



Review of electricity network operators'  
licences

# Issues Paper and Draft Report

January 2022

Energy »

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## Energy Networks Regulation Committee Members

The Committee members for this review are:

Ms Sandra Gamble, Chair  
Ms Deborah Cope  
Ms Naveena Rajaretnam

Enquiries regarding this document should be directed to a staff member:

Christine Allen (02) 9290 8412  
Peter Cole (02) 9019 1934

## Invitation for submissions

IPART invites comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

## Submissions are due by Friday, 11 February 2022

We prefer to receive them electronically via our [online submission form](#).

You can also send comments by mail to:

Review of electricity network operators' licences  
Independent Pricing and Regulatory Tribunal  
PO Box K35  
Haymarket Post Shop, Sydney NSW 1240

If you require assistance to make a submission (for example, if you would like to make a verbal submission) please contact one of the staff members listed above.

Late submissions may not be accepted at the discretion of the Energy Networks Regulation Committee. Our normal practice is to make submissions publicly available on our [website](#) as soon as possible after the closing date for submissions. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed above.

We may decide not to publish a submission, for example, if we consider it contains offensive or potentially defamatory information. We generally do not publish sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please let us know when you make the submission. However, it could be disclosed under the *Government Information (Public Access) Act 2009* (NSW) or the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW), or where otherwise required by law.

If you would like further information on making a submission, IPART's [submission policy](#) is available on our website.

## 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 We need to know what you think about the Network Operators' licences

The Minister for Energy and Environment (Minister) has directed IPART to conduct 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 are conducting this review to assess whether the Network Operators' existing licences remain appropriate by ensuring that the licences reflect current public expectations and regulatory practice. In this review, we will investigate any issues that may have arisen since the licences came into force and may recommend changes to the licences to address any issues we or our stakeholders identify.

As the Minister has excluded distribution reliability and performance conditions from the review,<sup>a</sup> and we do not propose to make changes to critical infrastructure licence conditions,<sup>b</sup> the scope of our review is limited. We do not consider that there is any significant benefit in publishing an Issues Paper for consultation followed by a separate Draft Report for further consultation. To make the process more efficient for all stakeholders we have combined the Issues Paper and Draft Report (Draft Report).

Following consultation on our Draft Report, we will provide a final report to the Minister, who is responsible for varying the conditions of a licence if appropriate.

This paper explains the purpose of the review and the approach we will take, sets out our preliminary positions, and discusses the key issues we will consider.

## 1.1 We have commenced initial consultation with Network Operators and government agencies

We have sought and received informal input from the Network Operators to inform the scope of the review. We have also liaised with the Cyber and Infrastructure Security Centre<sup>c</sup> (CISC) within the Commonwealth Department of Home Affairs, the NSW Department of Planning, Industry and Environment (DPIE), the Australian Energy Regulator (AER) and the Australian Energy Market Operator (AEMO).

## 1.2 The steps and timeline of our review

This Draft Report identifies issues we currently propose to consider in this review and sets out our preliminary views on some Network Operators' licence obligations. It also poses questions on which we particularly seek stakeholder comment.

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<sup>a</sup> Refer to section 2.1 for further details.

<sup>b</sup> Refer to section 3.1 for further details.

<sup>c</sup> Formerly known as the Critical Infrastructure Centre.

We invite submission to this review from all stakeholders, including the Network Operators, their customers, other network operators, regulators, government stakeholders, and community, industry and environmental groups.

Once we have considered all stakeholder input on our draft package, we will finalise our recommendations, including the recommended licences<sup>d</sup> and associated documents, and provide them to the Minister, who will make the final decisions.

We intend to provide our recommendation for amended licences to the Minister by March 2022. We will recommend to the Minister that any amended licences become effective from 1 July 2022.

We intend to complete the review according to the timetable below.

Table 1 Electricity licence review milestones

Date	Milestone
January 2022	IPART releases Draft Report (including draft licences) and invites submissions
February 2022	Stakeholders' submissions on Draft Report due
March 2022	IPART provides the Minister with the final report and licences
1 July 2022	Minister may amend licences to be effective from 1 July 2022 IPART publishes amended licences and reporting manuals (as required)

### 1.3 How stakeholders can make a submission

We invite all interested stakeholders to make submissions in response to this Draft Report by Friday, 11 February 2022.

We look forward to receiving your submission. For more information on how to make a submission and our submission policy, see page ii at the front of this Draft Report.

Your input is valuable to our review process.

[Make a submission »](#)

You can be involved by making a submission in response to this Draft Report.

<sup>d</sup> Over time, each licence has come to consist of multiple instruments, all of which must be read together to understand which conditions apply to a licensee. To address this issue, we intend to consolidate licences into single instruments.

## 2 Review context

### 2.1 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>e</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.

We note that 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>f</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 will not form part of our review.

### 2.2 What is our proposed approach to this review?

We have considered the Best Practice Licensing Framework<sup>g</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.

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

<sup>f</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*.

<sup>g</sup> IPART, [A best practice approach to designing and reviewing licensing schemes](#), prepared by PricewaterhouseCoopers, March 2013.

While we have used the 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.

We will undertake this review using a consultative process, which commences with publishing this Draft Report. As part of the consultative process, we encourage stakeholders to provide any additional information that may assist us to better assess the net benefit of licence conditions.

As we are reviewing existing licences against which we monitor compliance, we are well placed to form preliminary views on certain issues at this early stage in our process. This Draft Report sets out those preliminary views and our underlying reasoning to enable stakeholders to respond.

We have developed a series of options for retaining, amending or removing existing obligations and including new obligations. We will consider all the feedback that we receive on this Draft Report and publish a final report for the Minister's consideration.

## 2.3 What are the characteristics of the Network Operators and the differences between them?

Transgrid is a transmission network operator, whereas Ausgrid, Endeavour Energy and Essential Energy are distribution network operators. As a transmission network operator, Transgrid transmits electricity at high voltages between electricity generators and electricity distribution network operators in NSW and the ACT. Transgrid's network also connects to Victoria and Queensland. Transgrid has a small number of directly connected customers.

As distribution network operators, Ausgrid, Endeavour Energy and Essential Energy distribute electricity at lower voltages from the transmission network to end users including households and businesses.

We have summarised the characteristics of the Network Operators below.

Table 2 Overview of the Network Operators

Network operator	Network type	Approximate number of customers	Area of operation
Ausgrid	Distribution	1.8 million	Sydney, Central Coast, Newcastle and Hunter regions.
Endeavour Energy	Distribution	1,034,215	Wollongong, Western Sydney, part of the NSW south coast, Southern Highlands, the Blue Mountains, and parts of the mid-west of NSW.
Essential Energy	Distribution	More than 865,000	95% of NSW (areas not covered by Ausgrid and Endeavour Energy)

Transgrid	Transmission	20 directly connected	Transgrid owns and operates the major high voltage electricity transmission network in NSW and the ACT, connecting generators, distributors and major end users.
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Source: Transgrid website - 2019, Ausgrid website, 'About us'; Endeavour Energy website, 'What we do', Essential Energy website, 'Our Network Area'.

The different characteristics of the Network Operators are reflected by the different obligations imposed on them through their licence conditions.

## 2.4 Why do the Network Operators have licences?

The network operator licences authorise the licensees to operate distribution or transmission assets on terms and conditions that protect customers and the public from poor service or unsafe practices. The licences are enforceable instruments and subject to a compliance monitoring regime with potential penalties for contravention.

The ES Act includes the following requirements for the operation of distribution and transmission systems:

- "A person must not operate a distribution system for the purpose of conveying electricity, for or on behalf of retailers, otherwise than under the authority of a distributor's licence."<sup>h</sup> This provision relates to Ausgrid, Endeavour Energy and Essential Energy.
- "A person must not operate a transmission system that is a transacted transmission system under the *Electricity Network Assets (Authorised Transactions) Act 2015* otherwise than under the authority of a transmission operator's licence."<sup>i</sup> This provision relates to Transgrid.

The Minister is responsible for imposing conditions on a licence.<sup>j</sup> The ES Act specifies conditions that the licences **must** include, and others that the licences **may** include. We have noted these requirements throughout the paper during the discussion of each licence condition.

The licences are supported by reporting manuals<sup>k</sup> and audit guidelines<sup>l</sup>, which are issued by IPART and updated from time to time.

## 2.5 What do reporting manuals cover and have we reviewed them?

The Network Operators' licences include conditions requiring them to provide reports to IPART on their compliance with particular obligations. IPART issues reporting manuals that further specify these reporting requirements, and include information such as report contents, due dates and report recipients.

<sup>h</sup> *Electricity Supply Act 1995* Part 3, Division 1, s 13.

<sup>i</sup> *Electricity Supply Act 1995* Division 5, s 93A(1).

<sup>j</sup> *Electricity Supply Act 1995* Schedule 2, s 6.

<sup>k</sup> We have discussed reporting manuals in section 2.5 of this report.

<sup>l</sup> We have discussed audit guidelines in section 2.6 of this report



The current Network Operators' licences require them to comply with any reporting manuals issued by IPART. This means that a non-compliance with an obligation in the reporting manual is a non-compliance with a licence condition.

Where we have proposed to amend, remove or include a licence condition that includes a reporting obligation, we have also proposed to amend the relevant reporting manual to reflect the corresponding change to reporting.

We will not review or amend any other reporting manuals as part of this review. However, if stakeholders raise issues relating to reporting manuals, we will consider these issues and address them at a later date if required.

## 2.6 What do audit guidelines cover and have we reviewed them?

Audit guidelines set our expectations regarding the conduct of licence obligation audits. We will not review audit guidelines as part of this review. However, if stakeholders raise issues relating to audit guidelines, we will consider these issues and address them at a later date if required.

## 3 Critical infrastructure and transmission reliability

### 3.1 Critical infrastructure

The preamble to the Network Operators' critical infrastructure licence conditions provides that the assets the Network Operators operate 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.

Critical infrastructure licence conditions require the Network Operators to:

- have a substantial presence in Australia<sup>m</sup>, including having:
  - maintenance, operation and control of the transmission or distribution system undertaken within Australia
  - directors who are Australian citizens and senior officers who hold security clearances and are responsible officers for operational technology, and network and security operations.
- have data security measures on load data and privacy of personal information<sup>n</sup>
- comply with reporting and auditing requirements.<sup>o</sup>

The intent of critical infrastructure licence conditions is to ensure that Network Operators protect their electricity networks from security threats by implementing physical and cyber security controls.

#### 3.1.1 We have engaged with Network Operators and the CISC

During our initial consultation with Network Operators in April 2021, the Network Operators raised issues with their critical infrastructure licence conditions. We note that addressing these issues would require significant input from the CISC, who possesses the specialised national security knowledge underpinning the critical infrastructure licence conditions.

We have also liaised with the CISC on this matter. The CISC has advised us that:

- The CISC is currently involved in national critical infrastructure reforms to the *Security of Critical Infrastructure Act 2018* (Cth).
- These reforms involve a co-design process with the electricity sector (and other sectors) to develop sector specific rules pertaining to critical infrastructure security.

<sup>m</sup> Condition 9 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 6 of Transgrid's licence.

<sup>n</sup> Condition 10.1 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 7.1 of Transgrid's licence.

<sup>o</sup> Condition 11 of the licences of Ausgrid, Endeavour Energy and Essential Energy licence, and condition 8 of Transgrid's licence.

- The rules developed during the co-design process are expected to 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.

### 3.1.2 We do not propose to review critical infrastructure licence conditions

Our preliminary position is that we do not propose to make changes to critical infrastructure licence conditions as part of this review because national critical infrastructure reforms to the *Security of Critical Infrastructure Act 2018* (Cth) are likely to make these licence conditions redundant.

After new rules developed during the co-design process have been finalised by the Commonwealth Government, we will consider whether we should write to the Minister to recommend removal or amendment of the current NSW critical infrastructure licence conditions.

Although we do not intend to review critical infrastructure licence conditions at this time, we will consider any stakeholder submissions on these conditions. If stakeholders provide compelling reasons for changing critical infrastructure licence conditions, we may reconsider our preliminary position.

#### We seek stakeholder comment



1. Do you agree with our preliminary position of not reviewing critical infrastructure licence conditions at this time?

## 3.2 Transmission reliability

Transgrid's licence includes a condition requiring it to comply with the *Transmission Reliability and Performance Standard* (Transmission Reliability Standard).<sup>P</sup>

The Transmission Reliability Standard requires Transgrid to:

- plan its network to meet expected levels of unserved energy at each bulk supply point
- show that it has adequate redundancy built into its network to manage supply to the distribution networks.

The intent of the Transmission Reliability Standard obligation is to ensure that Transgrid maintains a reliable supply of electricity to the distribution network operators and its customers.

<sup>P</sup> Condition 3 of Transgrid's licence.

### 3.2.1 We propose to amend the Transmission Reliability Standard

Our preliminary position is that the Transmission Reliability Standard could be clarified by:

- defining Bulk Supply Point (BSP)
- providing 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.

We consider the proposed amendment would address uncommon situations in which a new point of electricity supply may otherwise be considered a BSP.

We also propose to include the Transmission Reliability Standard as an Appendix to Transgrid's licence.

We do not propose to review any other provisions of the Transmission Reliability Standard because the Transmission Reliability Standard has recently been reviewed, having come into force on 1 July 2018. We consider that the Transmission Reliability Standard should not be reviewed at this time because insufficient time has passed to determine whether the Standard is achieving long term planning outcomes. Changes to the Standard at this time are therefore unlikely to provide any positive benefit to stakeholders but may result in increased costs for Transgrid if they may need to amend their planning standards or network configuration.

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

We will consider any stakeholder submissions on the Transmission Reliability Standard. If stakeholders provide compelling reasons for making further amendments to the Transmission Reliability Standard, we may reconsider our preliminary position.

#### We seek stakeholder comment



2. Do you agree with our preliminary position of amending the Transmission Reliability Standard to include a Bulk Supply point definition?

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

### 4.1 Distribution districts

The current licences of Ausgrid, Endeavour Energy and Essential Energy require the network operators to:

- operate within their distribution districts, as set out in Schedule 3 of the ES Act<sup>q</sup>
- operate in areas outside of their distribution districts, if the network operators operated within such areas as at the date of their respective licences.<sup>r</sup> This provision also requires the Tribunal to maintain a register of such activity<sup>s</sup>
- only extend their electricity networks outside of their distribution districts if agreed and authorised by the Tribunal and the Licence Holder for the relevant distribution district.<sup>t</sup>

#### Operation outside of a distribution district

A network operator may seek to operate outside of its district where a distribution district boundary runs down the middle of a street. In this situation, it may be most efficient to connect a customer to existing infrastructure on the other side of the street, in the neighbouring distribution district.

Operation outside of a distribution district may also be the optimal solution where network assets are not available or are have limited available capacity near the boundary of a distribution district, or where neighbouring network operators need to interconnect their networks.

The distribution district obligations enable the network operators to operate in neighbouring distribution districts where it is cost effective to do so and ensure that such network extensions are undertaken in a planned and controlled manner.

<sup>q</sup> Condition 1(a) of the licences of Ausgrid and Endeavour Energy, and condition 1.1(a) of Essential Energy's licence.

<sup>r</sup> Condition 1(b) of the licences of Ausgrid and Endeavour Energy, and condition 1.1(b) of Essential Energy's licence.

<sup>s</sup> Schedule 1 of the licences of Ausgrid, Endeavour Energy and Essential Energy.

<sup>t</sup> Condition 1(c) of the licences of Ausgrid and Endeavour Energy, and condition 1.1(c) of Essential Energy's licence.

### 4.1.1 We propose to amend distribution district obligations

Although distribution district licence conditions are necessary in our view, we consider that we can achieve the same regulatory outcome by reducing the administrative process network operators are required to follow.

We consider that a network operator should only extend its electricity network outside of its distribution district if agreed and authorised by the Licence Holder for the relevant distribution district. However, we do not consider that Tribunal agreement and authorisation for operation outside of a distribution district is necessary to achieve this outcome. Nor is it necessary for the Tribunal to maintain a register of these activities.<sup>u</sup> We have not identified any circumstances where the Tribunal would refuse such an arrangement, or any risks that are addressed through Tribunal involvement in the decision. We propose that accurate records of activities outside an area of operation can most efficiently be retained and made available by the relevant network operators.

Our preliminary view is that the distribution district obligations could be refined by:

- allowing network operators to agree with each other in writing to operate outside of their distribution districts without requiring agreement and authorisation from IPART
- requiring the network operators to keep records of the agreements and make them available to IPART on request. The Tribunal would request this information to investigate should any complaints arise about operation outside of a distribution district.

The proposed changes will:

- still allow network operators to operate in a planned and controlled way in a neighbouring distribution district where network operators agree that this is the optimal solution
- minimise the time taken to approve operation outside of a distribution district
- reduce the costs of complying with the licence condition.

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

If we recommend these changes to the Minister and the Minister accepts them, we would remove our *Electricity networks reporting manual - Where Ausgrid, Endeavour Energy and Essential Energy operate outside their distribution districts - September 2019*.

### We seek stakeholder comment



3. Do you agree with our preliminary positions of:

- amending the existing licence conditions to allow Ausgrid, Endeavour Energy and Essential Energy to agree and authorise operation outside of distribution districts in writing?

<sup>u</sup> Schedule 1 of the licences of Ausgrid, Endeavour Energy and Essential Energy.

- amending 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?

Does our proposed solution capture the objective of ensuring that network extensions outside of legislated distribution districts are undertaken in a planned and controlled manner?

Are there any other risks associated with operation outside of distribution districts that need to be managed through licence conditions?

## 4.2 National electricity market obligations

Transgrid has requested that the review address regulatory compliance or compliance reporting duplication with other NSW or Commonwealth obligations including the National Electricity Law and Rules. We have discussed these obligations in this section.

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

The Network Operators' current licences require the Network Operators (and all other network operators of their distribution/transmission system) to:

- be registered or exempt from the requirement to be registered as a Network Service Provider under the National Electricity Rules (NER)<sup>v</sup>
- hold any equivalent authorisation or right of participation in any national electricity market (NEM), 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<sup>w</sup>
- 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).<sup>x</sup>

These licence conditions ensure that the Tribunal is able to hold the Network Operators to account if they breach these obligations in the NER and National Electricity Law.

<sup>v</sup> Condition 2(a) of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 1(a) of Transgrid's licence.

<sup>w</sup> Condition 2(b) of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 1(b) of Transgrid's licence.

<sup>x</sup> Condition 3 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 2 of Transgrid's licence.

## 4.2.2 We propose to remove obligations relating to NEM registration and technical and prudential criteria

In the absence of these licence conditions, we consider the AER, which regulates compliance with the NER, would continue to ensure that these obligations are administered in line with their compliance and enforcement policy and priorities.

We consider that the existing conditions may not be well designed as they include duplicative obligations. We consider the risk of NSW network operators failing to comply with requirements that underpin their participation in the NEM to be low. Therefore, the risk of non-compliance with these obligations does not warrant the additional cost of administration imposed on network operators and IPART.

Although we propose to remove these obligations from the licences, we have not deleted them from the attached draft licences. We will consider response to this consultation from the AER and other stakeholders before we finalise our decision to remove these licence conditions from the licences.

### We seek stakeholder comment



4. Do you agree with our preliminary positions of removing the licence conditions that require Network Operators to:

- be registered or exempt from the requirement to be registered as a Network Service Provider under the National Electricity Rules?
- 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?
- 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)?

## 4.2.3 Annual demand forecasts

Transgrid's current licence:

- requires it to submit an Annual Demand Forecast to AEMO in sufficient time to enable AEMO to consider and provide comments on the forecasts and for Transgrid to consider those comments prior to finalisation of the Annual Demand Forecast<sup>y</sup>

<sup>y</sup> Condition 4(a) of Transgrid's licence.



- specifies the Annual Demand Forecast is 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.<sup>z</sup>

The first licence condition enables the Tribunal to hold Transgrid to account if it does not provide AEMO with the Annual Demand Forecast when required.

#### 4.2.4 We propose to remove the Annual Demand Forecast requirements

The ES Act does not require Transgrid's licence to include these conditions. We also consider that these obligations are duplicative, as the NER also includes obligations for providing forecasts to AEMO. Based on our informal discussion with AEMO, we do not consider that the inclusion of these conditions in the NSW transmission operator's licence mitigates any significant risk. We therefore propose to remove this licence condition.

We have not yet deleted these conditions from the attached draft licences. We will consider response to this consultation from the AEMO and other stakeholders before we finalise our decision to remove this licence condition from the licence.

#### We seek stakeholder comment



5. Do you agree with our preliminary position of removing the licence conditions requiring Transgrid to submit an Annual Demand Forecast to AEMO?

### 4.3 Business continuity and disruptions

The Network Operators' current licences require them to:

- have a documented system to ensure that they have adequate arrangements in place to identify, assess and manage business disruptions (a Business Continuity Plan)<sup>aa</sup>
- implement and comply with their Business Continuity Plan.<sup>bb</sup>

The business continuity obligations enable the Network Operators to identify and prevent or reduce business continuity risks where possible, prepare for risks out of their control, and respond and recover if an incident or crisis occurs.

<sup>z</sup> Condition 4(b) of Transgrid's licence.

<sup>aa</sup> Condition 8.1 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 5.1 of Transgrid's licence.

<sup>bb</sup> Condition 8.2 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 5.2 of Transgrid's licence.

### 4.3.1 We propose to retain business continuity obligations

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.<sup>cc</sup> Therefore we have considered the form that the licence conditions currently take.

We consider that the current licence conditions are well designed, noting that reporting obligations are the minimum necessary.<sup>dd</sup> We propose to retain the existing conditions about business continuity.

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

### We seek stakeholder comment



6. Do you agree with our preliminary position of retaining the current requirement for Network Operators to have, implement and comply with their Business Continuity Plan?

<sup>cc</sup> *Electricity Supply Act 1995* Schedule 2, s 6, cl 5(b).

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

## 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 Asset Management System

The current licence obligations related to AMS vary slightly between the Network Operators (as summarised in the table below). However, broadly speaking, the Network Operators are required to certify their AMS and maintain the certification, implement their AMS, and notify IPART of any significant changes they propose to make to their AMS.<sup>ee</sup>

Table 3 Differences between Network Operators' AMS obligations

Licence requirement	Ausgrid	Endeavour Energy	Essential Energy	Transgrid
<b>Timeframe within which Network Operator must have a certified AMS</b>	Within two years after the date of the licence (i.e. by 1 December 2018)	Within two years after the date of the licence (i.e. by 14 June 2019)	Within three years after the date of the licence (i.e. by 5 February 2022)	At the time of licence issue
<b>Standard to which AMS must be certified</b>	International Standard ISO 55001 Asset Management System – Requirements	International Standard ISO 55001 Asset Management System – Requirements	Australian Standard AS ISO 55001:2014 Asset management - Management systems - Requirements	International Standard ISO 55001 Asset Management System – Requirements
<b>Use of alternative standard</b>	No option to request Tribunal to approve use of alternative standard.	No option to request Tribunal to approve use of alternative standard.	Option for Essential Energy to request the Tribunal to approve use of alternative standard.	No option to request Tribunal to approve use of alternative standard.

An AMS is a system for tracking, managing and maintaining assets. A robust AMS would assist the Network Operators to:

- identify and achieve asset management objectives
- maintain their assets cost effectively
- manage asset risks through effective governance

<sup>ee</sup> Conditions 12.1 to 12.4 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and conditions 9.1 to 9.3 of Transgrid's licence.

- facilitate compliance with some licence conditions and regulatory obligations.<sup>ff</sup>

The AMS licence obligations provide IPART with some assurance that Network Operators are effectively managing the risks of their assets.

### 5.1.2 We propose to amend AMS obligations

The ES Act does not require the Network Operators' licences to include AMS obligations. In the absence of these licence conditions, we consider that it is likely that the Network Operators would initially maintain and continue to implement their AS ISO 55001 compliant AMS to manage their assets. However, there is a risk that over time, they may choose not to maintain an AMS that is compliant with AS ISO 55001 or a similar standard.

We note the Network Operators incur costs maintaining, implementing and certifying their AMSs to the extent required under the licence conditions. However, in the absence of an obligation to maintain a compliant AMS, the Network Operators would still need to maintain and implement a system to manage the large number of assets that make up their networks. We therefore consider that a licence obligation which requires Network Operators to maintain and implement AS ISO 55001 (or a similar system) would not add significantly to their costs.

We consider that a robust AMS provides the following benefits:

- Assists the Network Operators' compliance with safety, reliability and other regulatory obligations.
- Certification of the AMS provides IPART with a level of assurance that the network operator has an effective system for managing its assets. Certification may have the effect of minimising regulatory burden on the Network Operators as it allows IPART, applying its risk based regulatory model, to limit audit and assurance activity where we consider that risks are minimised by an effective, certified AMS.

Following our discussions with a number of Network Operators about their AMS, we understand that certifying the AMS **may** assist the Network Operators with legal defence in any case resulting from failure of an asset, if the court considers certification to demonstrate asset management due diligence.

We consider that retaining the requirement for Network Operators to have an AMS provides 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.

<sup>ff</sup> These obligations include the *Transmission Reliability Standard* (which applies to Transgrid), distribution reliability and performance licence conditions (which apply to Ausgrid Endeavour Energy and Essential Energy), and the *ES(SNM) Regulation 2014*).

Although AMS licence conditions are necessary in our view, we consider that we can achieve the same regulatory outcome by streamlining the reporting obligation, removing transitional requirements and amending other obligations for consistency and flexibility.

Our preliminary position is that the AMS obligations could be refined by:

- Removing from the licences the obligation for Network Operators to notify IPART of any significant changes they propose to make to their AMS. We do not need to know of any changes to the AMS, provided that the certification of the system is retained. Furthermore, this change would reduce reporting burden.
- Removing from the licences of Ausgrid and Endeavour Energy the requirement to have and maintain an AMS within two years of the date of their licences. As Ausgrid and Endeavour Energy have held their licences for more than two years this transitional arrangement no longer applies. We will similarly remove the transitional arrangements from Essential Energy's licence if the new licence is issued after February 2022.
- Requiring Ausgrid, Endeavour Energy and Transgrid to comply with Australian Standard AS 55001:2014 *Asset management - Management systems - Requirements*. The Australian standard was released in 2014 and is identical to the International Standard for the AMS.
- 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. This change will provide flexibility to these network operators and ensure consistency with Essential Energy's licence.

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

## We seek stakeholder comment



### 7. Do you agree with our preliminary positions of:

- retaining the requirement to have an AMS?
- retaining the requirement to certify the AMS?
- removing from the licences the requirement to notify IPART of proposed significant changes to the AMS?
- removing from the licences of Ausgrid and Endeavour Energy the requirement to have and maintain an AMS within two years of the date of their licences?
- amending the relevant standard in the licences of Ausgrid, Endeavour Energy and Transgrid to AS ISO 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?

### 5.1.3 Environmental Management System

The Network Operators' EMS obligations are similar to their AMS obligations, in that the Network Operators are required to certify their EMS, maintain the certification and implement their EMS, and notify IPART of any significant changes they propose to make to their EMS.

Some of the EMS obligations vary slightly between the Network Operators. We have summarised these differences in the table below.

Table 4 Differences between Network Operators' EMS obligations

Licence requirement	Ausgrid	Endeavour Energy	Essential Energy	Transgrid
<b>Timeframe within which Network Operator must have a certified EMS</b>	Within two years after the date of the licence (i.e. by 1 December 2018)	Within two years after the date of the licence (i.e. by 14 June 2019)	Within three years after the date of the licence (i.e. by 5 February 2022)	At the time of licence issue
<b>Standard to which EMS must be certified</b>	International Standard ISO 14001 Environmental Management	International Standard ISO 14001 Environmental Management	Australian/New Zealand Standard AS/NZS ISO 14001:2016 Environmental management systems - Requirements with guidance for use	International Standard ISO 14001 Environmental Management
<b>Use of alternative standard</b>	Must ensure that ISO 14001 is certified.	Must ensure that ISO 14001 is certified.	Option for Essential Energy to request the Tribunal to approve use of alternative standard.	Must ensure that ISO 14001 is certified.

An EMS is a framework that can assist an organisation to comply with environmental legislation or policies and to better implement its environmental processes.

In addition to the EMS obligation, Ausgrid, Endeavour Energy and Transgrid are required to comply with the *NSW Code of Practice for Authorised Network Operators* (Code of Practice). The Code of Practice prescribes a framework for these network operators to execute their duty to consider an activity's impact on the environment and undertake appropriate environmental assessment as required under the *Environment Planning and Assessment Act 1979* (EP&A Act). IPART monitors compliance with the requirements set out under the Code of Practice and may undertake audits at its discretion.

The current EMS obligations ensure that Network Operators have an environmental management system to assist them to protect the environment and meet environmental obligations set out under the EP&A Act.

### 5.1.4 We propose to amend EMS obligations

We consider that many of the costs and benefits that apply to the AMS also apply to the EMS.

The ES Act does not require the Network Operators' licences to include EMS obligations. In the absence of these licence conditions, we consider that it is likely that the Network Operators would initially maintain and continue to implement their ISO 14001 compliant EMS to assist them to comply with their environmental obligations and their environmental policies. However, there is a risk that over time, they may choose not to maintain an EMS that is compliant with ISO 14001 or a similar standard.

We note the Network Operators incur costs maintaining, implementing and certifying their EMS to the extent required under the licence conditions. However, in the absence of an obligation to maintain a compliant EMS, the Network Operators would still need to maintain and implement a system to assist them to comply with their environmental obligations and their environmental policies. We therefore consider that a licence obligation which requires Network Operators to maintain and implement ISO 14001 (or a similar system) would not add significantly to their costs.

We consider that a robust EMS provides the following benefits:

- Assists the Network Operators' compliance with safety obligations (for example, the bushfire risk management component of the electricity network safety management system), the EP&A Act and other regulatory obligations.
- Provides a framework for the Network Operators to address climate change and its impact.
- Certification of the EMS provides IPART with a level of assurance that environmental obligations are being met.

Following our discussions with a number of Network Operators about their EMS, we understand that certifying the EMS **may** provide other benefits to the Network Operators by:

- assisting the Network Operators with legal defence in any case resulting from failure to meet an environmental obligation if the court considers certification to demonstrate environmental due diligence
- causing a reduction of licence fees under the *Protection of the Environment Operations Act 1997*, which is administered by the Environment Protection Authority
- causing a reduction of insurance premiums.

We consider that retaining the requirement for Network Operators to have an EMS provides a net positive benefit, as a certified EMS will assist Network Operators to comply with regulatory obligations that relate to environmental protection and provides a framework to efficiently and effectively consider and address climate change and its impact.

We also consider that the certification obligation should be retained as certification provides us with a level of assurance that the Network Operators' EMSs are being maintained to a certain standard.

Our preliminary view is that the EMS obligations could be refined by:

- Removing from the licences the obligation for Network Operators to notify IPART of any significant changes they propose to make to their EMS. We do not need to know of any changes to the EMS, provided that the certification of the system is retained. Furthermore, this change would reduce reporting burden.

- Removing from the licences of Ausgrid and Endeavour Energy the requirement to have and maintain an EMS within two years of the date of their licences. As Ausgrid and Endeavour Energy have held their licences for more than two years this transitional arrangement no longer applies. We will similarly remove the transitional arrangements from Essential Energy's licence if the new licence is issued after February 2022.
- Requiring Ausgrid, Endeavour Energy and Transgrid to comply with AS/NZS ISO 14001:2016 *Environmental management systems - Requirements with guidance for use*. The Australian standard is identical to the international standard for the EMS. This change would ensure consistency with Essential Energy's licence.
- Including a condition in the licences of Ausgrid, Endeavour Energy and Transgrid allowing them to request the Tribunal to approve use of an alternative EMS. This change will provide flexibility to these network operators and ensure consistency with Essential Energy's licence.

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

## We seek stakeholder comment



8. Do you agree with our preliminary positions of:

- retaining the requirement to have an EMS?
- retaining the requirement to certify the EMS?
- removing from the licences the requirement to notify IPART of proposed significant changes to the EMS?
- removing from the licences of Ausgrid and Endeavour Energy the requirement to have and maintain an EMS within two years of the date of their licences?
- amending 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*?
- including a condition in the licences of Ausgrid, Endeavour Energy and Transgrid allowing them to request the Tribunal to approve use of an alternative environmental management standard?

## 5.2 Reporting manuals and audit guidelines

The Network Operators' current licences require them to:

- prepare and submit reports in accordance with any reporting manuals issued by the Tribunal<sup>99</sup>

<sup>99</sup> Condition 14 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 11 of Transgrid's licence.



- comply with any audit guidelines issued by the Tribunal.<sup>hh</sup>

The reporting manual and audit guideline obligations enable IPART to control the conduct of audit activities and the information reported to us by Network Operators in fulfilling their statutory obligations. These reports and audits are essential for IPART to perform its compliance monitoring role.

### 5.2.1 We propose to maintain reporting manual and audit guideline obligations

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>ii</sup> In the absence of these licence conditions regarding reporting manuals and audit guidelines, IPART's ability to perform our compliance monitoring functions would be reduced. This is because we would not be able to require Network Operators to comply with specific reporting requirements and hence determine the type of information reported to us.

In addition, we would not be able to determine the way in which audits are conducted, noting that audits are a key tool we use to assess Network Operators' compliance with their statutory obligations.

Our preliminary view is that 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 review the reporting requirements set out in the reporting manuals and the audit requirements set out in the audit guidelines on an as needs basis. We consider that the requirements are the minimum required to meet compliance monitoring functions.

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

### We seek stakeholder comment



g. Do you agree with our preliminary positions of:

- retaining the licence condition requiring Network Operators to prepare and submit reports in accordance with any reporting manuals issued by the Tribunal?
- retaining the licence condition requiring Network Operators to comply with any audit guidelines issued by the Tribunal?

<sup>hh</sup> Condition 15 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 12 of Transgrid's licence.

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

## 5.3 Compliance management systems

The Network Operators' current licences require them to ensure that internal systems are developed and maintained that are capable of effectively managing compliance with their licence.<sup>jj</sup>

This obligation provides assurance to IPART that the Network Operators effectively manage compliance with their licence conditions.

### 5.3.1 We propose to retain the compliance management system obligation

The ES Act does not require the Network Operators' licences to include conditions for requiring development of systems to manage compliance with licence conditions.

Network operators need to comply with:

- network operator licence conditions
- the requirements of the ES Act and the ES(SNM) Regulation
- a wide range of obligations imposed by other acts, rules and regulations applicable to their business.

We therefore consider that it would be good business practice to have a system to assist them to manage compliance. We also consider that the licence conditions do not impose significant additional cost because Network Operators would continue to maintain compliance management systems regardless. It is likely that well-designed compliance management systems would reduce the Network Operators' compliance costs and avoid costly non-compliance events.

We consider that this licence condition is well-designed as it is proportionate to the risk being addressed and its inclusion provides a net positive benefit.

### We seek stakeholder comment



10. Do you agree with our preliminary position of retaining the existing 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?

<sup>jj</sup> Condition 16 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 13 of Transgrid's licence.

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

### 6.1 Statistical obligations and compliance information

The Network Operators' current licences require them to:

- provide operating statistics and performance indicators as may be required from time to time by the Tribunal<sup>kk</sup>
- furnish to 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.<sup>ll</sup>

These information request obligations enable IPART to request information from Network Operators on their business activities and compliance with certain regulatory obligations and facilitate us in performing our compliance monitoring role.

#### 6.1.1 We propose to maintain obligations on statistical reporting and compliance information

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, in the absence of these licence conditions, there would be a risk that IPART would not be able to adequately review Network Operators' performance, investigate compliance issues and assess the Network Operators' compliance. We therefore consider that these licence conditions are necessary.

We consider that the licence conditions are well-designed and impose minimal cost. There is no obligation for the Network Operators to expend resources unless IPART identifies a need.

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

#### We seek stakeholder comment



11. Do you agree with our preliminary positions of:

- retaining the existing licence condition requiring Network Operators to provide operating statistics and performance indicators as may be required from time to time by the Tribunal?

<sup>kk</sup> Condition 17 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 14 of Transgrid's licence.

<sup>ll</sup> Condition 18 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 15 of Transgrid's licence.

- retaining the existing licence condition requiring Network Operators to furnish to 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?

## 6.2 Employment guarantees

The licences of Ausgrid, Endeavour Energy and Transgrid require them to furnish to the Tribunal information on their compliance with the 'Employment Guarantees' set out in Schedule 4 to the *Electricity Network Assets (Authorised Transactions) Act 2015* (ENA(AT) Act).<sup>mm</sup>

The 5-year employment guarantee period started on 1 July 2015 and ended on 30 June 2020 and included obligations on minimum employee numbers and some conditions of employment such as restrictions on changes to workplace locations.<sup>nn</sup>

This employment guarantees obligation enables IPART to request information from Network Operators on their compliance with the employment guarantees obligation and facilitates us in performing our compliance monitoring role.

### 6.2.1 We propose to remove the employment guarantee licence condition

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.

Our preliminary position is to remove the employment guarantees licence condition. The proposed change would streamline the licences by removing an obligation which has ended.

### We seek stakeholder comment



12. Do you agree with our preliminary position of removing the employment guarantee licence conditions from the licences of Ausgrid, Endeavour Energy and Transgrid?

## 6.3 NSW Public Lighting Code

Public lighting is an important contributor to a safe, secure and attractive visual environment for pedestrians and vehicular traffic during times of inadequate natural light.

<sup>mm</sup> Condition 19 of the licences of Ausgrid and Endeavour Energy, and condition 16 of Transgrid's licence.

<sup>nn</sup> The employment guarantee obligations were introduced following the full privatisation of Transgrid in 2015, and partial privatisation of Ausgrid and Endeavour Energy in 2016 and 2017 respectively.

The licences of Ausgrid, Endeavour Energy and Essential Energy require them to:

- comply with the *NSW Public Lighting Code* (Public Lighting Code)<sup>oo</sup>
- comply at their own expense with any request from the Tribunal to audit their compliance with the Public Lighting Code.<sup>pp</sup>

The Public Lighting Code, published by DPIE, has been established to support the reliable and efficient provision of public lighting services.

The Public Lighting Code includes:

- service standards to be met by Ausgrid, Endeavour Energy and Essential Energy (defined as Service Providers under the Public Lighting Code), including requirements to repair faults with public lighting assets within certain timeframes
- requirements for the provision of public lighting services by Service Providers
- a mechanism that allows Services Providers and Customers to agree to the installation of non-standard Luminaires
- a requirement for Service Providers to have a management plan on the operation, maintenance, refurbishment, replacement, repair and disposal of public lighting assets
- quarterly and annual reporting obligations.

The Public Lighting Code licence obligations enable IPART to hold the Service Providers accountable for their compliance with the Public Lighting Code.

### 6.3.1 We have considered the costs and benefits of Public Lighting Code licence conditions

The ES Act does not require the Service Providers' licences to include conditions requiring compliance with the Public Lighting Code.

We note that in the absence of a licence condition requiring compliance with the Public Lighting Code, we expect that the Service Providers would still repair faulty streetlights and provide public lighting services, but they may not do so within the timeframes specified by the Public Lighting Code. We have attempted to assess the net benefit to the community of mandatory compliance with the Public Lighting Code to establish whether licensing is the best response to address the risk of streetlights not being repaired within reasonable timeframes.

We attempted to assess the cost of mandatory compliance with the Public Lighting Code by asking the Service Providers to provide an estimate of the **additional** cost of providing public lighting services in accordance with the Public Lighting Code. The information provided by the Service Providers was inconsistent and we were unable to confidently estimate the cost of mandatory compliance with the Public Lighting Code. However, we consider that if the target repair times and general requirements of the Public Lighting Code are appropriate and achievable, the additional cost of compliance should not be excessive.

<sup>oo</sup> Condition 19A.1 of the licences of Ausgrid, Endeavour Energy and Essential Energy.

<sup>pp</sup> Condition 19A.2 of the licences of Ausgrid, Endeavour Energy and Essential Energy.

We also attempted to assess the general benefits of public lighting by reviewing academic studies on this topic. These include:

- A 2015 study funded by the New Zealand Transport Agency, which analysed the benefits and cost of urban road lighting in New Zealand.<sup>qq</sup> Results indicated that best levels for safety are in the higher light levels and that the benefits of road lighting often substantially exceed the costs, including the energy costs.
- A 2001 study undertaken by the University of Cambridge, which analysed the financial benefits of improved street lighting, based on crime reduction.<sup>rr</sup> In the two cities studied, the financial savings (from reduced crimes) exceeded the financial costs by between 2.4 and 10 times after one year).

While the studies have some limitations (such as not being performed in Australia), they clearly establish some of the benefits of public lighting.

### 6.3.2 We propose to retain the Public Lighting Code compliance obligation

Based on the limited information available, we consider the benefit of mandatory compliance with the Public Lighting Code outweighs the cost to the community. Although this is our view, we consider that a higher cost-benefit **may** be possible if some of the requirements of the Public Lighting Code are reviewed.

We note that DPIE is currently reviewing the Public Lighting Code.<sup>ss</sup> We have written to DPIE asking that they consider the net benefit of the target repair timeframes and general requirements of the Public Lighting Code during the review.

Please refer to condition 19 of attached draft licences for Ausgrid, Endeavour Energy and Essential Energy for proposed wording of the licence condition. Please note that we have replaced the requirement to comply with any request from the Tribunal for an audit of Public Lighting Code compliance, with a general auditing provision in the licences. Please refer to section 7.1.1 of this paper for discussion of the general auditing provision.

### We seek stakeholder comment



13. Do you agree with our preliminary positions of:

- retaining the existing licence condition requiring Ausgrid, Endeavour Energy and Essential Energy to comply with the Public Lighting Code?
- replacing the existing 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>qq</sup> Frith, W, Jacket, M and Chisnall, J, *The benefits and costs associated with urban road lighting in New Zealand*. 2015.

<sup>rr</sup> Painter, A and Farrington, D, *The financial benefits of improved street lighting, based on crime reduction*. 2001.

<sup>ss</sup> DPIE is required to commence the review under clause 15(c) of the Public Lighting Code.

## 6.4 Licence fees

The Network Operators' current licences require them to:

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

These licence conditions enable the NSW Government to recover IPART's costs of regulating the Network Operators.

### 6.4.1 We propose to retain licence fee obligations

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.<sup>vv</sup> In the absence of these licence conditions, IPART would not be able to require the Network Operators to pay licence fees.

We therefore consider that these licence conditions are necessary as they enable the NSW Government to recover IPART's costs of regulating the Network Operators.

We also consider that the licence conditions are well-designed and administered effectively.

### We seek stakeholder comment



14. Do you agree with our preliminary positions of:

- retaining the existing licence condition 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?
- retaining the existing licence condition requiring the Network Operators to pay licence fees in the manner and within the period specified by the Tribunal?

<sup>tt</sup> Condition 20.1 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 17.1 of Transgrid's licence.

<sup>uu</sup> Condition 20.2 of the licences of Ausgrid, Endeavour Energy and Essential Energy, and condition 17.2 of Transgrid's licence.

<sup>vv</sup> *Electricity Supply Act 1995* Schedule 2, section 6, clause (2)(h).

## 7 Consideration of new conditions

### 7.1 General auditing condition

The Network Operators' current licences require them to conduct annual audits of their compliance with certain obligations including distribution reliability (which applies 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.

However, the Network Operators' current licences do not contain a general audit power for the Tribunal to conduct an audit of the Network Operators' compliance with other licence conditions.

#### 7.1.1 We propose to include a general auditing licence condition

In the absence of a general audit power, IPART is not able to use audits to investigate emerging and current compliance issues under certain obligations. Including a general audit power in the licences would address this risk and provide IPART with more flexibility to perform its compliance monitoring functions.

Our preliminary position is to include a condition in the Network Operators' licences allowing the Tribunal to direct the Network Operators to engage an auditor to conduct an audit of their compliance with conditions imposed by their licences.<sup>ww</sup> This would assist IPART to better monitor compliance with licence conditions by allowing us to undertake detailed investigation of compliance issues.

IPART undertakes audits on a risk basis and would only require audits and impose costs where a risk was identified and an audit was proportional to the risk. Should the audit power be included in the Network Operators' licences, IPART's intention would be to use this power on a risk basis. The proposed licence condition is necessary and targeted. In our view, it will not impose unnecessary costs on the Network Operators but will provide a benefit by ensuring that IPART is able to effectively perform its compliance monitoring functions.

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

<sup>ww</sup> Section 87A of the ES Act provides that each holder of a licence is required to pay to the Treasurer the cost (as certified by the Tribunal) involved in and in connection with carrying out the Tribunal's functions under section 87 in relation to the holder of the licence. We would rely on this provision to ensure audits are conducted at the expense of the Network Operators.



## We seek stakeholder comment



15. Do you agree with our preliminary positions of:

- including a general audit power in the amended licences?
- including a licence condition requiring audits to be conducted at the expense of the relevant network operator?

## 8 Full list of questions for stakeholder comment

We have included the full list of questions asked in this Draft Report for stakeholder comment below.

### Seek Comment

1.	Do you agree with our preliminary position of not reviewing critical infrastructure licence conditions at this time?	8
2.	Do you agree with our preliminary position of amending the Transmission Reliability Standard to include a Bulk Supply point definition?	9
3.	Do you agree with our preliminary positions of: <ul style="list-style-type: none"> <li>– amending the existing licence conditions to allow Ausgrid, Endeavour Energy and Essential Energy to agree and authorise operation outside of distribution districts in writing?</li> <li>– amending 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?</li> </ul>	11
	Does our proposed solution capture the objective of ensuring that network extensions outside of legislated distribution districts are undertaken in a planned and controlled manner?	12
	Are there any other risks associated with operation outside of distribution districts that need to be managed through licence conditions?	12
4.	Do you agree with our preliminary positions of removing the licence conditions that require Network Operators to: <ul style="list-style-type: none"> <li>– be registered or exempt from the requirement to be registered as a Network Service Provider under the National Electricity Rules?</li> <li>– 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?</li> <li>– 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)?</li> </ul>	13
5.	Do you agree with our preliminary position of removing the licence conditions requiring Transgrid to submit an Annual Demand Forecast to AEMO?	14
6.	Do you agree with our preliminary position of retaining the current requirement for Network Operators to have, implement and comply with their Business Continuity Plan?	15
7.	Do you agree with our preliminary positions of: <ul style="list-style-type: none"> <li>– retaining the requirement to have an AMS?</li> <li>– retaining the requirement to certify the AMS?</li> <li>– removing from the licences the requirement to notify IPART of proposed significant changes to the AMS?</li> </ul>	18

	<ul style="list-style-type: none"> <li>– removing from the licences of Ausgrid and Endeavour Energy the requirement to have and maintain an AMS within two years of the date of their licences?</li> <li>– amending the relevant standard in the licences of Ausgrid, Endeavour Energy and Transgrid to AS ISO 55001:2014 <i>Asset management - Management systems - Requirements</i>?</li> <li>– 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?</li> </ul>	
8.	Do you agree with our preliminary positions of: <ul style="list-style-type: none"> <li>– retaining the requirement to have an EMS?</li> <li>– retaining the requirement to certify the EMS?</li> <li>– removing from the licences the requirement to notify IPART of proposed significant changes to the EMS?</li> <li>– removing from the licences of Ausgrid and Endeavour Energy the requirement to have and maintain an EMS within two years of the date of their licences?</li> <li>– amending the relevant standard in the licences of Ausgrid, Endeavour Energy and Transgrid to AS/NZS ISO 14001:2016 <i>Environmental management systems - Requirements with guidance for use</i>?</li> <li>– including a condition in the licences of Ausgrid, Endeavour Energy and Transgrid allowing them to request the Tribunal to approve use of an alternative environmental management standard?</li> </ul>	21
9.	Do you agree with our preliminary positions of: <ul style="list-style-type: none"> <li>– retaining the licence condition requiring Network Operators to prepare and submit reports in accordance with any reporting manuals issued by the Tribunal?</li> <li>– retaining the licence condition requiring Network Operators to comply with any audit guidelines issued by the Tribunal?</li> </ul>	22
10.	Do you agree with our preliminary position of retaining the existing 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?	23
11.	Do you agree with our preliminary positions of: <ul style="list-style-type: none"> <li>– retaining the existing licence condition requiring Network Operators to provide operating statistics and performance indicators as may be required from time to time by the Tribunal?</li> <li>– retaining the existing licence condition requiring Network Operators to furnish to 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?</li> </ul>	24
12.	Do you agree with our preliminary position of removing the employment guarantee licence conditions from the licences of Ausgrid, Endeavour Energy and Transgrid?	25
13.	Do you agree with our preliminary positions of: <ul style="list-style-type: none"> <li>– retaining the existing licence condition requiring Ausgrid, Endeavour Energy and Essential Energy to comply with the Public Lighting Code?</li> <li>– replacing the existing 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?</li> </ul>	27
14.	Do you agree with our preliminary positions of:	28

- retaining the existing licence condition 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?
- retaining the existing licence condition requiring the Network Operators to pay licence fees in the manner and within the period specified by the Tribunal?

15. Do you agree with our preliminary positions of: 30
- including a general audit power in the amended licences?
  - including a licence condition requiring audits to be conducted at the expense of the relevant network operator?

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## A Draft Ausgrid licence

**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 and Environment, 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 and Environment**

## 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*.

Conditions 2 (National Electricity Market Registration) and 3 (Technical and prudential criteria) are proposed to be deleted.

## 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 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 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* 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 *Electricity Supply Act 1995*.

**Approved Auditor** means an auditor who has been approved by the *Tribunal* in accordance with any *Audit Guidelines* issued by the *Tribunal*

**Approved Critical Infrastructure Auditor** means an auditor who has been approved by the *Tribunal* as having the necessary independence, experience, and expertise in system security or has otherwise demonstrated to the *Tribunal's* 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 Critical Infrastructure Centre within the Commonwealth Attorney General's Department.</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> .
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 <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	<p>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:</p> <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</i>



	<i>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
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*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**

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- 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
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- (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
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- (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)

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

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

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

### 6.2 INDIVIDUAL FEEDER STANDARDS

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

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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 customer's premises is located	Interruption duration standard (hours)	Interruption frequency standard (number of interruptions and hours of duration)
metropolitan	12	4 interruptions of greater than or equal to 4 hours
non-metropolitan	18	4 interruptions 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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resulting from the placement and use in the described manner. For the avoidance of doubt and the promotion of consistency, Items “a”, “b”, “c” and “e” listed under *excluded interruptions* should be removed from daily records before applying the following methodology to calculate a major event day.

### 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
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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 7 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

## 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 connection point is located	Minutes interrupted	Number of interruptions
<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 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 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 of this Appendix 2 is the joint responsibility of the multiple officers and the approval contemplated in condition 1 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

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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 for the period of 12 months after the date of this *Licence* provided that 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*

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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.
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## B Draft Endeavour Energy licence

**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 and Environment, 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
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- (c) affect a right, privilege or liability acquired, accrued or incurred under the Previous Licence Conditions.

**Date:**

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

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## 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*.

Conditions 2 (National Electricity Market Registration) and 3 (Technical and prudential criteria) are proposed to be deleted.

## 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).
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## 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.
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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

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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* 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*.
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## 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 plan	has the meaning given to it in conditions 1.2(c) and 2.2(g) 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 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.
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</i>

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	<i>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> .
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	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').

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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>urbanfeeder</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 <i>Commonwealth Representative</i> and the <i>Licence Holder</i> . The document may set out (among other

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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.

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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
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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.
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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*.
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- 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:
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- (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*.
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- 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)**

SAIDI (Minutes per customer)	
ENDEAVOUR ENERGY	
Feeder Type	
Urban	80
Short-rural	300

<i>Long-rural</i>	n/a
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**Table 2: SAIFI Average Reliability Interruption Standards (Number per *customer*)**

<b>SAIFI (Number per <i>customer</i>)</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**

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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*

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*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:

- 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.
- 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).
- Take the natural logarithm (ln) of each daily *SAIDI* value in the data set.
- Find  $\alpha$  (Alpha), the average of the logarithms (also known as the log-average) of the data set.
- Find  $\beta$  (Beta), the standard deviation of the logarithms (also known as the log-standard deviation) of the dataset.
- Complete the major event day threshold *TMED* using the following equation:

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

- 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 an *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	

<b>Table 7: 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	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.

**[Note: table below to apply to the Endeavour Energy licence]**

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;
  - (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*; and
  - (c) will be taken to have satisfied condition 1.2(a) in this Appendix 2 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*.
-

**Note:** For the purposes of Licence condition 1 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 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

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*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 this Licence* 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 this Licence* 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 this Licence* 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 approved 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

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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 with critical infrastructure provisions

- 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
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*Licence Holder* to ensure compliance (and to preclude further non-compliance) and the timeframe within which it expects to achieve compliance.

## C Draft Essential Energy licence

**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 and Environment, 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 and Environment**

## 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*.

Conditions 2 (National Electricity Market Registration) and 3 (Technical and prudential criteria) are proposed to be deleted.

## 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 By 5 February 2022, the *Licence Holder* must have, and from that date onwards must 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, by the time it is required to comply with condition 7.1:
- (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, once its asset management system and environmental management system are each certified in accordance with condition 7.2, the certifications are 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**

- 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* 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.
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.
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	<p>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:</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 <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	<p>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:</p> <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)**

<b>SAIDI (Minutes per <i>customer</i>)</b>	
<b>ESSENTIAL ENERGY</b>	
<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)**

<b>SAIFI (Number per <i>customer</i>)</b>	
<b>ESSENTIAL ENERGY</b>	
<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 *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 an *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	

**Table 8: 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. Cessnock-Bellbird area**

ABERDARE	CESSNOCK
BELLBIRD	KEARSLEY
BELLBIRD HEIGHTS	NULKABA

**C. Kiama area**

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 Draft Transgrid licence

# 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 and Environment, 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 and Environment**



## 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 *transactioned 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*.

Conditions 1 (National Electricity Market Registration), 2 (Technical and prudential criteria) and 4 (Annual demand forecasts) are proposed to be deleted.

#### 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* 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> .
Approved Plan	means a plan of the type described under condition 2.2(g) of Appendix 1 of these conditions, that is required by the Commonwealth, and which provides approval for a service provider or contractor to the <i>Licence Holder</i> in respect of holding, accessing or using specified information. Such a plan is to be agreed to in writing by the <i>Commonwealth Representative</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> .
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;
- 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 with critical infrastructure provisions**

- 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 132kV 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*.

**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) 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
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
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
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