
**REGULATORY INFORMATION
NOTICE UNDER DIVISION 4
OF PART 3 OF THE
NATIONAL ELECTRICITY
(STATE) LAW**

ISSUED BY

**THE AUSTRALIAN ENERGY
REGULATOR**

**Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601**

NATIONAL ELECTRICITY (STATE) LAW

DIVISION 4 OF PART 3

REGULATORY INFORMATION NOTICE TO PROVIDE, PREPARE AND MAINTAIN INFORMATION

TO: NSP Name
ADDRESS
SUBURB STATE POSTCODE

The Australian Energy Regulator (**AER**) considers it reasonably necessary for NSP Name (ACN XXX XXX XXX) (**DNSP**), being a regulated network service provider for the purposes of section 28D of the *National Electricity (STATE) Law (NEL)* who provides electricity distribution services in State, to provide and to prepare and maintain the information in the manner and form specified in this Regulatory Information Notice (*Notice*), which is information the AER requires for the performance or exercise of its functions or powers conferred on it under the NEL or the *National Electricity Rules (NER)*.

THE MATTERS THE SUBJECT OF THIS NOTICE

This *Notice* sets out the information that must be provided to the AER and prepared and maintained and the requirements that must be complied with by DNSP for the purposes of the AER to:

1. publish network service provider performance reports (annual benchmarking reports) the purpose of which are to describe, in reasonably plain language, the relative efficiency of each Distribution Network Service Provider in providing direct control services over a 12 month period
2. assess benchmark operating expenditure and benchmark capital expenditure that would be incurred by an efficient Distribution Network Service Provider relevant to building block determinations

in respect of the distribution services provided by way of the electricity distribution network DNSP operates in State.

The AER requires DNSP to:

1. provide the information specified in Schedule 1 to this *Notice*, audited in accordance with Appendix C to this *Notice* in accordance with section 28M(e) of the NEL;
2. prepare and maintain the information in the manner and form specified in Schedule 2 to this *Notice*;

3. verify, using the statutory declaration in Appendix B to this *Notice*, the information specified in this *Notice*, in accordance with section 28M(d); and

deliver the said information and the accompanying Audit Report and Review Report(s) electronically to AERInquiry@ aer.gov.au, on or before 5 pm Australian Eastern Standard Time on:

- (a) 31 May 2014 for information relating to the Initial Regulatory Years; and
- (b) 30 April (or, if 30 April is not a *Business Day*, the next *Business Day*) of each year *t*, for information relating to each Subsequent Regulatory Year, where:
 - (i) Year *t* commences in 2014; and
 - (ii) The relevant Subsequent Regulatory Year is the year $t - 1$.

Explanatory note: DNSP must provide the information for the 2014 Regulatory Year on Thursday, 30 April 2015; the information for the 2015 Regulatory Year on Monday, 2 May 2016 and so on.

Pursuant to section 28K(1)(c) of the NEL, the reasons for the information required in this *Notice* to be provided and to be prepared and maintained in the manner and form specified are set out in Appendix D to this *Notice*.

DEFINITIONS AND INTERPRETATION

In this *Notice*, including the Schedules and Appendices to this *Notice*, unless the contrary intention appears:

- the singular includes the plural and the plural includes the singular;
- a reference to any corporation, whether expressly identified or not, includes a reference to any Representative of that corporation;
- words printed in italics like *this* will have the meaning given in Appendix F of this *Notice* or in the table below, or the meaning given in Chapter 10 of the *NER* if that term is not defined in this *Notice*.

Term	Definition
<i>Actual Information</i>	<p>Information presented in response to the <i>Notice</i> whose presentation is <i>Materially</i> dependent on information recorded in DNSP's historical accounting records or other records used in the normal course of business, and whose presentation for the purposes of the <i>Notice</i> is not contingent on judgments and assumptions for which there are valid alternatives, which could lead to a <i>Materially</i> different presentation in the response to the <i>Notice</i>.</p> <p>'Accounting records' include trial balances, the general ledger, subsidiary accounting ledgers, journal entries and documentation to support journal entries. Actual financial information may include accounting estimates, such as accruals and provisions, and any adjustments made to the accounting records to populate DNSP's regulatory accounts and responses to the <i>Notice</i>. 'Records used in the normal course of business', for the purposes of non-financial information, includes asset registers, geographical information systems, outage analysis systems, and so on.</p>

<i>Estimated Information</i>	Information presented in response to the <i>Notice</i> whose presentation is not <i>Materially</i> dependent on information recorded in DNSP's historical accounting records or other records used in the normal course of business, and whose presentation for the purposes of the <i>Notice</i> is contingent on judgments and assumptions for which there are valid alternatives, which could lead to a <i>Materially</i> different presentation in the response to the <i>Notice</i> .
<i>Financial Information</i>	Information that is measured in monetary terms.
<i>Initial Regulatory Years</i>	The period for which back cast information is required. This is the 2009 to 2013 Regulatory Years. For NSPs who report on a financial year basis, this equates to the 2008–09 to 2012–13 Regulatory Years.
<i>Materially</i>	Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively to influence the economic decisions of users (including the AER) taken on the basis of the information provided in accordance with the <i>Notice</i> . This definition is based on the definition of materiality in the accounting standard AASB 1031. This accounting standard provides context for the interpretation of this definition of materiality.
<i>Non-financial Information</i>	Numerical information that is not measured in monetary terms.
<i>Regulatory Year</i>	As defined in the NER
<i>Subsequent Regulatory Years</i>	Each Regulatory Year commencing from 2014 for which DNSP must update the Regulatory Templates for Actual Information. Subsequent Regulatory Years are not applicable to Forecast Information. That is, DNSP is not required to provide updated Forecast Information on an ongoing basis.

DATED: **25 March 2014**

.....
 Andrew Reeves
 Chair

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SCHEDULE 1

REGULATORY INFORMATION NOTICE UNDER DIVISION 4 OF PART 3 OF THE NATIONAL ELECTRICITY (STATE) LAW ISSUED TO

NSP NAME (ACN XXX XXX XXX)

Note: (a) All information and responses must be provided in accordance with this Schedule.

(b) Audited or reviewed information must be provided annually.

1. PROVIDE INFORMATION

1.1 Provide the information required in each *Regulatory Template* in the Microsoft Excel Workbooks attached at Appendix A completed in accordance with:

- (a) this *Notice*; and
- (b) the Principles and Requirements in Appendix E.

1.2 Provide in accordance with this *Notice* and the Principles and Requirements in Appendix E, a Basis of Preparation demonstrating DNSP has complied with this *Notice*, in respect of:

- (a) the information in each Regulatory Template in the Microsoft Excel Workbooks attached at Appendix A; and
- (b) any other information prepared in accordance with the requirements of this *Notice*.

1.3 Provide information or supporting documentation used to comply with the requirements of this *Notice*.

2. AUDIT REPORTS

2.1 Provide an Audit Report and Review Report(s) in accordance with the requirements in Appendix C.

2.2 Provide all reports from the Auditor to DNSP's management regarding the audit review and/or auditors' opinions or assessment.

3. CONFIDENTIAL INFORMATION

3.1 If DNSP wishes to make a claim for confidentiality over any information provided in response to this *Notice*, provide the details of that claim in accordance with the requirements of the AER's Confidentiality Guideline, as if it extended and applied to that claim for confidentiality.

3.2 Provide any details of a claim for confidentiality in response to clause 3.1 at the same time as making the claim for confidentiality.

3.3 Confirm, in writing, that DNSP consents to the *AER* disclosing all other of DNSP's Information on the *AER* website.

4. ONGOING OBLIGATION

4.1 Provide information for the Subsequent Regulatory Years annually up to and including the 2024 Regulatory Year.

SCHEDULE 2

REGULATORY INFORMATION NOTICE UNDER DIVISION 4 OF PART 3 OF THE NATIONAL ELECTRICITY (STATE) LAW ISSUED TO

NSP NAME (ACN XXX XXX XXX)

Note: The information specified in the Microsoft Excel workbooks attached at Appendix A and accompanying Basis of Preparation must be verified in accordance with the requirements of this *Notice* using the statutory declaration in Appendix B and audited or reviewed (as appropriate) in accordance with Appendix C.

1. PREPARE INFORMATION

- 1.1 Prepare the Microsoft Excel workbooks attached at Appendix A in the manner and form specified in the worksheets therein and in accordance with this *Notice*.
- 1.2 Prepare a Basis of Preparation in accordance with the requirements specified in Schedule 1. The Basis of Preparation must:
 - (a) demonstrate how the information provided is consistent with the requirements of this *Notice*;
 - (b) explain the source from which DNSP obtained the information provided;
 - (c) explain the methodology DNSP applied to provide the required information, including any assumptions DNSP made;
 - (d) explain, in circumstances where DNSP cannot provide input for a Variable using Actual Information and therefore must provide input using Estimated Information:
 - (i) why an estimate was required, including why it was not possible for DNSP to use Actual Information;
 - (ii) the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is DNSP's best estimate, given the information sought in this *Notice*.
- 1.3 Prepare all information required under this *Notice* in a manner and form:
 - (a) that is in accordance with the requirements specified at Schedule 1;
 - (b) which:
 - (i) is in an electronic format;
 - (ii) includes (where applicable) any underlying calculations and formulae;
 - (iii) is not password protected; and
 - (iv) is capable of text selection and a 'copy and paste' function being applied to it.

(c) that is readily available for inspection by, or submission to, the AER.

1.4 Prepare, using a person(s) who satisfies the requirements of paragraph 2 of Appendix C, an Audit Report and Review Report(s) (as applicable) in accordance with the requirements of this *Notice*.

2. MAINTAIN INFORMATION

2.1 Maintain, from the date of this *Notice* to 30 June 2024, all information prepared under this Schedule 2.

APPENDIX A: REGULATORY TEMPLATES

See attached Microsoft Excel Workbooks titled:

1. ***'AER Category Analysis data templates for distribution network service providers – Consolidated information.xlsx'***
2. ***'AER Category Analysis data templates for distribution network service providers – Actual information.xlsx'***
3. ***'AER Category Analysis data templates for distribution network service providers – Estimated information.xlsx'***

APPENDIX B: STATUTORY DECLARATION

NATIONAL ELECTRICITY (STATE) LAW

SECTION 28M(d)

STATUTORY DECLARATION

Commonwealth of Australia
STATUTORY DECLARATION
Statutory Declarations Act 1959

1 *Insert the name, address and occupation of person making the declaration*

I,¹

make the following declaration under the *Statutory Declarations Act 1959*:

2 *Set out matter declared to in numbered paragraphs*

2

1. I am an officer, for the purposes of the *National Electricity (STATE) Law (NEL)*, of NSP Name (ACN XXX XXX XXX) (**DNSP**), a regulated network service provider for the purposes of section 28D of the NEL. I am authorised by DNSP to make this statutory declaration as part of the response of DNSP to the Regulatory Information Notice dated 25 March 2014 (**Notice**) served on DNSP by the Australian Energy Regulator (**AER**).
2. I say that the actual information provided in DNSP's response to the Notice is, to the best of my information, knowledge and belief:
 - (a) in accordance with the requirements of the Notice; and
 - (b) true and accurate.
3. Where it is not possible to provide actual information to comply with the Notice, DNSP has, to the best of my information, knowledge and belief:
 - (a) provided DNSP's best estimate of the information in accordance with the requirements of the Notice; and
 - (b) provided the basis for each estimate, including assumptions made and reasons why the estimate is the best estimate, given the information sought in the Notice.

3 *Signature of person making the declaration*

3

4 *Place*

Declared at ⁴

on ⁵

of ⁶

5 *Day*

6 *Month and year*

Before me,

7 *Signature of person before whom the declaration is made (see over)*

7

8 *Full name, qualification and address of person before whom the declaration is made (in printed letters)*

8

Note 1 A person who intentionally makes a false statement in a statutory declaration is guilty of an offence, the punishment for which is imprisonment for a term of 4 years — see section 11 of the *Statutory Declarations Act 1959*.

Note 2 Chapter 2 of the *Criminal Code* applies to all offences against the *Statutory Declarations Act 1959* — see section 5A of the *Statutory Declarations Act 1959*.

A statutory declaration under the *Statutory Declarations Act 1959* may be made before—

- (1) a person who is currently licensed or registered under a law to practise in one of the following occupations:
- | | | |
|----------------------|----------------------|--------------------|
| Chiropractor | Dentist | Legal practitioner |
| Medical practitioner | Nurse | Optometrist |
| Patent attorney | Pharmacist | Physiotherapist |
| Psychologist | Trade marks attorney | Veterinary surgeon |
- (2) a person who is enrolled on the roll of the Supreme Court of a State or Territory, or the High Court of Australia, as a legal practitioner (however described); or
- (3) a person who is in the following list:
- Agent of the Australian Postal Corporation who is in charge of an office supplying postal services to the public
 - Australian Consular Officer or Australian Diplomatic Officer (within the meaning of the *Consular Fees Act 1955*)
 - Bailiff
 - Bank officer with 5 or more continuous years of service
 - Building society officer with 5 or more years of continuous service
 - Chief executive officer of a Commonwealth court
 - Clerk of a court
 - Commissioner for Affidavits
 - Commissioner for Declarations
 - Credit union officer with 5 or more years of continuous service
 - Employee of the Australian Trade Commission who is:
 - (a) in a country or place outside Australia; and
 - (b) authorised under paragraph 3 (d) of the *Consular Fees Act 1955*; and
 - (c) exercising his or her function in that place
 - Employee of the Commonwealth who is:
 - (a) in a country or place outside Australia; and
 - (b) authorised under paragraph 3 (c) of the *Consular Fees Act 1955*; and
 - (c) exercising his or her function in that place
 - Fellow of the National Tax Accountants' Association
 - Finance company officer with 5 or more years of continuous service
 - Holder of a statutory office not specified in another item in this list
 - Judge of a court
 - Justice of the Peace
 - Magistrate
 - Marriage celebrant registered under Subdivision C of Division 1 of Part IV of the *Marriage Act 1961*
 - Master of a court
 - Member of Chartered Secretaries Australia
 - Member of Engineers Australia, other than at the grade of student
 - Member of the Association of Taxation and Management Accountants
 - Member of the Australasian Institute of Mining and Metallurgy
 - Member of the Australian Defence Force who is:
 - (a) an officer; or
 - (b) a non-commissioned officer within the meaning of the *Defence Force Discipline Act 1982* with 5 or more years of continuous service; or
 - (c) a warrant officer within the meaning of that Act
 - Member of the Institute of Chartered Accountants in Australia, the Australian Society of Certified Practising Accountants or the National Institute of Accountants
 - Member of:
 - (a) the Parliament of the Commonwealth; or
 - (b) the Parliament of a State; or
 - (c) a Territory legislature; or
 - (d) a local government authority of a State or Territory
 - Minister of religion registered under Subdivision A of Division 1 of Part IV of the *Marriage Act 1961*
 - Notary public
 - Permanent employee of the Australian Postal Corporation with 5 or more years of continuous service who is employed in an office supplying postal services to the public
 - Permanent employee of:
 - (a) the Commonwealth or a Commonwealth authority; or
 - (b) a State or Territory or a State or Territory authority; or
 - (c) a local government authority;with 5 or more years of continuous service who is not specified in another item in this list
 - Person before whom a statutory declaration may be made under the law of the State or Territory in which the declaration is made
 - Police officer
 - Registrar, or Deputy Registrar, of a court
 - Senior Executive Service employee of:
 - (a) the Commonwealth or a Commonwealth authority; or
 - (b) a State or Territory or a State or Territory authority
 - Sheriff
 - Sheriff's officer
 - Teacher employed on a full-time basis at a school or tertiary education institution

APPENDIX C: AUDIT AND REVIEW
NATIONAL ELECTRICITY (STATE) LAW
SECTION 28M(e)
AUDIT AND REVIEW REQUIREMENTS

1. INFORMATION SUBJECT TO INDEPENDENT AUDIT OR REVIEW

- 1.1 The information subject to independent audit or review is the:
- (a) Actual Financial Information in the Microsoft Excel Workbooks attached at Appendix A;
 - (b) Estimated Financial Information in the Microsoft Excel Workbooks attached at Appendix A where DNSP certifies that it is not possible to provide actual historical information;
 - (c) Actual and Estimated Non-financial Information in the Microsoft Excel Workbooks attached at Appendix A; and
 - (d) The Basis of Preparation prepared by DNSP in accordance with the requirements of this *Notice* and the Principles and Requirements in Appendix E.
- 1.2 For the Initial Regulatory Years, the information subject to audit or review in paragraph 1.1 is limited to the Regulatory Years from 2009 to 2013, inclusive. For each Subsequent Regulatory Year, the information subject to audit or review in paragraph 1.1 is that Regulatory Year only.

2. CLASS OF PERSON TO CONDUCT AUDITS

- 2.1 The audit or review of information (as applicable) referred to in paragraph 1.1(a) and 1.1(b) and those parts of paragraph 1.1(d) that relate to Financial Information must be conducted by a person who:
- (a) is:
 - (i) a registered company auditor who is a member of the Institute of Chartered Accountants Australia (CA or FCA) or of CPA Australia (CPA or FCPA) that holds a Certificate of Public Practice; or
 - (ii) the Auditor-General of State;
 - (b) is independent from DNSP and all of its Related Bodies Corporate – that is, not a principal, member, shareholder, officer, or employee of DNSP or its related entities;
 - (c) is appointed for the purposes of expressing an opinion or conclusion on the audit requirements outlined in detail in paragraph 3;
 - (d) has experience in conducting financial, performance, operation or quality assurance audits and conducting data sampling in the electricity industry;

- (e) possesses relevant knowledge and experience in the electricity industry, engineering, IT systems, asset management or customer service as relevant to the audit or review;
 - (f) understands the procedures and methodologies underlying the data and the AER's relevant definitions for all information; and
 - (g) if necessary, is available to discuss issues relating to the audits with DNSP and the AER, including where an Audit Report or Review Report is critical of, or highlights deficiencies in, the audited Financial Information and/or Non-financial Information.
- 2.2 The review of information referred to in paragraph 1.1(c) and those parts of 1.1(d) that relate to Non-financial Information may be conducted by a person who:
- (a) does not satisfy all of the requirements in paragraph 2.1(a);
 - (b) is an assurance practitioner as defined in *ASAE 3000 Assurance engagements other than audits or reviews of historical financial information*; and
 - (c) satisfies the requirements of paragraphs 2.1(b) to (g).

3. AUDIT AND REVIEW REQUIREMENTS

- 3.1 Audits and reviews must be conducted in compliance with Australian Auditing and Assurance Standards, as developed by the Auditing and Assurance Standards Board.
- 3.2 The audit of Actual Financial Information referred to in paragraph 1.1(a) and those parts of paragraph 1.1(d) that relate to Actual Financial Information must:
- (a) comply with the Auditing Standard *ASA 805 Special Considerations — Audits of Single Financial Statements and Specific Elements, Accounts or Items of a Financial Statement*; and
 - (b) the Audit Report must include an opinion as to whether or not the Financial Information provided is presented fairly in accordance with the requirements of this *Notice* and DNSP's Basis of Preparation.
- 3.3 The review of the Estimated Financial Information referred to in paragraph 1.1(b) those parts of paragraph 1.1(d) that relate to Estimated Financial Information must:
- (a) comply with the *ASRE 2405 Review of Historical Financial Information Other than a Financial Report*; and
 - (b) the Review Report must include a conclusion as to whether or not anything has come to the Auditor's attention that causes it to believe that the estimated historical Financial Information is not, in all material respects, presented fairly in accordance with the requirements of this *Notice* and DNSP's Basis of Preparation.
- 3.4 The review of the Non-financial Information referred to in paragraph 1.1(c) and those parts of paragraph 1.1(d) that relate to Non-Financial Information must:
- (a) comply with the *ASAE 3000 Assurance engagements other than audits or reviews of historical financial information*; and

- (b) the Review Report must include a conclusion as to whether or not anything has come to the Auditor's attention that causes it to believe that the historical Non-financial Information is not, in all material respects, presented fairly in accordance with the requirements of this *Notice* and DNSP's Basis of Preparation.

APPENDIX D: STATEMENT OF REASONS

NATIONAL ELECTRICITY (STATE) LAW

SECTION 28K(1)(c)

STATEMENT OF REASONS

This statement of reasons explains why the AER considers it reasonably necessary for the information described in this *Notice* to be provided, prepared and maintained in the manner and form specified.

Under clause 6.27 of the NER, the AER must prepare and publish an annual benchmarking report to describe the relative efficiency of each distribution network service provider over a 12 month period. Further, under clauses 6.5.6 and 6.5.7 of the NER, the AER must have regard to benchmark operating expenditure and benchmark capital expenditure when assessing these types of expenditure.

Accordingly, the AER requires detailed information relating to DNSP and its regulated electricity network services to conduct benchmarking. Information detailing how the AER proposes to conduct and apply benchmarking and the reasons the AER requires the information in this *Notice* are contained in:

- the AER's Expenditure Forecast Assessment Guidelines issues paper (December 2012);
- the AER's explanatory statements for the draft and final Expenditure Forecast Assessment Guidelines for electricity transmission and distribution (August 2013 and November 2013); and
- the AER's explanatory statement for the draft regulatory information notices for category analysis (December 2013).

These documents are available on the AER's website at <http://www.aer.gov.au/node/18864> or <http://www.aer.gov.au/node/21843>.

We have considered the costs to DNSP of providing the information and consider they are outweighed by the social benefits. The explanatory statement for the final Expenditure Forecast Assessment Guideline (referred to above) contains detailed consideration of the costs and benefits.

Furthermore, we had regard to the regulatory purposes in preparing and providing the draft of the *Notice*. Subsequently, the AER has considered written and oral representations made by NSPs in response to the draft *Notice*, including issues they raised regarding the contents of the *Notice* and the nature of the obligations to comply with it. In response to those representations, we have made significant amendments to the draft of the *Notice*. In

particular, we have reduced the scope of the information that we require and we have modified some procedural requirements set out in the *Notice*. In making these changes we again had regard to the matters to be addressed by the service of the *Notice* and to the likely costs that may be incurred by an efficient network service provider in complying with the *Notice*.

Therefore, the AER considers that the information required by this *Notice* is reasonably necessary for the AER to perform its functions under chapter 6 of the NER.

APPENDIX E: PRINCIPLES AND REQUIREMENTS

1. GENERAL

- 1.1 In responding to this *Notice* DNSP must allocate costs for each *Regulatory Year* in accordance with the AER approved cost allocation method in effect for that *Regulatory Year*.
- 1.2 In responding to this *Notice* DNSP must apply the classification of services for each *Regulatory Year* as per the AER's final determination on the classification of services for that year.
- 1.3 DNSP must provide all information required in the *Regulatory Templates*, subject to the following exceptions:
 - (a) Weather corrected maximum demand (see paragraphs 8.13(b) and 8.6(b))
 - (b) Adjustments to demand data for embedded generation (see paragraphs 8.5(b) and 8.12(c))
 - (c) *Connection point* ratings (see paragraph 8.11(b))
 - (d) Detailed reasons for sustained interruptions to supply (see paragraph 18.5)
 - (e) *Hazard tree* clearance expenditure (see paragraph 12.11)
 - (f) *Ground clearance* expenditure (see paragraph 12.12)
 - (g) *Vegetation inspections* expenditure (see paragraph 12.13)
 - (h) *Vegetation audit* expenditure (see paragraph 12.14).
 - (i) *Fire starts* caused by defined vegetation sub-causes (see paragraph 12.17).
- 1.4 The exceptions referred to in paragraph 1.3 are identified in the *Regulatory Templates* with orange coloured cells. DNSP is exempted from inserting data into these cells and must instead colour them black if DNSP:
 - (a) does not currently collect or report this information; and
 - (b) identifies this in its basis of preparation.
- 1.5 The exceptions referred to in paragraph 1.3 apply for *Initial Regulatory Years* and *Regulatory Year 2014* only. For the *Regulatory Years* including and after 2015, DNSP must provide this information.
- 1.6 DNSP is exempted from its obligation to provide only *actual information* for *Subsequent Regulatory Years* for the following items (that is, may provide *estimated information* on an ongoing basis):
 - (a) *Average number of trees per maintenance span* as requested in regulatory template 2.7; and
 - (b) the mean and standard deviation for *economic life* requested in *regulatory template 5.2*.
- 1.7 Data for cells in *Regulatory Templates* coloured grey or containing formulae do not require input and must not be amended by DNSP.

- 1.8 When DNSP must make an estimate because it cannot populate the input cell with *actual information*, DNSP must demonstrate that it has provided the best estimate it can. In its basis of preparation, DNSP must explain:
- (a) why it could not use *actual information*;
 - (b) how DNSP derived the estimate; and
 - (c) why it is DNSP's best estimate.
- 1.9 All *opex* and *capex* provided to the AER in response to this *Notice* must be in nominal dollars, unless specified otherwise.
- 1.10 DNSP must provide any calculations used to convert real to nominal dollars or nominal to real dollars for the purposes of providing the information required under clause 1.9 above.
- 1.11 Unless otherwise required by this *Notice*, *capex* and associated data (such as asset volumes) reported in the *Regulatory Templates* must be reported against the *Regulatory Year* on an as-incurred basis.
- 1.12 Subject to exceptions in the case of non-network expenditures (see paragraph 10.1), expenditures reported in *Regulatory Templates 2.2* to *2.9* must be *Direct Costs* only, and exclude expenditures on *Overheads*.
- 1.13 DNSP must complete the *Regulatory Templates* ("AER Category Analysis data templates for distribution network service providers – Consolidated Information.xlsx") and ensure it contains all information required by the *Notice*. DNSP must then copy all *Actual Information* to the Microsoft Excel Workbook titled "AER Category Analysis data templates for distribution network service providers – Actual Information.xlsx" and all *Estimated Information* to the Microsoft Excel Workbook titled "AER Category Analysis data templates for distribution network service providers – Estimated Information.xlsx".

2. RECONCILIATION AND SUMMARY TABLES

- 2.1 DNSP must calculate the expenditure for each *capex* and *opex category* reported in *regulatory templates 2.2* to *2.10* and *4.1* to *4.4* and report these amounts in the corresponding rows in tables *2.1.1* to *2.1.6*.
- 2.2 The total expenditure for the *capex* and *opex* for each service classification in *Regulatory Template 2.1* must be mutually exclusive and collectively exhaustive. Total expenditure for *capex* must be reported on an "as-incurred" basis.
- 2.3 DNSP must report an amount that reconciles total *capex* and *opex* with the sum of the *capex* and *opex* line items in the "balancing item" row in each table in *Regulatory Template 2.1*. For the avoidance of doubt this means that the sum of each of the *capex* and *opex* line items in each of the tables in *Regulatory Template 2.1* minus the balancing item must equal the total *capex* or *opex* line item in these tables. To do this the balancing item must:
- (a) Include the amount of *capex* and *opex* reported where these expenditures have been reported more than once within the *Regulatory Templates 2.2* to *2.10*, and *4.1* to *4.4*; and

- (b) Account for any differences arising due to the reporting of capex on a basis other than the “as-incurred” basis.
- 2.4 DNSP must provide an excel spread sheet that contains the calculation of balancing items reported in *Regulatory Template 2.1*. At a minimum, this spread sheet must:
- (a) for each instance where an expenditure item is reported more than once (i.e. double counted), identify:
 - (i) where that instance is reflected in expenditure included in the *Regulatory Templates*
 - (ii) the value of that expenditure in each *Regulatory Template*
 - (b) identify each instance where the Notice requires DNSP to report *capex* not on an “as-incurred” basis in *Regulatory Templates 2.2 to 2.10* and, for the relevant expenditure item, list its corresponding value when expressed on an “as incurred” basis.
- 2.5 DNSP must provide a reconciliation between the total capital and operating expenditure provided in the *Regulatory Template 2.1* to the capital and operating expenditure recorded in DNSP’s *Regulatory Accounting Statements* and *Audited Statutory Accounts*.

3. BASIS OF PREPARATION

- 3.1 DNSP must explain, for all information in the *regulatory templates*, the basis upon which DNSP prepared information to populate the input cells (basis of preparation).
- 3.2 The basis of preparation must be a separate document (or documents) that DNSP submits with its completed *regulatory templates*.
- 3.3 The basis of preparation must follow a logical structure that enables auditors, assurance practitioners and the AER to clearly understand how DNSP has complied with the requirements of this *Notice*.
- 3.4 At a minimum, the basis of preparation must:
- (a) demonstrate how the information provided is consistent with the requirements of the *Notice*;
 - (b) explain the source from which DNSP obtained the information provided;
 - (c) explain the methodology DNSP used to provide the required information, including any assumptions DNSP made; and
 - (d) explain circumstances where DNSP cannot provide input for a variable using *actual information*, and therefore must provide *estimated information*:
 - (i) why an estimate was required, including why it was not possible for DNSP to use *actual information*;
 - (ii) the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is DNSP’s best estimate, given the information sought in the *Notice*.

- 3.5 DNSP may provide additional detail beyond the minimum requirements if DNSP considers it may assist a user to gain an understanding of the information presented in the *regulatory templates*.
- 3.6 When reporting an audit opinion or making an attestation report on the *regulatory templates* presented by DNSP, an auditor or assurance practitioner shall opine or attest by reference to DNSP's basis of preparation.

4. LABOUR COST INFORMATION

- 4.1 Only labour costs allocated to the provision of standard control services should be reported in the labour cost tables in *regulatory template 2.11*.
- 4.2 Labour used in the provision of contracts for both goods and services, other than contracts for the provision of labour (i.e. labour hire contracts) must not be reported in these tables.
- 4.3 DNSP must break down its labour data (both employees and labour contracted through labour hire contracts) into the *Classification Levels* provided in the relevant table in the template. DNSP must explain how it has grouped workers into these *Classification Levels*.
- 4.4 Labour related to each *classification level* obtained through labour hire contracts may be reported separately on separate lines to employee based labour. If DNSP wishes to do this they should add extra lines in the *regulatory template* below each *classification level* for which it wishes to separately report labour hire.
- 4.5 The total cost of labour reported in *regulatory template 2.11* must equal the total *Labour Costs* reported against the capex and opex categories relevant to standard control services listed in *regulatory template 2.12*.
- 4.6 Quantities of labour, expenditure, or *stand down periods* should not be reported multiple times across labour tables. However, labour may be split between tables (for example one worker could have half of their time allocated to *corporate overheads* and half of their time to *network overheads*).
- 4.7 The *ASLs* for each *Classification Level* must reflect the average *Paid FTEs* for each *Classification Level* over the course of the year.
- 4.8 'Per ASL' values are average values per *ASL* in each *Classification Level*. For example, the average *productive work hours* per *ASL* would equal the total *productive work hours* associated with labour in the *Classification Level* divided by the number reported in *Annual Totals – ASLs* for the *Classification Level* (i.e. the number of *ASLs* in the *Classification Level*).
- 4.9 *Stand down periods* must be reported against the relevant *classification level* in the table containing the relevant labour. For example, a stand down of an electrical line apprentice would be reported against the apprentice *classification level* in the Total network direct internal labour costs table.

5. REPLACEMENT CAPITAL EXPENDITURE

- 5.1 Table 2.2.1 instructions:

- (a) Where DNSP provides asset sub-categories corresponding to the prescribed asset categories in Table 2.2.1, DNSP must ensure that the expenditure and asset replacement / asset failure volumes of these sub-categories reconcile to the higher level asset category. DNSP is required to insert additional rows and provide a clear indication of the asset category applicable to each sub-category. DNSP must provide corresponding age profile data in *regulatory template 5.2* as per its respective instructions.
- (b) In instances where DNSP is reporting expenditure associated with *asset refurbishments/ life extensions capex* it must insert additional rows at the bottom of the table for the relevant asset group to account for this. DNSP must provide the required data, applying the corresponding asset category name followed by the word "REFURBISHED". DNSP must provide corresponding age profile data in *regulatory template 5.2* as per its respective instructions.
- (c) In instances where DNSP considers that both the prescribed asset group categories and the sub-categorisation provisions set out in (a) do not account for an asset on DNSP's *distribution system*, DNSP must insert additional rows below the relevant asset group to account for this. DNSP must provide the required data, applying a high level descriptor of the asset as the category name. The line item titled "OTHER - PLEASE ADD A ROW IF NECESSARY AND NOMINATE THE CATEGORY" illustrates this requirement. DNSP must provide corresponding age profile data in *regulatory template 5.2* as per its respective instructions. DNSP must ensure that the sum of the individual asset categories, including any additional sub-category, additional other asset category or asset refurbishment/ life extension asset category expenditure reconciles to the total expenditure of the asset group.
- (d) DNSP must ensure that the replacement volumes by asset group is equal to the applicable replacement volume data provided in table 2.2.2.
- (e) DNSP must ensure that the sum of the asset group replacement expenditures is equal to the total replacement expenditure contained in regulatory template 2.1.
- (f) If DNSP has provided estimated expenditure data on the basis of historical data that has included works across asset groups DNSP must provide the asset age profile data in *regulatory template 5.2* against the most elementary asset category. For example, where DNSP replaces pole-mounted switchgear in conjunction with a pole-top structure it must report the asset age profile data against the relevant switchgear asset category. DNSP must provide documentation of instances where backcast unit costs generated have involved allocations of historical records that include expenditure across asset groups.

5.2 Table 2.2.2 instructions:

- (a) DNSP must provide total volume of assets currently in commission and replacement volumes of certain asset groups by specified aggregated metrics. In instances where this information is estimated DNSP must explain how it has determined the volumes, detailing the process and assumptions used to allocate asset volumes to the aggregated metrics.

6. ASSET AGE PROFILE

6.1 Table 5.2.1 instructions:

- (a) Where DNSP provides asset sub-categories corresponding to the prescribed asset categories in Table 5.2.1, DNSP must ensure that the expenditure and asset replacement / asset failure volumes of these sub-categories reconcile to the higher level asset category. DNSP is required to insert additional rows and provide a clear indication of the asset category applicable to each sub-category. DNSP must provide corresponding replacement expenditure data in *regulatory template 2.2* as per its instructions.
- (b) In instances where DNSP is reporting expenditure associated with asset *refurbishments/ life extensions* capex it must insert additional rows at the bottom of the table for the relevant asset group to account for this. DNSP must provide the required data, applying the corresponding asset category name followed by the word "REFURBISHED". DNSP must provide corresponding replacement expenditure data in *regulatory template 2.2* as per its respective instructions.
- (c) In instances where DNSP considers that both the prescribed asset group categories and the asset sub-categorisation do not account for an asset on DNSP's *distribution system*, DNSP must insert additional rows below the relevant asset group to account for this. DNSP must provide the required data, applying a high level descriptor of the asset as the category name. The line item titled "OTHER - PLEASE ADD A ROW IF NECESSARY AND NOMINATE THE CATEGORY" illustrates this requirement. DNSP must provide corresponding age profile data in *regulatory template 2.2* as per its respective instructions.
- (d) In instances where DNSP wishes to provide asset sub-categories in addition to the specified asset categories in table 5.2.1, DNSP must provide a weighted average asset economic life, including mean and standard deviation that reconciles to the specified asset category in accordance with the following formula:

$$\text{Economic life of asset category} = \sum_{i=1}^n \left(\left(\frac{\text{value of asset sub-category}_i}{\text{total value of asset category}} \right) \times \text{economic life of asset sub-category}_i \right)$$

where:

n is the number of sub-categories to reconcile with the asset category

asset values are determined by the asset category's contribution to the current replacement cost of the network. This being the most recent per unit cost of replacement for each asset, multiplied by the number of those assets in service and reported in the asset age profile.

7. AUGEX PROJECT DATA

7.1 General instructions for *regulatory template 2.3*:

- (a) DNSP must include only projects and expenditure related to *augmentation* of the *network*.

- (b) Unless otherwise indicated, 'Rating' or 'MVA added' refers to equipment's *normal cyclic rating (for substations)* or *thermal rating (for lines and cables)*. As specified in the respective definitions of *normal cyclic rating (for substations)* and *thermal rating (for lines and cables)*, DNSP must provide its definition(s) of 'normal conditions' in the *basis of preparation*.
- (c) DNSP must not include information for gifted assets.
- (d) DNSP must enter *related party* and non related party contracts expenditures in the 'All *related party contracts*' and 'All non *related party contracts*' columns, respectively.
 - (i) Expenditure figures inputted into the 'All *related party contracts*' and 'All non *related party contracts*' columns do not contribute to the column that calculates the total direct expenditure on an augex project ('Total direct expenditure').
 - (ii) DNSP must record all *contract* expenditure for augex projects under the 'All *related party contracts*' and 'All non *related party contracts*' columns. DNSP must then allocate such contract expenditure to the appropriate 'Plant and equipment expenditure and volume' and 'Other expenditure' columns. For example, if a non *related party contract* involves expenditure on *civil works*, DNSP must record that expenditure under the 'All non *related party contracts*' and 'Other expenditure – Civil works' columns.
- (e) DNSP must not include *augmentation* information relating to *connections* in this worksheet. *Augmentations* in relation to *connections* are to be inputted in the *connections regulatory template* (worksheet 2.5).

7.2 Table 2.3.1 (on *regulatory template* 2.3) instructions:

- (a) For projects with a total cumulative expenditure over the life of the project of greater than or equal to \$5 million (nominal):
 - (i) insert a row for each *augmentation* project on a *subtransmission substation*, *switching station* and *zone substation* owned and operated by DNSP where *project close* occurred at any time in the years specified; and
 - (ii) input the required details.
- (b) For projects with a total cumulative expenditure over the life of the project less than \$5 million (nominal) (non material projects):
 - (i) input the total expenditure for all non material *augmentation* projects on a *subtransmission substation*, *switching station* and *zone substation* owned and operated by DNSP where *project close* occurred in the years specified in the penultimate row in the table, as indicated.
- (c) Record all expenditure data on a *project close* basis in real dollars (\$2012–13). DNSP must not include data for *augmentation* works where *project close* occurs after the years specified but incurs expenditure prior to this date.
 - (i) DNSP must provide any calculations used to convert real to nominal dollars or nominal to real dollars for this purpose.

- (d) For the avoidance of doubt, this includes *augmentation* works on any *substation* in DNSP 's *network*, including those which are notionally operating at transmission voltages. In such cases, choose 'Other - specify' in the '*Substation type*' category and describe the type of *substation* in the *basis of preparation*.
- (e) Each row must represent data for an *augmentation* project for an individual *substation*.
 - (i) If an *augmentation* project applies to two *substations*, for example, DNSP must enter data for the two *substations* in two rows.
- (f) Where a *substation augmentation* project in this table is related to other projects (including those in other tables in *regulatory template 2.3*), describe this relationship in the *basis of preparation*.
- (g) Where DNSP chooses 'Other - specify' in a drop down list, it must provide details in the *basis of preparation*.
- (h) For '*Substation ID*' and '*Project ID*', input DNSP's identifier for the *substation* and project, respectively. This may be the *substation/project* name, location and/or code.
- (i) For '*Project trigger*', choose the primary trigger for the project from the drop down list. Describe secondary triggers in the *basis of preparation*. Where there is no primary trigger (among multiple triggers), choose 'Other – specify' and describe the triggers in the *basis of preparation*.
- (j) For *substation voltages*, enter *voltages* in the format xx/xx, reflecting the primary and secondary *voltages*. For example, a *transformer* may have its *voltage* recorded as 500/275, where 500kV is the primary *voltage* and 275kV is the secondary *voltage*.
 - (i) Where a tertiary *voltage* is applicable, enter *voltages* in the format xx/xx/xx. For example, a *transformer* may have its *voltage* recorded as 220/110/33, where 220kV, 110kV and 33kV are the primary, secondary and tertiary *voltages*, respectively.
- (k) For *substation* ratings, 'Pre' refers to the relevant characteristic prior to the *augmentation* work; 'Post' refers to the relevant characteristic after the *augmentation* work. Where a rating metric does not undergo any change, or where the project relates to the establishment of a new *substation*, input the metric only in the 'Post' column.
- (l) Under '*Total expenditure*' for *transformers*, *switchgear*, capacitors, and other plant items, include only the procurement costs of the equipment. This must not include installation costs.
- (m) Expenditure inputted under the '*Land and easements*' columns is mutually exclusive from expenditure that appears in the columns that sum to the '*Total direct expenditure*' column. In other words, the '*Total direct expenditure*' for a particular project must not include expenditure inputted into the '*Land and easements*' columns.

- (n) If DNSP records land and *easement* projects and/or expenditures as separate line items for regulatory purposes, select 'Other – specify' and note 'Land/*easement* expenditure' in the *basis of preparation*.
 - (i) DNSP must input expenditure directly attributable to the land purchase or *easement* compensation payments in the 'Land purchases' and '*Easements*' columns, respectively. These costs include legal, stamp duties and cost of purchase or *easement* compensation payments.
 - (ii) DNSP must input other expenditure attributable to land purchases and *easements* in the 'Other expenditure – Other direct' column.
- (o) Insert additional rows as required.
- (p) Definitions: Other plant item
 - (i) All equipment involved in utilising or transmitting electrical energy that are not *transformers, switchgear, or capacitors*.

7.3 Table 2.3.2 (on *regulatory template 2.3*) instructions:

- (a) For projects with a total cumulative expenditure over the life of the project of greater than or equal to \$5 million (nominal):
 - (i) insert a row for each *augmentation* project on a *subtransmission line* owned and operated by DNSP where *project close* occurred at any time during the years specified; and
 - (ii) input the required details.
- (b) For projects with a total cumulative expenditure over the life of the project less than \$5 million (nominal) (non material projects):
 - (i) input the total expenditure for all non material *augmentation* projects on *subtransmission lines* owned and operated by DNSP where *project close* occurred in the years specified in the penultimate row in the table, as indicated.
- (c) Record all expenditure data on a *project close* basis in real dollars (\$2012–13). Hence, DNSP must not include data for *augmentation* works where *project close* occurs after the years specified but incurs expenditure prior to this date.
 - (i) DNSP must provide any calculations used to convert real to nominal dollars or nominal to real dollars for this purpose.
- (d) For the avoidance of doubt, this includes *augmentation* works on any *subtransmission line* in DNSP's network. If DNSP owns and operates any *lines* or *cables* notionally operating at transmission *voltages*, record any *augmentation* expenditure relating to such *lines* or *cables* in this table.
- (e) Each row should represent data for all circuits of a given *voltage* subject to *augmentation* works under the Project ID.
 - (i) If an *augmentation* project applies to two circuits of the same *voltage*, for example, DNSP must enter data for the two circuits in one row.

- (ii) If an *augmentation* project applies to two circuits of different *voltages*, for example, DNSP must enter data for the two circuits in two rows
- (f) Where a *subtransmission lines augmentation* project in this table is related to other projects (including those in other tables in *regulatory template 2.3*), describe this relationship in the *basis of preparation*.
- (g) Where DNSP chooses 'Other - specify' in a drop down list, provide details in the *basis of preparation*.
- (h) For 'Line ID', input DNSP's identifier for the circuit(s) subject to *augmentation* works under the Project ID. This may be the circuit name(s), location and/or code.
- (i) For 'Project ID', input DNSP's identifier for the project. This may be the project name, location and/or code.
- (j) For 'Project trigger', choose the primary trigger for the project from the drop down list. Describe secondary triggers in the *basis of preparation*. Where there is no primary trigger (among multiple triggers), choose 'Other – specify' and describe the triggers in the *basis of preparation*.
- (k) For length metrics, 'km added' refers to the gross addition of the relevant length measure resulting from the *augmentation* work.
 - (i) This must not be net of *line* or *cable* removal. If the *augmentation* project includes *line* or *cable* removal, describe the amount in *basis of preparation*.
- (l) Under 'Total expenditure' for *poles/towers*, include the procurement costs of the equipment and *civil works*. This must not include installation costs.
- (m) Under 'Total expenditure' for *lines*, *cables* and 'other plant item', respectively, include only the procurement costs of the equipment. This must not include installation costs.
- (n) Under 'Total expenditure' for *civil works*, do not include *civil works* expenditure related to *poles/towers*. As a guide, expenditure DNSP may input under 'Other expenditure – *Civil works*' includes (but is not limited to) construction of access tracks, construction pads and vegetation clearance.
- (o) Expenditure inputted under the 'Land and *easements*' columns is mutually exclusive from expenditure that appear in the columns that sum to the 'Total direct expenditure' column. In other words, the 'Total direct expenditure' for a particular project must not include expenditure inputted into the 'Land and *easements*' columns.
- (p) If DNSP records land and *easement* projects and/or expenditures as separate line items for regulatory purposes, select 'Other – specify' and note 'Land/*easement* expenditure' in the *basis of preparation*.
 - (i) DNSP must input expenditure directly attributable to the land purchase or *easement* compensation payments in the 'Land purchases' and '*Easements*' columns, respectively. These costs include legal, stamp duties and cost of purchase or *easement* compensation payments.

- (q) DNSP must input other expenditure attributable to land purchases and *easements* in the 'Other expenditure – Other direct' column.
- (r) Insert additional rows as required.
- (s) Definitions: Other plant item
 - (i) All equipment involved in utilising or transmitting electrical energy that are not *poles/towers (including pole top or tower structures), lines or cables*.

7.4 Table 2.3.3 (on *regulatory template 2.3*) instructions:

- (a) Complete the table by inputting the required details for:
 - (i) the rows that summarise all *augmentation* works on the specified types of *HV feeders* owned and operated by DNSP undertaken at any time during the years specified for projects with a total cumulative expenditure over the life of the project of greater than or equal to \$0.5 million (nominal); and
 - (ii) the row that summarises all *augmentation* works on *HV feeders* owned and operated by DNSP undertaken at any time during the years specified for projects with a total cumulative expenditure over the life of the project of less than \$0.5 million (nominal)
- (b) Record all expenditure data on an 'as incurred' basis in nominal dollars.
- (c) For projects that span across *regulatory years*, input figures for the 'Circuit km added' and 'Circuit km upgraded' columns according to the final year in which expenditure was incurred for the project.
- (d) DNSP must not include expenditure related to land purchases and *easements* in the 'Total direct expenditure' column. Land purchases and *easements* expenditure related to *augmentation* works on all *HV feeders* owned and operated by DNSP must be inputted in table 2.3.6.

7.5 Table 2.3.4 (on *regulatory template 2.3*) instructions:

- (a) Complete the table by inputting the required details for:
 - (i) the rows that summarises all *augmentation* works on the specified types of *distribution substations* owned and operated by DNSP undertaken at any time during the years specified.
- (b) Record all expenditure data on an 'as incurred' basis in nominal dollars.
- (c) For projects that span across *regulatory years*, input figures for the 'Units' column according to the final year in which expenditure was incurred.
- (d) DNSP must not include expenditure related to land purchases and *easements* in the 'Total direct expenditure' column. Land purchases and *easements* expenditure related to *augmentation* works on all *distribution substations* owned and operated by DNSP must be inputted in table 2.3.6.

7.6 Table 2.3.5 (on *regulatory template 2.3*) instructions:

- (a) Complete the table by inputting the required details for:

- (i) the rows that summarise all *augmentation* works on the specified types of *LV feeders* owned and operated by DNSP undertaken at any time during the years specified for projects with a total cumulative expenditure over the life of the project of greater than or equal to \$50,000 (nominal); and
 - (ii) the row that summarises all *augmentation works* on *LV feeders* owned and operated by DNSP undertaken at any time during the years specified for projects with a total cumulative expenditure over the life of the project of less than \$50,000 (nominal).
- (b) Record all expenditure data on an 'as incurred' basis in nominal dollars.
 - (c) For projects that span across *regulatory years*, input figures for the 'Circuit km added' and 'Circuit km upgraded' columns according to the final year in which expenditure was incurred for the project.
 - (d) DNSP must not include expenditure related to land purchases and *easements* in the 'Total direct expenditure' column. Land purchases and *easements* expenditure related to *augmentation* works on all *LV feeders* owned and operated by DNSP must be inputted in table 2.3.6.

7.7 Table 2.3.6 instructions:

- (a) DNSP must input the total *augmentation* expenditure for each asset group split by the groupings specified by the table.
 - (i) Record all expenditure data on an 'as incurred' basis in nominal dollars.
- (b) DNSP must explain how the sum of the asset group *augmentation* expenditures reconciles to the *augmentation* expenditure in tables 2.3.1 to 2.3.5.
- (c) Expenditure inputted under the 'Land and *easements*' rows are mutually exclusive from expenditure that appear in the rows for the corresponding asset group. For example, augex attributed to *HV feeders* must not include expenditure related to '*HV feeders* – land purchases and *easements*'.

8. DEMAND

General instructions for *regulatory templates* 5.3 and 5.4

8.1 DNSP must enter figures in yellow-shaded cells.

- (a) DNSP must enter figures in orange-shaded cells where it collects such information. Further instructions are provided for specific items below.

8.2 For the '*Winter/Summer peaking*' line item, the DNSP is to indicate the season in which the raw *maximum demand* occurred by entering 'Winter' or 'Summer' as appropriate.

8.3 Where the seasonality of DNSP's *maximum demand* (MD) does not correspond with the form of its regulatory years, DNSP must explain its basis of reporting MD in the *basis of preparation*. For example, if DNSP forecasts expenditure on a financial year basis but forecasts MD on a calendar year basis because of winter MD, DNSP would

state that it reports MD on a calendar year basis and describe, for example, the months that it includes for any given *regulatory year*.

Network level

Instructions for *regulatory template 5.3*

- 8.4 Input *maximum demand* information at the *network* level in *MW*.
- 8.5 DNSP must provide inputs for '*Embedded generation*' if it has kept and maintained historical data for *embedded generation* downstream of *connection points* and if it accounts for such *embedded generation* in its *maximum demand* forecast.
- (a) DNSP must describe the type of *embedded generation* data it has provided. For example, DNSP may state that it has included scheduled, semi-scheduled and non-scheduled *embedded generation*. In this example, we would be able to calculate native demand by adding these figures to raw *maximum demand*.
 - (b) If DNSP has not kept and maintained historical data for *embedded generation* downstream of *connection points*, it may estimate the historical *embedded generation* data or shade the cells black. For the *Regulatory Years* including and after 2015 DNSP must provide *embedded generation* data. It must do similarly if it accounts for *embedded generation* in its system level *maximum demand* forecast.
- 8.6 DNSP must provide inputs for the appropriate cells if it has calculated historical and forecast weather corrected *maximum demand*.
- (a) DNSP must describe its *weather correction* process in the *basis of preparation*. DNSP must describe whether the weather corrected maximum demand figures provided are based on *raw adjusted maximum demand* or *raw unadjusted maximum demand* or another type of *maximum demand* figure.
 - (b) Where DNSP does not calculate weather corrected *maximum demand* it may estimate the historical weather corrected data or shade the cells black. For the *Regulatory Years* including and after 2015 DNSP must provide weather corrected *maximum demand* in accordance with best regulatory practice *weather correction* methodologies.

Spatial

Instructions for *regulatory template 5.4*

- 8.7 In tables 5.4.1 and 5.4.2 (on *regulatory template 5.4*), DNSP must input *maximum demand* information for the indicated *network* segments.
- (a) DNSP must insert rows into the tables for each component of its *network* belonging to that segment. DNSP must note instances where it de-commissions components of its *network* belonging to that segment in the *basis of preparation*.
- 8.8 Where *maximum demand* in *MVA* occurred at a different time to *maximum demand* in *MW*, DNSP must enter *maximum demand* figures for both measures at the time *maximum demand* in *MW* occurred. In such instances, DNSP must enter the *maximum*

demand in *MVA* in the *basis of preparation*, noting the regulatory year in which it occurred.

- 8.9 If either the *MW* or *MVA* measure is unavailable, calculate the *power factor* conversion as an approximation based on best engineering estimates.
- 8.10 If DNSP cannot use *raw unadjusted maximum demand* as the basis for the information it provides in tables 5.4.1 and 5.4.2 (on regulatory template 5.4), it must describe the methods it employs to populate those tables. See clause 3.4(d) for further guidance.
- 8.11 DNSP must input the rating for each element in each *network* segment. For tables 5.4.1 and 5.4.2, rating refers to *normal cyclic rating*.
 - (a) DNSP must provide the seasonal rating that corresponds to the time of the *raw adjusted maximum demand*. For example, DNSP must provide the summer *normal cyclic rating* of the *network* segment if the *raw adjusted maximum demand* occurred in summer.
 - (b) Where DNSP does not keep and maintain rating information (for example, where the TNSP owns the assets to which such ratings apply), it may estimate this information or shade the cells black.
- 8.12 DNSP must provide inputs for '*Embedded generation*' if it has kept and maintained historical data for *embedded generation* downstream of the specified *network* segment and/or if it accounts for such *embedded generation* in its *maximum demand* forecast.
 - (a) DNSP must allocate *embedded generation* figures to the appropriate element of the *network* segment under system normal conditions (consistent with the definition of *raw adjusted maximum demand*).
 - (b) DNSP must describe the type of *embedded generation* data it has provided. For example, DNSP may state that it has included scheduled, semi-scheduled and non-scheduled *embedded generation* in the tables for *connection points*. In this example, we would be able to calculate native demand by adding these figures to the *raw adjusted maximum demand* figures.
 - (c) If DNSP has not kept and maintained historical data for *embedded generation* downstream of the specified *network* segment, it may estimate the historical *embedded generation* data or shade the cells black. For the *Regulatory Years* including and after 2015 DNSP must provide *embedded generation* data. It must do similarly if it accounts for *embedded generation* in its system level *maximum demand* forecast.
- 8.13 DNSP must provide inputs for the appropriate cells if it has calculated historical weather corrected *maximum demand*.
 - (a) DNSP must describe its *weather correction* process in the *basis of preparation*. DNSP must describe whether the weather corrected *maximum demand* figures provided are based on *raw adjusted maximum demand* or *raw unadjusted maximum demand* or another type of *maximum demand* figure.
 - (b) Where DNSP does not calculate weather corrected *maximum demand* it may estimate the historical weather corrected data or shade the cells black. For the

Regulatory Years including and after 2015 DNSP must provide weather corrected *maximum demand* in accordance with best regulatory practice *weather correction* methodologies.

- 8.14 Tables requesting system coincident data are referring to the demand at that particular point on the *network* (e.g. *zone substations*) at the time of system (or *network*) peak.
- (a) For example, table 5.4.2 (on *regulatory template* 5.4) requests information about the *maximum demand* on *zone substations* at the time of system or *network* peak.
 - (b) Conversely, *non coincident* data is the *maximum demand* at a particular point on the *network* (which may not necessarily coincide with the time of system peak). For example, table 5.4.1 (on *regulatory template* 5.4) requests information about *non-coincident raw maximum demand* at *zone substations*. In table 5.4.1 (on *regulatory template* 5.4), DNSP must provide information about the *maximum demand* at each *zone substation* in each year, which may not correspond to demand at the time of system peak.
 - (c) If DNSP does not record and/or maintain spatial *maximum demand* coincident to the system *maximum demand*, DNSP must provide spatial *maximum demand* coincident to a higher *network* segment. DNSP must specify the higher *network* segment to which the lower *network* segment is coincident to in the *basis of preparation*. For example, if DNSP does not maintain *maximum demand* data for *zone substations* coincident to the system *maximum demand*, DNSP may provide *maximum demand* data coincident to the *connection point*. In this example, DNSP would specify the relevant *connection point* in the *basis of preparation*.

9. CONNECTIONS

- 9.1 DNSP must ensure that the data provided for *connection services* reconciles to internal planning models used in generating DNSP's proposed revenue requirements.
- 9.2 DNSP is not required to distinguish expenditure for *connection services* between standard or alternative control services in *regulatory template* 2.5.
- 9.3 DNSP is not required to distinguish expenditure for *connection services* as either *capex* or *opex* in *regulatory template* 2.5.
- 9.4 DNSP must report expenditure data as a gross amount, by not subtracting *customer contributions* from expenditure data.
- 9.5 DNSP must report data for non-contestable, regulated *connection services*. This includes work performed by third parties on behalf of DNSP.
- 9.6 DNSP must not report data in relation to gifted assets, negotiated *connection services* or *connection services* which have been classified as contestable by the AER.
- 9.7 For augmentation metrics, 'km added' refers to the net addition of *circuit line length* resulting from the augmentation work of *complex connections*.

- 9.8 The definitions of *complex connections* in appendix F provide guidance on the types of augmentation works which must be reported as *connection services*, as descriptor metrics for table 2.5.1 and as cost metrics for table 2.5.2.
- 9.9 DNSP must only report augmentation for *connections* in *regulatory template 2.5* relating to *customer connection* requests, as per the definition of *connection expenditure* in appendix F. DNSP must not double count augmentation requirements by twice reporting augmentation data in *regulatory templates 2.3* and *2.5*.
- 9.10 DNSP must report the *MVA added* for *distribution substations* installed for *connection services*. Where *MVA added* must be calculated by DNSP as the sum of the *nameplate rating* of all the *distribution substations* installed for the relevant year.
- 9.11 DNSP is not required to report data in respect of *GSLs*, where a *GSL* scheme does not exist for the *connection service*.

10. NON-NETWORK EXPENDITURE

- 10.1 If expenditure is directly attributable to an expenditure category in this *regulatory template 2.6* it is a *Direct Cost* for the purposes of this *regulatory template*. Report all capex and/or opex *Direct Costs* as required, irrespective of whether any *Direct Costs* are also classified as *Corporate Overheads*, *Network Overheads* or other *capex* or *opex categories*. To the extent this results in multiple reporting of expenditures, identify this in accordance with instructions at paragraph 2.3 above.
- 10.2 For example, and for the avoidance of doubt, *Motor Vehicle expenditure* directly attributable to direct expenditure categories, for example *motor vehicle expenditure* directly attributable to activities giving rise to *replacement capital expenditure*, must be included in the expenditure reported in those *replacement capital expenditure* categories and any reported unit costs.
- 10.3 Where a requested value is not constant across a year, calculate an approximate simple average based on the different values over the year and the period for which the different values applied. For example, if DNSP had 12 vehicles for 8 months and 14 vehicles for 4 months, the average vehicles in the class over the year would be $12*(8/12) + 14*(4/12) = 12.67$ vehicles.
- 10.4 Add additional rows to disaggregate cost categories as DNSP considers required.
- 10.5 In relation to the *Non-network Other expenditure* category, if DNSP has incurred \$1 million or more (nominal) in *capital expenditure* over the last five *regulatory years* for a given type or class of assets (e.g. mobile cranes), DNSP must insert a row in the *regulatory template* and report that item separately.

11. MAINTENANCE EXPENDITURE

- 11.1 For expenditure incurred for the simultaneous inspection of assets and vegetation or for *access track maintenance*, report this expenditure under maintenance, not *vegetation management*.
- 11.2 For each of the *maintenance* subcategories prescribed in the template, add rows for additional subcategories if these are material and necessary to disaggregate financial

or non-financial data, for example, to disaggregate asset groups according to voltage levels or to specify inspection/ maintenance cycles.

- 11.3 For each *maintenance* subcategory, provide in separate columns the data for inspection cycles and maintenance cycles.
- 11.4 For the *inspection cycle* for each *maintenance* subcategory, express this as 'n' in the statement 'every n years'. For example, if the inspection cycle is 'every 6 years', put '6' in the inspection cycle column.
- 11.5 Similarly, for the *maintenance cycle* for each maintenance subcategory, express this as 'n' in the statement 'every n years'. For example, if the maintenance cycle is 'every 3 years', put '3' in the maintenance cycle column.
- 11.6 For inspection and maintenance cycles, asset quantity, and average age of the asset group, use the highest-value (i.e. highest replacement cost) asset type in the asset group as the basis.
- 11.7 Where there are multiple inspection and maintenance activities, report the cycle that reflects the highest cost activity.
- 11.8 Adding rows for additional *maintenance* subcategories to indicate inspection or maintenance cycles (i.e. non-financial data) does not require disaggregating the corresponding financial data for those additional subcategories.
- 11.9 For 'Asset Quantity', provide in separate columns:
 - (a) the total number of assets (population) at the end of the regulatory year, for each asset category
 - (b) the number of assets actually inspected or maintained during the regulatory year, for each asset category
- 11.10 For 'Other maintenance activity', add rows for *maintenance* expenditure subcategories if these are material and if these are not yet included in any other *maintenance* expenditure subcategory.

12. VEGETATION MANAGEMENT EXPENDITURE

Nomination of vegetation management zones

- 12.1 Identify one or more *vegetation management zones* across the geographical area of DNSP's *network*. To do so consider:
 - (a) areas where bushfire mitigation costs are imposed by legislation, regulation or ministerial order; and
 - (b) areas of the network where other recognised drivers affect the costs of performing *vegetation management* work.
- 12.2 Each contiguous area nominated by DNSP is a *vegetation management zone*.
- 12.3 Accordingly, each part of the network will be covered by only one *vegetation management zone*.

- 12.4 Provide, on separate A4 sheets, maps showing:
- (a) each *vegetation management zone*; and
 - (b) the total *network* area with the borders of each *vegetation management zone*.
- 12.5 Fill in tables in 2.7.1 and 2.7.2 for each *vegetation management zone*, adding additional tables where required.
- 12.6 To add additional *vegetation management zones* on *regulatory template 2.7*, copy the zone tables within table 2.7.1 and 2.7.2 and paste them at the bottom of each respective table.
- 12.7 For each *vegetation management zone* identified in 12.1 above, provide in the *basis of preparation*:
- (a) a list of regulations that impose a material cost on performing *vegetation management* works (including, but is not limited to, bushfire mitigation regulations);
 - (b) a list of self-imposed standards from DNSP's *vegetation management* program which apply to that zone; and
 - (c) an explanation of the cost impact of regulations and self-imposed standards on performing *vegetation management* work.

Descriptor metrics by zone table

- 12.8 If DNSP records poles rather than spans, the number of spans is the number of poles less one.
- 12.9 If DNSP does not record the *average number of trees per maintenance span*, estimate this variable using one or a combination of the following data sources:
- (a) Encroachment *defects* (e.g. identified by ground or aerial inspections, or *LiDAR*) and/or records of vegetation works scoping, or GIS vegetation density data;
 - (b) Field surveys using a sample of *maintenance spans* within each *vegetation management zone* to assess the number of mature *trees* within the maintenance corridor. Sampling must provide a reasonable estimate and consider the nature of *maintenance spans* in *urban* versus *rural* environments in determining reasonable sample sizes.
 - (c) Vegetation data such as:
 - (i) the Normalised Difference Vegetation Index (NDVI) and maps available from the Bureau of Meteorology (BOM);
 - (ii) data from the National Vegetation Information System (VIS data) overlaid on network GIS data to assess the density of vegetation in the direct vicinity of the *maintenance spans*; or

- (iii) similar data from other sources such as Geoscience Australia or commercial suppliers of satellite imagery overlaid on network GIS data records.
- (d) Any other data source based on expert advice.
- (e) When completing the templates for subsequent regulatory years, if DNSP can provide actual information for the *average number of trees per maintenance span* it must do so; otherwise DNSP must provide estimated information.

12.10 If DNSP performs *vegetation management* work on multiple *cutting cycles* in *urban* and *CBD*, or *rural* areas within its nominated *vegetation management zones*, provide a simple average of all the *cutting cycles* in the relevant area.

Expenditure metrics by zone table

12.11 If *hazard tree* clearance expenditures are not recorded separately, include these expenditures within tree trimming expenditure and shade the cells for *hazard tree* clearance black. For subsequent regulatory years, DNSP must provide data on *hazard tree* clearance expenditure.

12.12 If *ground clearance* works are not recorded separately, include these expenditures within tree trimming expenditure and shade the cells for *ground clearance* black. For the *Regulatory Years* including and after 2015 DNSP must provide data on *ground clearance* expenditure.

12.13 Only include expenditure on *inspections* where DNSP inspects solely for the purpose of assessing vegetation. Include *inspection* expenditure for inspections assessing both DNSP's *assets* and vegetation under *maintenance (regulatory template 2.8)*. If DNSP does not record expenditure on *inspections* of vegetation separately, DNSP may shade the cells black. For subsequent regulatory years, DNSP must provide data on *inspection* expenditure.

12.14 If auditing of *vegetation management* work is not recorded separately, include these expenditures within *inspection* expenditure. If DNSP does not record expenditure on *audits* of *vegetation management* work separately, DNSP may shade the cells black. For the *Regulatory Years* including and after 2015, DNSP must provide data on auditing expenditure.

12.15 Annual *vegetation management* expenditure across all categories and zones must sum up to the total *vegetation management* expenditure each year. In table 2.7.2, add any other *vegetation management* expenditure not requested in any other part of *regulatory template 2.7* (or added in *regulatory template 2.8*) in total annual *vegetation management* expenditure. In the *basis of preparation*, explain the expenditures that have been included in this table.

Unplanned vegetation events table

12.16 In table 2.7.3, fill out the unplanned vegetation events table once, providing the requested information across DNSP's entire network.

12.17 DNSP is not required to provide information requested in table 2.7.3 for *Initial Regulatory Years* where it does not currently have it, and may shade the cells black. For *Regulatory Years 2015* and thereafter, DNSP must provide this information.

13. EMERGENCY RESPONSE EXPENDITURE

13.1 Report the following expenditure for each regulatory year:

- (a) total *emergency response* expenditure
- (b) *emergency response* expenditure attributable to *major events* by identifying direct costs through a specific cost code for each *major event* or *major storm*. *Major events* most often refer to, but are not limited to, a *major storm*.
- (c) *emergency response* expenditure attributable to *major event days* by identifying daily operating expenditure incurred on each date of those *major event days* and summing up the expenditure for each event.

14. OVERHEADS EXPENDITURE

14.1 Report *overhead* expenditure before it is allocated to services or direct expenditure, and before any part of it is capitalised.

14.2 DNSP must disaggregate *network operating costs* into the following six subcategories:

- (a) network management
- (b) *network planning*
- (c) *network control* and operational switching personnel
- (d) quality and standard functions
- (e) project governance and related functions
- (f) other.

14.3 For the avoidance of doubt, the following expenditures must be provided in regulatory template 2.10:

- (a) Table 2.10.1 Network Overhead – If *DNSP* has previously reported *network operating costs* in its *Regulatory Accounting Statements*, *DNSP* must report these under *network overhead* in regulatory template 2.10.1:
 - (i) network management
 - (ii) network planning
 - (iii) *network control* and operational switching
 - (iv) quality and standard functions (including standards and manuals, compliance, quality of supply, reliability, *network records* (GIS), and *asset strategy* (other than network planning))
 - (v) project governance and related functions (including supervision, procurement, *works management*, logistics and stores)
 - (vi) other (including training, OH&S functions, network billing, and customer service).

The six subcategories above are mandatory subcategories in *network overhead*.

- (b) Table 2.10.1 Network Overhead – For other *network operating costs* that DNSP previously reported in its *Regulatory Accounting Statements* and are not included in the six mandatory subcategories above, DNSP must report these under *network overhead* in regulatory template 2.10.1. These expenditures include, but are not limited to:
- (i) meter reading
 - (ii) advertising/marketing
 - (iii) Guaranteed Service Level (GSL) payments
 - (iv) National Energy Customer Framework (NECF)-related expenses
 - (v) feed-in tariffs
 - (vi) demand management expenditure
 - (vii) levies
- (c) Table 2.10.2 Corporate Overhead – For *corporate overhead* expenditure that DNSP previously reported in its *Regulatory Accounting Statements* and are not included in any other *overhead* subcategory, DNSP must report these under *corporate overhead* in regulatory template 2.10.2. These expenditures include, but are not limited to:
- (i) office of the CEO
 - (ii) legal and secretariat
 - (iii) human resources
 - (iv) finance
 - (v) regulatory
 - (vi) insurance
 - (vii) self-insurance
 - (viii) debt raising costs
 - (ix) equity raising costs
 - (x) non-network IT support.

14.4 If there is any *overhead* expenditure that is capitalised:

- (a) explain, in the Basis of Preparation, why it is capitalised
- (b) if there is a material change in reported expenditures in the *Initial Regulatory Years* or in *Subsequent Regulatory Years* due to a change in capitalisation policy, identify the expenditure categories and quantum of capex and opex that are affected and explain this in the Basis of Preparation.

15. FEE BASED AND QUOTED ALTERNATIVE CONTROL SERVICES

- 15.1 DNSP must ensure that the data provided for *fee-based* and *quoted services* reconciles to internal planning models used in generating DNSP's proposed revenue requirements.
- 15.2 In *regulatory templates* 4.3 and 4.4, DNSP must list all the *fee-based* and *quoted services* that were listed in the annual tariff proposal of each relevant year.
- 15.3 In the basis of preparation, DNSP must provide a description of each *fee-based* and *quoted service* listed in regulatory templates 4.3 and 4.4. In each services' description, DNSP must explain the purpose of each service and detail the activities which comprise each service.
- 15.4 DNSP is not required to distinguish expenditure for *fee-based* and *quoted services* between *standard* or *alternative control services* in *regulatory templates* 4.3 and 4.4.
- 15.5 DNSP is not required to distinguish expenditure for *fee-based* and *quoted services* as either *capex* or *opex* in *regulatory templates* 4.3 and 4.4.

16. METERING ALTERNATIVE CONTROL SERVICES

- 16.1 DNSP must ensure that the data provided for *metering services* reconciles to internal planning models used in generating DNSP's proposed revenue requirements.
- 16.2 DNSP is not required to distinguish expenditure for *metering services* between *standard* or *alternative control services* in *regulatory template* 4.2.
- 16.3 DNSP is not required to distinguish expenditure for *metering services* as either *capex* or *opex* in *regulatory template* 4.2.
- 16.4 DNSP must report data for non-contestable, regulated *metering services*. This includes work performed by third parties on behalf of DNSP.
- 16.5 DNSP must not report data in relation to *metering services* which have been classified as contestable by the AER.
- 16.6 For guidance, the definition of *meter type 4* is provided in appendix F. This will include metering assets and services such as those introduced with the Advanced Metering Infrastructure rollout in Victoria..

17. PUBLIC LIGHTING ALTERNATIVE CONTROL SERVICES

- 17.1 DNSP must ensure that the data provided for *public lighting services* reconcile to internal planning models used in generating DNSP's proposed revenue requirements.
- 17.2 DNSP is not required to distinguish expenditure for *public lighting services* between *standard* or *alternative control services* in *regulatory template* 4.1.
- 17.3 DNSP is not required to distinguish expenditure for *public lighting services* as either *capex* or *opex* in *regulatory template* 4.1.
- 17.4 DNSP must report expenditure data as a gross amount, by not subtracting *customer contributions* from expenditure data.
- 17.5 DNSP must report data for non-contestable, regulated *public lighting services*. This includes work performed by third parties on behalf of DNSP.

- 17.6 DNSP must not report data in relation to gifted assets, negotiated *public lighting services* or *public lighting services* which have been classified as contestable by the AER.
- 17.7 DNSP is not required to report data in respect of *GSLs*, where a *GSL* scheme does not exist for a *public lighting service*.
- 17.8 In the basis of preparation, DNSP must explain how the *average unit cost* for *public lighting services* was estimated..

18. SUSTAINED INTERRUPTIONS TO SUPPLY

- 18.1 *Regulatory Template* 6.3 requires the input of both planned and unplanned interruptions to supply.
- 18.2 A sustained interruption is any loss of electricity supply to a customer associated with an outage of any part of the electricity supply network, including generation facilities and transmission networks, of more than 0.5 seconds, including outages affecting a single premises. The customer interruption starts when recorded by equipment such as SCADA or, where such equipment does not exist, at the time of the first customer call relating to the network outage. An interruption may be planned or unplanned, momentary or sustained. Does not include subsequent interruptions caused by network switching during fault finding. An interruption ends when supply is again generally available to the customer.
- 18.3 An unplanned event is an event that causes an interruption where the customer has not been given the required notice of the interruption or where the customer has not requested the outage.
- 18.4 An unplanned interruption is an interruption due to an unplanned event.
- (a) The following events may be excluded when calculating the revenue increment or decrement under the service target performance incentive scheme (STPIS) when an interruption on the DNSP's distribution network has not already occurred or is concurrently occurring at the same time:
- (1) load shedding due to a generation shortfall
 - (2) automatic load shedding due to the operation of under frequency relays following the occurrence of a power system under-frequency condition
 - (3) load shedding at the direction of the Australian Energy Market Operator (AEMO) or a system operator
 - (4) load interruptions caused by a failure of the shared transmission network
 - (5) load interruptions caused by a failure of transmission connection assets except where the interruptions were due to inadequate planning of transmission connections and the DNSP is responsible for transmission connection planning
 - (6) load interruptions caused by the exercise of any obligation, right or discretion imposed upon or provided for under jurisdictional electricity legislation or national electricity legislation applying to a DNSP.

- (b) An event may also be excluded where daily unplanned SAIDI for the DNSP's distribution network exceeds the major event day boundary, as set out in appendix D of the STPIS, when the event has not been excluded under clause 3.3(a).

18.5 In completing table 6.3.1, DNSP must select a reason from the list provided for in column G. For Initial Regulatory Years, and the 2014 Regulatory Year, DNSP may, but is not required to, select a detailed reason from the list provided for in column G (marked with orange cells). For the 2015 Regulatory Year and thereafter, DNSP must select a detailed reason for each interruption.

APPENDIX F: DEFINITIONS

Term	Definition
<i>Access track</i>	A path that enables vehicular or foot access to an NSP's assets. Where applicable this includes associated pavement, drainage, security (e.g. gates, fences) and animal control devices (e.g. cattle grid). For the purposes of this definition DNSP's must have a responsibility for the maintenance of the access track and the form of tenure, or lack of tenure, over the maintenance access track is not relevant.
<i>Access track maintenance</i>	Costs of activities to maintain an <i>access track</i> , including inspecting, surveying, auditing, altering, reconfiguring costs or <i>vegetation management</i> costs not involving capital expenditure.
<i>AER</i>	The Australian Energy Regulator, which is established by section 44AE of the <i>Competition and Consumer Act 2010</i> (Cth) (as defined in the NER).
<i>alternative control service</i>	A distribution service that is a direct control service but not a standard control service (as defined in the NER).
<i>Animal (supply interruptions)</i>	<p>Interruptions to supply that are the direct result of animal contact with energised equipment and include the detailed reasons of:</p> <ul style="list-style-type: none"> • Animal impact – <i>outages</i> caused by an animal moving into contact with energised equipment. For example climbing onto or flying into energised equipment. • Animal nesting – <i>outages</i> caused by an established animal nest on or within energised equipment. <p>Note that interruptions caused by the degradation of assets due to insect action (e.g. white ants, borers) should be included under <i>asset failure</i>.</p>
<i>Annual totals - ASLs</i>	The number of full-time equivalent employees and staff engaged under labour hire agreements engaged on <i>standard control services</i> receiving salary or wages (<i>Paid FTE</i>) by the organisation in a given <i>Classification level</i> averaged over the regulated year. For avoidance of doubt, one full time employee equating to one FTE over the course of the year for both <i>standard control services</i> work and other work) that spends 50% of their time on <i>standard control services</i> work is 0.5 ASL.
<i>Annual totals – total labour costs</i>	The total <i>Labour cost</i> associated with all ASLs in a given <i>Classification level</i> .
<i>Annual totals - average productive work hours per ASL.</i>	The average work hours for the regulatory year per ASL in each <i>Classification level</i> that are <i>productive work hours</i> spent on <i>standard control services</i> (i.e. not including <i>non-productive hours</i>).
<i>Annual ordinary time hours costs - productive work hours per ASL</i>	The average <i>productive work hours</i> spent on <i>standard control services</i> per regulatory year per ASL in each <i>Classification level</i> that are <i>Labour costs – ordinary time earnings</i> .
<i>Annual ordinary time hours costs - average productive work hours hourly rate per ASL</i>	<p>The regulatory year's average <i>productive work hours</i> spent on <i>standard control services</i> hourly rate per ASL for each <i>Classification level</i> including <i>labour costs</i> that are direct on costs related to <i>Labour costs – ordinary time earnings</i>. This includes all <i>direct costs</i> associated with <i>non-productive work hours</i> related to ordinary time hours spent on <i>standard control services</i> (e.g. costs associated with annual leave accrued from working ordinary hours). NSP should indicate what costs are included in each category (1) to (3) directly below. The average hourly wage rate for each year should be calculated by reference to the average number of <i>productive work hours</i> paid as <i>Labour costs – ordinary time earnings</i> for each year and includes costs that are:</p> <ol style="list-style-type: none"> 1. Ordinary time salaries and wages in the year 2. <i>Labour costs – other earnings, on costs, and taxes</i> that are directly related to ordinary time salaries and wages in the year but including allowances.. Fixed costs associated with <i>Labour costs – other earnings, on costs and taxes</i>, for example training, should be reported as costs of ordinary time hours. 3. <i>Labour costs – super</i> that are directly related to ordinary time salaries and wages in

the year.

Annual overtime hours costs - productive work hours per ASL The average overtime *productive work hours* over the regulatory year paid per ASL for each *Classification level* per year. Overtime hours are *paid productive work hours* spent on *standard control services* work that is not *Labour costs – ordinary time earnings*.

Note: for a given classification level average overtime productive work hours per ASL in regulatory year X spent on *standard control services* work plus average ordinary time earnings productive work hours per ASL in regulatory year X spent on *standard control services* work should equal total productive work hours in regulatory year X spent on *standard control services* work.

Annual overtime hours costs - average productive work hours hourly rate per ASL The regulatory year's average *productive work hours* spent on *standard control services* overtime hourly rate per ASL for each *Classification level* including *labour costs* that are direct on costs related to productive overtime hours that are not *Labour Costs – ordinary time earnings*. This includes all *direct costs* associated with *non-productive hours* related to overtime hours spent on *standard control services*. NSPs should indicate what costs are included in each category (1) to (3) directly below. The average hourly wage rate should be calculated by reference to the average number of hours paid as overtime and includes costs that are:

1. Overtime salaries and wages in the year
2. *Labour costs* – other earnings, on costs, and taxes that are directly related to overtime salaries and wages in the year including allowances. Only incremental costs associated with overtime should be reported against overtime hours costs, for example payroll tax on overtime payments.
3. *Labour costs* – super that are directly related to overtime salaries and wages in the year

Annual stand down occurrences – total per ASL The average number of *Stand Down Periods* per ASL in each *Classification level* over the year

Apportionment The allocation of unregulated revenues reflecting the proportionate use of the shared asset, in line with the AER's Shared Asset Guideline.

ASL Average Staffing Level. One ASL is one full-time equivalent employees undertaking *standard control services* work receiving salary or wages (Paid FTE) over the entire year. For avoidance of doubt, one full time employee equating to one FTE over the course of the year(for both *standard control services* and other work) that spends 50% of their time on *standard control services* work is 0.5 ASL.

Asset A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity

Asset failure (repex) The failure of an asset to perform its intended function safely and in compliance with jurisdictional regulations, not as a result of external impacts such as:

- extreme or atypical weather events; or
- third party interference, such as traffic accidents and vandalism; or
- wildlife interference, but only where the wildlife interference directly, clearly and unambiguously influenced asset performance; or
- vegetation interference, but only where the vegetation interference directly, clearly and unambiguously influenced asset performance.

Excludes planned interruptions.

Asset failure (supply interruptions) Interruptions to supply as a direct result of a network *asset* ceasing to operate, intermittently or permanently, in the manner for which it was intended. This includes the catastrophic failure of the *asset* as well as degradation of the asset where it leads to a supply interruption. For example, pole fire from insulation failure, joint failure, transformer failure, arching across polluted insulators, etc.

<i>Asset refurbishments/ life extension capex</i>	The non-demand driven capex to restore an asset to its former functionality where the asset has reached the end of its economic life. The works undertaken must result in a material extension in the expected life of the asset.
<i>Asset strategy (network overhead)</i>	Includes all costs associated with the development and maintenance of strategies for the ongoing management of network assets. It excludes network planning strategy development and maintenance that is part of the <i>Network Planning</i> function, as well as network operational strategy development and maintenance that is part of the <i>Network Control</i> function.
<i>Audit</i>	A service where the auditor's objective is to provide a high level of assurance through: the issue of a positive expression of an opinion that enhances the credibility of a written assertion(s) about an accountability matter ("attest audit"); or the provision of relevant and reliable information and a positive expression of opinion about an accountability matter where the party responsible for the matter does not make a written assertion(s) ("direct reporting audit").
<i>Audit (vegetation management)</i>	Auditing of vegetation management activities (e.g. <i>tree trimming</i> , tree removal, herbicide application, etc.) following vegetation maintenance works in order to confirm the quality and/or extent of the <i>vegetation management</i> activities undertaken.
<i>audit report</i>	A report provided by an auditor for an audit engagement, prepared in accordance with Australian Auditing Standards.
<i>Audited statutory accounts</i>	The audited set of accounts prepared in accordance with Australian Securities and Investments Commission (ASIC) requirements.
<i>auditor</i>	The person with final responsibility for the audit or audit related service engagement that is independent from the entity, appointed to express an opinion on an accountability matter
<i>Augex model</i>	The model described in the handbook located here: http://www.aer.gov.au/sites/default/files/AER%20guide%20to%20the%20augex%20model%20-%20revised%20November%202013.DOCX
<i>Augmentation</i>	Has the meaning prescribed in the National Electricity Rules, and also includes work relating to improving the quality of the <i>network</i> , for example, to meet regulatory obligations.
<i>Auxiliary transformer</i>	A <i>transformer</i> installed normally within a <i>substation</i> to provide power supply to <i>substation</i> auxiliaries, such as controls, motors, and communication facilities.
<i>Average</i>	An arithmetic (simple) average unless a weighted average is specified.
<i>Average number of trees per maintenance span</i>	The estimated average of the number of <i>trees</i> within <i>DNSP's</i> vegetation <i>maintenance spans</i> . This includes only <i>trees</i> that require active <i>vegetation management</i> to meet its vegetation obligations (it excludes <i>trees</i> that are only inspected).
<i>Average unit cost (public lighting)</i>	The simple average cost for public lighting services per light type.
<i>Basis of Preparation</i>	The basis upon which <i>DNSP</i> prepared information to populate the input cells in the Microsoft Excel workbooks attached at Appendix A
<i>Block load</i>	An identified step change in demand, either positive or negative, attributable to a specific project or customer.
<i>Bulk supply point</i>	A facility containing at least one connection point between the distribution network and a transmission network service provider.
<i>Cable</i>	See ' <i>underground cables</i> '.
<i>Capex</i>	Capital expenditure
<i>Capex Category</i>	Means capital expenditure associated with the following categories: <ul style="list-style-type: none"> • Augmentation Capital expenditure;

	<ul style="list-style-type: none"> Capitalised Overheads; Connections Capital expenditure; Non-Network—IT & Communications Expenditure; Non-Network—Buildings and Property Expenditure; Non-Network—Motor Vehicles Expenditure; or Non-Network—Other Expenditure. Replacement Capital expenditure SCADA & Network Control Expenditure.
<i>Capitalisation</i>	The recognition of expenditure as part of the cost of an asset, i.e. as capital expenditure
<i>Capitalised Overheads</i>	Overhead expenditure recognised as part of the cost of an asset, i.e. as capital expenditure.
<i>Car</i>	Cars are Motor Vehicles other than those that comply with the definition of Light commercial vehicle, Heavy commercial vehicle, Elevated work platform (LCV) or Elevated work platform (HCV).
<i>CBD</i>	In the context of <i>capex</i> and <i>opex</i> data, and related volume/ non-financial variables, refers to costs and works on a <i>CBD feeder</i> and all assets downstream of that feeder.
<i>CBD feeder</i>	Has the meaning described in the <i>Service Target Performance Incentive Scheme</i> .
<i>Circuit breaker</i>	Automatic switches that provide system protection functions by opening a network connection and breaking fault current
<i>Circuit line length</i>	<p>The length (measured in kilometres) of <i>lines</i> and <i>cables</i> in service (the total length of feeders including all spurs) where each SWER line, single-phase line, and three-phase line counts as one line. A double circuit line counts as twice the length. Length does not take into account vertical components such as sag.</p> <p>The length of <i>service lines</i> is not to be included in the <i>circuit line length</i>.</p>
<i>Civil works</i>	The construction and/or installation of the infrastructure which will house or provide supporting foundations for electrical cables and equipment. It includes buildings, earthworks, foundations, access roads, as well as support structures not included in any other category.
<i>Classification level</i>	The breakdown of paid FTE ASLs by classification levels within the organisation. (e.g. DNSP might have network classifications such as supervisor, linesman, apprentice, and non-network levels such as senior manager, manager, professional engineer, and administration)
<i>Coincidence factor</i>	The ratio of demand at a <i>network</i> segment at the time of system wide <i>maximum demand</i> to demand at the same <i>network</i> segment at its maximum. A coincidence factor can take a value between 0 and 1.
<i>Coincident maximum demand</i>	The load on the specified <i>network</i> segment at the time during which the <i>network</i> was experiencing its <i>maximum demand</i> for the relevant regulatory year.
<i>Commercial/Industrial customer connection</i>	A commercial and industrial customer connection relates to connecting any customer who is not a residential or unmetered customer.
<i>Common fee-based services</i>	Those fee-based services which are provided by all DNSPs, including: <ul style="list-style-type: none"> Energisation De-energisation Re-energisation
<i>Communications</i>	Refer to <i>Non-Network IT & Communications Expenditure</i> definition
<i>Communications network</i>	Network assets which facilitate the communication of SCADA, Network Control and Protection

assets (<i>Repex</i>)	systems assets beyond the gateway devices (routers, bridges etc.) at corporate offices.
<i>Complex commercial/industrial connection high voltage (customer connected at LV, minor HV works)</i>	<p>Multi-phase <i>customer connection</i> service at LV which are not <i>simple connections</i> and, as an example, may involve the following:</p> <ul style="list-style-type: none"> the installation of a distribution substation (pole mounted, ground types, or indoor types); overhead and/or underground HV feeder extension or augmentation associated with the connection of the substation but excluding major feeder extensions or augmentation; installation of LV mains associated with the new substation.
<i>Complex commercial/industrial connection high voltage (customer connected at LV, major HV works – ie. upstream asset works)</i>	<p>Multi-phase <i>customer connections</i> which are not simple connections or <i>Complex type connection</i> high voltage and, as an example, may involve the following:</p> <ul style="list-style-type: none"> large extension or augmentation, overhead and/or underground, of the HV feeder; installation of a distribution substation (pole mounted, ground types or indoor types). <p>Notes: Upstream shared asset alterations expected to be required. This also includes the reconfiguration of HV network assets as a result of specific requests for <i>connection</i>.</p>
<i>Complex commercial/industrial connection high voltage – connecting HV customers</i>	<p>Multi-phase <i>customer connections</i> where the <i>customer</i> is supplied at HV and, as an example, may include the following:</p> <ul style="list-style-type: none"> large extension or augmentations of the HV feeders; installation of a high voltage switching station or switch room.
<i>Complex commercial/industrial connection sub-transmission</i>	<p>Multi-phase <i>customer connections</i> where the customer is connected via feeders operating between 33kV and 132kV inclusive and, as an example, may include any of the following:</p> <ul style="list-style-type: none"> extension or augmentation of the Sub-transmission network; installation of switching stations, switch rooms or similar facilities.
<i>Complex embedded generation connection high voltage – small capacity</i>	<p>Multi-phase <i>customer connection</i> which are not simple connections and, as an example, may involve the following:</p> <ul style="list-style-type: none"> large extension or augmentation, overhead and/or underground, of the distribution HV/LV feeders; installation of a distribution substation (Pole mounted, ground types or indoor types).
<i>Complex embedded generation connection high voltage – large capacity</i>	<p>Multi-phase <i>customer connection</i> which are not simple connections and, as an example, may involve the following:</p> <ul style="list-style-type: none"> extension or augmentation of HV or sub transmission feeders; installation of switching stations, switch rooms or similar facilities.
<i>Complex residential connection low voltage</i>	<p>Single/multi-phase <i>customer connection</i> services which are not <i>simple customer connections</i> and, as an example, may involve the following:</p> <ul style="list-style-type: none"> greater than one span of overhead service wire extension or augmentation of the LV feeder, overhead and/or underground; road crossing (overhead or underground). Notes: This also includes the reconfiguration of LV network assets (not including any HV asset works) as a result of specific requests for connection specifications.
<i>Complex residential connection high voltage</i>	<p>Single/multi-phase <i>customer connection</i> services which are not <i>simple customer connections</i> or <i>complex</i> type low voltage connections and, as an example, may involve the following:</p> <ul style="list-style-type: none"> extension or augmentation of the HV feeder, overhead and/or underground; installation of a distribution substation (pole mounted, ground types);

- extension or augmentation of the LV feeder, overhead and/or underground;
- greater than one span of overhead service wire;
- road crossing (overhead or underground).

Notes: This also includes the reconfiguration of HV network assets (not including any LV asset works) as a result of specific requests for *connection*.

Complex subdivision connection low voltage

Single/multi-phase *customer connection* and, as an example, may include the following:

- extension or augmentation of overhead or underground LV feeders including road crossings.

Complex subdivision connection high voltage (no upstream asset works)

Multi-phase *customer connection* which are not *simple connections* and, as an example, may include the following:

- extension or augmentation of HV feeders;
- installation of one or more distribution substations;
- installation of LV mains.

Notes: Each subsequent connection of a residential premises within a new estate will be treated as a connection. The *subdivision* category excludes *civil works* (that is, the cost of trenching, excavation, backfilling or re-instatement within the subdivision development).

Complex subdivision connection high voltage (with upstream asset works)

Multi-phase customer connections which are not *simple connections* and, as an example, may involve the following:

- extension or augmentation of HV feeders including major upstream works;
- installation of one or more distribution substations;
- installation of LV mains

Notes: This category is intended to capture the cost of developing the network to serve new estates and possible upstream shared asset alterations that may be required. Each subsequent connection of residential premises within a new estate will be treated as a simple connection. The subdivision category excludes civil works (that is, the cost of trenching, excavation, backfilling or re-instatement within the subdivision development).

Connection

Has the meaning prescribed in the National Electricity Rules.

Connection assets

Has the meaning prescribed in the National Electricity Rules.

Connection point

Has the meaning prescribed in the National Electricity Rules.

Connection service

Has the meaning prescribed in the National Electricity Rules.

Connections expenditure

The costs to establish new *connection assets* and upgrades to existing *connections assets* necessary to meet *customer connection* requests. This excludes alterations to existing *connection assets*.

Contract

A legally binding contract

Contractor

An outside agent employed by DNSP to perform a specific task rather than DNSP performing the same task in-house, in accordance with a contract entered into with DNSP usually following a competitive process for the awarding of the right to enter into that contract. A contractor can be either a related party or a non-related party to DNSP.

Contractor liaison

Day-to-day liaison with and management of the contractors involved in undertaking *vegetation management* work on behalf of DNSP. This includes but is not limited to the management of work invoices, assigning work to contractors and the review of audits. This excludes actual *audit* work undertaken.

<i>Contributions</i>	Payments from unrelated parties provided to DNSP in relation to the provision of connection, public lighting or augmentation activities (net of standard service charges).
<i>Corporate Overheads</i>	<p><i>Corporate Overhead</i> costs refer to the provision of corporate support and management services by the corporate office that cannot be directly identified with specific operational activity.</p> <p>Corporate overhead costs typically include those for executive management, legal and secretariat, human resources, finance, and other corporate head office activities or departments.</p>
<i>Cost per subdivision lot</i>	Total cost of reticulation to the area (excluding the cost of connecting new premises within in the estate) divided by the number of lots within the new estate.
<i>Customer</i>	Has the meaning prescribed in the National Electricity Rules.
<i>Customer complaint</i>	A written or verbal expression of dissatisfaction about an action, or failure to act, or in respect of a product or service offered or provided by an electricity network distributor.
<i>Customer Initiated Capex</i>	Means capital expenditure, excluding attributed capitalised overheads and before any associated customer contributions, resulting directly from the connection of new customer connections to the distribution network, or changes to existing customer connections.
<i>Customer Installation Faults</i>	A fault caused by the failure of the customer's service fuse for no apparent reason or due to overloaded circuits.
<i>Cutting cycle</i>	The average planned number of years (including fractions of years) between which cyclic vegetation maintenance is performed within <i>urban</i> areas, <i>rural</i> areas, and <i>vegetation management zones</i> .
<i>De-energisation</i>	The opening of a connection in order to prevent the flow of energy to the premises.
<i>Defect</i>	A <i>defect</i> is any recorded incidence of noncompliance with DNSP's vegetation clearance standard. This also includes vegetation outside DNSP's standard clearance zone that is recognised as hazardous vegetation and which would normally be reported as requiring management under DNSP's <i>inspection</i> practices.
<i>Demand management</i>	'DMIA' means the Demand Management Innovation Allowance determined by the Australian Energy Regulator as part of any applicable Demand Management Incentive Scheme.
<i>Direct control service</i>	Direct control service has the meaning set out in the Chapter 6 Rules.
<i>Direct costs</i>	<p>Operating or capital expenditure directly attributable to a work activity, project or work order. Consists of in-house costs of direct labour, direct materials, contract costs, and other attributable costs.</p> <p>Excludes any allocated overhead.</p>
<i>Direct labour cost</i>	<i>Labour cost</i> attributable to a specific asset or service, cost centre, work activity, project or work order
<i>Direct materials</i>	<p>Materials are the raw materials, standard parts, specialised parts and sub-assemblies required to assemble or manufacture a network/non-network asset or to provide a network/non-network service. <i>Direct materials</i> costs are attributable to a specific asset or service, cost centre, or work order, and exclude materials provided under external-party contracts.</p> <p>Includes:</p> <ul style="list-style-type: none"> • the cost of scrap • normally anticipated defective units that occur in the ordinary course of the production process • routine quality assurance samples that are tested to destruction • the net invoice price paid to vendors to deliver the material quantity to the production

facility or to a point of free delivery.

Direct Network Labour

Only includes workers who primarily undertaking field work in their job. This includes:

- field tradespeople including workers working in field depots (e.g. fitters and turners and mechanics working in depots).
- Apprentices training for work that would primarily be field work (i.e. irrespective of whether most of their current work or training is not undertaken in the field)

distribution determination

Distribution determination has the meaning set out in the National Electricity Law.

Distribution line

Has the meaning prescribed in the National Electricity Rules.

Distribution substation

A *substation* on a *distribution network* that transforms *voltage* of levels at or below 33 kV but above 1 kV to levels below 1 kV.

As a guide, assets included within a *distribution substation* include all equipment permanently installed within the *distribution substation* boundary. Where applicable (such as indoor and outdoor *substations*), this includes any enclosures, structures, *civil works*, poles and associated hardware, cabling and other assets that are located permanently within the *distribution substation* boundary, but excludes any incoming or outgoing *lines* or *cables*. For the avoidance of doubt this does not include any building, structure, equipment, cabling, etc. located within the *substation* boundary that is the property or responsibility of third parties. Where applicable (such as for pole mounted *substations*), this also includes any poles, pole hardware, pole structures, links, surge diverters, fuses or protective devices, cabling and other assets forming part of the *substation* or its supports, but excluding incoming or outgoing overhead mains, cables and associated cable terminations (cables in this context includes all power, communications and control cables).

Distribution substation equipment & property maintenance

Maintenance of distribution substations, equipment to convert HV distribution to LV, current transformers, voltage transformers, voltage regulators and associated secondary protection and communication equipment.

Equipment maintenance – includes all direct costs (labour, material, contract, motor vehicle); maintenance of distribution switchgear; inspecting, testing and maintaining distribution substations primary and secondary equipment, apparatus and hardware; transformers, earthing, surge diverters, isolators, protection and communication directly associated with the substation; inspecting, testing and maintaining substations and protective apparatus, equipment and hardware; earthing, surge diverters, EDOs and isolators directly associated with the substation; maintenance of site including buildings, fences and cleaning; carrying out replacement of HV fuses not occasioned by fault or emergency work (minor value of replacement, e.g. <\$500).

Property maintenance – includes all direct costs (labour, material, contract, motor vehicle); maintenance of site including buildings, fences and cleaning; weed control.

Excludes upgrades and replacements of equipment which should be capex.

Physical measure: Number of projects completed by distribution substation; Number of substations and voltage regulators maintained by zone substation; Number of distribution substation properties maintained

Distribution substation transformers maintenance

A subset of Distribution Substation Equipment & Property Maintenance. Maintenance of all transformers in distribution substations and associated secondary protection and communication equipment.

Includes all direct costs (labour, material, contract, motor vehicle); maintenance of HV to LV transformers; inspecting, testing and maintaining transformer equipment, apparatus and hardware; protection and communication directly associated with the distribution substation.

Excludes upgrades and replacements of transformers (capex); maintenance of distribution substation equipment other than transformers under Distribution Substation Equipment & Property Maintenance.

Physical measure: Number of installed transformers by distribution substation

<i>Distribution switchgear maintenance</i>	<p>Maintenance of distribution network switches.</p> <p>Includes all direct costs (labour, material, contract, motor vehicle); distribution air break switches; distribution metal clad switchgear; distribution auto-reclosers; pole mounted and ground mounted switchgear; HV and LV switchgear</p> <p>Physical measure: Number of switches maintained by zone substation.</p>
<i>Distribution system</i>	Has the meaning prescribed in the National Electricity Rules
<i>Documents</i>	Includes correspondence, notices, circulars, memoranda, minutes, notes, reports, contracts or agreements in the possession, power or control of DNSP.
<i>Dual function asset</i>	Has the meaning prescribed in the National Electricity Rules
<i>Easement</i>	All rights to enjoyment over property not registered to DNSP and includes, without limitation, rights to access and maintain land, build and maintain assets on land and wayleaves
<i>Economic Benchmarking RIN for distribution network service providers</i>	The Notice issued on DNSP on 28 November 2013 for the purposes of collecting information for economic benchmarking
<i>Economic life</i>	<p>An asset's economic life is the estimated period after installation of the new asset during which the asset will be capable of delivering the same effective service as it could at its installation date.</p> <p>The period of effective service needs to consider the life cycle costs between keeping the asset in commission and replacing it with its modern equivalent.</p> <p>Life cycle costs of the asset include those associated with the design, implementation, operations, maintenance, renewal and rehabilitation, depreciation and cost of finance.</p>
<i>Elevated Work Platform (HCV)</i>	Elevated work platforms (HCV) are Motor Vehicles that have permanently attached elevating work platforms that would be HCVs but for the exclusion of elevated work platforms from the definition of HCV.
<i>Elevated Work Platform (LCV)</i>	Elevated work platforms (LCV) are Motor Vehicles that have permanently attached elevating work platforms that are not Elevated work platform (HCV).
<i>Embedded generation</i>	See <i>embedded generator</i> .
<i>Embedded generator</i>	Has the meaning prescribed in the National Electricity Rules.
<i>Embedded generation connection</i>	The connection of residential Photo Voltaic systems or district embedded generating system networks.
<i>Emergency response</i>	<p>Costs incurred to restore a failed component to an operational state including all expenditure relating to the work incurred where supply has been interrupted or assets damaged or rendered unsafe by a breakdown, making immediate operations and/or repairs necessary.</p> <p>Costs of activities primarily directed at maintaining network functionality and for which immediate rectification is necessary. These activities are primarily due to network failure caused by weather events, vandalism, traffic accidents or other physical interference by non-related entities.</p>
<i>Energisation</i>	The closing of a connection in order to allow the flow of energy to the premises.
<i>Excluded Interruption</i>	Interruptions excluded under clause 3.3(a) of the service target performance incentive scheme, or a <i>customer</i> installation fault.
<i>Field devices (Repex)</i>	This includes old fashioned electromechanical relays and modern digital relays that incorporate many functions. This includes field devices such as relays, Remote Terminal Unit, Program Logic Controllers, Data storage, communication interfaces, and local master stations.

<i>Fee-based services</i>	<p>Fee-based services are provided for the benefit of individual customers rather than uniformly supplied to all network customers. Some services of this type are homogenous in nature and scope. This means that these services are provided on a fixed fee basis.</p> <p>These services may, in some jurisdictions, be classified as ancillary network services charged on a fixed fee basis.</p>
<i>Fire start</i>	<p>Any fire:</p> <ul style="list-style-type: none"> • that starts in and originates from the reporting NSP's distribution system; or • started by any tree, or part of a tree which falls or blows in or grows into contact with the reporting NSP's distribution system; or • started by any person, bird, reptile or other animal coming into contact with the reporting NSP's distribution system; or • started by lightning striking the reporting NSP's distribution system; or • started by any other thing forming part of or coming into contact with the reporting NSP's distribution; or • otherwise started by the reporting NSP's distribution system
<i>Fuse</i>	<p>A device used in distribution networks that can break electrical connection of a load from a supply when current exceeds specified value and duration. For the purpose of replacement expenditure classification, switches that incorporate a fuse (fuse switches) are classified as switch.</p>
<i>Ground clearance (vegetation management)</i>	<p>The trimming or removal of low-lying vegetation (e.g. shrubs, saplings). This includes work surrounding the use of herbicides, chemical treatment and wash-downs.</p>
<i>GSL</i>	<p>The minimum guaranteed service level which <i>customers</i> are entitled to receive from <i>distributions</i>; as defined in each NEM jurisdiction's energy regulation, the relevant <i>distribution determination</i>, or the <i>distribution's</i> own charter.</p>
<i>GSL payments</i>	<p>Voluntary or mandated payments made by DNSPs to a <i>customer</i> when the <i>customer</i> received service at a level worse than the prescribed GSL service level. DNSPs must make GSL payments in accordance with the relevant jurisdictional energy regulation.</p>
<i>Hazard tree</i>	<p>A tree that is reasonably considered to be unhealthy, unstable, or in a condition where it is reasonably likely for trees, limbs or branches to contact electricity assets.</p>
<i>Heavy Commercial Vehicle (HCV)</i>	<p>Heavy commercial vehicles (HCVs) are Motor Vehicles that are registered for use on public roads excluding Elevated Work Platform (HCV)s that:</p> <ul style="list-style-type: none"> • have a gross vehicle mass greater than 4.5 tonnes; or • are articulated Vehicles; or • are buses with a gross vehicle mass exceeding 4.5 tonnes
<i>High voltage</i>	<p>Assets that distribute electricity at voltage levels between the sub transmission and LV sections of the network. The connection boundaries are the outgoing terminals of the HV circuit breakers at the zone substations to the HV terminals of the HV to LV distribution transformers.</p>
<i>HV feeder</i>	<p>A <i>distribution line</i> with a nominal voltage that is at or below 33 kV and above 1 kV, and connects <i>distribution substations</i> to a <i>zone substation</i></p> <p>Includes all connected <i>lines</i> and <i>cables</i> from the point of origin (typically a <i>zone substation</i>) to the normally-open points or <i>line/cable</i> terminations.</p>
<i>Inspection cycle</i>	<p>The planned or actual duration between two consecutive inspections of an asset</p>
<i>Inspection (Vegetation management)</i>	<p>Inspections only for the purpose of identifying of trees or other vegetation that require trimming or removal. This includes vegetation scoping works, the use of <i>LIDAR</i>, aerial and other forms of inspection.</p>

<i>Installed assets – quantity currently in commission by year</i>	The number of assets currently in commission and the year they were installed.
<i>Interruption</i>	An interruption is as defined in the STPIS.
<i>Interval energy data</i>	Data which results from the measurement of the flow of electricity in a power conductor where the data is prepared into intervals which correspond to a trading interval or are sub-multiples of a trading interval.
<i>IT & Communications</i>	See Non-network IT & Communications expenditure
<i>Labour Classification Level – Executive manager</i>	A manager responsible for managing multiple senior managers. NSPs typically may have one or more executive managers in areas such as CEO, HR, Finance & Treasury, Legal, Corporate and Network Operations.
<i>Labour Classification Level – Senior Manager</i>	A manager responsible for managing multiple managers who each manage work teams and projects within the organisation
<i>Labour Classification Level - Manager</i>	A manager responsible for managing up to full project teams of staff
<i>Labour Classification Level - Professional</i>	Professional workers who do not have a primary role as staff managers. These may include lawyers, accountants, economists etc.
<i>Labour Classification Level – Semi professional</i>	Workers with some specialist training supporting fully trained professionals (e.g. draftsperson, bookkeeper etc).
<i>Labour Classification Level – Support staff</i>	Non-professional support staff not undertaking filed work (e.g. clerical support, secretaries)
<i>Labour Classification Level – intern, junior staff, non-field work apprentice</i>	Interns, junior staff and apprentices undertaking non field work. All apprentices undertaking or training to undertake field work should be reported under <i>Labour Classification Level - Apprentice</i>
<i>Labour Classification Level – Skilled electrical worker</i>	Fully qualified/trained electrical workers. This will include line workers, cable jointers, electrical technicians and electricians who have completed an apprenticeship.
<i>Labour Classification Level – Skilled non electrical worker</i>	Skilled non electrical worker employed for their skill set. Examples are tradesmen who have completed an apprenticeship such as carpenters, mechanic, painters and arborists.
<i>Labour Classification Level - Apprentice</i>	A field worker employed as part of a government accredited apprenticeship program. This includes all apprentices who will not primarily be working in offices once fully trained (e.g. apprentices training to become electrical workers, fitters and turners, plumbers, painters, mechanics and arborists)
<i>Labour Classification Level – unskilled worker</i>	Field workers with limited specialist training. This includes workers who have completed short courses with no other qualifications (e.g. labourer, arborist's assistant, traffic controller, meter reader)
<i>Labour costs</i>	<p>The costs of:</p> <ul style="list-style-type: none"> • Labour hire; and • Ordinary time earnings; and • Other earnings, on-costs and taxes; and • Superannuation. <p><i>Labour hire</i> – means expenditure:</p> <ul style="list-style-type: none"> • incurred under labour hire contracts. • Excludes expenditure required under contracts other than labour hire contracts, irrespective of whether or not the contract includes a labour component.

Ordinary time earnings – means expenditure:

- that was required under contracts of employment with the reporting NSP; and
- which constitutes ordinary time salaries and wages.

Includes expenditure related to full time, part-time, and casual employees.

Includes expenditure related to ongoing and temporary employment contracts.

Excludes expenditure required under contracts other than employment contracts, irrespective of whether or not the contract includes a labour component.

Excludes overtime, allowances, bonuses and incentive payments, and superannuation contributions.

Excludes payroll tax paid and fringe benefits tax paid.

Other earnings, on-costs, and taxes – means expenditure:

- that was required under contracts of employment with the reporting NSP; and
- which does not constitute employer superannuation contributions; and
- which constitutes:
- overtime; and/or
- staff allowances, including allowances for expenses incurred (e.g. meal allowances) and allowances for nature of work performed (e.g. special skills allowance, or living away from home allowance); and/or
- bonuses, incentive payments, and awards; and/or
- benefits in kind and corresponding compensation payments (e.g. housing, electricity or gas subsidies); and/or
- termination and redundancy payments; and/or
- workers compensation; and/or
- purchase of protective clothing for use by employees; and/or
- training and study assistance provided to employees; and/or
- taxes (payroll tax, fringe benefits tax etc.)

Includes expenditure related to full time, part-time, and casual employees.

Includes expenditure related to ongoing and temporary employment contracts.

Excludes expenditure required under contracts other than employment contracts, irrespective of whether or not the contract includes a labour component.

Superannuation – means expenditure:

- that was required under contracts of employment with the reporting NSP; and
- which constitutes employer superannuation contributions.

Includes expenditure related to full time, part-time, and casual employees.

Includes expenditure related to ongoing and temporary employment contracts.

Excludes expenditure required under contracts other than employment contracts, irrespective of whether or not the contract includes a labour component.

LiDAR

Light detection and ranging

Light Commercial Vehicle (LCV)

Light commercial vehicles (LCVs) are Motor Vehicles that are registered for use on public roads excluding elevated work platforms that:

- are rigid trucks or load carrying vans or utilities having a gross vehicle mass greater than 1.5 tonnes but not exceeding 4.5 tonnes; or
 - have cab-chassis construction, and a gross vehicle mass greater than 1.5 tonnes but
-

	<p>not exceeding 4.5 tonnes; or</p> <ul style="list-style-type: none"> are buses with a gross vehicle mass not exceeding 4.5 tonnes.
<i>Light installation</i>	<p>The installation on a <i>major</i> or <i>minor</i> road for the purpose of establishing new: Luminaires, including associated components such as bracket and lamp.</p> <p>The installation may also include:</p> <ul style="list-style-type: none"> Poles dedicated to public lighting services and Underground or overhead cabling dedicated to public lighting services.
<i>Light maintenance</i>	<p>The operating cost associated with the repair and inspection of the following public lighting assets on a major or minor road:</p> <ul style="list-style-type: none"> Luminaires Brackets Lamps Poles dedicated to public lighting services; and Underground or overhead cabling dedicated to public lighting services. <p>Light maintenance should include the operational repairs and inspection of the public lighting assets, not including capital expenditure.</p>
<i>Light replacement</i>	<p>The cost of replacement on a major or minor road of any of the following public lighting assets:</p> <ul style="list-style-type: none"> Luminaires Brackets Lamps Poles dedicated to public lighting services; and Underground or overhead cabling dedicated to public lighting services. <p>Light replacement should be estimated as the replacement of public lighting assets with their modern equivalent, where the public lighting assets have reached the end of their economic life.</p>
<i>Light type</i>	<p>DNSP should nominate the light type and/or standard wattage used. This will be consistent with the light types listed in annual tariff proposals. For example: Sodium, Fluorescent, Mercury, Metal Halide lighting types.</p>
<i>Line</i>	<p>See '<i>overhead conductor</i>'.</p>
<i>Local network wiring assets (repex)</i>	<p>Assets that connect sensors, current and voltage transformers and other status indicators to the field devices.</p>
<i>Long rural</i>	<p>In the context of capex and opex data, and related volume/ non-financial variables, refers to costs and works on a <i>Long rural feeder</i> and all assets downstream of that feeder.</p>
<i>Long rural feeder</i>	<p>Has the meaning described in the <i>Service Target Performance Incentive Scheme</i>.</p>
<i>LV feeder</i>	<p>A <i>distribution line</i> that is not a <i>subtransmission line</i> or a <i>high voltage feeder</i> or an overhead service wire or an underground service cable.</p> <p>Includes <i>switchgear</i> located on the feeder rather than in a <i>subtransmission substation</i>, <i>zone substation</i>, or <i>distribution substation</i>.</p> <p>Includes all non-transforming <i>substations</i> used to switch two or more <i>distribution lines</i> that are associated with the <i>low voltage feeder</i>.</p>
<i>Maintenance</i>	<p>Operational repairs and maintenance of the distribution system including high voltage and low voltage assets, and including testing, investigation, validation and correction costs not involving capital expenditure. This also includes location of underground cables and covering of low voltage mains for safety reasons.</p> <p>Includes the maintenance of public lighting, as well as scheduled maintenance, meter investigations, special readings and photovoltaic (PV) installations</p>

	For AMI services, includes the maintenance of meters and time switches
<i>Maintenance cycle</i>	The planned or actual duration between two consecutive maintenance works on an asset
<i>Maintenance span</i>	A span within DNSP's network that is subject to active <i>vegetation management</i> practices in the relevant year. Active <i>vegetation management</i> practices do not include <i>inspection</i> of vegetation <i>maintenance spans</i> .
<i>Major event</i>	Has the same meaning as specified in the <i>service target performance incentive scheme</i>
<i>Major Event Day (MED)</i>	Has the same meaning as specified in the <i>service target performance incentive scheme</i> .
<i>Major road</i>	Roads on which the visual requirements of motorists are dominant (e.g. traffic routes). Typically the responsibility of a state or territory road authority.
<i>Major storm</i>	Tropical cyclone of Category 1 or above as classified by the Australian Bureau of Meteorology.
<i>Management (network overhead)</i>	Includes all costs associated with general management of the network business, i.e. management and management support staff not directly involved with any other network overhead functions listed under <i>Network Overhead</i> .
<i>Master station assets (repex)</i>	Includes those network assets dedicated communication devices, front end processors, data servers, master station servers, control room HMI's including wall mounted large screens.
<i>Material Project</i>	A Project that relates to one or more Capex Categories and which over the life of the works exceeds: <ul style="list-style-type: none"> • \$2 million (nominal dollars) in the case of a project which relates to non-network categories; or • \$5 million (nominal dollars) in the case of all other projects.
<i>Maximum demand</i>	Has the meaning prescribed in the National Electricity Rules. Note: this <i>Notice</i> sets out the specific types of <i>maximum demand</i> information we require to perform our obligations under the NER. For the avoidance of doubt, <i>maximum demand</i> refers to 30 minute demand unless otherwise indicated.
<i>Meter data services</i>	Has the meaning prescribed in the National Electricity Rules.
<i>Meter investigation</i>	The cost to investigate a metering request at a given supply point i.e. Interval data analysis; meter malfunction; wiring transposition (polarity) investigation; contestable metering investigation and meter tampering or bypass.
<i>Meter maintenance</i>	The cost to repair a meter currently deployed in the field. Meter maintenance costs should include the expenditure related to operational repairs of the meter unit, not including capex.
<i>Meter purchase</i>	The direct material cost of purchasing the meter unit for installation or replacement. This includes the cost of delivery to DNSP's store, including testing of equipment and inclusion of spare parts.
<i>Meter reading</i>	The scheduled collection of energy data from a metering installation on a cycle that equates to the end-use customer's billing cycle, usually monthly or quarterly.
<i>Meter replacement</i>	The replacement cost of a meter and associated equipment at a site with existing metering infrastructure. This activity should be estimated as the replacement of a meter with its modern equivalent, where the meter has reached the end of its economic life. <i>Replacement</i> is a non-demand driven activity where the existing asset cannot be efficiently maintained to meet its service performance requirement.
<i>Meter testing</i>	Routine testing, for the purposes of complying with AEMO's metrology procedure, including the ongoing and regular maintenance testing, compliance testing and in-service testing of metering installation components initiated by the responsible person or Metering Provider to fulfil their

	obligations in accordance with S7.3 of the Rules.
<i>Meter type 4</i>	<p>Remotely read interval meter with communications functionality that is:</p> <ul style="list-style-type: none"> • designed to transmit metering data to a remote location for data collection; and • does not, at any time, require the presence of a person at, or near, the meter for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading), <p>including, but not limited to, an interval meter that transmits metering data via direct dialup, satellite, the internet, general packet radio service, power line carrier, or any other equivalent technology.</p>
<i>Meter type 5</i>	Manually read interval meter that records interval energy data, which is not a remotely read interval meter.
<i>Meter type 6</i>	Manually read accumulation meter which measures and records electrical energy in periods in excess of a trading interval.
<i>Metering Services.</i>	<p>Metering Services for <i>meter types 4–6</i> include:</p> <ul style="list-style-type: none"> • <i>Meter purchase</i> • <i>Meter testing</i> • <i>Meter investigation</i> • <i>Scheduled meter reading</i> • <i>Special meter reading</i> • <i>New meter installation</i> • <i>Meter replacement</i> • <i>Meter maintenance</i> • Other (all activities not captured by the defined meter service categories including those activities relating to type 7 meters).
<i>Minor road</i>	Roads on which the visual requirements of pedestrians are dominant (e.g. local roads and lighting that is applicable to areas other than roads outdoor public areas, e.g. outdoor shopping). Typically the responsibility of a local Government authority.
<i>Miscellaneous fee-based services</i>	Those fee-based services that are provided by some but not all DNSPs. This would include, among other services, service truck visits and wasted service truck visits.
<i>Motor Vehicle</i>	Is any motor vehicle registered for use on public roads excluding motor vehicles not generally moved large distances on public roads under their own power (e.g. excluding tractors, forklifts, backhoes, bobcats and any other road registered mobile plant).
<i>Motor Vehicles Expenditure</i>	<p>Motor Vehicle Expenditure is defined as all expenditure directly attributable to Motor Vehicles including: purchase, replacement, operation and maintenance of motor vehicles assets registered for use on public roads, excluding mobile plant and equipment. It excludes expenditure on vehicles not generally moved large distances on public roads under their own power. Expenditure on registered vehicles that is not Motor Vehicles Expenditure for this reason should be reported under the Other Non-network expenditure category include: tractors; forklifts; backhoes; bobcats and any other registered mobile plant.</p> <p>All Motor Vehicle Expenditure, irrespective of whether it is Network Motor Vehicle Expenditure or Non- Network Motor Vehicle Expenditure must be recorded in the Non-Network <i>regulatory template</i>.</p> <p>Sub Categories of Motor Vehicle Expenditure are:</p> <ul style="list-style-type: none"> • Motor Vehicle Expenditure – Cars

	<ul style="list-style-type: none"> • Motor Vehicle Expenditure – LCVs • Motor Vehicle Expenditure – HCVs • Motor Vehicle Expenditure – Elevated Work Platforms (LCVs) • Motor Vehicle Expenditure – Elevated Work Platforms (HCVs) •
<i>Motor Vehicle – Descriptor Metric – Average Kilometres Travelled</i>	The average kilometres travelled per vehicle in the fleet for that category of vehicle due to <i>standard control services</i> work. The vehicle fleet includes all vehicles that have been used for <i>standard control services</i> work (in relation to historic data), or are expected to be used for <i>standard control services</i> work (in relation to forecast data) for that category of vehicle.
<i>Motor Vehicle – Descriptor Metric – Number Purchased</i>	The number of vehicles in the fleet purchased in that year for that category of vehicle scaled for <i>standard control services</i> use (e.g. a vehicle purchased that is expected to be used 50% of the time for <i>standard control services</i> work would equal 0.5 vehicles). The vehicle fleet includes all vehicles that have been used for <i>standard control services</i> work (in relation to historic data), or are expected to be used for <i>standard control services</i> work (in relation to forecast data) for that category of vehicle.
<i>Motor Vehicle – Descriptor Metric – Number Leased</i>	The average number of vehicles leased in the fleet for that year for that category of vehicle scaled for <i>standard control services</i> use (e.g. a vehicle purchased that is expected to be used 50% of the time for <i>standard control services</i> work would equal 0.5 vehicles). The vehicle fleet includes all vehicles that have been used for <i>standard control services</i> work (in relation to historic data), or are expected to be used for <i>standard control services</i> work (in relation to forecast data) for that category of vehicle.
<i>Motor Vehicle – Descriptor Metric – Number in Fleet</i>	The number in fleet is the average number of vehicles in the fleet in that year for that category of vehicle scaled for <i>standard control services</i> use (e.g. a vehicle in the fleet used 50% of the time for <i>standard control services</i> work would equal 0.50 vehicles). The vehicle fleet includes all vehicles that have been used for <i>standard control services</i> work (in relation to historic data), or are expected to be used for <i>standard control services</i> work (in relation to forecast data) for that category of vehicle.
<i>Motor Vehicle – Descriptor Metric – Proportion of total fleet expenditure allocated as regulatory expenditure</i>	The proportion of total fleet expenditure (capex and opex) for that category of vehicle allocated as <i>standard control services</i> expenditure. The vehicle fleet includes all vehicles that have been used for <i>standard control services</i> work (in relation to historic data), or are expected to be used for <i>standard control services</i> work (in relation to forecast data) for that category of vehicle.
MVA	Mega volt ampere
<i>MVA added for distribution substation</i>	Should be calculated as the sum of distribution substations capacity nameplate ratings installed for connection services
MW	Megawatt
<i>N-1 emergency (for lines and cables)</i>	The maximum peak load for a given load cycle that a <i>line</i> can supply for up to 15 minutes under a single contingency emergency condition.
<i>N-1 emergency (for substations)</i>	The maximum peak load for a given load cycle that a substation can supply for up to two hours under a single contingency emergency condition.
<i>Nameplate rating</i>	Has the meaning as prescribed in the National Electricity Rules. For the avoidance of doubt, DNBP must provide information in MVA where specified.
<i>negotiated distribution service</i>	A distribution service that is a negotiated network service within the meaning of section 2C of the National Electricity Law.
NEL	National Electricity Law - means the National Electricity Law set out in schedule to the National Electricity Rules (South Australia) Act 1996.
NER	National Electricity Rules - means the Rules, as defined in the National Electricity Law.

<i>Network</i>	Has the meaning as prescribed in the National Electricity Rules.
<i>Network business – network error (supply interruptions)</i>	An unintended interruption to supply caused by the direct action of the network business, its employees or contractors. For example a network crew digging into a live cable. This excludes switching errors or outages due to causes included in other categories.
<i>Network business – Switching or protection error (supply interruptions)</i>	An interruption of supply that is a direct result of incorrect switching or errors in switch practices, mal-operations of protective devices or mal-operations due to protection or design flaws.
<i>Network coincident maximum demand</i>	The load on the <i>network</i> at the time during which the <i>network</i> was experiencing its <i>maximum demand</i> for the relevant regulatory year.
<i>Network control (network overhead)</i>	Includes all costs associated with network control (system operations). This includes functions such as planning and scheduling of switching activities, control room staff, management of field crews, dispatch operators, associated support staff, as well as management directly associated with these functions.
<i>Network Motor Vehicles Expenditure</i>	Motor Vehicle Expenditure is where the key/dominant driver for purchase or acquisition of the Motor Vehicle is related to use supporting the operation, development, maintenance or management of the network.
<i>Network Operating Costs</i>	Operational costs associated with the operation of the network including, but not restricted to, the staffing of the control centre(s), operational switching personnel, outage planning personnel, provision of authorised network personnel, demand forecasting, procurement, logistics and stores, information technology (IT) costs directly attributable to network operation, insurance costs and land tax costs. Demand forecasting costs include labour, material and IT charges for the purposes of forecasting peak demand, energy growth and customer numbers in the distribution licence area, but do not include energy trading costs related to the wholesale purchase of electricity.
<i>Network Overhead</i>	<p><i>Network Overhead</i> costs refer to the provision of network, control and management services that cannot be directly identified with specific operational activity (such as routine maintenance, vegetation management, etc.).</p> <p>For distribution NSPs, <i>Network Overhead</i> includes the following:</p> <ul style="list-style-type: none"> • management (not directly related to any of the functions listed below) • network planning (i.e. system planning) • network control and operational switching personnel • quality and standards functions including standards & manuals, asset strategy (other than network planning), compliance, quality of supply, reliability, and network records (e.g. geographical information systems (GIS)) • project governance and related functions including supervision, procurement, works management, logistics and stores • Other including training, OH&S functions, training, network billing and <i>customer service & call centre</i> <p>In addition to the above, <i>Network Overhead</i> includes:</p> <ul style="list-style-type: none"> • Meter reading • Advertising/marketing • Guaranteed Service Level (GSL) payments • National Energy Customer Framework (NECF)-related expenses • Feed-in tariffs • Demand side management (DSM) expenditure/ non-network alternatives • Levies.

<i>Network planning (network overhead)</i>	<p>Includes all costs associated with developing visions, strategies, or plans for the development of the network. This includes functions such as demand forecasting, network analysis, preparation of planning documentation, area plans, and the like, as well as management directly associated with these functions.</p> <p>Excludes planning costs for specific projects, which should be attributed to direct costs (and not overhead).</p>
<i>Network records (network overhead)</i>	<p>Includes all costs associated with the development and maintenance of network records such as information in geographic information systems, network outage information, network capacity/ratings, network loading records, etc. except where these costs are included in any of the other <i>Network Overhead</i> categories.</p>
<i>Network underground cable maintenance</i>	<p>Inspection, testing and maintenance of underground HV distribution and LV cable installations and terminations.</p> <p>Includes all direct costs (labour, material, contract, motor vehicle); power, supervisory and protection cable maintenance and ancillaries such as conduits, tunnels, manholes, cover slabs, sumps and terminations; cable location inquiries; cable maintenance for all voltages; total lengths of distribution feeder cables emanating from a zone substation.</p> <p>Excludes underground service cable maintenance (see Pole Top, Overhead Line and Services Maintenance); all cables and major replacements inside a zone substation except feeder cables; cable repairs made as part of an emergency or fault restoration and repair of damage caused by other parties.</p> <p>Physical measure: Length of cables maintained by zone substation; Number of joints.</p>
<i>New meter installation</i>	<p>Has the meaning of <i>metering installation</i> as prescribed in the National Electricity Rules and should also include the expenditure associated with deploying refurbished meters in <i>new meter installations</i>.</p>
<i>NMI</i>	<p>National Metering Identifier – has the meaning prescribed in the National Electricity Rules</p>
<i>Non-coincident maximum demand</i>	<p>The load on the specified <i>network</i> segment, at the time during which the relevant <i>network</i> segment was experiencing its <i>maximum demand</i> for the relevant regulatory year. This is irrespective of whether the <i>network</i> was also experiencing <i>maximum demand</i>.</p>
<i>Non-network Buildings and Property Expenditure</i>	<p>Expenditure directly attributable to non-network buildings and property assets including: the replacement, installation, operation and maintenance of non-network buildings, fittings and fixtures. It includes expenditure related to real chattels (e.g. interests in land such as a lease) but excludes expenditure related personal chattels (e.g. furniture) that should be reported under Non-network Other expenditure.</p>
<i>Non-network – Current year</i>	<p>Means the most recently completed regulatory year for which regulatory accounts have been filed with the Australian Energy Regulator (i.e. 2012/13)</p>
<i>Non-network IT & Communications Expenditure</i>	<p>Is all non-network expenditure directly attributable to IT and communications assets including replacement, installation, operation, maintenance, licensing, and leasing costs but excluding all costs associated with SCADA and Network Control Expenditure that exist beyond gateway devices (routers, bridges etc.) at corporate offices.</p> <p>IT & Communications Expenditure includes:</p> <ul style="list-style-type: none"> • costs associated with SCADA and Network Control that exist at the Corporate office side of gateway devices (routers, bridges etc.). For example, this would include cost associated with SCADA master systems/control room and directly related equipment • IT & Communications Expenditure related to management, dispatching and coordination, etc. of network work crews (e.g. phones, radios etc.). • any common costs shared between the SCADA and Network Control Expenditure and IT & Communications Expenditure categories with no dominant driver related to either of these expenditure categories. For example, a dedicated communications link used for both corporate office communications and network data communications with no dominant driver for incurring the expenditure attributable to

	<p>either expenditure category should be reported as IT & Communications Expenditure.</p> <ul style="list-style-type: none"> expenditure related to network metering recording and storage at non network sites (i.e. corporate offices/sites) Sub categories of Non-network IT& Communications Expenditure are: <ul style="list-style-type: none"> Client Devices Expenditure Recurrent Expenditure (excluding any client devices expenditure) Non-Recurrent Expenditure (excluding any client devices expenditure).
<i>Non-network IT & Communications Expenditure Client Devices Expenditure</i>	Client Devices Expenditure is expenditure related to a hardware device that accesses services made available by a server. Client Devices Expenditure includes hardware involved in providing desktop computers, laptops, tablets and thin client interfaces and handheld end user computing devices including smart phones, tablets and laptops.
<i>Non-network IT & Communications - Non Recurrent Expenditure</i>	IT & Communications - Non Recurrent is all IT & Communications Expenditure that is Non-recurrent Expenditure excluding any expenditure reported under IT & Communications Expenditure - Client Devices Expenditure.
<i>Non-network IT & Communications Expenditure - Recurrent Expenditure</i>	Is all IT & Communications Expenditure that is Recurrent Expenditure excluding any expenditure reported as IT & Communications Expenditure - Client Devices Expenditure.
<i>Non-network IT & Communication - user numbers</i>	Active IT system log in accounts used for <i>standard control services</i> work scaled for <i>standard control services</i> use (i.e. an account used 50% of the time for <i>standard control services</i> work equals 0.5 active IT log in accounts)
<i>Non-network It & Communications – device numbers</i>	The number of client devices used to provide <i>standard control services</i> scaled for <i>standard control services</i> use (i.e. a device used 50% of the time for <i>standard control services</i> work equals 0.5 devices).. Client Devices are hardware devices that accesses services made available by a server and may include desktop computers, laptops, tablets and thin client interfaces and handheld end user computing devices including smart phones, tablets and laptops.
<i>Non-network IT & Communications Expenditure – Descriptor Metric – employee numbers</i>	The average number of employees engaged in <i>standard control services</i> work over the year scaled for time spent on <i>standard control services</i> work (i.e. an employee spending 50% of their time on <i>standard control services</i> work equating to 0.5ASLs for the purposes of the labour metrics would be 0.5 employees). This metric does not include labour engaged under labour hire agreements.
<i>Non-Network Other Expenditure</i>	<p>Is all expenditure directly attributable to the replacement, installation, maintenance and operation of Non-network assets, excluding Motor Vehicle assets, Building and Property assets and IT and Communications assets and includes</p> <ul style="list-style-type: none"> non road registered motor vehicles; non road motor vehicles (e.g. forklifts, boats etc.); mobile plant and equipment; tools; trailers (road registered or not); elevating work platforms not permanently mounted on motor vehicles; and mobile generators.
<i>Non-productive work hours</i>	Work hours that are non-productive work hours such as annual leave; sick leave ,training course and sessions (that are more than supervised on the job training, mentoring and normal employee feedback and development) and other non-productive work hours. For avoidance of doubt, time apprentices spend in trade school/formal training not performing their substantive job would be <i>Non-productive work hours</i> .
<i>Non-recurrent Expenditure</i>	Is all Expenditure that is not Recurrent Expenditure in relation to the specific category of expenditure
<i>Non-routine maintenance</i>	Costs (opex) of activities predominantly directed at managing asset condition or rectifying

	<p>defects (excluding emergency call-outs). The timing of these activities depends on asset condition and decisions on when to maintain or replace the asset, which may vary over time and across NSPs.</p> <p>Activities to maintain asset condition and/or to maintain the capacity of the distribution system to distribute electricity, and where the activities are not routine in nature.</p> <p>The non-routine activities may be undertaken in a discriminate manner for individual assets.</p> <p>Excludes routine asset maintenance activities.</p> <p>Excludes activities that are designed to increase or improve the capacity of the distribution system to distribute electricity, except where the increase or improvement is incidental to the maintenance of the distribution system.</p> <p>Excludes asset removal, asset replacement, new asset installation, vegetation management, and emergency response.</p> <p>May include:</p> <ul style="list-style-type: none"> • activities to inspect, survey, audit, test, repair, alter, or reconfigure assets • functional and intrusive testing of assets, including spares and equipment; <p>Includes load monitoring and switching activities attributable to non-routine asset maintenance.</p>
<i>Normal cyclic rating</i>	The maximum peak loading based on a given daily load cycle that an asset or element of the <i>network</i> can supply each day of its life under normal conditions resulting in a normal rate of wear. DN SP must provide its definition(s) of 'normal conditions'.
<i>Normal cyclic rating (for substations)</i>	The maximum peak loading based on a given daily load cycle that a <i>substation</i> can supply each day of its life under normal conditions resulting in a normal rate of wear. DN SP must provide its definition(s) of 'normal conditions'.
<i>Notice</i>	The regulatory information notice to which this document is an appendix.
<i>NSP</i>	Network Service Provider
<i>ONAN</i>	Oil natural air natural
<i>Operational switching (network overhead)</i>	Includes all costs associated with field crews that undertake the operational switching of the network to facilitate network access or restoration, as well as any directly associated local management that is not included in the <i>Network Control</i> category.
<i>Opex</i>	<p>The costs of operating and maintaining the network (excluding all capital costs and capital construction costs).</p> <p>Operating expenditure</p>
<i>Opex Category</i>	<p>Means operating expenditure associated with the following categories:</p> <ul style="list-style-type: none"> • Non-network expenditures • Vegetation management • Maintenance • Emergency response • <i>Network Overheads</i> and <i>Corporate Overheads</i>
<i>Other (supply interruptions)</i>	An interruption to supply that is not covered in any of the other reason for interruption categories. A short description should be provided under detailed reason for interruption.
<i>Other costs (metering)</i>	<p>The costs of performing metering services which are not already included in the following meter services:</p> <ul style="list-style-type: none"> • <i>Meter purchase</i> • <i>Meter testing</i> • <i>Meter investigation</i>

- *Scheduled meter reading*
- *Special meter reading*
- *New meter installation*
- *Meter replacement*
- *Meter maintenance*

Costs for *meter data services*, which apply to meter types 4–7 should be reported in the meter associated works category.

<i>Outage</i>	Has the meaning prescribed in the National Electricity Rules
<i>Overhead asset inspection</i>	All inspection of network overhead assets. Includes all direct costs (labour, material, contract, motor vehicle); thermal survey programs. Physical measure: Route km line patrolled by zone substation
<i>Overhead conductors</i>	These assets have the primary function of distributing power, above ground, within the distribution network. It excludes any pole mounted assets that are included in any other asset group.
<i>Overhead connection</i>	A physical aerial link between the distribution system and a customer's premises from a pole to the customer's premises.
<i>Overhead service wire</i>	A length of overhead conductor that runs from a distribution pole to a distribution customer's, excluding customer which are other network service providers, connection point.
<i>Overheads</i>	Expenditure that cannot be directly attributed to a work activity, project or work order. Consists of labour, materials, contract costs and other costs. Overheads can also be referred to as 'shared costs' (e.g. in the NSPs' Cost Allocation Method documents). <i>Overheads</i> are disaggregated into <i>Network Overheads</i> and <i>Corporate Overheads</i> .
<i>Overloads (supply interruptions)</i>	Where the normal (including peak) customer loads of the network caused a current limiting device to operate. Does not include overloads caused by phase-to-phase or phase-to-ground faults. Does not include overloads due to network errors, switching errors or emergency switching.
<i>Paid FTE</i>	The number of full-time equivalent employees receiving salary or wages by the organisation at the end of a pay period. Part-time employees are converted to full-time equivalent. Includes: <ul style="list-style-type: none"> • all active full-time and part-time, ongoing and non-ongoing employees engaged for a specified term or task paid through payroll (part-time employees are converted to full-time equivalent based on the hours they work). • workers engaged under labour hire contracts. Excludes: <ul style="list-style-type: none"> • Overtime. • Employees on unpaid leave.
<i>Planned (supply interruptions)</i>	The interruption to supply was planned by the DNSP and <i>customers</i> were notified in advance.
<i>Pole inspection and treatment</i>	All inspection, testing and treatment of sub transmission and/or distribution poles. Includes all direct costs (labour, material, contract, motor vehicle); inspection of network assets including poles, conductors and cross-arms; pole preserving chemical treatments. Includes inspection of vegetation where inspections of both vegetation and poles occur simultaneously.

	<p>Excludes customers HV lines; LV overhead private electric lines. Excludes inspection of vegetation where inspection is for vegetation only (this is captured under Vegetation Management).</p> <p>Physical measure: Number of poles inspected by zone substation.</p>
<i>Pole top, overhead line and services line maintenance</i>	<p>Maintenance of network overhead lines and pole tops, sub transmission & distribution: conveying electricity between zone substations, from zone substations to distribution substations and low voltage lines. Includes Stobie poles for South Australian NSPs. Includes services maintenance (pre-arranged maintenance of DNSP's services providing supply to customers' premises).</p> <p>Includes:</p> <p>Pole tops and overhead lines maintenance –all direct costs (labour, material, contract, motor vehicle); insulation washing; bird covers and spreaders; maintenance of all pole and conductor hardware and surge diverters not on substation poles. One pole top job will include all the maintenance activity carried out in one work session.</p> <p>Services maintenance –all direct costs (labour, material, contract, motor vehicle); removing, inspecting, testing and re-installation of overhead or underground services and associated equipment; service maintenance including attending to customer complaints not covered by Emergency Response category.</p> <p>Excludes:</p> <p>Pole tops and overhead lines maintenance –Pole Inspection and Treatment; vegetation control; pole replacement or staking; switch maintenance or recall; work on voltage complaints or television and radio interference - investigation & solution not involving capex; replacement of hardware on a pole which is being changed; the replacement of existing conductor other than minor works to ensure continuity and reliability of supply (major replacements are capex).</p> <p>Services maintenance –new connections; removing, inspecting, testing and re-installation of meters and time switches; metering personnel costs; service maintenance on fused junction boxes, joints and terminations; costs to replace any of the above assets with new assets (capex); and underground services installed to replace overhead services in relation to private electricity lines. Excludes vegetation inspection which is captured under Vegetation Management.</p> <p>Excludes poles used solely for providing public lighting services</p> <p>Physical measure: Pole tops and overhead lines – Number of pole tops maintained by zone substation; Services – Number of customer premises maintained.</p>
<i>Pole top</i>	<p>These are horizontally oriented structures and their components that provide support for overhead conductors and related assets to be supported on a pole and provide adequate clearances. This relates to expenditure incurred when a pole top structure is replaced independently of the pole it is located on. This includes cross-arms, insulators, links, fuses, air break switches and the like. It excludes any pole mounted assets that are included in any other asset group. It excludes pole mounted substations, reclosers, sectionalisers, etc.</p>
<i>Pole top structures</i>	<p>These are horizontally oriented structures and their components that provide support for overhead conductors and related assets to be supported on a pole and provide adequate clearances. This relates to expenditure incurred when a pole top structure is replaced independently of the pole it is located on. This includes cross-arms and insulators. It excludes any pole mounted assets that are included in any other asset group, notably pole mounted substations and pole mounted switchgear such as links, fuses, air break switches etc.</p>
<i>Poles</i>	<p>These are vertically oriented assets that provide load bearing structural support for overhead conductors or other lines assets. This also includes associated pole top structures, such as cross-arms and insulators where these are replaced in conjunction with a pole replacement project. It excludes other pole mounted assets that are included in any other asset group, notably pole mounted substations and pole mounted switchgear such as links, fuses, air break switches etc.</p>
<i>Poles/Towers (including pole</i>	<p>Structures that provide support for <i>overhead lines</i>, <i>transformers</i> and other <i>lines</i> assets.</p>

<i>top or tower structures)</i>	
<i>Power factor</i>	The ratio of demand in <i>MW</i> to demand in <i>MVA</i> .
<i>Primary driver</i>	The factor or cause leading directly to a decision to incur capex, categorised by the expenditure categories.
<i>Probability of exceedance (PoE)</i>	<p>Typically, actual <i>maximum demand</i> is standardised to either, or both, of 10 per cent and 50 per cent PoE levels.</p> <p>The 50 (10) PoE demand level is the level of <i>maximum demand</i> that, on average would be exceeded in 50 per cent (10 per cent) of seasons. It can be thought of as the <i>maximum demand</i> that would be observed or exceeded once every two (ten) years on average.</p> <p>The key driver of variability in demand is usually weather. However this is not always the case and the concept of POE is not necessarily tied directly to weather.</p>
<i>Productive work hours</i>	<p>Hours worked undertaking the employee/labour hire person's substantive job. This does not include <i>Non-productive work hours</i>.. Productive hours include:</p> <ul style="list-style-type: none"> - Supervised on the job training including supervision of apprentices, mentoring and normal employee feedback and development. - All normal work involved in undertaking the person's substantive job including time spent on meetings and travel between different work areas.
<i>Program</i>	A mix of capex or opex projects directed at the same purpose.
<i>Project close</i>	When the project account(s) are closed off at the completion of the project.
<i>Project governance (network overhead)</i>	Includes all costs associated with the approval and management control of network projects or programs. This includes the cost of functions such as project management offices, works management, project accounting, or project control groups where these costs are not directly charged to specific projects or programs.
<i>Protection system</i>	Has the meaning prescribed in the National Electricity Rules.
<i>Public lighting maintenance</i>	<p>Expenditure associated with the maintenance, repair or inspection of public lighting assets on <i>major roads</i> and <i>minor roads</i></p> <p>Includes all direct costs (labour, material, contract, motor vehicle)</p> <p>Physical Measure: Number of public lights serviced by zone substation; Number of kilometres patrolled by zone substation.</p>
<i>Public lighting services</i>	Public lighting services are the installation, repair, replacement and maintenance of public lighting whether owned by the NSP or by another party. This also includes alteration and relocation of existing public lighting assets. Public lighting assets include luminaires, brackets, lamps and dedicated public lighting poles (not poles that deliver network services).
<i>Quality and standards functions (network overhead)</i>	Includes all costs associated with management of the quality of supply, supply reliability, etc. It also includes all costs associated with the development, maintenance and compliance with network technical standards, service standards, quality of supply standards, etc.
<i>Quoted services</i>	<p>Quoted Services are services for which costs are recovered through quoted prices as the nature and scope of these services are specific to individual customers' needs and vary from customer to customer.</p> <p>These services may, in some jurisdictions, be classified as ancillary network services charged on a quoted basis.</p>
<i>Raw data</i>	Refers to demand without <i>weather correction</i> .
<i>Raw adjusted maximum demand</i>	<i>Raw unadjusted maximum demand</i> that is adjusted to system normal conditions. <i>DNSP</i> must adjust to system normal conditions by accounting for (temporary) <i>switching</i> relevant to the <i>network</i> segment, and for temporary load changes from major customers (such as temporary closure of major industrial customers). <i>DNSP</i> must not adjust <i>maximum demand</i> data for

	(permanent) <i>transfers, block loads or embedded generation</i> . The term, 'raw', refers to demand data that has not undergone <i>weather correction</i> .
<i>Raw unadjusted maximum demand</i>	Actual <i>maximum demand</i> as measured by the DNSP at the specified <i>network</i> segment. This must not include any adjustments for factors such as <i>switching</i> , temporary load changes from major customers, <i>transfers, block loads or embedded generation</i> . The term, 'raw', refers to demand data that has not undergone <i>weather correction</i> .
<i>Recurrent Expenditure</i>	Recurrent expenditure is expenditure that returns time after time with respect to the particular category of expenditure. Temporally, expenditure that would be expected to be reasonably consistent from regulatory period to regulatory period (taking into account volume and unit cost drivers) would be recurrent expenditure. For example, repex categories with large enough numbers of assets to require consistent replacement from regulatory period to regulatory period (taking into account increases in unit costs and increases in the volumes of assets on the network) would be recurrent expenditure. We would also expect most opex to be recurrent expenditure as it would be reasonably consistent from regulatory period to regulatory period. Examples of recurrent IT & Communications expenditure may include cyclic replacement of assets and related costs (hardware, software, training etc.). Non-recurrent expenditure is likely to include projects, particularly major projects, that are one off and not ongoing in nature (e.g. major IT or Communications systems upgrades) .
<i>Re-energisation</i>	The <i>energisation</i> of a premises after their <i>de-energisation</i> . Does not include alterations or new installation of meters or services.
<i>Regulatory Accounting Statements</i>	The financial reports revealing the performance and financial situation of ActewAGL Distribution. They show the originating statutory account amount, its translation into a regulatory account amount and its disaggregation between the different categories of distribution services that it provides.
<i>Regulatory obligations or requirements</i>	Has the meaning prescribed in the National Electricity Rules
<i>regulatory template</i>	Refers to worksheets contained within the Microsoft Excel workbooks at Appendix A to this <i>Notice</i> .
<i>Related Party</i>	In relation to DNSP, any other entity that: <ul style="list-style-type: none"> • had, has or is expected to have control or significant influence over DNSP; • was, is or is expected to be subject to control or significant influence from DNSP; • was, is or is expected to be controlled by the same entity that controlled, controls or is expect to control DNSP—referred to as a situation in which entities are subject to common control; • was, is or is expected to be controlled by the same entity that significantly influenced, influences or is expected to influence DNSP; or • was, is or is expected to be significantly influenced by the same entity that controlled, controls or is expected to control DNSP; <p>but excludes any other entity that would otherwise be related solely due to normal dealings of:</p> <ul style="list-style-type: none"> • financial institutions; • authorised trustee corporations as prescribed in Schedule 9 of the Corporations Regulations 2001 (Cth); • fund managers; • trade unions; • statutory authorities; • government departments; • local governments and includes NSP Name (ACN XXX XXX XXX); or

- where any of the entities identified in sub-paragraphs (a) to (e) have novated or assigned a contract or arrangement to or from another entity (where that contract or arrangement relates to the provision of distribution services by DNSP, the entity to whom that contract or arrangement has been novated or assigned).

<i>Related party contract</i>	A finalised <i>Contract</i> between DNSP and a <i>Related Party</i> for the provision of goods and/or services
<i>Related party margin</i>	The dollar amount of profit a <i>Related Party</i> gains above its total actual costs under a <i>Related Party Contract</i> with DNSP. This profit may include margins, management fees or incentive payments.
<i>Remote meter configuration</i>	A change to the software in the meter that enables changes to parameters for a specific meter function. Examples of meter reconfigurations may include: <ul style="list-style-type: none"> • changing the switching times for controlled loads • changes associated with the installation of embedded generation and/or the premium feed-in tariff.
<i>Remote meter reading</i>	The use of remotely read interval metering infrastructure to perform meter reading and special meter reading.
<i>Repex model</i>	Available at: http://www.aer.gov.au/node/18864
<i>Replacement Capital expenditure — ‘Repex’</i>	The non-demand driven capex to replace an asset with its modern equivalent where the asset has reached the end of its economic life.. Capex has a primary driver of replacement expenditure if the factor determining the expenditure is the existing asset's inability to efficiently maintain its service performance requirement.
<i>Replacement life</i>	Probability distribution function parameterized by the mean and standard deviation of the expected time to replacement of the assets in the asset category
<i>Residential customer connection</i>	A residential customer connection relates to connecting customers who purchase energy principally for personal, household or domestic use at premises.
<i>Review Report</i>	An Auditor's limited assurance engagement report as required by this <i>Notice</i> and prepared in accordance with the requirements set out in Appendix D of this <i>Notice</i>
<i>Route line length</i>	The aggregate length in kilometres of <i>distribution lines</i> , measured as the length of each span between poles and/or towers, and where the length of each span is considered only once irrespective of how many circuits it contains. This is the distance between <i>line</i> and <i>cable</i> segments and does not include vertical components such as sag. The length of <i>service lines</i> is not to be included in the <i>route line length</i> .
<i>Routine maintenance</i>	Costs (opex) of recurrent/programmed activities undertaken to maintain assets, performed regardless of the condition of the asset. Costs of activities predominantly directed at discovering information on asset condition, and often undertaken at intervals that can be predicted. Activities to maintain asset condition and/or to maintain the capacity of the distribution system to distribute electricity, and where the activities are: <ul style="list-style-type: none"> • routine in nature; and • indiscriminately carried out for a pre-defined set of assets; and • scheduled to occur at pre-defined intervals. May include activities to inspect, survey, audit, test, repair, alter, or reconfigure assets. A pre-defined interval may be based on the number of times the asset has operated, or any other measure, if the future timing of the maintenance based on the measure can be predicted with a reasonable level of certainty. Excludes activities that are designed to increase or improve the capacity of the distribution

	<p>system to distribute electricity, except where the increase or improvement is incidental to the maintenance of the distribution system.</p> <p>Excludes asset removal, asset replacement, new asset installation, vegetation management, and emergency response.</p> <p>May include:</p> <ul style="list-style-type: none"> • functional and intrusive testing of assets, including spares and equipment; • helicopter, vehicle, and foot patrols, including negotiation of landowner access; • asset surveys; • environmental testing; • painting of network assets; • re-conductoring lines • indoor and outdoor maintenance of substations including lawn mowing, weed control, fencing; <p>Includes load monitoring and switching activities attributable to routine asset maintenance.</p>
<i>Rural</i>	In the context of capex and opex, and related volume/ non-financial variables, is the sum of values reported for <i>short rural</i> and <i>long rural</i> .
<i>SAIDI</i>	The system average interruption duration index for the purposes of the service target performance incentive scheme.
<i>SCADA</i>	Supervisory control and data acquisition
<i>SCADA and Network Control and Protection systems replacement</i>	Replacement expenditure associated with SCADA and network control hardware, software and associated IT systems. Includes replacement of protection and control systems and communication systems. This excludes all costs associated with SCADA and Network Control Expenditure that exist within gateway devices (routers, bridges etc.) at corporate offices. Protection systems has the meaning prescribed in the National Electricity Rules
<i>SCADA and Network Control Expenditure</i>	<p>Is all expenditure directly attributable to SCADA and Network Control devices (i.e. network control or network monitoring devices) that exist beyond gateway devices (routers, bridges etc.) at corporate offices; and all communications expenditure incurred primarily for communications associated with the control or telemetering of the network (e.g. communications to and from SCADA devices or network control devices to corporate systems).</p> <p>It includes:</p> <ul style="list-style-type: none"> • all fixed IT devices on the network side of gateway devices (router, bridge etc.) at the corporate office sites; and • all communications expenditure incurred primarily for communications around the network or from network devices to corporate systems and vice versa (e.g. communications to and from smart meters and SCADA devices). •
<i>SCADA and Network Control maintenance (opex)</i>	<p>Expenditure associated with the maintenance of SCADA and network control hardware, software and associated IT and communications systems.</p> <p>Excludes maintenance of Protection Systems, which is a separate subcategory in template 2.7 Maintenance.</p> <p>Also refer to <i>SCADA and Network Control Expenditure</i> definition (capex).</p>
<i>Service Target Performance Incentive Scheme</i>	The AER's Electricity distribution network service providers: Service target performance incentive scheme dated November 2009.
<i>Service lines</i>	Includes assets that provide a physical link and associated assets between the distribution network and a customer's premises

	It excludes any pole mounted assets and meters that are included in any other asset group.
<i>Severe weather events</i>	Weather events related to Major Event Days
<i>Shared asset unregulated revenue</i>	Revenue earned by charging for unregulated services provided with shared assets. In some circumstances this may reflect revenue apportionment in line with the AER's Shared Asset Guideline.
<i>Short rural</i>	In the context of capex and opex data, and related volume/ non-financial variables, refers to costs and works on a <i>Short rural feeder</i> and all assets downstream of that feeder.
<i>Short rural feeder</i>	Has the meaning described in the <i>Service Target Performance Incentive Scheme</i> .
<i>Special meter reading</i>	An actual <i>meter reading</i> performed to support an out of cycle customer billing or consumption request.
<i>Simple commercial/industrial connection low voltage</i>	Single/multi-phase <i>customer service connection</i> and, as an example, may involve the following: <ul style="list-style-type: none"> • one or more spans of overhead service wire; • road crossing (overhead or underground). • small LV extension or augmentation of overhead and/or underground mains.
<i>Simple embedded generation connection low voltage</i>	Single/multi-phase <i>customer connection</i> service, and /or: <ul style="list-style-type: none"> ▪ one span of overhead service wire or standard underground service wire and/or road crossing; and ▪ meter upgrade.
<i>Simple residential connection low voltage</i>	Single/multi-phase <i>customer connection</i> service; and /or: <ul style="list-style-type: none"> • one span of overhead service wire or standard underground service; and/or • an overhead road crossing.
<i>Standard Control Operating Expenditure</i>	Operating expenditure relating to standard control services.
<i>Standard control service</i>	A direct control service that is subject to a control mechanism based on a Distribution Network Service Provider's total revenue requirement (as defined in the NER).
<i>Stand Down Period</i>	Where an employee, or worker employed under a labour hire contract, can't start a scheduled shift that would involve <i>standard control services</i> work at normal ordinary time wages due to prior work at the organisation (for example, due to not having sufficient time off between work shifts).
<i>Subdivision connection</i>	The <i>subdivision connection</i> category is intended to capture expenditure incurred in connecting un-reticulated lots or areas to the distribution network for residential subdivisions.
<i>Substation</i>	Has the meaning prescribed in the National Electricity Rules.
<i>Subtransmission line</i>	A <i>distribution line</i> with a nominal voltage that is above 33 kV, and connects a <i>subtransmission substation</i> to a <i>zone substation</i> . Includes all connected <i>lines</i> and <i>cables</i> from the point of origin to the normally-open points or <i>line/cable</i> terminations.
<i>Subtransmission substation</i>	A <i>substation</i> on a distribution network that transforms any <i>voltage</i> to levels above 33 kV. For the purposes of populating regulatory templates 2.3 (Augex project data) and 5.4 (MD & utilisation – spatial), a <i>subtransmission substation</i> includes a <i>substation</i> or parts of the <i>substation</i> owned and operated by DNSP associated with a <i>connection point(s)</i> . As a guide, assets included within a <i>subtransmission substation</i> include all equipment, buildings, structures, <i>civil works</i> and other assets that are located permanently within the <i>substation</i> boundary fence; but excluding the landing spans of incoming or outgoing <i>overhead</i>

	<i>lines</i> , and excluding incoming or outgoing cables and associated cable terminations (cables includes all power, communications and control cables).
<i>Subtransmission</i>	Assets that distribute electricity at <i>voltage</i> levels between the transmission system and the HV section of the network. The connection boundaries are the outgoing terminals at the transmission terminal station to the incoming terminals of the HV circuit breakers at the <i>zone substations</i> .
<i>Subtransmission assets</i>	Assets that distribute electricity at voltage levels between the transmission system and the HV section of the network. The connection boundaries are the outgoing terminals at the transmission terminal station to the incoming terminals of the HV circuit breakers at the zone substations.
<i>Summer peaking</i>	<i>Maximum demand</i> experienced over the period 1 October to 31 March.
<i>Switch</i>	A switch used to make and break connection of one section of the network from another for the purposes of enabling access to the network, or for managing the configuration of the network. Examples include isolator switches, fuse switch, drop-out links, links, air break switches, earthing switches, etc. For clarification, this does not include circuit breakers
<i>Switchgear</i>	These are assets used to control, protect and isolate segments of the network This includes disconnect switches, fuses, circuit breakers, links, reclosers, sectionalisers, ring main units, oil insulated fuses etc.
<i>Switching</i>	Temporary changes in network configuration and restoration made by <i>DNSP</i> for operational reasons.
<i>Switching station</i>	A station that connects to multiple circuits but does not contain a <i>transformer</i> .
<i>Telecommunications</i>	Refer to <i>IT & Communications</i> definition
<i>Telecommunications</i>	Refer to <i>IT & Communications</i> definition
<i>Thermal rating (for lines and cables)</i>	The maximum rating assigned to a <i>line</i> or <i>cable</i> under normal operational conditions, that is, resulting in a normal life expectancy. <i>DNSP</i> must provide its definitions of 'normal operational conditions'.
<i>Third party (supply interruptions)</i>	<p>Interruptions to supply that are the direct result of the action of a third party and include the detailed reasons of:</p> <ul style="list-style-type: none"> • Vehicle impact – <i>outages</i> caused by any type of vehicle impacting with network assets. For example, car hitting a pole, crane jib contacting overhead wires, etc. • Dig-in – <i>outages</i> caused by a third party digging into or undermining network assets • Unauthorised access – <i>outages</i> caused by an unauthorised third party accessing, attempting to access, or interfering with network assets. For example, vandalism, theft or attempted theft, human contact, etc. • Fire – <i>outages</i> caused by any type of fire ignited by any ignition source other than the network. • Other – <i>outages</i> caused by third parties not otherwise described here. A short description should be provided.
<i>Trading interval</i>	Means a 30 minute period ending on the hour (Australian Eastern Standard Time) or on the half hour.
<i>Transfers</i>	Permanent (or indefinite) changes in network configuration made by <i>DNSP</i> usually to manage demand growth.
<i>Transformers</i>	<p>These are assets used to transform between <i>voltage</i> levels within the <i>network</i></p> <p>This includes all its components such as the cooling systems and tap changing equipment (where installed)</p> <p>It excludes any pole mounted assets that are included in any other asset group.</p> <p>For the avoidance of doubt, this does not include instrument transformers as defined in the National Electricity Rules. It also does not include <i>auxiliary transformers</i>.</p>

<i>Tree</i>	<p>For the purposes of calculating the <i>average number of trees per maintenance span</i>, a tree is a perennial plant (of any species including shrubs) that is:</p> <ul style="list-style-type: none"> • equal to or greater in height than 3 metres (measured from the ground) in the relevant reporting period; and • of a species which could grow to a height such that it may impinge on the vegetation clearance space of power lines.
<i>Tree replacement program costs</i>	All costs (excluding overheads) associated with the management, purchase, planting and maintenance of vegetation that are incurred as a result of replacing vegetation within, or directly associated with, the business' <i>vegetation management</i> practices.
<i>Tree trimming</i>	The activity of cutting back trees or other vegetation to remove dead or living parts so as to prevent parts of the tree or vegetation from growing into, falling onto, or blowing onto electricity assets.
<i>Underground cables</i>	These assets have the primary function of distributing power, below ground, within the distribution <i>network</i> . This includes cable ends, joints, terminations and associated hardware and equipment (e.g. surge diverters, etc.), cable tunnels, ducts, pipes, pits and pillars. It excludes any pole mounted assets that are included in any other asset group. .
<i>Underground connection</i>	A physical link between the distribution system and a customer's premises running underground from a pole or service pit to the customer's premises.
<i>Unknown (supply interruptions)</i>	An interruption, the cause of which was, unable to be reasonably attributed to any other cause or trigger.
<i>Urban</i>	In the context of <i>capex</i> and <i>opex</i> data, and related volume/ non-financial variables, refers to costs and works on an <i>urban feeder</i> and all assets downstream of that feeder.
<i>Urban feeder</i>	Has the meaning described in the <i>Service Target Performance Incentive Scheme</i> .
<i>Variable</i>	Words or numerical values inputted into the <i>regulatory templates</i>
<i>Vegetation – Blow-in/fall-in (supply interruptions)</i>	<p>An interruption to supply caused by vegetation blowing onto or falling onto network assets. For example wind born branches lodging across the phases of an overhead line, or an adjacent tree falling onto overhead lines.</p> <p>These interruptions to supply may be the responsibility of DNSP or other responsible parties such as municipal councils or private land owners.</p>
<i>Vegetation – Grow-in (supply interruptions)</i>	<p>An interruption to supply caused by vegetation growing into network assets. For example a tree branch contacting overhead lines.</p> <p>These interruptions to supply may be the responsibility of DNSP or other responsible parties such as municipal councils or private land owners.</p>
<i>Vegetation corridor</i>	A tract of land along which vegetation is maintained in order to form a passageway along the route of a power line or lines (e.g. a shared corridor) that is free of vegetation encroachment into the asset clearance space. This does not include portions of the corridor where no managed vegetation exists (e.g. grassland or heathland) or where vegetation is not managed (e.g. deep gullies/valleys where no vegetation management is undertaken). For clarity, the form of tenure, or lack of tenure, over the corridor are not relevant to the existence of a vegetation corridor.
<i>Vegetation management</i>	<p>Activities that:</p> <ul style="list-style-type: none"> • are primarily directed at removing, altering, or managing vegetation to maintain safe or regulated clearances from distribution or transmission assets; and • are not emergency or fault related activities; and • are not initiated by a request from a distribution or transmission customer, excluding customers that are network service providers; and • are not activities for which expenditure could be attributed to the AER expenditure

	<p>category 'Augmentation, replacement, or non-routine maintenance activities triggered by a changed regulatory obligation or requirement'; and</p> <ul style="list-style-type: none"> • are not activities for which expenditure could be attributed to the AER expenditure category 'Augmentation, replacement, or non-routine maintenance activities triggered by a changed internal standard'. • include tree cutting, undergrowth control, root management, waste disposal, use of herbicide and growth retardants, and encouragement of low-growth vegetation to prevent the establishment of high-growth vegetation. <p>includes:</p> <ul style="list-style-type: none"> • pre-cutting/trimming inspections; and • inspections of vegetation to ensure that activities have been undertaken appropriately; and • liaison with affected residents and landowners including the issue of trim/cut notices, and follow up calls on notices; and • operational support such as any temporary generation used during the activity; and <p>does not include:</p> <ul style="list-style-type: none"> • such items as "beautification" works, lawn mowing e.g. from nature strips, or office gardens, interior plant and aesthetic vegetation works. • any work done in proximity to non-<i>network</i> assets.
<i>Vegetation management zone</i>	A segment of the distribution network distinguished from other vegetation management segments by material differences in recognised cost drivers.
<i>Voltage</i>	Has the meaning prescribed in the National Electricity Rules
<i>Wasted service visit</i>	Where a request is received for a service truck visit and the service is not required and insufficient notice is provided by the customer.
<i>Weather (supply interruptions)</i>	An interruption to supply caused by storm winds, lightning and airborne debris (not vegetation). This excludes salt and dust pollution caused <i>outages</i> – these are to be included under <i>asset failure</i> .
<i>Weather correction</i>	The removal of the impact of temperature fluctuations so as to derive a <i>maximum demand</i> measure corrected to a <i>probability of exceedance (PoE)</i> , usually 50% PoE and/or 10% PoE.
<i>Winter peaking</i>	<i>Maximum demand</i> experienced over the period 1 April to 30 September.
<i>Works management (network overhead)</i>	Within the context of the project governance and related functions category, works management means all costs associated with coordinating, planning, programming and controlling the NSPs portfolio of works.
<i>Zone substation</i>	<p>A <i>substation</i> on a distribution <i>network</i> that transforms any <i>voltage</i> above 33 kV to levels at or below 33 kV but above 1 kV.</p> <p>As a guide, assets included within a <i>zone substation</i> include all equipment, buildings, structures, <i>civil works</i> and other assets that are located permanently within the <i>substation</i> boundary fence; but excluding the landing spans of incoming or outgoing <i>overhead lines</i>, and excluding incoming or outgoing cables and associated cable terminations (cables includes all power, communications and control cables).</p>
<i>Zone substation equipment maintenance</i>	<p>Maintenance of zone substations, equipment to convert sub transmission voltage to distribution voltage, current transformers, voltage transformers and associated secondary protection and communication equipment.</p> <p>Includes all direct costs (labour, material, contract, motor vehicle); maintenance of sub transmission switchgear; inspecting, testing and maintaining zone substations primary and secondary equipment, apparatus and hardware; transformers, earthing, surge diverters, isolators, protection and communication directly associated with the substation.</p>

	<p>Includes maintenance of distribution equipment within the zone substation.</p> <p>Excludes upgrades and replacements which should be capex; Zone Substation Property Maintenance.</p> <p>Physical measure: Number of zone substation assets, e.g. number of transformers</p>
<i>Zone substation property maintenance</i>	<p>Includes all direct costs (labour, material, contract, motor vehicle); maintenance of site including buildings, fences and cleaning; weed control.</p> <p>Excludes Zone Substation Equipment Maintenance and Zone Substation Transformer Maintenance</p> <p>Physical measure: Number of zone substation properties maintained</p>
<i>Zone substation transformers maintenance</i>	<p>A subset of Zone Substation Equipment Maintenance. Maintenance of all transformers in zone substations and associated secondary protection and communication equipment.</p> <p>Includes all direct costs (labour, material, contract, motor vehicle); maintenance of HV to LV transformers; inspecting, testing and maintaining transformer equipment, apparatus and hardware; protection and communication directly associated with the zone substation.</p> <p>Excludes upgrades and replacements of transformers which should be capex; maintenance of zone substation equipment other than transformers under Zone Substation Equipment Maintenance.</p> <p>Physical measure: Number of installed voltage transformers by zone substation</p>
