



# **ELECTRICITY STANDARD OF SERVICE CODE**

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## **DRAFT STATEMENT OF REASONS**

*October 2012*

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## Call for submissions

Submissions are invited from interested parties concerning the issues raised in this Options Paper and any related matters.

Submissions should be directed in the first instance:

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The closing date for submissions is **19 October 2012**.

## Confidentiality

In the interest of transparency and to promote informed discussion, the Commission will make submissions publicly available.

Persons wishing to submit confidential information should:

- clearly identify the relevant sections of the submission that are confidential, so that the remainder of the document can be made publicly available; and
- provide a copy of the submission suitable for publication with any confidential material removed

Confidential information is defined in section 26 of the *Utilities Commission Act* as information that could affect the competitive position of a licensed entity or other person or information that is commercially sensitive for some other reason.

## Public access to submissions

Subject to the above, submissions will be made available for public inspection at the office of the Commission and on its website ([www.utilicom.nt.gov.au](http://www.utilicom.nt.gov.au)).

To facilitate publication on the Commission's website, submissions should be provided electronically in Adobe Acrobat or Microsoft Word format by CD, DVD, or email. However, if this is not possible, submissions can be made in writing.

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## Glossary of terms

Term	Definition
2.5 Beta Method	Statistical method developed by the IEEE to identify events that are outside the reasonable control of the network service provider.
2014 Network Price Determination	The Price (or revenue) Determination for the 2014-19 regulatory control period under the <i>Electricity Networks (Third Party Access) Act</i> .
AER	Australian Energy Regulator.
DNSP	Distribution network service provider.
ESS	Electricity Standards of Service.
Feeder	Any of the medium-voltage lines used to distribute electric power from a substation to consumers or to smaller substations.
IEEE	US Institute of Electrical and Electronics Engineers.
GSL Code	Guaranteed Service Levels Code effective from 1 January 2012, sets out a scheme by which the network service provider makes payments to customers when service performance is outside a defined threshold.
KM	Kilometre.
MW	Megawatt.
MVA	Megavolt Ampere.
NEM	National Electricity Market.
Power system	Refers to the Darwin-Katherine power system, Tennant Creek power system and/or the Alice Springs power system.
PWC	Power and Water Corporation.
Region	Refers to the Darwin Region, Katherine Region, Tennant Creek Region and/or the Alice Springs Region.
Regulatory Proposal	The regulatory proposal submitted by the network service provider to the Commission to determine prices for network services under <i>Electricity Networks (Third Party Access) Act</i> and as part of the 2014 Network Price Determination.
SAIDI	System Average Interruption Duration Index. The average number of minutes that a customer is without supply in a given period.
SAIFI	System Average Interruption Frequency Index. The average number of times a customer's supply is interrupted in a given period.
TNSP	Transmission network service provider.

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# CHAPTER 1

## Introduction

### Background

- 1.1 The Utilities Commission of the Northern Territory (the Commission) is an independent statutory authority responsible for the economic regulation of the electricity supply industry, which is governed by the *Utilities Commission Act* (the Act), the *Electricity Reform Act*, the *Electricity Networks (Third Party Access) Act*, and associated legislation.
- 1.2 Under the Act, the Commission has the power to make codes and rules if authorised to do so under a relevant industry regulation Act or by regulations under the Act. The Act prescribes a code-making process for the creation, variation, and revocation of industry codes, which requires the Commission to (among other things):<sup>1</sup>
  - consult with the Minister (the Treasurer)<sup>2</sup> and representative bodies and participants in the regulated industry;
  - give notice of the making, variation, or revocation of a code to the Minister, and to each licensed entity to which the code applies; and
  - ensure copies of the code are made available for inspection for the public.
- 1.3 On 21 December 2005, the Commission released the Electricity Standards of Service Code (ESS Code), which was made pursuant to the Act, and in accordance with the Commission's powers to do anything necessary or convenient to be done for or in connection with or incidental to the performance of the Commission's functions under:
  - section 91 (1) of the *Electricity Reform Act*, which requires the Commission to make provisions imposing minimum standards of service and safety for non-contestable customers;
  - section 10 of the *Electricity Networks (Third Party Access) Act*; and
  - section 6 of the Act.
- 1.4 In accordance with the introduction of full-retail contestability, the last tranche of non-contestable customers became contestable on 1 April 2010. This means that the Commission's functions in relation to electricity standards of service under section 92 (1) of the *Electricity Reform Act* have become redundant, and the ESS Code was partially ineffective.
- 1.5 On 15 May 2012, the Commission released the proposed ESS Code and an accompanying Consultation Paper for public comment. In the Consultation Paper, the Commission expressed its intention to revoke the existing ESS Code and make a new

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<sup>1</sup> S.24, *Utilities Commission Act*.

<sup>2</sup> Administrative Arrangements Order as at 31 January 2012.

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ESS Code in response to recent regulatory changes, and the (then) Government's Priority Works Program. The Commission invited submissions from stakeholders and industry participants by 8 June 2012.

- 1.6 The Commission received submissions from Power and Water Corporation (PWC) and ERM Power Retail Pty Ltd (ERM).
- 1.7 Upon receipt of submissions, the Commission requested further information from PWC on certain aspects of its submission. In August 2012, PWC responded with supplementary information. All submissions are available on the Commission's website ([www.utilicom.nt.gov.au](http://www.utilicom.nt.gov.au)).

### **Changes in the consultation process**

- 1.8 The Consultation Paper outlined the following timetable for implementation of the new ESS Code:
- The Commission to release the final Code and Statement of Reasons by 27 June 2012.
  - The Code to be implemented by 1 July 2012.
- 1.9 The Commission identified technical issues requiring independent expert advice. As a result, the Commission engaged the services of ACIL Tasman to advise on the:
- mathematical formula and associated definitions of the performance indicators in the proposed ESS Code; and
  - categories of distribution feeders, how they are applied and defined, and whether or not the definitions should be amended to further the objectives of the new ESS Code.
- 1.10 This has resulted in necessary delays in the implementation of the new ESS Code.
- 1.11 Due to the nature of the issues and the changes to the proposed ESS Code, the Commission has decided to consult on its second draft of the proposed ESS Code as well as its draft Statement of Reasons.

### **Purpose of this paper**

- 1.12 The purpose of this draft Statement of Reasons is to outline the Commission's preliminary views (as well as accompanying information) on the form and content of the new ESS Code and to:
- address the issues raised in the submissions received during the initial consultation; and
  - seek comments from stakeholders and industry participants on issues that have emerged since the initial consultation.
- 1.13 The Commission has considered all submissions by stakeholders and industry participants. The Commission has also considered the advice of ACIL Tasman on the mathematical formulae of performance indicators and the categorisation of distribution feeders in the proposed ESS Code.
- 1.14 This draft Statement of Reasons should be read in conjunction with the second draft of the proposed ESS Code (including the 'delta' view of the proposed changes) and the following ACIL Tasman reports:
- independent review of performance indicators; and
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- independent review of distribution network feeder category definitions.
- 1.15 A copy of the independent review reports prepared by ACIL Tasman are available on the Commission's website or by contacting the Commission office.
- 1.16 The Commission invites submissions from stakeholders and industry participants by 19 October 2012. Late submissions will be considered at the Commission's discretion, however the Commission highlights that consideration of late submissions will impact on the Commission's ability to implement the new ESS Code by 1 November.
- 1.17 The Commission will endeavour to implement the new ESS Code by 1 November 2012. Table 1.1 contains the relevant timeframes.

Table 1.1: Process and timeframes for the development of the ESS Code

Action	Timeframe
Release of the second draft Code	5 October 2012
Submissions due	19 October 2012
Release of final ESS Code and Statement of reasons, and publication of Notice in the NT Government Gazette	26 October 2012
Implementation of the ESS Code	1 November 2012

### Structure of this paper

- 1.18 Chapter 2 of this draft Statement of Reasons addresses the primary concerns raised in the submissions. Chapter 2 also outlines the views of interested parties and the Commission's Preliminary Decision.
- 1.19 Appendix A of this draft Statement of Reasons contains a table, which addresses all other concerns (not addressed in Chapter 2) raised by interested parties.
- 1.20 In making the Code, the Commission has had regard to the need to:
- promote competitive and fair conduct;
  - prevent the misuse of monopoly or market power;
  - facilitate entry into relevant markets;
  - promote economic efficiency;
  - ensure consumers benefit from competition and efficiency;
  - protect the interests of consumers with respect to reliability and quality of services and supply in regulated industries;
  - facilitates maintenance of the financial viability of regulated industries; and
  - ensure an appropriate rate of return on regulated infrastructure assets.<sup>3</sup>

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<sup>3</sup> s 6 (2), *Utilities Commission Act*.

## CHAPTER 2

### Electricity Standards of Service Code

#### Objectives and purpose of the Code

2.1 The objectives of the ESS Code are to:

- establish standards of service and performance measures in the electricity supply industry;
- develop, monitor, and enforce compliance with and promote improvement in standards of service of supply in the electricity supply industry; and
- require electricity entities to have adequate systems in place which allow for regular reporting of actual performance in accordance with the Code.

2.2 In achieving these objectives, the ESS Code prescribes matters on:

- process for adding to or amending the ESS Code, and the creation of guidelines and directions;
- process for establishing target standards for distribution and transmission network reliability measures;
- performance indicators for generation services, network services, and retail services with and without a target standard;
- reporting of performance indicators with and without a target standard;
- mandatory and discretionary obligations on the Commission; and
- mandatory obligations on electricity entities to which the ESS Code will apply.

#### Draft Statement of Reasons

##### Target standards

2.3 The proposed ESS Code sets out the process and obligations for establishing, amending, and meeting the approved target standards, and applies only to network service providers.

2.4 The proposed ESS Code requires a network service provider to submit proposed target standards to the Commission, by a date specified by the Commission and notified to the electricity entity. These proposed target standards must include all the network service performance indicators requiring a target as specified in Schedule 2, be segmented in accordance with clause 6 and contain proposed calculations for the target standards that are:

- an average of the data from the preceding five financial years;
  - if that type of data is not available, averaging comparable and available data from each of the preceding five financial years; or
  - utilising such other methodology that the Commission considers appropriate.
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*Views in submissions*

- 2.5 PWC has made the following suggestions regarding the process for establishing the approved target standards:
- The target standards for the next regulatory control period (commencing 1 July 2014) should be set by 1 January 2013. This will enable the service levels to be incorporated into PWC's Network's regulatory proposal for the 2014 Network Price Determination under the *Electricity Networks (Third Party Access) Act*.
  - The Commission should consult with System Control in relation to setting and approving the target standards, as System Control would be well placed to make technical comments on the performance of the power system and appropriate standards.

*Commission's response to views in submissions*

Date to set the target standards

- 2.6 Due to the anticipated 1 November 2012 commencement date for the new ESS Code, the Commission is unlikely to set or approve target standards by 1 January 2013.
- 2.7 The Commission notes that the proposed ESS Code incorporates a proposal-approval model for setting target standards, which includes the following:
- the Commission issues a direction specifying the date on which the network service provider must submit its proposed target standards to the Commission;
  - the Commission assesses the network service provider's proposed target standards; and
  - the Commission either approves the proposed target standards, or sets its own target standards based on an alternative methodology.
- 2.8 Therefore, the date for setting the target standards will depend on the due date for the network service provider's proposed target standards (as directed by the Commission) and whether or not the proposed target standards are consistent with the Commission's requirements (and are of an adequate standard) in the first instance.
- 2.9 The Commission will liaise with the network service provider prior to issuing a direction specifying the due date for the network service provider's proposed target standards, but will strive to set the due date some months prior to the due date for the network service provider's regulatory proposal under the 2014 Network Price Determination. The due date will be set to:
- enable the Commission to properly consider the network service provider's proposed target standards;
  - provide sufficient time for the Commission to set an alternative methodology for the target standards or set its own target standards if appropriate; and
  - provide sufficient time for the network service provider to incorporate the target standards (as set or approved by the Commission) in its regulatory proposal.

Consult with System Control prior to setting the target standards

- 2.10 The proposed ESS Code requires the network service provider to submit proposed target standards to the Commission. In submitting its proposed target standards, the Commission would expect the network service provider to liaise with System Control
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on any technical and related issues that may impact on the performance of the power system, if appropriate to support the approval of the proposed target standards.

- 2.11 It is also noted that clause 3.1.6 of the proposed ESS Code states that the Commission may consult (on the target standards) more widely with other electricity entities (including System Control)<sup>4</sup>, the Minister and anyone else that the Commission considers should be consulted in the circumstances.
- 2.12 The Commission considers that clause 3.1.6 contains appropriate mechanisms for System Control to provide input on the target standards.

*Commission's preliminary decision*

Date to set the target standards

- 2.13 The Commission does not propose to specify a date to approve or set the target standards. However, the Commission will take PWC's comments into account in issuing a direction specifying the due date for the proposed target standards to be submitted to the Commission for approval.

Consult with System Control prior to setting target standards

- 2.14 The Commission does not propose to impose any requirement on the Commission for the Commission to consult with System Control prior to setting the target standards. However, the Commission will consult with System Control if required.

**IEEE Standard and adjusted and unadjusted categories**

- 2.15 Clause 6 of the proposed ESS Code sets out the requirements for the segmentation of network service performance indicators into adjusted and unadjusted categories. The network service performance indicators are contained in Schedule 2.
- 2.16 The proposed ESS Code defines adjusted and unadjusted as the following:
- Adjusted means to exclude all network outages that meet the requirements of clause 6.2 of this Code.
  - Unadjusted means to include all network outages that would normally be excluded if adjusted.
- 2.17 The proposed ESS Code contains the following exclusions (from the adjusted category):

*An electricity entity may only exclude a network outage from the adjusted category if the event that caused that network outage is listed below and was beyond the reasonable control of the electricity entity:*

*(a) load shedding due to a shortfall in generation;*

*(b) an interruption where more than two business days' notice was given to customers by the electricity entity and the electricity entity has otherwise complied with the relevant requirements of the applicable regulatory instruments;*

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<sup>4</sup> The *Electricity Reform Act* defines "electricity entity" as a person licensed under Part 3 to carry on operations in the electricity supply industry. This includes System Control in accordance with section 30 of the Act.

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- (c) *the System Controller exercising any functions or powers under an applicable regulatory instrument, a direction by a police officer or another authorised person exercising powers in relation to public safety, but only to the extent that the exercise of that function or power, or the giving of that direction, is not caused by a failure by the electricity entity to comply with any applicable regulatory instrument;*
- (d) *a traffic accident;*
- (e) *an act of vandalism;*
- (f) *a natural event that is identified as statistical outliers using the IEEE 2.5 beta method; or*
- (g) *an interruption caused by a customer's electricity installation.*

2.18 The proposed ESS Code contains an approval process for natural events, whereby the network service provider would make an application to the Commission (in writing within 30 business days) from the date on which the event occurred, outlining all the relevant information relating to the event.

#### *Views in submissions*

2.19 PWC has made a number of suggestions and comments on the adjusted and unadjusted categories in the proposed ESS Code.

2.20 PWC states that the adjusted and unadjusted categories should align with the IEEE (US Institute of Electrical and Electronics Engineers) 1366-2003 standard 2.5 beta method, which distinguishes between underlying network reliability and major event days, for the following reasons:

- the adjusted category for setting target standards will result in PWC's historical outage data sets no longer being directly comparable to future figures;
  - the IEEE 1366-2003 standard is a recognised industry standard that will allow PWC to study distinctly different data sets and develop the most suitable and appropriate actions, including benchmarking with other network service providers;
  - the 2.5 beta method is the most appropriate exclusion methodology for business planning, capital maintenance and resource allocation, as it provides PWC with an understanding of network performance and the impact this may have on customers. The 2.5 beta method data sets will take into account all relevant events, in their totality and regardless of the perceived or actual fault. In comparison, the Commission's proposed exclusion methodology may have unintended consequences in terms of business planning, capital maintenance and resource allocation;
  - the exclusions from the adjusted category generally do not apply in the context of transmission network performance (for example planned transmission outages generally do not affect customers and in the technical sense, would not be excluded to begin with);
  - adopting a methodology other than the 2.5 beta method will result in increased compliance costs on System Control. In particular, System Control would have to reconcile half-yearly reports to the Commission as well as electricity entities' performance reports. Furthermore, PWC argues that the System Control charges, as they stand, are insufficient to recover the costs of complying with increased
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regulatory obligations. PWC requests that the Commission review these charges; and

- the Commission's approval process for natural events identified using the 2.5 beta method is subjective, and results in intensive reporting requirements for PWC. PWC requests that the process be more objective. PWC also added that the full application of the 2.5 beta method would negate the need for an approval process.

#### *Commission's response to views in submissions*

#### Separate data sets

2.21 The Commission acknowledges that PWC may not be able to use the historical data sets, which have been adjusted using the 2.5 beta method under the IEEE standard 1366-2003. However, the Commission expects PWC to have historical unadjusted data sets, which could be adjusted to derive data sets that would comply with the proposed exclusion methodology.

#### Application of the 2.5 beta method

2.22 It is noted that the IEEE 1366-2003 standard requires a distribution network service provider (DNSP) to maintain two separate data sets to distinguish between day-to-day operations and major event days (which are identified using the 2.5 beta method), the purpose of which is to reveal trends in daily operation that would normally be hidden by the large statistical effects of major events. The 2.5 beta method has (in theory) the effect of identifying major events that would occur 2.3 days per year. These events are deemed to be outside the random process that is assumed to control distribution network reliability.

2.23 However, it is noted that the 2.5 beta method does not account for the cause of the event. The IEEE has said that a statistical approach was preferred due to the difficulties in creating a uniform list of major events for the industry. Other reasons include:

- definitions must be understandable and easy to apply;
- definitions must be specific and calculated using the same process for all utilities;
- must be fair to all utilities regardless of size, geographic, or design; and
- entities that adopt the methodology will calculate indices on a normalised basis for trending and reporting. They will further classify the major event days separately and report on those days through a separate process.<sup>5</sup>

2.24 It is also noted that state regulators in Queensland<sup>6</sup> and New South Wales<sup>7</sup> as well as the Australian Energy Regulator (AER),<sup>8</sup> have adopted the 2.5 beta method to identify major event days for standards of service and pricing purposes (as the case may be), although there are slight variations based on local characteristics. In comparison, state regulators in South Australia and Tasmania do not use the 2.5 beta method. It should

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5 IEEE Standard 1366-2003, Guide for electric power distribution reliability indices.

6 Schedule 1 – reliability limits, Queensland Electricity Industry Code.

7 Schedule 4 – excluded interruptions, Design, Reliability and Performance Licence conditions for Distribution Network Service Providers, IPART, 1 December 2007.

8 Appendix D, Electricity distribution network service providers, Service target performance incentive Scheme, AER, November 2009.

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also be noted that the AER does not use the 2.5 beta method for transmission network service providers (TNSP), opting instead to use an exhaustive list that defines events that are deemed to be outside the reasonable control of the TNSP.<sup>9</sup>

- 2.25 A new version of the standard (IEEE 1366-2012) was released on 31 May 2012, which discusses major event days and the development of an objective methodology for the identification and processing of ‘catastrophic days’ (those major events that have a low probability of occurring, yet tend to skew the distribution of network performance by causing a shift of average data sets). The IEEE notes that it was unable to devise an objective methodology for the identification and processing of catastrophic events and recommends that regulators and utilities determine a process for catastrophic events on a case-by-case basis.<sup>10</sup>
- 2.26 In light of the above comments on catastrophic days, the Commission accepts that the inclusion of some major events in setting or approving the target standards may essential skew the true performance of the network, which may negatively impact on the target standards and PWC’s planning and capital maintenance. The Commission is inclined to consider the exclusion of these major events (for example, Casuarina substation incident) on a case-by-case basis, as part of a submission by the network service provider in its proposed target standards, or under clause 3.1.3 (c), which allows the Commission to set target standards based on an alternative methodology.
- 2.27 However, the Commission considers that reporting of network performance should be based on the Commission’s current exclusion approach, as this would reflect the network service provider’s true performance during the relevant reporting period and will trigger reporting of events based on the cause of the event and whether or not the event is truly outside the reasonable control of the network provider. This is similar to the approach taken by the AER in measuring TNSP performance.
- 2.28 The Commission is of the view that the current exclusion methodology will provide the network service provider with the right incentives to prevent or minimise the likelihood of major events (whether catastrophic or otherwise) through prudent asset management.

#### Application of adjusted category on transmission network performance indicators

- 2.29 The Commission notes that the exclusions (from the adjusted category) may not apply in the context of transmission network performance. However, this does not mean that these events are not relevant or may not apply in future. In response to PWC’s example, the Commission notes that a transmission outage may have an impact on customers, depending on the circumstances.
- 2.30 Furthermore, the exclusions also contain other events that are relevant to transmission network performance (for example, the System Controller exercising its functions or powers under applicable regulatory instruments or load shedding due to a shortfall in generation).

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<sup>9</sup> Appendix E, Electricity transmission network service providers, Service target performance incentive Scheme, AER, March 2012.

<sup>10</sup> IEEE Standard 1366-2012, Guide for electric power distribution reliability indices, page 19-20.

- 2.31 The Commission considers that the exclusions (from the adjusted category) are relevant to transmission network performance and should apply to the adjusted transmission network performance indicators under the proposed ESS Code.

#### Adjusted category and network outages by System Control

- 2.32 The Commission notes PWC's concern that the exclusion of network outages (from the adjusted category) due to an event by System Control will result in increased compliance costs. However, the Commission also notes that similar provisions are contained in the Commission's Guaranteed Service Level Code (GSL Code)<sup>11</sup>, the AER's Service Target Performance Incentive Scheme<sup>12</sup>, and the Queensland Electricity Industry Code.<sup>13</sup>
- 2.33 The Commission notes PWC's concerns over how these compliance costs should be funded and PWC's request for the Commission to review these charges.
- 2.34 It is noted that section 39 of the *Electricity Reform Act* states that a system controller is entitled to impose and recover charges relating to the operations of the system controller and that the schedule of charges to be applied are to be approved by the Commission.
- 2.35 Therefore, System Control is free to submit a schedule of charges to the Commission for approval if it considers the charges to be justified in relation to the operations of system control.
- 2.36 Should System Control submit an updated schedule of charges, the Commission suggests that System Control distinguish between the costs associated with its system control functions and those costs associated with its services as procured by PWC Networks, as only the former should be included in the schedule of charges.
- 2.37 The Commission considers the exclusion of a network outage (from the adjusted category) due to an event by the system controller to be appropriate for the purposes of the ESS Code.

#### Approval process for natural events

- 2.38 The Commission notes PWC's concerns over the subjective nature of the approval process for considering natural events (as identified using the 2.5 beta method) that are to be excluded from the adjusted category.
- 2.39 The approval process was developed to ensure regulatory oversight over natural events identified using the 2.5 beta method and to ensure that the events are excluded only to the extent that they fall outside the reasonable control of the network service provider. The approval process also aligns with the approval process set out in the GSL Code.
- 2.40 After further consideration, the Commission has decided to remove the approval process, as a strict approval process may impinge upon reporting requirements by the due date.

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11 Clause 2.2 Guaranteed Service Level Code.

12 Clause 3.3, Electricity distribution network service providers, Service target performance incentive Scheme, AER, November 2009.

13 Clause 2.4.3 (b), Queensland Electricity Industry Code.

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2.41 The Commission proposes to replace the approval process with an annual reporting requirement. The following reporting process intends to improve transparency in relation to the occurrence of natural events (inserted as clause 4.3):

- All relevant events considered to be natural events as identified using the 2.5 beta method are to be reported in the annual performance report provided to the Commission on 1 November.
- Information in the report should include information and documentation:
  - on the circumstances surrounding the event;
  - detailing the reasons why the event is excluded; and
  - outlining the extent of the exclusion from the adjusted category.

2.42 Furthermore, clause 4.1.5 has been inserted, which requires the electricity entity to respond to the Commission's request for further information regarding the annual performance report, within 20 business days of receipt of that request or as otherwise specified by the Commission.

*Commission's preliminary decision*

2.43 The Commission proposes that the exclusion methodology in the proposed ESS Code remain unchanged. However, in setting or approving the target standards, the Commission will consider the exclusion of certain major events on a case-by-case basis, as proposed by the network service provider or under an alternative methodology determined by the Commission.

2.44 The Commission proposes to make the following changes:

- remove the approval process for natural events identified using the 2.5 beta method;
- insert a reporting mechanism, requiring the network service provider to report certain information in relation to natural events identified using the 2.5 beta method;
- insert timeframe for the network service provider to respond to the Commission's request for further information regarding an annual performance report, from within 20 business days of receipt of that request or as otherwise specified by the Commission.

## **Generation Performance Indicators**

2.45 The proposed ESS Code contains the following generation service performance indicators:

- Availability Factor (AF);
  - Unplanned Availability Factor (UAF);
  - Equivalent Available Factor (EAF);
  - Forced Outage Factor (FOF);
  - Equivalent Forced Outage Factor (EFOF);
  - System Average Interruption Duration Index (SAIDI); and
  - System Average Interruption Frequency Index (SAIFI).
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### *Views in submissions*

- 2.46 PWC has made the following comments and suggestions on the generation service performance indicators:
- inclusion of three new performance indicators (AF, UAF, and FOF) is inconsistent with the Commission's Final Report for the Review of Electricity Standards of Service for the Northern Territory;
  - use of Net Maximum Capacity (NMC) in the calculation of AF, UAF, EAF, FOF, and EFOF should be replaced with Gross Maximum Capacity (GMC) as PWC is unable to capture the auxiliary load for each generator and because of this, GMC will be a more reliable value;
  - segmenting SAIDI and SAIFI performance indicators by power system and region will involve duplication of information; and
  - SAIDI and SAIFI performance indicators are not applicable in the context of generation services. The Energy Supply Association of Australia does not report SAIDI and SAIFI for generation services. PWC suggests that SAIDI and SAIFI generation performance indicators be replaced with 'System Minutes'. System minutes measure the loss of one minute at annual peak for the entire system.

### *Commission's response to views in submissions*

#### Inclusion of AF, UAF, and FOF in the Code

- 2.47 The Commission's Final Report for the Review of Electricity Standards of Service for the Northern Territory recommends that EFOF and EAF (and equivalent) measures should be used to report generation reliability performance.<sup>14</sup>
- 2.48 It is noted that EFOF, EAF, AF, UAF, and FOF generation service performance indicators have been sourced from the IEEE standard 762-2006<sup>15</sup>, and are therefore considered to be industry best practice.
- 2.49 The Commission also notes that AF, UAF, and FOF are equivalent measures to EFOF and EAF, as these indicators are more segmented versions of EFOF and EAF, each containing similar inputs.
- 2.50 The Commission considers the inclusion of AF, UAF, and FOF to be consistent with the Commission's Final Report for the Review of Electricity Standards of Service for the Northern Territory.

#### Use of Gross Maximum Capacity

- 2.51 The Commission acknowledges that PWC may not be able to capture the electricity consumed by the auxiliary units for each of its generators. The Commission accepts PWC's suggestion to use GMC rather than NMC in the calculation of generation performance indicators. Changes have been made to Schedule 1 and 4 of the Code as a result.

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<sup>14</sup> Paragraph 4.42, Final Report for the Review of Electricity Standards of Service for the Northern Territory, Utilities Commission, November 2010.

<sup>15</sup> IEEE Standard 762-2006 Definitions for use in reporting electric generating unit reliability, availability, and productivity.

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### Segmentation by power system and region

2.52 The proposed ESS Code defines:

- power system as the Darwin-Katherine, Tennant Creek or Alice Springs power systems; and
- region as the Darwin, Katherine, Tennant Creek, and Alice Springs regions.

2.53 It is noted that both the Darwin and Katherine region are linked by a 132kV transmission line and that both regions have their own generation plants.

2.54 However, the Commission considers that segmentation of generation performance indicators by power system and region should remain in order to capture the combined generation reliability performance of the Darwin-Katherine power system and the individual performance of Darwin and Katherine (the Darwin and Katherine regions).

### SAIDI and SAIFI for generation services

2.55 The Commission notes that PWC considers SAIDI and SAIFI generation service performance indicators to be an inappropriate means of assessing generation reliability performance.

2.56 The Commission notes that the impact of generation outages on Territory customers can be substantial and should be easily identified by PWC. The Commission considers SAIDI and SAIFI to be useful indicators for this very reason. It should also be noted that Territory customers generally do not distinguish between network (whether distribution or transmission) and generation outages. Therefore, the inclusion of SAIDI and SAIFI generation service performance indicators is important to capture and assess the full impact of outages on customers.

2.57 The Commission notes PWC's suggestion to use System Minutes (where one system minute is equivalent to the loss of one minute at annual peak for the entire system) instead of SAIDI and SAIFI. Although a useful measure, the use of System Minutes will not capture the impact of generation outages on customers. In comparison, SAIDI and SAIFI generation service performance indicators measure the duration and frequency of interruptions of supply to customers.

2.58 Once Unserved Energy standards of reliability are set under the System Control Technical Code and ancillary services arrangement are developed, the Commission may consider reviewing the use of SAIDI and SAIFI to measure generation reliability performance.

### *Commission's preliminary decision*

2.59 The Commission does not propose to make any changes to:

- the use of AF, UAF, and EAF;
- segmentation of generation service performance indicators by power system and region; and
- the use of SAIDI and SAIFI to measure generation reliability performance.

2.60 The Commission proposes to replace NMC with GMC for the calculation of AF, UAF, EAF, FOF and EFOF.

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## Transmission network performance indicators

2.61 The proposed ESS Code contains the following transmission network performance indicators:

- Average Circuit Outage Duration (ACOD) adjusted and unadjusted;
- Frequency of Circuit Outages (FCO) adjusted and unadjusted;
- Average Transformer Outage Duration (ATOD) adjusted and unadjusted;
- Frequency of Transformer Outages (FTO) adjusted and unadjusted;
- SAIDI adjusted and unadjusted; and
- SAIFI adjusted and unadjusted.

### *Views in submissions*

2.62 PWC has made a number of comments and suggestions on the transmission network performance indicators:

- SAIDI and SAIFI should not be used to measure transmission network performance, as the IEEE 1366-2003 standard only intended SAIDI and SAIFI to measure distribution network performance.
- Using SAIDI and SAIFI to measure transmission network performance will result in a low data value, as there are limited transmission customers. PWC is willing to provide SAIDI and SAIFI for the transmission network based on the 'DNSP cause code' or the 'outage cause code at the DNSP level'. PWC queries whether this is what the Commission intended.

### *Commission's response to views in submissions*

#### SAIDI and SAIFI to measure transmission network performance:

2.63 The Commission notes that the SAIDI and SAIFI performance indicators in the IEEE 1366-2003 standard were originally intended for distribution network performance. However, the standard does not preclude the use of SAIDI and SAIFI for the transmission network.

2.64 It is also noted that the transmission network is crucial to maintain reliable electricity supply in the Territory. Territory customers generally do not distinguish between different types outages. In light of the reasons set out in paragraph 2.56 of this paper, the Commission considers that transmission outages and their impact on Territory customers should be measured.

2.65 The Commission considers the inclusion of SAIDI and SAIFI transmission network performance indicators to be appropriate for the purposes of the ESS Code.

#### Customers for calculating SAIDI and SAIFI for the transmission network:

2.66 The Commission notes that SAIDI and SAIFI transmission network performance indicators are measured based (among other things) on the number of 'customers', as defined in Schedule 4 (and in accordance with clause 1.6.3 of Schedule 2) of the proposed ESS Code. The proposed ESS Code states that the term customer has the same meaning as that under the *Electricity Reform Act*. The *Electricity Reform Act* defines customer as a person who receives or wants to receive, a supply of electricity for final consumption and includes:

- the occupier for the time being of a place to which electricity is supplied;
- where the context requires – a person seeking an electricity supply; and
- a person of a class declared by the Regulations to be customers.<sup>16</sup>

2.67 The Commission considers the above definition to include all end-user customers (customers who receive supply from the transmission and distribution network) for the purpose of calculating SAIDI and SAIFI performance indicators (including SAIDI and SAIFI generation, transmission and distribution service performance indicators).

2.68 The Commission notes PWC's intention to calculate SAIDI and SAIFI transmission network performance indicators using the 'outage cause code at the DNSP level'. The Commission understands that this means that a transmission outage 'cause code' is recorded at a 'DNSP level'.

2.69 The Commission agrees with PWC's approach, as long as the SAIDI and SAIFI transmission network performance indicators measure the impact of transmission related events on end-user customers.

#### *Commission's preliminary decision*

2.70 The Commission does not propose to make any changes.

### **Distribution network performance indicators**

2.71 The proposed ESS Code contains the following distribution network performance indicators:

- SAIDI adjusted and unadjusted;
- SAIFI adjusted and unadjusted; and
- Feeder Performance.

#### *Submissions*

2.72 PWC made a number of comments on the distribution network performance indicators:

- With the exception of Darwin-Katherine, each region is isolated. The Darwin-Katherine system is connected by one 132kV transmission line, with no interconnection at a DNSP level. For this reason, PWC supports reporting of distribution network performance indicators by region rather than by power system.
- When reporting feeder performance, segmentation should be done by exception, rather than on all 150 + feeders. Furthermore, Table 3 of Schedule 2 of the proposed Code states that no targets are necessary for feeder performance. However, a target of 3 is specified in the definition section of the proposed ESS Code.

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<sup>16</sup> Section 4, *Electricity Reform Act*.

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## *Commission's response to views in submissions*

### Reporting distribution performance by region and power system

- 2.73 The Commission acknowledges that each region is isolated and operates independently from one another, with the exception of the Darwin and Katherine regions.
- 2.74 The Commission accepts PWC's argument that reporting of distribution network performance indicators should be by feeder category and region, and not by power system. Changes to Table 3 and clause 1.7.4 of Schedule 2 of the proposed ESS Code have been made as a result.

### Identification of poorly performing feeders

- 2.75 The proposed ESS Code contains a formula for the identification of poorly performing feeders. The process requires the SAIDI performance ratio of an individual feeder to be compared against the pre-defined SAIDI threshold, which is set at 3. If the SAIDI performance ratio is greater than 3 in at least two consecutive reporting periods, the individual feeder will be poorly performing. The feeders that are poorly performing (SAIDI performance ratio greater than 3) will be reported to the Commission.
- 2.76 The SAIDI threshold of 3 is not a target standard, but a mechanism to identify (approximately) the bottom five per cent of worst performing feeders. Therefore, the Commission considers that reporting on feeder performance is by exception and not all 150 + feeders.
- 2.77 The SAIDI threshold was set at 3 (as a starting point) due to the lack of information to determine the appropriate SAIDI threshold.<sup>17</sup>
- 2.78 The Commission has decided to determine the exact SAIDI threshold to identify the bottom five per cent of the worst performing feeders, in consultation with PWC, at a later stage. Therefore, the definition of the SAIDI threshold in Schedule 4 of the proposed ESS Code has been changed to *a multiple of a distribution network feeder's target standard as directed by the Commission*. It is anticipated that a default SAIDI threshold of 3 may be set if there is a lack of information to determine a more appropriate SAIDI threshold.
- 2.79 The Commission considers the formulae for the identification of poorly performing feeders to be appropriate for the purposes of the ESS Code.

### *Commission's preliminary decision*

- 2.80 The Commission proposes changes to Table 3 and clause 1.7.4 of Schedule 2 of the proposed Code, to remove the requirement to report distribution network reliability performance by power system.

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<sup>17</sup> The Essential Service Commission of South Australia uses a SAIDI threshold of 3 to identify the bottom five per cent of worst performing feeders. Refer to Essential Services Commission of South Australia, June 2010, South Australia Electricity Distribution Service Standards 2010-2015 Review of Regulatory Instruments – Final Decision, page 15.

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## Distribution feeder category definitions

2.81 In the Final Report of the Review of Electricity Standards of Service<sup>18</sup>, the Commission proposed the adoption of the AER distribution feeder category definitions for the purpose of measuring distribution network reliability.<sup>19</sup> The AER distribution feeder categories are divided into the following feeders:

- CBD – a feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground distribution network containing significant interconnection and redundancy when compared to urban areas.
- Urban – a feeder, which is not a CBD feeder, with actual maximum demand over the reporting period per total feeder route length greater than 0.3 MVA/km.
- Rural short – a feeder which is not CBD or urban feeder with a total feeder route length less than 200km.
- Rural long – a feeder which is not a CBD or urban with a total feeder route length greater than 200km.

2.82 The proposed ESS Code defines feeder categories in reference to a map published by the network service provide and developed under the GSL Code. Because of this, the publication of maps under the GSL Code will impact on the application of the feeder category definitions and the calculation of target standards for each feeder category under the proposed ESS Code.

2.83 On 1 June 2012, PWC published maps in accordance with the GSL Code, which identified various regions (CBD, Urban, Rural short, and Rural long) in the Territory.<sup>20</sup> PWC applied the AER feeder category definitions as described above.

2.84 On perusal of the maps, the Commission identified issues with the way in which these AER categories separate urban and rural areas in the Territory. In particular, significant parts of the network (and the regions that they serve) which would otherwise be considered urban by Territory consumers, are categorised as Rural Short under application of the AER feeder category definitions. The Commission's concern is that the levels of standard of reliability (as set through the feeder category definitions) may not match consumer expectations and the objectives of the ESS Code.

2.85 To address these concerns, the Commission engaged an independent expert consultant (ACIL Tasman) to determine whether:

- the AER feeder category definitions have been applied appropriately by PWC;
- other Australian jurisdictions have experienced similar issues with the application of the AER feeder category definition to those experienced by the Territory and how they were resolved;

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<sup>18</sup> Utilities Commission, Review of Electricity Standards of Service for the Northern Territory - Final Report, November 2010.

<sup>19</sup> The AER feeder category definitions are based on the definitions developed by the Steering Committee on National Regulatory Reporting Reform (SCONRRR). These definitions were initially developed by the Office of the Regulatory-General, the predecessor of the Essential Service Commission of Victoria.

<sup>20</sup> The maps are available on PWC's website [http://www.powerwater.com.au/news\\_and\\_publications/policy\\_and\\_guidelines/guaranteed\\_service\\_levels](http://www.powerwater.com.au/news_and_publications/policy_and_guidelines/guaranteed_service_levels).

- the overlap of certain feeders categorised as ‘Rural short’ supplying areas that would otherwise be considered to be ‘Urban’, has any implications for the regulation of standards of service performance in the Territory; and
- any adjustments to the feeder category definitions which can be made to address those implications.

2.86 The ACIL Tasman final report is available on the Commission’s website. ([www.utilicom.nt.gov.au](http://www.utilicom.nt.gov.au)).

#### *Summary of the findings*

2.87 ACIL Tasman’s final report includes the following findings:

- PWC appears to have applied the AER feeder category definitions appropriately.
- Other Australian jurisdictions have experienced similar issues in applying the AER feeder category definitions. Regulators in South Australia and Tasmania have applied separate categories (independent to those used by the AER) to set standards of service and reliability for their respective distribution networks.
- The ESS Code should incorporate the AER feeder category definitions. However, the MVA/km threshold (which defines Urban feeders) should be reduced from 0.3 MVA/km to 0.12 MVA/km.

2.88 ACIL Tasman explored three possible options in redefining the feeder category definitions in the proposed ESS Code:

- Re-aligning the feeder categories by altering the MVA/km threshold values. ACIL Tasman did not support this approach, as there may be little or no relationship between the load on a feeder (by km) and the type of area it supplies. Furthermore, the approach is seen as arbitrary and without additional information, it is impossible to know whether or not the right threshold value has been chosen.
- The ‘meshed’ and ‘radial’ feeder categorisation currently applied under the existing ESS Code. Such an approach is more closely related to the nature of the network. However, ACIL Tasman did not support this approach, as there is no universally accepted definition of ‘radial’ and ‘meshed’.
- Setting performance targets in reference to identified geographic zones. This approach allows a great deal of flexibility, as standards could be applied on a place-by-place basis. Targets could be set to reflect the actual or expected performance for specific areas. However, ACIL Tasman notes that this approach would make it impossible to compare standards of service and reliability with those standards set in other Australian jurisdictions. This approach may also require a major design of PWC’s information systems to enable reporting in accordance with geographic zones.

2.89 ACIL Tasman recommends a ‘hybrid’ approach for categorising distribution feeders in the Territory:

- on the basis that customers in like areas can reasonable expect to receive similar levels of service; and
- to minimise the costs of compliance on PWC, given that PWC’s information systems currently use the AER feeder category definitions.

2.90 The following approach was used to justifying the reduction of the MVA/km threshold (which defines Urban feeders) from 0.3 MVA/km to 0.12 MVA/km:

- areas are determined based on Australian Bureau of Statistics (ABS) definitions (eg the ABS definition of Urban) and demographic data;
- GIS data is used to determine the location of each of PWC's feeders in reference to ABS definitions and demographic data (the 'target categorisation'); and
- MVA/km threshold is reduced to the extent that it provides the best possible match with the 'target categorisation', that is 0.12MVA/km.

*Commission's preliminary decision*

2.91 The Commission is of the view that the 'hybrid approach' proposed by ACIL Tasman is pragmatic and workable. It meets the Commission's expectations while minimising the impact on PWC's information systems.

2.92 The Commission notes that the approach does not provide a workable solution for all feeders. For example, ACIL Tasman has identified a small number of feeders ('mixed' feeders), which cross urban and rural areas (as defined by ABS definitions and demographic data). However, it is noted that the outcome is significantly better than the application of the AER feeder category definitions in their pure form. The Commission's view is that any methodology will have some anomalies, but that ACIL Tasman's recommended approach reduces these anomalies and is therefore workable in the Territory context.

2.93 The Commission may consider other options for amending the AER feeder categories if they are more appropriate in the Territory context.

2.94 Given these issues, the Commission proposes that:

- the feeder and area definitions are no longer defined in relation to a map developed in accordance with clause 2.3 of the GSL Code; and
- the feeder and area definitions are defined in reference to a direction issued by the Commission in accordance with the Code.

2.95 This approach will provide sufficient time for both PWC and the Commission to develop a workable solution for the treatment of problematic feeders and areas, without compromising the timeframe for implementation of the new ESS Code. Changes to Schedule 4 have been made as a result.

**Transmission and distribution customer service performance indicators**

2.96 The proposed ESS Code contains the following transmission and distribution customer service performance indicators:

- connections;
- phone answering;
- network complaints; and
- written enquiries.

*Views in Submissions*

2.97 PWC made a number of comments in relation to the transmission and distribution customer service performance indicators including:

- PWC considers that a combination of network and retail related queries for phone answering data (as well as complaints) is the most practical approach. However, PWC states that phone answering data (and possibly complaints) will also include water and sewerage queries.
- Reporting on written enquiries in relation to transmission and distribution customer service was not included in the Commission's Final Report for the Review of Electricity Standards of Service for the Northern Territory.

*Commission's response to views in submissions*

Phone answer data and complaints containing water and sewerage queries

- 2.98 The Commission notes that the proposed ESS Code permits combined totals for network and retail related queries. However, this will only apply until such time as system functionality supports separate reporting. The Commission expects that PWC is actively working towards separate recording and reporting of network and retail queries and complaints for their own business purposes, given that these type of queries and complaints can be quite different.
- 2.99 The Commission's view is that separate recording and reporting will enable PWC to better cater to its customer's needs, understand its customer base, and provide greater transparency in relation to the quality of its customer service performance. This should enable PWC to resolve customer queries in a more timely and efficient manner.
- 2.100 The Commission notes that PWC's phone answering data (and possibly complaints) will also include water and sewerage queries.
- 2.101 The Code does not extend to water and sewerage queries. For similar reasons as discussed above, the Commission expects PWC to be able to exclude water and sewerage queries for the purposes of the ESS Code, as soon as possible.

Written enquiries relating to transmission and distribution customer service

- 2.102 The Commission notes PWC's concerns regarding the addition of written enquiries as a transmission and distribution customer service performance indicator.
- 2.103 The inclusion of written enquiries for network related queries will inform and potentially incentivise the network service provider to cater for its customers' needs and understand its customer base. It is noted that the proposed ESS Code includes written enquiries as a retail services performance indicator. It is also noted that the time taken by a network service provider to respond to a customer enquiry is one of the performance measures included in the GSL Code.<sup>21</sup>
- 2.104 There does not appear to be any compelling reason preventing PWC to report on network related written enquiries. The Commission considers the inclusion of written enquiries as a transmission and distribution service performance indicator to be appropriate for the purposes of the ESS Code.

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<sup>21</sup> See Table 1 and clause 2.1.4 Guaranteed Service Level Code.



### *Commission's preliminary decision*

2.105 The Commission does not propose to make any changes to the transmission and distribution customer service performance indicators.

### **Retail Performance Indicators**

2.106 The proposed ESS Code contains the following retail services performance indicators:

- connections;
- phone answering;
- complaints;
- hardship; and
- written enquiries.

### *Views in submissions*

2.107 PWC made a number of comments on the retail services performance indicators.

### Complaint categories

2.108 PWC notes that the percentage and total number of complaints will be segmented into complaint categories. PWC intends to segment complaints into the following categories:

- disconnection in error;
- credit listing in error;
- delayed connection (connection not performed within specified timeframes);
- bill issues – where process has not been followed; and
- complaints related to PWC's hardship scheme.

2.109 PWC also informed the Commission that it could report on 'customer transfer' and 'energy marketing'. However, PWC cautioned that the customer transfer process involves multiple business units within PWC which may make it difficult to report on these performance indicators.

### Customer hardship measures

2.110 PWC commented on the customer hardship measures:

- total number of disconnections for failure to pay and reconnections under customer hardship measures, does not provide information relating to customer's difficulty to pay;
  - total number of customer complaints under customer hardship measures, is already covered under the complaints performance indicator;
  - total number of calls relating to the collection of security deposits under customer hardship measures, is only applicable to large customers and not small customers; and
  - total number of calls associated with social welfare concessions and other related schemes, does not relate to a retailer's performance.
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2.111 PWC also proposed that the new ESS Code adopt the following customer hardship indicators (as sourced from the AER retail performance reporting guidelines):

- number of current residential customers on the retail hardship program as at 30 June each financial year;
- number of current residential customers that completed the retail hardship program for the financial year ending 30 June;
- number of current residential customers on the retail hardship program receiving hardship vouchers for the financial year ending 30 June;
- number of current residential ceased customers whilst on the retail hardship program for the financial year ending 30 June;
- number of residential electricity customers denied access to the retail hardship program during each calendar month of the reporting period;
- the average energy bill debt for those retail hardship program customers who entered the hardship program during the reporting period;
- the number of electricity customers who entered the retail hardship program during the reporting period, with an energy bill debt that was:
  - between \$0 and \$500;
  - over \$500 but less than \$1,500;
  - over \$1,500 but less than \$2,500;
  - \$2,500 or more;
- total number of electricity customers who exited the retail hardship program during the reporting year, who:
  - successfully completed the retail hardship program or exited with the agreement of the retailer; and
  - were excluded or removed from the retail hardship program for non-compliance.

2.112 PWC considers the following hardship measures (as sourced from the AER retail performance reporting guidelines) would require extra resourcing for PWC Retail and may be provided to the Commission at significant costs:

- number of residential electricity customers disconnected for non-payment of a bill during the reporting period, who successfully completed the hardship program, or exited by agreement with the retailer, in the previous 12 months;
  - number of residential customers who successfully completed the hardship program or exited by agreement with the retailer in the previous 12 months, who were reconnected in the same name and at the same address within seven days of disconnection for non-payment; and
  - the retailer must provide a written summary on the types of assistance offered and provided to hardship customers throughout the reporting period.
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### Definition of hardship and application of performance indicators to domestic customers

2.113 PWC proposes that the term 'hardship' be defined in accordance with PWC's Stay Connected Policy, which is as follows:

*a stay connected customer is someone who is experiencing financial hardship whose intention is to pay, but who does not have the financial capacity to make the required payments with the timeframe set out in Power and Water's payment terms.*

2.114 PWC has also requested that the Commission confirm whether the hardship measures will apply to all customers or domestic customers alone.

### *Commission's response to views in submissions*

#### Complaint categories

2.115 The Code defines complaint category as the type of complaint specified by the relevant electricity entity, which accurately reflects the type of dissatisfaction expressed by the customer. It should be noted that the intention of this definition is for the retailer to identify all major (and potential) issues, which will allow it (and the Commission) to properly assess retail performance.

2.116 The Commission considers PWC's proposed complaint categories to be appropriate for the purposes of the ESS Code. However, it is noted that complaint categories should be reasonably comprehensive, to ensure that all major (and potential) issues are properly identified. This will enable retailers to assess any trends in its performance and adopt appropriate measures in response to major issues that affect the majority of its customers.

2.117 The Commission welcomes PWC's position to report on complaints relating to customer transfers and energy marketing. The Commission accepts that the customer transfer process involves coordination with various business units within PWC and as a result, these complaints may not necessarily relate to PWC Retail's performance.

#### Customer hardship measures

2.118 The Commission notes PWC's comments in relation to customer hardship measures in the proposed ESS Code.

2.119 In relation to the total number of disconnections for failure to pay and reconnections (in the same name), the Commission considers that these indicators, when viewed in conjunction with customers service measures associated with retail hardship schemes, will provide valuable insight into a retailer's treatment of vulnerable customers (including vulnerable customer on a retail hardship program and those customers who are not). Therefore, the Commission proposes to retain this customer hardship measure.

2.120 In relation to customer hardship measures for the total number of calls relating to the collection of security deposits and social welfare concessions (including membership of pensioner concession schemes, and other relevant schemes), the Commission agrees with PWC's comments that these indicators may not be directly related to customer hardship and should be removed.

2.121 In relation to the total number of customer complaints under customer hardship measures, the Commission notes that PWC will adopt a complaint category for

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complaints relating to PWC's customer hardship scheme. The Commission considers that the adoption of this complaint category will meet the requirements under this customer hardship measures. However, the proposed Code does not strictly define the complaint categories (and does not intend to, as this provides the retailer with a flexible approach to compiling complaint categories to cater for its own operations and assess its own retail performance). Therefore, the Commission proposes to retain this customer hardship measure.

2.122 The Commission accepts PWC's proposed measures in relation to the performance of its retail hardship scheme and notes that these measures generally align with the AER retail performance reporting guidelines. Schedule 4 has been amended accordingly.

2.123 The Commission notes that the three other measures (as identified in paragraph 2.112) can be provided to the Commission at significant costs. The Commission has decided against imposing a requirement to report under those measures, at this time.

#### Definition of hardship and application to domestic customers

2.124 The Commission notes PWC's comment that hardship is not adequately defined. It is noted that PWC's proposed definition of hardship defines a customer in reference to PWC's Stay Connected Policy, as opposed to a generic hardship policy.

2.125 As an alternative, the Commission has decided to align the definition of 'customer hardship policy' with the National Energy Retail Law (NECF).<sup>22</sup> A definition of 'Retail Hardship Program' has been inserted in Schedule 4 (and in the relevant retail performance indicators in Schedule 3) of the proposed Code, and is defined as a scheme, which may include any of the following elements:

- processes to identify residential customers experiencing payment difficulties due to hardship, including identification by the retailer and self-identification by a residential customer;
- process for early response by the retailer in the case customers identified as experiencing payment difficulties due to hardship;
- flexible payment options (including a prepayment plan and Centrepay) for the payment of energy bills by hardship customers;
- processes to identify appropriate government concession programs and appropriate financial counselling services and to notify hardship customers of those programs and services;
- an outline of a range of programs that the retailer may use to assist hardship customers;
- process to review the appropriateness of a hardship customer's market retail contract in accordance with the purpose of the customer hardship policy;
- processes or programs to assist customers with strategies to improve their energy efficiency, where such processes or programs are required under an applicable regulatory instrument; and
- any other matters required by an applicable regulatory instrument.

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<sup>22</sup> s 44, *National Energy Retail Law (South Australia) Act*.

2.126 The Commission also confirms that the hardship measures (and the retail service performance indicators more generally) should be limited to measuring the treatment of domestic customers, which are those customers taking in 160 megawatt (MW) hours or likely to be taking less than 160 MW hours of electricity during the reporting period). Clause 1.1.3 of Schedule 4 has been added clarify this point.

2.127 The Commission considers the above definitions to be appropriate for the purposes of the ESS Code.

*Commission's preliminary decision*

2.128 The Commission proposes to:

- adopt the hardship measures listed in the AER's performance reporting procedures and guidelines with the exception of the three measures identified by PWC as being too costly to provide;
  - retain the measure on the total number of disconnections for failure to pay and reconnections in the same name and total number of customer complaints under customer hardship measures;
  - remove the following measures:
    - total number of calls relating to the collection for security deposits; and
    - the total number of calls associated with social welfare concessions, including membership of pensioner concession schemes and other relevant schemes;
  - adopt a variation of the NECF definition of 'customer hardship program' in Schedule 4; and
  - limit the application of retail services performance indicators to domestic customers only.
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## APPENDIX A

### Other Matters raised in Submissions

Draft Code reference	Submission	Commission's response and preliminary decision
cl.3.1.3	In proposing target standards, PWC requests that an additional methodology be added to clause 3.1.3, that will enable PWC to propose an alternative methodology, for example, average the data from the preceding three years, subject to the Commission's approval.	The Commission notes that clause 3.1.3 of the proposed ESS Code states that the proposed target standards must be calculated by averaging the data from the preceding five financial years. However if that data is not available, averaging comparable and available data from each of the preceding five financial years. The Commission notes that the proposed target standards may be calculated utilising such other methodology that the Commission considers appropriate. The Commission's view is that this would enable PWC to propose an alternative methodology to the Commission.
cl.5.2.1	PWC proposes that audits under the Code should take place every five years, unless there are significant changes to the service standards or to PWC's reporting methodology. PWC is concerned that frequent audits will result in additional costs on PWC.	The Commission is mindful that audit costs can be significant. The Commission will have regard to the overall benefits of the audit relative to the costs. Of particular interest to the Commission is the accuracy of the proposed target standards as they will be one of the inputs to distribution network planning. The Commission is of the view that audit costs would be comparably small, relative to the magnitude of the cost associated with PWC network's capital programme.
Schedule 1	PWC has queried how generation planned and unplanned outages are to be treated under Schedule 1 of the proposed ESS Code. PWC is of the understanding that reporting will continue to be in terms of total outages.	Planned and/or unplanned outages (as well as the equivalent partial outages hours resulting from partial planned outages and/or partial unplanned outages) are used as an input to calculate the generation service performance indicators in Schedule 1 of the proposed ESS Code.
Schedule 1, Table 1	PWC has commented that there is an additional performance indicator (Equivalent Forced Outage Factor (EFOF)) outlined in Table 1 of Schedule 1 of the proposed ESS Code that does not appear in Table 1.2 of the consultation paper. PWC seeks clarification as to which set of indicators will be used.	The Commission confirms that EFOF will be used, as per its inclusion in the proposed ESS Code. Although EFOF was not listed in Table 1.2 of the consultation paper, it is noted that EFOF was listed in Table 3.1, and discussed at length, at paragraph 3.80 of the consultation paper.

Schedule 1	PWC has said that it is of the understanding that the segmentation of generation services performance indicators by power station in Schedule 1 (as well as other indicators) will not apply to Indigenous Essential Services communities.	<p>The Commission confirms that the application of Schedule 1 is intended to exclude IES communities. Clause 1.2.2 has been inserted stating that the Code will only apply to an electricity entity to the extent that it provides generation services, network services or retail service on the regulated network.</p> <p>The Commission proposes to define 'regulated network' in relation to an 'electricity network prescribed by the Minister by notice in the Gazette as an electricity network covered by the Network Access Code in accordance with the ENTPA Act'.</p> <p>The calculation of network services performance indicators in Schedule 2 of the proposed Code will apply to IES communities to the extent that they are connected to a regulated network.</p>
Schedule 1 and 2	<p>PWC recommends that the Commission consults directly with the Energy Supply Association of Australia (ESAA) to ensure consistent formulae are used with regards to the generation performance indicators.</p> <p>PWC's has also made a number of comments on:</p> <ul style="list-style-type: none"> <li>• equations containing extra closing brackets;</li> <li>• the variable "x" has been used in place of a multiplication sign; and</li> </ul> <p>the use of word 'Incident' as opposed to 'Interruption' for SAIDI and SAIFI performance indicators</p>	<p>The Commission sought external expert advice (ACIL Tasman) to ensure that all indicators are consistent with generally accepted industry practice. As a result, inconsistencies have been identified and corrected and in some cases the formulation of the indicators was simplified.</p> <p>Furthermore, the derivation of the number of customers in the denominator of the generation and network SAIDI and SAIFI indicators has been clarified as <i>the average of the number of customers supplied at the beginning of the reporting period and the number of all customers supplied at the end of the reporting period</i></p> <p>ACIL Tasman's report on the review of performance indicators in the proposed ESS Code can be found on the Commission's website.</p>
Schedule 2, cl.1.4, 1.5 and 1.63	PWC has commented that clauses 1.4, 1.5, and 1.6.3 of Schedule 2 of the proposed ESS Code provides different definitions for network outages or interruptions, which makes the document unclear. PWC has said that it supports the use of a single definition for each term, followed by accurate and adequately defined performance indicators descriptions in their own right.	<p>The Commission notes that the Code has been checked for legal consistency.</p> <p>To assist the reader, the Commission has added a clause to each performance indicator referencing the relevant parts of the Code, which should be read in conjunction with the relevant formulae for that performance indicator.</p> <p>The Commission considers that an electricity entity is responsible for ensuring that it interprets the Code correctly in accordance with any laws that apply to the interpretation of statutory instruments.</p>
Schedule 5 clause 1.1.6 (c)	PWC has commented that there is a typographical error in Schedule 5 clause 1.1.6 (c) of the proposed ESS Code, where data segmentation should refer to clause 6 not clause 7.	The Commission agrees with PWC's comment and has made amendments accordingly.

Schedule 2 clause 1.8.2	<p>On the connections customer service performance indicators for transmission and distribution networks under clause 1.8.2 of Schedule 2 of the proposed ESS Code, PWC commented that:</p> <ul style="list-style-type: none"> <li>• the requirement for reconnections should read “the percentage and total number of reconnections not undertaken within 24 hours of receipt by the network provider of a valid request for reconnection from the customer”; and</li> <li>• the inclusion of “the number and average length of time taken to provide new connections to new subdivisions where minor extensions or augmentation is required in urban areas” is unwarranted and uninformative, as timing is determined on a case-by-case basis.</li> </ul>	The Commission agrees with PWC’s comments and has made amendments accordingly.
Schedule 2 clause 1.8.3	<p>On phone answering customer service performance indicators for transmission and distribution networks under clause 1.8.3 of Schedule 2 of the proposed ESS Code, PWC proposes that the average time taken to answer the phone should be 30 seconds, rather than 20 seconds. This is in line with AER guidelines.</p>	The Commission agrees with PWC’s proposal and has made amendments accordingly.
Schedule 2, cl.1.8.3	<p>On phone answering customer service performance indicators for transmission and distribution networks under clause 1.8.3 of Schedule 2 of the proposed ESS Code, PWC seeks clarity on how abandonment of a call should be interpreted (for example, if abandonment occurs after a pre-recorded message is heard by a customer (and the pre-recorded message contains the information that the customer requires) is this considered negative in terms of performance).</p>	The intention of measuring abandonment of calls is to capture those calls that are abandoned within the specified timeframe (especially in cases where a customer chooses to talk to an operator) in instances where a customer’s query has not been resolved. In the example given, the Commission considers that the call has not been abandoned, as the customer has received the information they require, through a pre-recorded message.



Schedule 5	<p>On the interim targets under clause 1.1.5 of Schedule 5 of the proposed ESS Code, PWC commented that there is not enough time to develop systems to collect the required information and ensure its accuracy. The new performance indicators, the GSL Code, and the regulatory reset process, is enough incentive to develop systems, processes, and procedures to collect data for the proposed target standards re 2014-19 Network Price Determination. PWC is also concerned of any costs that could be spent on the development and improvement of PWC's systems, processes, and procedures.</p>	<p>The Commission notes that PWC may not have sufficient time to develop its systems, processes, and procedures to ensure compliance with the interim target standards. However, the Commission consider that interim target standards should be established, as this would avoid a situation where there are no set levels of service performance reliability for the remainder of the 2009-14 regulatory control period.</p> <p>PWC has proposed in its submission that target standards for the 2014-19 regulatory period needed to be in place by early 2013. The Commission suggests that these targets could also be used as part of the interim arrangements. The Commission intends to discuss this matter further with PWC.</p>
Schedule 3	<p>ERM has made a number of comments regarding the relevance of the retail customer service performance indicators on its business:</p> <ul style="list-style-type: none"> <li>• ERM intends to retail electricity to commercial and industrial customers not households and small businesses.</li> <li>• ERM does not operate a call centre, every customer is assigned a specialist account manager who has the capacity to respond to enquiries 7 days a week regardless of contact methodology.</li> </ul> <p>Given its business model, ERM requests confirmation on whether nil reports are required to be submitted to the Commission.</p>	<p>The Commission notes ERM's comments on the operation of its business and the way in which it deals with its customers. The Commission considers that an electricity entity will be required to submit nil reports to the Commission. Over time, the Commission may consider limiting reporting requirements on certain electricity entities so that reporting is only required for customer service performance indicators that are relevant.</p> <p>It is also noted that the application of retail services performance indicators will be limited to measuring the treatment of domestic customers, which are those customers taking in 160 megawatt MW hours or likely to be taking less than 160 MW hours of electricity during the reporting period. Clause 1.1.3 of Schedule 4 has been added clarify this point.</p>