
  - (b) details of the remedial action that the *Licence Holder* intends taking, or has taken, to improve compliance with the *individual customer standards*;
  - (c) if applicable, the date of completion, or the date of planned completion, of the remedial action plan; and

- (d) if applicable, details of the investigation and action proposed or undertaken leading to the decision to advise the *Tribunal* that it is not economically justifiable to bring the *minutes interrupted* or *number of interruptions* (as the case may be) for the affected *connection point* into compliance with the *individual customer standards*; and
- (e) any other matter notified by the *Tribunal* in writing.

#### **Customer service standards report**

- 5.5 A *Licence Holder* must submit a quarterly *customer service standard* report to the *Tribunal* on the following matters within one month of the end of each *quarter*, for the preceding *quarter* and for the previous 12 month period to the end of that *quarter*:
- (a) the number of payments given under condition 4 of this Appendix 1 to *customers* by each type of area listed in Column 1 of Table 5 of this Appendix 1 and by the type of standard, as shown in Columns 2 and 3 of Table 5 of this Appendix 1;
  - (b) the number of claims not paid (whether in part or full) under condition 4 of this Appendix 1 by each type of area listed in Column 1 of Table 5 of this Appendix 1 and by the type of standard, as shown in Columns 2 and 3 of Table 5 of this Appendix 1; and
  - (c) any other matter notified by the *Tribunal* in writing.

#### **Incident reporting**

- 5.6 A *Licence Holder* must prepare and submit reports on any incident in accordance with any *Reporting Manuals* issued by the *Tribunal*.

#### **Independent audit report**

- 5.7 An independent audit must be conducted after the end of each *financial year* to audit the *Licence Holder's* performance against the:
- (a) *network overall reliability standards*;
  - (b) *individual feeder standards*;
  - (c) *individual customer standards*; and
  - (d) *customer service standards*.
- 5.8 The audit must be conducted in accordance with any *Audit Guidelines* issued by the *Tribunal*.
- 5.9 A *Licence Holder* is required to nominate a person to conduct the independent audit by written notice given to the *Tribunal* in accordance with auditor nomination procedures published in any *Audit Guidelines* issued by the *Tribunal*.
- 5.10 The person nominated to conduct the independent audit is to be a person who is:
- (a) independent of the *Licence Holder*; and
  - (b) competent to exercise the functions of an auditor in respect of the matters to be audited.

- 5.11 The nomination of an auditor by a *Licence Holder* ceases to have effect if the *Tribunal* advises the *Licence Holder*, by notice in writing, that the nomination is not acceptable or has ceased to be acceptable.
- 5.12 The *Tribunal* may nominate an auditor to carry out an audit, and the person so nominated is taken to have been nominated by the *Licence Holder*, if:
- (a) the nomination of an auditor by the *Licence Holder* ceases to have effect; or
  - (b) the *Licence Holder* fails to nominate an auditor to carry out the audit in accordance with any requirements specified by the *Tribunal* by notice in writing to the *Licence Holder*.
- 5.13 A *Licence Holder* must provide a copy of the auditor's report by 30 September each year to the *Tribunal*.

### General matters concerning reports

- 5.14 Where the *Tribunal* determines the format of a report required by this condition 5 of this Appendix 1, a *Licence Holder* must submit the report in that format.
- 5.15 The *Tribunal* may from time to time publish requirements to be followed by the *Licence Holder* in respect of reports required by this condition and the *Licence Holder* must comply with any such requirements.
- 5.16 The *Tribunal* may from time to time require, by notice in writing to the *Licence Holder*, further reports relating to these *Licence* conditions including, without limitation, reports relating to capital expenditure works, network refurbishment and maintenance programs.
- 5.17 A *Licence Holder* must provide a report submitted to the *Tribunal* under this condition 5 of this Appendix 1 to the *Minister*, if requested to do so by the *Minister* by notice in writing.

## 6 Definitions

### 6.1 NETWORK OVERALL RELIABILITY STANDARDS

Table 1: SAIDI Average Reliability Duration Standards (Minutes per customer)

<b>SAIDI (Minutes per customer)</b>	
<b>AUSGRID</b>	
<b>Feeder type</b>	
<i>CBD Sydney</i>	45
<i>Urban</i>	80
<i>Short-rural</i>	300
<i>Long-rural</i>	700



**Table 2: SAIFI Average Reliability Interruption Standards (Number per customer)**

<b>SAIFI (Number per customer)</b>	
<b>AUSGRID</b>	
<b>Feeder type</b>	
<i>CBD Sydney</i>	0.3
<i>Urban</i>	1.2
<i>Short-rural</i>	3.2
<i>Long-rural</i>	6

## 6.2 INDIVIDUAL FEEDER STANDARDS

**Table 3: SAIDI Individual Feeder Average Reliability Duration Standards (Minutes per customer)**

<b>SAIDI (Minutes per customer)</b>	
<b>AUSGRID</b>	
<b>Feeder type</b>	
<i>CBD Sydney</i>	100
<i>Urban</i>	350
<i>Short-rural</i>	1000
<i>Long-rural</i>	1400

**Table 4: SAIFI Individual Feeder Standard Average Reliability Interruption Standards (Number per customer)**

<b>SAIFI (Number per customer)</b>	
<b>AUSGRID</b>	
<b>Feeder type</b>	
<i>CBD Sydney</i>	1.4
<i>Urban</i>	4
<i>Short-rural</i>	8
<i>Long-rural</i>	10

## 6.3 EXCLUDED INTERRUPTIONS

The following types of *interruptions* (and no others) are *excluded interruptions*:

- (a) an *interruption* of a duration of three minute or less;
  - (b) an *interruption* resulting from:
    - (i) load shedding due to a shortfall in generation;
    - (ii) a direction or other instrument issued under the *National Electricity Law*, *Energy and Utilities Administration Act 1987*, the *Essential Services Act 1988* or the *State Emergency and Rescue Management Act 1989* to interrupt the supply of electricity;
    - (iii) automatic shedding of load under the control of under-frequency relays following the occurrence of a power system under-frequency condition described in the *Power System Security and Reliability Standards* made under the *National Electricity Rules*;
- or

- (iv) a failure of the shared transmission system;
- (c) a *planned interruption*;
- (d) any *interruption* to the supply of electricity on a *Licence Holder's distribution system* which commences on a *major event day*; and
- (e) an *interruption* caused by a *customer's* electrical installation or failure of that electrical installation.

## 6.4 CUSTOMER SERVICE STANDARDS

### ***Interruption duration standard:***

1. The *interruption duration standard* is the maximum duration, set out in column 2 of Table 5, of an *interruption* to a *customer's* premises located in the relevant area in column 1 of Table 5.

### ***Interruption frequency standard:***

2. The *interruption frequency standard* is the maximum *number of interruptions* in a *financial year* set out in column 3 of Table 5, to a *customer's* premises located in the relevant area in column 1 of Table 5:

**Table 5**

Column 1	Column 2	Column 3
Type of area in which <i>customer's</i> premises is located	<i>Interruption duration standard (hours)</i>	<i>Interruption frequency standard (number of interruptions and hours of duration)</i>
<i>metropolitan</i>	12	4 <i>interruptions</i> of greater than or equal to 4 hours
<i>non-metropolitan</i>	18	4 <i>interruptions</i> of greater than or equal to 5 hours

### **Interruptions to be disregarded**

3. In calculating the *interruption duration standard* or the *interruption frequency standard* the following types of *interruptions* (and no others) are excluded:
  - (a) an *interruption* resulting from the following external causes:
    - (i) a shortfall in generation;
    - (ii) a failure or instability of the shared *transmission system*; or
    - (iii) a request or direction from an *emergency service organisation*;
  - (b) a *planned interruption*;
  - (c) an *interruption* within a region in which a natural disaster has occurred and:
    - (i) the responsible *Minister* has made a declaration of a natural disaster enabling the NSW disaster assistance arrangements to apply in respect of that natural disaster for that region; and
    - (ii) the *interruption* occurred during the period for which a declaration of Natural Disaster and NSW Disaster Assistance Arrangements were in effect;
  - (d) an *interruption* caused by the effects of a severe thunderstorm or severe weather as

advised by the Bureau of Meteorology. These effects may include the necessary operation of a circuit protection device which interrupts supply to *customers* in areas not directly impacted by the severe thunderstorm or severe weather; and

- (e) an *interruption* caused by third party actions other than animal or vegetation interference (e.g. vehicle-hit-pole, vandalism) where the *interruption* is not also caused by any failure of the *Licence Holder* to comply with relevant plans, codes, guides or standards (e.g. low conductor clearance).

## 6.5 MAJOR EVENT DAY

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### Explanation and Purpose

The following process (“Beta Method”) is used to identify *major event days* which are to be excluded from the *network overall reliability standards*, *individual feeder standards* and *individual customer standards*. The method is to be used provided that the natural log transformation of the data results closely resembles a Gaussian (normal) distribution. Where this is not the case, the *Licence Holder* may seek the *Tribunal’s* approval to apply a different threshold value.

Its purpose is to allow major events to be studied separately from daily operation, and in the process, to better reveal trends in a daily operation that would be hidden by the large statistical effect of major events.

A *major event day* under the Beta Method is one in which the daily total system (i.e. not on a *feeder type* basis) *SAIDI* value (“daily *SAIDI* value”) exceeds a threshold value, *TMED*. The *SAIDI* is used as the basis of determining whether a day is a *major event day* since it leads to consistent results regardless of utility size and because *SAIDI* is a good indicator of operational and design stress.

In calculating the daily total system *SAIDI*, any *interruption* that spans multiple days is deemed to accrue on the day on which the *interruption* begins. That is, all minutes without supply resulting from an *interruption* beginning on a *major event day* are deemed to have occurred in the *major event day*, including those minutes without supply occurring on following days.

### Determining a major event day

The *major event day* identification threshold value *TMED* is calculated at the end of each *financial year* for each *Licence Holder* for use during the next *financial year* as follows:

- (a) Collect daily *SAIDI* values for the last five *financial years*. If fewer than five years of historical data are available, use all available historical data for the lesser period.
- (b) Only those days that have a daily *SAIDI* value will be used to calculate the *TMED* (i.e. days that did not have any *interruptions* are not included).
- (c) Take the natural logarithm (ln) of each daily *SAIDI* value in the data set.
- (d) Find  $\alpha$  (Alpha), the average of the logarithms (also known as the log-average) of the dataset.
- (e) Find  $\beta$  (Beta), the standard deviation of the logarithms (also known as the log-standard deviation) of the dataset.
- (f) Complete the *major event day* threshold *TMED* using the following equation:  

$$TMED = e^{(\alpha + 2.5\beta)}$$
- (g) Any day with daily *SAIDI* value greater than the threshold value *TMED* which occurs during the subsequent *financial year* is classified as a *major event day*.

### Treatment of a major event day

To avoid doubt, a *major event day*, and all *interruptions* beginning on that day, are excluded from the calculation of a *Licence Holder SAIDI* and *SAIFI* in respect of all of its *feeder types*.

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## 6.6. METROPOLITAN AREAS

Table 6 Local Government Areas		
ASHFIELD	HUNTERS HILL	PITTWATER
AUBURN	HURSTVILLE	RANDWICK
BANKSTOWN	KOGARAH	ROCKDALE
BAULKHAM HILLS	KU-RING-GAI	RYDE
BLACKTOWN	LAKE MACQUARIE	SHELLHARBOUR
BOTANY BAY	LANE COVE	STRATHFIELD
BURWOOD	LEICHHARDT	SUTHERLAND
CAMDEN	LIVERPOOL	SYDNEY
CAMPBELLTOWN	MANLY	WARRINGAH
CANTERBURY	MARRICKVILLE	WAVERLEY
CANADA BAY	MOSMAN	WILLOUGHBY
FAIRFIELD	NEWCASTLE	WOLLONGONG
GOSFORD	NORTH SYDNEY	WOOLLAHRA
HOLROYD	PARRAMATTA	WYONG
HORNSBY	PENRITH	

Table 7 Suburbs	
A. Blue Mountains area	
BLACKHEATH	LINDEN
BLAXLAND	MEDLOW BATH
BULLABURRA	MOUNT RIVERVIEW
FAULCONBRIDGE	MOUNT VICTORIA
GLENBROOK	SPRINGWOOD
HAWKESBURY HEIGHTS	VALLEY HEIGHTS
HAZELBROOK	WARRIMOO
KATOOMBA	WENTWORTH FALLS
LAPSTONE	WINMALEE
LAWSON	WOODFORD
LEURA	YELLOW ROCK

<b>B. Cessnock-Bellbird area</b>	
ABERDARE	CESSNOCK
BELLBIRD	KEARSLEY
BELLBIRD HEIGHTS	NULKABA
<b>C. Kiama area</b>	
BOMBO	KIAMA HEIGHTS
KIAMA	MINNAMURRA
KIAMA DOWNS	
<b>D. Kurri Kurri-Weston area</b>	
ABERMAIN	PELAW MAIN
HEDDON GRETA	STANFORD MERTHYR
KURRI KURRI	WESTON
NEATH	
<b>E. Maitland area</b>	
ABERGLASSLYN	MOUNT DEE
ASHTONFIELD	OAKHAMPTON
BOLWARRA	OAKHAMPTON HEIGHTS
BOLWARRA HEIGHTS	PITNACREE
EAST MAITLAND	RAWORTH
HORSESHOE BEND	RUTHERFORD
LARGS	SOUTH MAITLAND
LORN	TELARAH
LOUTH PARK	TENAMBIT
MAITLAND	THORNTON
METFORD	WOODBERRY
MORPETH	

<b>F. Newcastle Industrial area</b>	
FERN BAY	WILLIAMTOWN
FULLERTON COVE	
<b>G. Port Stephens area</b>	
CORLETTE	SALAMANDER BAY
FINGAL BAY	SHOAL BAY
NELSON BAY	SOLDIERS POINT
<b>H. Raymond Terrace area</b>	
HEATHERBRAE	TOMAGO
RAYMOND TERRACE	
<b>I. Richmond-Windsor area</b>	
BLIGH PARK	NORTH RICHMOND
CLARENDON	RICHMOND
HOBARTVILLE	SOUTH WINDSOR
MCGRATHS HILL	VINEYARD
MULGRAVE	WINDSOR

## 6.7 INDIVIDUAL CUSTOMER STANDARDS

**Table 8**

The *minutes interrupted* and *number of interruptions* will be measured at the *connection point* for each customer.

Type of area in which the affected <i>connection point</i> is located	<i>Minutes interrupted</i>	<i>Number of interruptions</i>
<i>Metropolitan</i>	350	4
<i>Non-Metropolitan</i>	1000	8

## APPENDIX 2 – CRITICAL INFRASTRUCTURE LICENCE CONDITIONS

*For the purposes of conditions 1, 2 and 3 of this Appendix 2 of this Licence, it is acknowledged that the assets which the Licence Holder operates may constitute "critical infrastructure" being those physical facilities, supply chains, information technologies and communication networks which, if destroyed, degraded or rendered unavailable for an extended period, would significantly impact on the security, social or economic wellbeing of the State of New South Wales and other States and Territories which are from time to time electrically interconnected with New South Wales and other States and Territories. The Licence conditions in this Appendix 2 will be reviewed by the Minister from time to time (and where necessary) in consultation with responsible Ministers of the Commonwealth and relevant States and Territories. According to its own legislation and policy, the Commonwealth may require a Licence Holder to agree to certain arrangements. The Licence Holder should also establish procedures for sharing national security threats with the Critical Infrastructure Centre and action received information on a good-faith basis.*

### 1 Substantial presence in Australia

- 1.1 Except to the extent allowed for under the *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder* must take all practical and reasonable steps to ensure:
- (a) the maintenance of its *distribution system* is undertaken solely from within Australia, except where maintenance requires either physical servicing of components offshore or the acquisition of replacement components from outside Australia. In such an instance, it is the responsibility of the senior officer responsible for network operations to ensure this maintenance does not impact condition 1.2 in this Appendix 2; and
  - (b) that any third party or non-*Licence Holder* employee, including individuals/entities from outside Australia, undertaking maintenance of the *distribution system* is subject to the approval of the senior officer responsible for network operations.
- 1.2 Except to the extent that the *Licence Holder* is undertaking steps in accordance with, and for the duration of a *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder*:
- (a) must, by using best industry practice for electricity network control systems, ensure that operation and control of its *distribution system*, including all associated ICT infrastructure, can be accessed, operated and controlled only from within Australia, and that its *distribution system* is not connected to any other infrastructure or network which could enable it to be controlled or operated by persons outside Australia; and
  - (b) must notify the *Commonwealth Representative* in advance of any engagement with the market to procure a contract under which it outsources the operation and control of its *distribution system*, including any ICT infrastructure associated with the operation and control of its *distribution system*.
- Note:** *For the purposes of Licence condition 1.2(a) of this Appendix 2;*
- Best industry practice includes access required by relevant Australian regulators and market and system operators to meet the Licence Holder's obligations under Australian law.*
- 1.3 The *Licence Holder* must:
- (a) have at least two directors who are Australian citizens; and
  - (b) have senior officers responsible for (notwithstanding their title):
    - (i) operational technology;

- (ii) network operations; and
- (iii) security operations

in relation to its *distribution system*,

who are persons residing in Australia and hold an appropriate national security clearance, being a clearance of not less than Negative Vetting Level 1 (or equivalent) issued by the NSW Government on advice from the Australian Government Security Vetting Agency (AGSVA).

**Note:** For the purposes of Licence condition 1.3(b) of this Appendix 2:

*The senior officer responsible for operational technology is the officer whose responsibilities include:*

- *Delivering the Supervisory Control and Data Acquisition (SCADA) capability required to safely and reliably operate the NSW distribution system;*
- *Developing and implementing strategies to manage cyber security and other threats affecting the network operational technology environment; and*
- *Developing systems for effectively managing assets remotely, including but not limited to network switches, condition monitoring and remote interrogation or operation of protection systems and relays; and*

*The senior officer responsible for network operations, is the officer whose responsibilities include:*

- *The day to day operation, monitoring and maintenance of the distribution system; and*
- *Directing the operational planning, management, control and security of the distribution system.*

*The senior officer responsible for security operations, is the officer whose responsibilities include:*

- *Approval for the Licence Holder's personnel or other nominated personnel to access the Licence Holder's information systems or physical access to the Licence Holder's premises and associated infrastructure;*
- *Personnel security; and*
- *Managing relationships with Commonwealth and state government agencies.*

**Note:** *The above responsibilities may be held by a single officer or shared between more than one officer. Where the responsibilities are shared between more than one officer, the relevant senior officer responsibility contemplated in condition 1.1(a) of this Appendix 2 is the joint responsibility of the multiple officers and the approval contemplated in condition 1.1(b) of this Appendix 2 must be obtained from each of those officers.*

1.4 The *Licence Holder* is not in breach of its obligations under:

- (a) condition 1.3(a) of this Appendix 2 if, in the case of a casual vacancy on the board of directors, the vacancy is filled within two months of the casual vacancy first occurring; and



- (b) condition 1.3 of this Appendix 2 if, following:
  - (i) the *first issue of these conditions* to the *Licence Holder*; or
  - (ii) any position identified in condition 1 of this Appendix 2 being vacated or the relevant person ceasing to satisfy the qualifications set out there for any reason, the *Licence Holder*.
  - (iii) procures the appointment of a person to the relevant position that the *Licence Holder* bona fide believes will be able to obtain the required security clearance; and
  - (iv) has procured that the person applies for the required security clearance.

1.5 The exception in condition 1.4(b) of this Appendix 2 ceases to apply to the *Licence Holder* if:

- (a) an appointment and application for national security clearance for the person is not made within 4 months of (as relevant) the *first issue of these conditions* or the relevant vacancy or disqualification occurring; or
- (b) if the application referred to in condition 1.5(a) of this Appendix 2 is made and is rejected or withdrawn, the *Licence Holder* does not procure a replacement application being made within 4 months of that rejection or withdrawal; or
- (c) the *Licence Holder* does not procure compliance with condition 1.3(b) of this Appendix 2 in any event with respect to any position within 8 months (or such longer period as approved in writing by the *Minister*) of (as relevant) the *first issue of these conditions* or the relevant vacancy occurring.

## 2 Data security

2.1 *Licence Holder* must ensure that:

- (a) all of its information (being design specifications, operating manuals and the like) as to the operational technology (such as the SCADA system) and associated ICT infrastructure of the operational network is held solely within Australia, and that such information is accessible only by a *Relevant Person* who has been authorised by the *Licence Holder* and only from within Australia;
- (b) all:
  - (i) *Load Data*; and
  - (ii) *Bulk Personal Data Records*, relating to or obtained in connection with the operation of the *distribution system* by a *Relevant Person* is held solely within Australia, and is accessible only by a *Relevant Person* or a person who has been authorised by the *Licence Holder*; and
- (c) it does not export, and has appropriate security controls in place to prevent the export, of *Bulk Personal Data Records* relating to or obtained in connection with the operation of the *distribution system* by a *Relevant Person*, outside of Australia.

2.2 The *Licence Holder* is not in breach of its obligations under conditions 2.1(a), 2.1(b)(i) or 2.1(c) of this Appendix 2 if the *Licence Holder* discloses, holds, uses or accesses any information or data referred to in those conditions, or the *Licence Holder* allows a *Relevant Person* approved by the

senior officer referred to in condition 1.3(b)(i) of this Appendix 2 to disclose, hold, use or access any information or data referred to in those conditions for the purposes of:

- (a) disclosure to a recognised stock exchange so that such information is made available publicly in compliance with a binding obligation on the part of the *Licence Holder* or an *Associate* to do so;
- (b) complying with any law of the Commonwealth of Australia, or of any of its States and Territories;
- (c) disclosure to the financial, accounting, insurance, legal, regulatory and other advisers, auditors, insurers, security trustees and financiers (and each of their advisers) of the *Licence Holder*, any *Associate*, and any bona fide prospective purchaser of any interest in, or of any interest in the main undertaking of, the *Licence Holder* or any *Associate*, but in each case only to the extent necessary in order for those persons to provide the advisory or other services bona fide required of them;
- (d) disclosure to participants, regulators and service providers in the electricity sector, provided it is in the ordinary course of business and in accordance with good electricity industry practice, and such information is required by those persons to provide the services or to perform the functions bona fide required of them;
- (e) providing aggregated data which does not permit identification of any particular *customer* or *customer's connection points* or their demand characteristics;
- (f) allowing a service provider or contractor to hold, use or access information where that arrangement is approved by the *Tribunal*, in the case of arrangements approved as of the *First issue of this Licence*, and otherwise where the *Licence Holder* has provided the *Commonwealth Representative* with a submission demonstrating that:
  - (i) the service provider or contractor is reputable; and
  - (ii) the service provider or contractor has data security systems in place to ensure information security is maintained;and has obtained the written agreement of the *Commonwealth Representative* for the arrangement; and
- (g) allowing a service provider or contractor who is a provider to the *Licence Holder* at the date of this *Licence* to hold, use or access information for the period of 12 months after the date of this *Licence* provided, after a transition plan is approved by the *Tribunal* in writing during that period, the *Licence Holder* undertakes the steps (if any) that are required to be undertaken in that 12 month period as set out in that transition plan; and
- (h) such other circumstances as approved by the *Tribunal* in writing. Prior to seeking approval from the *Tribunal*, the *Licence Holder* must provide the *Commonwealth Representative* with a reasonable opportunity within a period not ending less than 60 calendar days, to confirm in writing to the *Tribunal* that the Commonwealth does not intend to make any further requests or submissions in relation to the matter.

2.3 The *Licence Holder* is not in breach of its obligations under condition 2.1(b)(ii) of this Appendix 2 if a *Relevant Person* or a person authorised to access the information by the *Licence Holder* discloses, holds, uses or accesses personal information in accordance with the *Privacy Act 1988* (Cth).

2.4 The *Licence Holder* must ensure that third party data or information (including without limitation communications within the meaning of the *Telecommunications (Interception and Access) Act 1979* (Cth), personal information within the meaning of the *Privacy Act 1988* (Cth), and closed-circuit television footage) which is indirectly accessed or obtained by the *Licence Holder* because that third

party data or information is transferred by a carrier or other party using the *Licence Holder's* infrastructure, are held by the *Licence Holder* solely within Australia, and are accessible only by a *Relevant Person* or a person who has been authorised by the *Licence Holder* and, in each case, only from within Australia.

### **3 Compliance**

- 3.1 By 30 September each year the *Licence Holder* must furnish a report to the *Tribunal* and the *Commonwealth Representative* detailing whether the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 2 over the preceding *financial year* to 30 June.
- 3.2 The report required under condition 3.1 of this Appendix 2 must be audited by an *Approved Critical Infrastructure Auditor* by a date specified by the *Tribunal*. The audit required by this condition 3.2 must be a comprehensive audit and must meet any requirements specified by the *Tribunal*. The *Licence Holder* must provide the audited report to the *Commonwealth Representative* at the same time that the report is provided to the *Tribunal*.
- 3.3 The *Tribunal* may provide guidance to the *Approved Critical Infrastructure Auditor* as to the *Licence Holder's* practices that have satisfied or will satisfy conditions 1 and 2 of this Appendix 2.
- 3.4 The report required under condition 3.1 of this Appendix 2 must be accompanied by a certification in writing supported by a resolution of the Board of the *Licence Holder* that, with respect to the relevant period:
  - (a) the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 2; or
  - (b) the *Licence Holder* has not complied with conditions 1 and 2 of this Appendix 2, and certifying the nature and extent of each non-compliance and the steps taken by the *Licence Holder* to ensure compliance (and to preclude further non-compliance) and the timeframe within which it expects to achieve compliance.

## B Recommended Licence - Endeavour Energy

**INSTRUMENT OF VARIATION OF CONDITIONS OF DISTRIBUTOR'S LICENCE**  
***ELECTRICITY SUPPLY ACT 1995 (NSW)***

**1 Variation of conditions of distributor's licence**

I, Matthew Kean, Minister for Energy, pursuant to clause 7 of Schedule 2 of the *Electricity Supply Act 1995*, hereby vary the Licence held by the Licence Holder.

This is the second instrument of variation issued for the Licence.

**2 Commencement**

This Instrument of Variation commences on the day this Instrument is signed.

**3 Definitions**

In this Instrument of Variation:

**Licence** means the distributor's licence granted under section 14 of the *Electricity Supply Act 1995* to the Licence Holder to operate a distribution system that is a transacted distribution system under the *Electricity Network Assets (Authorised Transactions) 2015* effective on 14 June 2017.

**Licence Holder** means:

**Endeavour Energy Network Partnership**, a partnership carried on under that name by:

- (a) **Edwards O Pty Limited** (ACN 618 643 486) as trustee for **Edwards O Trust**;
- (b) **ERIC Epsilon Operator Corporation 1 Pty Ltd** (ACN 617 221 735) as trustee for **ERIC Epsilon Operator Trust 1**;
- (c) **ERIC Epsilon Operator Corporation 2 Pty Ltd** (ACN 617 221 744) as trustee for **ERIC Epsilon Operator Trust 2**;
- (d) **ERIC Epsilon Operator Corporation 3 Pty Ltd** (ACN 617 221 753) as trustee for **ERIC Epsilon Operator Trust 3**; and
- (e) **ERIC Epsilon Operator Corporation 4 Pty Ltd** (ACN 617 221 771) as trustee for **ERIC Epsilon Operator Trust 4**.

**Previous Licence Conditions** means all the conditions of the Licence as in force immediately before the commencement of this Instrument of Variation.

**4 Variation of licence**

- (1) Omit the Previous Licence Conditions and substitute Schedule A.
- (2) Clause 4(1) does not:
  - (a) revive anything not in force or existing at the time this Instrument of Variation takes effect;
  - (b) affect the previous operation of the Previous Licence Conditions or anything done or begun, under or in accordance, with the Previous Licence Conditions; or
  - (c) affect a right, privilege or liability acquired, accrued or incurred under the Previous Licence Conditions.

**Date:**

**The Hon. Matthew Kean  
Minister for Energy**

## SCHEDULE A

### MINISTERIALLY IMPOSED LICENCE CONDITIONS FOR THE OPERATOR OF A TRANSACTED DISTRIBUTION SYSTEM

This schedule provides a list of conditions which the *Minister* has determined to impose pursuant to clause 6(1)(b) of Schedule 2 of the *Electricity Supply Act 1995* (the *Act*) on the operator of a *transacted distribution system* under the *Electricity Network Assets (Authorised Transactions) Act 2015*.

In addition to Ministerially-imposed conditions, licensees are subject to obligations imposed by the *Act*, *Regulations* and associated regulatory instruments which include (without limitation) an obligation to comply with requirements imposed by or under regulations made pursuant to section 5.6 of the *Environmental Planning and Assessment Act 1979*.

### GENERAL CONDITIONS

#### 1 Operate within distribution district

- 1.1 At all times this *Licence* is in force, the *Licence Holder* must ensure that it and all other network operators of its *distribution system* only operate a *distribution system*:
- (a) within its *distribution district* as set out in Schedule 3 of the *Act*;
  - (b) within:
    - i. such other areas outside of its *distribution district* in which the *Licence Holder* operated a *distribution system* as at 14 June 2017; or
    - ii. any areas notified by the *Licence Holder* to the Tribunal and included on the register maintained by the *Tribunal* between 14 June 2017 and the date of the second instrument of variation issued for this *Licence*; and
  - (c) within such other *distribution district* outside of its *distribution district* as agreed with the *distributor* for the other *distribution district*.
- 1.2 Where the *Licence Holder* has obtained agreement from another *distributor* to operate in the *distribution district* of such other *distributor*, the *Licence Holder* must
- (a) make a record of the agreement which includes sufficient details to allow all assets that operate or are to be operated outside the *Licence Holder's distribution district* to be uniquely identified and located; and
  - (b) where the *Licence Holder* permanently removes or disconnects assets that were operating outside of its *distribution district*, remove details of these assets from the record referred to in condition 1.2(a).

#### 2 National Electricity Market registration

At all times this *Licence* is in force, the *Licence Holder* must ensure that it and all other network operators of its *distribution system*:

- (a) are registered or exempt from the requirement to be registered as a Network Service Provider under the National Electricity Rules; or
- (b) hold any equivalent authorisation or right of participation in any national electricity market, granted by the person responsible for the granting of such an authorisation or right of participation under any legislation enacted for the purpose of introducing such a market.

### 3 Technical and prudential criteria

The *Licence Holder* must, for the duration of this *Licence*, ensure that it and all other network operators of its *distribution system* satisfy the technical and prudential criteria that each entity is required to meet as a condition of its registration or exemption, or equivalent authorisation or right of participation in any national electricity market, referred to in condition 2.

### 4 Business continuity and disruptions

- 4.1 The *Licence Holder* must have a documented system to ensure that it has adequate arrangements in place to identify, assess and manage business continuity risks and manage business disruptions relating to the operation of its *distribution system* (a *Business Continuity Plan*).
- 4.2 The *Licence Holder* must ensure that it and any other network operator of its *distribution system* implements and complies with the *Business Continuity Plan*.

### 5 Reliability and performance

The *Licence Holder* must ensure that it complies with the *Reliability and Performance Standards*.

### 6 Critical infrastructure

The *Licence Holder* must ensure that it and all other network operators of its *distribution system* comply with the *Critical Infrastructure Licence Conditions*.

## CONDITIONS RELATING TO MANAGEMENT SYSTEMS

### 7 Maintenance of certified management systems

- 7.1 The *Licence Holder* must have and maintain:
- (a) an asset management system that is consistent with *Australian Standard AS ISO 55001 - 2014 Asset management – Management systems – Requirements* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*; and
  - (b) an environmental management system that is consistent with *Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management system – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*,
- which comply with this condition 7.
- 7.2 The *Licence Holder* must ensure that:
- (a) its asset management system is certified by an appropriately qualified person to be consistent with *Australian Standard AS ISO 55001 - 2014 Asset management - Management systems - Requirements* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*; and
  - (b) its environmental management system is certified by an appropriately qualified person to be consistent with *the Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management systems – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*.



- 7.3 The *Licence Holder* must ensure that the certification of its asset management system and environmental management system in accordance with condition 7.2 is maintained for the remainder of the duration of the *Licence*.

## **8 Implementation of management systems**

The *Licence Holder* must ensure that its asset management system and environmental management system are fully implemented, and all relevant activities undertaken by it or any other network operator of its *distribution system* are carried out in accordance with the relevant management system.

## **CONDITIONS RELATING TO COMPLIANCE, REPORTING AND FEES**

### **9 Reporting in accordance with Reporting Manuals**

The *Licence Holder* must prepare and submit reports in accordance with any *Reporting Manuals* issued by the *Tribunal*.

### **10 Complying with Audit Guidelines issued by the Tribunal**

The *Licence Holder* must comply with any *Audit Guidelines* issued by the *Tribunal*.

### **11 Compliance management systems**

The *Licence Holder* must ensure internal systems are developed and maintained that are capable of effectively managing compliance with its *Licence*.

### **12 Compliance with statistical operating obligations**

The *Licence Holder* must provide to the *Tribunal* such operating statistics and performance indicators as may be required from time to time by the *Tribunal*. The *Tribunal* will provide the *Licence Holder* with reasons for its request when the initial request is made and after that when a request relates to operating statistics and performance indicators that are of a materially different type or category to that provided under the initial or subsequent request.

### **13 Information about compliance with Licence Conditions**

The *Licence Holder* must provide to the *Tribunal* (at such times and in respect of such periods as the *Tribunal* may determine and in the manner and form specified by the *Tribunal*) such information as the *Tribunal* may determine, to enable the *Tribunal* to ascertain whether or not the *Licence Holder* is complying with the conditions of its *Licence*, the *Act* or the *Regulations*.

### **14 Compliance with Public Lighting Code**

The *Licence Holder* must ensure that it and all other network operators of its *distribution system* comply with the NSW Public Lighting Code published by the Department of Planning, Industry and Environment, as amended from time to time.

## **15 Compliance with audit directions**

- 15.1 The *Tribunal* may at any time direct the *Licence Holder*, by written notice, to engage an *Approved Auditor* at the expense of the *Licence Holder* to conduct an audit of, and prepare a report on, the *Licence Holder's* compliance with conditions imposed on it by this *Licence*, the *Act* or *Regulations*.
- 15.2 The *Licence Holder* must comply with any direction issued by the *Tribunal* under condition 15.1.
- 15.3 The *Licence Holder* must provide the *Approved Auditor's* report to the *Tribunal* by the date specified in the direction issued by the *Tribunal* under condition 15.1.

## **16 Licence fees**

- 16.1 It is a condition of this *Licence* that the *Licence Holder* pay such fees (annual or otherwise) in connection with the holding of the *Licence* as may be determined by the *Minister* from time to time.
- 16.2 The *Licence Holder* must pay the fees referred to in condition 16.1 in the manner and within the period specified by the *Tribunal*.

## INTERPRETATION AND DEFINITIONS

### Interpretation

In these *Licence* conditions, unless the context requires otherwise:

- (a) the singular includes the plural and vice versa;
- (b) headings are used for convenience only and do not affect the interpretation of these *Licence* conditions;
- (c) a reference to a document includes the document as modified from time to time and any document replacing it;
- (d) a reference to a person includes a natural person and any body or entity whether incorporated or not; and
- (e) references to conditions are references to conditions in these *Licence* conditions.

### Definitions

Expressions used in these *Licence* conditions that are defined in the *Act* or the *Regulations* have the meanings set out in the *Act* or the *Regulations*.

In these *Licence* conditions:

Act	means the <i>Electricity Supply Act 1995</i> .
Approved Auditor	means an auditor who has been approved by the <i>Tribunal</i> in accordance with any <i>Audit Guidelines</i> issued by the <i>Tribunal</i> .
Associate	has the meaning given to that term in the <i>Corporations Act 2001</i> (Cth).
Audit Guidelines	means any document setting out audit requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.
Bulk Personal Data Records	means any holdings or files of personal information (within the meaning of the <i>Privacy Act 1988</i> (Cth)) about multiple individuals which contain fields or categories.
Business Continuity Plan	has the meaning given to it condition 4.1.
CBD Sydney feeder	means a <i>feeder</i> forming part of the triplex 11kV cable system supplying predominantly commercial high-rise buildings, within the City of Sydney.
Commonwealth Representative	means the First Assistant Secretary, with responsibility for critical infrastructure security within the Commonwealth or equivalent level in a subsequent agency with responsibility for critical infrastructure security.  <i>Note: At the time of varying this Licence, the Commonwealth Representative is the First Assistant Secretary responsible for the Cyber and Infrastructure Security Centre within the Commonwealth Department of Home Affairs.</i>

Connection point	in relation to the premises of a <i>customer</i> or a class of <i>customers</i> , means the point of connection to an electrical installation supplying electricity to the premises as determined in accordance with the <i>Service and Installation Rules of New South Wales</i> , as in force from time to time, published by the Department of Planning, Industry and Environment.
Critical Infrastructure Licence Conditions	means the conditions set out in Appendix 2 to these conditions.
Customer	means a wholesale or retail customer who is supplied electricity through a <i>connection point</i> on an electricity distributor's system.
Customer service standards	means the <i>customer service standards</i> set out in condition 4 of Appendix 1 to these conditions.
Distribution district	has the meaning given to it in the Dictionary to the <i>Act</i> .
Distribution system	means the <i>distribution system</i> of which the <i>Licence Holder</i> is a network operator.
Distributor	has the meaning given to it in the Dictionary to the <i>Act</i> .
Emergency service organisation	has the same meaning as section 3 of the <i>State Emergency and Rescue Management Act 1989</i> .
Excluded interruptions	means excluded interruptions listed in Appendix 1 to these conditions (see 6.3 'Excluded Interruptions').
Feeder	means a high-voltage line operating at over 1kV and generally at or below 22 kV that connects between a zone substation and a distribution substation.
Feeder type	means a <i>CBD Sydney feeder</i> , <i>long rural feeder</i> , <i>short rural feeder</i> or <i>urban feeder</i> as the case may be.
Financial year	means the period commencing on 1 July and ending 30 June the following calendar year.
First issue of this Licence	or <i>First issue of these conditions</i> refers to the date of the first issue of this Licence, being 14 June 2017.
Foreign Person	has the meaning given to that term in the <i>Foreign Acquisitions and Takeovers Act 1975</i> (Cth) and the <i>Foreign Acquisitions and Takeovers Regulation 2015</i> (Cth).
Individual customer standards	means the individual customer standards in Table 8 of Appendix 1 to these conditions.
Individual feeder standards	mean the individual feeder standards in Tables 3 and 4 of Appendix 1 to these conditions.
Interruption	means any temporary unavailability of electricity supply to a customer associated with an outage of the <i>distribution system</i> including outages affecting a single premises but does not include disconnection.

Interruption duration standards	means the interruption duration standards set out in Appendix 1 to these conditions (see 6.4, 'Customer Service Standards').
Interruption frequency standards	means the interruption frequency standards set out in Appendix 1 to these conditions (see 6.4, 'Customer Service Standards').
Licence	means the distributor's licence authorising the <i>Licence Holder</i> to operate its <i>distribution system</i> .
Licence Holder	means a person who is the holder of a <i>Licence</i> .
Load Data	means data as to the quantum of electricity delivered (both historical and current load demand from or to any one or more sites (or their <i>connection points</i> ) which satisfies each of the following criteria: <ul style="list-style-type: none"> <li>i. it is not historical load data older than 30 days;</li> <li>ii. it is not fault data;</li> <li>iii. it describes a location that allows a <i>customer(s)</i> or <i>connection point(s)</i> to be identified;</li> <li>iv. it describes a date and time of the data record; and</li> <li>v. it describes a duration - a length of time that allows for a quantum to exist.</li> </ul>
Local government area	has the same meaning as 'area' in Chapter 9 of the <i>Local Government Act 1993</i> .
Long rural feeder	means a <i>feeder</i> with a total <i>feeder</i> length greater than 200 km which is not a <i>CBD Sydney feeder</i> or an <i>urban feeder</i> .
Major event day	has the meaning given in Appendix 1 to these conditions (see 6.5, 'Major Event Day').
Metropolitan	means the areas comprising the <i>local government areas</i> and <i>suburbs</i> listed in Tables 6 and 7 in Appendix 1 to these conditions, but only to the extent that the <i>Licence Holder</i> may operate a <i>distribution system</i> in the relevant areas in accordance with condition 1.
Minister	means the Minister responsible for administering the <i>Act</i> .
Minutes interrupted	means the total number of minutes from any <i>interruption</i> to a <i>customer</i> over the relevant 12 month period.
Network overall reliability standards	means the requirements imposed under condition 1 of Appendix 1 to these conditions.
Non-metropolitan	means areas in NSW other than areas defined as <i>metropolitan</i> .
Number of interruptions	means the total number of times there is an <i>interruption</i> to a <i>customer</i> over the relevant 12 month period.
Planned interruption	means an interruption that has been planned by the <i>Licence Holder</i> .
Protocol	means a document of the type referred to in conditions 1.1 and 1.2 of Appendix 2 to these conditions, that is required by the Commonwealth and which must be agreed to

between the *Commonwealth Representative* and the *Licence Holder*. The document may set out (among other things) the:

- i. specified purposes for which maintenance of *distribution system* equipment may be conducted offshore and the circumstances in which it may be conducted offshore;
- ii. methodology and activities to be undertaken to allow for maintenance and repairs of *distribution system* equipment to be carried out involving remote access from offshore;
- iii. the exceptional circumstances in which the *Protocol* applies; and
- iv. activities and processes which achieve requisite levels of cyber-security.

Quarter	means a period of three months commencing 1 January, 1 April, 1 July and 1 October and concluding on the following 31 March, 30 June, 30 September and 31 December dates respectively.
Regulations	means regulations made under the <i>Act</i> .
Relevant Person	means the <i>Licence Holder</i> , any other network operator of the <i>distribution system</i> , and any person who is contracted or sub-contracted by the <i>Licence Holder</i> to work on the <i>distribution system</i> .
Reliability and Performance Standards	means the conditions set out in Appendix 1 to these conditions.
Reporting Manual	means any document setting out reporting requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.
SAIDI	means the average derived from the sum of the durations of each sustained customer interruption (measured in minutes), divided by the total number of <i>customers</i> (averaged over the <i>financial year</i> ) of the <i>Licence Holder</i> .
SAIDI average standards	means the standards set out in Table 1 of Appendix 1 to these conditions.
SAIFI	means the average derived from the total number of sustained customer interruptions divided by the total number of <i>customers</i> (averaged over the <i>financial year</i> ) of the <i>Licence Holder</i> .
SAIFI average standards	means the standards set out in Table 2 of Appendix 1 to these conditions.
Short rural feeder	means a <i>feeder</i> with a total <i>feeder</i> route length less than 200 km, and which is not a <i>CBD Sydney feeder</i> or an <i>urban feeder</i> .
Suburb	means an area defined by boundaries determined and gazetted by the Geographical Names Board of New South Wales.
Transacted distribution system	means a transacted distribution system under the <i>Electricity</i>

*Network Assets (Authorised Transactions) Act 2015.*

Tribunal

means the Independent Pricing and Regulatory Tribunal of New South Wales established under the *Independent Pricing and Regulatory Tribunal Act 1992*.

Urban feeder

means a *feeder* with actual maximum demand over the reporting period per total *feeder* route length greater than 0.3 MVA/km and which is not a *CBD Sydney feeder*.

## APPENDIX 1 – RELIABILITY AND PERFORMANCE STANDARDS

### 1 Network overall reliability standards

- 1.1 A *Licence Holder* must not, when *excluded interruptions* are disregarded, exceed in a *financial year* the *SAIDI average standards* that apply to its *feeder types*.
- 1.2 A *Licence Holder* must not, when *excluded interruptions* are disregarded, exceed in a *financial year* the *SAIFI average standards* that apply to its *feeder types*.

### 2 Individual feeder performance

- 2.1 This condition 2 of this Appendix 1 applies where one or more of the feeders of a *Licence Holder* exceed the relevant *individual feeder standards* for any 12 month period ending at the end of March, June, September or December, when *excluded interruptions* are disregarded.
- 2.2 A *Licence Holder* must
  - (a) investigate the causes for each *feeder* exceeding the *individual feeder standards*;
  - (b) by the end of the *quarter* following the *quarter* in which the *feeder* first exceeded the *individual feeder standards*, complete an investigation report identifying the causes and, as appropriate, any action required to improve the performance of each *feeder* to the *individual feeder standards*;
  - (c) complete any operational actions identified in the investigation report to improve the performance of each *feeder* against the *individual feeder standards* by the end of the third *quarter* following the *quarter* in which each *feeder* first exceeded the *individual feeder standards*;
  - (d) except as permitted by condition 2.2(e) of this Appendix 1, where the investigation report identifies actions, other than operational actions, required to improve the performance of each *feeder* to the *individual feeder standards*, develop a project plan, including implementation timetable, and commence its implementation by the end of the second *quarter* following the *quarter* in which the *feeder* first exceeded the *individual feeder standards*;
  - (e) consider non-network strategies which provide reliable outcomes for *customers*. Where found by the investigation report to be equal or more cost-effective than the lowest cost feasible network option such strategies shall be adopted rather than network augmentation options;
  - (f) ensure that the implementation timetable for the project plan or alternative non-network solutions is as short as is reasonably practicable; and
  - (g) where all reasonable steps to improve supply reliability have been taken, the costs of further actions to rectify the non-compliance must be subject to a cost benefit analysis. Where such analysis does not provide a positive benefit, no further action will be taken to improve the *feeder's* performance and the ongoing non-conformance with the *individual feeder standards* will be reported to the *Minister* by the *Licence Holder*.
- 2.3 The investigation report is to include a documented rectification plan where action is found to be justified in order to improve the performance of a *feeder* to the *individual feeder standards*. The action that is required may involve work to other network elements, or may involve only repair or maintenance work where capital works are not warranted and take into account any one-off events and previous performance trends.



### 3 Reliability provided to individual customers

- 3.1 This condition 3 of this Appendix 1 does not apply to a *connection point* supplied by a *Licence Holder's feeder* to which condition 2 of this Appendix 1 applies.
- 3.2 Where the *minutes interrupted* exceed the relevant *individual customer standards* in any 12 month period ending at the end of March, June, September or December when *excluded interruptions* are disregarded, the *Licence Holder* must comply with condition 3.4
- 3.3 Where the *number of interruptions* exceed the relevant *individual customer standards* in any 12 month period ending at the end of March, June, September or December, when *excluded interruptions* are disregarded, the *Licence Holder* must comply with condition 3.4.
- 3.4 A *Licence Holder* must:
- (a) investigate the causes for the *minutes interrupted* or *number of interruptions* (as the case may be) exceeding the *individual customer standards*;
  - (b) by the end of the *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) first exceeded the *individual customer standards*, complete an investigation report that must:
    - (i) identify the causes for exceeding the *individual customer standards*;
    - (ii) as appropriate, identify any action required to improve performance against the *individual customer standards*; and
    - (iii) consider the terms of the connection contract (including network security arrangements) agreed with the *customer* of the affected *connection point*, including when the *customer* was connected to the *distribution system*;
  - (c) complete any operational actions identified in the investigation report to improve performance against the *individual customer standards* by the end of the third *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) first exceeded the *individual customer standards*;
  - (d) except as permitted by condition 3.4(e) of this Appendix 1, where the investigation report identifies actions, other than operational actions, required to improve performance against the *individual customer standards*, develop a project plan, including implementation timetable, and commence its implementation by the end of the fourth *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) exceeded the *individual customer standards*;
  - (e) consider non-network strategies which provide reliable outcomes for *customers*. Where found by the investigation report to be equal or more cost-effective than the lowest cost feasible network option such strategies shall be adopted rather than network augmentation options;
  - (f) ensure that the implementation timetable for the project plan or alternative non network solutions is as short as is reasonably practicable;

- (g) where all reasonable steps to improve supply reliability have been taken, the costs of further actions to rectify the non-compliance must be subject to a cost benefit analysis. Where such analysis does not provide a positive benefit, no further action will be taken to improve the *minutes interrupted* or *number of interruptions* (as the case may be) and the ongoing non-conformance with the *individual customer standards* will be reported to the Minister by the *Licence Holder*.

- 3.5 The investigation report is to include a documented rectification plan where action is found to be justified in order to improve the *minutes interrupted* or *number of interruptions* (as the case may be) against the *individual customer standards*. The action that is required may involve work to other network elements, or may involve only repair or maintenance work where capital works are not warranted and take into account any one-off events and previous performance trends.

#### **4 Customer service standards**

- 4.1 A *Licence Holder* must pay the sum of \$80 to a *customer* on each occasion when the *Licence Holder* exceeds the *interruption duration standard* at the *customer's* premises and the *customer* has made a claim to the *Licence Holder* within three months of the interruption ceasing.
- 4.2 A *Licence Holder* must pay the sum of \$80 to a *customer* where the *Licence Holder* exceeds the *interruption frequency standard* at the *customer's* premises in a *financial year* and the *customer* has made a claim to the *Licence Holder* within three months of the end of the *financial year* to which the interruptions relate.
- 4.3 A *Licence Holder* must determine a claim for payment under this condition 4 of this Appendix 1, and notify the *customer* of the determination in writing, within one month of receipt of a claim. For *customers* eligible for payment, the notice of determination must include the amount to be paid, the manner of payment and the timing of payment. Where the claim is not paid (whether in part or in full), the notice of determination must include reasons for the decision.
- 4.4 A *Licence Holder* is required to take reasonable steps to make *customers* aware of the availability of payments on the terms set out in this condition 4 of this Appendix 1. Reasonable steps include, as a minimum, publication of information on the *Licence Holder's website* and annual newspaper advertisements. On request from a *customer*, a *Licence Holder* must provide written information on the availability of payments on the terms set out in this condition 4 of this Appendix 1.
- 4.5 A *Licence Holder* is required to make only one payment of \$80 to a *customer* per premises in a *financial year* for exceeding the *interruption frequency standard*.
- 4.6 A *Licence Holder* is required to pay no more than \$320 under this condition 4 of this Appendix 1 to a *customer* per premises in any one *financial year*.
- 4.7 A payment under this condition 4 of this Appendix 1 does not:
  - (a) in any way alter or diminish any rights that a *customer* may have against any person under any trade practices or other applicable legislation, common law or contract;
  - (b) represent any admission of legal liability by the *Licence Holder*; or
  - (c) alter, vary or exclude the operation of section 119 of the *National Electricity Law* or any other statutory limitations on liability or immunities applicable to a *Licence Holder*.
- 4.8 *Customers* who are eligible for payments under this condition 4 of this Appendix 1 are limited to those *customers* who are supplied electricity through a metered *connection point* on an electricity distributor's system.

## 5 Performance monitoring and reporting

### Network overall reliability standards report

- 5.1 A *Licence Holder* must submit a *network overall reliability standards* quarterly report to the *Tribunal* within one month of the end of each *quarter*.
- 5.2 Each *network overall reliability standards* report must include the following matters for the previous 12 month period to the end of that *quarter*.
- (a) performance against the *SAIDI average standards* and *SAIFI average standards* by *feeder type*, disregarding excluded interruptions;
  - (b) reasons for any non-compliance by the *Licence Holder* with the network overall reliability standards and plans to improve performance; and
  - (c) any other matter notified by the *Tribunal* in writing.

### Individual feeder standards report

- 5.3 A *Licence Holder* must submit, within one month of the end of each *quarter*, a quarterly *individual feeder standard* report to the *Tribunal* on *feeders* that exceeded the relevant *individual feeder standards* during the previous 12 month period to the end of that *quarter*, together with, for each *feeder*:
- (a) the date at which the *feeder* first exceeded the relevant *individual feeder standard*, together with the actual *SAIDI* and *SAIFI* performance of the *feeder* for the 12 month period;
  - (b) details of the remedial action that the *Licence Holder* intends taking, or has taken, to improve the performance of those *feeders*;
  - (c) either of the following:
    - (i) the date of completion, or the date of planned completion, of the remedial action plan; or
    - (ii) details of the investigation and action proposed or undertaken leading to the decision to advise the *Tribunal* that it is not economically justifiable to bring the feeder performance into compliance with the *individual feeder standards*; and
  - (d) any other matter notified by the *Tribunal* in writing.

### Individual customer standards report

- 5.4 *Licence Holder* must submit, within one month of the end of each *quarter*, a quarterly *individual customer standards* report to the *Tribunal* on instances where conditions 3.2 and/or 3.3 of this Appendix 1 applied, together with the following details:
- (a) the date at which the *minutes interrupted* or *number of interruptions* (as the case may be) exceeded the *individual customer standard*, together with the actual *minutes interrupted* or *number of interruptions* for the affected *connection point* for the 12 month period;
  - (b) details of the remedial action that the *Licence Holder* intends taking, or has taken, to improve compliance with the *individual customer standards*;

- (c) if applicable, the date of completion, or the date of planned completion, of the remedial action plan;
- (d) if applicable, details of the investigation and action proposed or undertaken leading to the decision to advise the *Tribunal* that it is not economically justifiable to bring the *minutes interrupted* or *number of interruptions* (as the case may be) for the affected *connection point* into compliance with the *individual customer standards*; and
- (e) any other matter notified by the *Tribunal* in writing.

### **Customer service standards report**

- 5.5 A *Licence Holder* must submit a quarterly *customer service standard* report to the *Tribunal* on the following matters within one month of the end of each *quarter*, for the preceding *quarter* and for the previous 12-month period to the end of that *quarter*.
- (a) the number of payments given under condition 4 of this Appendix 1 to *customers* by each type of area listed in Column 1 of Table 5 of this Appendix 1 and by the type of standard, as shown in Columns 2 and 3 of Table 5 of this Appendix 1;
  - (b) the number of claims not paid (whether in part or full) under condition 4 of this Appendix 1 by each type of area listed in Column 1 of Table 5 of this Appendix 1 and by the type of standard, as shown in Columns 2 and 3 of Table 5 of this Appendix 1; and
  - (c) any other matter notified by the *Tribunal* in writing.

### **Incident reporting**

- 5.6 A *Licence Holder* must prepare and submit reports on any incident in accordance with any *Reporting Manuals* issued by the *Tribunal*.

### **Independent audit report**

- 5.7 An independent audit must be conducted after the end of each *financial year* to audit the *Licence Holder's* performance against the:
- (a) *network overall reliability standards*;
  - (b) *individual feeder standards*;
  - (c) *individual customer standards*; and
  - (d) *customer service standards*.
- 5.8 The audit must be conducted in accordance with any *Audit Guidelines* issued by the *Tribunal*.
- 5.9 A *Licence Holder* is required to nominate a person to conduct the independent audit by written notice given to the *Tribunal* in accordance with auditor nomination procedures published in any *Audit Guidelines* issued by the *Tribunal*.
- 5.10 The person nominated to conduct the independent audit is to be a person who is:
- (a) independent of the *Licence Holder*; and
  - (b) competent to exercise the functions of an auditor in respect of the matters to be audited.

- 5.11 The nomination of an auditor by a *Licence Holder* ceases to have effect if the *Tribunal* advises the *Licence Holder*, by notice in writing, that the nomination is not acceptable or has ceased to be acceptable.
- 5.12 The *Tribunal* may nominate an auditor to carry out an audit, and the person so nominated is taken to have been nominated by the *Licence Holder*, if:
- (a) the nomination of an auditor by the *Licence Holder* ceases to have effect; or
  - (b) the *Licence Holder* fails to nominate an auditor to carry out the audit in accordance with any requirements specified by the *Tribunal* by notice in writing to the *Licence Holder*.
- 5.13 A *Licence Holder* must provide a copy of the auditor's report by 30 September each year to the *Tribunal*.

### General matters concerning reports

- 5.14 Where the *Tribunal* determines the format of a report required by this condition 5 of this Appendix 1, a *Licence Holder* must submit the report in that format.
- 5.15 The *Tribunal* may from time to time publish requirements to be followed by the *Licence Holder* in respect of reports required by this condition 5 of this Appendix 1 and the *Licence Holder* must comply with any such requirements
- 5.16 The *Tribunal* may from time to time require, by notice in writing to the *Licence Holder*, further reports relating to these licence conditions including, without limitation, reports relating to capital expenditure works, network refurbishment and maintenance programs.
- 5.17 A *Licence Holder* must provide a report submitted to the *Tribunal* under this condition 5 of this Appendix 1 to the *Minister*, if requested to do so by the *Minister* by notice in writing.

## 6 Definitions

### 6.1 NETWORK OVERALL RELIABILITY STANDARDS

**Table 1: SAIDI Average Reliability Duration Standards (Minutes per customer)**

<b>SAIDI (Minutes per customer)</b>	
<b>ENDEAVOUR ENERGY</b>	
<b>Feeder Type</b>	
<i>Urban</i>	80
<i>Short-rural</i>	300
<i>Long-rural</i>	n/a

**Table 2: SAIFI Average Reliability Interruption Standards (Number per customer)**

<b>SAIFI (Number per customer)</b>	
<b>ENDEAVOUR ENERGY</b>	
<b>Feeder Type</b>	
<i>Urban</i>	1.2
<i>Short-rural</i>	2.8
<i>Long-rural</i>	n/a

## 6.2 INDIVIDUAL FEEDER STANDARDS

**Table 3: SAIDI Individual Feeder Average Reliability Duration Standards (Minutes per customer)**

<b>SAIDI (Minutes per customer)</b>	
<b>ENDEAVOUR ENERGY</b>	
<b>Feeder Type</b>	
<i>Urban</i>	350
<i>Short-rural</i>	1000
<i>Long-rural</i>	1400

**Table 4: SAIFI Individual Feeder Standards Average Reliability Interruption Standards (Number per customer)**

<b>SAIFI (Number per customer)</b>	
<b>ENDEAVOUR ENERGY</b>	
<b>Feeder Type</b>	
<i>Urban</i>	4
<i>Short-rural</i>	8
<i>Long-rural</i>	10

## 6.3 EXCLUDED INTERRUPTIONS

The following types of *interruptions* (and no others) are *excluded interruptions*:

- (a) an *interruption* of a duration of three minutes or less;
- (b) an *interruption* resulting from:
  - (i) load shedding due to a shortfall in generation;
  - (ii) a direction or other instrument issued under the *National Electricity Law, Energy and Utilities Administration Act 1987*, the *Essential Services Act 1988* or the *State Emergency and Rescue Management Act 1989* to interrupt the supply of electricity;
  - (iii) automatic shedding of load under the control of under- frequency relays following the occurrence of a power system under-frequency condition described in the *Power System Security and Reliability Standards* made under the *National Electricity Rules*;
  - (iv) a failure of the shared transmission system;
- (c) a *planned interruption*;
- (d) any *interruption* to the supply of electricity on a *Licence Holder's distribution system* which commences on a *major event day*; and
- (e) an *interruption* caused by a *customer's* electrical installation or failure of that electrical installation.

## 6.4 CUSTOMER SERVICE STANDARDS

### ***Interruption duration standard:***

1. The *interruption duration standard* is the maximum duration, set out in column 2 of Table 5, of an *interruption* to a *customer's* premises located in the relevant area in column 1 of Table 5.

### ***Interruption frequency standard:***

2. The *interruption frequency standard* is the maximum number of interruptions in a *financial year* set out in column 3 of Table 5, to a *customer's* premises located in the relevant area in column 1 of Table 5:

**Table 5**

Column 1	Column 2	Column 3
Type of area in which <i>customer's</i> premises is located	<i>Interruption duration standard</i> (hours)	<i>Interruption frequency standard</i> (number of <i>interruptions</i> and hours of duration)
<i>metropolitan</i>	12	4 <i>interruptions</i> of greater than or equal to 4 hours
<i>non-metropolitan</i>	18	4 <i>interruptions</i> of greater than or equal to 5 hours

### **Interruptions to be disregarded**

3. In calculating the *interruption duration standard* or the *interruption frequency standard* the following types of *interruptions* (and no others) are excluded:
  - (a) an *interruption* resulting from the following external causes:
    - (i) a shortfall in generation;
    - (ii) a failure or instability of the shared *transmission system*;
    - (iii) a request or direction from an *emergency service organisation*;
  - (b) a *planned interruption*;
  - (c) an *interruption* within a region in which a natural disaster has occurred and:
    - (i) the responsible Minister has made a declaration of a natural disaster enabling the NSW disaster assistance arrangements to apply in respect of that natural disaster for that region; and
    - (ii) the *interruption* occurred during the period for which a declaration of a Natural Disaster and NSW Disaster Assistance Arrangements were in effect;
  - (d) an *interruption* caused by the effects of a severe thunderstorm or severe weather as advised by the Bureau of Meteorology. These effects may include the necessary operation of a circuit protection device which interrupts supply to *customers* in areas not directly impacted by the severe thunderstorm or severe weather.



- (e) an *interruption* caused by third party actions other than animal or vegetation interference (e.g. vehicle-hit-pole, vandalism) where the interruption is not also caused by any failure of the *Licence Holder* to comply with relevant plans, codes, guides or standards (e.g. low conductor clearance).

## 6.5 MAJOR EVENT DAY

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### Explanation and Purpose

The following process ("Beta Method") is used to identify *major event days* which are to be excluded from the *network overall reliability standards*, *individual feeder standards* and *individual customer standards*. The method is to be used provided that the natural log transformation of the data results closely resembles a Gaussian (normal) distribution. Where this is not the case, the *Licence Holder* may seek the *Tribunal's* approval to apply a different threshold value.

Its purpose is to allow major events to be studied separately from daily operation, and in the process, to better reveal trends in a daily operation that would be hidden by the large statistical effect of major events.

A *major event day* under the Beta Method is one in which the daily total system (i.e. not on a *feeder type* basis) *SAIDI* value ("daily *SAIDI* value") exceeds a threshold value, *TMED*. The *SAIDI* is used as the basis of determining whether a day is a *major event day* since it leads to consistent results regardless of utility size and because *SAIDI* is a good indicator of operational and design stress.

In calculating the daily total system *SAIDI*, any *interruption* that spans multiple days is deemed to accrue on the day on which the *interruption* begins. That is, all minutes without supply resulting from an *interruption* beginning on a *major event day* are deemed to have occurred in the *major event day*, including those minutes without supply occurring on following days.

### Determining a major event day

The *major event day* identification threshold value *TMED* is calculated at the end of each *financial year* for each *Licence Holder* for use during the next *financial year* as follows:

- (a) Collect daily *SAIDI* values for the last five *financial years*. If fewer than five years of historical data are available, use all available historical data for the lesser period.
- (b) Only those days that have a daily *SAIDI* value will be used to calculate the *TMED* (i.e. days that did not have any *interruptions* are not included).
- (c) Take the natural logarithm (ln) of each daily *SAIDI* value in the data set.
- (d) Find  $\alpha$  (Alpha), the average of the logarithms (also known as the log-average) of the data set.
- (e) Find  $\beta$  (Beta), the standard deviation of the logarithms (also known as the log-standard deviation) of the dataset.
- (f) Complete the major event day threshold *TMED* using the following equation:

$$TMED = e^{(\alpha + 2.5\beta)}$$

- (g) Any day with daily *SAIDI* value greater than the threshold value *TMED* which occurs during the subsequent *financial year* is classified as a *major event day*.



### Treatment of a major event day

To avoid doubt, a *major event day*, and all *interruptions* beginning on that day, are excluded from the calculation of a *Licence Holder's SAIDI* and *SAIFI* in respect of all of its *feeder types*.

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## 6.6 METROPOLITAN AREAS

Table 6: Local Government Areas		
ASHFIELD	HUNTERS HILL	PITTWATER
AUBURN	HURSTVILLE	RANDWICK
BANKSTOWN	KOGARAH	ROCKDALE
BAULKHAM HILLS	KU-RING-GAI	RYDE
BLACKTOWN	LAKE MACQUARIE	SHELLHARBOUR
BOTANY BAY	LANE COVE	STRATHFIELD
BURWOOD	LEICHHARDT	SUTHERLAND
CAMDEN	LIVERPOOL	SYDNEY
CAMPBELLTOWN	MANLY	WARRINGAH
CANTERBURY	MARRICKVILLE	WAVERLEY
CANADA BAY	MOSMAN	WILLOUGHBY
FAIRFIELD	NEWCASTLE	WOLLONGONG
GOSFORD	NORTH SYDNEY	WOOLLAHRA
HOLROYD	PARRAMATTA	WYONG
HORNSBY	PENRITH	

Table 7: Suburbs	
A. Blue Mountains area	
BLACKHEATH	LINDEN
BLAXLAND	MEDLOW BATH
BULLABURRA	MOUNT RIVERVIEW
FAULCONBRIDGE	MOUNT VICTORIA
GLENBROOK	SPRINGWOOD
HAWKESBURY HEIGHTS	VALLEY HEIGHTS
HAZELBROOK	WARRIMOO
KATOOMBA	WENTWORTH FALLS
LAPSTONE	WINMALEE
LAWSON	WOODFORD
LEURA	YELLOW ROCK

<b>B. Cessnock-Bellbird area</b>	
ABERDARE	CESSNOCK
BELLBIRD	KEARSLEY
BELLBIRD HEIGHTS	NULKABA
<b>C. Kiama area</b>	
BOMBO	KIAMA HEIGHTS
KIAMA	MINNAMURRA
KIAMA DOWNS	
<b>D. Kurri Kurri-Weston area</b>	
ABERMAIN	PELAW MAIN
HEDDON GRETA	STANFORD MERTHYR
KURRI KURRI	WESTON
NEATH	
<b>E. Maitland area</b>	
ABERGLASSLYN	MOUNT DEE
ASHTONFIELD	OAKHAMPTON
BOLWARRA	OAKHAMPTON HEIGHTS
BOLWARRA HEIGHTS	PITNACREE
EAST MAITLAND	RAWORTH
HORSESHOE BEND	RUTHERFORD
LARGS	SOUTH MAITLAND
LORN	TELARAH
LOUTH PARK	TENAMBIT
MAITLAND	THORNTON
METFORD	WOODBERRY
MORPETH	
<b>F. Newcastle Industrial area</b>	
FERN BAY	WILLIAMTOWN
FULLERTON COVE	
<b>G. Port Stephens area</b>	
CORLETTE	SALAMANDER BAY
FINGAL BAY	SHOALBAY
NELSON BAY	SOLDIERS POINT
<b>H. Raymond Terrace area</b>	

HEATHERBRAE	TOMAGO
RAYMOND TERRACE	
<b>I. Richmond-Windsor area</b>	
BLIGH PARK	NORTH RICHMOND
CLARENDON	RICHMOND
HOBARTVILLE	SOUTH WINDSOR
MCGRATHS HILL	VINEYARD
MULGRAVE	WINDSOR

## 6.7 INDIVIDUAL CUSTOMER STANDARDS

**Table 8**

The *minutes interrupted* and *number of interruptions* will be measured at the *connection point* for each *customer*.

Type of area in which the affected <i>connection point</i> is located	<i>Minutes interrupted</i>	<i>Number of interruptions</i>
<i>Metropolitan</i>	350	4
<i>Non-Metropolitan</i>	1000	8

## APPENDIX 2 - CRITICAL INFRASTRUCTURE LICENCE CONDITIONS

*For the purposes of conditions 1, 2 and 4 in this Appendix 2, it is acknowledged that the assets which the Licence Holder operates may constitute "critical infrastructure" being those physical facilities, supply chains, information technologies and communication networks which, if destroyed, degraded or rendered unavailable for an extended period, would significantly impact on the security, social or economic wellbeing of the State of New South Wales and other States and Territories which are from time to time electrically interconnected with New South Wales and other States and Territories. The licence conditions in this Appendix 2 will be reviewed by the Minister from time to time (and where necessary) in consultation with responsible Ministers of the Commonwealth and relevant States and Territories. These licence conditions will be reviewed by the Minister from time to time (and where necessary) in consultation with responsible Ministers of the Commonwealth and relevant States and Territories. According to its own legislation and policy, the Commonwealth may require a Licence Holder to agree to certain arrangements. The Licence Holder should also establish procedures for sharing national security threats with the Critical Infrastructure Centre and action received information on a good-faith basis.*

### 1 Substantial presence in Australia

- 1.1 Except to the extent allowed for under the *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder* must take all practical and reasonable steps to ensure:
- (a) the maintenance of its *distribution system* is undertaken solely from within Australia, except where maintenance requires either physical servicing of components offshore or the acquisition of replacement components from outside Australia. In such an instance it is the responsibility of the senior officer responsible for network operations to ensure this maintenance does not impact condition 1.2 of this Appendix 2; and
  - (b) that any third party or non-*Licence Holder* employee, including individuals/entities from outside Australia, undertaking maintenance of the *distribution system* is subject to the approval of the senior officer responsible for network operations.
- 1.2 Except to the extent that the *Licence Holder* is undertaking steps in accordance with, and for the duration of, a *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder*:
- (a) must, by using best industry practice for electricity network control systems, ensure that operation and control of its *distribution system*, including all associated ICT infrastructure, can be accessed, operated and controlled only from within Australia, and that its *distribution system* is not connected to any other infrastructure or network which could enable it to be controlled or operated by persons outside Australia; and
  - (b) must notify the *Commonwealth Representative* in advance of any engagement with the market to procure a contract under which it outsources the operation and control of its *distribution system*, including any ICT infrastructure associated with the operation and control of its *distribution system*.

**Note:** *For the purposes of Licence condition 1.2(a) in this Appendix 2:*

*Best industry practice includes access required by relevant Australian regulators and market and system operators to meet the Licence Holder's obligations under Australian law.*

- (c) will be taken to have satisfied condition 9.2(a) for the duration of the period set out in an *approved plan* if the *Licence Holder*:
  - (i) has a plan approved by the *Minister*, in the case of a plan approved as of the first issue of this *Licence*, or any other plan or amended plan approved by the *Tribunal* subsequent to the first issue of this *Licence* (each an *approved plan*); and
  - (ii) is at the relevant time undertaking the steps that are required to be undertaken in that *approved plan*.

### 1.3 The *Licence Holder* must:

- (a) have at least two directors who are Australian citizens; and
- (b) have senior officers responsible for (notwithstanding their title):
  - (iii) operational technology;
  - (iv) network operations; and
  - (v) security operations,
 in relation to its *distribution system*,

who are persons residing in Australia and hold an appropriate national security clearance, being a clearance of not less than Negative Vetting Level 1 (or equivalent) issued by the NSW Government on advice from the Australian Government Security Vetting Agency (AGSVA).

**Note:** For the purposes of Licence condition 1.3(b) of this Appendix 2:

*The senior officer responsible for operational technology is the officer whose responsibilities include:*

- *Delivering the Supervisory Control and Data Acquisition (SCADA) capability required to safely and reliably operate the NSW distribution system;*
- *Developing and implementing strategies to manage cyber security and other threats affecting the network operational technology environment; and*
- *Developing systems for effectively managing assets remotely, including but not limited to network switches, condition monitoring and remote interrogation or operation of protection systems and relays.*

*The senior officer responsible for network operations is the officer whose responsibilities include:*

- *The day to day operation, monitoring and maintenance of the distribution system; and*
- *Directing the operational planning, management, control and security of the distribution system.*

*The senior officer responsible for security operations is the officer whose responsibilities include:*

- *Approval for the Licence Holder's personnel or other nominated personnel to access the Licence Holder's information systems or physical access to the Licence Holder's premises and associated infrastructure;*
- *Personnel security; and*
- *Managing relationships with Commonwealth and state government*

agencies.

**Note:** The above responsibilities may be held by a single officer or shared between more than one officer. Where the responsibilities are shared between more than one officer, the relevant senior officer responsibility contemplated in condition 1.1(a) of this Appendix 2 is the joint responsibility of the multiple officers and the approval contemplated in condition 1.1(b) of this Appendix 2 must be obtained from each of those officers.

1.4 The *Licence Holder* is not in breach of its obligations under:

- (a) condition 1.3(a) of this Appendix 2 if, in the case of a casual vacancy on the board of directors, the vacancy is filled within two months of the casual vacancy first occurring;
- (b) condition 1.3 of this Appendix 2 if, following:
  - (i) the *first issue of these conditions* to the *Licence Holder*; or
  - (ii) any position identified in condition 1.3 of this Appendix 2 being vacated or the relevant person ceasing to satisfy the qualifications set out there for any reason,  
the *Licence Holder*:
  - (iii) procures the appointment of a person to the relevant position that the *Licence Holder* bona fide believes will be able to obtain the required security clearance; and
  - (iv) has procured that the person applies for the required security clearance.

1.5 The exception in condition 1.4(b) of this Appendix 2 ceases to apply to the *Licence Holder* if:

- (a) an appointment and application for national security clearance for the person is not made within 4 months of (as relevant) the *first issue of these conditions* or the relevant vacancy or disqualification occurring; or
- (b) if the application referred to in condition 1.5(a) of this Appendix 2 is made and is rejected or withdrawn, the *Licence Holder* does not procure a replacement application being made within 4 months of that rejection or withdrawal; or
- (c) the *Licence Holder* does not procure compliance with condition 1.3(b) of this Appendix 2 in any event with respect to any position within 8 months (or such longer period as approved in writing by the *Minister*) of (as relevant) the *first issue of these conditions* or the relevant vacancy occurring.

## 2 Data security

2.1 The *Licence Holder* must ensure that:

- (a) all of its information (being design specifications, operating manuals and the like) as to the operational technology (such as the SCADA system) and associated ICT infrastructure of the operational network is held solely within Australia, and that such information is accessible only by a *Relevant Person* who has been authorised by the *Licence Holder* and only from within Australia;
- (b) all:
  - (i) *Load Data*; and
  - (ii) *Bulk Personal Data Records*,relating to or obtained in connection with the operation of the *distribution system* by a

*Relevant Person* is held solely within Australia, and is accessible only by a *Relevant Person* or a person who has been authorised by the *Licence Holder*; and

- (c) it does not export, and has appropriate security controls in place to prevent the export of, *Bulk Personal Data Records* relating to or obtained in connection with the operation of the *distribution system* by a *Relevant Person*, outside of Australia.

2.2 The *Licence Holder* is not in breach of its obligations under conditions 2.1(a), 2.1(b)(i) or 2.1(c) of this Appendix 2 if the *Licence Holder* discloses, holds, uses or accesses any information or data referred to in those conditions, or the *Licence Holder* allows a *Relevant Person* approved by the senior officer referred to in condition 1.3(b)(i) of this Appendix 2 to disclose, hold, use or access any information or data referred to in those conditions for the purposes of:

- (a) disclosure to a recognised stock exchange so that such information is made available publicly in compliance with a binding obligation on the part of the *Licence Holder* or that *Associate* to do so;
- (b) complying with any law of the Commonwealth of Australia, or of any of its States and Territories;
- (c) disclosure to the financial, accounting, insurance, legal, regulatory and other advisers, auditors, insurers, security trustees and financiers (and each of their advisers) of the *Licence Holder*, any *Associate*, and any bona fide prospective purchaser of any interest in, or of any interest in the main undertaking of, the *Licence Holder* or any *Associate*, but in each case only to the extent necessary in order for those persons to provide the advisory or other services bona fide required of them;
- (d) disclosure to participants, regulators and service providers in the electricity sector, provided it is in the ordinary course and in accordance with good electricity industry practice, and such information is required by those persons to provide the services or to perform the functions bona fide required of them;
- (e) providing aggregated data which does not permit identification of sites or groups of sites (or their *connection points*) or their demand characteristics;
- (f) allowing a service provider or contractor to hold, use or access information where that arrangement is approved by the *Tribunal*, in the case of arrangements approved as of the *first issue of this Licence*, and otherwise where the *Licence Holder* has provided the *Commonwealth Representative* with a submission demonstrating that:
  - (i) the service provider or contractor is reputable; and
  - (ii) the service provider or contractor has data security systems in place to ensure information security is maintained,

and has obtained the written agreement of the *Commonwealth Representative* for the arrangement.

- (g) allowing a service provider or contractor who is a provider to the *Licence Holder* at the date of this Licence to hold, use or access information provided the *Licence Holder* is at the relevant time undertaking the steps that are required to be undertaken as set out in a plan (and for the duration of the period set out in that plan) related to that service provider or contractor approved by the Minister, in the case of a plan as of the first issue of this *Licence*, or any plan or amended plan approved by the *Tribunal* subsequent to the first issue of this *Licence* (each an *approved plan*);
- (h) such other circumstances as approved by the *Tribunal* in writing. Prior to seeking approval from the *Tribunal*, the *Licence Holder* must provide the *Commonwealth Representative* with



a reasonable opportunity within a period not ending less than 60 calendar days to confirm in writing to the *Tribunal* that the Commonwealth does not intend to make any further requests or submissions in relation to the matter.

- 2.3 The *Licence Holder* is not in breach of its obligations under condition 2.1(b)(ii) of this Appendix 2 if a *Relevant Person* or a person authorised to access the information by the *Licence Holder* discloses, holds, uses or accesses personal information in accordance with the *Privacy Act 1988* (Cth).
- 2.4 The *Licence Holder* must ensure that third party data or information (including without limitation communications within the meaning of the *Telecommunications (Interception and Access) Act 1979* (Cth), personal information within the meaning of the *Privacy Act 1988* (Cth), and closed-circuit television footage) which is indirectly accessed or obtained by the *Licence Holder* because that third party data or information is transferred by a carrier or other party using the *Licence Holder's* infrastructure, are held by the *Licence Holder* solely within Australia, and are accessible only by a *Relevant Person* or a person who has been authorised by the *Licence Holder* and, in each case, only from within Australia.

### 3 Consultation with the Commonwealth

If the *Licence Holder* is a Foreign Person, in considering whether to provide or withhold approval under conditions 2.2(f) or 2.2(h) of this Appendix 2, ~~or whether to approve any plan or amended plan under conditions 1.2(c) or 2.2(g) of this Appendix 2,~~ the *Tribunal* must:

- (a) notify the *Commonwealth Representative* that the *Tribunal's* approval under conditions ~~1.2(c), 2.2(f), 2.2(g)~~ or 2.2(h) of this Appendix 2 (as applicable) is being sought by the *Licence Holder*, and
- (b) provide the Commonwealth with a reasonable opportunity to:
  - (i) request such information as the Commonwealth reasonably requires; and
  - (ii) make submissions to the *Tribunal* on whether the *Tribunal* should provide its approval, and if so, the terms upon which that approval should be provided,

within a period ending not less than 60 calendar days from the date of notification under condition 3(a) of this Appendix 2 unless the *Commonwealth Representative* confirms in writing to the *Tribunal* that the Commonwealth does not intend to make any further requests or submissions in relation to the matter.

### 4 Compliance

- 4.1 On 30 September each year the *Licence Holder* must furnish a report to the *Tribunal* and the *Commonwealth Representative* detailing whether the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 2 over the preceding *financial year* to 30 June.
- 4.2 The report required under condition 4.1 of this Appendix 2 must be audited by an *Approved Auditor* by a date specified by the *Tribunal*. The audit required by this condition 4.2 of Appendix 2 must be a comprehensive audit and must meet any requirements specified by the *Tribunal*. The *Licence Holder* must provide the audited report to the *Commonwealth Representative* at the same time that the report is provided to the *Tribunal*.
- 4.3 The *Tribunal* may provide guidance to the *Approved Auditor* as to whether the *Licence Holder's* practices have satisfied or will satisfy conditions 1 and 2 of this Appendix 2.

- 4.4 The report required under condition 4.1 of this Appendix 2 must be accompanied by a certification in writing supported by a resolution of the Board of the *Licence Holder* that, with respect to the relevant period:
- (a) the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 2; or
  - (b) the *Licence Holder* has not complied with conditions 1 and 2 of this Appendix 2 and certifying the nature and extent of each non-compliance and the steps taken by the *Licence Holder* to ensure compliance (and to preclude further non-compliance) and the timeframe within which it expects to achieve compliance.

## C Recommended Licence - Essential Energy

**INSTRUMENT OF VARIATION OF CONDITIONS OF DISTRIBUTOR'S LICENCE**  
***ELECTRICITY SUPPLY ACT 1995 (NSW)***

**1 Variation of conditions of distributor's licence**

I, Matthew Kean, Minister for Energy, pursuant to clause 7 of Schedule 2 of the *Electricity Supply Act 1995*, hereby vary the Licence held by the Licence Holder.

This is the second instrument of variation issued for the Licence.

**2 Commencement**

This Instrument of Variation commences on the day this Instrument is signed.

**3 Definitions**

In this Instrument of Variation:

**Licence** means the distributor's licence taken to be held by the Licence Holder's predecessors under NSW legislation and currently held by the Licence Holder for the purposes of section 14 of the *Electricity Supply Act 1995*.

**Licence Holder** means Essential Energy (ABN 37 428 185 226), a statutory state owned corporation established under the *Energy Services Corporations Act 1995*.

**Previous Licence Conditions** means all the conditions of the Licence as in force immediately before the commencement of this Instrument of Variation.

**4 Variation of licence**

- (1) Omit the Previous Licence Conditions and substitute Schedule A.
- (2) Clause 4(1) does not:
  - (a) revive anything not in force or existing at the time this Instrument of Variation takes effect;
  - (b) affect the previous operation of the Previous Licence Conditions or anything done or begun under or in accordance with the Previous Licence Conditions; or
  - (c) affect a right, privilege or liability acquired, accrued or incurred under the Previous Licence Conditions.

**Date:**

**The Hon. Matthew Kean**  
**Minister for Energy**

## SCHEDULE A

### MINISTERIALLY IMPOSED LICENCE CONDITIONS FOR THE OPERATOR OF A DISTRIBUTION SYSTEM

These *Licence* conditions are imposed by the *Minister* pursuant to clause 6(1)(b) of Schedule 2 of the *Act*.

These *Licence* conditions are in addition to other *Licence* conditions imposed by the *Minister*, *Licence* conditions under the *Act* or *Regulations*, and other obligations imposed on *Licence Holders* by the *Act* and *Regulations*.

#### GENERAL CONDITIONS

##### 1 Operate within distribution district

- 1.1 At all times this *Licence* is in force, the *Licence Holder* must ensure that it and all other network operators of its *distribution system* only operate a *distribution system*:
- (a) within its *distribution district* as set out in Schedule 3 of the *Act*; and
  - (b) within:
    - i. such other areas outside of its *distribution district* in which the *Licence Holder* operated a *distribution system* as at 5 February 2019; or
    - ii. any areas notified by the *Licence Holder* to the *Tribunal* and included in the register maintained by the *Tribunal* between 5 February 2019 and the date of the second instrument of variation issued for this *Licence*; and
  - (c) within such other *distribution district* outside of its *distribution district*, as agreed with the *distributor* for the other *distribution district*.
- 1.2 Where the *Licence Holder* has obtained agreement from another *distributor* to operate in the *distribution district* of such other *distributor*, the *Licence Holder* must:
- (a) make a record of the agreement which includes sufficient details to allow all assets that operate or are to be operated outside the *Licence Holder's distribution district* to be uniquely identified and located; and
  - (b) where the *Licence Holder* permanently removes or disconnects assets that were operating outside of its *distribution district*, remove details of these assets from the record referred to in condition 1.2(a).

##### 2 National Electricity Market registration

At all times this *Licence* is in force, the *Licence Holder* must ensure that it and all other network operators of its *distribution system*:

- (a) are registered or exempt from the requirement to be registered as a Network Service Provider under the National Electricity Rules; or
- (b) hold any equivalent authorisation or right of participation in any national electricity market, granted by the person responsible for the granting of such an authorisation or right of participation under any legislation enacted for the purpose of introducing such a market.

### **3 Technical and prudential criteria**

The *Licence Holder* must, for the duration of this *Licence*, ensure that it and all other network operators of its *distribution system* satisfy the technical and prudential criteria that each entity is required to meet as a condition of its registration or exemption, or equivalent authorisation or right of participation in any national electricity market, referred to in condition 2.

### **4 Business continuity and disruptions**

- 4.1 The *Licence Holder* must have a documented system to ensure that it has adequate arrangements in place to identify, assess and manage business continuity risks and manage business disruptions relating to the operation of its *distribution system* (a *Business Continuity Plan*).
- 4.2 The *Licence Holder* must ensure that it and any other network operator of its *distribution system* implements and complies with the *Business Continuity Plan*.

### **5 Reliability and performance**

The *Licence Holder* must ensure that it complies with the *Reliability and Performance Standards*.

### **6 Critical infrastructure**

The *Licence Holder* must ensure that it and all other network operators of its *distribution system* comply with the *Critical Infrastructure Licence Conditions*.

## **CONDITIONS RELATING TO MANAGEMENT SYSTEMS**

### **7 Maintenance of certified management systems**

- 7.1 The *Licence Holder* must have and maintain:
  - (a) an asset management system that is consistent with *Australian Standard AS ISO 55001:2014 Asset management - Management systems - Requirements* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*, and
  - (b) an environmental management system that is consistent with *Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management systems – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*,which comply with this condition 7.
- 7.2 The *Licence Holder* must ensure that:
  - (a) its asset management system is certified by an appropriately qualified person to be consistent with *Australian Standard AS ISO 55001:2014 Asset management - Management systems – Requirements* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*, and
  - (b) its environmental management system is certified by an appropriately qualified person to be consistent with *the Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management systems – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*.

- 7.3 The *Licence Holder* must ensure that the certification of its asset management system and its environmental management system in accordance with condition 7.2 is maintained for the duration of the *Licence*.

## **8 Implementation of management systems**

The *Licence Holder* must ensure that its asset management system and environmental management system are fully implemented, and all relevant activities undertaken by it or any other network operator of its *distribution system* are carried out in accordance with the relevant management system.

## **CONDITIONS RELATING TO COMPLIANCE, REPORTING AND FEES**

### **9 Reporting in accordance with Reporting Manuals**

The *Licence Holder* must prepare and submit reports in accordance with any *Reporting Manuals* issued by the *Tribunal*.

### **10 Complying with Audit Guidelines issued by the Tribunal**

The *Licence Holder* must comply with any *Audit Guidelines* issued by the *Tribunal*.

### **11 Compliance management systems**

The *Licence Holder* must ensure internal systems are developed and maintained that are capable of effectively managing compliance with its *Licence*.

### **12 Compliance with statistical operating obligations**

The *Licence Holder* must provide to the *Tribunal* such operating statistics and performance indicators as may be required from time to time by the *Tribunal*. The *Tribunal* will provide the *Licence Holder* with reasons for its request when the initial request is made and after that when a request relates to operating statistics and performance indicators that are of a materially different type or category to that provided under the initial or subsequent request.

### **13 Information about compliance with Licence Conditions**

The *Licence Holder* must provide to the *Tribunal* (at such times and in respect of such periods as the *Tribunal* may determine and in the manner and form specified by the *Tribunal*) such information as the *Tribunal* may determine, to enable the *Tribunal* to ascertain whether or not the *Licence Holder* is complying with the conditions of its *Licence*, the *Act* or the *Regulations*.

### **14 Compliance with Public Lighting Code**

- 14.1 The *Licence Holder* must ensure that it and all other network operators of its *distribution system* comply with the NSW Public Lighting Code published by the Department of Planning, Industry and Environment, as amended from time to time.

### **15 Compliance with audit directions**

- 15.1 The *Tribunal* may at any time direct the *Licence Holder*, by written notice, to engage an *Approved Auditor* at the expense of the *Licence Holder* to conduct an audit of, and prepare a report on, the

*Licence Holder's* compliance with conditions imposed on it by this *Licence*, the *Act* or *Regulations*.

- 15.2 The *Licence Holder* must comply with any direction issued by the *Tribunal* under condition 15.1.
- 15.3 The *Licence Holder* must provide the *Approved Auditor's* report to the *Tribunal* by the date specified in the direction issued by the *Tribunal* under condition 15.1.

## **16 Licence Fees**

- 16.1 It is a condition of this *Licence* that the *Licence Holder* pay such fees (annual or otherwise) in connection with the holding of the *Licence* as may be determined by the *Minister* from time to time.
- 16.2 The *Licence Holder* must pay the fees referred to in condition 16.1 in the manner and within the period specified by the *Tribunal*.

## **INTERPRETATION AND DEFINITIONS**

### **Interpretation**

In these *Licence* conditions, unless the context requires otherwise:

- (a) the singular includes the plural and vice versa;
- (b) headings are used for convenience only and do not affect the interpretation of these *Licence* conditions;
- (c) a reference to a document includes the document as modified from time to time and any document replacing it;
- (d) a reference to a person includes a natural person and any body or entity whether incorporated or not; and
- (e) references to conditions are references to conditions in these *Licence* conditions.

### **Definitions**

Expressions used in these *Licence* conditions that are defined in the *Act* or the *Regulations* have the meanings set out in the *Act* or the *Regulations*.

Where the following terms are in italics in these *Licence* conditions, they have the following corresponding meaning:

Act	means the <i>Electricity Supply Act 1995</i> .
Approved Auditor	means an auditor who has been approved by the <i>Tribunal</i> in accordance with any <i>Audit Guidelines</i> issued by the <i>Tribunal</i> .
Approved plan	has the meaning given to it in conditions 1.7 and 2.6 of Appendix 2 to these conditions.
Associate	has the meaning given to that term in the <i>Corporations Act 2001</i> (Cth).
Audit Guidelines	means any document setting out audit requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.



Bulk Personal Data Records	means any holdings or files of personal information (within the meaning of the <i>Privacy Act 1988</i> (Cth)) about multiple individuals which contain fields or categories.
Business Continuity Plan	has the meaning given to it in condition 4.1.
CBD Sydney feeder	means a <i>feeder</i> forming part of the triplex 11kV cable system supplying predominantly commercial high-rise buildings, within the City of Sydney.
Commonwealth Representative	means the First Assistant Secretary, with responsibility for critical infrastructure security within the Commonwealth or equivalent level in a subsequent agency with responsibility for critical infrastructure security.  <i>Note: At the time of varying this Licence, the Commonwealth Representative is the First Assistant Secretary responsible for the Cyber and Infrastructure Security Centre within the Commonwealth Department of Home Affairs.</i>
Connection point	in relation to the premises of a <i>customer</i> or a class of <i>customers</i> , means the point of connection to an electrical installation supplying electricity to the premises as determined in accordance with the <i>Service and Installation Rules of New South Wales</i> , as in force from time to time, published by the Department of Planning, Industry and Environment.
Critical Infrastructure Licence Conditions	means the conditions set out in Appendix 2 to these conditions.
Customer	means a wholesale or retail customer who is supplied electricity through a <i>connection point</i> on an electricity distributor's system.
Customer service standards	means the customer service standards set out in condition 4 of Appendix 1 to these conditions.
Distribution district	has the meaning given to it in the Dictionary to the <i>Act</i> .
Distribution system	means the distribution system of which the <i>Licence Holder</i> is a network operator.
Distributor	has the meaning given to it in the Dictionary to the <i>Act</i> .
Emergency service organisation	has the same meaning as section 3 of the <i>State Emergency and Rescue Management Act 1989</i> .
Excluded interruptions	means excluded interruptions listed in Appendix 1 to these conditions (see 6.4 'Excluded Interruptions').
Feeder	means a high-voltage line operating at over 1kV and generally at or below 22 kV that connects between a zone substation and a distribution substation.
Feeder type	means a <i>CBD Sydney feeder</i> , <i>long rural feeder</i> , <i>short rural feeder</i> or <i>urban feeder</i> as the case may be.
Financial year	means the period commencing on 1 July and ending 30 June the following calendar year.
First issue of this Licence	or <i>First issue of these conditions</i> refers to the date of the first issue of this Licence, being 5 February 2019.

Individual customer standards	means the individual customer standards in Table 3 of Appendix 1 to these conditions.
Individual feeder standards	means the individual feeder standards in Tables 4 and 5 of Appendix 1 to these conditions.
Interruption	means any temporary unavailability of electricity supply to a customer associated with an outage of the <i>distribution system</i> including outages affecting a single premises but does not include disconnection.
Interruption duration standards	means the interruption duration standards set out in Appendix 1 to these conditions (see 6.5, 'Customer Service Standards').
Interruption frequency standards	means the interruption frequency standards set out in Appendix 1 to these conditions (see 6.5, 'Customer Service Standards').
Licence	means the distributor's licence authorising the <i>Licence Holder</i> to operate its <i>distribution system</i> .
Licence Holder	means a person who is the holder of a <i>Licence</i> .
Load Data	means data as to the quantum of electricity delivered (both historical and current load demand from one or to any one or more sites (or their <i>connection points</i> ) which satisfies each of the following criteria: <ul style="list-style-type: none"> <li>i. it is not historical load data older than 30 days;</li> <li>ii. it is not fault data;</li> <li>iii. it describes a location that allows a <i>customer(s)</i> or <i>connection point(s)</i> to be identified;</li> <li>iv. it describes a date and time of the data record; and</li> <li>v. it describes a duration – a length of time that allows for a quantum to exist.</li> </ul>
Local government area	has the same meaning as 'area' in Chapter 9 of the <i>Local Government Act 1993</i> .
Long rural feeder	means a <i>feeder</i> with a total <i>feeder</i> length greater than 200 km which is not a <i>CBD Sydney feeder</i> or an <i>urban feeder</i> .
Major event day	has the meaning given in Appendix 1 to these conditions (see 6.6, 'Major Event Day').
Metropolitan	means the areas comprising the <i>local government areas</i> and <i>suburbs</i> listed in Tables 7 and 8 of Appendix 1 to these conditions, but only to the extent that the <i>Licence Holder</i> may operate a <i>distribution system</i> in the relevant areas in accordance with condition 1.
Minister	means the Minister responsible for administering the <i>Act</i> .
Minutes interrupted	means the total number of minutes from any <i>interruption</i> to a <i>customer</i> over the relevant 12 month period.
Network overall reliability standards	means the requirements imposed under condition 1 of Appendix 1 to these conditions.
Non-Metropolitan	means areas in NSW other than areas defined as <i>metropolitan</i> .

Number of interruptions	means the total number of times there is an <i>interruption</i> to a <i>customer</i> over the relevant 12 month period.
Planned interruption	means an <i>interruption</i> that has been planned by the <i>Licence Holder</i> .
Protocol	means a document of the type referred to in conditions 1.1 and 1.2 of Appendix 2 to these conditions, that is required by the Commonwealth and which must be agreed to between the <i>Commonwealth Representative</i> and the <i>Licence Holder</i> . The document may set out (among other things) the: <ul style="list-style-type: none"> <li>i. specified purpose for which maintenance of <i>distribution system</i> equipment may be conducted offshore and the circumstances in which it may be conducted offshore;</li> <li>ii. methodology and activities to be undertaken to allow for maintenance and repairs of <i>distribution system</i> equipment to be carried out involving remote access from offshore;</li> <li>iii. exceptional circumstances in which the <i>Protocol</i> applies; and</li> <li>iv. activities and processes which achieve requisite level of cyber-security.</li> </ul>
Quarter	means a period of three months commencing 1 January, 1 April, 1 July and 1 October and concluding on the following 31 March, 30 June, 30 September and 31 December dates respectively.
Regulations	means regulations made under the <i>Act</i> .
Relevant Person	means the <i>Licence Holder</i> , any other network operator of the <i>distribution system</i> , and any person who is contracted or sub-contracted by the <i>Licence Holder</i> to work on the <i>distribution system</i> .
Reliability and Performance Standards	means the conditions set out in Appendix 1 to these conditions.
Reporting Manual	means any document setting out reporting requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.
SAIDI	means the average derived from the sum of the durations of each sustained customer interruptions (measured in minutes), divided by the total number of <i>customers</i> (averaged over the <i>financial year</i> ) of the <i>Licence Holder</i> .
SAIDI average standards	means the standards set out in Table 1 of Appendix 1 to these conditions.
SAIFI	means the average derived from the total number of sustained customer interruptions divided by the total number of <i>customers</i> (averaged over the <i>financial year</i> ) of the <i>Licence Holder</i> .
SAIFI average standards	means the standards set out in Table 2 of Appendix 1 to these conditions.
Short rural feeder	means a <i>feeder</i> with a total <i>feeder</i> route length less than 200 km, and which is not a <i>CBD Sydney feeder</i> or an <i>urban feeder</i> .
Suburb	means an area defined by boundaries determined and gazetted by the Geographical Names Board of New South Wales.

Tribunal	means the Independent Pricing and Regulatory Tribunal of New South Wales established under the <i>Independent Pricing and Regulatory Tribunal Act 1992</i> .
Urban feeder	means a <i>feeder</i> with actual maximum demand over the reporting period per total <i>feeder</i> route length greater than 0.3 MVA/km and which is not a <i>CBD Sydney feeder</i> .

## APPENDIX 1 – RELIABILITY AND PERFORMANCE STANDARDS

### 1 Network overall reliability standards

- 1.1 A *Licence Holder* must not, when *excluded interruptions* are disregarded, exceed in a *financial year* the *SAIDI average standards* that apply to its *feeder types*.
- 1.2 A *Licence Holder* must not, when *excluded interruptions* are disregarded, exceed in a *financial year* the *SAIFI average standards* that apply to its *feeder types*.

### 2 Individual feeder performance

- 2.1 This condition 2 of this Appendix 1 applies where one or more of the *feeders* of a *Licence Holder* exceed the relevant *individual feeder standards* for any 12 month period ending at the end of March, June, September or December, when *excluded interruptions* are disregarded.
- 2.2 A *Licence Holder* must:
  - (a) investigate the causes for each *feeder* exceeding the *individual feeder standards*;
  - (b) by the end of the *quarter* following the *quarter* in which the *feeder* first exceeded the *individual feeder standards*, complete an investigation report identifying the causes and, as appropriate, any action required to improve the performance of each *feeder* to the *individual feeder standards*;
  - (c) complete any operational actions identified in the investigation report to improve the performance of each *feeder* against the *individual feeder standards* by the end of the third *quarter* following the *quarter* in which each *feeder* first exceeded the *individual feeder standards*;
  - (d) except as permitted by condition 2.2(e) of this Appendix 1, where the investigation report identifies actions, other than operational actions, required to improve the performance of each *feeder* to the *individual feeder standards*, develop a project plan, including implementation timetable, and commence its implementation by the end of the second *quarter* following the *quarter* in which the *feeder* first exceeded the *individual feeder standards*;
  - (e) consider non-network strategies which provide reliable outcomes for *customers*. Where found by the investigation report to be equal or more cost-effective than the lowest cost feasible network option, such strategies shall be adopted rather than network augmentation options;
  - (f) ensure that the implementation timetable for the project plan or alternative non-network solutions is as short as is reasonably practicable; and
  - (g) where all reasonable steps to improve supply reliability have been taken, the costs of further actions to rectify the non-compliance must be subject to a cost benefit analysis. Where such analysis does not provide a positive benefit, no further action will be taken to improve the *feeder's* performance and the ongoing non-conformance with the *individual feeder standards* will be reported to the *Minister* by the *Licence Holder*.
- 2.3 The investigation report is to include a documented rectification plan where action is found to be justified in order to improve the performance of a *feeder* to the *individual feeder standards*. The action that is required may involve work to other network elements or may involve only repair or maintenance work where capital works are not warranted and take into account any one-off events and previous performance trends.

### 3 Reliability provided to individual customers

- 3.1 This condition 3 of this Appendix 1 does not apply to a *connection point* supplied by a *Licence Holder's feeder* to which condition 2 of this Appendix 1 applies.
- 3.2 Where the *minutes interrupted* exceed the relevant *individual customer standards* in any 12 month period ending at the end of March, June, September or December when *excluded interruptions* are disregarded, the *Licence Holder* must comply with condition 3.4.
- 3.3 Where the *number of interruptions* exceed the *individual customer standards* in any 12 month period ending at the end of March, June, September or December, when *excluded interruptions* are disregarded, the *Licence Holder* must comply with condition 3.4.
- 3.4 A *Licence Holder* must:
- (a) investigate the causes for the *minutes interrupted* or *number of interruptions* (as the case may be) exceeding the *individual customer standards*;
  - (b) by the end of the *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) first exceeded the *individual customer standards*, complete an investigation report that must:
    - (i) identify the causes for exceeding the *individual customer standards*;
    - (ii) as appropriate, identify any action required to improve performance against the *individual customer standards*; and
    - (iii) consider the terms of the connection contract (including network security arrangements) agreed with the *customer* of the affected *connection point*, including when the *customer* was connected to the *distribution system*;
  - (c) complete any operational actions identified in the investigation report to improve performance against the *individual customer standards* by the end of the third *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) first exceeded the *individual customer standards*;
  - (d) except as permitted by condition 3.4(e) of this Appendix 1, where the investigation report identifies actions, other than operational actions, required to improve performance against the *individual customer standards*, develop a project plan, including implementation timetable, and commence its implementation by the end of the fourth *quarter* following the *quarter* in which the *minutes interrupted* or *number of interruptions* (as the case may be) exceeded the *individual customer standards*;
  - (e) consider non-network strategies which provide reliable outcomes for *customers*. Where found by the investigation report to be equal or more cost-effective than the lowest cost feasible network option, such strategies shall be adopted rather than network augmentation options;
  - (f) ensure that the implementation timetable for the project plan or alternative non-network solutions is as short as is reasonably practicable; and
  - (g) where all reasonable steps to improve supply reliability have been taken, the costs of further actions to rectify the non-compliance must be subject to a cost benefit analysis. Where such analysis does not provide a positive benefit, no further action will be taken to improve the *minutes interrupted* or *number of interruptions* (as the case may be) and the ongoing non-conformance with the *individual customer standards* will be reported to the *Minister* by the *Licence Holder*.

- 3.5 The investigation report is to include a documented rectification plan where action is found to be justified in order to improve the *minutes interrupted* or *number of interruptions* (as the case may be) against the *individual customer standards*. The action that is required may involve work to other network elements, or may involve only repair or maintenance work where capital works are not warranted and take into account any one-off events and previous performance trends.

#### 4 Customer service standards

- 4.1 A *Licence Holder* must pay the sum of \$80 to a *customer* on each occasion when the *Licence Holder* exceeds the *interruption duration standard* at the *customer's* premises and the *customer* has made a claim to the *Licence Holder* within three months of the *interruption* ceasing.
- 4.2 A *Licence Holder* must pay the sum of \$80 to a *customer* where the *Licence Holder* exceeds the *interruption frequency standard* at the *customer's* premises in a *financial year* and the *customer* has made a claim to the *Licence Holder* within three months of the end of the *financial year* to which the *interruptions* relate.
- 4.3 A *Licence Holder* must determine a claim for payment under this condition 4 of this Appendix 1, and notify the *customer* of the determination in writing, within one month of receipt of a claim. For *customers* eligible for payment, the notice of determination must include the amount to be paid, the manner of payment and the timing of payment. Where the claim is not paid (whether in part or in full), the notice of determination must include reasons for the decision.
- 4.4 A *Licence Holder* is required to take reasonable steps to make *customers* aware of the availability of payments on the terms set out in this condition 4 of this Appendix 1. Reasonable steps include, as a minimum, publication of information on the *Licence Holder's* website and annual newspaper advertisements. On request from a *customer*, a *Licence Holder* must provide written information on the availability of payments on the terms set out in this condition 4 of this Appendix 1.
- 4.5 A *Licence Holder* is required to make only one payment of \$80 to a *customer* per premises in a *financial year* for exceeding the *interruption frequency standard*.
- 4.6 A *Licence Holder* is required to pay no more than \$320 under this condition 4 of this Appendix 1 to a *customer* per premises in any one *financial year*.
- 4.7 A payment under this condition 4 of this Appendix 1 does not:
- (a) in any way alter or diminish any rights that a *customer* may have against any person under any trade practices or other applicable legislation, common law or contract;
  - (b) represent any admission of legal liability by the *Licence Holder*, or
  - (c) alter, vary or exclude the operation of section 119 of the *National Electricity Law* or any other statutory limitations on liability or immunities applicable to a *Licence Holder*.
- 4.8 *Customers* who are eligible for payments under this condition 4 of this Appendix 1 are limited to those *customers* who are supplied electricity through a metered *connection point* on an electricity distributor's system.

## 5 Performance monitoring and reporting

### Network overall reliability standards report

- 5.1 A *Licence Holder* must submit a *network overall reliability standards quarterly* report to the *Tribunal* within one month of the end of each *quarter*.
- 5.2 Each *network overall reliability standards* report must include the following matters for the previous 12 month period to the end of that *quarter*:
- (a) performance against the *SAIDI average standards* and *SAIFI average standards* by *feeder type*, disregarding *excluded interruptions*;
  - (b) reasons for any non-compliance by the *Licence Holder* with the *network overall reliability standards* and plans to improve performance; and
  - (c) any other matter notified by the *Tribunal* in writing.

### Individual feeder standards report

- 5.3 A *Licence Holder* must submit, within one month of the end of each *quarter*, a *quarterly individual feeder standards* report to the *Tribunal* on *feeders* that exceeded the relevant *individual feeder standards* during the previous 12 month period to the end of that *quarter*, together with, for each *feeder*:
- (a) the date at which the *feeder* first exceeded the relevant *individual feeder standard*, together with the actual *SAIDI* and *SAIFI* performance of the *feeder* for the 12 month period;
  - (b) details of the remedial action that the *Licence Holder* intends taking, or has taken, to improve the performance of those *feeders*;
  - (c) either of the following:
    - (i) the date of completion, or the date of planned completion, of the remedial action plan; or
    - (ii) details of the investigation and action proposed or undertaken leading to the decision to advise the *Tribunal* that it is not economically justifiable to bring the *feeder* performance into compliance with the *individual feeder standards*; and
  - (d) any other matter notified by the *Tribunal* in writing.

### Individual customer standards report

- 5.4 A *Licence Holder* must submit, within one month of the end of each *quarter*, a *quarterly individual customer standards* report to the *Tribunal* on instances where conditions 3.2 and/or 3.3 of this Appendix 1 applied, together with the following details:
- (a) the date at which the *minutes interrupted* or *number of interruptions* (as the case may be) exceeded the *individual customer standard*, together with the actual *minutes interrupted* or *number of interruptions* for the affected *connection point* for the 12 month period;
  - (b) details of the remedial action that the *Licence Holder* intends taking, or has taken, to improve compliance with the *individual customer standards*;
  - (c) if applicable, the date of completion, or the date of planned completion, of the remedial action plan;
  - (d) if applicable, details of the investigation and action proposed or undertaken leading to the decision to advise the *Tribunal* that it is not economically justifiable to bring the *minutes interrupted* or *number of interruptions* (as the case may be) for the affected *connection point* into compliance with the *individual customer standards*; and



- (e) any other matter notified by the *Tribunal* in writing.

#### **Customer service standards report**

- 5.5 A *Licence Holder* must submit a *quarterly customer service standards* report to the *Tribunal* on the following matters within one month of the end of each *quarter*, for the preceding *quarter* and for the previous 12 month period to the end of that *quarter*:
- (a) the number of payments given under condition 4 of this Appendix 1 to *customers* by each type of area listed in Column 1 of Table 6 of this Appendix 1 and by the type of standard, as shown in Columns 2 and 3 of Table 6 of this Appendix 1;
  - (b) the number of claims not paid (whether in part or full) under condition 4 of this Appendix 1 by each type of area listed in Column 1 of Table 6 of this Appendix 1 and by the type of standard, as shown in Columns 2 and 3 of Table 6 of this Appendix 1; and
  - (c) any other matter notified by the *Tribunal* in writing.

#### **Incident reporting**

- 5.6 A *Licence Holder* must prepare and submit reports on any incident in accordance with any *Reporting Manual* issued by the *Tribunal*.

#### **Independent audit report**

- 5.7 An independent audit must be conducted after the end of each *financial year* to audit the *Licence Holder* 's performance against the:
- (a) *network overall reliability standards*;
  - (b) *individual feeder standards*;
  - (c) *individual customer standards*; and
  - (d) *customer service standards*.
- 5.8 The audit must be conducted in accordance with any *Audit Guidelines* issued by the *Tribunal*.
- 5.9 A *Licence Holder* is required to nominate a person to conduct the independent audit by written notice given to the *Tribunal* in accordance with auditor nomination procedures published in any *Audit Guidelines* issued by the *Tribunal*.
- 5.10 The person nominated to conduct the independent audit is to be a person who is:
- (a) independent of the *Licence Holder*; and
  - (b) competent to exercise the functions of an auditor in respect of the matters to be audited.
- 5.11 The nomination of an auditor by a *Licence Holder* ceases to have effect if the *Tribunal* advises the *Licence Holder*, by notice in writing, that the nomination is not acceptable or has ceased to be acceptable.
- 5.12 The *Tribunal* may nominate an auditor to carry out an audit, and the person so nominated is taken to have been nominated by the *Licence Holder*, if:
- (a) the nomination of an auditor by the *Licence Holder* ceases to have effect; or
  - (b) the *Licence Holder* fails to nominate an auditor to carry out the audit in accordance with any requirements specified by the *Tribunal* by notice in writing to the *Licence Holder*.

- 5.13 A *Licence Holder* must provide a copy of the auditor's report by 30 September each year to the *Tribunal*.

#### General matters concerning reports

- 5.14 Where the *Tribunal* determines the format of a report required by this condition 5 of this Appendix 1, a *Licence Holder* must submit the report in that format.
- 5.15 The *Tribunal* may from time to time publish requirements to be followed by the *Licence Holder* in respect of reports required by this condition 5 of this Appendix 1 and the *Licence Holder* must comply with any such requirements.
- 5.16 The *Tribunal* may from time to time require, by notice in writing to the *Licence Holder*, further reports relating to these *Licence* conditions including, without limitation, reports relating to capital expenditure works, network refurbishment and maintenance programs.
- 5.17 A *Licence Holder* must provide a report submitted to the *Tribunal* under this condition 5 of this Appendix 1 to the *Minister*, if requested to do so by the *Minister* by notice in writing.

## 6 Definitions

### 6.1 NETWORK OVERALL RELIABILITY STANDARDS

Table 1: SAIDI Average Reliability Duration Standards (Minutes per customer)

<b>SAIDI (Minutes per customer)</b>	
<b>ESSENTIAL ENERGY</b>	
<i>Urban</i>	125
<i>Short-rural</i>	300
<i>Long-rural</i>	700

Table 2: SAIFI Average Reliability Interruption Standards (Number per customer)

<b>SAIFI (Number per customer)</b>	
<b>ESSENTIAL ENERGY</b>	
<i>Urban</i>	1.8
<i>Short-rural</i>	3.0
<i>Long-rural</i>	4.5

## 6.2 INDIVIDUAL CUSTOMER STANDARDS

The *minutes interrupted* and *number of interruptions* will be measured at the *connection point* for each *customer*.

**Table 3**

Type of area in which the affected <i>connection point</i> is located	<i>Minutes interrupted</i>	<i>Number of interruptions</i>
<i>Metropolitan</i>	400	6
<i>Non-Metropolitan</i>	1000	8

## 6.3 INDIVIDUAL FEEDER STANDARDS

**Table 4: SAIDI Individual Feeder Average Reliability Duration Standards (Minutes per customer)**

<i>SAIDI (Minutes per customer)</i>	
ESSENTIAL ENERGY	
<i>Urban</i>	400
<i>Short-rural</i>	1000
<i>Long-rural</i>	1400

**Table 5: SAIFI Individual Feeder Standards Average Reliability Interruption Standards (Number per customer)**

<i>SAIFI (Number per customer)</i>	
ESSENTIAL ENERGY	
<i>Urban</i>	6
<i>Short-rural</i>	8
<i>Long-rural</i>	10

## 6.4 EXCLUDED INTERRUPTIONS

The following types of *interruptions* (and no others) are *excluded interruptions*:

- (a) an *interruption* of a duration of three minutes or less;
- (b) an *interruption* resulting from:
  - (i) load shedding due to a shortfall in generation;
  - (ii) a direction or other instrument issued under the *National Electricity Law, Energy and Utilities Administration Act 1987*, the *Essential Services Act 1988* or the *State Emergency and Rescue Management Act 1989* to interrupt the supply of electricity;
  - (iii) automatic shedding of load under the control of under-frequency relays following the

occurrence of a power system under-frequency condition described in the *Power System Security and Reliability Standards* made under the *National Electricity Rules*;

- (iv) a failure of the shared transmission system;
- (c) a *planned interruption*;
- (d) any *interruption* to the supply of electricity on a *Licence Holder's distribution system* which commences on a *major event day*; and
- (e) an *interruption* caused by a *customer's* electrical installation or failure of that electrical installation.

## 6.5 CUSTOMER SERVICE STANDARDS

### ***Interruption duration standard***

1. The *interruption duration standard* is the maximum duration, set out in column 2 of Table 6, of an *interruption* to a *customer's* premises located in the relevant area in column 1 of Table 6.

### ***Interruption frequency standard:***

2. The *interruption frequency standard* is the maximum *number of interruptions* in a *financial year* set out in column 3 of Table 6, to a *customer's* premises located in the relevant area in column 1 of Table 6:

**Table 6**

Column 1	Column 2	Column 3
Type of area in which <i>customer's</i> premises is located	<i>Interruption duration standard</i> (hours)	<i>Interruption frequency standard</i> (number of <i>interruptions</i> and hours of duration)
<i>metropolitan</i>	12	4 <i>interruptions</i> of greater than or equal to 4 hours
<i>non-metropolitan</i>	18	4 <i>interruptions</i> of greater than or equal to 5 hours

### **Interruptions to be disregarded**

3. In calculating the *interruption duration standard* or the *interruption frequency standard* the following types of *interruptions* (and no others) are excluded:
  - (a) an *interruption* resulting from the following external causes:
    - (i) a shortfall in generation;
    - (ii) a failure or instability of the shared *transmission system*;
    - (iii) a request or direction from an *emergency service organisation*;
  - (b) *planned interruption*;

- (c) an *interruption* within a region in which a natural disaster has occurred and:
  - (i) the responsible Minister has made a declaration of a natural disaster enabling the NSW disaster assistance arrangements to apply in respect of that natural disaster for that region; and
  - (ii) the *interruption* occurred during the period for which a declaration of a Natural Disaster and NSW Disaster Assistance Arrangements were in effect;
- (d) an *interruption* caused by the effects of a severe thunderstorm or severe weather as advised by the Bureau of Meteorology. These effects may include the necessary operation of a circuit protection device which interrupts supply to customers in areas not directly impacted by the severe thunderstorm or severe weather;
- (e) an *interruption* caused by third party actions other than animal or vegetation interference (e.g. vehicle-hit-pole, vandalism) where the *interruption* is not also caused by any failure of the *Licence Holder* to comply with relevant plans, codes, guides or standards (e.g. low conductor clearance).

## 6.6 MAJOR EVENT DAY

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### Explanation and Purpose

The following process (“Beta Method”) is used to identify *major event days* which are to be excluded from the *network overall reliability standards*, *individual feeder standards* and *individual customer standards*. The method is to be used provided that the natural log transformation of the data results closely resembles a Gaussian (normal) distribution. Where this is not the case, the *Licence Holder* may seek the *Tribunal’s* approval to apply a different threshold value.

Its purpose is to allow major events to be studied separately from daily operation, and in the process, to better reveal trends in a daily operation that would be hidden by the large statistical effect of major events.

A *major event day* under the Beta Method is one in which the daily total system (i.e. not on a *feeder type* basis) *SAIDI* value (“daily *SAIDI* value”) exceeds a threshold value, *TMED*. The *SAIDI* is used as the basis of determining whether a day is a *major event day* since it leads to consistent results regardless of utility size and because *SAIDI* is a good indicator of operational and design stress.

In calculating the daily total system *SAIDI*, any *interruption* that spans multiple days is deemed to accrue on the day on which the *interruption* begins. That is, all minutes without supply resulting from an *interruption* beginning on a *major event day* are deemed to have occurred in the *major event day*, including those minutes without supply occurring on following days.

### Determining a major event day

The *major event day* identification threshold value *TMED* is calculated at the end of each *financial year* for each *Licence Holder* for use during the next *financial year* as follows:

- (a) Collect daily *SAIDI* values for the last five *financial years*. If fewer than five years of historical data are available, use all available historical data for the lesser period.
- (b) Only those days that have a daily *SAIDI* value will be used to calculate the *TMED* (i.e. days that did not have any *interruptions* are not included).
- (c) Take the natural logarithm ( $\ln$ ) of each daily *SAIDI* value in the data set.
- (d) Find  $\alpha$  (Alpha), the average of the logarithms (also known as the log-average) of the data set.

- (e) Find  $\beta$  (Beta), the standard deviation of the logarithms (also known as the log-standard deviation) of the data set.
- (f) Complete the *major event day* threshold  $T_{MED}$  using the following equation:  

$$T_{MED} = e^{(\alpha + 2.5\beta)}$$
- (g) Any day with daily *SAIDI* value greater than the threshold value  $T_{MED}$  which occurs during the subsequent *financial year* is classified as a *major event day*.

#### Treatment of a major event day

To avoid doubt, a *major event day*, and all *interruptions* beginning on that day, are excluded from the calculation of a *Licence Holder's SAIDI* and *SAIFI* in respect of all of its *feeder types*.

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## 6.7 METROPOLITAN AREAS

Table 7: Local Government Areas		
ASHFIELD	HUNTERS HILL	PITTWATER
AUBURN	HURSTVILLE	RANDWICK
BANKSTOWN	KOGARAH	ROCKDALE
BAULKHAM HILLS	KU-RING-GAI	RYDE
BLACKTOWN	LAKE MACQUARIE	SHELLHARBOUR
BOTANY BAY	LANE COVE	STRATHFIELD
BURWOOD	LEICHHARDT	SUTHERLAND
CAMDEN	LIVERPOOL	SYDNEY
CAMPBELLTOWN	MANLY	WARRINGAH
CANTERBURY	MARRICKVILLE	WAVERLEY
CANADA BAY	MOSMAN	WILLOUGHBY
FAIRFIELD	NEWCASTLE	WOLLONGONG
GOSFORD	NORTH SYDNEY	WOOLLAHRA
HOLROYD	PARRAMATTA	WYONG
HORNSBY	PENRITH	

<b>Table 8: Suburbs</b>	
<b>A. Blue Mountains area</b>	
BLACKHEATH	LINDEN
BLAXLAND	MEDLOW BATH
BULLABURRA	MOUNT RIVERVIEW
FAULCONBRIDGE	MOUNT VICTORIA
GLENBROOK	SPRINGWOOD
HAWKESBURY HEIGHTS	VALLEY HEIGHTS
HAZELBROOK	WARRIMOO
KATOOMBA	WENTWORTH FALLS
LAPSTONE	WINMALEE
LAWSON	WOODFORD
LEURA	YELLOW ROCK
<b>B. Cessnock-Bellbird area</b>	
ABERDARE	CESSNOCK
BELLBIRD	KEARSLEY
BELLBIRD HEIGHTS	NULKABA
<b>C. Kiama area</b>	
BOMBO	KIAMA HEIGHTS
KIAMA	MINNAMURRA
KIAMA DOWNS	
<b>D. Kurri Kurri-Weston area</b>	
ABERMAIN	PELAW MAIN
HEDDON GRETA	STANFORD MERTHYR
KURRI KURRI	WESTON
NEATH	
<b>E. Maitland area</b>	
ABERGLASSLYN	MOUNT DEE
ASHTONFIELD	OAKHAMPTON
BOLWARRA	OAKHAMPTON HEIGHTS
BOLWARRA HEIGHTS	PITNACREE

EAST MAITLAND	RAWORTH
HORSESHOE BEND	RUTHERFORD
LARGS	SOUTH MAITLAND
LORN	TELARAH
LOUTH PARK	TENAMBIT
MAITLAND	THORNTON
METFORD	WOODBERRY
MORPETH	
<b>F. Newcastle Industrial area</b>	
FERN BAY	WILLIAMTOWN
FULLERTON COVE	
<b>G. Port Stephens area</b>	
CORLETTE	SALAMANDER BAY
FINGAL BAY	SHOAL BAY
NELSON BAY	SOLDIERS POINT
<b>H. Raymond Terrace area</b>	
HEATHERBRAE	TOMAGO
RAYMOND TERRACE	
<b>I. Richmond-Windsor area</b>	
BLIGH PARK	NORTH RICHMOND
CLARENDON	RICHMOND
HOBARTVILLE	SOUTH WINDSOR
MCGRATHS HILL	VINEYARD
MULGRAVE	WINDSOR



## APPENDIX 2 – CRITICAL INFRASTRUCTURE LICENCE CONDITIONS

*For the purposes of conditions 1, 2 and 3 in this Appendix 2, it is acknowledged that the assets which the Licence Holder operates may constitute "critical infrastructure" being those physical facilities, supply chains, information technologies and communication networks which, if destroyed, degraded or rendered unavailable for an extended period, would significantly impact on the security, social or economic wellbeing of the State of New South Wales and other States and Territories which are from time to time electrically interconnected with New South Wales and other States and Territories. The licence conditions in this Appendix 2 will be reviewed by the Minister from time to time (and where necessary) in consultation with responsible Ministers of the Commonwealth and relevant States and Territories. According to its own legislation and policy, the Commonwealth may require a Licence Holder to agree to certain arrangements. The Licence Holder should also establish procedures for sharing national security threats with the Critical Infrastructure Centre and action received information on a good-faith basis.*

### 1 Substantial presence in Australia

- 1.1 Except to the extent allowed for under the *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder* must take all practical and reasonable steps to ensure:
- (a) the maintenance of its *distribution system* is undertaken solely from within Australia, except where maintenance requires either physical servicing of components offshore or the acquisition of replacement components from outside Australia. In such an instance, it is the responsibility of the senior officer responsible for network operations to ensure this maintenance does not impact condition 1.2 in this Appendix 2; and
  - (b) that any third party or non-*Licence Holder* employee, including individuals/entities from outside Australia, undertaking maintenance of the *distribution system* is subject to the approval of the senior officer responsible for network operations.
- 1.2 Except to the extent that the *Licence Holder* is undertaking steps in accordance with, and for the duration of, a *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder*:
- (a) must, by using best industry practice for electricity network control systems, ensure that operation and control of its *distribution system*, including all associated ICT infrastructure, can be accessed, operated and controlled only from within Australia, and that its *distribution system* is not connected to any other infrastructure or network which could enable it to be controlled or operated by persons outside Australia; and
  - (b) must notify the *Commonwealth Representative* in advance of any engagement with the market to procure a contract under which it outsources the operation and control of its *distribution system*, including any ICT infrastructure associated with the operation and control of its *distribution system*.

**Note:** *For the purposes of condition 1.2(a) in this Appendix 2:*

*Best industry practice includes access required by relevant Australian regulators and market and system operators to meet the Licence Holder's obligations under Australian law.*

- 1.3 The *Licence Holder* must:
- (a) have at least two directors who are Australian citizens; and
  - (b) have senior officers responsible for (notwithstanding their title):
    - (i) operational technology;

- (ii) network operations; and
- (iii) security operations,

in relation to its *distribution system*,

who are persons residing in Australia and hold an appropriate national security clearance, being a clearance of not less than Negative Vetting Level 1 (or equivalent) issued by the NSW Government on advice from the Australian Government Security Vetting Agency (AGSVA).

**Note:** For the purposes of condition 1.3(b) in this Appendix 2:

*The senior officer responsible for operational technology is the officer whose responsibilities include:*

- *Delivering the Supervisory Control and Data Acquisition (SCADA) capability required to safely and reliably operate the NSW distribution system;*
- *Developing and implementing strategies to manage cyber security and other threats affecting the network operational technology environment; and*
- *Developing systems for effectively managing assets remotely, including but not limited to network switches, condition monitoring and remote interrogation or operation of protection systems and relays.*

*The senior officer responsible for network operations is the officer whose responsibilities include:*

- *The day to day operation, monitoring and maintenance of the distribution system; and*
- *Directing the operational planning, management, control and security of the distribution system.*

*The senior officer responsible for security operations is the officer whose responsibilities include:*

- *Approval for the Licence Holder's personnel or other nominated personnel to access the Licence Holder's information systems or physical access to the Licence Holder's premises and associated infrastructure;*
- *Personnel security; and*
- *Managing relationships with Commonwealth and state government agencies.*

**Note:** *The above responsibilities may be held by a single officer or shared between more than one officer. Where the responsibilities are shared between more than one officer, the relevant senior officer responsibility contemplated in condition 1.1(a) of this Appendix 2 is the joint responsibility of the multiple officers and the approval contemplated in condition 1.1(b) of this Appendix 2 must be obtained from each of those officers.*

1.4 The *Licence Holder* is not in breach of its obligations under:

- (a) condition 1.3(a) of this Appendix 2 if, in the case of a casual vacancy on the board of directors, the vacancy is filled within two months of the casual vacancy first occurring;
- (b) condition 1.3 of this Appendix 2 if, following:
  - (i) the *first issue of these conditions* to the *Licence Holder*; or
  - (ii) any position identified in condition 1.3 of this Appendix 2 being vacated or the relevant person ceasing to satisfy the qualifications set out there for any reason,

the *Licence Holder*.

- (iii) procures the appointment of a person to the relevant position that the *Licence Holder* bona fide believes will be able to obtain the required security clearance; and
- (iv) has procured that the person applies for the required security clearance.

1.5 The exception in condition 1.4(b) of this Appendix 2 ceases to apply to the *Licence Holder* if:

- (a) an appointment and application for national security clearance for the person is not made within 4 months of (as relevant) the *first issue of these conditions* or the relevant vacancy or disqualification occurring; or
- (b) if the application referred to in condition 1.5(a) of this Appendix 2 is made and is rejected or withdrawn, the *Licence Holder* does not procure a replacement application being made within 4 months of that rejection or withdrawal; or
- (c) the *Licence Holder* does not procure compliance with condition 1.3(b) of this Appendix 2 in any event with respect to any position within 8 months (or such longer period as approved in writing by the *Minister*) of (as relevant) the *first issue of these conditions* or the relevant vacancy occurring.

1.6 Until 1 July 2019, and despite whether the *Licence Holder* is complying with condition 1 of this Appendix 2, the *Licence Holder* will be taken to have complied with condition 1 of this Appendix 2, if it has taken reasonable steps towards developing an *approved plan* as contemplated by condition 1.7 of this Appendix 2.

1.7 The *Licence Holder* will be taken to have satisfied condition 1 of this Appendix 2 for the duration of the period set out in an *approved plan* if the *Licence Holder*:

- (a) has a plan approved by the *Tribunal* by 1 July 2019; and
- (b) is at the relevant time undertaking the steps that are required to be undertaken in that *approved plan*.

## 2 Data Security

2.1 The *Licence Holder* must ensure that:

- (a) all of its information (being design specifications, operating manuals and the like) as to the operational technology (such as the SCADA system) and associated ICT infrastructure of the operational network is held solely within Australia, and that such information is accessible only by a *Relevant Person* who has been authorised by the *Licence Holder* and only from within Australia;
- (b) all:
  - (i) *Load Data*; and
  - (ii) *Bulk Personal Data Records*,  
relating to or obtained in connection with the operation of the *distribution system* by a *Relevant Person* is held solely within Australia, and is accessible only by a *Relevant Person* or a person who has been authorised by the *Licence Holder*; and
- (c) it does not export, and has appropriate security controls in place to prevent the export of, *Bulk Personal Data Records* relating to or obtained in connection with the operation of the *distribution system* by a *Relevant Person*, outside of Australia.

2.2 The *Licence Holder* is not in breach of its obligations under conditions 2.1(a), 2.1(b)(i) or 2.1(c) of this Appendix 2 if the *Licence Holder* discloses, holds, uses or accesses any information or

data referred to in those conditions, or the *Licence Holder* allows a *Relevant Person* approved by the senior officer referred to in condition 1.3(b)(i) of this Appendix 2 to disclose, hold, use or access any information or data referred to in those conditions for the purposes of:

- (a) disclosure to a recognised stock exchange so that such information is made available publicly in compliance with a binding obligation on the part of the *Licence Holder* or an *Associate* to do so;
- (b) complying with any law of the Commonwealth of Australia, or of any of its States and Territories;
- (c) disclosure to the financial, accounting, insurance, legal, regulatory and other advisers, auditors, insurers, security trustees and financiers (and each of their advisers) of the *Licence Holder*, any *Associate*, and any bona fide prospective purchaser of any interest in, or of any interest in the main undertaking of, the *Licence Holder* or any *Associate*, but in each case only to the extent necessary in order for those persons to provide the advisory or other services bona fide required of them;
- (d) disclosure to participants, regulators and service providers in the electricity sector, provided it is in the ordinary course of business and in accordance with good electricity industry practice, and such information is required by those persons to provide the services or to perform the functions bona fide required of them;
- (e) providing aggregated data which does not permit identification of any particular *customer* or *customer's connection points* or their demand characteristics;
- (f) allowing a service provider or contractor to hold, use or access information where that arrangement is approved by the *Tribunal*, in the case of arrangements approved as of the *first issue of this Licence*, and otherwise where the *Licence Holder* has provided the *Commonwealth Representative* with a submission demonstrating that:
  - (i) the service provider or contractor is reputable; and
  - (ii) the service provider or contractor has data security systems in place to ensure information security is maintained;

and has obtained the written agreement of the *Commonwealth Representative* for the arrangement;

- (g) allowing a service provider or contractor who is a provider to the *Licence Holder* at the date of this *Licence* to hold, use or access information provided the *Licence Holder* is at the relevant time undertaking the steps that are required to be undertaken as set out in an *approved plan* referred to in condition 2.6 of this Appendix 2; and
- (h) such other circumstances as approved by the *Tribunal* in writing. Prior to seeking approval from the *Tribunal*, the *Licence Holder* must provide the *Commonwealth Representative* with a reasonable opportunity within a period not ending less than 60 calendar days to confirm in writing to the *Tribunal* that the Commonwealth does not intend to make any further requests or submissions in relation to the matter.

2.3 The *Licence Holder* is not in breach of its obligations under condition 2.1(b)(ii) of this Appendix 2 if a *Relevant Person* or a person authorised to access the information by the *Licence Holder* discloses, holds, uses or accesses personal information in accordance with the *Privacy Act 1988* (Cth).

2.4 The *Licence Holder* must ensure that third party data or information (including without limitation communications within the meaning of the *Telecommunications (Interception and Access) Act 1979* (Cth), personal information within the meaning of the *Privacy Act 1988* (Cth), and closed-circuit television footage) which is indirectly accessed or obtained by the *Licence Holder* because that third party data or information is transferred by a carrier or other party using the

*Licence Holder's* infrastructure, are held by the *Licence Holder* solely within Australia, and are accessible only by a *Relevant Person* or a person who has been authorised by the *Licence Holder* and, in each case, only from within Australia.

- 2.5 Until 1 July 2019, and despite whether the *Licence Holder* is complying with condition 2 of this Appendix 2, the *Licence Holder* will be taken to have complied with condition 2 of this Appendix 2 if it has taken reasonable steps towards developing an *approved plan* as contemplated by condition 2.6 of this Appendix 2.
- 2.6 The *Licence Holder* will be taken to have satisfied condition 2 of this Appendix 2 for the duration of the period set out in an *approved plan* if the *Licence Holder*:
- (a) has a plan approved by the *Tribunal* by 1 July 2019; and
  - (b) is at the relevant time undertaking the steps that are required to be undertaken in that *approved plan*.

### **3 Compliance**

- 3.1 By 30 September each year the *Licence Holder* must furnish a report to the *Tribunal* and the *Commonwealth Representative* detailing whether the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 2 over the preceding *financial year* to 30 June.
- 3.2 For the purposes of the *financial year* to 30 June 2019, the *Licence Holder's* report must detail the steps taken towards compliance with conditions 1.6 and 2.5 of this Appendix 2.
- 3.3 The report required under condition 3.1 of this Appendix 2 must be audited by an *Approved Auditor* by a date specified by the *Tribunal*. The audit required by this condition 3.3 of this Appendix 2 must be a comprehensive audit and must meet any requirements specified by the *Tribunal*. The *Licence Holder* must provide the audited report to the *Commonwealth Representative* at the same time that the report is provided to the *Tribunal*.
- 3.4 The *Tribunal* may provide guidance to the *Approved Auditor* as to the *Licence Holder's* practices that have satisfied or will satisfy conditions 1 and 2 of this Appendix 2.
- 3.5 The report required under condition 3.1 of this Appendix 2 must be accompanied by a certification in writing supported by a resolution of the Board of the *Licence Holder* that, with respect to the relevant period:
- (a) the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 2; or
  - (b) the *Licence Holder* has not complied with conditions 1 and 2 of this Appendix 2, and certifying the nature and extent of each non-compliance and the steps taken by the *Licence Holder* to ensure compliance (and to preclude further non-compliance) and the timeframe within which it expects to achieve compliance.

## D Recommended Licence – Transgrid

# INSTRUMENT OF VARIATION OF CONDITIONS OF TRANSMISSION OPERATOR'S LICENCE

## *ELECTRICITY SUPPLY ACT 1995 (NSW)*

### **1 Variation of conditions of transmission operator's licence**

I, Matthew Kean, Minister for Energy, pursuant to clause 7 of Schedule 2 of the *Electricity Supply Act 1995*, hereby vary the Licence held by the Licence Holder.

### **2 Commencement**

This Instrument of Variation commences on the day this Instrument is signed.

### **3 Definitions**

In this Instrument of Variation:

**Licence** means the transmission operator's licence granted under section 93A of the *Electricity Supply Act 1995* to the Licence Holder to operate a transmission system that is a transacted transmission system under the *Electricity Network Assets (Authorised Transactions) Act 2015* effective on 16 December 2015.

**Licence Holder** means NSW Electricity Networks Operations Pty Limited (ACN 609 169 959) as trustee for the NSW Electricity Networks Operations Trust.

**Previous Licence Conditions** means all the conditions of the Licence as in force immediately before the commencement of this Instrument of Variation.

### **4 Variation of licence**

- (1) Omit the Previous Licence Conditions and substitute Schedule A.
- (2) Clause 4(1) does not:
  - (a) revive anything not in force or existing at the time this Instrument of Variation takes effect;
  - (b) affect the previous operation of the Previous Licence Conditions or anything done or begun under or in accordance with the Previous Licence Conditions; or
  - (c) affect a right, privilege or liability acquired, accrued or incurred under the Previous Licence Conditions.

**Date:**

**The Hon. Matthew Kean**  
**Minister for Energy**

## SCHEDULE A

### MINISTERIALLY IMPOSED LICENCE CONDITIONS FOR THE OPERATOR OF A TRANSACTIONED TRANSMISSION SYSTEM

This schedule provides a list of conditions which the *Minister* has determined to impose pursuant to clause 6(1)(b) of Schedule 2 of the *Electricity Supply Act 1995* (the *Act*) on the operator of a *transacted transmission system* under the *Electricity Network Assets (Authorised Transactions) Act 2015*.

In addition to ministerially-imposed conditions, licensees are subject to obligations imposed by the *Act*, *Regulations* and associated regulatory instruments which include (without limitation) an obligation to comply with requirements imposed by or under regulations made pursuant to section 5.6 of the *Environmental Planning and Assessment Act 1979*.

#### GENERAL CONDITIONS

##### 1 National Electricity Market registration

At all times this *Licence* is in force, the *Licence Holder* must ensure that it and all other network operators of its *transmission system*:

- (a) are registered or exempt from the requirement to be registered as a Network Service Provider under the National Electricity Rules; or
- (b) hold any equivalent authorisation or right of participation in any national electricity market, granted by the person responsible for the granting of such an authorisation or right of participation under any legislation enacted for the purpose of introducing such a market.

##### 2 Technical and prudential criteria

The *Licence Holder* must, for the duration of this *Licence*, ensure that it and all other network operators of its *transmission system* satisfy the technical and prudential criteria that each entity is required to meet as a condition of its registration or exemption, or equivalent authorisation or right of participation in any national electricity market, referred to in condition 1.

##### 3 Reliability and performance standards

The *Licence Holder* must ensure that it and all other network operators of its *transmission system* comply with the *Reliability and Performance Standard*.

##### 4 Annual Demand Forecasts

- (a) The *Licence Holder* must submit its *Annual Demand Forecasts* to AEMO in sufficient time to enable AEMO to consider and provide comments in relation to the forecasts and for the *Licence Holder* to consider those comments prior to finalisation of the *Annual Demand Forecast*.
- (b) In this condition, the **Annual Demand Forecast** means the annual demand forecast prepared as part of the Annual Transmission Planning Review, required under clause 5.12 of the *National Electricity Rules* or any equivalent or replacement requirements.

##### 5 Business continuity and disruptions

- 5.1 The *Licence Holder* must have a documented system to ensure that it has adequate arrangements in place to identify, assess and manage business continuity risks and manage business disruptions relating to the operation of its *transmission system* (a *Business Continuity*



*Plan*).

- 5.2 The *Licence Holder* must ensure that it and any other network operator of its *transmission system* implements and complies with the *Business Continuity Plan*.

## **6 Critical infrastructure**

The *Licence Holder* must ensure that it and all other network operators of its *transmission system* comply with the *Critical Infrastructure Licence Conditions*.

## **CONDITIONS RELATING TO MANAGEMENT SYSTEMS**

### **7 Maintenance of certified management systems**

- 7.1 The *Licence Holder* must have and maintain:

- (a) an asset management system that is consistent with the *Australian Standard AS ISO 55001 - 2014 Asset Management – Management Systems – Requirements* (as in force from time to time) or other standard approved by the *Tribunal* on request of the *Licence Holder*; and
- (b) an environmental management system that is consistent with *Australian/New Zealand Standard AS/NZS ISO 14001: 2016 Environmental management system – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*.

- 7.2 The *Licence Holder* must ensure that:

- (a) its asset management system is certified by an appropriately qualified person to be consistent with the *Australian Standard AS ISO 55001- 2014 Asset Management – Management Systems – Requirements* (as in force from time to time) or other standard approved by the *Tribunal* on request of the *Licence Holder*; and
- (b) its environmental management system is certified by an appropriately qualified person to be consistent with *the Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management systems – Requirements with guidance for use* (as in force from time to time), or other standard approved by the *Tribunal* on request of the *Licence Holder*; and
- (c) the certification of its asset management system and environmental management system in accordance with conditions 7.2(a) and 7.2(b) is maintained for the duration of the *Licence*.

### **8 Implementation of management systems**

The *Licence Holder* must ensure that its asset management system and environmental management system are fully implemented, and all relevant activities undertaken by it or any other network operator of its *transmission system* are carried out in accordance with the relevant management system.

## **CONDITIONS RELATING TO COMPLIANCE, REPORTING AND FEES**

### **9 Reporting in accordance with Reporting Manuals**

The *Licence Holder* must prepare and submit reports in accordance with any *Reporting Manuals* issued by the *Tribunal*.

**10 Complying with Audit Guidelines issued by the Tribunal**

The *Licence Holder* must comply with any *Audit Guidelines* issued by the *Tribunal*.

**11 Compliance management systems**

The *Licence Holder* must ensure internal systems are developed and maintained that are capable of effectively managing compliance with its *Licence*.

**12 Compliance with statistical operating obligations**

The *Licence Holder* must provide to the *Tribunal* such operating statistics and performance indicators as may be required from time to time by the *Tribunal*. The *Tribunal* will provide the *Licence Holder* with reasons for its request when the initial request is made and after that when a request relates to operating statistics and performance indicators that are of a materially different type or category to that provided under the initial or subsequent request.

**13 Information about compliance with Licence Conditions**

The *Licence Holder* must furnish to the *Tribunal* (at such times and in respect of such periods as the *Tribunal* may determine and in the manner and form specified by the *Tribunal*) such information as the *Tribunal* may determine, to enable the *Tribunal* to ascertain whether or not the *Licence Holder* is complying with these *Licence* conditions, the *Act* or the *Regulations*.

**14 Compliance with audit directions**

14.1 The *Tribunal* may at any time direct the *Licence Holder*, by written notice, to engage an *approved auditor* at the expense of the *Licence Holder* to conduct an audit of, and prepare a report on, the *Licence Holder's* compliance with conditions imposed on it by this *Licence*, the *Act* or *Regulations* (***approved auditor's report***).

14.2 The *Licence Holder* must comply with any direction issued by the *Tribunal* under condition 14.1.

14.3 The *Licence Holder* must provide the *approved auditor's report* to the *Tribunal* by the date specified in the direction issued by the *Tribunal* under condition 14.1.

**15 Licence fees**

15.1 It is a condition of this *Licence* that the *Licence Holder* pay such fees (annual or otherwise) in connection with the holding of the *Licence* as may be determined by the *Minister* from time to time.

15.2 The *Licence Holder* must pay the fees referred to in condition 15.1 in the manner and within the period specified by the *Tribunal*.

**INTERPRETATION AND DEFINITIONS**

**Interpretation**

In these *Licence* conditions, unless the context requires otherwise:

- (a) the singular includes the plural and vice versa;
- (b) headings are used for convenience only and do not affect the interpretation of these *Licence* conditions;
- (c) a reference to a document includes the document as modified from time to time and any document replacing it;
- (d) a reference to a person includes a natural person and any body or entity whether

- incorporated or not; and
- (e) references to conditions are references to conditions in these *Licence* conditions.

## Definitions

Expressions used in these *Licence* conditions that are defined in the *Act* or the *Regulations* have the meanings set out in the *Act* or the *Regulations*.

In these *Licence* conditions:

AEMO	Means the Australian Energy Market Operator.
Act	means the <i>Electricity Supply Act 1995</i> .
Approved Auditor	means a person chosen from a panel of auditors approved by the <i>Tribunal</i> or an auditor otherwise approved by the <i>Tribunal</i> as being of reputable standing, suitability qualified and who is independent of the <i>Licence Holder</i> .
Approved Critical Infrastructure Auditor	means an <i>Approved Auditor</i> who has been further approved by the <i>Tribunal</i> as having the necessary experience and expertise in system security or has otherwise demonstrated to the <i>Tribunal's</i> satisfaction the capability to audit compliance with the <i>Critical Infrastructure Licence Conditions</i> .
Associate	has the meaning given to that term in the <i>Corporations Act 2001</i> (Cth).
Audit Guidelines	means any document setting out audit requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.
Bulk Personal Data Records	means any holdings or files of personal information (within the meaning of the <i>Privacy Act 1988</i> (Cth)) about multiple individuals which contain fields or categories.
Business Continuity Plan	has the meaning given to it condition 5.1.
Critical Infrastructure Licence Conditions	means the conditions set out in Appendix 1 to this <i>Licence</i> .
Commonwealth Representative	means the First Assistant Secretary with responsibility for <i>critical infrastructure security</i> within the Commonwealth or equivalent level in a subsequent agency with responsibility for <i>critical infrastructure security</i> .  <i>Note: At the time of varying this Licence, the Commonwealth Representative is the First Assistant Secretary responsible for the Cyber and Infrastructure Security Centre within the Commonwealth Department of Home Affairs.</i>
First issue of these conditions or first issue of this Licence	refers to the first issue of this <i>Licence</i> being 16 December 2015.
Licence	means the transmission operator's licence authorising the <i>Licence Holder</i> to operate its <i>transmission system</i> .
Licence Holder	means a person who is the holder of a <i>Licence</i> .

Load Data	<p>means data as to the quantum of electricity delivered (both historical and current load demand from or to any one or more sites (or their connection points) which satisfies each of the following criteria:</p> <ul style="list-style-type: none"> <li>i. it is not historical load data older than 30 days;</li> <li>ii. it is not fault data;</li> <li>iii. it describes a location that allows a customer(s) or connection point(s) to be identified;</li> <li>iv. it describes the date and time of the data record;</li> <li>v. it describes a magnitude which comprises a voltage of at least 330 kV and power of at least one Terawatt hour; and</li> <li>vi. it describes a duration - a length of time that allows for a quantum to exist.</li> </ul>
Minister	means the <i>Minister</i> responsible for administering the <i>Act</i> .
Protocol	<p>means a document of the type referred to in conditions 1.1 and 1.2 of Appendix 1 of these conditions, that is required by the Commonwealth and which must be agreed to between the <i>Commonwealth Representative</i> and the <i>Licence Holder</i>, the document may set out (among other things) the:</p> <ul style="list-style-type: none"> <li>i. specified purposes for which maintenance of <i>transmission system</i> equipment may be conducted offshore and the circumstances in which it may be conducted offshore;</li> <li>ii. methodology and activities to be undertaken to allow for maintenance and repairs of <i>transmission system</i> equipment to be carried out involving remote access from offshore;</li> <li>iii. the exceptional circumstances in which the <i>Protocol</i> applies; and</li> <li>iv. activities and processes which achieve requisite levels of cyber-security.</li> </ul>
Regulations	means regulations made under the <i>Act</i> .
Relevant Person	means the <i>Licence Holder</i> , any other network operator of the <i>transmission system</i> and any person who is contracted or sub-contracted by the <i>Licence Holder</i> to work on the <i>transmission system</i> .
Reliability and Performance Standard	in condition 3, means Appendix 2 to these conditions, being the <i>NSW Electricity Transmission Reliability and Performance Standard 2017</i> , as amended or replaced from time to time.
Reporting Manual	means any document setting out reporting requirements for <i>Licence Holders</i> which is prepared by the <i>Tribunal</i> and is available on its website at <a href="http://www.ipart.nsw.gov.au">www.ipart.nsw.gov.au</a> as amended from time to time.
transacted transmission system	means a transacted transmission system under the <i>Electricity Network Assets (Authorised Transactions) Act 2015</i> .

Transition Plan	Means a plan of the type described under condition 1.2 of Appendix 1, that is required by the Commonwealth, and which describes the existing practices of the <i>Licence Holder</i> which do not comply with condition 1.2 of Appendix 1 and the planned actions and timeframes to move to compliance. Such a plan is to be agreed to in writing by the <i>Commonwealth Representative</i> .
transmission system	means the transmission system of which the <i>Licence Holder</i> is a network operator.
Tribunal	means the Independent Pricing and Regulatory Tribunal of New South Wales established under the <i>Independent Pricing and Regulatory Tribunal Act 1992</i> .

## Appendix 1

### Critical Infrastructure Licence Conditions

*For the purposes of these Critical Infrastructure Licence Conditions, it is acknowledged that the assets which the Licence Holder operates may constitute “critical infrastructure” being those physical facilities, supply chains, information technologies and communication networks which, if destroyed, degraded or rendered unavailable for an extended period, would significantly impact on the security, social or economic wellbeing of the State of New South Wales and other States and Territories which are from time to time electrically interconnected with New South Wales and other States and Territories. These Critical Infrastructure Licence Conditions will be reviewed by the Minister from time to time (and where necessary) in consultation with responsible Ministers of the Commonwealth and relevant States and Territories. According to its own legislation and policy, the Commonwealth may require a Licence Holder to agree to certain arrangements. The Licence Holder should also establish procedures for national security threat sharing with the Critical Infrastructure Centre and action received information on a good-faith basis.*

#### 1 Substantial presence in Australia

- 1.1 Except to the extent allowed for under the *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder* must take all practical and reasonable steps to ensure:
- (a) the maintenance of its *transmission system* is undertaken solely from within Australia, except where maintenance requires either physical servicing of components offshore or the acquisition of replacement components from outside Australia. In such an instance, it is the responsibility of the senior officer responsible for network operations to ensure this maintenance does not impact condition 1.2 of this Appendix 1; and
  - (b) that any third party or non-*Licence Holder* employee, including individuals/entities from outside Australia, undertaking maintenance of the *transmission system* is subject to the approval of the senior officer responsible for network operations.
- 1.2 Except to the extent that the *Licence Holder* is undertaking steps in accordance with, and for the duration of, a *Transition Plan* and/or a *Protocol* agreed with the *Commonwealth Representative*, the *Licence Holder*:
- (a) must, by using best industry practice for electricity network control systems, ensure that operation and control of its *transmission system*, including all associated ICT infrastructure, can be accessed, operated and controlled only from within Australia, and that its *transmission system* is not connected to any other infrastructure or network which could enable it to be controlled or operated by persons outside Australia;
  - (b) must notify the *Commonwealth Representative* in advance of any engagement with the market to procure a contract under which it outsources the operation and control of its *transmission system*, including any ICT infrastructure associated with the operation and control of its *transmission system*.
- Note:** *For the purposes of condition 1.2(a) of this Appendix 1;*
- Best industry practice includes access required by relevant Australian regulators and market and system operators to meet the Licence Holder's obligations under Australian law.*
- 1.3 The *Licence Holder* must:
- (a) have at least two directors who are Australian citizens; and
  - (b) have senior officers responsible for (notwithstanding their title):
    - (i) operational technology;
    - (ii) network operations; and

- (iii) security operations

in relation to its *transmission system*,

who are persons residing in Australia and hold an appropriate national security clearance, being a clearance of not less than Negative Vetting Level 1 (or equivalent) issued by the NSW Government on advice from the Australian Government Security Vetting Agency (AGSVA).

**Note:** For the purposes of condition 1.3(b) of this Appendix 1:

*The senior officer responsible for operational technology is the officer whose responsibilities include:*

- *Delivering the Supervisory Control and Data Acquisition (SCADA) capability required to safely and reliably operate the NSW transmission system;*
- *Developing and implementing strategies to manage cyber security and other threats affecting the network operational technology environment; and*
- *Developing systems for effectively managing assets remotely, including but not limited to network switches, condition monitoring and remote interrogation or operation of protection systems and relays; and*

*The senior officer responsible for network operations, is the officer whose responsibilities include:*

- *The day to day operation and monitoring of the transmission system; and*
- *Directing the operational planning, management, control and security of the transmission system.*

*The senior officer responsible for security operations, is the officer whose responsibilities include:*

- *Approval for the Licence Holder's personnel or other nominated personnel to access the Licence Holder's information systems or physical access to the Licence Holder's premises and associated infrastructure;*
- *Personnel security; and*
- *Managing relationships with Commonwealth and state government agencies.*

**Note:** *The above responsibilities may be held by a single officer or shared between more than one officer. Where the responsibilities are shared between more than one officer, the relevant senior officer responsibility contemplated in condition 1.1(a) of this Appendix 1 is the joint responsibility of the multiple officers and the approval contemplated in condition 1.1(b) of this Appendix 1 must be obtained from each of those officers.*

1.4 The *Licence Holder* is not in breach of its obligations under:

- (a) condition 1.3(a) of this Appendix 1 if, in the case of a casual vacancy on the board of directors, the vacancy is filled within two months of the casual vacancy first occurring;
- (b) condition 1.3 of this Appendix 1 if following:
  - (i) the first issue of these conditions to the *Licence Holder*; or
  - (ii) either position identified in condition 1.3 of this Appendix 1 being vacated or the relevant person ceasing to satisfy the qualifications set out there for any reason,

the *Licence Holder*.

- (iii) procures the appointment of a person to the relevant position that the *Licence Holder* bona fide believes will be able to obtain the required security clearance; and
- (iv) has procured that the person apply for the required security clearance.

1.5 The exception in condition 1.4(b) of this Appendix 1 ceases to apply to the *Licence Holder* if:

- (a) an appointment and application for national security clearance for the person is not made within 4 months of (as relevant) the first issue of these conditions or the relevant vacancy or disqualification occurring; or
- (b) if the application referred to in condition 1.5(a) of this Appendix 1 is made and is rejected or withdrawn, the *Licence Holder* does not procure a replacement application being made within 4 months of that rejection or withdrawal; or
- (c) the *Licence Holder* does not procure compliance with condition 1.3(b) of this Appendix 1 in any event with respect to any position within 8 months (or such longer period as approved in writing by the *Minister*) of (as relevant) the first issue of these conditions or the relevant vacancy occurring.

## **2 Data security**

2.1 The *Licence Holder* must ensure that:

- (a) all of its information (being design specifications, operating manuals and the like) as to the operational technology (such as the SCADA system) and associated ICT infrastructure of the operational network is held solely within Australia, and that such information is accessible only by a *Relevant Person* who has been authorised by the *Licence Holder* and only from within Australia;
- (b) all:
  - (i) *Load Data*; and
  - (ii) *Bulk Personal Data Records*,relating to or obtained in connection with the operation of the *transmission system* by a *Relevant Person* is held solely within Australia, and is accessible only by a *Relevant Person* or a person who has been authorised by the *Licence Holder*; and
- (c) it does not export and has appropriate security controls in place to prevent the export, of *Bulk Personal Data Records* relating to or obtained in connection with the operation of the *transmission system* by a *Relevant Person*, outside of Australia.

2.2 The *Licence Holder* is not in breach of its obligations under conditions 2.1(a), 2.1(b)(i) or 2.1(c) of this Appendix 1 if the *Licence Holder* discloses, holds, uses or accesses any information or data referred to in those conditions, or the *Licence Holder* allows a *Relevant Person* approved by the senior officer referred to in condition 1.3(b)(i) of this Appendix 1 to disclose, hold, use or access any information or data referred to in those conditions for the purposes of:

- a) disclosure to a recognised stock exchange so that such information is made available publicly in compliance with a binding obligation on the part of the *Licence Holder* or an *Associate* to do so;
- b) complying with any law of the Commonwealth of Australia, or of any of its States and Territories;
- c) disclosure to the financial, accounting, insurance, legal, regulatory and other advisers,



auditors, insurers, security trustees and financiers (and each of their advisers) of *the Licence Holder*, any *Associate*, and any bona fide prospective purchaser of any interest in, or of any interest in the main undertaking of, the *Licence Holder* or any *Associate*, but in each case only to the extent necessary in order for those persons to provide the advisory or other services bona fide required of them;

- d) disclosure to participants, regulators and service providers in the electricity sector, provided it is in the ordinary course of business and in accordance with good electricity industry practice, and such information is required by those persons to provide the services or to perform the functions bona fide required of them;
- e) providing aggregated data which does not permit identification of any particular customer or customer's connection points or their demand characteristics;
- f) allowing a service provider or contractor to hold, use or access information where that arrangement is approved by the *Minister*, in the case of arrangements approved as of the *First issue of this Licence*, and otherwise where the *Licence Holder* has provided the *Commonwealth Representative* with a submission demonstrating that:
  - (i) the service provider or contractor is reputable; and
  - (ii) the service provider or contractor has data security systems in place to ensure information security is maintained;

and has obtained the written agreement of the *Commonwealth Representative* for the arrangement; and

- g) allowing a service provider or contractor who is a provider to the *Licence Holder* at the date of this Licence to hold, use or access information where the *Licence Holder* is at the relevant time undertaking the steps that are required to be undertaken as set out in an *Approved Plan* (and for the duration of the period set out in that Plan) related to that service provider or contractor, provided that the *Licence Holder* has provided the *Approved Plan* to the *Tribunal*.
- h) such other circumstances as approved by the *Tribunal* in writing. Prior to seeking approval from *the Tribunal*, the *Licence Holder* must provide the *Commonwealth Representative* with a reasonable opportunity within a period not ending less than 60 calendar days, to confirm in writing to the *Tribunal* that the Commonwealth does not intend to make any further requests or submissions in relation to the matter.

- 2.3 The *Licence Holder* is not in breach of its obligations under condition 2.1(b) of this Appendix 1 if a *Relevant Person* or a person authorised to access the information by the *Licence Holder* discloses, holds, uses or accesses personal information in accordance with the *Privacy Act 1988* (Cth).

### **3 Compliance**

- 3.1 By 30 September each year the *Licence Holder* must furnish a report to the *Tribunal* and the *Commonwealth Representative* detailing whether the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 1 over the preceding financial year to 30 June.
- 3.2 The report required under condition 3.1 of this Appendix 1 must be audited by an *Approved Critical Infrastructure Auditor* by a date specified by the *Tribunal*. The audit required by this condition 3.2 of this Appendix 1 must be a comprehensive audit and must meet any requirements specified by the *Tribunal*. The *Licence Holder* must provide the audited report to the *Commonwealth Representative* at the same time that the report is provided to the *Tribunal*.

- 3.3 The *Tribunal* may provide guidance to the *Approved Critical Infrastructure Auditor* as to the *Licence Holder's* practices that have satisfied or will satisfy conditions 1 and 2 of this Appendix 1.
- 3.4 The report required under condition 1.1 of this Appendix 1 must be accompanied by a certification in writing supported by a resolution of the Board of the *Licence Holder* that, with respect to the relevant period:
- (a) the *Licence Holder* has complied with conditions 1 and 2 of this Appendix 1; or
  - (b) the *Licence Holder* has not complied with conditions 1 or 2 of this Appendix 1, and certifying the nature and extent of each non-compliance and the steps taken by the *Licence Holder* to ensure compliance (and to preclude further non-compliance) and the timeframe within which it expects to achieve compliance.

## Appendix 2

### Reliability and Performance Standard

#### NSW Electricity Transmission Reliability and Performance Standard 2017

##### 1. Status of this standard

- (a) This standard is a reliability and performance standard issued by the *Minister* for the purposes of condition 3 of the *Licence*.
- (b) This standard may be cited as the *Transmission Reliability and Performance Standard 2017 No. 1*.

##### 2. Interpretation

- (a) In this standard, where the terms below are italicised they have the corresponding meanings set out below.

**Act** means the *Electricity Supply Act 1995*.

**Customer** has the same meaning given to it in the Act.

**Distribution system** has the same meaning given to it in the Act.

**Distributor** has the same meaning given to it in the Act.

**Expected unserved energy** means the expected amount of energy that cannot be supplied, taking into account the probability and expected impact (including expected outage duration and forecast load) of the following:

- (i) failure of a single *system element*;
- (ii) double transformer failure, or failure of equivalent *system elements*; and
- (iii) double line failure, or failure of equivalent *system elements*.

**Inner Sydney** means the inner metropolitan transmission system, which is that part of the *transmission system* constituted by:

- (i) cables 41 and 42;
- (ii) the 330/132kV substations at Rookwood Road, Beaconsfield, Haymarket, Sydney North and Sydney South;
- (iii) any future associated 330kV cables and 330/132kV substations; and
- (iv) any of Ausgrid's 132k transmission network that links any of the above.

**Level of redundancy** means:

- (i) for category 1 bulk supply points, a supply interruption may occur following the outage of a single system element;
- (ii) for category 2 bulk supply points, a non-zero amount of load must be supplied following the outage of a single system element; and
- (iii) for category 3 bulk supply points, a non-zero amount of load must be supplied following the outage of a single system element. In addition, for Inner Sydney, a non-zero amount of load must be supplied following the simultaneous outage of a single 330 kV cable and any 132 kV feeder or 330/132 kV transformer.

**Licence** means the Transmission Operator's Licence under the *Electricity Supply Act 1995* granted to NSW Electricity Networks Operations Pty Limited (ACN 609 169 959) as trustee for the NSW Electricity Networks Operations Trust dated 7 December 2015, or a licence that replaces it.

**Licence Holder** has the same meaning as under the *Licence*.

**Minister** has the same meaning as under the *Licence*.

**Negotiated load connection agreement** means an agreement between the *Licence Holder* and a customer by which the customer is connected to the *transmission system* and the services to be provided by the *Licence Holder* are to be negotiated between the parties.

**RIT-T** means the *Regulatory investment test for transmission and application guidelines 2010* published by the Australian Energy Regulator, or any replacement of that document from time to time.

**Supply** has the same meaning given to it in the Act.

**System element** means:

- (i) a transmission circuit (a line or a cable);
- (ii) a transformer;
- (iii) a component of physical infrastructure other than a transmission circuit or transformer; or
- (iv) network support arrangements, backup supply capability, or other measure that provides supply capacity.

**Transmission system** has the same meaning as under the *Licence*.

**Tribunal** has the same meaning as under the *Electricity Supply Act 1995*.

- (b) Headings and notes which appear in this standard are intended as an aide to usage only, and do not form part of this standard.
- (c) References to clauses in this standard are references to clauses of this standard, unless this standard expressly provides otherwise.

### **3. Requirement to design for a specified level of redundancy for each bulk supply point**

Subject to clause 5(a) of this standard, the *Licence Holder* must ensure that the *transmission system* is designed such that, for each bulk supply point listed in the table in clause 8 of this standard, the *transmission system* achieves the *level of redundancy* category specified for that bulk supply point in the table in clause 8 of this standard.

### **4. Requirement to design for a level of expected unserved energy for each bulk supply point**

Subject to clause 6(a) of this standard, the *Licence Holder* must ensure that the *transmission system* is designed such that the annual *expected unserved energy* in respect of a bulk supply point listed in the table in clause 8 of this standard does not exceed the allowance for *expected unserved energy* specified for that bulk supply point in the table in clause 8 of this standard.

### **5. Flexibility in planning for the level of redundancy**

- (a) The *Licence Holder* is not required to comply with clause 3 of this standard in respect of a bulk supply point listed in the table in clause 8 of this standard provided that:

- (i) the *Licence Holder* has developed and submitted to the *Tribunal* a plan regarding measures for altering the reliability of the supply capacity of the bulk supply point;
  - (ii) that plan provides a greater net-benefit, using the cost-benefit methodology defined in the *RIT-T*, than the net-benefit of complying with clause 3 of this standard; and
  - (iii) the *Tribunal* has advised the *Licence Holder* in writing that it is satisfied that the plan submitted under clause 5(a)(i) of this standard would, if implemented, be likely to provide a greater net-benefit than would be provided by the *Licence Holder* complying with clause 3 of this standard in relation to the bulk supply point.
- (b) The *Licence Holder* must implement the plan within a time specified by the *Tribunal* to the *Licence Holder*, and such implementation must be to the reasonable satisfaction of the *Tribunal*.
- (c) For the avoidance of any doubt:
- (i) the *Licence Holder* may submit, from time to time, a proposed replacement for a plan referred to in clause 5(a) of this standard; and
  - (ii) clause 5(a) of this standard applies to such a plan in the same way that it would apply to the first plan submitted under that clause in relation to a bulk supply point.
- (d) Where the *Tribunal* has expressed satisfaction in writing under clause 5(a)(iii) of this standard about a plan that relates to a bulk supply point or bulk supply points listed in the table in clause 8 of this standard, the *Licence Holder* may advise the *Tribunal* in writing that it has elected not to implement the plan. If the *Licence Holder* so advises the *Tribunal* of such an election:
- (i) the *Licence Holder* is not required to implement the plan in question, despite clause 5(b) of this standard;
  - (ii) despite clause 5(a) of this standard, the *Licence Holder* must comply with clause 3 of this standard in respect of the bulk supply point or bulk supply points to which the plan in question relates; and
  - (iii) the *Licence Holder's* election not to implement the plan may not be reversed, unless the *Tribunal* provides its written consent for the reversal.

## **6. Flexibility in planning for the level of expected unserved energy**

- (a) The *Licence Holder* is not required to comply with clause 4 of this standard in respect of a bulk supply point listed in the table in clause 8 of this standard provided that:
- (i) the *Licence Holder* has developed and submitted to the *Tribunal* a plan regarding measures for altering the reliability of the supply capacity of the bulk supply point;
  - (ii) that plan provides a greater net-benefit, using the cost-benefit methodology defined in the *RIT-T*, than the net-benefit of complying with clause 4 of this standard; and
  - (iii) the *Tribunal* has advised the *Licence Holder* in writing that it is satisfied that the plan submitted under clause 6(a)(i) of this standard would, if implemented:

- A. be likely to provide a greater net-benefit than would be provided by the *Licence Holder* complying with clause 4 of this standard in relation to the bulk supply point; and
  - B. not result in a material reduction in the level of expected unserved energy at any bulk supply point.
- (b) The *Licence Holder* must implement the plan within a time specified by the *Tribunal* to the *Licence Holder*, and such implementation must be to the reasonable satisfaction of the *Tribunal*.
- (c) For the avoidance of any doubt:
  - (i) the *Licence Holder* may submit, from time to time, a proposed replacement for a plan referred to in clause 6(a) of this standard; and
  - (ii) clause 6(a) of this standard applies to such a plan in the same way that it would apply to the first plan submitted under that clause in relation to a bulk supply point.
- (d) Where the *Tribunal* has expressed satisfaction in writing under clause 6(a)(iii) of this standard about a plan that relates to a bulk supply points or bulk supply points listed in the table in clause 8 of this standard, the *Licence Holder* may advise the *Tribunal* in writing that it has elected not to implement the plan. If the *Licence Holder* so advises the *Tribunal* of such an election:
  - (i) the *Licence Holder* is not required to implement the plan in question, despite clause 6(b) of this standard;
  - (ii) despite clause 6(a) of this standard, the *Licence Holder* must comply with clause 4 of this standard in respect of the bulk supply point or bulk supply points which the plan in question relates; and
  - (iii) the *Licence Holder's* election not to implement the plan may not be reversed, unless the *Tribunal* provides its written consent for the reversal.

## **7. Requirement to provide information to the Tribunal**

- (a) The *Licence Holder* must comply with any request notified to the *Licence Holder* by the *Tribunal* for information that the *Tribunal* reasonably considers to be necessary or convenient for the *Tribunal* in monitoring the *Licence Holder's* compliance with this standard.
- (b) The *Licence Holder* must comply with a request under clause 7(a) of this standard within a reasonable timeframe notified to the *Licence Holder* by the *Tribunal*.
- (c) If reasonably requested to do so by the *Tribunal*, the *Licence Holder* must commission an audit of its compliance with this standard (or specified aspects of this standard). Such an audit must be conducted:
  - (i) by an auditor approved by the *Tribunal* in writing;
  - (ii) at the expense of the *Licence Holder*; and
  - (iii) such that a report on the audit by the auditor is provided to the *Tribunal* within a reasonable timeframe notified to the *Licence Holder* by the *Tribunal*.
- (d) Subject to clause 7(f) of this standard, at least 90 days before entering into any contract for the construction of a new *bulk supply point* (as defined in clause 7(e) of this standard)

intended to form part of the *transmission system* (or within a different timeframe proposed by the *Licence Holder* and agreed to in writing by the *Tribunal*), the *Licence Holder* must submit a proposal regarding the new *bulk supply point* to the *Tribunal*. The proposal must:

- (i) propose a *level of redundancy* category that this standard should specify for the new bulk supply point;
  - (ii) propose a level of *expected unserved energy* that this standard should specify for the new bulk supply point; and
  - (iii) set out reasons in support of the *level of redundancy* category and level of *expected unserved energy* proposed.
- (e) For the purposes of clauses 7(d) and 7(f) of this standard, *bulk supply point* means one or more points of connection at a location where *supply* is provided from the *transmission system* to one or more *distribution systems* and/or one or more *customers* directly connected to the *transmission system*. For the purposes of this definition, where *supply* is provided:
- (i) at the same voltage level through multiple points of connection at a particular location, those points of connection together constitute a single new bulk supply point;
  - (ii) at different voltages through multiple points of connection at a particular location, each point of connection through which *supply* is provided at a different voltage level constitutes a separate new bulk supply point.

**Note:** *New bulk supply points are generally located at the busbar(s) at Transgrid substations where there can be multiple individual connections to a distribution system or directly connected customer. However, sometimes, new bulk supply points are where connections are made to Transgrid's transmission lines or cables at 'tee' connections or at busbars or substations owned by the distributor or directly connected customer.*

*An example of a single bulk supply point consisting of multiple points of connection through which supply is provided at the same voltage at a particular location is the points of connection of several distributor lines to the busbar(s) at a Transgrid substation.*

*An example of a separate bulk supply point existing for each point of connection through which supply is provided at a different voltage level is where supply is provided from higher voltage busbar(s) as well as lower voltage busbar(s) of a Transgrid substation.*

- (f) Clause 7(d) of this standard does not apply to the *Licence Holder* in relation to a new *bulk supply point* if:
- (i) a single customer to whom supply would be provided through the new bulk supply point is on a *negotiated load connection agreement* and is the sole party connected to the new bulk supply point; or
  - (ii) the *Licence Holder* and all the *distributors* and *customers* directly connected to the *transmission system* to whom *supply* would be provided through the new *bulk supply point* agree, in writing, that the new *bulk supply point* may, for the purposes of clause 7(d) of this standard, be taken not to be a *bulk supply point*; and
- the *Licence Holder* keeps a record providing evidence of the agreement.

**Note:** It is expected that clause 7(f) of this standard would generally only apply in situations where:

- the connection to the distributor(s) and/or directly connected customer(s) was at a 'distribution voltage' (e.g. 11kV or 22kV) to supply very small loads; and
- the level of redundancy or expected unserved energy that would be proposed by the Licence Holder under clause 7(d) of this standard, if it applied, could not be economically justified.

**Note:** Once the Licence Holder submits a proposal to the Tribunal in accordance with clause 7(d) of this standard, the Tribunal would consult on the proposal before making a recommendation to the Minister on listing the new bulk supply point in the table in clause 8 of this standard as well as the specification of the redundancy category and unserved energy allowance.

## 8. Table of values

	Redundancy category	Unserved energy allowance, maximum minutes per year at average demand
<b>1. Inner City</b>		
Beaconsfield West 132 kV	3	0.6 <sup>a</sup>
Haymarket 132 kV	3	
Rookwood Road 132 kV	3	
Sydney North 132 kV	3	
Sydney South 132 kV	3	
<b>2. Other bulk supply points</b>		
Albury 132 kV	2	14
ANM 132 kV	2	6
Armidale 66 kV	2	7
Beryl 66kV	2	5
Bomabee South 132 kV	2	18
Canberra 132 kV and Williamsdale 132 kV	2	3
Coffs Harbour 66 kV	2	10
Coleambally 132 kV	2	32
Cooma 66 kV	2	28
Cooma 132 kV	2	11
Cowra 66 kV	2	25
Dapto 132 kV	2	4



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Darlington Point 132 kV	2	4
Deniliquin 66 kV	2	19
Finley 66 kV	2	12
Forbes 66 kV	2	19
Gadara (132 kV & 11 kV)	2	13
Glen Innes 66 kV	2	43
Griffith 33 kV	2	12
Gunnedah 66 kV	2	19
Holroyd 132 kV	2	24
Ingelburn 66 kV	2	5
Inverell 66 kV	2	40
Kempsey 33 kV	2	24
Koolkhan 66 kV	2	19
Liddell 330 kV	2	2
Lismore 132 kV	2	4
Liverpool 132 kV	2	5
Macarthur 132 kV and 66 kV	2	3
Macksville 132 kV	2	23
Manildra 132 kV	2	6
Moree 66 kV	2	5
Mount Piper 66 kV	2	19
Munmorah 132 kV	2	20
Murrumburrah 132 kV	2	19
Muswellbrook 132 kV	2	3
Nambucca 66 kV	2	65
Narrabri 66 kV	2	5
Newcastle 132 kV	2	2
Orange North 132 kV / Orange 132 kV and 66 kV	2	7
Panorama 66 kV	2	5
Parkes 132 kV	2	9
Parkes 66 kV	2	51
Port Macquarie 33 kV	2	14
Queanbeyan 66 kV	2	4

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Raleigh 132 kV	2	32
Regentville 132 kV	2	13
Stroud 132 kV	2	21
Sydney East 132 kV	2	2
Sydney West 132 kV	2	1
Tamworth 66 kV	2	4
Taree 66 kV and 33 kV	2	15
Tenterfield 22 kV	2	79
Tomago 132 Note 3	2	13
Tomago 330 kV	2	14
Tuggerah 132 kV	2	13
Tumut 66 kV	2	13
Vales Pt 132 kV	2	3
Vineyard 132 kV	2	1
Wagga 66 kV	2	33
Wagga North 132 kV	2	5
Wallerawang 132 kV	2	26
Wallerawang 66 kV	2	31
Waratah West 132 kV	2	3
Wellington 132 kV	2	6
Yanco 33 kV	2	41
Balranald 22 kV	1	115
Broken Hill 22 kV and Broken Hill 220 kV	1	10
Casina 132 kV	1	7
Dorrigo 132 kV	1	41
Hawks Nest 132 kV	1	42
Hérons Creek	1	17
Ilford 132 kV	1	14
Marulan 132 kV	1	10
Molong 66 kV	1	46
Morven 132 kV	1	33
Mudgee 132 kV	1	14
Munyang 33 kV	1	14

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Murrumbateman 132 kV	1	49
Snowy Adit 132 kV	1	52
Wagga North 66 kV	1	42
Wellington Town	1	21
Yass 66 kV	1	22

<sup>a</sup> Applies across all the Inner Sydney

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