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Public version

[Draft] Electricity Distribution Information Disclosure (Targeted Review Tranche 1) Amendment Determination 2022

[2022] NZCC XX

The Commission: Sue Begg

Elisabeth Welson Dr Derek Johnston Vhari McWha

Date of decision: [XX] November 2022

[Signature]

Dated at Wellington this [XX] day of November 2022

COMMERCE COMMISSION

Wellington, New Zealand

Determination history		
Determination date	Decision number	Determination name
1 October 2012	[2012] NZCC 22	Electricity Distribution Information Disclosure
		Determination 2012
24 March 2015	[2015] NZCC 6	2015 Amendment to the Electricity Distribution
		Information Disclosure Determination 2012
21 December 2017	[2017] NZCC 33	Electricity Distribution Information Disclosure
		Amendments Determination 2017
31 August 2021	[2021] NZCC 12	Electricity Distribution Information Disclosure
		(Aurora Energy Limited) Amendment
		Determination 2021
30 September 2021	[2021] NZCC 18	Electricity Distribution Information Disclosure
		(Non-material) Amendment Determination 2021
[XX] November 2022	[2022] NZCC [XX]	Electricity Distribution Information Disclosure
		(Targeted Review Tranche 1) Amendment
		Determination 2022

This draft document is published with edits as track changes so it's clear which changes have been made since the previous determination. The report will be finalised in October 2022.

[DRAFT] Electricity Distribution Information Disclosure (Targeted Review Tranche 1) Amendment Determination 2022

[Drafting notes:

- This amendment determination amends the Electricity Distribution Information Disclosure Determination 2012 [2012] NZCC 22 ('principal determination') to introduce new information disclosure requirements.
- The included amendments are made under Part 4 of the Commerce Act 1986.
- __Amendments to the body of the principal determination are marked as track changes.]

Electricity Distribution Information Disclosure (Targeted Review Tranche 1) Amendment Determination 2022

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Determination 202	Distribution Information Disclosure (Targeted Review Tranche 1) Amendment 2
<u>Under Part 4 of</u>	the Commerce Act 1986, the Commerce Commission makes the followi
determination:	

1. TITLE

(a) This determination is the Electricity Distribution Information Disclosure (Targeted Review Tranche 1) Amendment Determination 2022.

2. INTERPRETATION

- (a) In this determination (excluding Appendices A and B), the words or phrases in bold type bear the following meanings:
 - (i) Act has the same meaning as in the principal determination; and
 - (ii) **principal determination** means the Electricity Distribution Information Disclosure Determination 2012 [2012] NZCC 22.

3. DETERMINATION AMENDED

(a) This amendment determination amends the principal determination.

4. COMMENCEMENT AND APPLICATION

(a) This determination comes into force on the day on which a summary of it is published in the New Zealand Gazette under s 52Q of the **Act**.

5. PRINCIPAL DETERMINATION AMENDMENTS

- (a) Replace the contents page of the **principal determination** with the contents page in Appendix A.
- (b) The amendments to the body of the principal determination are the deletions, substitutions and additions to the attached copy of a <u>consolidated version</u> (as <u>at 9 December 2021</u>) of the principal determination that are marked as track changes in Appendix B.

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[DRAFT] Electricity Distribution Information Disclosure (Targeted Review Tranche 1) Amendment Determination 2022
Annendix R.

PART 1 GENERAL PROVISIONS

1.1 TITLE

1.1.1 This determination is the Electricity Distribution Information Disclosure Determination 2012.

1.2 COMMENCEMENT DATE

1.2.1 This determination came into force on 1 October 2012.

1.3 APPLICATION

1.3.1 This determination applies to **electricity distribution businesses** as suppliers of regulated goods and services under Part 4 of the **Act**.

1.4 INTERPRETATION

- 1.4.1 In this determination, unless the context otherwise requires—
 - (1) Terms in bold type in the main body of this determination (including the attachments) have the meaning given to those terms in this clause 1.4. Terms used in the schedules are defined in Schedule 16;
 - (2) Terms used in this determination that are defined in the **Act** but not in this determination, have the same meanings as in the **Act**;
 - (3) Terms used in this determination that are defined in the **IM determination** but not in this determination have the same meanings as in the **IM determination**:
 - (4) A reference to a 'Schedule' or to an 'Attachment' is to a Schedule or to an Attachment of this determination;
 - (5) A word which denotes the singular also denotes the plural and vice versa;
 - (6) An obligation to do something is deemed to include an obligation to cause that thing to be done;
 - (7) Financial items must be measured and disclosed in accordance with GAAP unless otherwise required by this determination or the IM determination;
 - (8) Non-financial items must be measured and disclosed in accordance with standard industry practice unless otherwise required in this determination;

- (9) Guidance notes in this determination are for guidance purposes only and any material referred to in the guidance notes does not form part of the determination;
- (10) Where any material referred to in guidance notes is inconsistent with this determination, this determination prevails; and
- (11) Materials incorporated by reference into this determination, including standards promulgated by other bodies, are incorporated under the terms of Schedule 5 of the **Act**.

Guidance note: (refer to clause 1.4.1(9)-(10))

Commerce Commission "Input methodologies review final decision – Related party transactions – Final decision and determinations guidance" (21 December 2017), Attachment D notes the process by which materials are incorporated by reference in this determination.

- 1.4.2 If there is any inconsistency between the main body of this determination (this includes the attachments) and any schedule to this determination, the main body of this determination prevails.
- 1.4.3 In this determination the words or phrases in bold type bear the following meanings-

Α

ABAA has the meaning given in the IM

determination

ACAM has the meaning given in the **IM**

determination

Act means the Commerce Act 1986

Additional notice has the meaning given in the Aurora CPP

Allocated works under

construction

means, for the components of the works under construction roll-forward, the works

under construction values after the
application of clause 2.1.1 of the IM

determination

Allocation methodology type has the meaning given in the IM

determination

Allocator means the measure used to allocate

operating costs or **regulated service asset values** that are not **directly attributable** as set out in clause 2.1.3 or clause 2.1.4 of the

IM determination

Amalgamation has the meaning given in the **IM**

determination

AMP means asset management plan

AMP planning period has the meaning specified in clause 3.4 of

Attachment A to this determination

AMP update has the meaning specified in clause 2.6.5 of

this determination

Annual delivery report means the report Aurora completes and

publicly discloses under clause 2.5.5(1)

Arm's-length transaction has the meaning given in the IM

determination

Guidance note: (refer to clause 1.4.1(9)-

(10))

This definition used in the **IM determination** is identical to the

definition in ISA (NZ) 550.

Assessed values means the aggregate SAIDI values and SAIFI

values for an assessment period, which are derived from a normalised assessment dataset

Assessment dataset means the set of daily SAIDI values and SAIFI

values for a disclosure year, with SAIDI values and SAIFI values for an interruption that spans multiple calendar days accrued to the day on which the interruption began

Asset management plan

has the meaning specified in clause 2.6.1 of this determination

Asset relocations

in relation to expenditure, means **expenditure on assets** where the **primary driver** is the need to relocate assets due to third party requests, such as for the purpose of allowing road widening or similar needs. This expenditure category includes **expenditure on assets** relating to the undergrounding of previously aboveground assets at the request of a third party

Asset replacement and renewal

means-

- (a) in relation to capital expenditure, expenditure on assets
- (b) in relation to operational expenditure, operational expenditure where the primary driver is the need to maintain network asset integrity so as to maintain current security and/or quality of supply standards and includes expenditure to replace or renew assets incurred as a result of-
 - the progressive physical deterioration of the condition of **network** assets or their immediate surrounds;
 - the obsolescence of network assets;
 - preventative replacement programmes, consistent with asset lifecycle management policies; or
 - the need to ensure the ongoing physical security of the network assets

Assets commissioned

means-

 (a) in relation to the unallocated RAB or unallocated works under construction, the sum of value of commissioned assets

- as determined in accordance with clause 2.2.11 of the **IM determination**;
- (b) in relation to the RAB or allocated works under construction, the value of the assets (as determined in accordance with paragraph (a)) which is allocated to the electricity distribution services in accordance with clause 2.1.1 of the IM determination;
- (c) in relation to forecast information, a forecast of the value of the assets (as determined in accordance with paragraph (b)) for a future disclosure year

Audited disclosure information

means information required to be disclosed under any of-

- (a) clauses 2.3.1 and 2.3.2 of this determination;
- (b) the SAIDI and SAIFI information disclosed under clause 2.5.1, and clauses 1.8 and 1.10 of Attachment C;
- (c) the **related party transactions** information disclosed under clauses 2.3.8, 2.3.10-2.3.12;
- (d) the explanatory notes disclosed in boxes 1 to 11 of Schedule 14 under clause 2.7; and
- (e) clauses 1.5-1.7 of Attachment C

Aurora

means Aurora Energy Limited or any subsequent entity or entities that succeeds Aurora Energy Limited because of an amalgamation, merger, or major transaction

Aurora CPP

means the Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination 2021 [2021] NZCC 3

Aurora pricing region

means a part of **Aurora's** network for which **Aurora** sets prices specific to that part of

Aurora's network under its pricing methodology, provided—

- (a) the total circuit length of the electricity lines supplying electricity distribution services and capable of conveying electricity at 3.3 kV or greater, in that part of the network, is at least 25 km;
- (b) the electricity conveyed to that part of the network is at least 20 GWh per annum; and
- (c) that part of the network supplies electricity distribution services to at least 2000 ICPs.

Average domestic consumer

means a notional **person** that consumes or acquires from the **network** 9000kWh of electricity per year in respect of their principal place of residence

C

Capital contributions

has the meaning given in the **IM** determination

Capital expenditure

means-

- (a) in relation to the unallocated works under construction, costs-
 - (i) incurred in the acquisition or development of an asset during the disclosure year that is, or is intended to be, commissioned; and
 - (ii) that are included or are intended to be included in the value of assets commissioned relating to the unallocated RAB;
- (b) in relation to the Report on **related party transactions**, costs-
 - (i) incurred in the acquisition or development of an asset during the

disclosure year that is, or is intended
to be, commissioned; and

- (ii) that are included or are intended to be included in the value of assets commissioned relating to the RAB; and
- (iii) that are as a result of **related party** transactions;
- (c) in all other instances, costs-
 - (i) incurred or forecast to be incurred in the acquisition or development of an asset during the disclosure year that is, or is intended to be, commissioned; and
 - (ii) that are included or are intended to be included in the value of assets commissioned relating to the RAB

Causal relationship	has the meaning given in the IM	
	determination	

Class B (planned interruptions	means a planned interruption initiated by the
on the network)	EDB

Class C (unplanned	means an unplanned interruption originating
interruptions on the network)	within the network of the EDB

Commencement date	means the date specified in clause 1.2.1 of
	this determination

Commission means the	he Commerce Commission
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Commissioned	has the meaning given in the IM
	determination

given	ııns	S 54D	(2)	or the <i>i</i>	4Ct
į	giver	given in s	given in s 540	given in s 540(2)	given in s 54D(2) of the A

Connection point	con the definition of ICD
CONNECTION DONNE	see the demilian of ter

	distribution services
	that EDB's Aurora's supply of electricity
	received by an EDBAurora about an aspect of
Complaint	means an expression of dissatisfaction

Connection point

see the definition of ICP

Constant prices

means, in relation to the prospective disclosures made under clauses 2.6.1 and 2.6.3, and subclause 2.6.6(1) of this determination, prices expressed in New Zealand dollars as at the mid-point of the current year. Constant price expenditure forecasts are forecasts based on constant price assumptions

Consumer

means-

(a)

(b)(a) ____in relation to clauses 2.4.23 and 2.4.24 of this determination, the definition given in s 54D(2) of the Act;a person who is supplied, or who applies to be supplied, with electricity for their own consumption; and

(c) for the purpose of information disclosure requirements relating to Aurora's customer charter and consumer compensation arrangement, a person that consumes electricity distribution services supplied by Aurora

(d)(b) in all other instances, a person that consumes or acquires **electricity** lines services

Consumer compensation arrangement

means an arrangement an **EDB** adopts to compensate **consumers** in a prescribed manner (by credit, reimbursement, or another appropriate means) if the **EDB** fails to meet specified standards of performance in supplying **electricity distribution services** to those **consumers**

Consumer connection

in relation to expenditure, means **expenditure on assets** where the **primary driver** is the establishment of a new customer **connection point** or alterations to an existing customer **connection point**. This expenditure category includes **expenditure on assets** relating to-

- (a) connection assets and/or parts of the network for which the expenditure is recoverable in total, or in part, by a contribution from the customer requesting the new or altered connection point; and
- (b) both electricity injection and offtake points of connection

Consumer connections

in relation to the number of connections, means the number of new customer connection points established and alterations made to an existing customer connection point during the year, and includes both electricity injection and offtake points of connection

Consumer-controlled

means an EDB that is a community trust, customer co-operative, or customer trust or is controlled by 1 or more such community trust, customer co-operative, or customer trust; and, for the purposes of this definition, a EDB is controlled by 1 or more such community trust, customer co-operative, or customer trust if it or they together directly or indirectly—

- (a) control the composition of the board or other governing body of the EDB;
- (b) are in a position to exercise, or control the exercise of, more than one-half the maximum number of votes that can be exercised at a meeting of the shareholders or members or beneficiaries of the EDB:
- (c) hold more than one-half of the issued capital of the **EDB**; or
- (d) are entitled to receive more than one-half of every dividend or other distribution paid by the EDB

Consumer group

means the category of **consumer** used by the **EDB** for the purposes of setting **prices**

Contract

means a contract for the supply of goods or services (or both) whether or not the contract, or any part of the contract, is in writing and, for the avoidance of doubt, includes-

- (a) a contract under which goods or services
 (or both) are being supplied, although
 some or all of the terms and conditions in
 relation to the supply of those goods or
 services have not been settled; and
- (b) any operating agreement, side letter, or documentation that influences, adjusts or amends the terms and conditions of the contract

Controlling consumers

in relation to a **consumer-controlled EDB**, means all the income beneficiaries or shareholders, as the case may be, of the **community trusts**, **customer co-operatives**, or **customer trusts** that constitute or control that **EDB**

Cost of financing

means the cost of financing incurred by an EDB and accumulated during the construction phase of a project that creates a new network asset, determined in accordance with clause 2.2.11(2) of the IM determination and allocated to the electricity distribution services in accordance with clause 2.1.1 of the IM determination

Cost of supply model

means a financial model that **Aurora** uses to allocate **target revenue**, for example, across the **Aurora pricing regions** and amongst each of **Aurora's consumer groups**

CPP

has the meaning given in the **IM** determination

CPP determination

has the meaning given in the **IM** determination

CPP regulatory period means the period to which a CPP determination relates

Current year or CY means-

(a) in relation to the historic disclosures made under clause 2.3.1 of this determination, the disclosure year of the report

(b) in relation to the prospective disclosures made under clauses 2.6.1 and 2.6.3, and subclause 2.6.6(1) of this determination, the disclosure year in which the report is prepared

Customer co-operative has the meaning given in s 54D(2) of the **Act**

Customer charter means a document that describes an EDB's

relationship with its **consumers**, including, for example, what **consumers** can expect from the **EDB** in its supply of **electricity distribution**

services

<u>Customer interruption minutes</u> <u>means the total duration in minutes</u>

accumulated for each ICP for each

interruption

Customer trust has the meaning given in s 54D(2) of the **Act**

CY, CY-X or CY+X means

(a) the **current year**; or

(b) where a '-' precedes 'X', the Xth year preceding the current year; or

(c) where a '+' precedes the 'X', the Xth year

following the current year

Cybersecurity means the application of technologies,

processes and controls to protect systems, networks, programmes, devices, and data

D

Direct billing in relation to expenditure, means **operational**

expenditure associated with directly billing

end **consumers** and recovering payments due. This includes billing services, credit and debtor management, associated customer call centres, and customer account management

Directly attributable has the meaning given in the **IM**

determination

Director has the meaning given in the **IM**

determination

Disclosure year means the 12-month period ending on 31

March of the year the disclosure relates to or, if the term disclosure year is combined with a year, the 12-month period ended on 31

March of that year

Discretionary discounts and

customer rebates

has the meaning given in the IM

determination

Distributed generation has the meaning given in the Electricity

Industry Participation Code 2010 and includes equipment used for generating electricity on the **EDB**'s **network** that is connected and

operated by the **EDB**

Distribution voltage means 3 phase nominal voltage-

(a) over 1 \boldsymbol{kV} and up to and including 30 $\boldsymbol{kV};$

and

(b) excludes those voltages used within the

network in the role or manner of a

subtransmission voltage

DPP determination means the Electricity Distribution Services

Default Price-Quality Path Determination

2020 [2019] NZCC 21

DPP regulatory period has the meaning given in the **IM**

determination

Ε

EDB (or electricity distribution business)

means EDB as that term is defined in the **IM** determination

Electrical contracting services

means the following services, when provided under a **contract** between the **EDB** and a **related party**-

- (a) construction and maintenance
- (b) **network** management
- (c) vegetation management
- (d) connection and disconnection services
- (e) load control

Electricity distribution services

has the meaning given in the $\ensuremath{\text{IM}}$

determination

Electricity lines services

has the meaning given in s 54C of the Act

Electricity retailer

means a **person** who supplies electricity to another **person**(s) for any purpose other than for re-supply by the other **person**(s)

Embedded network

has the meaning given in Part 1 of the Electricity Industry Participation Code 2010

Error

means incorrect information disclosed in accordance with the **principal determination** as amended at the time of the disclosure, in such a way that-

- (a) the data is incorrect;
- (b) a statement is incorrect; or
- (c) the compilation of disclosed information is inconsistent with the principal determination as amended at the time of disclosure; and

is not where-

- (d) the correction is to the **initial RAB**;
- (e) an estimate has changed due to new information becoming available;

(f) the change is a lost and found assets adjustment;

Expenditure on assets

means the expenditure relating to costs included or expected to be included in a closing RAB value and is equal to capital expenditure plus value of capital contributions less value of vested assets less cost of financing, where capital expenditure has meaning I or, in respect of related party transactions, meaning (b) as defined in this determination

F

Fault

means a physical condition that causes a device, component or **network** element to fail to perform in the required manner

Feeder SAIDI

means, in respect of a feeder line on a **network**, the contribution to **network SAIDI** of **interruptions** occurring on the feeder line

Feeder SAIFI

means, in respect of a feeder line on a **network**, the contribution to **network SAIFI** of **interruptions** occurring on the feeder line

Financial distribution

means-

- (a) discretionary discounts and customer rebates:
- (b) dividend or equivalent owner payment to a community trust, customer trust or cooperative where the EDB recommends how the payment should be allocated amongst consumers; or
- (c) dividend or equivalent owner payment to a community trust, customer trust or cooperative where the EDB makes the allocation to consumers on behalf of the community trust, customer trust or customer co-operative

Forecast expenditure

means, in relation to-

- (a) current disclosure year, the forecast expenditure for the current disclosure year disclosed under subclauses 2.6.6(1)(a) and 2.6.6(1)(b) of this determination immediately prior to the start of the current disclosure year
- (b) regulatory period, the forecast expenditure for the disclosure years from the start of the regulatory period to the current disclosure year disclosed under Part 5 of the IM determination where a CPP is in place for the current disclosure year or disclosed under subclauses 2.6.6(1)(a) and 2.6.6(1)(b) of this determination prior to the start of the disclosure year preceding the regulatory period where a CPP is not in place for the current disclosure year

G

GAAP

means generally accepted accounting practice in New Zealand, as defined in the **IM**

determination

GWh

means gigawatt-hour

I

ICP (or connection point)

means a point of connection on a local network or embedded network which the EDB nominates as the point at which an electricity retailer will be deemed to supply electricity to a consumer

IM determination

means the Electricity Distribution Services
Input Methodologies Determination 2012
[2012] NZCC 26, including amendments in
effect at the time this determination comes
into force

Independent appraiser

means-

- (a) the independent auditor; or
- (b) a person who-
 - (i) an EDB considers is qualified to publicly offer professional services to clients in connection with the requirements specified in clause 2.8.4;
 - (ii) has no relationship with, or interest in, the EDB that is likely to involve a conflict of interest;
 - (iii) has not assisted with the compilation of the information or provided advice or opinions (other than in relation to audit reports) on the methodologies or processes used in compiling the information; and
 - (iv) is not associated with nor directed by any **person** who has provided any such assistance, advice, or opinion

Independent auditor

means a person who-

- (a) is qualified for appointment as auditor of a company under the Companies Act 1993 or, where the EDB is a public entity (as defined in s 4 of the Public Audit Act 2001), is the Auditor-General;
- (b) has no relationship with, or interest in, the EDB that is likely to involve a conflict of interest;
- (c) has not assisted with the compilation of the information or provided advice or opinions (other than in relation to audit reports) on the methodologies or processes used in compiling the information; and

(d) is not associated with nor directed by any person who has provided any such assistance, advice, or opinion

Independent expert

means a **person** who—

- (a) is qualified to offer professional services to clients and provide an opinion on one or more of the areas under clause 2.8.5A;
 and
- (b) has no direct or indirect relationship with, or interest in, the EDB in question, that is likely to involve a conflict of interest between his, her or its duties to the EDB and his, her or its duties to the Commission

Indirectly affected data and statements

means data or statements which are incorrect only because they relied on disclosed data or statements that are affected by an **error**

Initial RAB

has the meaning given in the IM

Innovation practice

determination

means an activity or practice, in respect of the supply of electricity lines services, that is focussed on the creation, development, or application of a new or improved technology, process or approach, and includes an innovation project as defined in the IM determination

Interruption

in relation to the supply of **electricity lines services** to a **consumer** by means of a prescribed voltage electric line, means the cessation of supply of **electricity lines services** to that **consumer** for a period of 1 minute or longer, <u>including any temporary restoration of supply mid-cessation for less than one minute</u>, other than by reason of disconnection of that **consumer**-

- (a) for breach of the contract under which the electricity lines services are provided;
- (b) as a result of a request from the consumer; or

(c) as a result of a request from the consumer's electricity retailer; or for the purpose of isolating an unsafe installation

ISA (NZ) 550

means International Standard on Auditing (New Zealand) 550, Related Parties, issued by the New Zealand Auditing and Assurance Standards Board of the External Reporting Board in July 2011 and amended effective 15 December 2016, under s 24(1)(b) of the Financial Reporting Act 1993

ISAE (NZ) 3000

means International Standard on Assurance Engagements (New Zealand) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the New Zealand Auditing and Assurance Standards Board of the External Reporting Board in July 2014, under s 12(b) of the Financial Reporting Act 2013

Guidance note: (refer to clause 1.4.1(9)-(10))

Commerce Commission "Input methodologies review final decision – Related party transactions – Final decision and determinations guidance" (21 December 2017), Attachment D notes the process by which materials are incorporated by reference in this determination.

Κ

km means kilometre

kV means kilovolt

kVA means kilovolt ampere

kWh means kilowatt hour

L

Legislative and regulatory

in relation to expenditure, means expenditure on assets where the primary driver is a new regulatory or legal requirement that results in the creation of, or modification to, network assets

Line charge revenue

means revenue from prices

Lost and found assets adjustment

means-

- (a) in relation to the unallocated RAB, the value of found assets as determined in accordance with clause 2.2.12 of the IM determination, less the value of lost assets. The value of a lost asset is the unallocated opening RAB value of the asset less regulatory depreciation as unallocated opening RAB value and regulatory depreciation are determined in accordance with the IM determination
- (b) in relation to the RAB, the value of the asset (as determined in accordance with paragraph (a)) which is allocated to electricity distribution services in accordance with clause 2.1.1 of the IM determination
- (c) in relation to the regulatory tax asset base roll-forward, the sum of regulatory tax asset values for found assets less the sum of regulatory tax asset values of lost assets, where 'found assets' and 'lost assets' have the meanings given in the IM determination

Low voltage (or LV)

means the nominal Alternating Current (AC) voltage of less than 1000 volts or the assets of the **EDB** that are directly associated with the transport or delivery of electricity at those voltages

М

Major transaction

has the meaning given in clause 5.6.4 of the **IM determination**

Mark-up

means the percentage margin charged on the directly attributable cost incurred by the **related party** in providing a good or service which is included in the price of the good or service

Material projects and programmes

means projects or programmes with actual or forecast total expenditure greater than the materiality threshold that is developed and applied by the **EDB**

Merger

means a transaction under which an **EDB** takes over, or otherwise merges with, any other **EDB** other than by a **major transaction** or **amalgamation** or under Part 13 of the Companies Act 1993, which includes:

- (a) the purchase of all the assets of another **EDB**:
- (b) the acquisition of sufficient shares in another EDB to have an interest in the other EDB sufficient to enable it, whether directly or indirectly, to exert a substantial degree of influence over the activities of the other EDB; or
- (c) a scheme of arrangement under Part 15 of the Companies Act 1993 having like effect

Ν

Network

means the fixed assets used by a **EDB** to provide **electricity lines services**

Nominal New Zealand dollars

in relation to an expenditure or revenue forecast, means the New Zealand dollar prices expected to apply in the year of the transaction

Non-network assets means assets related to the provision of

electricity lines services but that are not a

network asset, and include-

- (a) information and technology systems;
- (b) asset management systems;
- (c) office buildings, depots and workshops;
- (d) office furniture and equipment;
- (e) motor vehicles;
- (f) tools, plant and machinery; and
- (g) any other assets under GAAP that are not network assets

Non-standard contract means a contract for electricity distribution

services that is not a standard contract

Normalised assessment dataset means an assessment dataset normalised in

accordance with the calculations set out in

Attachment B

0

Operating cost has the meaning given in the IM

determination

Operational expenditure means operating costs after applying clause

2.1.1 of the **IM determination**, except in relation to the Report on **related party**

transactions where it means operating costs

from related party transactions as

determined after applying clause 2.1.1 of the **IM determination** and clause 2.3.6 of this

determination

Original disclosure means disclosures made in accordance with

the **principal determination** as amended at the time of the disclosure which contains a

material or non-material error

Other reliability, safety and

environment

in relation to expenditure, means **expenditure**

on assets where the primary driver is to improve network reliability or safety or to mitigate the environmental impacts of the network, but is not included in either of the

quality of supply or legislative and regulatory categories. For example, this category may include expenditure on assets where the primary driver is to ensure staff safety or meet the EDB's environmental policies

OVABAA

has the meaning given in the $\ensuremath{\text{IM}}$

determination

Ρ

Person has the meaning as defined in s 2 of the **Act**

Planned accumulated SAIDI limit has the meaning as defined in the Aurora CPP

Planned accumulated SAIFI limit has the meaning as defined in the Aurora CPP

Planned interruption means any **interruption** in respect of which not

less than 24 hours' notice was given, either to the public or to all electricity **consumers**

affected by the interruption

Planned interruption cancelled

with notice

means a **planned interruption** that **Aurora** cancels by giving, either to the public or to all

electricity **consumers** affected by the cancellation, no less than 24 hours' notice before the scheduled start time of the **planned**

interruption

Planned interruption cancelled with less than 10 working days'

notice

means a planned interruption that Aurora

cancels by giving, either to the public or to all

electricity **consumers** affected by the

cancellation, more than 24 hours' notice but less than 10 working days' notice, before the

scheduled start time of the planned

interruption

Planned interruption cancelled

without notice

means a planned interruption that Aurora

cancels but which is not a planned interruption cancelled with notice

Planned SAIDI values means SAIDI values based on Class B (planned interruptions on the network) on a network Planned SAIDI assessed value has the meaning as defined in the Aurora CPP means SAIFI values based on Class B (planned interruptions on the network) on a network Planned SAIFI assessed value has the meaning as defined in the Aurora CPP

Prescribed contract in relation to an EDB, means –

- (a) a **contract** under which the **EDB** supplies **electricity lines services**; or
- (b) a contract for related services, if goods or services are to be supplied under the contract by—
 - (i) the EDB; or
 - (ii) a person that is a related party of the EDB; or
 - (iii) a person that supplies electricity lines services by means of works owned by the EDB; or
 - (iv) a person that is a related party of a person of the kind referred to in subclause (iii)

Prescribed terms and conditions

means, in relation to a **contract** for the supply of **electricity lines services** or for **related services**, the terms and conditions of the **contract** that—

- (a) describe the goods or services to be supplied under the contract;
- (b) determine, or provide for the determination of, the quantity or amount of those goods or services;
- (c) specify, determine, or provide for the determination of the-

- (i) price at which those goods or services are to be supplied;
- (ii) timing of payment for those goods or services;
- (iii) security for payment for those goods or services; and
- (iv) EDB's obligations and responsibilities (if any) to consumers in the event that the supply of electricity lines services to consumers is interrupted

Price component

means the various tariffs, fees and charges that constitute the components of the total **price** paid, or payable, by a **consumer**

Prices

has the meaning given in the IM determination

Pricing principles

means, in relation to the supply of **electricity distribution services**, the distribution pricing principles as published by the Electricity Commission in March 2010, adopted by the Electricity Authority, and amended by the Electricity Authority from time to time

Pricing strategy

means a decision made by the **Directors** of the **EDB** on the **EDB**'s plans or strategy to amend or develop **prices** in the future, and recorded in writing

Primary driver

means the primary reason for a decision to incur a cost in the year the cost was incurred or forecast to be incurred.

For example, an asset may be relocated at the request of a third party and, at the same time, capacity on the asset increased to take account of expected future demand. If it is the third party request that required the asset to be relocated at that time, then the **expenditure on**

assets would be allocated to asset relocation. If the deadline for relocating the asset was not imminent, but the project had to be completed to allow for the increase in capacity, then the expenditure on assets would be allocated to system growth.

Where there is more than one driver for a cost, and the cost is a significant proportion of operational expenditure or expenditure on assets, expenditure may be apportioned between expenditure categories according to the relative importance of each driver to the decision, or the project divided into cost categories

Principal determination

means the *Electricity Distribution Information Disclosure Determination 2012 [2012] NZCC 22,*as published on 1 October 2012

Proxy asset allocator

has the meaning given in the IM Determination

Proxy cost allocator

has the meaning given in the **IM Determination**

Publicly disclose

means to-

- (a) disclose the information to the public on the Internet at the **EDB**'s usual publicly accessible website;
- (b) make copies of the information available for inspection by any **person** during ordinary office hours, at the principal office of the **EDB** making the public disclosure and
- (c) within 10 working days of being requested to do so by any person, provide that person with a copy of the information, either by post or for collection (during ordinary office hours) from that principal office, whichever the person prefers; and
- (d) within 5 working days after the information is disclosed to the public, provide a copy of the information to the **Commission** in the

form that it is disclosed to the public and in an electronic format that is compatible with Microsoft Excel or Microsoft Word (as the case may be),

and **public disclosure** and **publicly disclosing** have corresponding meanings

Q

Quality of supply

in relation to expenditure, means **expenditure on assets** where the **primary driver** is the need to meet improved security and/or quality of supply standards. This may include expenditure to-

- (a) reduce the overall interruption/fault rate of the network;
- (b) reduce the average time that consumers are affected by planned interruptions and/or unplanned interruptions; or
- (c) reduce the average number of consumers affected by planned interruptions and/or unplanned interruptions

R

RAB

means regulatory asset base and for the components of the RAB roll-forward, the values after applying clause 2.1.1 of the **IM determination**

Record

has the meaning given in section 4 of the Public Records Act 2005

Reference dataset

means the set of daily SAIDI values and SAIFI values for the reference period, with SAIDI values and SAIFI values for an interruption that spans multiple calendar days accrued to the day on which the interruption began

Reference period

means the period 1 April 2004 to 31 March

2009

Regulated service has the meaning given in the

IM determination

Regulated service asset values has the meaning given in the

IM determination

Regulatory period has the meaning given in the

IM determination

Related party has the meaning given in the

IM determination

Guidance note: (refer to clause 1.4.1(9)-

(10))

Commerce Commission "Input

methodologies review final decision – Final decision and determinations quidance" (21 December 2017),

Attachment A notes examples of related

parties.

Related party transaction has the meaning given in the

IM determination

Related services means goods or services (other than the

supply or conveyance of electricity or electrical appliances) supplied or to be

supplied under a contract in any case where-

- (a) there is a linkage between-
 - (i) that contract; and
 - (ii) a contract for the supply or conveyance of electricity

by reason that the consideration for the supply of those goods or services is linked to, or combined with, payment for the supply or conveyance of that electricity;

- and
- (b) the monetary value of the goods or services supplied, or to be supplied, under the contract referred to in (a)(i), in respect of-
 - (i) the period of 12 months immediately before the information relating to the contract for the supply or conveyance

- of electricity referred to in (a)(ii) is **publicly disclosed** as required by clauses 2.4.9 or 2.4.12 of this determination; or
- (ii) the period of 12 months immediately after that information is publicly disclosed-

amounts to or will amount to more than 1% of the monetary value or projected monetary value of the **contract** referred to in (a)(ii)

Routine and corrective maintenance and inspection

in relation to expenditure, means **operational expenditure** where the **primary driver** is the activities specified in planned or programmed inspection, testing and maintenance work schedules and includes-

- (a) **fault** rectification work that is undertaken at a time or date subsequent to any initial **fault** response and restoration activities
- (b) routine inspection
- (c) functional and intrusive testing of assets, plant and equipment including critical spares and equipment
- (d) helicopter, vehicle and foot patrols, including negotiation of landowner access
- (e) asset surveys
- (f) environmental response
- (g) painting of network assets
- (h) outdoor and indoor maintenance of substations, including weed and vegetation clearance, lawn mowing and fencing
- (i) maintenance of access tracks, including associated security structures and weed and vegetation clearance
- (j) customer-driven maintenance
- (k) notices issued

S

SAE 3100

means Standard on Assurance Engagements 3100 – Compliance Engagements, issued by the External Reporting Board in October 2014 and incorporating amendments up to August 2014 under s 24(1)(b) of the Financial Reporting Act 1993

Guidance note: (refer to clause 1.4.1(9)-(10))

Commerce Commission "Input methodologies review final decision – Related party transactions – Final decision and determinations guidance" (21 December 2017), Attachment D notes the process by which materials are incorporated by reference in this determination.

SAIDI (System Average Interruption Duration Index)

means the average forced sustained interruption duration per connection point served per year, measured in minutes.

Connection point numbers are to be the average for the disclosure year

SAIDI values

means the customer interruption minutes accrued for each interruption or successive interruption (-system average interruption duration index values based on Class B (planned interruptions on the network) and Class C (unplanned interruptions on the network) divided by the total number of connection points on the network

SAIFI (System Average Interruption Frequency Index)

means the average forced sustained interruption frequency per connection point served per year, measured in frequency per year. Connection point numbers are to be the average for the disclosure year

SAIFI values

means system average interruption frequency index values means the number of connection points affected by each interruption or successive interruption (based on Class B (planned interruptions on the network) and Class C (unplanned interruptions on the network)) divided by the total number of connection points on the network

Secondary assets

means **network** assets, including ripple injection systems, SCADA, protection relays and telecommunications systems, that do not carry the energy that is distributed to **consumers**

Self-assessment rating

means, in respect of an aspect of an **EDB's** performance in supplying **electricity distribution services**, a numerical rating from 1 to 5, with '1' being the lowest rating and '5' being the highest rating

Service interruptions and emergencies

In relation to expenditure, means operational expenditure where the primary driver is an unplanned instantaneous event or incident that impairs the normal operation of **network** assets. This relates to reactive work (either temporary or permanent) undertaken in the immediate or short term in response to an unplanned event. Includes back-up assistance required to restore supply, repair leaks or make safe. It also includes operational support such as mobile generation used during the outage or emergency response. It also includes any necessary response to events arising in the transmission system. It does not include expenditure on activities performed proactively to mitigate the impact such an event would have should it occur. Planned follow-up activities resulting from an event which were unable to be permanently repaired in the short term are to be included

under routine and corrective maintenance and inspection

Shared asset

means a **network** asset used by more than one **consumer** in order to receive **electricity lines services**

Sole use assets

means assets connected to the **network** for use by only 1 connecting **consumer** in order to receive **electricity lines services**

Special contract term

means -

- (a) a non-price term in a contract which materially differs from the terms which the parties in their respective positions would usually include in an arm's length contract; or
- (b) the omission of a material non-price term from a contract, when the parties in their respective positions would usually include that term in an arm's length contract; or
- (c) a non-price term in a **contract** resulting from a tender process, which materially varies from, or was not included in, the contractual basis on which the tender proposals were requested or the terms proposed by the lowest qualifying tender from an unrelated party, which credibly could have performed the services

Standard contract

means any **contract** (being a **contract** for the provision of **electricity line services**) between an **EDB** and any other **person** where-

- (a) the price at which the electricity line services are to be provided under the contract is determined solely by reference to a schedule of prescribed terms and conditions, being a schedule that is publicly disclosed; and
- (b) at least 4 other persons have such contracts with the EDB, and none of those other persons is a related party of the

EDB, or is a **related party** of those other **persons**

Sub-network

means, in relation to network assets of a supplier that is-

- (a) consumer-controlled and the number of controlling consumers is less than 90% of the total number of consumers of the services provided by the EDB; the part of the network assets owned by the EDB that is substantially used to provide services to—
 - (i) consumers that are controlling consumers; or
 - (ii) consumers that are not controlling consumers; or
- (b) a part of the **network** that is geographically separate from all other parts of the **network**; and, for the purposes of this definition, -
- (c) the existence of electricity distribution service activities supplied by another supplier that are between different electricity distribution service activities supplied by the supplier is to be regarded as a geographical separation; but
- (d) parts of the **network** of the supplier are not to be regarded as geographically separate from all other parts of the **network** of the supplier if –
- (e) the total circuit length of the electric lines that are used in supplying the electricity distribution services and are capable of conveying electricity at a voltage equal to or greater than 3.3 kV is less than 25 km; or
- (f) the electricity conveyed is less than 20GWh per annum; or
- (g) the **electricity distribution services** are provided to fewer than 2000 **ICP**s.

Subtransmission

means-

- (a) in relation to **AMP**s, the transport or delivery of electricity at the following voltages: 110 kV, 66 kV, 33 kV and other voltages within this range (note: whilst voltages outside this range (eg, 22 kV) may be used for the purposes of subtransmission, they are not to be included in the sub-transmission reporting category); or
- (b) for any other purpose, any of the electric lines, cables, plant and equipment, operated at any subtransmission voltage, that are not installed in any zone substation. The assets include associated pilot and communication cables, switches and surge arrestors or other overhead lines and cable components installed outside of any zone substation

Subtransmission voltage

means 3 phase nominal voltage-

- (a) over 30 kV and up to and including 110 kV; or
- (b) 22kV, if that voltage is used within the network in the role or manner of a subtransmission voltage

Successive interruption

means an **interruption** that follows an initial **interruption** and either:

- (a) relates directly to that initial **interruption**; or
- (b) occurs as part of the process of restoring supply of electricity lines services following that initial interruption

System growth

in relation to expenditure, means expenditure on assets where the primary driver is a change in demand or generation on a part of the network which results in a requirement for either additional capacity to meet this demand or additional investment to maintain current security and/or quality of supply standards due to the increased demand. This expenditure category includes expenditure on assets associated with SCADA and telecommunications assets.

System operations and network support

in relation to expenditure, means **operational expenditure** where the **primary driver** is the management of the **network** and includes expenditure relating to control centre and office-based system operations, including-

- (a) asset management planning including preparation of the AMP, load forecasting, network modelling;
- (b) network and engineering design (excluding design costs capitalised for capital projects);
- (c) network policy development (including the development of environmental, technical and engineering policies);
- (d) standards and manuals for **network** management;
- (e) network record keeping and asset management databases including GIS;
- (f) outage recording;
- (g) connection and customer records/customer management databases (including distributed generators);
- (h) customer queries and call centres (not associated with direct billing);
- (i) operational training for **network** management and field staff;
- (j) operational vehicles and transport;

- (k) IT & telecoms for **network** management (including IT support for asset management systems);
- day to day customer management including responding to queries on new connections, disconnections and reconnections, distributed generators;
- (m) network planning and system studies;
- (n) logistics (procurement) and stores;
- (o) **network** asset site expenses and leases;
- (p) route/easement management (including locating cables and pipelines for third parties, mark cuts, stand-overs, high-load escorts, obstructions, plans and permits);
- (q) surveying of new sites to identify work requirements;
- (r) engineering/technical consulting services (excluding costs capitalised);
- (s) contractor/contracts management (excluding costs capitalised);
- (t) transmission operator liaison and management; and
- (u) **network** related research and development

T

Target revenue

Terms of reference

means the revenue that the $\ensuremath{\textbf{EDB}}$ expects to obtain from $\ensuremath{\textbf{prices}}$

means a deed **Aurora** enters into with an **independent expert** for the purpose of procuring an opinion from that **independent expert** under clause 2.8.5A, and which, alongside other requirements,—

(a) imposes an overriding duty on the independent expert to assist and advise the Commission on areas under clause
 2.8.5A within the independent expert's area of expertise; and

(b) specifies the standard to which the independent expert will provide their opinion on the relevant areas under clause 2.8.5A

Total opening RAB value

means-

- (a) in relation to the unallocated RAB, the sum of unallocated opening RAB values as determined in accordance with the IM determination;
- (b) in relation to the RAB, the sum of opening **RAB** values as determined in accordance with the IM determination

Transmission charge

means any payment made in respect of the use of the **transmission system**. For the avoidance of doubt, this includes avoided transmission charges

Transmission system

means the national grid

U

Unallocated RAB

means for the components of the RAB rollforward, the values before the application of

clause 2.1.1 of the IM determination

Unallocated works under construction

means for the components of the works under construction roll-forward, the works under construction values before the application of clause 2.1.1 of the

IM determination

Unplanned interruption

means any interruption that is not a planned

interruption

Unplanned SAIDI limit

has the meaning as defined in the Aurora CPP

Unplanned SAIDI assessed

has the meaning as defined in the Aurora CPP

value

Unplanned SAIDI values means SAIDI values based on Class C

(unplanned interruptions on the network) on

a **network**

Unplanned SAIFI assessed value has the meaning as defined in the Aurora CPP

Unplanned SAIFI limit has the meaning as defined in the **Aurora CPP**

Unplanned SAIFI values means SAIFI values based on Class C

(unplanned interruptions on the network) on

a **network**

٧

Value of capital contributions means the value of capital contributions

received or expected to be received by an

EDB -in respect of the cost of assets

accumulated during the construction phase of a project that creates a new **network** asset, and is determined in accordance with clause 2.2.11(1)(h) of the **IM** determination and allocated to the **electricity distribution** services in accordance with the allocation of

clause 2.1.1 of the IM determination

Value of vested assets means the consideration incurred or expected

to be incurred by an $\ensuremath{\mathbf{EDB}}$ in respect of $\ensuremath{\mathbf{vested}}$

the regulated service asset values set out in

assets that are or are expected to be

accumulated during the construction phase of a project that creates a new **network** asset, and is determined in accordance with clause 2.2.11(1)(i) of the **IM determination** and allocated to the **electricity distribution**

services in accordance with clause 2.1.1 of the

IM determination

Vegetation management in relation to expenditure, means **operational**

expenditure where the **primary driver** is the

need to physically fell, remove or trim

vegetation (including root management) that is in the proximity of overhead lines or cables. It includes expenditure arising from the following activities-

- (a) inspection of affected lines and cables where the inspection is substantially or wholly directed to vegetation management (e.g., as part of a vegetation management contract). Includes pre-trim inspections as well as well as inspections of vegetation cut for the primary purpose of ensuring the work has been undertaken in an appropriate manner;
- (b) liaison with landowners including the issue of trim/cut notices, and follow up calls on notices;
- (c) the felling or trimming of vegetation to meet externally imposed requirements or internal policy, including operational support such as any mobile generation used during the activity.

The following activities and related costs are excluded from this category-

- (a) general inspection costs of assets subject to vegetation where this is not substantially directed to vegetation management (include in routine and corrective maintenance and inspection);
- (b) costs of assessing and reviewing the vegetation management policy (include in system operations and network support);
- (c) data collection relating to vegetation (include in system operations and network support);
- (d) the cost of managing a vegetation management contract, except as stated above (include in system operations and network support);
- (e) emergency work (include in service interruptions and emergencies)

Vested asset

has the meaning given in the **IM determination**

W

Works under construction

means-

(a) in relation to unallocated works under construction, the value of qcalculated using the following formula:

$$q = a + b - c + d$$

where-

a = unallocated works under construction – preceding disclosure year

b = capital expenditure

c = assets commissioned

d = adjustment resulting from asset allocation

(b) in relation to allocated works under construction, the value (as determined in accordance with paragraph (a)) which was allocated to electricity distribution services in accordance with clause 2.1.1 of the IM determination

Worst-performing feeders

means the feeder lines on an **EDB's network** that, in respect of the most recent **disclosure year**, are in the 90th percentile or higher for one or both of the following:

- (a) feeder SAIDI; and
- (b) feeder SAIFI

Z

Zone substation

means the transformers, switchgear, protection and control and Supervisory Control and Data Acquisition (SCADA) equipment, **low voltage** and station direct current systems, other secondary systems,

ripple injection plant and outdoor structure installed in an electrical power substation primarily used to convert any **subtransmission voltage** to any **distribution voltage**. Zone substation assets include the land, any buildings and the value of site developments.

PART 2 DISCLOSURE REQUIREMENTS

2.1 INFORMATION DISCLOSURE

- 2.1.1 Subject to clause 2.11.1, from the commencement date;
 - every **EDB**, other than **Aurora**, must comply with the information disclosure requirements set out in this determination, except those that apply only to **Aurora**, being clauses 2.4.5A, 1.1.1 to 2.5.7, 2.6.1(1)(c)(i), 2.8.5A, 2.8.5B, 2.9.5, clause 17 of A18 of Attachment A, and Attachment C; and
 - (2) except as provided in clause 2.1.2, Aurora must comply with the information disclosure requirements set out in this determination.
- 2.1.2 Aurora is not required to comply with clauses 17.1-17.3 of Attachment A.

2.2 APPLICABLE INPUT METHODOLOGIES

- 2.2.1 Every **EDB** must apply the requirements set out in the following subparts of the **IM determination** as applicable, when complying with this determination-
 - (1) Subpart 1 of part 2, cost allocation;
 - (2) Subpart 2 of part 2, asset valuation; and
 - (3) Subpart 3 of part 2, treatment of taxation.

2.3 FINANCIAL INFORMATION FOR THE DISCLOSURE YEAR

Annual disclosure relating to financial information for the disclosure year

- 2.3.1 Except as provided under clause 2.3.1A, \(\precedum\) within 5 months after the end of each disclosure year, every each EDB must complete and publicly disclose information the following reports relating to its financial position: by-
 - (1) Completing each of the following reports by inserting all information relating to the electricity lines services supplied by the EDB for that disclosure year-
 - (2)(1) the Analytical Ratios set out in Schedule 1;
 - (3)(2) the Report on Return on Investment set out in Schedule 2;
 - (4)(3) the Report on Regulatory Profit set out in Schedule 3;

- (5)(4) the Report on Value of the Regulatory Asset Base (Rolled Forward) set out in Schedule 4;
- (6)(5) the Report on Regulatory Tax Allowance set out in Schedule 5a;
- (7)(6) the Report on Related Party Transactions set out in Schedule 5b;
- (8)(7) the Report on Term Credit Spread Differential Allowance set out in Schedule 5c;
- (9)(8) the Report on Cost Allocations set out in Schedule 5d;
- (10)(9) the Report on Asset Allocations set out in Schedule 5e;
- (11)(10) the Report on Capital Expenditure for the Disclosure Year set out in Schedule 6a;
- (12)(11) the Report on Operational Expenditure for the Disclosure Year set out in Schedule 6b; and
- (13)(12) the Comparison of Forecasts to Actual Expenditure set out in Schedule 7; and.
- 2.3.1A For the purpose of Publicly disclosing each of those the Report on Operational

 Expenditure for the Disclosure Year set out in Schedule 6b required under clause

 2.3.1(10), each EDB must—
 - (1) exclude information on **cybersecurity** expenditure from the version of the report the **EDB** makes publicly available; but
 - (1)(2) include information on **cybersecurity** expenditure in the version of the report the **EDB** provides to the **Commission**reports.
- 2.3.2 Within 5 months and 5 working days after the end of each disclosure year, every EDB must disclose to the Commission information supporting the information disclosed in accordance with clause 2.3.1 by completing each of the following reports by inserting all information relating to the information supplied by the EDB in Schedules 5d and 5e for that disclosure year-
 - (1) the Report Supporting Cost Allocations set out in Schedule 5f; and
 - (2) the Report Supporting Asset Allocations set out in Schedule 5g.

Alternative method for return on investment information

- 2.3.3 In completing the Report on Return on Investment in Schedule 2-
 - (1) Each **EDB** must disclose information in accordance with part 2(iii) of Schedule 2 if during the first three months or last three months of the **disclosure year** the value of **assets commissioned** by the **EDB** exceeds 10% of the **total opening RAB values**; and
 - (2) Otherwise an **EDB** may elect to disclose information in accordance with part 2(iii) of Schedule 2.

Term credit spread differential allowance

2.3.4 The Report on Term Credit Spread Differential Allowance in Schedule 5c is only required to be completed by qualifying suppliers as qualifying suppliers is defined in the **IM determination**.

Allocation of assets and operating costs

- 2.3.5 In completing the Report on Cost Allocations in Schedule 5d and the Report on Asset Allocations in Schedule 5e, every EDB must publicly disclose, for each operational expenditure category in Schedule 5d and each asset category in Schedule 5e that includes operating costs and asset values that are not directly attributable-
 - (1) A description of the **operating costs** and asset values that are not **directly attributable**;
 - (2) The allocation methodology types used to allocate the operating costs and asset values that are not directly attributable;
 - (3) Where more than one allocation methodology type is used, the percentage of not directly attributable operating costs or asset values allocated using each method;
 - (4) The **allocators** used and the rationale for using each **allocator**;
 - (5) Where **ABAA** or **OVABAA** methodologies are used-
 - (a) whether the **allocators** used are causal allocators, **proxy asset** allocators or **proxy cost allocators**; and
 - (b) where proxy asset allocators or proxy cost allocators are used, explain-

- (i) why a **causal relationship** cannot be established or why it is impractical to apply a **causal relationship**; and
- (ii) the rationale for the quantifiable measure used for each **proxy** asset allocator or proxy cost allocator; and
- (6) Where ACAM has had the effect of being a limit under the OVABAA methodology, provide a summary of the relevant maximum values of allocated operating costs or regulated service asset values.

Related party transactions

- 2.3.6 For the purpose of clause 2.3.1, the value of a good or service acquired in a related party transaction, or the amount received for the sale or supply of assets or goods or services in a related party transaction, must be set on the basis that-
 - (1) the value of a good or service acquired in the related party transaction must be given a value not greater than if that transaction had the terms of an arm's-length transaction;
 - (2) the value of an asset or good or service sold or supplied in the related party transaction must be given a value not less than if that transaction had the terms of an arm's-length transaction;
 - (3) an objective and independent measure must be used in determining the terms of an arm's-length transaction for the purpose of subclauses (1) and
 (2); and
 - (4) for the purpose of subclause (1), where a good or service is acquired in the related party transaction, the value of the good or service must not exceed the actual amount charged to the EDB by the related party.

Guidance note 1: (refer to clause 1.4.1(9)-(10))

Commerce Commission "Input methodologies review final decision – Related party transactions – Final decision and determinations guidance" (21 December 2017), Table B1 of Attachment B provides an illustrative list of examples of arm's length transactions and Table B2 of Attachment B provides an illustrative list of examples of non-arm's length transactions.

Guidance note 2: (refer to clause 1.4.1(9)-(10))

Commerce Commission "Input methodologies review final decision – Related party transactions – Final decision and determinations guidance" (21

December 2017), Attachment C provides illustrative guidance on the relationship between the related party rules and cost allocation rules.

- 2.3.7 For the purpose of clause 2.3.6(1), a related party transaction will be treated as if it had the terms of an arm's-length transaction if the good or service acquired from a related party is valued at the cost incurred by the related party, provided that this is-
 - (1) fair and reasonable to the EDB; and
 - (2) substantially the same as the cost that has been incurred or would be incurred by the **related party** in providing the same type of good or service to third parties.
- 2.3.8 Within 5 months after the end of each disclosure year, if an EDB has had related party transactions involving a procurement from a related party during that disclosure year, the EDB must publicly disclose a diagram or a description that shows the connection between the EDB and the related parties with which it has had related party transactions in the disclosure year, including for each of those related parties-
 - (1) the relationship between the **EDB** and the **related party**;
 - (2) the principal activities of the related party; and
 - (3) the total annual expenditure incurred by the EDB with the related party.
- 2.3.9 An **EDB** shall not be required to comply with clauses 2.3.10-2.3.16 and 2.8.2-2.8.5 if-
 - (1) the sum of its **capital expenditure** and **operational expenditure** in the **disclosure year** is less than \$20 million; or
 - the proportion of the sum of its **capital expenditure** and **operational expenditure** accounted for by **related party transactions** is less than 10% in the **disclosure year**.
- 2.3.10 Subject to clause 2.3.9, within 5 months after the end of each **disclosure year**, if an **EDB** has had **related party transactions** involving a procurement from a **related party** during that **disclosure year**, the **EDB** must **publicly disclose**-
 - (1) a summary of its current policy in respect of the procurement of assets or goods or services from any **related party**; or

- (2) a summary of alternative documentation which is equivalent to a procurement policy in respect of the procurement of assets or goods or services from any **related party**.
- 2.3.11 Subject to clause 2.3.9, within 5 months after the end of each disclosure year, if an EDB has had related party transactions involving a procurement from a related party during that disclosure year, the EDB must disclose to the Commission-
 - (1) its current policy in respect of the procurement of assets or goods or services from any **related party**; or
 - (2) alternative documentation which is equivalent to a procurement policy in respect of the procurement of assets or goods or services from any **related party**.
- 2.3.12 Subject to clause 2.3.9, within 5 months after the end of each **disclosure year**, if an **EDB** has had **related party transactions** involving a procurement from a **related party** during that **disclosure year**, the **EDB** must **publicly disclose**-
 - (1) a description of how the **EDB** applies its current policy for the procurement of assets or goods or services from a **related party** in practice;
 - (2) a description of any policies or procedures of the EDB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the electricity distribution services;
 - (3) subject to subclause (5), at least one representative example transaction from the **disclosure year** of how the current policy for the procurement of assets or goods or services from a **related party** is applied in practice;
 - (4) for each representative example transaction specified in accordance with subclause (3), how and when the **EDB** last tested the arm's-length terms of those transactions; and
 - (5) separate representative example transactions where the **EDB** has applied the current policy for the procurement of assets or goods or services from a **related party** significantly differently between expenditure categories.

Map of anticipated network expenditure and network constraints

2.3.13 Subject to clause 2.3.9, within 5 months after the end of each **disclosure year**, where an **EDB** has had **related party transactions** involving a procurement from a

related party during that **disclosure year**, the **EDB** must **publicly disclose** a map of its **electricity distribution service** territory, which includes-

- (1) subject to clause 2.3.15, a brief explanatory description of the 10 largest forecast **operational expenditure** projects in the **AMP planning period** and the likely timing, value and location of the projects;
- (2) subject to clause 2.3.15, a brief explanatory description of the 10 largest forecast **capital expenditure** projects in the **AMP planning period** and the likely timing, value and location of the projects;
- (3) subject to clause 2.3.16, a brief explanatory description of possible future **network** or equipment constraints and their location, where the responses to the constraints would involve one of the 10 largest future **operational expenditure** projects in the **AMP planning period**; and
- (4) subject to clause 2.3.16, a brief explanatory description of possible future **network** or equipment constraints and their location, where the responses to the constraints would involve one of the 10 largest future **capital expenditure** projects in the **AMP planning period**.
- 2.3.14 For the purposes of clause 2.3.13, the map must-
 - (1) identify whether the forecast or possible **operational expenditure** or **capital expenditure** is-
 - (a) already subject to a contract and, if so, whether that contract is with a related party;
 - (b) forecast to require the supply of assets or goods or services by a related party; or
 - (c) currently not indicated for supply by a **related party**; and
 - (2) be consistent with the **AMP** information specified in-
 - (a) clause 11.8.3 of Attachment A on **network** or equipment constraints;
 - (b) clause 11.8.4 of Attachment A on the projected impact of demand management initiatives; and
 - (c) clause 11.10 of Attachment A on the **network** development programme.

- 2.3.15 For the purposes of clause 2.3.13, where an EDB forecasts having fewer than-
 - (1) 10 forecast operational expenditure projects in the AMP planning period, the map must include all of its forecast operational expenditure projects; or
 - (2) 10 forecast **capital expenditure** projects in the **AMP planning period**, the map must include all of its forecast **capital expenditure** projects.
- 2.3.16 For the purposes of clause 2.3.13, where the responses to the **network** or equipment constraints would involve fewer than-
 - (1) 10 future **operational expenditure** projects in the **AMP planning period**, the map must include all future **operational expenditure** projects; or
 - (2) 10 future **capital expenditure** projects in the **AMP planning period**, the map must include all future **capital expenditure** projects.

Information on capital expenditure projects

- 2.3.17 In completing the Report on Capital Expenditure for the Disclosure Year in Schedule 6a, every **EDB** must disclose the following information in relation to **material projects and programmes**-
 - (1) Separately disclose consumer connection expenditure for each consumer type defined by the EDB in 6a(iii) of Schedule 6a;
 - (2) For each material asset relocation project in Schedule 6a-
 - (a) separately disclose a brief description of the project and its value in 6a(v) of Schedule 6a;
 - (b) provide any additional commentary, including the purpose of the project and a description of the assets relocated for each project in Schedule 14 (Mandatory Explanatory Notes);
 - (3) For each material quality of supply project in Schedule 6a-
 - (a) separately disclose a brief description of the project and its value in 6a(vi) in Schedule 6a;
 - (b) provide any additional commentary, including the purpose of the project and a description of the assets affected for each project in Schedule 14 (Mandatory Explanatory Notes);
 - (4) For each material **legislative and regulatory** project in Schedule 6a-

- (a) separately disclose a brief description of the **legislative and regulatory** requirement and the value of the project in 6a(vii) of Schedule 6a;
- (b) provide any additional commentary, including the purpose of the projects and a description of the assets affected for each project in Schedule 14 (Mandatory Explanatory Notes);
- (5) For each material **other reliability, safety and environment** project in Schedule 6a-
 - (a) separately disclose a brief description of the project and its value in 6a(viii) of Schedule 6a;
 - (b) provide any additional commentary, including the purpose of the project and a description of the assets affected for each project in Schedule 14 (Mandatory Explanatory Notes);
- (6) For each material **non-network assets** project in Schedule 6a-
 - (a) separately disclose a brief description of the project and its value in 6a(ix) of Schedule 6a;
 - (b) provide any additional commentary, including the purpose of the project and a description of the assets affected for each project in Schedule 14 (Mandatory Explanatory Notes).

Information on physical service life potential

2.3.18 For all assets or groups of assets where the supplier has changed the asset(s)' depreciation profile or the asset(s) was **commissioned** during the **disclosure year**, and the asset(s)' life service potential was determined by an **engineer** in accordance with clause 2.2.8 of the **IM determination**, within 5 months after the end of each **disclosure year**, the **EDB** must **publicly disclose** the report written by the **engineer** which was prepared in accordance with clause 2.2.8(3)(b) of the **IM determination**.

2.4 PRICING AND RELATED INFORMATION

Disclosure of pricing methodologies

- 2.4.1 Every **EDB** must **publicly disclose**, before the start of each **disclosure year**, a pricing methodology which-
 - (1) Describes the methodology, in accordance with clause 2.4.3, used to calculate the **prices** payable or to be payable;

- (2) Describes any changes in **prices** and **target revenues**;
- (3) Explains, in accordance with clause 2.4.5, the approach taken with respect to pricing in **non-standard contracts** and **distributed generation** (if any);
- (4) Explains whether, and if so how, the **EDB** has sought the views of **consumers**, including their expectations in terms of **price** and quality, and reflected those views in calculating the **prices** payable or to be payable. If the **EDB** has not sought the views of **consumers**, the reasons for not doing so must be disclosed.
- 2.4.2 Any change in the pricing methodology or adoption of a different pricing methodology, must be **publicly disclosed** at least 20 working days before **prices** determined in accordance with the change or the different pricing methodology take effect.
- 2.4.3 Every disclosure under clause 2.4.1 must-
 - (1) Include sufficient information and commentary to enable interested **persons** to understand how **prices** were set for each **consumer group**, including the assumptions and statistics used to determine **prices** for each **consumer group**;
 - (2) Demonstrate the extent to which the pricing methodology is consistent with the **pricing principles** and explain the reasons for any inconsistency between the pricing methodology and the **pricing principles**;
 - (3) State the **target revenue** expected to be collected for the **disclosure year** to which the pricing methodology applies;
 - (4) Where applicable, identify the key components of target revenue required to cover the costs and return on investment associated with the EDB's provision of electricity lines services. Disclosure must include the numerical value of each of the components;
 - (5) State the consumer groups for whom prices have been set, and describe-
 - (a) the rationale for grouping **consumers** in this way;
 - the method and the criteria used by the EDB to allocate consumers to each of the consumer groups;

- (6) If **prices** have changed from **prices** disclosed for the immediately preceding **disclosure year**, explain the reasons for changes, and quantify the difference in respect of each of those reasons;
- (7) Where applicable, describe the method used by the **EDB** to allocate the **target revenue** among **consumer groups**, including the numerical values of the **target revenue** allocated to each **consumer group**, and the rationale for allocating it in this way;
- (8) State the proportion of **target revenue** (if applicable) that is collected through each **price component** as **publicly disclosed** under clause 2.4.18.
- 2.4.4 Every disclosure under clause 2.4.1 must, if the **EDB** has a **pricing strategy**-
 - (1) Explain the pricing strategy for the next 5 disclosure years (or as close to 5 years as the pricing strategy allows), including the current disclosure year for which prices are set;
 - (2) Explain how and why **prices** for each **consumer group** are expected to change as a result of the **pricing strategy**;
 - (3) If the **pricing strategy** has changed from the preceding **disclosure year**, identify the changes and explain the reasons for the changes.
- 2.4.5 Every disclosure under clause 2.4.1 must-
 - (1) Describe the approach to setting prices for non-standard contracts, including-
 - (a) the extent of non-standard contract use, including the number of ICPs represented by non-standard contracts and the value of target revenue expected to be collected from consumers subject to nonstandard contracts;
 - (b) how the EDB determines whether to use a non-standard contract, including any criteria used;
 - (c) any specific criteria or methodology used for determining prices for consumers subject to non-standard contracts and the extent to which these criteria or that methodology are consistent with the pricing principles;

- (2) Describe the **EDB**'s obligations and responsibilities (if any) to **consumers** subject to **non-standard contracts** in the event that the supply of **electricity lines services** to the **consumer** is interrupted. This description must explain-
 - (a) the extent of the differences in the relevant terms between **standard contracts** and **non-standard contracts**:
 - (b) any implications of this approach for determining prices for consumers subject to non-standard contracts;
- (3) Describe the EDB's approach to developing prices for electricity distribution services provided to consumers that own distributed generation, including any payments made by the EDB to the owner of any distributed generation, and including the-
 - (a) **prices**; and
 - (b) value, structure and rationale for any payments to the owner of the distributed generation.

Additional pricing methodology disclosure requirements for Aurora

- 2.4.5A Every disclosure by Aurora under clauses 2.4.1 and 2.4.2 must include:
 - (1) Together with the information disclosed under clauses 2.4.1(1) and 2.4.2, sufficient information and commentary in a readily understandable form to enable interested **persons** to understand how **Aurora** has set **prices** for each **Aurora pricing region**;
 - (2) For each **Aurora pricing region**, a worked example of how an **average domestic consumer's prices** would be calculated; and
 - (3) A version of **Aurora's cost of supply model** with explanatory material that will assist interested **persons** to understand how the **cost of supply model** works.

Disclosure of capital contributions

- 2.4.6 Every EDB must at all times publicly disclose—
 - (1) A description of its current policy or methodology for determining **capital contributions**, including—
 - (a) the circumstances (or how to determine the circumstances) under which the EDB may require a capital contribution;

- (b) how the amount payable of any **capital contribution** is determined.

 Disclosure must include a description of how the costs of any assets (if applicable), including any **shared assets** and any **sole use assets** that are included in the amount of the **capital contribution**, are calculated;
- (c) the extent to which any policy or methodology applied is consistent with the relevant **pricing principles**;
- (2) A statement of whether a **person** can use an independent contractor to undertake some or all of the work covered by the **capital contribution** sought by the **EDB**;
- (3) If the **EDB** has a standard schedule of **capital contribution** charges, the current version of that standard schedule.
- 2.4.7 When a consumer or other person from whom the EDB seeks a capital contribution, queries the capital contribution charge, (and when the charge is not covered in the standard schedule of capital contribution charges, or no such schedule exists) the EDB must, within 10 working days of receiving the request, provide reasonable explanation to any reasonable query from that consumer or other person of the components of that charge and how these were determined.
- 2.4.8 The requirements in clauses 2.4.6 and 2.4.7 apply if-
 - (1) The **EDB** determines the amount of **capital contributions**; or
 - (2) The **EDB** has or can obtain information about the policy or methodology used by another **person** to determine **capital contributions** where the **EDB** receives those **capital contributions**.

Disclosure of prescribed terms and conditions of contracts

- 2.4.9 Every **EDB** must, within 20 working days of entering into a **prescribed contract**, that is a **standard contract**, **publicly disclose**
 - (1) If the other party to the **contract** is an **electricity retailer**, the name of that **electricity retailer**;
 - (2) In any other case, the **prescribed terms and conditions** of the **prescribed contract**.
- 2.4.10 Subject to section 53C(4) of the Act, if any prescribed terms and conditions of a prescribed contract that is also a standard contract (including a prescribed contract that was entered into before the commencement date) are modified,

the **EDB** must, not later than 20 working days after those modifications take effect, **publicly disclose**-

- (1) The **prescribed contract** concerned;
- (2) The modifications made to the **prescribed terms and conditions**.
- 2.4.11 For the purposes of this section, public disclosure by an EDB of the prescribed terms and conditions of a standard contract is to be regarded as public disclosure by that EDB in relation to all of its standard contracts with the same prescribed terms and conditions.
- 2.4.12 Subject to section 53C(4) of the **Act**, every **EDB** must, in respect of all **prescribed contracts** that are **non-standard contracts** entered into during the **disclosure year**, no earlier than 5 months after the end of that **disclosure year**, either-
 - (1) If the other party to the **contract** is an **electricity retailer**, **publicly disclose** the name of that **electricity retailer**;
 - (2) In any other case, either—
 - (a) publicly disclose a description of the goods or services to be supplied under the prescribed contract and the quantity or amount of those goods or services; or
 - (b) publicly disclose the prescribed terms and conditions of each prescribed contract, with the exception of prescribed terms and conditions that specify, determine, or provide for the determination of the price at which goods or services are to be supplied.
- 2.4.13 For any contract for which information is publicly disclosed under clause 2.4.12, unless prescribed terms and conditions have been publicly disclosed under subclause 2.4.12(2)(b), every EDB must, within 20 working days of a request by any person, provide to that person and publicly disclose the prescribed terms and conditions of the prescribed contract, with the exception of prescribed terms and conditions that specify, determine, or provide for the determination of the price at which goods or services are to be supplied.
- 2.4.14 Clauses 2.4.15 and 2.4.16 apply to prescribed contracts—
 - (1) For which information was disclosed in any previous **disclosure year** under clause 2.4.12 or clause 2.4.13; or

- (2) Which were entered into before the **commencement date** of this determination.
- 2.4.15 Subject to section 53C(4) of the Act, if any prescribed terms and conditions of a prescribed contract described under clause 2.4.14 are modified, every EDB must immediately publicly disclose, no earlier than 5 months after the end of the disclosure year in which the prescribed contract was modified-
 - (1) The existence of the **prescribed contract** described in clause 2.4.14 that has been modified; and
 - (2) The fact of its modification.
- 2.4.16 Within 20 working days of a request by any person, the EDB must provide to the person and publicly disclose the prescribed terms and conditions of the prescribed contract described in clause 2.4.15, with the exception of prescribed terms and conditions that specify, determine or provide for the determination of the price at which goods and services are to be supplied.
- 2.4.17 Every **EDB** must, when **publicly disclosing** the **prescribed terms and conditions** under any of clauses 2.4.12, 2.4.13, or 2.4.16, include the following information-
 - (1) The electricity supply capacity (in **kVA**) of the assets used for the purposes of conveying electricity under the **contract**-
 - (a) at the **ICP**, if the electricity is conveyed to a **consumer**; or
 - (b) at the point at which the electricity is supplied to any **person** other than a **consumer**;
 - (2) The voltage at which the electricity is to be supplied or conveyed under the **non-standard contract**.

Disclosure of prices

- 2.4.18 Every EDB must at all times publicly disclose—
 - (1) Each current **price** expressed in a manner that enables **consumers** to determine-
 - (a) the **consumer group** or **consumer groups** applicable to them;
 - (b) the total **price** for **electricity lines services** applicable to them;
 - (c) the **prices** represented by each **price component** applicable to them;

- (d) the amount of each current **price** that is attributable to **transmission** charges;
- (2) The number (or estimated number) of **consumers** which must pay each **price**;
- (3) The date at which each **price** was or will be first introduced;
- (4) The **price** that was payable immediately before each current **price** (if any) expressed in the manner referred to in subclause (1).
- 2.4.19 Every **EDB** must, at least 20 working days before changing or withdrawing a **price** or introducing a new **price** that is payable by 5 or more **consumers**-
 - (1) Publicly disclose-
 - (a) the information specified in clause 2.4.18 in respect of that **price**;
 - (b) an explanation of the reasons for the new **price** or the changed or withdrawn **price**;
 - (2) In addition, either-
 - (a) give written notice to each **consumer** by whom that **price** is, or in the case of a withdrawn **price** would have been, payable, including the information specified in clause 2.4.18 in respect of that **price**; or
 - (b) notify **consumers** in the news section of either-
 - (i) 2 separate editions of each newspaper; or
 - (ii) news media accessible using the internet that is widely read by consumers connected to EDB's network;
 - (c) notification under subclause (2)(b) must provide details of the **price**, including-
 - (i) the changed **price** alongside the immediately preceding **price** applicable; and
 - (ii) contact details where further details of the new or changed price can be found including the URL of the EDB's publicly accessible website.

- 2.4.20 Every EDB must, in respect of-
 - (1) All new **prices** payable; or
 - (2) In the case of withdrawn **prices**, the **prices** which would have been payable;

by 4 or fewer **consumers**, at least 20 working days before introducing a new **price**, give written notice to each **consumer** by whom that **price** is payable, the information specified in clause 2.4.18 in respect of that **price**.

Annual disclosure of information on quantities and revenues billed

- 2.4.21 Within 5 months after the end of each **disclosure year**, every **EDB** must **publicly disclose** the Report on Billed Quantities and Line Charge Revenues in Schedule 8.
- 2.4.22 If **prices** differ between **sub-networks**, a separate Schedule 8 must be completed and **publicly disclosed** for each **sub-network**.

Disclosure of financial distributions arising from ownership interest

- 2.4.23 At the time an **EDB** makes a **financial distribution**, the **EDB** must **publicly disclose**
 - (1) the allocation methodology it used to make the recommendation or allocation
 - (2) the value of the **financial distribution**; and
 - (3) whether the **EDB** or the **community trust**, **customer trust** or **customer cooperative** made the allocation.
- 2.4.24 The description in clause 2.4.23 must provide sufficient detail that **consumers** can accurately determine their entitlement.

2.5 NON-FINANCIAL INFORMATION RELATING TO NETWORK ASSETS

Network asset reporting

- 2.5.1 Except as provided under clause 2.5.1A, \widehigh within 5 months after the end of each disclosure year, every EDB must—
 - (1) Complete each of the following reports by inserting all information relating to the **electricity distribution services** supplied by the **EDB** for the **disclosure years** provided for in the following reports-
 - (a) the Asset Register set out in Schedule 9a;

- (b) the Asset Age Profile set out in Schedule 9b;
- (c) the Report on Overhead Lines and Underground Cables set out in Schedule 9c;
- (d) the Report on Embedded Networks set out in Schedule 9d;
- (e) the Report on Network Demand set out in Schedule 9e;
- (f) the Report on Network Reliability set out in Schedule 10; and
- (2) publicly disclose each of these reports.
- 2.5.1A EDBs are not required to complete and publicly disclose the following information within 5 months after the end of disclosure year 2023:
 - (1) information regarding 'overhead circuit requiring vegetation management'
 (applying the definition in Schedule 16) as part of the Report on Overhead
 Lines and Underground Cables set out in Schedule 9c: -and
 - (2) <u>item 10(vi) (notice of planned interruptions) and item 10(vii) notice of unplanned interruptions) as part of the Report on Network Reliability set out in Schedule 10.</u>
- 2.5.2 Except as provided under clause 2.5.2A, lif an EDB has sub-networks, within 5 months after the end of each disclosure year, an-the EDB must—
 - (1) complete each of the following reports by inserting all information relating to the electricity distribution services supplied by the EDB in relation to each sub-network for the disclosure years provided for in the following reports-
 - (a) the Assets Register set out in Schedule 9a;
 - (b) the Report on Asset Age Profile set out in Schedule 9b;
 - (c) the Report on Overhead Lines and Underground Cables set out in Schedule 9c;
 - (d) the Report on Network Demand set out in Schedule 9e;
 - (e) the Report on Network Reliability set out in Schedule 10; and
 - (2) **publicly disclose** each of these reports.

- 2.5.2A EDBs are not required to complete and publicly disclose the following information within 5 months after the end offor disclosure year 2023:
 - (1) information regarding 'overhead circuit requiring vegetation management'
 (applying the definition in Schedule 16) (as part of -the Report on Overhead
 Lines and Underground Cables set out in Schedule 9c): and
 - (2) item 10(vi) (notice of planned interruptions) and item 10(vii) notice of unplanned interruptions) as part of the Report on Network Reliability set out in Schedule 10.

Customer charters and consumer compensation arrangements

2.5.3 An **EDB** must **publicly disclose**—

- (1) whether the EDB has a customer charter or any consumer compensation arrangement (whether as part of, or separate to, a customer charter);
- (2) the **EDB's customer charter** (including guaranteed service levels) at all times, if the **EDB** has a **customer charter**; and
- (3) at all times an explanation of any consumer compensation arrangements the EDB has in place; and -
- (4) if the EDB has a customer charter or consumer compensation arrangement, a description of any change the EDB—
 - (a) intends to make to its **customer charter** or **consumer compensation arrangement**, reasonably in advance of making the change; and
 - (b) makes to its customer charter or consumer compensation

 arrangement, as soon as reasonably practicable after making the change.

Aurora's customer charter and consumer compensation arrangement

2.5.3 Where applicable, Aurora must publicly disclose—

- (1) its customer charter and consumer compensation arrangement at all times; and
- (2) a description of any change Aurora—
 - (a) intends to make to its customer charter or consumer compensation arrangement, reasonably in advance of making the change; and

(b) makes to its customer charter or consumer compensation arrangement, as soon as reasonably practicable after making the change.

Aurora's development plan, project and programme delivery plan, and safety delivery plan

- 2.5.4 **Aurora** must do the following:
 - (1) by 31 March 2022, **publicly disclose Aurora's** 'development plan' that describes how **Aurora** plans to develop and improve its—
 - (a) low voltage network practices for—
 - (i) monitoring voltage quality on the low voltage parts of Aurora's network;
 - (ii) achieving compliance with applicable voltage requirements of the Electricity (Safety) Regulations 2010 on the low voltage parts of Aurora's network;
 - (iii) responding to voltage quality issues when they are identified; and
 - (iv) communicating to affected consumers the work on voltage quality that Aurora is doing on its low voltage network;
 - (b) engagement with consumers on Aurora's customer charter and consumer compensation arrangement;
 - (c) planning, management, and communication of **planned interruptions** to **consumers**;
 - (d) asset data collection and asset data quality practices, to
 - systematise Aurora's processes for collecting and collating network asset data;
 - (ii) improve Aurora's knowledge of network asset condition so that assets are replaced in a timely manner;
 - (iii) ensure **Aurora** has an appropriate platform for sharing **network** asset data with internal and external stakeholders;
 - (iv) evaluate whether **Aurora** is achieving its asset management policies and objectives; and

- ensure there is a clear line of sight between Aurora's network asset condition data and Aurora's expenditure forecasts and financial reporting;
- (e) asset management practices and processes, including, where appropriate, to develop and improve **Aurora's**
 - (i) asset health models so that they are informed by **network** asset condition data;
 - (ii) understanding of asset criticality so that it informs Aurora's strategies for asset replacement and renewal;
 - (iii) asset risk framework so that **Aurora** can make risk-based decisions in relation to its supply of **electricity distribution services**, including where appropriate, based on reliability risk, environmental risk, high-impact low-probability event risk, and safety risk; and
 - (iv) practices for identifying and reducing safety risks in relation to Aurora's supply of electricity distribution services, including by using frameworks to prioritise identified safety issues and to justify investments to reduce the likelihood of those issues arising;
- (f) practices for estimating the costs of capital expenditure and operational expenditure projects and programmes, including –
 - (i) a description of how **Aurora** plans to update and manage its models for estimating costs; and
 - (ii) a description of how Aurora uses the actual costs of completed capital expenditure and operational expenditure projects and programmes to improve future cost estimates;
- (g) quality assurance processes, including a description of any actions Aurora plans to take to ensure capital expenditure and operational expenditure projects and programmes are efficiently delivered and implemented to meet applicable industry standards;
- (2) by 31 March 2022, **publicly disclose Aurora's** 'project and programme delivery plan' that describes:

- (a) the capital expenditure and operational expenditure projects and programmes Aurora plans to deliver over the CPP regulatory period, including where and when Aurora plans to deliver those projects and programmes;
- (b) whether, and if so how and why, the projects and programmes in paragraph (a), and the capital expenditure and operational expenditure required for those projects and programmes, as applicable, differ in material respects to:
 - the capital expenditure and operational expenditure projects and programmes outlined in Aurora's application for the Aurora CPP; and
 - (ii) the capital expenditure and operational expenditure provided for in the Aurora CPP;
- how Aurora plans to communicate with consumers and other stakeholders when it needs to reprioritise or substitute capital expenditure or operational expenditure projects or programmes during the CPP regulatory period;
- (3) by 31 March 2022, **publicly disclose Aurora's** 'safety delivery plan' setting out for each **disclosure year** how the **capital expenditure** and **operational expenditure** projects and programmes described in **Aurora's** project and programme delivery plan are expected to reduce **Aurora's network** safety risk in supplying **electricity distribution services**, and includes:
 - (a) an explanation of whether, and if so how and why, the expected network safety risk profile varies from Aurora's equivalent profile at the time of Aurora's application for the Aurora CPP;
 - (b) a list of the key **network** safety risks and the actions **Aurora** plans to take to reduce those risks, with reference to the principle of reducing risk to 'as low as reasonably practicable'; and
 - (c) a visual representation of Aurora's expected reduction or change in its network safety risk, grouped by asset class, as a result of delivering capital expenditure or operational expenditure projects or programmes identified in Aurora's project and programme delivery plan under subclause (2);

(4) by 31 May 2022, and according to the requirements of clause 2.5.7, present to **consumers** in each **Aurora pricing region**, a summary of the key features of the development plan, the project and programme delivery plan, and the safety delivery plan under subclauses (1) to (3).

Aurora's annual delivery report

- 2.5.5 For each disclosure year after disclosure year 2021, Aurora must,—
 - (1) within 5 months after the end of that **disclosure year**, complete and **publicly disclose** an **annual delivery report** that, subject to clause <u>2.5.6</u>2.5.6, includes the content specified in Attachment C; and
 - (2) within 2 months after publicly disclosing an annual delivery report under subclause (1), and according to the requirements of clause 2.5.7, present to consumers in each Aurora pricing region, a summary of the key features of that annual delivery report.
- 2.5.6 Aurora does not need to include qualitative content required under clauses 1.2,1.12.2, 1.12.3(a) and (c), and 2 of Attachment C in an annual delivery report thatAurora publicly discloses under clause 2.5.5(1) if Aurora—
 - (1) has previously made that content publicly available, in a readily identifiable and accessible form, prior to publicly disclosing the annual delivery report; and
 - (2) includes in that annual delivery report—
 - (a) a summary of that publicly available content;
 - (b) a reference to the location where that publicly available content may be accessed; and
 - (c) an update on any changes to the content since it was previously made publicly available.

Presenting a summary of the key features of the plans and each annual delivery report

- 2.5.7 When presenting the summary of the key features of the development plan, the project and programme delivery plan, and the safety delivery plan under clause 2.5.4(4), and each **annual delivery report** under clause 2.5.5(2), **Aurora** must ensure it presents that summary in a public forum
 - in a format that allows **Aurora's consumers** to readily understand and engage with **Aurora** and the information presented;

- (2) of which **Aurora** publishes reasonable notice on its website and via other suitable means of communication; and
- (3) that, except where it is not feasible for reasons outside **Aurora's** control, is held in a physical venue that is accessible to **Aurora's consumers**.

2.6 ASSET MANAGEMENT PLANS AND FORECAST INFORMATION

Disclosure relating to asset management plans and forecast information

- 2.6.1 Except as provided in clause 2.6.1A, and Ssubject to clause 2.6.3, before the start of each disclosure year commencing with the disclosure year 2014, every EDB must—
 - (1) Complete an AMP that—
 - (a) relates to the **electricity distribution services** supplied by the **EDB**;
 - (b) meets the purposes of **AMP** disclosure set out in clause 2.6.2;
 - (c) has been prepared in accordance with:
 - (i) in **Aurora's** case, clauses 1 to 1718 of Attachment A; and
 - (ii) in the case of each other **EDB**, clauses 1 to 1746 of Attachment A;
 - (d) contains the information set out in the schedules described in clause2.6.6; and
 - (e) contains the Report on Asset Management Maturity as described in Schedule 13;
 - (2) Complete the Report on Asset Management Maturity in accordance with the requirements specified in Schedule 13; and
 - (3) Publicly disclose the AMP.

2.6.1A Despite clause 2.6.1,—

- (1) each EDB may choose to publicly disclose the information in clauses 17.1-17.6 of Attachment A in any of the following forms:
 - (a) wholly in a document(s) separate to the **AMP**, which must be made publicly available on the **EDB**'s website. The contents page of the

EDB's most recent **AMP** must include a hyperlink reference to the website where the document(s) can be located; or

- (b) across a combination of its **AMP** and a document(s) available on its website. The contents page of the **EDB**'s most recent **AMP** must include a hyperlink reference to the website where the document(s) can be located;
- (2) clause 3.11.1(e) and (f), clauses 12.5-12.7, and clauses 17.1-17.6 of

 Attachment A do not apply in respect of the AMP required for disclosure year

 2023; but
- (3) each EDB must, by 30 June 2023, publicly disclose the information under clauses 17.1-17.6 of Attachment A, either in the EDB's AMP for disclosure year 2023 or in a separate document.
- 2.6.2 The purposes of **AMP** disclosure referred to in subclause 2.6.1(1)(b) are that the **AMP**
 - (1) Must provide sufficient information for interested **persons** to assess whether-
 - (a) assets are being managed for the long term;
 - (b) the required level of performance is being delivered; and
 - (c) costs are efficient and performance efficiencies are being achieved;
 - (2) Must be capable of being understood by interested **persons** with a reasonable understanding of the management of infrastructure assets;
 - (3) Should provide a sound basis for the ongoing assessment of asset-related risks, particularly high impact asset-related risks.
- 2.6.3 Subject to clause 2.6.4, an **EDB** may elect to complete and **publicly disclose** an **AMP update**, as described under clause 2.6.5, before the start of a **disclosure year**, instead of an **AMP**, as described under clause 2.6.1(1), unless the start of that **disclosure year** is-
 - (1) one year after the start of the **DPP regulatory period**; or
 - (2) two years before the start of the next **DPP regulatory period**.

- 2.6.4 An EDB must not complete and publicly disclose an AMP update instead of an AMP if it has not previously publicly disclosed an AMP under clause 2.6.1.
- 2.6.5 For the purpose of clause 2.6.3, the AMP update must—
 - (1) Relate to the **electricity distribution services** supplied by the **EDB**;
 - (2) Identify any material changes to the **network** development plans disclosed in the last **AMP** under clause 11 <u>and clause</u> 17.5-17.7 of Attachment A or in the last **AMP update** disclosed under this clause;
 - (3) Identify any material changes to the lifecycle asset management (maintenance and renewal) plans disclosed in the last **AMP** pursuant to clause 12 of Attachment A or in the last **AMP update** disclosed under this section;
 - (4) Provide the reasons for any material changes to the previous disclosures in the Report on Forecast Capital Expenditure set out in Schedule 11a and Report on Forecast Operational Expenditure set out in Schedule 11b;
 - (5) Identify any changes to the asset management practices of the **EDB** that would affect a Schedule 13 Report on Asset Management Maturity disclosure; and
 - (6) Contain the information set out in the schedules described in clause 2.6.6.

2.6.6 Each EDB—

- (1) must, except as provided in subclauses (2) and (3), before the start of each disclosure year, complete and publicly disclose each of the following reports by inserting all information relating to the electricity distribution services supplied by the EDB for the disclosure years provided for in the following reports—
 - (a) the Report on Forecast Capital Expenditure in Schedule 11a;
 - (b) the Report on Forecast Operational Expenditure in Schedule 11b;
 - (c) the Report on Asset Condition in Schedule 12a;
 - (d) the Report on Forecast Capacity in Schedule 12b;
 - (e) the Report on Forecast Network Demand in Schedule 12c;

- (f) the Report on Forecast Interruptions and Duration in Schedule 12d;
- (2) is not required to complete and **publicly disclose** the following information in respect of **disclosure year** 2023:
 - (a) information on forecast **cybersecurity** expenditure (as part of the Report on Forecast Operational Expenditure set out in Schedule 11(b)):; and
 - (b) information on consumer disconnections (as part of the Report on Forecast Network Demand set out in Schedule 12(c)(i));
- (3) for the purpose of the Report on Forecast Operational Expenditure set out in Schedule 11(b) required under subclause (1)(b), must—
 - (a) exclude information on **cybersecurity** expenditure from the version of the report the **EDB** makes publicly available; but
 - (b) include information on **cybersecurity** expenditure in the version of the report the **EDB** provides to the **Commission**; and
- (2)(4) must, I if the EDB has sub-networks, complete and publicly disclose the Report on Forecast Interruptions and Duration set out in Schedule 12d by inserting all information relating to the electricity distribution services supplied by the EDB in relation to each sub-network for the disclosure years provided for in the report.

2.7 EXPLANATORY NOTES TO DISCLOSED INFORMATION

- 2.7.1 Within 5 months after the end of each **disclosure year**, every **EDB** must complete and **publicly disclose** the Schedule of Mandatory Explanatory Notes (Schedule 14) by inserting all information relating to information disclosed in accordance with clauses 2.3.1, 2.4.21, 2.4.22, and clauses 2.5.1(1)(f) and 2.5.2(1)(e)-
 - (1) In relation to details of any insurance cover for the assets used to provide **electricity distribution services**, the explanatory notes in Schedule 14 must include-
 - (a) the **EDB**'s approaches and practices in regard to the insurance of assets, including the level of insurance;
 - (b) in respect of any self-insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance;

- (2) Where an item disclosed in accordance with clause 2.3.1 is classified differently from the previous year, the explanatory notes in Schedule 14 must include the-
 - (a) nature of the item reclassified;
 - (b) value of the item in the current **disclosure year** and in the previous **disclosure year**;
 - (c) classification of the item in the previous disclosure year;
 - (d) classification of the item in the current disclosure year; and
 - (e) reason why the item has been reclassified.
- 2.7.2 Before the start of each disclosure year, every EDB must complete and publicly disclose the Mandatory Explanatory Notes on Forecast Information in Schedule 14a by inserting all relevant information relating to information disclosed in accordance with clause 2.6.6.
- 2.7.3 Within 5 months after the end of each **disclosure year**, every **EDB** may **publicly disclose** any further comments on the information disclosed in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1 and 2.5.2, in Schedule 15.

2.8 ASSURANCE REPORTS

- 2.8.1 Where an **EDB** is required to **publicly disclose** any **audited disclosure** information, the **EDB** must-
 - (1) procure an assurance report by an **independent auditor** in respect of that **audited disclosure information**, that is prepared in accordance with **SAE 3100** and **ISAE (NZ) 3000**, signed by the **independent auditor** (either in his or her own name or that of his or her firm), that-
 - (a) is addressed to the **directors** of the **EDB** and to the **Commission** as the intended users of the assurance report;
 - (b) states-
 - (i) that it has been prepared in accordance with **SAE 3100** and **ISAE (NZ) 3000**;
 - (ii) the work done by the **independent auditor**;

- (iii) the scope and limitations of the assurance engagement;
- (iv) the existence of any relationship (other than that of auditor) which the independent auditor has with, or any interests which the independent auditor has in, the EDB or any of its subsidiaries;
- (v) whether the independent auditor has obtained sufficient recorded evidence and explanations that he or she required and, if not, the information and explanations not obtained;
- (vi) whether, in the independent auditor's opinion, as far as appears from an examination, the information used in the preparation of the audited disclosure information has been properly extracted from the EDB's accounting and other records, sourced from its financial and non-financial systems; and
- (vii) whether, in the independent auditor's opinion, as far as appears from an examination of them, proper records to enable the complete and accurate compilation of the audited disclosure information required by the Electricity Distribution Information Disclosure Determination 2012 have been kept by the EDB and, if not, the records not so kept;
- (c) states whether (and, if not, the respects in which it has not), in the independent auditor's opinion, the EDB has complied, in all material respects, with the Electricity Distribution Information Disclosure Determination 2012 in preparing the audited disclosure information; and
- (d) states whether, in the **independent auditor's** opinion, the **EDB's** basis for valuation of **related party transactions** in the **disclosure year** has complied, in all material respects, with clause 2.3.6 of this determination and clauses 2.2.11(1)(g) and 2.2.11(5) of the **IM determination**;
- (2) without limiting the application of **SAE 3100** and **ISAE (NZ) 3000** as set out in subclause (1), the assurance report must state any key audit matters, being those matters that-
 - required significant attention by the independent auditor in carrying out its assurance engagement;

- (b) are selected from matters communicated with those charged with governance of the **EDB**; and
- (c) the **independent auditor** has identified, taking into account:
 - (i) areas of higher assessed risk of material misstatement of audited disclosure information;
 - significant auditor judgements relating to areas in the audited disclosure information that involved significant judgement of the management of the EDB; and
 - (iii) the effect on the assurance engagement of any significant events or transactions by the EDB that occurred during the disclosure year; and

Guidance note: (refer to clause 1.4.1(9)-(10))
This is a similar requirement to that which applies for the audit or financial statements under International Standard on Auditing (New Zealand) 701, Communicating Key Audit Matters in the Independent Auditor's Report, issued by the New Zealand Auditing and Assurance Standards Board of the External Reporting Board in October 2015, under s 12(b) of the Financial Reporting Act 2013.

- (3) **publicly disclose** the **independent auditor**'s assurance report prepared in accordance with subclause (1) at the same time as the **EDB publicly discloses** the **audited disclosure information**.
- 2.8.2 Subject to clauses 2.3.9, 2.8.3 and 2.8.5, an **EDB** must procure and **publicly disclose** at the same time as it **publicly discloses** the **audited disclosure information**, an independent report prepared in accordance with clause 2.8.4, where-
 - (1) the proportion of the EDB's total capital expenditure accounted for by related party transactions involving a procurement from a related party exceeds 65% in the disclosure year;
 - (2) the proportion of the EDB's total operational expenditure accounted for by related party transactions involving a procurement from a related party exceeds 65% in the disclosure year; or
 - (3) the **independent auditor** is not able to conclude that the valuation or disclosures of **related party transactions** in the **disclosure year** comply, in all

material respects, with clause 2.3.6 of this determination and clauses 2.2.11(1)(g) and 2.2.11(5) of the **IM determination**.

- 2.8.3 Where clause 2.8.2 applies for the **disclosure year** and time constraints do not permit the preparation of an independent report for that **disclosure year** before the **independent auditor** issues their opinion for that **disclosure year**, the **EDB** must-
 - (1) within 5 months after the end of that **disclosure year publicly disclose** a statement indicating that it will procure and **publicly disclose** an independent report in accordance with clause 2.8.4 for the subsequent **disclosure year**; and
 - (2) procure and **publicly disclose** an independent report from an **independent appraiser**, prepared in accordance with clause 2.8.4 at the same time as the **EDB publicly discloses** the **audited disclosure information** for the subsequent **disclosure year**.
- 2.8.4 The independent report prepared by the **independent appraiser**, as specified in clauses 2.8.2 and 2.8.3(2), must-
 - (1) be addressed to the **directors** of the **EDB** and to the **Commission** as the intended users of the report;
 - (2) be a separate report from the **independent auditor's** assurance report prepared in accordance with clause 2.8.1(1);
 - (3) based on the information obtained, sampling of **related party transactions**, and analysis undertaken, state whether or not in the opinion of the **independent appraiser**, the **EDB's related party transactions** would comply, in all material respects, with clause 2.3.6 of this determination and clauses 2.2.11(1)(g) and 2.2.11(5) of the **IM determination**, and set out the grounds for that opinion;
 - (4) where the **independent appraiser** provides an opinion in the report that the **EDB's related party transactions** would not comply with clause 2.3.6 of this determination or clauses 2.2.11(1)(g) and 2.2.11(5) of the **IM determination**, state the alternative terms the **independent appraiser** considers could enable the **related party transactions** to comply;
 - (5) set out the qualifications of the **independent appraiser** to provide the opinion in the report;

- (6) set out the scope and any limitations of the engagement of the **independent** appraiser by the **EDB**;
- (7) state all key assumptions made by the **independent appraiser** on which the analysis in the report relies;
- (8) describe the basis used for sampling of **related party transactions** to inform the opinion in the report;
- (9) describe the steps and analysis undertaken;
- (10) summarise the steps the **EDB** has taken to test whether **related party transactions** comply with clause 2.3.6 of this determination and clauses 2.2.11(1)(g) and 2.2.11(5) of the **IM determination**;
- (11) state whether or not, in the opinion of the **independent appraiser**, the steps taken by the **EDB** specified in subclause (9), are considered to be, in all material respects, reasonable in the circumstances; and
- (12) state whether the **independent appraiser** has obtained the recorded information and explanations that they required and, if not, the information and explanations not able to be obtained.
- 2.8.5 An **EDB** may elect not to obtain an independent report for a **disclosure year**, as required under clause 2.8.2, where-
 - (1) for that disclosure year, the proportion of either the EDB's total capital expenditure or total operational expenditure accounted for by related party transactions involving a procurement from a related party has not increased by more than 5% from the disclosure year for which the most recent independent report has been disclosed in accordance with clause 2.8.2 or 2.8.3(2); and
 - the **EDB** has disclosed an independent report for at least one of the two previous **disclosure years** in accordance with clause 2.8.2 or 2.8.3(2).

Mid-period expert report on Aurora's progress

2.8.5A By 1 March 2024, **Aurora** must **publicly disclose** one or more reports, procured and prepared in accordance with clause 2.8.5B, that provide an opinion from one or more **independent experts** on **Aurora's** progress in, and any recommendations for **Aurora** to improve on, each of the following:

- (1) delivering on time the **capital expenditure** and **operational expenditure** projects and programmes described in **Aurora's** project and programme delivery plan under clause 2.5.4(2);
- (2) developing **low voltage network** practices referred to in clause 2.5.4(1)(a);
- (3) developing Aurora's consultation practices with consumers, including those regarding changes to Aurora's customer charter, consumer compensation arrangement, and the additional pricing methodology disclosures under clause 2.4.5A;
- (4) developing asset management practices and processes referred to in clause 2.5.4(1)(e)(i) to (iii); and
- (5) developing practices for identifying and reducing safety risks referred to in clause 2.5.4(1)(e)(iv).
- 2.8.5B For the purposes of clause 2.8.5A, Aurora must ensure the report or reports are—
 - (1) procured according to the following requirements:
 - (a) Aurora must prepare and provide draft terms of reference to the Commission for feedback by no later than 31 October 2022;
 - (b) Aurora must finalise the terms of reference by no later than 31 March
 2023 after giving effect to any feedback the Commission provides
 Aurora on the draft terms of reference; and
 - (c) before appointing an independent expert to provide an opinion on one or more of the areas under clause 2.8.5A, Aurora must obtain the Commission's approval to the independent expert that Aurora intends to appoint;
 - (2) prepared—
 - (a) by one or more independent experts; and
 - (b) in a manner that gives effect to, and is consistent with, the terms of reference finalised under subclause (1)(b);
 - (3) based only on—
 - (a) the information Aurora has publicly disclosed—

- (i) in its AMPs for disclosure year 2022 and disclosure year 2023;
- (ii) in its **annual delivery reports** for **disclosure year** 2022 and **disclosure year** 2023; and
- (iii) under clause 2.5.41.1.1 and clause 2.5.52.5.5;
- (b) other relevant publicly available information;
- (4) provided in draft, by no later than 31 October 2023, to the **Commission** for feedback; and
- (5) finalised only after **Aurora** has considered any feedback provided by the **Commission**.
- 2.8.5C For the purposes of clause 2.8.5B, the **Commission** must provide **Aurora** with any written feedback the **Commission** has on—
 - (1) the draft **terms of reference**, by no later than 31 January 2023; and
 - (2) the draft report or reports, by 15 December 2023.

Assurance reports

- 2.8.6 Subject to clause 2.8.7, where an **EDB publicly discloses** information under clause 2.12.1 or 2.12.2 and the **EDB** was required to procure an assurance report under clause 2.8.1 for the **original disclosure**, the **EDB** must procure an assurance report to the information disclosed under clause 2.12.1 or 2.12.2 to the standard of the assurance report procured for the **original disclosure**.
- 2.8.7 In applying clause 2.8.6, the assurance required for **indirectly affected data and statements** disclosures is whether the disclosed **error** has been corrected and subsequently correctly reflected in the revised **indirectly affected data and statements**.

2.9 CERTIFICATES

- 2.9.1 Where an **EDB** is required to **publicly disclose** any information under clauses 2.4.1, 2.6.1, 2.6.3, 2.6.6 and 2.7.2, the **EDB** must at that time **publicly disclose** a certificate in the form set out in Schedule 17 in respect of that information, duly signed by 2 **directors** of the **EDB**.
- 2.9.2 Where an **EDB** is required to **publicly disclose**, or disclose to the **Commission**, any information under any of clauses 2.3.1, 2.3.2, 2.3.6, 2.4.21, 2.4.22, 2.5.1, 2.5.2, and 2.7.1, the **EDB** must at that time **publicly disclose** a certificate in the form set

- out in Schedule 18 in respect of that information, duly signed by 2 **directors** of the **EDB**.
- 2.9.3 Subject to clause 2.9.4, where an **EDB publicly discloses** information under clause 2.12.1 or 2.12.2, the **EDB** must **publicly disclose** a certificate under clause 2.12.1 or 2.12.2 to the standard of the certificate disclosed with the **original disclosure**.
- 2.9.4 In applying clause 2.9.3, the certification required for indirectly affected data and statements disclosures is whether the disclosed error has been corrected and subsequently correctly reflected in the revised indirectly affected data and statements.

Additional certificate disclosure requirement for Aurora

- 2.9.5 **Aurora** must **publicly disclose** a certificate in the form set out in Schedule 18, duly signed by 2 **directors** of **Aurora**, with, and in respect of, any information **Aurora**
 - (1) **publicly discloses** under clauses 1.1.1, 2.5.4(1) to (3), and 2.5.5(1); and
 - (2) includes in an **annual delivery report** under clause 2.5.6(2), which **Aurora publicly discloses** under clause 2.5.5(1).

2.10 RETENTION AND CONTINUING DISCLOSURES

2.10.1 An **EDB** that is required by this determination to **publicly disclose** any information must retain, and continuously **publicly disclose**, that information for at least 7 years from the date that information is first required to be **publicly disclosed**.

2.11 EXEMPTIONS

- 2.11.1 The Commission may at any time, by written notice to an EDB-
 - (1) Exempt the **EDB** from any or all of the requirements of this determination, for a period and on such terms and conditions as the **Commission** specifies in the notice; and
 - (2) Amend or revoke any such exemption.

2.12 DISCLOSURE OF ERRORS IN PREVIOUSLY DISCLOSED INFORMATION

- 2.12.1 Within 7 months of identifying a material error, an EDB must-
 - (1) publicly disclose-

- a description of the error including the quantum of the error and a summary of the disclosures, data and statements affected by the error;
- (b) the reason for the error;
- (c) the data and statements from the **original disclosure** affected by the **error**;
- in a manner which is consistent with the principal determination including any amendments in effect at the time of the original disclosure, materially correct revised data or statements affected by the error;
- (e) a certificate in accordance with clause 2.9.3; and
- (f) where applicable, an assurance report in accordance with clause 2.8.6.
- (2) disclose the information outlined in subclause (1) when **publicly disclosing** the **original disclosure** in accordance with clause 2.10.1.
- 2.12.2 If an EDB identifies a non-material error, an EDB may, within 7 months of identifying the non-material error, publicly disclose it in accordance with clause 2.12.1.
- 2.12.3 Information disclosed in accordance with this determination that refers to or relies on information contained in a previous disclosure must be consistent with the previous disclosure, unless an **error** disclosure related to that information has been made in accordance with clause 2.12.1 or 2.12.2.
- 2.12.4 Information disclosed after an **error** disclosure is made in accordance with clause 2.12.1 or 2.12.2 must be consistent with the **error** disclosure made in accordance with clause 2.12.1 or 2.12.2.

Attachment A Asset Management Plans

This attachment sets out the mandatory disclosure requirements with respect to **AMP**s. The text in italics provides a commentary on those requirements. The purpose of the commentary is to provide guidance on the expected content of disclosed **AMP**s. The commentary has been prepared on the basis that **EDB**s will implement best practice asset management processes.

AMP design

- The core elements of asset management—
 - 1.1 A focus on measuring **network** performance, and managing the assets to achieve service targets;
 - 1.2 Monitoring and continuously improving asset management practices;
 - 1.3 Close alignment with corporate vision and strategy;
 - 1.4 That asset management is driven by clearly defined strategies, business objectives and service level targets;
 - 1.5 That responsibilities and accountabilities for asset management are clearly assigned;
 - 1.6 An emphasis on knowledge of what assets are owned and why, the location of the assets and the condition of the assets;
 - 1.7 An emphasis on optimising asset utilisation and performance;
 - 1.8 That a total life cycle approach should be taken to asset management;
 - 1.9 That the use of 'non-network' solutions and demand management techniques as alternatives to asset acquisition is considered.
- 2. The disclosure requirements are designed to produce **AMP**s that—
 - 2.1 Are based on, but are not limited to, the core elements of asset management identified in clause 1;
 - 2.2 Are clearly documented and made available to all stakeholders;
 - 2.3 Contain sufficient information to allow interested **persons** to make an informed judgement about the extent to which the **EDB**'s asset management processes meet best practice criteria and outcomes are consistent with outcomes produced in competitive markets;
 - 2.4 Specifically support the achievement of disclosed service level targets;

- 2.5 Emphasise knowledge of the performance and risks of assets and identify opportunities to improve performance and provide a sound basis for ongoing risk assessment;
- 2.6 Consider the mechanics of delivery including resourcing;
- 2.7 Consider the organisational structure and capability necessary to deliver the **AMP**:
- 2.8 Consider the organisational and contractor competencies and any training requirements;
- 2.9 Consider the systems, integration and information management necessary to deliver the plans;
- 2.10 To the extent practical, use unambiguous and consistent definitions of asset management processes and terminology consistent with the terms used in this attachment to enhance comparability of asset management practices over time and between **EDBs**; and
- 2.11 Promote continual improvements to asset management practices.

Disclosing an **AMP** does not constrain an **EDB** from managing its assets in a way that differs from the **AMP** if its circumstances change after preparing the plan or if the **EDB** adopts improved asset management practices.

Contents of the AMP

- 3. The **AMP** must include the following-
 - 3.1 A summary that provides a brief overview of the contents and highlights information that the **EDB** considers significant;
 - 3.2 Details of the background and objectives of the **EDB**'s asset management and planning processes;
 - 3.3 A purpose statement which-
 - 3.3.1 makes clear the purpose and status of the AMP in the EDB's asset management practices. The purpose statement must also include a statement of the objectives of the asset management and planning processes;
 - 3.3.2 states the corporate mission or vision as it relates to asset management;
 - 3.3.3 identifies the documented plans produced as outputs of the annual business planning process adopted by the **EDB**;

- 3.3.4 states how the different documented plans relate to one another, with particular reference to any plans specifically dealing with asset management; and
- 3.3.5 includes a description of the interaction between the objectives of the AMP and other corporate goals, business planning processes, and plans;
 - The purpose statement should be consistent with the **EDB**'s vision and mission statements, and show a clear recognition of stakeholder interest.
- 3.4 Details of the **AMP planning period**, which must cover at least a projected period of 10 years commencing with the **disclosure year** following the date on which the **AMP** is disclosed;
 - Good asset management practice recognises the greater accuracy of short-to-medium term planning, and will allow for this in the **AMP**. The asset management planning information for the second 5 years of the **AMP** planning period need not be presented in the same detail as the first 5 years.
- 3.5 The date that it was approved by the **directors**;
- 3.6 A description of stakeholder interests (owners, **consumers** etc) which identifies important stakeholders and indicates-
 - 3.6.1 how the interests of stakeholders are identified
 - 3.6.2 what these interests are;
 - 3.6.3 how these interests are accommodated in asset management practices; and
 - 3.6.4 how conflicting interests are managed;
- 3.7 A description of the accountabilities and responsibilities for asset management on at least 3 levels, including-
 - 3.7.1 governance—a description of the extent of director approval required for key asset management decisions and the extent to which asset management outcomes are regularly reported to directors;
 - 3.7.2 executive—an indication of how the in-house asset management and planning organisation is structured; and
 - 3.7.3 field operations—an overview of how field operations are managed, including a description of the extent to which field work is undertaken in-house and the areas where outsourced contractors are used;

- 3.8 All significant assumptions-
 - 3.8.1 quantified where possible;
 - 3.8.2 clearly identified in a manner that makes their significance understandable to interested **persons**, including-
 - 3.8.3 a description of changes proposed where the information is not based on the **EDB**'s existing business;
 - 3.8.4 the sources of uncertainty and the potential effect of the uncertainty on the prospective information; and
 - 3.8.5 the price inflator assumptions used to prepare the financial information disclosed in **nominal New Zealand dollars** in the Report on Forecast Capital Expenditure set out in Schedule 11a and the Report on Forecast Operational Expenditure set out in Schedule 11b;
- 3.9 A description of the factors that may lead to a material difference between the prospective information disclosed and the corresponding actual information recorded in future disclosures;
- 3.10 An overview of asset management strategy and delivery;

To support the Report on Asset Management Maturity disclosure and assist interested **persons** to assess the maturity of asset management strategy and delivery, the **AMP** should identify-

- how the asset management strategy is consistent with the EDB's other strategy and policies;
- how the asset strategy takes into account the life cycle of the assets;
- the link between the asset management strategy and the AMP; and
- processes that ensure costs, risks and system performance will be effectively controlled when the AMP is implemented.
- 3.11 An overview of systems and information management data;
 - 3.11.1 To support the Report on Asset Management Maturity disclosure and assist interested **persons** to assess the maturity of systems and information management, the **AMP** should describe-
 - (a) the processes used to identify asset management data requirements that cover the whole of life cycle of the assets;

- (b) the systems used to manage asset data and where the data is used, including an overview of the systems to record asset conditions and operation capacity and to monitor the performance of assets;
- (c) the systems and controls to ensure the quality and accuracy of asset management information; and
- (d) the extent to which these systems, processes and controls are integrated;
- (e) how asset management data informs the models that an EDB develops and uses to assess asset health; and
- (f) how the outputs of these models are used in developing capital expenditure projections.
- 3.12 A statement covering any limitations in the availability or completeness of asset management data and disclose any initiatives intended to improve the quality of this data;
 - Discussion of the limitations of asset management data is intended to enhance the transparency of the **AMP** and identify gaps in the asset management system.
- 3.13 A description of the processes used within the **EDB** for-
 - 3.13.1 managing routine asset inspections and **network** maintenance;
 - 3.13.2 planning and implementing **network** development projects; and
 - 3.13.3 measuring **network** performance;
- 3.14 An overview of asset management documentation, controls and review processes.

To support the Report on Asset Management Maturity disclosure and assist interested **persons** to assess the maturity of asset management documentation, controls and review processes, the **AMP** should-

- (i) identify the documentation that describes the key components of the asset management system and the links between the key components;
- (ii) describe the processes developed around documentation, control and review of key components of the asset management system;

- (iii) where the **EDB** outsources components of the asset management system, the processes and controls that the **EDB** uses to ensure efficient and cost effective delivery of its asset management strategy;
- (iv) where the **EDB** outsources components of the asset management system, the systems it uses to retain core asset knowledge in-house; and
- (v) audit or review procedures undertaken in respect of the asset management system.
- 3.15 An overview of communication and participation processes;

To support the Report on Asset Management Maturity disclosure and assist interested **persons** to assess the maturity of asset management documentation, controls and review processes, the **AMP** should-

- (i) communicate asset management strategies, objectives, policies and plans to stakeholders involved in the delivery of the asset management requirements, including contractors and consultants; and
- (ii) demonstrate staff engagement in the efficient and cost effective delivery of the asset management requirements.
- 3.16 The **AMP** must present all financial values in **constant price** New Zealand dollars except where specified otherwise; and
- 3.17 The **AMP** must be structured and presented in a way that the **EDB** considers will support the purposes of **AMP** disclosure set out in clause 2.6.1(2) of the determination.

Assets covered

- 4. The **AMP** must provide details of the assets covered, including-
 - 4.1 a high-level description of the service areas covered by the **EDB** and the degree to which these are interlinked, including-
 - 4.1.1 the region(s) covered;
 - 4.1.2 identification of large **consumers** that have a significant impact on **network** operations or asset management priorities;

- 4.1.3 description of the load characteristics for different parts of the network;
- 4.1.4 peak demand and total energy delivered in the previous year, broken down by **sub-network**, if any.
- 4.2 a description of the **network** configuration, including-
 - 4.2.1 identifying bulk electricity supply points and any **distributed generation** with a capacity greater than 1 MW. State the existing firm supply capacity and current peak load of each bulk electricity supply point;
 - 4.2.2 a description of the **subtransmission** system fed from the bulk electricity supply points, including the capacity of **zone substations** and the voltage(s) of the **subtransmission network**(s). The **AMP** must identify the supply security provided at individual **zone substations**, by describing the extent to which each has n-x **subtransmission** security or by providing alternative security class ratings;
 - 4.2.3 a description of the distribution system, including the extent to which it is underground;
 - 4.2.4 a brief description of the **network**'s distribution substation arrangements;
 - 4.2.5 a description of the **low voltage network** including the extent to which it is underground; and
 - 4.2.6 an overview of **secondary assets** such as protection relays, ripple injection systems, SCADA and telecommunications systems.
 - To help clarify the **network** descriptions, **network** maps and a single line diagram of the **subtransmission network** should be made available to interested **persons**. These may be provided in the **AMP** or, alternatively, made available upon request with a statement to this effect made in the **AMP**.
- 4.3 If **sub-networks** exist, the **network** configuration information referred to in clause 4.2 must be disclosed for each **sub-network**.

Network assets by category

- 4.4 The **AMP** must describe the **network** assets by providing the following information for each asset category-
 - 4.4.1 voltage levels;

- 4.4.2 description and quantity of assets;
- 4.4.3 age profiles; and
- 4.4.4 a discussion of the condition of the assets, further broken down into more detailed categories as considered appropriate. Systemic issues leading to the premature replacement of assets or parts of assets should be discussed.
- 4.5 The asset categories discussed in clause 4.4 should include at least the following-
 - 4.5.1 the categories listed in the Report on Forecast Capital Expenditure in Schedule 11a(iii);
 - 4.5.2 assets owned by the **EDB** but installed at bulk electricity supply points owned by others;
 - 4.5.3 **EDB** owned mobile substations and generators whose function is to increase supply reliability or reduce peak demand; and
 - 4.5.4 other generation plant owned by the **EDB**.

Service Levels

- 5. The AMP must clearly identify or define a set of performance indicators for which annual performance targets have been defined. The annual performance targets must be consistent with business strategies and asset management objectives and be provided for each year of the AMP planning period. The targets should reflect what is practically achievable given the current network configuration, condition and planned expenditure levels. The targets should be disclosed for each year of the AMP planning period.
- 6. Performance indicators for which targets have been defined in clause 5 must include **SAIDI values** and **SAIFI values** for the next 5 **disclosure years**.
- 7. Performance indicators for which targets have been defined in clause 5 should also include-
 - 7.1 **Consumer** oriented indicators that preferably differentiate between different consumer types; and
 - 7.2 Indicators of asset performance, asset efficiency and effectiveness, and service efficiency, such as technical and financial performance indicators related to the efficiency of asset utilisation and operation.

- 8. The **AMP** must describe the basis on which the target level for each performance indicator was determined. Justification for target levels of service includes **consumer** expectations or demands, legislative, regulatory, and other stakeholders' requirements or considerations. The **AMP** should demonstrate how stakeholder needs were ascertained and translated into service level targets.
- 9. Targets should be compared to historic values where available to provide context and scale to the reader.
 - 10. Where forecast expenditure is expected to materially affect performance against a target defined in clause 5, the target should be consistent with the expected change in the level of performance.

Performance against target must be monitored for disclosure in the Evaluation of Performance section of each subsequent **AMP**.

Network Development Planning

- 11. **AMP**s must provide a detailed description of **network** development plans, including—
 - 11.1 A description of the planning criteria and assumptions for **network** development;
 - 11.2 Planning criteria for **network** developments should be described logically and succinctly. Where probabilistic or scenario-based planning techniques are used, this should be indicated and the methodology briefly described;
 - 11.3 A description of strategies or processes (if any) used by the **EDB** that promote cost efficiency including through the use of standardised assets and designs;
 - 11.4 The use of standardised designs may lead to improved cost efficiencies. This section should discuss-
 - 11.4.1 the categories of assets and designs that are standardised; and
 - 11.4.2 the approach used to identify standard designs;
 - 11.5 A description of strategies or processes (if any) used by the **EDB** that promote the energy efficient operation of the **network**;
 - The energy efficient operation of the **network** could be promoted, for example, though **network** design strategies, demand side management strategies and asset purchasing strategies.
 - 11.6 A description of the criteria used to determine the capacity of equipment for different types of assets or different parts of the **network**;

- The criteria described should relate to the **EDB**'s philosophy in managing planning risks.
- 11.7 A description of the process and criteria used to prioritise **network** development projects and how these processes and criteria align with the overall corporate goals and vision;
- 11.8 Details of demand forecasts, the basis on which they are derived, and the specific **network** locations where constraints are expected due to forecast increases in demand;
 - 11.8.1 explain the load forecasting methodology and indicate all the factors used in preparing the load estimates;
 - 11.8.2 provide separate forecasts to at least the **zone substation** level covering at least a minimum five year forecast period. Discuss how uncertain but substantial individual projects/developments that affect load are taken into account in the forecasts, making clear the extent to which these uncertain increases in demand are reflected in the forecasts;
 - 11.8.3 identify any network or equipment constraints that may arise due to the anticipated growth in demand during the AMP planning period; and
 - 11.8.4 discuss the impact on the load forecasts of any anticipated levels of **distributed generation** in a **network**, and the projected impact of any demand management initiatives;
- 11.9 Analysis of the significant **network** level development options identified and details of the decisions made to satisfy and meet target levels of service, including-
 - 11.9.1 the reasons for choosing a selected option for projects where decisions have been made;
 - 11.9.2 the alternative options considered for projects that are planned to start in the next five years and the potential for non-network solutions described; and
 - 11.9.3 consideration of planned innovations that improve efficiencies within the **network**, such as improved utilisation, extended asset lives, and deferred investment;
- 11.10 A description and identification of the **network** development programme including **distributed generation** and non-network solutions and actions to be

taken, including associated expenditure projections. The **network** development plan must include-

- 11.10.1 a detailed description of the material projects and a summary description of the non-material projects currently underway or planned to start within the next 12 months;
- 11.10.2 a summary description of the programmes and projects planned for the following four years (where known); and
- 11.10.3 an overview of the material projects being considered for the remainder of the **AMP planning period**;

For projects included in the **AMP** where decisions have been made, the reasons for choosing the selected option should be stated which should include how target levels of service will be impacted. For other projects planned to start in the next five years, alternative options should be discussed, including the potential for non-network approaches to be more cost effective than **network** augmentations.

- 11.11 A description of the **EDB**'s policies on **distributed generation**, including the policies for connecting **distributed generation**. The impact of such generation on **network** development plans must also be stated; and
- 11.12 A description of the EDB's policies on non-network solutions, including-
 - 11.12.1 economically feasible and practical alternatives to conventional **network** augmentation. These are typically approaches that would reduce **network** demand and/or improve asset utilisation; and
 - 11.12.2 the potential for non-network solutions to address **network** problems or constraints.

<u>Lifecycle Asset Management Planning (Maintenance and Renewal)</u>

- 12. The **AMP** must provide a detailed description of the lifecycle asset management processes, including—
 - 12.1 The key drivers for maintenance planning and assumptions;
 - 12.2 Identification of **routine and corrective maintenance and inspection** policies and programmes and actions to be taken for each asset category, including associated expenditure projections. This must include-
 - 12.2.1 the approach to inspecting and maintaining each category of assets, including a description of the types of inspections, tests and condition monitoring carried out and the intervals at which this is done;

- 12.2.2 any systemic problems identified with any particular asset types and the proposed actions to address these problems; and
- 12.2.3 budgets for maintenance activities broken down by asset category for the **AMP planning period**;
- 12.3 Identification of **asset replacement and renewal** policies and programmes and actions to be taken for each asset category, including associated expenditure projections. This must include-
 - 12.3.1 the processes used to decide when and whether an asset is replaced or refurbished, including a description of the factors on which decisions are based, and consideration of future demands on the **network** and the optimum use of existing **network** assets;
 - 12.3.2 a description of innovations that have deferred asset replacements;
 - 12.3.3 a description of the projects currently underway or planned for the next 12 months;
 - 12.3.4 a summary of the projects planned for the following four years (where known); and
 - 12.3.5 an overview of other work being considered for the remainder of the **AMP planning period**; and
- The asset categories discussed in clauses 12.2 and 12.3 should include at least the categories in clause 4.5.
- 12.5 Identification of the approach used for modelling **capital expenditure**projections for lifecycle asset management. This must include an explanation of:
 - 12.5.1 the model that the EDB uses to inform its capital expenditure

 projections for lifecycle asset management (for example, volumetric replacement models based on asset age, or expenditure projections informed by condition-based risk modelling); and
 - 12.5.2 the rationale for using the particular model for each asset category.
- 12.6 Identification of vegetation management-related maintenance. This must include an explanation of:
 - 12.6.1 the modelling that the EDB uses to inform its **vegetation** management-related maintenance;
 - 12.6.2 the assumptions used to inform the model used; and

- 12.6.3 the economic justification underpinning the model used.
- 12.7 The **EDB's** consideration of non-network solutions to inform its **expenditure** projections for lifecycle asset management. This must include an explanation of:
 - 12.7.1 the modelling of non-network solutions the **EDB** used to inform these expenditure projections; and
 - <u>12.7.2</u> the assumptions used to inform the modelling of non-network solutions.

Non-Network Development, Maintenance and Renewal

- 13. **AMP**s must provide a summary description of material non-network development, maintenance and renewal plans, including—
 - 13.1 a description of **non-network assets**;
 - 13.2 development, maintenance and renewal policies that cover them;
 - 13.3 a description of material **capital expenditure** projects (where known) planned for the next five years; and
 - a description of material maintenance and renewal projects (where known) planned for the next five years.

Risk Management

- 14. **AMP**s must provide details of risk policies, assessment, and mitigation, including—
 - 14.1 Methods, details and conclusions of risk analysis;
 - 14.2 Strategies used to identify areas of the network that are vulnerable to high impact low probability events and a description of the resilience of the network and asset management systems to such events;
 - 14.3 A description of the policies to mitigate or manage the risks of events identified in clause 14.2; and
 - 14.4 Details of emergency response and contingency plans.

Asset risk management forms a component of an **EDB**'s overall risk management plan or policy, focusing on the risks to assets and maintaining service levels. **AMPs** should demonstrate how the **EDB** identifies and assesses asset related risks and describe the main risks within the **network**. The focus should be on credible low-probability, high-impact risks. Risk evaluation may

highlight the need for specific development projects or maintenance programmes. Where this is the case, the resulting projects or actions should be discussed, linking back to the development plan or maintenance programme.

Evaluation of performance

- 15. **AMP**s must provide details of performance measurement, evaluation, and improvement, including—
 - 15.1 A review of progress against plan, both physical and financial;
 - referring to the most recent disclosures made under Section <u>2.6</u> of this determination, discussing any significant differences and highlighting reasons for substantial variances;
 - commenting on the progress of development projects against that planned in the previous AMP and provide reasons for substantial variances along with any significant construction or other problems experienced; and
 - commenting on progress against maintenance initiatives and programmes and discuss the effectiveness of these programmes noted.
 - 15.2 An evaluation and comparison of actual service level performance against targeted performance;
 - in particular, comparing the actual and target service level performance for all the targets discussed under the Service Levels section of the AMP in the previous AMP and explain any significant variances.
 - 15.3 An evaluation and comparison of the results of the asset management maturity assessment disclosed in the Report on Asset Management Maturity set out in Schedule 13 against relevant objectives of the EDB's asset management and planning processes.
 - 15.4 An analysis of gaps identified in clauses 15.2 and 15.3. Where significant gaps exist (not caused by one-off factors), the **AMP** must describe any planned initiatives to address the situation.

Capability to deliver

- 16. AMPs must describe the processes used by the EDB to ensure that-
 - 16.1 The **AMP** is realistic and the objectives set out in the plan can be achieved; and

The organisation structure and the processes for authorisation and business capabilities will support the implementation of the **AMP** plans.

Requirements to provide qualitative information in narrative form

17. AMPs must include the following qualitative information in narrative form, as prescribed in clauses 17.1-17.7 below:

Notice of planned and unplanned interruptions

a description of how the EDB provides notice to and communicates with consumers regarding planned interruptions and unplanned interruptions, including any plans for changing the EDB's processes and communications in respect of planned interruptions and unplanned interruptions;

Power quality

- 17.2 a description of the **EDB's** practices for monitoring voltage, including:
 - 17.2.1 actions the **EDB** is taking towards developing and improving its practices for monitoring voltage quality on its **low voltage network**;
 - 17.2.2 work the **EDB** is doing on its **low voltage network** to address any noncompliance with the applicable voltage requirements of the Electricity (Safety) Regulations 2010;
 - 17.2.3 how the **EDB** responds to voltage quality issues when they are identified;
 - 17.2.4 how the EDB communicates with affected consumers regarding the voltage quality work it is carrying out on its low voltage network; and
 - 17.2.5 any plans for improvements to any of the practices outlined at clauses 17.2.1-17.2.4 above;

Customer service practices

There may be a degree of overlap between the information required under this section and the information required in respect of customer charters under clause 2.5.3

- 17.3 a description of the **EDB's** customer service practices, including:
 - <u>17.3.1</u> the **EDB's** customer engagement protocols and customer service measures including customer satisfaction with the **EDB's** supply of **electricity distribution services**;

17.3.2 the EDB's approach to planning and managing customer complaint resolution;

New connections and alterations to existing connections

- 17.4 a description of the **EDB's consumer** connection practices, including:
 - 17.4.1 the EDB's approach to planning and management of-
 - (a) new **consumer** connections (load and injection connections), and overcoming commonly encountered issues; and
 - (b) alteration to existing **consumer** connections (load and injection connections);
 - 17.4.2 how the **EDB** is seeking to minimise the cost of new or altered connections for **consumers**;
 - 16.1.117.4.3 the EDB's approach to planning and managing communication with consumers about new connections or alterations to existing connections;

New network loads likely to have a significant impact

The following requirements focus on the EDB's capability and risk management regarding new loads – known and potential – on the network that the EDB considers are likely to have a significant impact on its network operations or asset management priorities.

'Known loads' are known planned loads where there is some degree of certainty as to their timing. 'Potential loads' refers to facilities located an EDB's network's footprint that could convert its energy supply from fossil fuels to electricity. This may vary between **EDB**s based on the different characteristics of their networks.

17.5 A description of the following:

- 17.5.1 how the EDB assesses the impact that new loads will have on the EDB's network, including:
 - (a) how the **EDB** measures the scale and impact of new network loads;

- (b) how the EDB takes the timing and uncertainty of new network loads into account; and
- (c) how the **EDB** takes other factors into account, eg, the network location of new loads;
- 17.5.2 how the **EDB** assesses and manages the risk posed by uncertainty regarding new loads on the network;

Innovation practices

- 17.6 a description of the following:
 - 17.6.1 innovation practices the EDB has planned or undertaken since the last AMP, including case studies and trials;
 - 17.6.2 the basis on which the EDB makes decisions regarding innovation practices, including how the EDB decides to commence, adopt commercially and continue these practices;
 - <u>16.1.2</u>17.6.3 how the **EDB's** decision-making and **innovation practices**depend on the work of other companies, including other **EDBs** and providers of **non-network solutions**; and
 - 17.6.4 the types of information the EDB has to inform or enable innovation practices, and their approach to seeking that information.
- 17.7 For the purpose of the information required under clauses 17.6.1-17.6.4 above, AMPs do not need to include commercially sensitive or confidential information.

Additional AMP disclosure requirements for Aurora

- 17.18. Aurora must summarise in its AMP Aurora's development plan under clause 2.5.4(1) to develop and improve its:
 - Asset data collection and asset data quality practices as specified in clause 2.5.4(1)(d);
 - Asset management practices and processes as specified in clause 2.5.4(1)(e)(i) to (iii);
 - Practices for identifying and reducing safety risks as specified in clause 2.5.4(1)(e)(iv);

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<u>17.418.4</u> Practices for estimating the costs of **capital expenditure** and **operational expenditure** projects and programmes as specified in clause 2.5.4(1)(f); and

<u>17.5</u>18.5 Quality assurance processes as specified in clause 2.5.4(1)(g).

Attachment B Calculation of Normalised SAIDI and SAIFI

- 1. This attachment sets out the calculation of normalised **SAIDI** and normalised **SAIFI** for use in calculating these statistics for disclosures under Schedule 10.
- 2. In order for an **EDB** to calculate its normalised **SAIDI** and normalised **SAIFI**, the **EDB** must undertake the steps set out below-

Develop a non-zero dataset

 Construct a non-zero dataset containing only those days from the reference dataset where the daily SAIDI value is greater than zero (i.e. exclude zero SAIDI days).

Calculate boundary values

- 4. Using the non-zero dataset, calculate the **SAIDI** boundary value (B_{SAIDI}) as follows-
- 5. $B_{SAIDI} = e^{(\alpha_{SAIDI} + 2.5 \beta_{SAIDI})}$
- 6. where-
- 7. \mathcal{O}_{SAIDi} is the average of the natural logarithm (In) of each daily **SAIDI value** in the non-zero dataset;
- 8. β_{SAIDi} is the standard deviation of the natural logarithm (ln) of each daily **SAIDI value** in the non-zero dataset.
- 9. Using the non-zero dataset, calculate the **SAIFI** boundary value ($B_{\!S\!A\!I\!F\!I}$) as follows-
- 10. $B_{SAIFI} = e^{(\alpha_{SAIFI} + 2.5\beta_{SAIFI})}$
- 11. where-
- 12. \mathcal{O}_{SAIFI} is the average of the natural logarithm (In) of each daily **SAIFI value** in the non-zero dataset;
- 13. β_{SAIFI} is the standard deviation of the natural logarithm (ln) of each daily **SAIFI value** in the non-zero dataset.

Normalise the Assessment Dataset

14. For any day in the **assessment dataset** for the **disclosure year** where the daily **SAIDI** value is greater than $B_{SAID\Gamma}$

- 15. replace the daily **SAIDI value** with $B_{\!\scriptscriptstyle SAID}$; and
- 16. replace the daily **SAIFI value** with $B_{S\!A\!I\!F\!I}$ if the daily **SAIFI value** for that day exceeds $B_{S\!A\!I\!F\!I}$.

Calculate Assessed Values

- 17. The normalised SAIDI value is the sum of daily **SAIDI values** in the **normalised** assessment dataset for the disclosure year; and
- 18. The normalised SAIFI value is the sum of daily **SAIFI values** in the **normalised** assessment dataset for the disclosure year.

Attachment C Annual Delivery Report

This attachment sets out the content required in an **annual delivery report** which is prepared and **publicly disclosed**, and for which a summary of the key features must be presented, under clauses 2.5.5 and 2.5.7.

1. **Aurora** must include the following in an **annual delivery report**:

Overall progress update from board of directors

- 1.1 an overview from Aurora's board of directors setting out—
 - 1.1.1 **Aurora's** overall progress in the following areas:
 - for disclosure year 2022, Aurora's progress in completing capital expenditure and operational expenditure projects and programmes;
 - (b) for each disclosure year except disclosure year 2022, Aurora's progress in completing the capital expenditure and operational expenditure projects and programmes identified in Aurora's project and programme delivery plan under clause 2.5.4(2);
 - 1.1.2 any actions Aurora is taking to ensure its capital expenditure and operational expenditure projects and programmes are completed as effectively and efficiently as possible;
 - 1.1.3 for each disclosure year except disclosure year 2022, in respect of any key capital expenditure and operational expenditure project or programme that Aurora is behind schedule in completing according to Aurora's project and programme delivery plan under clause 2.5.4(2), the reason(s) why the project or programme is behind schedule, and any actions Aurora is taking to bring the project or programme back on track; and
 - 1.1.4 a summary of the **network** safety risks **Aurora** has successfully reduced;

Safety delivery plan reporting

- 1.2 for each **disclosure year** except **disclosure year** 2022, a report on **Aurora's** progress against the safety delivery plan under clause 2.5.4(3) containing the following information:
 - 1.2.1 a visual representation of **Aurora's** actual reduction or change in **network** safety risk, grouped by asset class, as a result of delivering **capital expenditure** or **operational expenditure** projects or

- programmes identified in **Aurora's** project and programme delivery plan under clause 2.5.4(2); and
- 1.2.2 in relation to the key **network** safety risks listed in the safety delivery plan,—
 - a summary of actions Aurora has taken to reduce those risks, with reference to the principle of reducing risk to 'as low as reasonably practicable'; and
 - (b) for any identified risk that Aurora has not reduced to the extent planned, a description of how, and within what timeframe, Aurora plans to reduce the risk;

Progress in developing key processes and practices – disclosure year 2022

- for disclosure year 2022, a summary, a self-assessment rating, and reason(s) for the self-assessment rating, of Aurora's progress in developing in each of the following areas:
 - 1.3.1 ensuring the information Aurora publicly discloses under clause 2.4.5A(1) enables interested persons to understand how Aurora sets prices for each Aurora pricing region;
 - 1.3.2 **low voltage network** practices referred to in clause 2.5.4(1)(a);
 - 1.3.3 engagement with **consumers** on **Aurora's customer charter**, and **consumer compensation arrangement**;
 - 1.3.4 planning, management, and communication to **consumers** of **planned interruptions**;
 - 1.3.5 asset data collection and asset data quality practices referred to in clause 2.5.4(1)(d);
 - 1.3.6 asset management practices and processes referred to in clause 2.5.4(1)(e)(i) to (iii);
 - 1.3.7 practices for identifying and reducing safety risks referred to in clause2.5.4(1)(e)(iv);
 - 1.3.8 cost estimation practices referred to in clause 2.5.4(1)(f); and
 - 1.3.9 quality assurance processes referred to in clause 2.5.4(1)(g);

Progress in developing key processes and practices – disclosure years after disclosure year 2022

- for each disclosure year except disclosure year 2022, a summary, a self-assessment rating, and reason(s) for the self-assessment rating, of Aurora's progress—
 - 1.4.1 in ensuring the information **Aurora publicly discloses** under clause 2.4.5A(1) enables interested **persons** to understand how **Aurora** sets **prices** for each **Aurora pricing region**; and
 - 1.4.2 against each of the following areas in **Aurora's** development plan under clause 2.5.4(1):
 - (a) developing and improving its **low voltage network** practices referred to in clause 2.5.4(1)(a);
 - (b) engagement with consumers on Aurora's customer charter and consumer compensation arrangement;
 - (c) planning, management, and communication of **planned** interruptions to consumers;
 - (d) asset data collection and asset data quality practices referred to in clause 2.5.4(1)(d);
 - (e) asset management practices and processes referred to in clause 2.5.4(1)(e)(i) to (iii);
 - (f) practices for identifying and reducing safety risks referred to in clause 2.5.4(1)(e)(iv);
 - (g) cost estimation practices referred to in clause 2.5.4(1)(f); and
 - (h) quality assurance processes referred to in clause 2.5.4(1)(g);

Spending and work done on Aurora's network

- 1.5 for each disclosure year except disclosure year 2022, the key capital expenditure and operational expenditure projects and programmes that Aurora—
 - 1.5.1 has delivered on time in the most recent **disclosure year**;
 - 1.5.2 has not yet completed, but which are on schedule in accordance with **Aurora's** project and programme delivery plan under clause 2.5.4(2);

- 1.5.3 has not completed on time, but had planned to complete in the most recent **disclosure year**; and
- 1.5.4 has not commenced, but had planned to commence, in the most recent **disclosure year**;
- 1.6 for disclosure year 2022, the following information relating to capital expenditure and operational expenditure projects and programmes that Aurora has undertaken in the disclosure year:
 - 1.6.1 Aurora's actual capital expenditure on each of:
 - (a) consumer connection;
 - (b) system growth;
 - (c) asset replacement and renewal;
 - (d) asset relocations;
 - (e) quality of supply;
 - (f) legislative and regulatory; and
 - (g) other reliability, safety and environment;
 - 1.6.2 **Aurora's** actual **operational expenditure** on each of:
 - (a) service interruptions and emergencies;
 - (b) vegetation management;
 - (c) routine and corrective maintenance and inspection;
 - (d) asset replacement and renewal;
 - (e) system operations and network support; and
 - (f) business support;
 - 1.6.3 **asset replacement and renewal**, including the number of assets replaced;
 - 1.6.4 for the purpose of **vegetation management**, the percentage of the **network** that **Aurora** has—
 - (a) inspected; and

- (b) felled, trimmed, removed, or sprayed;
- 1.7 for each disclosure year except disclosure year 2022, the following information relating to capital expenditure and operational expenditure projects and programmes Aurora has undertaken in the disclosure year in each Aurora pricing region:
 - 1.7.1 Aurora's actual expenditure compared to the proposed expenditure in Aurora's project and programme delivery plan under clause 2.5.4(2), with any variance expressed as the percentage difference between proposed and actual expenditure, together with the reason(s) for the variance,—
 - (a) where the actual capital expenditure or operational expenditure—
 - (i) exceeds the expenditure proposed in **Aurora's** project and programme delivery plan under clause 2.5.4(2) by 20% or more; and
 - (ii) is \$1 million or more;
 - (b) for each of:
 - (i) consumer connection;
 - (ii) system growth;
 - (iii) asset replacement and renewal;
 - (iv) asset relocations;
 - (v) quality of supply;
 - (vi) legislative and regulatory; and
 - (vii) other reliability, safety and environment;
 - (c) for each of:
 - (i) service interruptions and emergencies;
 - (ii) vegetation management;
 - (iii) routine and corrective maintenance and inspection;
 - (iv) asset replacement and renewal;

- (v) system operations and network support; and
- (vi) business support;
- 1.7.2 asset replacement and renewal, including:
 - (a) the number of assets replaced compared to the number of assets **Aurora** planned to replace in its project and programme delivery plan under clause 2.5.4(2) in the relevant **disclosure year**, with reasons for variances; and
 - (b) for each asset type for which **Aurora** undertook **asset replacement and renewal** in the relevant **disclosure year**, the average total cost of replacing an asset of that type compared to the forecast average total cost of replacing the asset type in **Aurora's** project and programme delivery plan under clause 2.5.4(2);
- 1.7.3 compared to **Aurora's** documented planning for **vegetation management**, the percentage of the **network** that **Aurora** has, as part of its **vegetation management**,—
 - (a) inspected; and
 - (b) felled, trimmed, removed, or sprayed;

Quality information – for the network and Aurora pricing regions

- 1.8 for each **Aurora pricing region**, in a time series form for each of the most recent five **disclosure years**, the—
 - 1.8.1 planned SAIDI values;
 - 1.8.2 planned SAIFI values;
 - 1.8.3 unplanned SAIDI values; and
 - 1.8.4 unplanned SAIFI values;
- for each disclosure year except disclosure year 2022, in respect of each Aurora pricing region,—
 - 1.9.1 a table with the following information on any **complaints** from **consumers** about **Aurora's** supply of **electricity distribution services** in the most recent **disclosure year**:

- the type of complaint, with Aurora determining the different types of complaint by the general subject matter to which the complaints relate;
- (b) the number of each type of **complaint**;
- (c) the average time to resolve each type of **complaint**;
- (d) the top three types of complaints with the highest numbers of complaints and how they differ to the three types of complaints with the highest numbers of complaints from the previous disclosure year; and
- (e) a description of whether, and if so how, Aurora is using the learning and insights gained from handling complaints as a feedback loop to improve the quality and service levels of in supplying electricity distribution services;
- 1.9.2 regarding the most recent disclosure year,—
 - (a) the number of safety-related incidents in relation to network assets, maintenance, or operational activities that created a safety risk to the public, an Aurora employee, or an Aurora contractor;
 - (b) commentary on how the number of safety-related incidents compared against the previous **disclosure year**; and
 - (c) any corrective actions taken in respect of these incidents;
- 1.10 for Aurora's network, in respect of the most recent disclosure year, the—
 - 1.10.1 planned SAIDI assessed value, unplanned SAIDI assessed value, planned accumulated SAIDI limit, and unplanned SAIDI limit; and
 - 1.10.2 planned SAIFI assessed value, unplanned SAIFI assessed value, planned accumulated SAIFI limit, and unplanned SAIFI limit;
- 1.11 for each **disclosure year** except **disclosure year** 2022, the total number of each of the following:
 - 1.11.1 planned interruptions cancelled with less than 10 working days' notice;
 - 1.11.2 planned interruptions cancelled without notice;
 - 1.11.3 planned interruptions for which Aurora gave additional notice;

- 1.11.4 planned interruptions for which Aurora did not give additional notice;
- 1.11.5 **planned interruptions** in which the **interruption** either started more than one hour before, or continued for more than one hour after, the period in which the **interruption** was notified to occur; and
- 1.11.6 **unplanned interruptions** that **Aurora** intentionally initiated to carry out work on its **network** that did not directly relate to a **fault**;

Performance and engagement with consumers

- 1.12 regarding **Aurora's** performance in supplying **electricity distribution services** to its **consumers**,—
 - 1.12.1 a **self-assessment rating**, and reason(s) for the **self-assessment rating**, regarding each of the following:
 - (a) for **disclosure year** 2022, **Aurora's** performance in notifying and updating **consumers** on **interruptions** affecting them; and
 - (b) for each disclosure year except disclosure year 2022,—
 - (i) how effectively **Aurora** has engaged with different **consumers** in each **Aurora pricing region**; and
 - (ii) any consultation **Aurora** has done with **consumers** on **capital expenditure** or **operational expenditure** projects or programmes, **Aurora** proposes to reprioritise or substitute;
 - 1.12.2 a summary of,—
 - (a) for each **disclosure year**,—
 - (i) whether, and if so how, **Aurora** has consulted with **consumers** on any proposed changes to its **customer charter**, **consumer compensation arrangement**, or additional pricing methodology disclosures under clause 2.4.5A;
 - (ii) any feedback from consumers on Aurora's additional pricing methodology disclosures under clause 2.4.5A;
 and
 - (iii) whether **Aurora** met its commitments under its **customer charter** and **consumer compensation**

arrangement, and if not, the respects in which **Aurora** failed to do so, and the reasons for such failure; and

- (b) for each disclosure year except disclosure year 2022,—
 - (i) whether, and if so how, Aurora has improved consumer awareness of its customer charter and consumer compensation arrangement;
 - (ii) any payments Aurora has made in respect of each service level standard under Aurora's consumer compensation arrangement;
 - (iii) whether, and if so how, Aurora has taken account of consumers' feedback on any aspect of its supply of electricity distribution services – for example, feedback on Aurora's presentation of its summary of the key features of the most recent annual delivery report; and
 - (iv) the different groups of **consumers Aurora** has engaged with;
- 1.12.3 for each disclosure year except disclosure year 2022, the following information on Aurora's supply of electricity distribution services to its worst-performing feeders:
 - using a map, or series of maps, of appropriate scale, the geographical location of each of Aurora's worst-performing feeders;
 - (b) for the worst-performing feeders:
 - (i) the planned SAIFI value(s);
 - (ii) the planned SAIDI value(s);
 - (iii) the unplanned SAIFI value(s); and
 - (iv) the unplanned SAIDI value(s);
 - (c) any plans Aurora has to improve supply of electricity distribution services on its worst-performing feeders.

Additional content required in annual delivery reports disclosed after mid-period expert report

2. In addition to the content specified under clause 1 of this attachment, **Aurora** must include in the **annual delivery report** it **publicly discloses** for each of **disclosure year**

2025 and **disclosure year** 2026, a summary of any actions **Aurora** has taken as a result of any recommendations from the report or reports from one or more **independent experts** under clause 2.8.5A — for example, updating **Aurora's** development plan under clause 2.5.4(1)2.5.4(1).

Schedule 1 Analytical Ratios

			Company Name			
			For Year Ended			
sc	HEDULE 1: ANALYTICAL RATIOS					
	s schedule calculates expenditure, revenue and service ratios from the information	on disclosed. The dis-	closed ratios may va	ery for reasons that	are company specif	c and as a result must
be i	is treducing calculates experimenter, levering and service radios from the information therpreted with care. The Commerce Commission will publish a summary and an closed in accordance with this and other schedules, and information disclosed un i information is part of audited disclosure information (as defined in section 1.4 or	alysis of information der the other requir	n disclosed in accord ements of the deter	lance with the ID de mination.	termination. This w	ill include information
sch re	ef .					
	1/i). Fun and it was makening					
7	1(i): Expenditure metrics	Expenditure per GWh energy delivered to ICPs	Expenditure per average no. of ICPs	Expenditure per MW maximum coincident system demand	km circuit length	Expenditure per MVA of capacity from EDB-owned distribution transformers
8		(\$/GWh)	(\$/ICP)	(\$/MW)	(\$/km)	(\$/MVA)
9	Operational expenditure		-	-	-	-
10 11	Network Non-network		-			-
12	Non-network	_	_	_	_	_
13	Expenditure on assets	_	-	- 1	_	-
14	Network	_	_	_	-	-
15	Non-network	-	-	-	-	-
16						
17	1(ii): Revenue metrics					
		Revenue per GWh energy delivered to ICPs	Revenue per average no. of ICPs			
18		(\$/GWh)	(\$/ICP)	ī		
19	Total consumer line charge revenue		_			
20 21	Standard consumer line charge revenue Non-standard consumer line charge revenue					
22	Non-standard consumer line charge revenue					
23	1(iii): Service intensity measures					
25	Demand density	_	Maximum coincid	lent system demand	per km of circuit le	ngth (for supply) (kW/km)
26	Volume density	-				r supply) (MWh/km)
27	Connection point density	-	Average number	of ICPs per km of circ	cuit length (for supp	ly) (ICPs/km)
28	Energy intensity	-	Total energy deliv	ered to ICPs per ave	rage number of ICP	s (kWh/ICP)
29	1/i.). Commontain of months					
30	1(iv): Composition of regulatory income		(\$000)	% of royonya		
31 32	Operational expenditure		(3000)	% of revenue		
33	Pass-through and recoverable costs excluding financial incentive	ves and wash-ups				
34	Total depreciation	res una masir aps	-	-		
35	Total revaluations		-	-		
36	Regulatory tax allowance		-	-		
37	Regulatory profit/(loss) including financial incentives and wash	-ups	I	-		
38	Total regulatory income		-			
39	Al A. B. P. L. Phys.					
40	1(v): Reliability					
41				l	400 1 1	
42	Interruption rate		_	Interruptions per	100 circuit km	

Schedule 2 Report on Return on Investment

		lama a		
	Company N For Year Ei			
SCI	HEDULE 2: REPORT ON RETURN ON INVESTMENT			
	schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's est based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes this elec			
2(iii)			•	·
	information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subj	ect to the assurance report r	required by section 2.	8.
sch ref				
7	2(i): Return on Investment	CY-2	CY-1	Current Year CY
8 9	ROI – comparable to a post tax WACC	%	%	%
10	Reflecting all revenue earned		-	-
11	Excluding revenue earned from financial incentives			-
12	Excluding revenue earned from financial incentives and wash-ups			-
13 14	Mid-point estimate of post tax WACC			
15	25th percentile estimate			
16	75th percentile estimate			
17 18				
19	ROI – comparable to a vanilla WACC			
20	Reflecting all revenue earned			-
21	Excluding revenue earned from financial incentives			-
22 23	Excluding revenue earned from financial incentives and wash-ups			-
24	WACC rate used to set regulatory price path			
25				
26	Mid-point estimate of vanilla WACC			
27 28	25th percentile estimate 75th percentile estimate			
29	75th percentage extraore		P	
29 30	2(ii): Information Supporting the ROI		(\$000)	
30 31	2(ii): Information Supporting the ROI		(\$000)	
30 31 32	2(ii): Information Supporting the ROI Total opening RAB value	-	(\$000)	
30 31	2(ii): Information Supporting the ROI	-	(\$000)]
30 31 32 33 34 35	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax	-		
30 31 32 33 34 35 36	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax	-		1
30 31 32 33 34 35 36 37	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue	-		l l
30 31 32 33 34 35 36	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV	-		l l
30 31 32 33 34 35 36 37 38 39 40	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals			l l
30 31 32 33 34 35 36 37 38 39 40 41	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments	-]]
30 31 32 33 34 35 36 37 38 39 40	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals	- - - - - -]]
30 31 32 33 34 35 36 37 38 39 40 41 42 43	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows	-		
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income	-]
30 31 32 33 34 35 36 37 38 39 40 41 42 43	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance	-]
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows	-		I I I
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment	-		I I I
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment plus Closing deferred tax	-		
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment	-		I I I
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52 53	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment plus Closing deferred tax	-]]]
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 50 51 52 53 54	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment plus Closing deferred tax Closing RIV ROI – comparable to a vanilla WACC	-		
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52 53	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment plus Closing deferred tax Closing RIV ROI – comparable to a vanilla WACC Leverage (%)	-		42%
30 311 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment plus Closing deferred tax Closing RIV ROI – comparable to a vanilla WACC	-		
30 31 32 33 34 35 36 37 38 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	2(ii): Information Supporting the ROI Total opening RAB value plus Opening deferred tax Opening RIV Line charge revenue Expenses cash outflow add Assets commissioned less Asset disposals add Tax payments less Other regulated income Mid-year net cash outflows Term credit spread differential allowance Total closing RAB value less Adjustment resulting from asset allocation less Lost and found assets adjustment plus Closing deferred tax Closing RIV ROI – comparable to a vanilla WACC Leverage (%) Cost of debt assumption (%)	-		42%

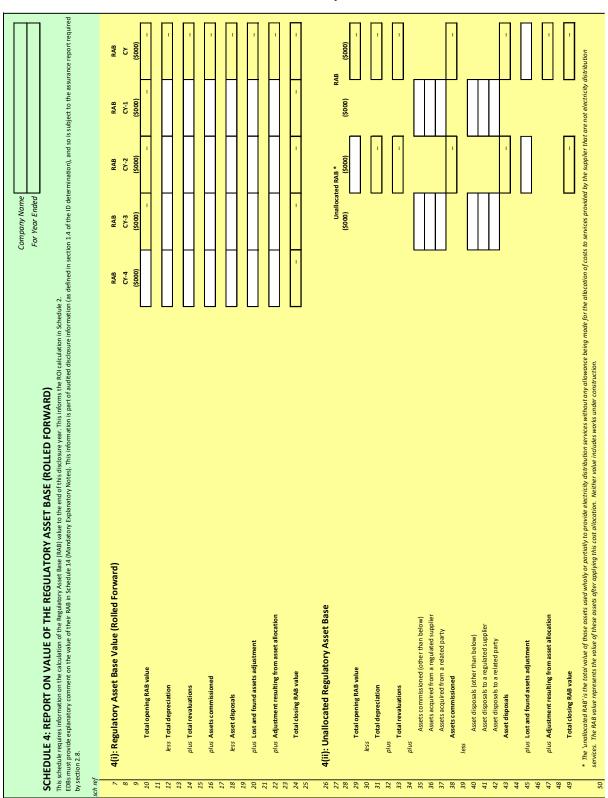
61	2(iii): Information Supporting the	e Monthly ROI					
62							
63	Opening RIV						N/A
64 65							
66		Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows
67	April		out.iou	commissioned	шэрозия	come	-
68	May						-
69	June						-
70	July						-
71	August						-
72	September						-
73	October						-
74	November -						-
75 76	December						-
75	January February						-
78	March						_
79	Total	_	_	_	-	_	_
80							
81	Tax payments						N/A
82							
83	Term credit spread differential allov	vance					N/A
84							
85	Closing RIV						N/A
86							
87							
88	Monthly ROI – comparable to a vanilla \	WACC					N/A
89 90	Monthly ROI – comparable to a post ta	WACC					N/A
91	Monthly ROI – comparable to a post ta	WACC					N/A
92	2(iv): Year-End ROI Rates for Cor	mparison Purposes					
93	(,)						
94	Year-end ROI – comparable to a vanilla	WACC					-
95							
96	Year-end ROI – comparable to a post ta	x WACC					-
97							
98	* these year-end ROI values are compare	able to the ROI reported in pre	2012 disclosures by EDBs	and do not represent	the Commission's curi	ent view on ROI.	
99 100	2(v): Financial Incentives and Wa	ach_line					
100	2(v). Financial incentives and wa	asii-ops					
102	Net recoverable costs allowed unde	r incremental rolling incentive	e scheme			_	1
103	Purchased assets – avoided transmi		e serieme				
104	Energy efficiency and demand incen						
105	Quality incentive adjustment						
106	Other financial incentives						
107	Financial incentives						-
108							
109	Impact of financial incentives on ROI						_
110							1
111 112	Input methodology claw-back CPP application recoverable costs						
112	Catastrophic event allowance						
114	Capex wash-up adjustment						
115	Transmission asset wash-up adjust	ment					
116	2013–15 NPV wash-up allowance						
117	Reconsideration event allowance						
118	Other wash-ups						
119	Wash-up costs						-
120							
121	Impact of wash-up costs on ROI						

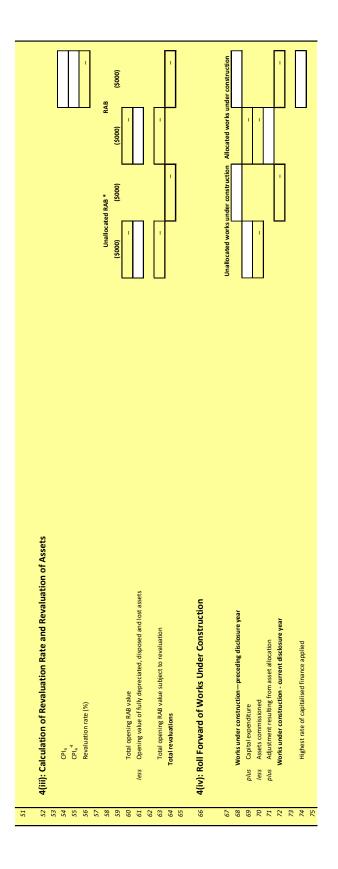
Schedule 3 Report on Regulatory Profit

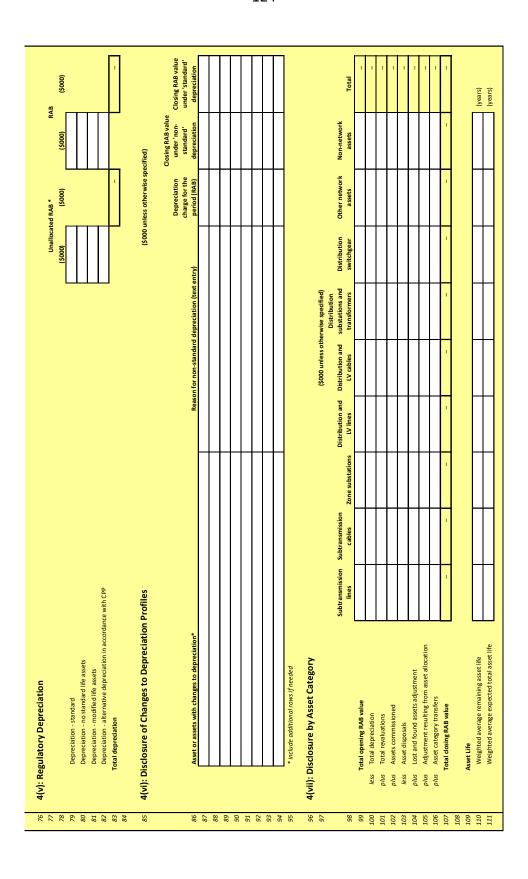
	Company Name	
	For Year Ended	
SC	SCHEDULE 3: REPORT ON REGULATORY PROFIT	
	his schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all secti heir regulatory profit in Schedule 14 (Mandatory Explanatory Notes).	ons and provide explanatory comment on
Thi	his information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance	ce report required by section 2.8.
sch r	ref	
7	3(i): Regulatory Profit	(\$000)
8		
9		
10	· · · · · · · · · · · · · · · · · · ·	
11		
12		
13		-
14	4 Expenses	
15	5 less Operational expenditure	-
16	5	
17 18	· ·	_
19		
20		
21		
22		
23	3 plus Total revaluations	_
24 25		
26 27		
28	· · · · · · · · · · · · · · · · · · ·	
29		
30	9 ,	
31		-
32		
33	3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups	(\$000)
34		
35		
36		
37		
38	· · · · · · · · · · · · · · · · · · ·	
39		
40	·	
41		
42		
43		
44	4 Extended reserves allowance	
45	Other recoverable costs excluding financial incentives and wash-ups	
46	Pass-through and recoverable costs excluding financial incentives and wash-ups	-

48	3(iii): Increm	ental Rolling Incentive Scheme	(\$	000)
49			CY-1	CY
50				
51		ontrollable opex		
52	Actual co	ntrollable opex		
53 54		Add shares to the		
55	incremen	tal change in year		
55				Previous years'
			Previous years'	incremental
			incremental	change adjusted
56			change	for inflation
57	CY-5	[year]		
58	CY-4	[year]		
59	CY-3	[year]		
60	CY-2	[year]		
61	CY-1	[year]		
62	Net increm	ental rolling incentive scheme		
63 64	Not recove	rable costs allowed under incremental rolling incentive scheme		
04	Net recove	lable costs allowed under incremental rolling incentive scheme		
65	3(iv): Merger a	and Acquisition Expenditure		
70				(\$000)
66	Merger a	nd acquisition expenditure		
67				
		ommentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including	required disclosures i	in accordance with
68	section 2.	7, in Schedule 14 (Mandatory Explanatory Notes)		
69	3(v): Other Dis	closures		
70				(\$000)
71	Self-insur	ance allowance		

Schedule 4 Report on Value of the Regulatory Asset Base (Rolled Forward)







Schedule 5a Report on Regulatory Tax Allowance

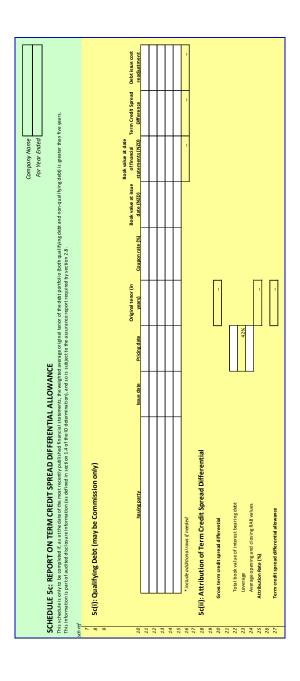
		Company Name	
		For Year Ended	
SCI	HEDULE 5	a: REPORT ON REGULATORY TAX ALLOWANCE	
This	schedule requi	es information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory	profit/loss in Schedule 3 (regulatory
		provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explan	
This i	information is	part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the a	ssurance report required by section 2.8.
sch ref			
	F-/:\. D	- Johann Tou Allanous	(éana)
7		gulatory Tax Allowance	(\$000)
8		egulatory profit / (loss) before tax	
10	plus	Income not included in regulatory profit / (loss) before tax but taxable	*
11	•	Expenditure or loss in regulatory profit / (loss) before tax but not deductible	*
12		Amortisation of initial differences in asset values	-
13		Amortisation of revaluations	-
14			_
15			
16 17	less	Total revaluations	*
18		Income included in regulatory profit / (loss) before tax but not taxable Discretionary discounts and customer rebates	
19		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	*
20		Notional deductible interest	-
21			-
22			
23	1	legulatory taxable income	_
24		1849 and Anna January	
25 26	less	Utilised tax losses Regulatory net taxable income	
27		Regulatory net taxable income	
28		Corporate tax rate (%)	
29		egulatory tax allowance	_
30			
31	* Worki	gs to be provided in Schedule 14	
32	5a(ii): D	isclosure of Permanent Differences	
33	54(,. 5	In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Sched	lule Sa(i)
33		in seriedale 2 i, sox s, provide descriptions and frontings of terms recorded in the determined eategories in series	30(1).
34	5a(iii): A	mortisation of Initial Difference in Asset Values	(\$000)
35			
36		Opening unamortised initial differences in asset values	
37	less	Amortisation of initial differences in asset values	-
38	plus	Adjustment for unamortised initial differences in assets acquired	
39	less	Adjustment for unamortised initial differences in assets disposed	
40 41		Closing unamortised initial differences in asset values	
42		Opening weighted average remaining useful life of relevant assets (years)	
43		, , ,	

44	5a(iv):	Amortisation of Revaluations		(\$000)
45 46		Opening sum of RAB values without revaluations		
47				
48 49		Adjusted depreciation Total depreciation		
50		Amortisation of revaluations		
51		Amortisation of revaluations		
52	5a(v): F	Reconciliation of Tax Losses		(\$000)
53				
54		Opening tax losses		
55	plus	Current period tax losses		
56	less	Utilised tax losses		
57		Closing tax losses		-
58	5a(vi):	Calculation of Deferred Tax Balance		(\$000)
59 60		Opening deferred tax		
61		Opening deferred tax		
62	plus	Tax effect of adjusted depreciation	_	
63	,			
64	less	Tax effect of tax depreciation	_	
65				
66	plus	Tax effect of other temporary differences*		
67 68	less	Tax effect of amortisation of initial differences in asset values		
69	1633	Tax effect of amortisation of initial unferences in asset values		
70	plus	Deferred tax balance relating to assets acquired in the disclosure year		
71				
72	less	Deferred tax balance relating to assets disposed in the disclosure year	_	
73				
74	plus	Deferred tax cost allocation adjustment	_	
75 76		Closing deferred tax		_
70		Closing deferred tax		
77				
78	5a(vii):	Disclosure of Temporary Differences		
		In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule	5a(vi) (Tax effect of	other temporary
79		differences).		
80	F = /: .:::\	Developer Tay Asset Day Dell Farmer		
81	5a(viii)	: Regulatory Tax Asset Base Roll-Forward		(*****)
82 83		Opening sum of regulatory tax asset values		(\$000)
84	less	Tax depreciation		
85	plus	Regulatory tax asset value of assets commissioned		
86	less	Regulatory tax asset value of asset disposals		
87	plus	Lost and found assets adjustment		
88	plus	Adjustment resulting from asset allocation		
89	plus	Other adjustments to the RAB tax value		
90		Closing sum of regulatory tax asset values		-

Schedule 5b Report on Related Party Transactions

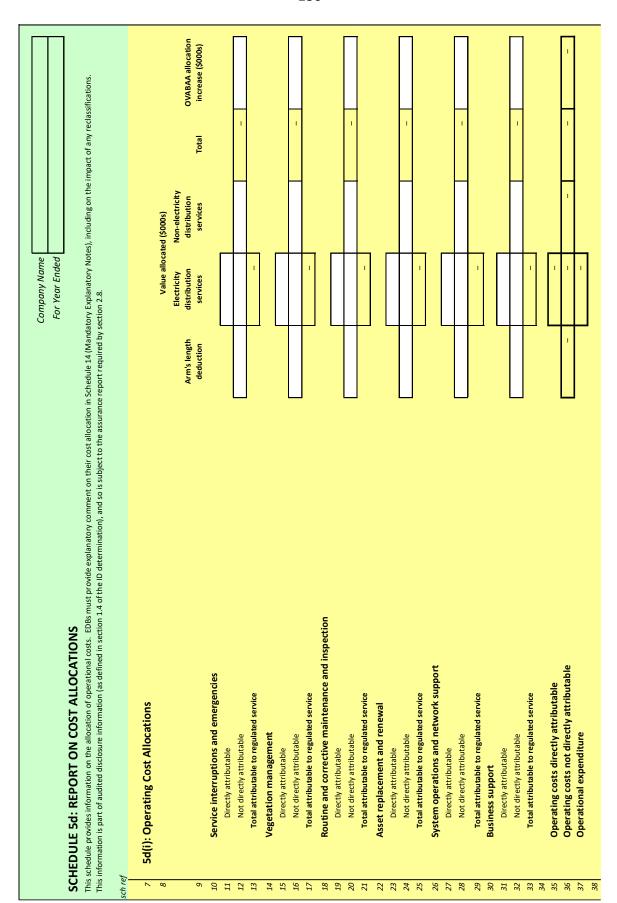
		Company Name		
	IFDUILE EL DEDONT ON DELATED DARTY	For Year Ended		
This		IRANSACTIONS ransactions, in accordance with clause 2.3.6 of the ID determination. in clause 1.4 of the ID determination), and so is subject to the assurar	nce report required	by clause 2.8.
sch ref				
7	5b(i): Summary—Related Party Transactions		(\$000)	(\$000)
	Total regulatory income	•	(\$000)	(\$000)
9	rotal regulatory income		'	
10	Market value of asset disposals			
11				
12	Service interruptions and emergencies		_	
13	Vegetation management		-	
14	Routine and corrective maintenance and inspec	tion	-	
15	Asset replacement and renewal (opex)	L	-	
16	Network opex	_		-
17	Business support	-	-	
18	System operations and network support	L	-	
19 20	Operational expenditure	Г		
21	Consumer connection System growth	<u> </u>		
22	Asset replacement and renewal (capex)		_	
23	Asset relocations		_	
24	Quality of supply		-	
25	Legislative and regulatory		-	
26	Other reliability, safety and environment		-	
27	Expenditure on non-network assets			-
28	Expenditure on assets			-
29	Cost of financing			
30	Value of capital contributions			
31	Value of vested assets			
32 33	Capital Expenditure Total expenditure			
34	rotal experiulture		'	
35	Other related party transactions			
	other related party transactions		'	
36	5b(iii): Total Opex and Capex Related Party	Nature of opex or capex service provided		Total value of transactions (\$000)
38		[Select one]		
39 40		[Select one]		
41		[Selectione]		
42		[Select one]		
43		[Select one]		
44		[Select one]		
45		[Select one]		
46		[Select one]		
47		[Select one]		
48		[Select one]		
49		[Select one]		
50		[Select one]		
51		[Select one]		
52	Total value of related manturareations	[Select one]		
53	Total value of related party transactions			
54 55	* include additional rows if needed			

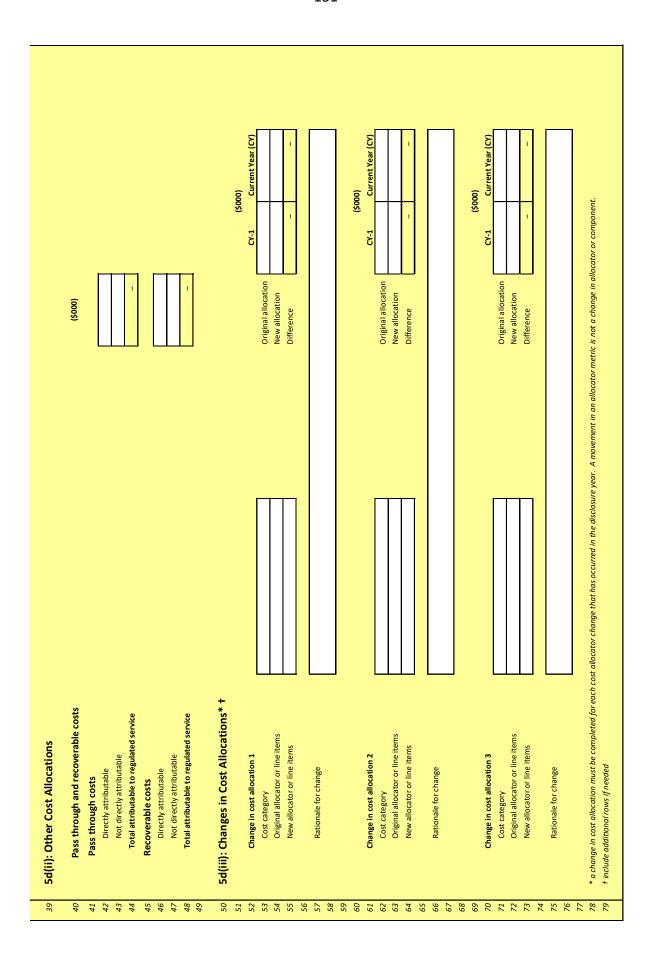
Schedule 5c Report on Term Credit Spread Differential Allowance



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Schedule 5d Report on Cost Allocations





Schedule 5e Report on Asset Allocations

		Company Name	
s c	HEDULE 5e: REPORT ON ASSET ALLOCA	For Year Ended	
This EDB	schedule requires information on the allocation of asset values is must provide explanatory comment on their cost allocation in	. ITOMS This information supports the calculation of the RAB value in Schedule 4. Schedule 14 (Mandatory Explanatory Notes), including on the impact of any c tition), and so is subject to the assurance report required by section 2.8.	hanges in asset allocations. This information is part of audited
		ation), and 30 is subject to the assurance report required by section 2.0.	
sch re			
7	5e(i): Regulated Service Asset Values		
8			Value allocated (\$000s)
9			Electricity distribution services
10	Subtransmission lines		
11	Directly attributable		
12 13	Not directly attributable Total attributable to regulated service		-
14	Subtransmission cables		
15 16	Directly attributable Not directly attributable		
17	Total attributable to regulated service		_
18	Zone substations		
19 20	Directly attributable Not directly attributable		
21	Total attributable to regulated service		-
22 23	Distribution and LV lines Directly attributable		
23	Not directly attributable		
25	Total attributable to regulated service		-
26 27	Distribution and LV cables Directly attributable	ı	
28	Not directly attributable		
29	Total attributable to regulated service Distribution substations and transformers		
30 31	Distribution substations and transformers Directly attributable		
32	Not directly attributable		
33 34	Total attributable to regulated service Distribution switchgear		
35	Directly attributable		
36	Not directly attributable		
37 38	Total attributable to regulated service Other network assets	· ·	-
39	Directly attributable		
40 41	Not directly attributable Total attributable to regulated service		
42	Non-network assets		
43	Directly attributable		
44 45	Not directly attributable Total attributable to regulated service		-
46 47	Regulated service asset value directly attributable		
48	Regulated service asset value not directly attributable	ble	-
49	Total closing RAB value		_
50			
51 52	5e(ii): Changes in Asset Allocations* †		(\$000)
53	Change in asset value allocation 1		CY-1 Current Year (CY)
54 55	Asset category Original allocator or line items		Original allocation New allocation
56	New allocator or line items		Difference – –
57 58	Rationale for change		
59	national for change		
60 61			(\$000)
62	Change in asset value allocation 2		CY-1 Current Year (CY)
63 64	Asset category Original allocator or line items		Original allocation New allocation
65	New allocator or line items		Difference – –
66 67	Rationale for change		
68	Nationale for change		
69 70			(\$000)
71	Change in asset value allocation 3		CY-1 Current Year (CY)
72 73	Asset category Original allocator or line items		Original allocation New allocation
74	Original allocator or line items New allocator or line items		New allocation Difference – –
75 76	Pation-le for shores		
76 77	Rationale for change		
78 79	* a change in asset allocation must be completed for each	llocator or component change that has occurred in the disclosure year. A mov	vement in an allocator metric is not a change in allocator or company
80	† include additional rows if needed		an anocator means is not a change in unocator or componen.

Schedule 5f Report Supporting Cost Allocations

Section Allocation Alloca	Allocat or Metric (%)	ntions). This schedule is not re	SCHEDULE 5F, REPORT SUPPORTING COST ALLOCATIONS This conduct so the sast at literation methodology spired in allocating saster value that are real direction to the asset allocation methodology spired in allocating saster value that are real direction to the asset allocation methodology spired in allocating saster value that are real direction to the asset and a saster value that are real direction to the asset value that are real direction to the asse	ut must be disclosed to the
	Non-electridity distribution Arm's services dedu	Electricity Arm's length distribution deduction services	Non-electridity distribution services Total	OVABAA allocation increase (\$000)
			,	
E.E. ARAA Allocators				
			•	-
E				
e g dah. Allocator 3 e g hah. Allocator 4				
e.g. ABAA Allocator 4				
-				
		-	-	
Insert cost description e.g. ABAA Allocator 1 (Select one)	-	_		-
e.g. ABAA Allocator 2				
Insert cost describéen e.e. ABAA Allocator 3 (Selectione)				
e.g. ABAA Allocator 4				

		e.g. ABAA	Allocator 1	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 2	[Select one]					-	
	Insert cost description	e.g. ABAA	Allocator 3	[Select one]					-	
	Insert cost description	e.g. ABAA	Allocator 4	[Select one]						
	Not directly attributable					-	-	-	-	
8	Business support									
	Insert cost description	e.g. ABAA	Allocator 1	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 2	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 3	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 4	[Select one]						
	Not directly attributable					•	,	-	-	
					1					
	Operating costs not directly attributable					,	-	-	-	
Δ.	Pass through and recoverable costs									
	Pass through costs									
	Insert cost description	e.g. ABAA	Allocator 1	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 2	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 3	[Select one]					-	
	Insert cost description	e.g. ABAA	Allocator 4	[Select one]						
	Not directly attributable					·		-	-	
	Recoverable costs									
	Insert cost description	e.g. ABAA	Allocator 1	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 2	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 3	[Select one]						
	Insert cost description	e.g. ABAA	Allocator 4	[Select one]						
	Not directly attributable					,	1	,		
*	* include additional rows if needed									

Schedule 5g Report Supporting Asset Allocations

SCHEDULE 5 This schedule requir to the Commission. This information is, sch.ref	SCHEDULE Se; REPORT SUPPORTING ASSET ALLOCATIONS This schedule service additional detail on the asset allocation methodology sppiled in allocating asset values that are not directly attributable, to support the information provided in Schedule 5e (Report on Asset Allocations). This schedule is not required to be publicly disclosed but must be disclosed to the support to all the standard or a service of the support to all the support to a service or a servi	ass et values that a	re not directly attrib s su bject to the assu	utable, to s upport the	e information provic d by section 2.8.	ded in Schedule Se (Re	port on As set Alloca	For Year Ended	is not required to be	publicly disclosed,	out must be disclos
ref											
N 00											
6					Allocator	Allocator Metric (%)		Value alloca	Value allocated (\$000)		
92	Line Rem *	Allocation	Allocator	Allocator type	Ele ctricity distribution services	Non-electricity distribution services	Arm's length deduction	Ele ctricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase (\$000)
11 Suk	Subtransmission lines										
12	Insert as set description	e.g. ABAA	Allocator 1	[Select one]							
13	Insert as set des cription	eg. ABAA	Allocator 2	[Select one]							
14	Insert as set description	eg. ABAA	Allocator 3	[Select one]							
15	Insert as set description	e.g. ABAA	Allocator 4	[Select one]							
	Not directly attrautable										
	Subtransmission cables										
18	Insert as set description	e.g. ABAA	Allocator 1	[Select one]							
19	Insert as set des cription	e.g. ABAA	Allocator 2	[Select one]							
20	Insert as set des cription	e.g. ABAA	Allocator 3	[Select one]							
21	Insert as set description	e.g. ABAA	Allocator 4	[Select one]							
	Not directly attributable								•		
707	ne su ostations	*****	Allen and and	1000							
25	Insert asset description	66 AB AA	Allocator 2	[Selectione]							
26	Insert as set description	e.g. ABAA	Allocator 3	[Select one]							
27	Insert as set des cription	e.g. ABAA	Allocator 4	[Select one]							
	Not directly attributable										
	Distribution and LV lines										
30	insert as set des cription	eg. ABAA	Allocator 1	[Selectione]				Ī			
32	Insert asset description	68.70/M	Allocator 3	[Selectione]							
33	no transfer or transfer	AN AN AN	Allocator A	[Salart one]							
22	maeri da aer des cription	W/G/-92	Allocator 4	facion one)							

36	Distribution and LV cables								
37	Insert asset description	e.g. ABAA	Allocator 1	[Select one]				-	
38	Insert asset description	e.g. ABAA	Allocator 2	[Select one]				-	
39	Insert asset description	e.g. ABAA	Allocator 3	[Select one]					
40	Insert asset description	e.g. ABAA	Allocator 4	[Select one]				-	
41	Not directly attributable				•	-	-	-	•
42									
43	Distribution substations and transformers								
44	Insert asset description	e.g. ABAA	Allocator 1	[Select one]				-	
45	Insert asset description	e.g. ABAA	Allocator 2	[Select one]					
46	Insert asset description	e.g. ABAA	Allocator 3	[Select one]				-	
47	Insert asset description	e.g. ABAA	Allocator 4	[Select one]					
48	Not directly attributable								
20	Distribution switchgear								
51	Insert asset description	e.g. ABAA	Allocator 1	[Select one]					
25	Insert asset description	e.g. ABAA	Allocator 2	[Select one]					
53	Insert asset description	e.g. ABAA	Allocator 3	[Select one]				-	
54	Insert asset description	e.g. ABAA	Allocator 4	[Select one]				-	
55	Not directly attributable				,	•			-
99	Other network assets								
57	Insert asset description	e.g. ABAA	Allocator 1	[Select one]				-	
28	Insert asset description	e.g. ABAA	Allocator 2	[Select one]				-	
59	Insert asset description	e.g. ABAA	Allocator 3	[Select one]				-	
09	Insert asset description	e.g. ABAA	Allocator 4	[Select one]				-	
19	Not directly attributable				•	,			•
62	Non-network assets								
63	Insert asset description	e.g. ABAA	Allocator 1	[Select one]				-	
64	Insert asset description	e.g. ABAA	Allocator 2	[Select one]				-	
65	Insert asset description	e.g. ABAA	Allocator 3	[Select one]				-	
99	Insert asset description	e.g. ABAA	Allocator 4	[Select one]				-	
67	Not directly attributable					•			•
69	Regulated service asset value not directly attributable					-	•		•
20	* include additional rows if needed								

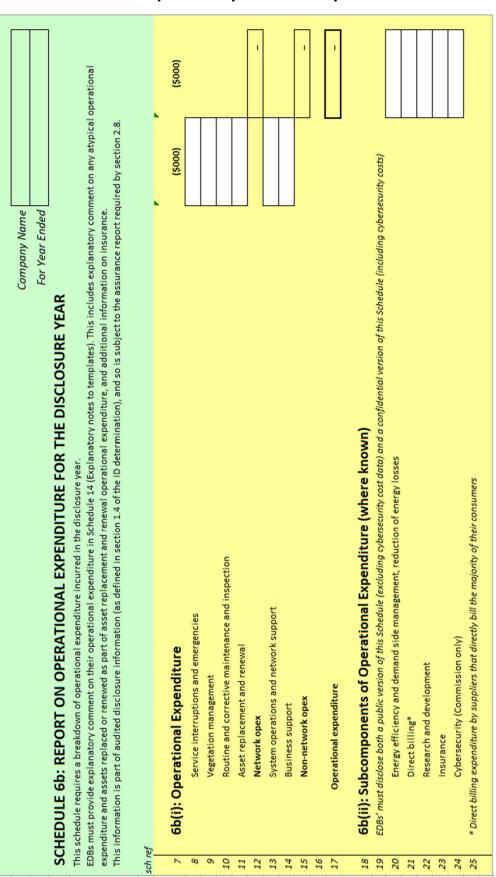
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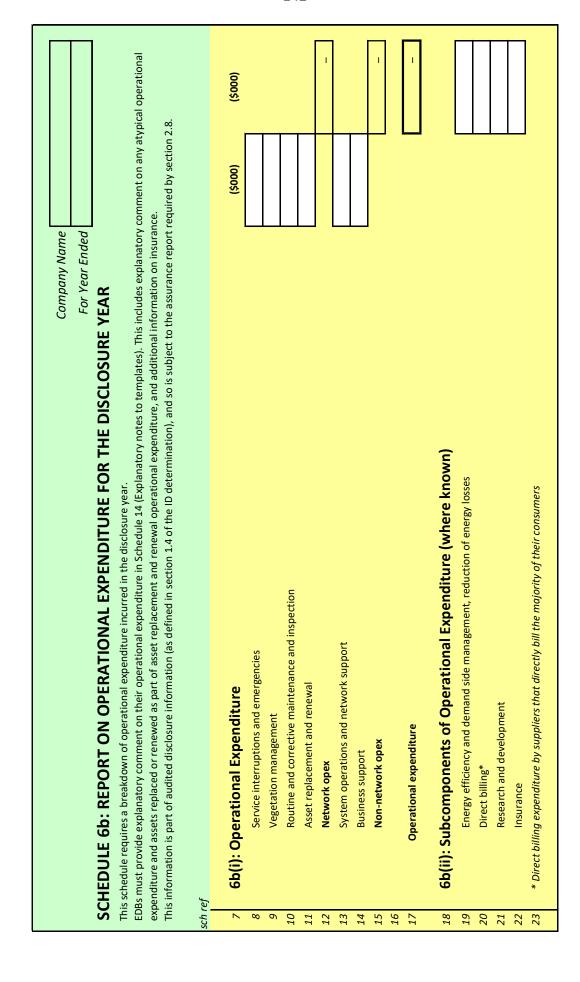
Schedule 6a Report on Capital Expenditure for the Disclosure Year

	Company Name					
	For Year Ended					
SC	CHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR					
This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but						
excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs.						
	Bs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates).	alored by a service 2.0				
inis	s information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report req	uired by section 2.8.				
sch re	ef					
7	6a(i): Expenditure on Assets (5000	(\$000)				
8	Consumer connection	-				
9	System growth	_				
10	Asset replacement and renewal					
11	Asset relocations	_				
12	Reliability, safety and environment:					
13	Quality of supply	-				
14	Legislative and regulatory					
15 16	Other reliability, safety and environment Total reliability, safety and environment	-				
17	Expenditure on network assets					
18	Expenditure on non-network assets Expenditure on non-network assets					
19						
20	Expenditure on assets	-				
21	plus Cost of financing					
22	less Value of capital contributions					
23	plus Value of vested assets					
24						
25	Capital expenditure	-				
26	Caliily Subsempenents of Evanditure on Assets (where known)	(\$000)				
26	6a(ii): Subcomponents of Expenditure on Assets (where known)	(3000)				
27	Energy efficiency and demand side management, reduction of energy losses					
28 29	Overhead to underground conversion Research and development					
29	kesearch and development					
30	6a(iii): Consumer Connection					
31	Consumer types defined by EDB*	(\$000)				
32	[EDB consumer type]					
33	[EDB consumer type]					
34	[EDB consumer type]					
35	[EDB consumer type]					
36 37	[EDB consumer type] * include additional rows if needed					
38	Consumer connection expenditure					
39	consumer connection expenditure					
40	less Capital contributions funding consumer connection expenditure					
41	Consumer connection less capital contributions	-				
	Coll A Contact Country and Acoust Production and Production	Asset				
42	6a(iv): System Growth and Asset Replacement and Renewal System Growth Gr	Replacement and rowth Renewal				
43 44	(\$000					
45	Subtransmission	(\$550)				
46	Zone substations					
47	Distribution and LV lines					
48	Distribution and LV cables					
49	Distribution substations and transformers					
50	Distribution switchgear					
51	Other network assets					
52	System growth and asset replacement and renewal expenditure					
53	less Capital contributions funding system growth and asset replacement and renewal	_				
54 55	System growth and asset replacement and renewal less capital contributions					
55						
56	6a(v): Asset Relocations					
57	Project or programme* (\$000	(\$000)				
58	[Description of material project or programme]					
59	[Description of material project or programme]					
60	[Description of material project or programme]					
61	[Description of material project or programme]					
62	[Description of material project or programme]					
63	* include additional rows if needed					
64	All other projects or programmes - asset relocations					
65	Asset relocations expenditure	-				
66 67	less Capital contributions funding asset relocations Asset relocations less capital contributions					
67	Asset relocations less capital contributions					

68			
69	6a(vi): Quality of Supply		
70	Project or programme*	(\$000)	(\$000)
71	[Description of material project or programme]	(\$666)	(\$000)
72	[Description of material project or programme]		
73	[Description of material project or programme]		
74	[Description of material project or programme]		
75	[Description of material project or programme]		
76	* include additional rows if needed		
77	All other projects programmes - quality of supply		
78 79	Quality of supply expenditure less Capital contributions funding quality of supply		
80	Quality of supply less capital contributions		_
81	6a(vii): Legislative and Regulatory		
82	Project or programme*	(\$000)	(\$000)
83	[Description of material project or programme]		
84	[Description of material project or programme]		
85	[Description of material project or programme]		
86 87	[Description of material project or programme]		
88	[Description of material project or programme] * include additional rows if needed		
89	All other projects or programmes - legislative and regulatory		
90	Legislative and regulatory expenditure		-
91	less Capital contributions funding legislative and regulatory		
92	Legislative and regulatory less capital contributions		-
93	6a(viii): Other Reliability, Safety and Environment	(4000)	(4000)
94	Project or programme* [Description of material project or programme]	(\$000)	(\$000)
95 96	[Description of material project or programme]		
97	[Description of material project or programme]		
98	[Description of material project or programme]		
99	[Description of material project or programme]		
100	* include additional rows if needed		
101	All other projects or programmes - other reliability, safety and environment		
102	Other reliability, safety and environment expenditure		-
103	less Capital contributions funding other reliability, safety and environment		
104	Other reliability, safety and environment less capital contributions		-
105			
106	6a(ix): Non-Network Assets		
107	Routine expenditure		
108	Project or programme*	(\$000)	(\$000)
109	[Description of material project or programme]		
110	[Description of material project or programme]		
111	[Description of material project or programme]		
112 113	[Description of material project or programme] [Description of material project or programme]		
114	* include additional rows if needed	<u> </u>	
115	All other projects or programmes - routine expenditure		
116	Routine expenditure		-
	About and armound the con-	•	
117 118	Atypical expenditure Project or programme*	(\$000)	(\$000)
119	[Description of material project or programme]	(\$500)	(4000)
120	[Description of material project or programme]		
121	[Description of material project or programme]		
122	[Description of material project or programme]		
123	[Description of material project or programme]		
124	* include additional rows if needed		
125	All other projects or programmes - atypical expenditure		
126	Atypical expenditure		-
127	Form of the control o		
128	Expenditure on non-network assets		-

Schedule 6b Report on Operational Expenditure for the Disclosure Year



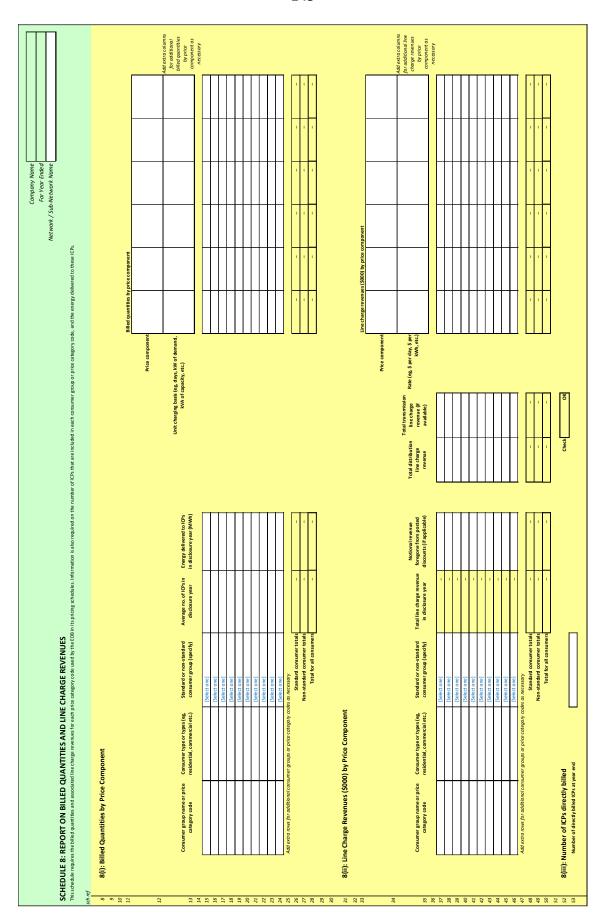


Schedule 7 Comparison of Forecasts to Actual Expenditure

	Company Name						
For Year Ended							
SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE							
This schedule compares actual revenue and expenditure to the previous forecasts that were made for the disclosure year. Accordingly, this schedule requires the forecast revenue and expenditure information from previous disclosures to be inserted. EDBs must provide explanatory comment on the variance between actual and target revenue and forecast expenditure in Schedule 14 (Mandatory Explanatory Notes). This information is part of the audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. For the purpose of this audit, target revenue and forecast expenditures only need to be verified back to previous disclosures. sch ref							
30111	.						
7	7(i): Revenue	Target (\$000) 1	Actual (\$000)	% variance			
8	Line charge revenue		-	-			
9	7(ii): Expenditure on Assets	Forecast (\$000) ²	Actual (\$000)	% variance			
10	Consumer connection		_	_			
11	System growth		_	_			
12	Asset replacement and renewal		-	-			
13	Asset relocations		_	_			
14	Reliability, safety and environment:						
15	Quality of supply		_	-			
16	Legislative and regulatory		-	-			
17	Other reliability, safety and environment		-	-			
18	Total reliability, safety and environment	_	_	_			
19	Expenditure on network assets	-	-	-			
20	Expenditure on non-network assets		_	-			
21	Expenditure on assets						
22	7(iii): Operational Expenditure						
23	Service interruptions and emergencies		_	_			
24	Vegetation management		_	_			
25	Routine and corrective maintenance and inspection		_	_			
26	Asset replacement and renewal		-	-			
27	Network opex	-	_	-			
28	System operations and network support		-	-			
29	Business support		-	-			
30	Non-network opex	_	-	-			
31	Operational expenditure	-	-	-			
22	7/iv): Subsampanants of Evnanditure on Assats (where known)						
32	7(iv): Subcomponents of Expenditure on Assets (where known)						
33	Energy efficiency and demand side management, reduction of energy losses Overhead to underground conversion	 	-	_			
34 35	Research and development						
36	Research and development						
37	7(v): Subcomponents of Operational Expenditure (where known)					
38	Energy efficiency and demand side management, reduction of energy losses		_	_			
39	Direct billing		_	-			
40	Research and development		-	_			
41	Insurance		-	-			
42							
43	1 From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3	3(3) of this determine	ntion				
	2 From the CY+1 nominal dollar expenditure forecasts disclosed in accordance with clause 2.	6.6 for the forecast p	period starting at th	e beginning of the			
44	disclosure year (the second to last disclosure of Schedules 11a and 11b)						

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Schedule 8 Report on Billed Quantities and Line Charge Revenues



Schedule 9a Asset Register

					Company Name			
					For Year Ended			
			Netv	work / Su	b-network Name			
SC	HEDULE 9	a: ASSET REGISTER						
This	schedule requir	es a summary of the quantity of ass	ets that make up the network, by asset category and asset class. All units rela	iting to cab	le and line assets, th	nat are expressed in	km, refer to circuit l	engths.
sch ref								
					Items at start of	Items at end of		Data accuracy
8	Voltage	Asset category	Asset class	Units	year (quantity)	year (quantity)	Net change	(1-4)
9	All	Overhead Line	Concrete poles / steel structure	No.			_	[Select one]
10	All	Overhead Line	Wood poles	No.			_	[Select one]
11	All	Overhead Line	Other pole types	No.			_	[Select one]
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km			-	[Select one]
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km			-	[Select one]
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km			-	[Select one]
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km			-	[Select one]
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km			-	[Select one]
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km			-	[Select one]
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km			_	[Select one]
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km			_	[Select one]
20 21	HV HV	Subtransmission Cable Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised) Subtransmission UG 110kV+ (PILC)	km km				[Select one]
22	HV	Subtransmission Cable Subtransmission Cable	Subtransmission UG 110KV+ (PILC) Subtransmission submarine cable	km km			_	[Select one]
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.			_	[Selectione]
24	HV	Zone substation Buildings	Zone substations 110kV+	No.			_	[Selectione]
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.			_	[Select one]
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.			_	[Select one]
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.			_	[Select one]
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.			-	[Select one]
29	HV	Zone substation switchgear	33kV RMU	No.			_	[Select one]
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.			_	[Select one]
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.			_	[Select one]
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.			_	[Select one]
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.			_	[Select one]
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.			-	[Select one]
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km			_	[Select one]
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km			-	[Select one]
37	HV	Distribution Line	SWER conductor	km			-	[Select one]
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km			_	[Select one]
39	HV	Distribution Cable	Distribution UG PILC	km			-	[Select one]
40	HV	Distribution Cable	Distribution Submarine Cable	km			-	[Select one]
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.			_	[Select one]
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			_	[Select one]
43	HV HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.			_	[Select one]
44	HV	Distribution switchgear Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU 3.3/6.6/11/22kV RMU	No. No.				[Select one]
45	HV	Distribution Transformer	Pole Mounted Transformer	No.				[Selectione]
47	HV	Distribution Transformer	Ground Mounted Transformer	No.			_	[Selectione]
48	HV	Distribution Transformer	Voltage regulators	No.			_	[Select one]
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.			_	[Select one]
50	LV	LV Line	LV OH Conductor	km			_	[Select one]
51	LV	LV Cable	LV UG Cable	km			_	[Select one]
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km			_	[Select one]
53	LV	Connections	OH/UG consumer service connections	No.			_	[Select one]
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.			_	[Select one]
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot			_	[Select one]
56	All	Capacitor Banks	Capacitors including controls	No			-	[Select one]
57	All	Load Control	Centralised plant	Lot			-	[Select one]
58	All	Load Control	Relays	No			_	[Select one]
59	All	Civils	Cable Tunnels	km			-	[Select one]

Schedule 9b Asset Age Profile

																						Company No	nme			_				_	_	
																						For Year En				-				-	-	_
																					Hatmark /	For rear En Sub-network No									_	_
	9b: ASSET AGE PROFILE																			,	vetwork / .	Sub-rietwork re	une			_				_	_	_
requ	ares a summary or the age profile (basi	ed on year of installation) of the assets that make up the network, by ass	ser caregor	y and asset class. A	ii units relac	ing to capie a	no nne asse	s, mat are ex	presseu iii r	on, reser to circuit renge	113-																					
	Disclosure Year (year ended)		J							Number of assets	at disclosure year en	d by installati	ion date																No with	It ems at	No with	h
				194				1980																					age	end of year	default	t D
tage	Asset category	Asset class	Units	pre-1940 -194	19 -195	9 -1969	-1979	-1989	-1999	2000 2001	2002 2003	2004	2005	2006	2007	2008 20	009 2010	2011	2012	2013	2014	2015 20	16 20	017 2018 2019	2020 2021	2022	2023	2024 2025	unknown	(quantity)	dates	-
	Overhead line Overhead line	Concrete poles / steel structure Wood poles	No.		_	_	+	 				_			_	_			_				-			+-				-	$\overline{}$	+
	Overhead Line	Other pole types	No.				+																			-					$\overline{}$	
	Subtransmission Line	Subtransmission OH up to 66kV conductor	km																											-		
	Subtransmission Line	Subtransmission OH 110kV+ conductor	km																											-		
	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km																											-		_
	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km			_	+	_				_	_					_	_	\vdash						+-	\vdash		+		—	4
	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km		-	-	+	-				+	-		-			-	+	\vdash						+-	\vdash		+	-	-	+
	Subtransmission Cable	Subtransmission UG up to 66kV (PLC)	km			_	+	_				_	_	_	_		_	_	+	_	_		-			+-	-		-	_	-	+
	Subtransmission Cable Subtransmission Cable	Subtransmission UG 110kV+ (XLPE) Subtransmission UG 110kV+ (Oil pressurised)	km km	 		_	+	_				+	1	-	_	_	-	-	1	 			-			+-	\vdash		+	_	-	+
	Subtransmission Cable Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised) Subtransmission UG 110kV+ (Gas Pressurised)	km km		-	_	1	1				1	1						1				_			+-			1		$\overline{}$	+
	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km			1	1												1							\top			1		$\overline{}$	$^{+}$
	Subtransmission Cable	Subtransmission submarine cable	km																													
	Zone substation Buildings	Zone substations up to 66kV	No.																											_		
	Zone substation Buildings	Zone substations 110kV+	No.																											-	_	
	Zone substation switchgear	50/66/110kV CB (Indoor)	No.														_						_									_
	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.		_	_	+	_					_						-				_				-		-	-		4
	Zone substation switchgear	33kV Switch (Ground Mounted)	No.			_	+					_	_		_				+	-			_			+-	_				-	-
	Zone substation switchgear Zone substation switchgear	33kV Switch (Pole Mounted) 33kV RMU	No.		_	-	+	+				+	_		_	_	_		+			_	_			+-	1			+	-	-
	Zone substation switchgear	22/33KV CB (Indoor)	No.		_												_						_			+-				+=	$\overline{}$	-
	Zone substation switchgear	22/33kV CB (Outdoor)	No.																							+					_	_
	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.																											-		1
	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.																											-		
	Zone Substation Transformer	Zone Substation Transformers	No.																											-		
	Distribution Line	Distribution OH Open Wire Conductor	km																											-	—	
	Distribution Line	Distribution OH Aerial Cable Conductor	km		_		1																_							-	—	4
	Distribution Line	SWER conductor	km	<u> </u>	_	_	_	-				_	_	_	_	_	_	_	_	_			-			+-					\leftarrow	4
	Distribution Cable	Distribution UG XLPE or PVC	km		_	-	+	-				+	_		-	-	_		+				-			+-	\vdash				-	+
	Distribution Cable Distribution Cable	Distribution UG PILC Distribution Submarine Cable	km km		_	_	1					_					_						_			+-				+	-	-
	Distribution Cable Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectional isers	No.		_		1	1							- +				1						-	+-	1 - 1		1		$\overline{}$	+
	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.				1												1							τ			1		$\overline{}$	-
	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.																											-		Т
	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.																											-		
	Distribution switchgear	3.3/6.6/11/22kV RMU	No.																							\bot				-	=	
	Distribution Transformer	Pole Mounted Transformer	No.		\perp		\perp	_				_	\perp						\perp				-			4—	\vdash		_	-	—	4
	Distribution Transformer	Ground Mounted Transformer	No.	\vdash	_	_	+	1	\vdash	\vdash		_	_	\vdash		_		-	+	-			_	-		+	\vdash		+		₩	4
	Distribution Transformer	Voltage regulators	No.		_	_	+		\vdash			+	-		-+	_		-	+	\vdash			-			+-	\vdash		+	-	-	+
	Distribution Substations	Ground Mounted Substation Housing	No.		-	-	+	 				+	1	-	-+			-	+	 				-	-	+-	+		+	_	-	+
	LV Line LV Cable	LV OH Conductor LV UG Cable	km km	 		-	+	 			 	+	_					-	+	 		 	-1-			+-	1		+	+	-	+
	LV Cable LV Street lighting	LV OH/UG Streetlight circuit	km km		_	_	+	 				_			_	_			+				-		_	+-			+		$\overline{}$	-
	Connections	OH/UG consumer service connections	No.	-	_		1	1							- +										-	+	1 1				$\overline{}$	+
	Protection	Protection relays (electromechanical, solid state and numeric)	No.				1						1													\neg	1 1		1	-		\top
	SCADA and communications	SCADA and communications equipment operating as a single system																								T				-	$\overline{}$	+
	Capacitor Banks	Capacitors including controls	No																											-		
	Load Control	Centralised plant	Lot																													
	Load Control	Relays	No																											_		-
	Givils	Cable Tunnels	km		1	1	1	1																							1	

Schedule 9c Report on Overhead Lines and Underground Cables

	Company Name			
	For Year Ended			
	Network / Sub-network Name			
SI	CHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES			,
_	is schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units rela	ina ta sabla and lin.		
	is scriedule requires a summary of the key characteristics of the overhead line and underground cable network. All units rela- cuit lengths.	ting to cable and line	e assets, that are exp	rressed in km, refer to
sch r	ef			
50,,,	9			
9				
				Total circuit length
10	Circuit length by operating voltage (at year end)	Overhead (km)	Underground (km)	(km)
11	> 66kV			-
12	50kV & 66kV			_
13	33kV			-
14	SWER (all SWER voltages)			-
15	22kV (other than SWER)			-
16	6.6kV to 11kV (inclusive—other than SWER)			-
17	Low voltage (< 1kV)			-
18 19	Total circuit length (for supply)	-	-	-
20	Dedicated street lighting circuit length (km)			_
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)		ļ.	
22	Circuit in sensitive areas (conservation areas, iwi territory etc) (kin)			
			(% of total	
23	Overhead circuit length by terrain (at year end)	Circuit length (km)	overhead length)	
24	Urban		-	
25	Rural		-	
26	Remote only		-	
27	Rugged only		-	
28	Remote and rugged		-	
29	Unallocated overhead lines		-	
30	Total overhead length	-	-	
31			(% of total circuit	
32		Circuit length (km)	length)	
33	Length of circuit within 10km of coastline or geothermal areas (where known)		-	
			(% of total	
34		Circuit length (km)	•	
35	Overhead circuit requiring vegetation management	- Care length (Kill)		
55	2.2			

Schedule 9d Report on Embedded Networks

			Company Name For Year Ended		
	schedule requires i	REPORT ON EMBEDDED NETWORKS Information concerning embedded networks owned by an EDB that are embedded in another EDB's ne	etwork or in another e	mbedded network.	
				Number of ICPs	Line charge revenue
8 9		Location *	[served	(\$000)
10					
11					
12 13					
14					
15					
16 17			ŀ		
18					
19					
20					
21 22					<u> </u>
23					
24					
25	* Extend emi	bedded distribution networks table as necessary to disclose each embedded network owned by the ED	B which is embedded in	n another FDB's netwo	ork or in another
26	embedded ne		S TIME IS EMBERGED IN	. d. other EDD's netwo	o and the

Schedule 9e Report on Network Demand

	SC	CHEDULE 9e: REPORT ON NETWORK DEMAND	
1	Thi	s schedule requires a summary of the key measures of network utilisation for the disclosure ye	ear (number of new connections including
ı	dis	tributed generation, peak demand and electricity volumes conveyed).	
ł			
ł	sch.	ret I	
ı	8	9e(i): Consumer Connections and Disconnections	
ł	9	Number of ICPs connected in year by consumer type	
1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	number of
ı	10	Consumer types defined by EDB*	connections (ICPs)
ł	11	[EDB consumer type]	(ICFS)
ł	12		
ł		[EDB consumer type]	
ł	13	[EDB consumer type]	
ł	14	[EDB consumer type]	
ł	15	[EDB consumer type]	
Į	16	* include additional rows if needed	
Į	17	Connections total	-
Į	18		
Į	19	Number of ICPs disconnected in year by consumer type	
ı			Number of
ł	20	Consumer types defined by EDB*	disconnections
ļ	21	[EDB consumer type]	
ļ	22	[EDB consumer type]	
Į	23	[EDB consumer type]	
Į	24	[EDB consumer type]	
Į	25	[EDB consumer type]	
Į	26	*include additional rows if needed to a maxmimum of 10	
Į	27	Disconnections total	
Į	28	CARL SEC. 10.	
Į	29	Distributed generation	
	30	Number of connections made in year	connections
	31	Number of disconnections made in year	disconnections
1	32	Capacity of distributed generation installed in year	MVA
1	33		
1	34	Connection times	
1	35	Time taken to quote new connections and alterations to existing connection	ns
1	36	Where time taken for EDBs to give a quote begins with the EDB's receipt of the	
1		,	Number of
J	37	Average time taken to give a quote for a new ICP*	business days
	38	[EDB consumer type]	
1	39	[EDB consumer type]	
1	40	[EDB consumer type]	
1	41	[EDB consumer type]	
1	42	[EDB consumer type]	
1	43	* include additional rows if needed up to a maximum of 10	
1	44		
1			Number of
J	45	Average time taken to give a quote for alterations made to an existing ICP*	business days
1	46	[EDB consumer type]	
1	47	[EDB consumer type]	
1	48	[EDB consumer type]	
1	49	[EDB consumer type]	
1	50	[EDB consumer type]	
ł	51	* include additional rows if needed up to a maximum of 10	
1	52	molude additional forms if needed up to a maximum of 10	
-1	02		

-	. 1	The state of the s	
5	3	Time taken to install new connections and alterations to existing connections	
	- 1	Where time taken for an EDB to install a new ICP or alter an existing ICP begins with the later of the customer's agreement to the proposed	the later of the customer's agreement to the proposed
	- 1	design and quote, payment of any required upfront payment by the customer, and readying of the site by the customer, and ends with the	dving of the site by the customer, and ends with the
5	4	receipt of the certificate of compliance for new connections or power restoration to the customer's ICP for alterations	
-	٦.		
		Number of	
5	5	Average time taken to install a new ICP* business days	business days
5	6	[EDB consumer type]	
5			
		[EDB consumer type]	
5	8	[EDB consumer type]	
5	9	[EDB consumer type]	
	- 1		
6	- 1	[EDB consumer type]	
6	1	* include additional rows if needed up to a maximum of 10	
6	2	S. Ser Barrier, and the service of t	
	٤.	Numbered	Numbered
	_	Number of	
6	3	Average time taken to make alterations to an existing ICP* business days	business days
6	4	[EDB consumer type]	
6	اء	[EDB consumer type]	
	- 1		
6	6	[EDB consumer type]	
6	7	[EDB consumer type]	
6	1		
	- 1	[EDB consumer type]	
6	9	* include additional rows if needed up to a maximum of 10	
	- 1		
70		9e(ii): System Demand	
		Setil). System Demand	
7	1		
7:	2	Demand at	Demand at
		time of	time of
	- 1	maximum	maximum
	- 1		maximum
		coincident	coincident
7:	3	Maximum coincident system demand demand (MW)	Comoracin
-		Waxiiidii Collicidelit Systelli dellialid	demand (MW)
17	4	GXP demand	demand (MW)
	4	GXP demand	demand (MW)
7	5	plus Distributed generation output at HV and above	demand (MW)
	5		demand (MW)
7: 70	5	plus Distributed generation output at HV and above Maximum coincident system demand	demand (MW)
7: 7: 7:	5	plus Distributed generation output at HV and above Maximum coincident system demand	demand (MW)
7: 70	5	plus Distributed generation output at HV and above Maximum coincident system demand	demand (MW)
7: 7: 7:	5	plus Distributed generation output at HV and above Maximum coincident system demand	demand (MW)
7: 7: 7: 7:	5 6 7 8	plus Distributed generation output at HV and above Maximum coincident system demand – less Net transfers to (from) other EDBs at HV and above Demand on system for supply to consumers' connection points –	
7: 7: 7: 7:	5 6 7 8 9	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8:	5 6 7 8 9 0	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7:	5 6 7 8 9 0	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8:	5 6 7 8 9 0 1	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8:	77 88 99 10 11 12	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8:	7 8 9 10 11 12 13	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8:	7 8 9 10 11 12 13	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8: 8:	75 76 77 78 99 90 91 12 13	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8: 8: 8:	7 8 9 10 11 12 13 14 15	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8: 8: 8: 8:	7 8 9 9 10 11 12 13 14 15 16 16	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 70 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 8:	7 8 9 10 11 12 13 14 15 16 17	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8: 8: 8: 8:	7 8 9 10 11 12 13 14 15 16 17	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 70 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 8: 8:	7 8 9 10 11 12 13 14 15 16 17	plus Distributed generation output at HV and above Maximum coincident system demand	
7: 7: 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 8: 8: 8:	7 8 9 10 11 12 13 14 15 16 17 18	Distributed generation output at HV and above Maximum coincident system demand	
7: 70 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 8: 8:	7 8 9 10 11 12 13 14 15 16 17 18	plus Distributed generation output at HV and above Maximum coincident system demand	
75 70 77 70 88 88 88 88 88 88 88 88 88 88	75 67 78 99 91 11 12 13 14 15 16 17 18	Distributed generation output at HV and above Maximum coincident system demand Less Net transfers to (from) other EDBs at HV and above Demand on system for supply to consumers' connection points Electricity volumes carried Electricity supplied from GXPs Less Electricity exports to GXPs plus Electricity supplied from distributed generation Less Net electricity supplied to (from) other EDBs Electricity entering system for supply to consumers' connection points Less Total energy delivered to ICPs Electricity losses (loss ratio) Load factor 9e(iii): Transformer Capacity	- Energy (GWh)
7:777777777777777777777777777777777777	5 6 7 8 9 00 1 1 2 3 4 4 5 6 6 7 8 9 0 0	plus Distributed generation output at HV and above Maximum coincident system demand less Net transfers to (from) other EDBs at HV and above Demand on system for supply to consumers' connection points Electricity volumes carried Electricity supplied from GXPs less Electricity exports to GXPs plus Electricity supplied from distributed generation less Net electricity supplied to (from) other EDBs Electricity entering system for supply to consumers' connection points less Total energy delivered to ICPs Electricity losses (loss ratio) Load factor 9e(iii): Transformer Capacity (MVA)	- Energy (GWh)
75 70 77 70 88 88 88 88 88 88 88 88 88 88	5 6 7 8 9 00 1 1 2 3 4 4 5 6 6 7 8 9 0 0	Distributed generation output at HV and above Maximum coincident system demand Less Net transfers to (from) other EDBs at HV and above Demand on system for supply to consumers' connection points Electricity volumes carried Electricity supplied from GXPs Less Electricity exports to GXPs plus Electricity supplied from distributed generation Less Net electricity supplied to (from) other EDBs Electricity entering system for supply to consumers' connection points Less Total energy delivered to ICPs Electricity losses (loss ratio) Load factor 9e(iii): Transformer Capacity	- Energy (GWh)
7:777777777777777777777777777777777777	9 0 1 2 3 4 5 6 7 8 9 0 1	Distributed generation output at HV and above Maximum coincident system demand —	- Energy (GWh)
7: 7: 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 9: 9: 9: 9:	56 78 99 91 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Distributed generation output at HV and above Maximum coincident system demand -	- Energy (GWh)
7: 7: 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9:	56789901123445667889901123	Distributed generation output at HV and above Maximum coincident system demand —	- Energy (GWh)
7: 7: 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 9: 9: 9: 9:	56789901123445667889901123	Distributed generation output at HV and above Maximum coincident system demand -	- Energy (GWh)
7: 7: 7: 7: 8: 8: 8: 8: 8: 8: 8: 8: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9: 9:	5678 90112345678 9011234	Distributed generation output at HV and above Maximum coincident system demand -	- Energy (GWh)

	Company Name
	For Year Ended
	Network / Sub-network Name
SC	CHEDULE 9e: REPORT ON NETWORK DEMAND
This	s schedule requires a summary of the key measures of network utilisation for the disclosure year (number of new connections including
dist	tributed generation, peak demand and electricity volumes conveyed).
cch re	nf.
sch re	
8	9e(i): Consumer Connections
9	Number of ICPs connected in year by consumer type
	Number of
10	Consumer types defined by EDB* (ICPs)
11	[EDB consumer type]
12 13	[EDB consumer type] [EDB consumer type]
14	[EDB consumer type]
15	[EDB consumer type]
16	* include additional rows if needed
17	Connections total –
18	
19	Distributed generation
20	Number of connections made in year connections
21	Capacity of distributed generation installed in year
22	9e(ii): System Demand
23	Sellif. System Belliuliu
24	Downard at time of
	Demand at time of maximum
	coincident
25	Maximum coincident system demand (MW)
26	GXP demand
27	plus Distributed generation output at HV and above
28	Maximum coincident system demand –
29	less Net transfers to (from) other EDBs at HV and above
30	Demand on system for supply to consumers' connection points
	Florinity and any second of
31	Electricity volumes carried Energy (GWh)
32	Electricity supplied from GXPs
33 34	less Electricity exports to GXPs plus Electricity supplied from distributed generation
35	less Net electricity supplied to (from) other EDBs
36	Electricity entering system for supply to consumers' connection points –
37	less Total energy delivered to ICPs –
38	Electricity losses (loss ratio)
39	
40	Load factor
11	9e(iii): Transformer Capacity
41	Se(iii): Transformer Capacity (MVA)
42	
43 44	Distribution transformer capacity (EDB owned) Distribution transformer capacity (Non-EDB owned, estimated)
45	Total distribution transformer capacity —
46	
47	Zone substation transformer capacity

Schedule 10 Report on Network Reliability

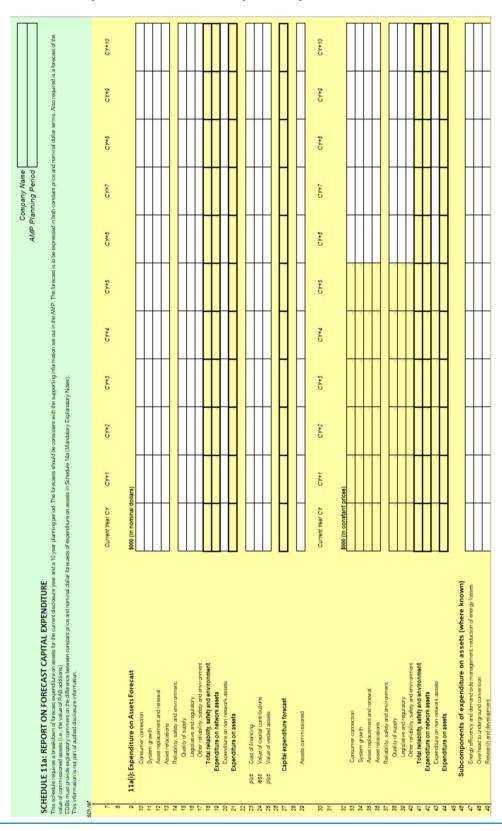
	Company Nan	ne l
	For Year Ende	
	Network / Sub-network Nan	
	SCHEDULE 10: REPORT ON NETWORK RELIABILITY	
	This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclos- comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI info	
	nformation (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.	mation is part or audited disclosure
sch	ref	
8	10(i): Interruptions	
0	Number of	
9	Interruptions by class interruption	s
10	Class A (planned interruptions by Transpower)	
11	Class B (planned interruptions on the network)	
12	Class C (unplanned interruptions on the network)	
13	Class D (unplanned interruptions by Transpower)	
14		
15		
16		
17		
18		
19		
20		
21		>3hrs
23		
24		SAIDI
25 26		+
27		
28		
29		
30		
31		
32		
33		
34		-
35	5	
20	Normalised Normalised SAISI	
36 37		SAIDI
3/	Classes 6 a C (interruptions on the network)	
38		
39	Transitional SAIDI and SAIDI (previous method) SAIFI	SAIDI
	Where EDBs do not currently record their SAIFI and SAIDI values using the 'multi-count' approach they shall continue	
	SAIDI values on the same basis that they employed as at 31 March 2022. This is a transitional reporting requirement th	at shall be in place for two
40		
41	The state of the s	
42	Class C (unplanned interruptions on the network)	
40		
43	31	

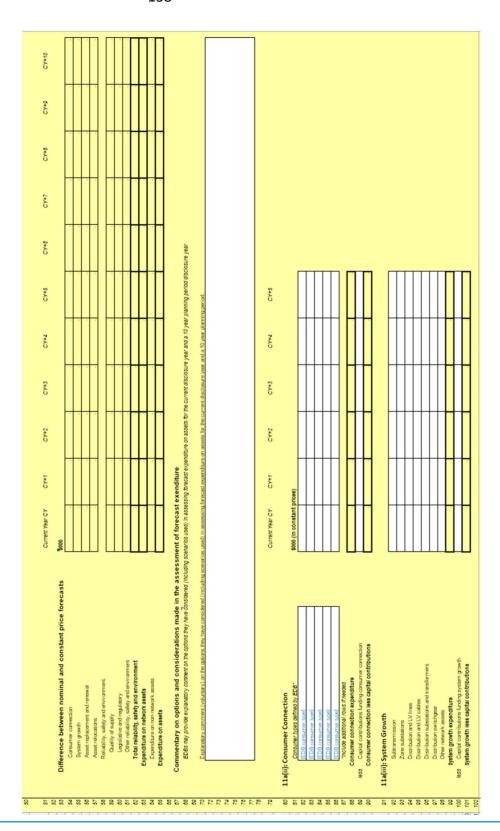
44 45			
	10(ii): Class C Interruptions and Duration by Cause		
	- Virginia - Vindina - Vin		
45	Cause	SAIFI	SAIDI
	Lightning		
	Vegetation		
	Adverse weather		
	Adverse environment		
	Third party interference		
	Wildlife		
	Human error		
	Defective equipment		
	Cause unknown		
	Breakdown of third party interference	SAIFI	SAIDI
	Digin		
	Overhead contact		
	Vandalism		
	Vehicle damage		
	Other		
	40000 Oless Distance Consult Description 1 11 1 5 1 1 1 1 1 1		
	10(iii): Class B Interruptions and Duration by Main Equipment Involved		
	Main aguinment involved	60151	90170
	Main equipment involved	SAIFI	SAIDI
	Subtransmission lines		
	Subtransmission cables		
	Subtransmission other		
	Distribution lines (excluding LV) Distribution cables (excluding LV)		
	Distribution capies (excluding LV) Distribution other (excluding LV)		
	managed one (exclusive a)		
	10(iv): Class C Interruptions and Duration by Main Equipment Involved		
	Main equipment involved	SAIFI	SAIDI
	Subtransmission lines		
	Subtransmission cables		
	Subtransmission other		
	Distribution lines (excluding LV)		
	Distribution lines (excluding LV) Distribution cables (excluding LV)		
	Distribution lines (excluding LV)		
	Distribution lines (excluding LV) Distribution cables (excluding LV)		
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV)		
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate		Circuit length
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved	Number of Faults	Circuit length (km)
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV)	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV)	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission cables Subtransmission cables Distribution cables (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV)	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV)	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total	Number of Faults	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV)	_	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total	Number of Faults Number of planned outages	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total	Number of	
	Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total	Number of planned outages	
	Distribution lines (excluding LV) Distribution cables (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution cables (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total 10(vi): Cancellation of planned interruptions	Number of planned outages cancelled unplanned	
	Distribution lines (excluding LV) Distribution cables (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution cables (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total 10(vi): Cancellation of planned interruptions	Number of planned outages cancelled	
	Distribution cables (excluding LV) Distribution other (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total 10(vi): Cancellation of planned interruptions Planned interruptions cancelled at short notice	Number of planned outages cancelled unplanned	
	Distribution lines (excluding LV) Distribution cables (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total 10(vi): Cancellation of planned interruptions	Number of planned outages cancelled unplanned	
	Distribution cables (excluding LV) Distribution cables (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution lines (excluding LV) Distribution cables (excluding LV) Total 10(vi): Cancellation of planned interruptions Planned interruptions cancelled at short notice Unplanned interruptions not directly related to a fault eq. planned outages that are recorded as unplanned because they are not properly notified.	Number of planned outages cancelled unplanned	
	Distribution lines (excluding LV) Distribution cables (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total 10(vi): Cancellation of planned interruptions Planned interruptions cancelled at short notice Unplanned interruptions not directly related to a fault	Number of planned outages cancelled unplanned outages	
	Distribution cables (excluding LV) Distribution cables (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission cables Subtransmission other Distribution lines (excluding LV) Distribution cables (excluding LV) Distribution cables (excluding LV) Total 10(vi): Cancellation of planned interruptions Planned interruptions cancelled at short notice Unplanned interruptions not directly related to a fault eg, planned outages that are recorded as unplanned because they are not properly notified.	Number of planned outages cancelled unplanned	
	Distribution cables (excluding LV) Distribution cables (excluding LV) 10(v): Fault Rate Main equipment involved Subtransmission lines Subtransmission cables Subtransmission cables Subtransmission other Distribution cables (excluding LV) Distribution cables (excluding LV) Distribution other (excluding LV) Total 10(vi): Cancellation of planned interruptions Planned interruptions cancelled at short notice Unplanned interruptions not directly related to a fault eg, planned outages that are recorded as unplanned because they are not properly notified.	Number of planned outages oancelled unplanned outages	

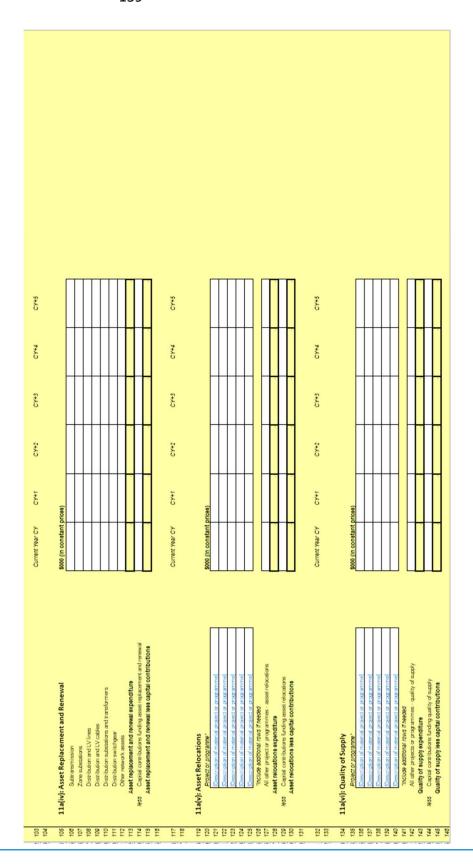
		Company Name		
		For Year Ended		
	Natural / Cub	-network Name		
	·	-network name		
SCI	HEDULE 10: REPORT ON NETWORK RELIABILITY			
	schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for			
	ork reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI informatio D determination), and so is subject to the assurance report required by section 2.8.	in is part of audited	disclosure informat	ion (as defined in section 1.4 of
uieii	b determination), and so is subject to the assurance report required by section 2.8.			
sch ref				
8	10(i): Interruptions			
	Interruptions by class	Number of		
9	Г	interruptions	1	
10 11	Class A (planned interruptions by Transpower)			
12	Class B (planned interruptions on the network) Class C (unplanned interruptions on the network)			
13	Class D (unplanned interruptions by Transpower)			
14	Class E (unplanned interruptions of EDB owned generation)			
15	Class F (unplanned interruptions of generation owned by others)			
16	Class G (unplanned interruptions caused by another disclosing entity)			
17	Class H (planned interruptions caused by another disclosing entity)			
18	Class i (interruptions caused by parties not included above)			
19	Total	_		
20			•	
21	Interruption restoration	≤3Hrs	>3hrs	_
22	Class Cinterruptions restored within			
23				
24	SAIFI and SAIDI by class	SAIFI	SAIDI	_
25	Class A (planned interruptions by Transpower)			
26	Class B (planned interruptions on the network)			
27	Class C (unplanned interruptions on the network)			
28	Class D (unplanned interruptions by Transpower)			
29	Class E (unplanned interruptions of EDB owned generation)			
30	Class F (unplanned interruptions of generation owned by others)			
31	Class G (unplanned interruptions caused by another disclosing entity)			
32	Class H (planned interruptions caused by another disclosing entity)			
33	Class I (interruptions caused by parties not included above)			
34	Total		-	
35				
36	Normalised SAIFI and SAIDI	Normalised SAIFI	Normalised SAIDI	
37	Classes B & C (interruptions on the network)			
3.8				

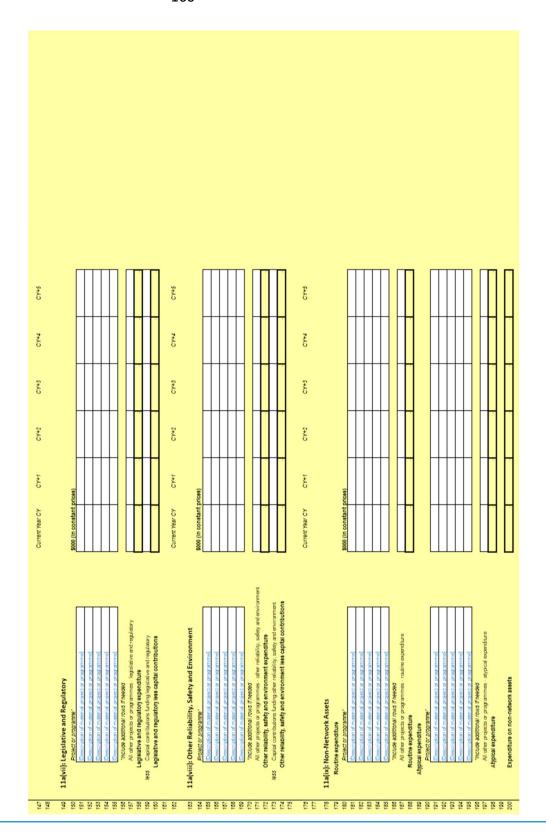
42	10(ii): Class C Interruptions and Duration by Cause			
43				
44	Cause		SAIFI	SAIDI
			JAIFI	JAIDI
45	Lightning			
46	Vegetation			
47	Adverse weather			
48	Adverse environment			
49	Third party interference			
50	Wildlife			
51	Human error			
52	Defective equipment			
53	Cause unknown			
54				
	10(iii): Class B Interruptions and Duration by Main Ed	winmont Involved		
55	To(iii): Class B interruptions and Duration by Main Ed	quipment involved		
56	Main accionment involved		SAIFI	SAIDI
57	Main equipment involved		JAIFI	JAIDI
58	Subtransmission lines			
59	Subtransmission cables			
60	Subtransmission other			
61	Distribution lines (excluding LV)			
62	Distribution cables (excluding LV)			
63	Distribution other (excluding LV)			
64	10(iv): Class C Interruptions and Duration by Main Ed	uinment Involved		
65	10(10). Class C Interruptions and Duration by Iviain Lo	anpinent involved		
			SAIFI	SAIDI
66	Main equipment involved		SAIFI	SAIDI
67	Subtransmission lines			
68	Subtransmission cables			
69	Subtransmission other			
70	Distribution lines (excluding LV)			
71	Distribution cables (excluding LV)			
72	Distribution other (excluding LV)			
72	10(v): Fault Rate			
73	10(v). Fault Nate			
74	Main accionment involved	N.	mbor of Faults	Circuit longth (km)
74	Main equipment involved	Nu	iniper of Faults	Circuit length (km)
75	Subtransmission lines			
76	Subtransmission cables			
77	Subtransmission other			
78	Distribution lines (excluding LV)			
79	Distribution cables (excluding LV)			
80	Distribution other (excluding LV)			
81	Total		-	

Schedule 11a Report on Forecast Capital Expenditure



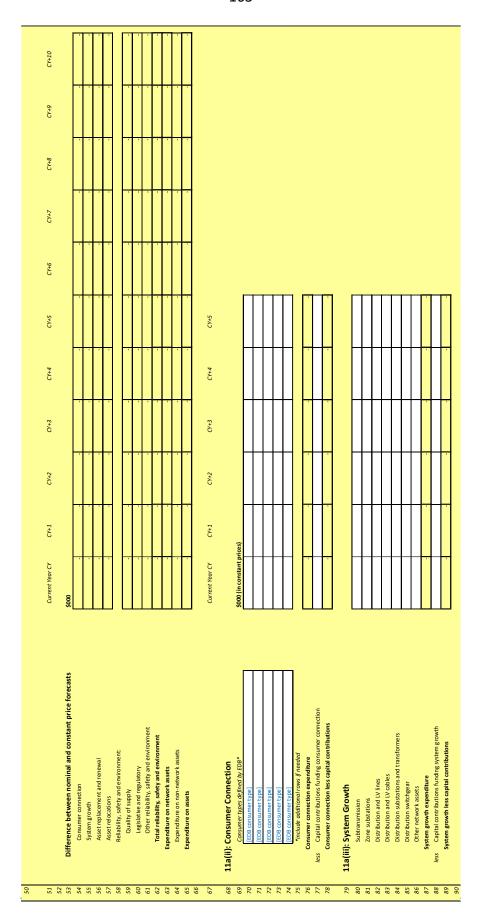




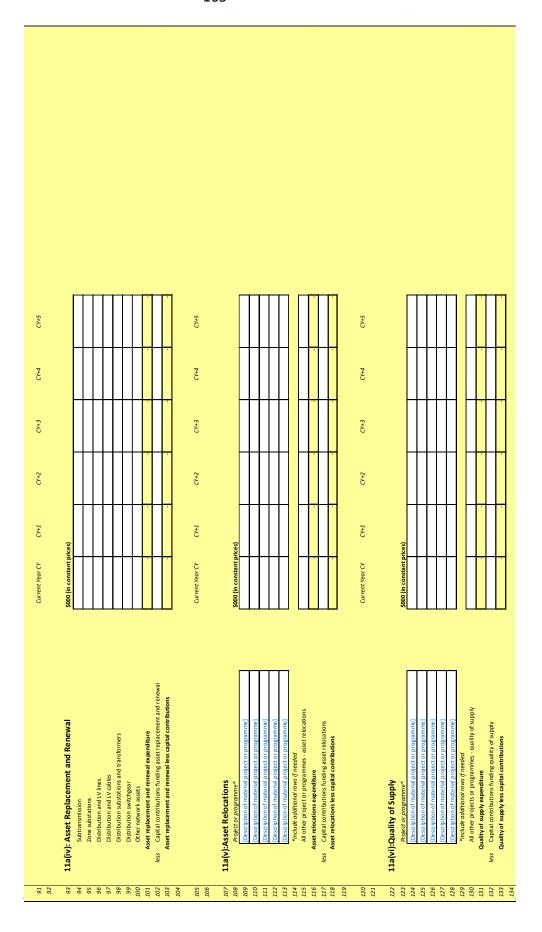


ı												
Ş								AMP	Company Name AMP Planning Period			
This EDBy	SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE This stands are a second or secon	.0 year planning peric .asts of expenditure o	d. The forecasts shi n assets in Schedule	ould be consistent wi e 14a (Mandatory Exp	ith the supporting info	ormation set out in	the AMP. The forec	ast is to be expressec	in both constant pr	ice and nominal dollar	r terms. Also require	ed is a forecast of
sch ref												
7		Current Year CY	CY+1	CV+2	CY+3	CY+4	CV+5	9+,40	CV+7	CV+8	6+10	CY+10
80												
6	11a(i): Expenditure on Assets Forecast	\$000 (in nominal dollars)	ollars)							•		
10												
12	Asset replacement and renewal											
13												
14	Reliability, safety and environment: Onality of enouly											
16												
17												
18												
20	Expenditure on non-network assets									1		
21	ă					, I		·	·	-		
22												
23	plus Cost of financing lase Value of earliel contributions											
25	snld											
26	Canital awanditura foraset											
28												
29	Assets commissioned											
30		Current Year CY	CY+1	CY+2	CV+3	CY+4	CV+5	9+KD	CV+7	CV+8	CV+9	CY+10
32		\$000 (in constant prices)	rices)									
33					'							Ī
34	System growth Asset replacement and renewal											
36					1							
37	Re											
38	Quality of supply											
40												
41										,		
42	Expenditure on non-network assets								•			
44	ă				1					•		
45	Subcomponents of expenditure on assets (where known)											
47												
48												
49	Research and development											

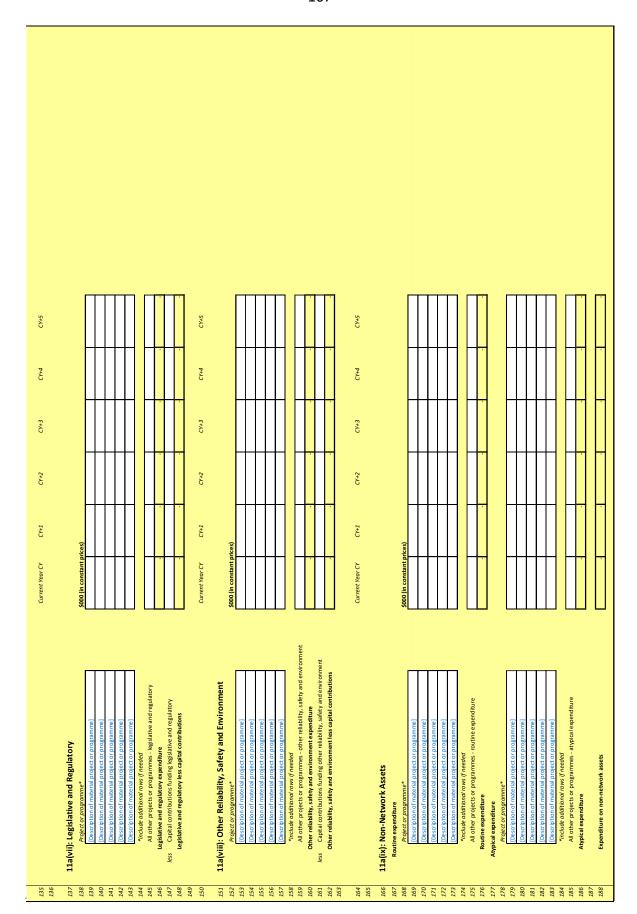
[DRAFT] Electricity Distribution Information Disclosure (<u>Targeted Review Tranche 1</u>) <u>Amendment</u> Determination 2022



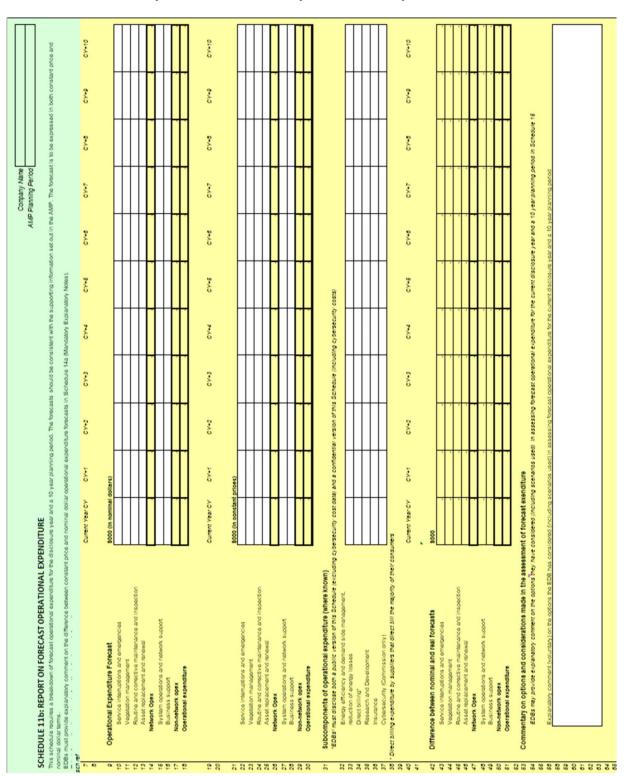
[DRAFT] Electricity Distribution Information Disclosure (<u>Targeted Review Tranche 1</u>) <u>Amendment</u> Determination 2022



[DRAFT] Electricity Distribution Information Disclosure (<u>Targeted Review Tranche 1</u>) <u>Amendment</u> Determination 2022



Schedule 11b Report on Forecast Operational Expenditure



SCHEDULE 11b: REPORT ON FORECAST OPERATIONAL EXPENDITURE This schedule equitives be required a broad and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar operational expenditure forecasts in Schedule 14a (Mandatory Explanatory Notes). This information is not part of audited disclosure information.	FNDITIBE						AMP	AMP Planning Period			
	and a 10 year planni al dollar operational	ing period. The fore expenditure foreca:	casts should be consi sts in Schedule 14a (N	sistent with the supp Mandatory Explanat	iorting information si ory Notes).	et out in the AMP. T	he forecast is to be ϵ	expressed in both co	nstant price and nom	inal dollar terms.	
	Current Year CY	CY+1	CV+2	CV+3	CY+4	CV+5	CV+6	C++7	C)+8	CV+9	C/+10
Operational Expenditure Forecast	\$000 (in nominal dollars)	illars)									
Service interruptions and emergencies Vesetation management											
Routine and corrective maintenance and inspection											
Asset replacement and renewal											
Network Opex	•	•	•	•	•		•		•	•	
system operations and network support Business support											
Non-network opex	-					•	•		-		
Operational expenditure	•		·	•	,		•		,		
	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CV+6	C++2	C)+8	CV+9	C/+10
	\$000 (in constant prices)	rices)									
Service interruptions and emergencies											
Vegetation management Routine and corrective maintenance and inspection											
Asset replacement and renewal Network Opex	•		•	•	•	•			,		
System operations and network support											
Business support											
Non-network Opex Operational expenditure	1										
Subcomponents of operational expenditure (where known) Energy efficiency and demand side management, reduction of											
energy losses											
Direct billing*											
Research and Develop ment											
 Direct billing expenditure by suppliers that direct bill the majority of their consumers 	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	9+10	C++7	8+A)	6+A.)	CY+10
recasts	\$000										
emergencies	1		•	•	•		,				
Vegetation management			•	1							
Koutine and corrective maintenance and inspection Asset replacement and renewal											
Network Opex					•			-	•		
System operations and network support	-		-	1	-		,	1	•	•	
Business support											
Normetwork open Operational expenditure								_			

Schedule 12a Report on Asset Condition

sch ref						replaced in the react 5 years. All information should be consistent with the information provided in the AMP and the expenditure on assets forecast in Schedule 11a. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.	s relating to cabi				This schedule requires a te auktown of asset condition by asset class as at the start of the forecast year. The clab a scurincy assessment relates to the percentage value disclosed in the asset condition columns. Also required is a forecast of the percentage of units to be a series of the asset condition columns and the percentage of units to be a series of the asset of the assets of the assets of the assets and in the assets, that are expressed in km, refer to circuit lengths. In the assets of the assets are a series of the asset of the asset of the assets of the asset of the assets of the asset of the asse	units to be
N 0						As	set condition at s	tart of planning pe	eriod (percent.	Asset condition at start of planning period (percentage of units by grade)	(a)	
) 9	Voltage	Voltage Asset category	Asset class	Units	Ŧ	딮	£3	¥	£	Grade unknown	Data accuracy (1-4)	% of asset for ecast to be replaced in next 5 years
10	W	Overhead Line	Concrete poles / steel structure	No.							[Selectione]	
11	W	Overhead Line	Wood poles	No.							[Selectione]	
12	W	Overhead Line	Other pole types	No.							[Selectione]	
13	Α	Subtransmission Line	Subtransmission O H up to 66kV conductor	km							[Selectione]	
14	¥	Subtransmission Line	Subtransmission O H 110kV+ conductor	km							[Select one]	
15	¥	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km							[Select one]	
16	¥	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km							[Selectione]	
17	Η	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km							[Selectione]	
18	¥	Subtransmission Cable	Subtransmission UG up to 66kV (PLC)	km							[Select one]	
19	¥	Subtransmission Cable	Subtransmission UG110kV+ (XLPE)	km							[Selectione]	
20	¥	Subtransmission Cable	Subtransmission UG110kV+ (Oil pressurised)	km							[Selectione]	
21	¥	Subtransmission Cable	Subtransmission UG110kV+ (Gas Pressurised)	km		Ī					[Selectione]	
22	¥	Subtransmission Cable	Subtransmission UG110kV+ (PILC)	km							[Select one]	
23	Ϋ́	Subtransmission Cable	Subtransmission submarine cable	km							[Selectione]	
24	Α	Zone substation Buildings	Zone substations up to 66kV	No.							[Selectione]	
25	Η	Zone substation Buildings	Zone substations 110kV+	No.							[Selectione]	
56	Α	Zone substation switchgear	22/33kV CB (Indoor)	No.							[Selectione]	
27	¥	Zone substation switchgear	22/33kV CB (Outdoor)	No.							[Select one]	
28	¥	Zone substation switchgear	33 kV Switch (Ground Mounted)	No.							[Select one]	
29	¥	Zone substation switchgear	33kV Switch (Pole Mounted)	No.							[Selectione]	
30	Η	Zone substation switchgear	33k/ RMU	No.							[Selectione]	
31	Η	Zone substation switchgear	50/66/110kV CB (Indoor)	No.							[Selectione]	
32	Ϋ́	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.							[Selectione]	
33	Α	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.							[Selectione]	
,												

											% of asset
Volta	Voltage Asset category	Asset class	Units	로	7	뙆	Ŧ	£	Grade unknown	Data acuracy (1-4)	replaced in
											e made o war
≥	Zone Substation Transformer	Zone Substation Transformers	No.							[Select one]	
≥	Distribution Line	Distribution OH Open Wire Conductor	km							[Select one]	
≥	Distribution Line	Distribution OH Aerial Cable Conductor	km							[Select one]	
2	Distribution Line	SWER conductor	km							[Select one]	
2	Distribution Cable	Distribution UG XLPE or PVC	km							[Select one]	
2	Distribution Cable	Distribution UG PILC	km							[Select one]	
2	Distribution Cable	Distribution Submarine Cable	km							[Select one]	
≥	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.							[Select one]	
≥	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.							[Select one]	
≥	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.							[Select one]	
≥	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.							[Select one]	
2	Distribution switchgear	3.3/6.6/11/22kV RMU	No.							[Select one]	
2	Distribution Transformer	Pol e Mounted Transformer	No.							[Select one]	
≥	Distribution Transformer	Ground Mounted Transformer	No.							[Select one]	
≥	Distribution Transformer	Vol tage regula tors	No.							[Select one]	
≥	Distribution Substations	Ground Mounted Substation Housing	No.							[Select one]	
>	LV Line	IV OH Conductor	km							[Select one]	
>	LV Cable	LV UG Cable	km							[Select one]	
>.	LV Streetlighting	LV OH/UG Streetlight circuit	km							[Select one]	
	Connections	OH/UG consumer service connections	No.							[Select one]	
ş	Protection	Protection relays (electromechanical, solid state and numeric)	No.							[Select one]	
Ę	SCADA and communications	SCADA and communications equipment operating as a single system	Lot							[Select one]	
₹	Capacitor Banks	Capacitors including controls	No.							[Select one]	
Ħ	Load Control	Centralised plant	lot							[Select one]	
₹	Load Control	Relays	No.							[Select one]	
-	Chelle	Cable Toppole	-								

Schedule 12b Report on Forecast Capacity

									Company Mama	
									AMP Planning Period	
SCHEDULI This schedule re	SCHEDULE 12b: REPORT ON FORECAST CAPACITY This schedule requires a breakdown of current and forecast capacity and utilisation for each zone substation and current distribution transformer capacity. The data provided should be consistent with the information provided in the AMP. Information provided	on for each zone substat	ion and current dis	tribution transformer c	apacity. The data pro	vided should be co	nsistent with the info	ormation provided in	the AMP. Information provided	
in this table shou sch ref	in this table should relate to the operation of the network in its normal steady state configuration. The experiment of the configuration of the network in its normal steady state configuration.	ite configuration.								
7 12b(i	12b(i): System Growth - Zone Substations		Installed Firm	Security of Supply		% E	Installed Firm	Utilisation of Installed Firm	Installed Firm Capacity	
	Existing Zone Substations	(MVA)	(MVA)		(MVA)	Capacity %	Capacity +5 years (MVA)	Capacity + syrs %	constraint +5 years (cause)	Explanation
6	[Zone Substation_01]					•		51	[Select one]	
10	[Zone Substation_02]					-		5]	[Select one]	
11	[Zone Substation_03]							5]	Select one]	
12	[Zone Substation_04]							5]	[Select one]	
13	[Zone Substation_05]					-		5]	[Select one]	
14	[Zone Substation_06]					-		5]	[Select one]	
15	[Zone Substation_07]					-		[3	[Select one]	
16	[Zone Substation_08]					-		[3	[Select one]	
17	[Zone Substation_09]							5]	[Select one]	
18	[Zone Substation_10]					-		5]	[Select one]	
19	[Zone Substation_11]					-		5]	[Select one]	
20	[Zone Substation_12]							51	[Select one]	
21	[Zone Substation_13]					-		[3	[Select one]	
22	[Zone Substation_14]							S)	[Select one]	
23	[Zone Substation_15]					-		[5	Select one]	
24	[Zone Substation_16]					-		[3	[Select one]	
25	[Zone Substation_17]							5]	[Select one]	
26	[Zone Substation_18]							5]	[Select one]	
27	[Zone Substation_19]					-		[3	[Select one]	
28	[Zone Substation_20]					•		5]	[Select one]	
29	¹ Extend forecast capacity table as necessary to disclose all capacity by each zone substation	acity by each zone subst	ation							

Schedule 12c **Report on Forecast Network Demand** This schedule requires a forecast of new connections (by consumer type), peak demand and energy volumes for the disclosure year and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumptions used in developing the expenditure forecasts in Schedule 11a and Schedule 11b and the capacity and utilisation forecasts in Schedule 12b. CY+5 CY+5 CY+5 CY+5 CY+4 CY+4 CY+4 CY+4 Number of disconnections CY+2 CY+3 Number of connections CY+2 CY+3 CY+3 CY+3 AMP Planning Period Company Name CY+2 CY+2 CY+1 CY+1 CY+1 CY+1 Qurrent Year CY Qurent Year CY ment Year CY Qurrent Year CY Demand on system for supply to consumers' connection points SCHEDULE 12C: REPORT ON FORECAST NETWORK DEMAND Capacity of distributed generation installed in year (MVA) include additional rows if needed to a maximum of 10 Net transfers to (from) other EDBs at HV and above Number of ICPs disconnected in year by consumer type Number of IQPs connected in year by consumer type 12c(i): Consumer Connections and Disconnections Electricity supplied from distributed generation Net electricity supplied to (from) other EDBs Electricity entering system for supply to ICPs Total energy delivered to ICPs Losses Distributed generation output at HV and above Maximum coincident system demand (MW) Number of connections made in year Number of disconnections made in year Maximum coincident system demand Electricity volumes carried (GWh) Consumer types defined by EDB* include additional rows if needed Consumer types defined by EDB* Electricity supplied from GXPs Electricity exports to GXPs Distributed generation (EDB consumer type sconnections total 12c(ii) System Demand Connections total GXP demand Load factor Loss ratio less plus ess less plus

AMP Planning Period and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as tion forecasts in Schedule 12b.	Number of connections Current Vear CY CY+1 CY+2 CY+3 CY+4 CY+5			Current Year CY CY+1 CY+2 CY+3 CY+4 CY+5		
SCHEDULE 12C: REPORT ON FORECAST NETWORK DEMAND This schedule requires a forecast of new connections (by consumer type), peak demand and energy volumes for the disclosure year and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as the assumptions used in developing the expenditure forecasts in Schedule 11a and Schedule 11b and the capacity and utilisation forecasts in Schedule 12b.	12c(i): Consumer Connections Number of ICPs connected in year by consumer type Consumer types defined by EDB*	[EDB consumer type] [EDB consumer type] [EDB consumer type]	[EDB consumer type] Connections total "include additional rows if needed Distributed generation	Number of connections Capacity of distributed generation installed in year (MVA) 12c(ii) System Demand Maximum coincident system demand (MW)	GXP demand plus Distributed generation output at HV and above Maximum coincident system demand less Net transfers to (from) other EDBs at HV and above Demand on system for supply to consumers' connection points	Electricity volumes carried (GWh) Electricity supplied from GXPs less Electricity supplied from dSributed generation less Net electricity supplied from distributed generation less Net electricity supplied from for supply to ICPs less Total energy delivered to ICPs losses Load factor Loss ratio

Schedule 12d Report on Forecast Interruptions and Duration

			ď	Company Name				
			AMP P	AMP Planning Period				
			Network / Sub-network Name	network Name				
SCHE	SCHEDULE 12d: REPORT FORECAST INTERRUPTIONS AND DURATION	7		l				
This sche unplanne	This schedule requires a forecast of SAIFI and SAIDI for disclosure and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumed impact of planned and unplanned SAIFI and SAIDI on the expenditures forecast provided in Schedule 11a and Schedule 11b.	hould be consistent wi	h the supporting in:	iformation set out ir	ı the AMP as well as	the assumed impact	t of planned and	
sch ref								
∞		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	
6								
10	SAIDI				٠			
11	Class B (planned interruptions on the network)							
12	Class C (unplanned interruptions on the network)							
0	CARE							
14	Class B (planned interruptions on the network)							-
15	Class C (unplanned interruptions on the network)							
								1

Schedule 13 Report on Asset Management Maturity

- 1. When required to complete the Report on Asset Management Maturity under clause 2.6.1, each EDB must-
 - 1.1 ensure that the person responsible for managing network assets (or a similar level individual) in the organisation takes responsibility for completing this report, including-
 - 1.1.1 Organising people within the organisation to answer the questions;
 - 1.1.2 Arranging for all information to be captured in the Report on Asset Management Maturity;
 - 1.1.3 Reporting to the organisation on the results of the assessment;
 - 1.1.4 Planning the assessment process, which may include-
 - (a) determining the form the assessment process is to take. In this context, the principal formats are generally taken to be interviews, facilitated groups/panels or a combination of the two;
 - (b) arranging for appropriate outsourced service providers and stakeholders to act as respondents during the assessment exercise;
 - (c) providing appropriate pre-assessment communication (and training where appropriate) to ensure that, as a minimum, the proposed respondents are aware of the process and the part within it that they are being asked to play;
 - (d) identifying which questions are to be asked of which respondents.
 - specify in the Report on Asset Management Maturity the standard of asset management practice that the EDB has used as the reference standard.
 - 1.3 fill out the following columns in the Report on Asset Management Maturity set out below
 - 1.3.1 <u>'User guidance'</u>: guidance (if required) on completing each question of the report.

This column can be used by the person responsible for completing the Report on Asset Management Maturity to provide guidance to the persons coordinating responses to each question.

1.3.2 <u>'Evidence—Summary'</u>: the information/evidence used to support the assessed rating.

The cells in this column should be completed by persons coordinating responses to each question.

1.3.3 <u>'Score'</u>: the appropriate maturity rating (this must be a whole number between 0 and 4).

To meet Report on Asset Management Maturity level 4 maturity, the EDB's processes must surpass the standards that must be complied with in an internationally accepted asset management specification. The Report on Asset Management Maturity questionnaire has been prepared to conform to the PAS 55 specification. However, a similar specification, if available, may be used for the purpose of disclosure.

- 2. When disclosing the Report on Asset Management Maturity in the AMP, an EDB must include at least the following columns-
 - 2.1 'Question No';
 - 2.2 'Function';
 - 2.3 'Question';
 - 2.4 'Score';
 - 2.5 'Evidence—Summary';
 - 2.6 'Why';
 - 2.7 'Who';
 - 2.8 'Record/documented Information'; and
 - a maturity level column which includes, for each row, the corresponding definition of the maturity level 'score' selected for each 'question'.
- 3. Guidance notes on completing the Report on Asset Management Maturity
 - 3.1 Part of the value of a formal asset management system is the definition and standardisation of terms. A common understanding of terms helps interested persons to understand the asset management concepts and processes that apply to the EDB. In particular, it helps the EDB's employees and suppliers to understand and improve asset management concepts and processes.

- 3.2 The report will not provide an effective assessment of the maturity of the EDB's asset management capability and processes unless the preparation of the report is supported by senior management of the EDB.
- 3.3 The level of effort required to complete the report should be consistent with a gap analysis exercise rather than the level typically involved with an audit for certification.
- 3.4 An audit involves a systematic, independent process for the collection and analysis of evidence to support a rating whereas the report is intended to be used by providing a reference to supporting evidence or an explanation of the self-assessment.
- 3.5 The level of documentation within an asset management system is expected to be consistent with factors such as the size of the company, complexity of processes and competence of personnel.
- 3.6 The definitions provided in the report for each maturity rating should provide sufficient information for an EDB to objectively identify the level currently being achieved by the organisation.

						Company Name		
						AMP Planning Period		
						Asset Management Standard Applied		
SCHEDULE 13	R: REPORT ON A	ASSET MANAGEMENT MATUR	RITY					
		DB'S self-assessment of the maturity of its assi		ent practices .				
Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
3	Asset	To what extent has an asset		•		Widely used AM practice standards require an	Top management. The management team that has	The organisation's asset management policy, its
	management	management policy been				organisation to document, authorise and communicate	overall responsibility for asset management.	organisational strategic plan, documents indicating how
	policy	documented, authorised and				its asset management policy (eg, as required in PAS 55		the asset management policy was based upon the
		communicated?				para 4.2 i). A key pre-requisite of any robust policy is		needs of the organisation and evidence of
						that the organisation's top management must be seen		communication.
						to endorse and fully support it. Also vital to the		
						effective implementation of the policy, is to tell the		
						appropriate people of its content and their obligations		
						under it. Where an organisation outsources some of its		
						asset-related activities, then these people and their		
						organisations must equally be made aware of the		
						policy's content. Also, there may be other stakeholders,		
						such as regulatory authorities and shareholders who		
						should be made aware of it.		
10	Asset	What has the organisation done to				In setting an organisation's asset management	Top management. The organisation's strategic	The organisation's asset management strategy
	management	ensure that its asset management				strategy, it is important that it is consistent with any	planning team. The management team that has overall	document and other related organisational policies and
	strategy	strategy is consistent with other				other policies and strategies that the organisation has	responsibility for asset management.	strategies. Other than the organisation's strategic
		appropriate organisational policies				and has taken into account the requirements of relevant		plan, these could include those relating to health and
		and strategies, and the needs of				stakeholders. This question examines to what extent		safety, environmental, etc. Results of stakeholder
		stakeholders?				the asset management strategy is consistent with other		consultation.
						organisational policies and strategies (eg, as required		
						by PAS 55 para 4.3.1 b) and has taken account of		
						stakeholder requirements as required by PAS 55 para		
						4.3.1 c). Generally, this will take into account the same		
						polices, strategies and stakeholder requirements as covered in drafting the asset management policy but at		
						a greater level of detail.		
						a greater rever or detail.		
11	Asset	In what way does the organisation's				Good asset stewardship is the hallmark of an	Top management. People in the organisation with	The organisation's documented asset management
	management	asset management strategy take				organisation compliant with widely used AM standards.	expert knowledge of the assets, asset types, asset	strategy and supporting working documents.
	strategy	account of the lifecycle of the assets,				A key component of this is the need to take account of	systems and their associated life-cycles. The	,
		asset types and asset systems over				the lifecycle of the assets, asset types and asset	management team that has overall responsibility for	
		which the organisation has					asset management. Those responsible for developing	
		stewardship?					and adopting methods and processes used in asset	

organisation has done to take lifecycle into account in management

into practical plan(s) so that all parties know how the

objectives will be achieved. The development of

plan(s) will need to identify the specific tasks and activities required to optimize costs, risks and performance of the assets and/or asset system(s), when they are to be carried out and the resources

The asset management strategy need to be translated The management team with overall responsibility for

the asset management system. Operations,

maintenance and engineering managers.

The organisation's asset management plan(s).

its asset management strategy.

required.

How does the organisation establish

and document its asset management

plan(s) across the life cycle activities

of its assets and asset systems?

management

plan(s)

Company Name	
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SCHEDULE 13: REPORT ON ASSET MANAGEMENT MATURITY (cont)

Question No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
3	Asset	To what extent has an asset	The organisation does not have a	The organisation has an asset	The organisation has an asset	The asset management policy is	The organisation's process(es) surpass
	management	management policy been	documented asset management policy.	management policy, but it has not been	management policy, which has been	authorised by top management, is	the standard required to comply with
	policy	documented, authorised and		authorised by top management, or it is	authorised by top management, but it	widely and effectively communicated to	requirements set out in a recognised
		communicated?		not influencing the management of the		all relevant employees and stakeholders,	standard.
				assets.	use to influence development of strategy	The state of the s	
					and planning but its effect is limited.	of their asset related obligations.	The assessor is advised to note in the
							Evidence section why this is the case
							and the evidence seen.
10	Asset	What has the organisation done to	The organisation has not considered the	The need to align the asset management	Some of the linkages between the long-	All linkages are in place and evidence is	The organisation's process(es) surpas
10	management	ensure that its asset management	need to ensure that its asset	strategy with other organisational	term asset management strategy and	available to demonstrate that, where	the standard required to comply with
	strategy	_	management strategy is appropriately	policies and strategies as well as		appropriate, the organisation's asset	requirements set out in a recognised
	, o,		aligned with the organisation's other	stakeholder requirements is understood	and stakeholder requirements are		standard.
			organisational policies and strategies or	and work has started to identify the	defined but the work is fairly well	its other organisational policies and	
		stakeholders?	with stakeholder requirements.	linkages or to incorporate them in the	advanced but still incomplete.	strategies. The organisation has also	The assessor is advised to note in the
			OR	drafting of asset management strategy.		identified and considered the	Evidence section why this is the case
			The organisation does not have an asset			requirements of relevant stakeholders.	and the evidence seen.
			management strategy.				
11	Asset	In what way does the organisation's	The organisation has not considered the	The need is understood, and the	The long-term asset management	The asset management strategy takes	The organisation's process(es) surpass
	management	asset management strategy take	need to ensure that its asset	organisation is drafting its asset	strategy takes account of the lifecycle of	account of the lifecycle of all of its	the standard required to comply with
	strategy	account of the lifecycle of the assets,	management strategy is produced with	management strategy to address the	some, but not all, of its assets, asset	assets, asset types and asset systems.	requirements set out in a recognised
		asset types and asset systems over	due regard to the lifecycle of the assets,	lifecycle of its assets, asset types and	types and asset systems.		standard.
			asset types or asset systems that it	asset systems.			
		stewardship?	manages.				The assessor is advised to note in the
			OR				Evidence section why this is the case
			The organisation does not have an asset				and the evidence seen.
			management strategy.				
26	Asset	How does the organisation establish	The organisation does not have an	The organisation has asset management	The organisation is in the process of	Asset management plan(s) are	The organisation's process(es) surpas
	management		identifiable asset management plan(s)	plan(s) but they are not aligned with the	putting in place comprehensive,	established, documented, implemented	the standard required to comply with
	plan(s)	plan(s) across the life cycle activities		asset management strategy and		and maintained for asset systems and	requirements set out in a recognised
			assets.	objectives and do not take into	that cover all life cycle activities, clearly		standard.
				consideration the full asset life cycle	aligned to asset management objectives		
				(including asset creation, acquisition,	and the asset management strategy.	management objectives across all life	The assessor is advised to note in the
				enhancement, utilisation, maintenance		cycle phases.	Evidence section why this is the case
				decommissioning and disposal).			and the evidence seen.

						Company Name						
						AMP Planning Period						
						Asset Management Standard Applied						
CHEDULE 13	HEDULE 13: REPORT ON ASSET MANAGEMENT MATURITY (cont)											
Question No.	Function	Question	Score	Fyidence—Summary	User Guidance	Why	Who	Record/documented Information				

Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
27	Asset management plan(s)	How has the organisation communicated its plan(s) to all relevant parties to a level of detail appropriate to the receiver's role in their delivery?				Plans will be ineffective unless they are communicated to all those, including contracted suppliers and those who undertake enabling function(s). The plan(s) need to be communicated in a way that is relevant to those who need to use them.	The management team with overall responsibility for the asset management system. Delivery functions and suppliers.	Distribution lists for plan(s). Documents derived from plan(s) which detail the receivers role in plan delivery Evidence of communication.
29	Asset management plan(s)	How are designated responsibilities for delivery of asset plan actions documented?				The implementation of asset management plan(s) relies on (1) actions being clearly identified, (2) an owner allocated and (3) that owner having sufficient delegated responsibility and authority to carry out the work required. It also requires alignment of actions across the organisation. This question explores how well the plan(s) set out responsibility for delivery of asset plan actions.	the asset management system. Operations,	The organisation's asset management plan(s). Documentation defining roles and responsibilities of individuals and organisational departments.
31	Asset management plan(s)	What has the organisation done to ensure that appropriate arrangements are made available for the efficient and cost effective implementation of the plan(s)? (Note this is about resources and enabling support)				It is essential that the plan(s) are realistic and can be implemented, which requires appropriate resources to be available and enabling mechanisms in place. This question explores how well this is achieved. The plan(s) not only need to consider the resources directly required and timescales, but also the enabling activities, including for example, training requirements, supply chain capability and procurement timescales.		The organisation's asset management plan(s). Documented processes and procedures for the deliver of the asset management plan.
33	Contingency planning	What plan(s) and procedure(s) does the organisation have for identifying and responding to incidents and emergency situations and ensuring continuity of critical asset management activities?				Widely used AM practice standards require that an organisation has plan(s) to identify and respond to emergency situations. Emergency plan(s) should outline the actions to be taken to respond to specified emergency situations and ensure continuity of critical asset management activities including the communication to, and involvement of, external agencies. This question assesses if, and how well, these plan(s) triggered, implemented and resolved in the event of an incident. The plan(s) should be appropriate to the level of risk as determined by the organisation's risk assessment methodology. It is also a requirement that relevant personnel are competent and trained.	The manager with responsibility for developing emergency plan(s). The organisation's risk assessment team. People with designated duties within the plan(s) and procedure(s) for dealing with incidents and emergency situations.	

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Question No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
27	Asset management plan(s)	How has the organisation communicated its plan(s) to all relevant parties to a level of detail appropriate to the receiver's role in their delivery?	The organisation does not have plan(s) or their distribution is limited to the authors.	The plan(s) are communicated to some of those responsible for delivery of the plan(s). OR Communicated to those responsible for delivery is either irregular or ad-hoc.	The plan(s) are communicated to most of those responsible for delivery but there are weaknesses in identifying relevant parties resulting in incomplete or inappropriate communication. The organisation recognises improvement is needed as is working towards resolution.	The plan(s) are communicated to all relevant employees, stakeholders and contracted service providers to a level of detail appropriate to their participation or business interests in the delivery of the plan(s) and there is confirmation	The organisation's process(es) surpass the standard required to comply with
29	Asset management plan(s)	How are designated responsibilities for delivery of asset plan actions documented?	The organisation has not documented responsibilities for delivery of asset plan actions.	Asset management plan(s) inconsistently document responsibilities for delivery of plan actions and activities and/or responsibilities and authorities for implementation inadequate and/or delegation level inadequate to ensure effective delivery and/or contain misalignments with organisational accountability.		Asset management plan(s) consistently document responsibilities for the delivery actions and there is adequate detail to enable delivery of actions. Designated responsibility and authority for achievement of asset plan actions is appropriate.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
31	Asset management plan(s)	What has the organisation done to ensure that appropriate arrangements are made available for the efficient and cost effective implementation of the plan(s)? (Note this is about resources and enabling support)	The organisation has not considered the arrangements needed for the effective implementation of plan(s).	The organisation recognises the need to ensure appropriate arrangements are in place for implementation of asset management plan(s) and is in the process of determining an appropriate approach for achieving this.	The organisation has arrangements in place for the implementation of asset management plan(s) but the arrangements are not yet adequately efficient and/or effective. The organisation is working to resolve existing weaknesses.	The organisation's arrangements fully cover all the requirements for the efficient and cost effective implementation of asset management plan(s) and realistically address the resources and timescales required, and any changes needed to functional policies, standards, processes and the asset management information system.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
33	Contingency planning	What plan(s) and procedure(s) does the organisation have for identifying and responding to incidents and emergency situations and ensuring continuity of critical asset management activities?	The organisation has not considered the need to establish plan(s) and procedure(s) to identify and respond to incidents and emergency situations.	The organisation has some ad-hoc arrangements to deal with incidents and emergency situations, but these have been developed on a reactive basis in response to specific events that have occurred in the past.	Most credible incidents and emergency situations are identified. Either appropriate plan(s) and procedure(s) are incomplete for critical activities or they are inadequate. Training/ external alignment may be incomplete.	Appropriate emergency plan(s) and procedure(s) are in place to respond to credible incidents and manage continuity of critical asset management activities consistent with policies and asset management objectives. Training and external agency alignment is in place.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.

						Company Name		
						AMP Planning Period		
						Asset Management Standard Applied		
CHEDULE 13	: REPORT ON	ASSET MANAGEMENT MATUR	ITY (co	nt)	3			
Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
37	Structure,	What has the organisation done to				In order to ensure that the organisation's assets and	Top management. People with management	Evidence that managers with responsibility for the
	authority and	appoint member(s) of its				asset systems deliver the requirements of the asset	responsibility for the delivery of asset management	delivery of asset management policy, strategy,
	responsibilities	management team to be responsible				management policy, strategy and objectives	policy, strategy, objectives and plan(s). People working	objectives and plan(s) have been appointed and have

Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
37	Structure, authority and responsibilities	What has the organisation done to appoint member(s) of its management team to be responsible for ensuring that the organisation's assets deliver the requirements of the asset management strategy, objectives and plan(s)?				responsibilities need to be allocated to appropriate people who have the necessary authority to fulfil their responsibilities. (This question, relates to the organisation's assets eg, para b), s 4.4.1 of PAS 55, making it therefore distinct from the requirement contained in para a), s 4.4.1 of PAS 55).		assumed their responsibilities. Evidence may include the organisation's documents relating to its asset management system, organisational charts, job descriptions of post-holders, annual targets/objectives and personal development plan(s) of post-holders as appropriate.
40	Structure, authority and responsibilities	What evidence can the organisation's top management provide to demonstrate that sufficient resources are available for asset management?				Optimal asset management requires top management to ensure sufficient resources are available. In this context the term 'resources' includes manpower, materials, funding and service provider support.	overall responsibility for asset management. Risk management team. The organisation's managers involved in day-to-day supervision of asset-related activities, such as frontline managers, engineers, foremen and chargehands as appropriate.	Evidence demonstrating that asset management plan(s) and/or the process(es) for asset management plan implementation consider the provision of adequate resources in both the short and long term. Resources include funding, materials, equipment, services provided by third parties and personnel (internal and service providers) with appropriate skills competencies and knowledge.
42	Structure, authority and responsibilities	To what degree does the organisation's top management communicate the importance of meeting its asset management requirements?				Widely used AM practice standards require an organisation to communicate the importance of meeting its asset management requirements such that personnel fully understand, take ownership of, and are fully engaged in the delivery of the asset management requirements (eg, PAS 55 s 4.4.1 g).	Top management. The management team that has overall responsibility for asset management. People involved in the delivery of the asset management requirements.	Evidence of such activities as road shows, written bulletins, workshops, team talks and management walkabouts would assist an organisation to demonstrate it is meeting this requirement of PAS 55.
45	Outsourcing of asset management activities	Where the organisation has outsourced some of its asset management activities, how has it ensured that appropriate controls are in place to ensure the compliant delivery of its organisational strategic plan, and its asset management policy and strategy?				Where an organisation chooses to outsource some of its asset management activities, the organisation must ensure that these outsourced process(es) are under appropriate control to ensure that all the requirements of widely used AM standards (eg, PAS 55) are in place, and the asset management policy, strategy objectives and plan(s) are delivered. This includes ensuring capabilities and resources across a time span aligned to life cycle management. The organisation must put arrangements in place to control the outsourced activities, whether it be to external providers or to other in-house departments. This question explores what the organisation does in this regard.	Top management. The management team that has overall responsibility for asset management. The manager(s) responsible for the monitoring and management of the outsourced activities. People involved with the procurement of outsourced activities. The people within the organisations that are performing the outsourced activities. The people impacted by the outsourced activity.	The organisation's arrangements that detail the compliance required of the outsourced activities. For example, this this could form part of a contract or service level agreement between the organisation and the suppliers of its outsourced activities. Evidence that the organisation has demonstrated to itself that it has assurance of compliance of outsourced activities.

Company Name	
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Asset Management Standard Applied	

Question No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
37	Structure, authority and responsibilities	What has the organisation done to appoint member(s) of its management team to be responsible for ensuring that the organisation's	Top management has not considered the need to appoint a person or persons to ensure that the organisation's assets deliver the requirements of the asset management strategy, objectives and plan(s).		Top management has appointed an appropriate people to ensure the assets	The appointed person or persons have full responsibility for ensuring that the organisation's assets deliver the requirements of the asset management strategy, objectives and plan(s). They have been given the necessary authority to achieve this.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard.
40	Structure, authority and responsibilities	top management provide to	The organisation's top management has not considered the resources required to deliver asset management.		A process exists for determining what resources are required for its asset management activities and in most cases these are available but in some instances resources remain insufficient.	An effective process exists for determining the resources needed for asset management and sufficient resources are available. It can be demonstrated that resources are matched to asset management requirements.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
42	Structure, authority and responsibilities	To what degree does the organisation's top management communicate the importance of meeting its asset management requirements?	The organisation's top management has not considered the need to communicate the importance of meeting asset management requirements.	the importance of meeting its asset	Top management communicates the importance of meeting its asset management requirements but only to parts of the organisation.	Top management communicates the importance of meeting its asset management requirements to all relevant parts of the organisation.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
45	Outsourcing of asset management activities	Where the organisation has outsourced some of its asset management activities, how has it ensured that appropriate controls are in place to ensure the compliant delivery of its organisational strategic plan, and its asset management policy and strategy?	The organisation has not considered the need to put controls in place.	The organisation controls its outsourced activities on an ad-hoc basis, with little regard for ensuring for the compliant delivery of the organisational strategic plan and/or its asset management policy and strategy.	currently only provide for the compliant delivery of some, but not all, aspects of the organisational strategic plan and/or	Evidence exists to demonstrate that outsourced activities are appropriately controlled to provide for the compliant delivery of the organisational strategic plan, asset management policy and strategy, and that these controls are integrated into the asset management system	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.

						Company Name		
						AMP Planning Period		
						Asset Management Standard Applied		
SCHEDULE 13	: REPORT ON A	SSET MANAGEMENT MATUR	RITY (co	nt)				
Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
48	Training,	How does the organisation develop				There is a need for an organisation to demonstrate that	Senior management responsible for agreement of	Evidence of analysis of future work load plan(s) in
	awareness and	plan(s) for the human resources				it has considered what resources are required to	plan(s). Managers responsible for developing asset	terms of human resources. Document(s) containing
	competence	required to undertake asset					management strategy and plan(s). Managers with	analysis of the organisation's own direct resources and
		management activities - including the				There is also a need for the organisation to	responsibility for development and recruitment of staff	contractors resource capability over suitable
		development and delivery of asset				demonstrate that it has assessed what development	(including HR functions). Staff responsible for training.	timescales. Evidence, such as minutes of meetings,
		management strategy, process(es),				plan(s) are required to provide its human resources with	Procurement officers. Contracted service providers.	that suitable management forums are monitoring
		objectives and plan(s)?				the skills and competencies to develop and implement		human resource development plan(s). Training plan(s),
						its asset management systems. The timescales over		personal development plan(s), contract and service
						which the plan(s) are relevant should be commensurate		level agreements.
						with the planning horizons within the asset		
						management strategy considers e.g. if the asset		
						management strategy considers 5, 10 and 15 year time		
						scales then the human resources development plan(s)		
						should align with these. Resources include both 'in		
						house' and external resources who undertake asset		
						management activities.		
49	Training,	How does the organisation identify				Widely used AM standards require that organisations to	Senior management responsible for agreement of	Evidence of an established and applied competency
	awareness and	competency requirements and then				undertake a systematic identification of the asset	plan(s). Managers responsible for developing asset	requirements assessment process and plan(s) in place
	competence	plan, provide and record the training				management awareness and competencies required at		to deliver the required training. Evidence that the
		necessary to achieve the				each level and function within the organisation. Once	responsibility for development and recruitment of staff	training programme is part of a wider, co-ordinated
		competencies?				identified the training required to provide the necessary		asset management activities training and competency
						competencies should be planned for delivery in a timely	Procurement officers. Contracted service providers.	programme. Evidence that training activities are
						and systematic way. Any training provided must be		recorded and that records are readily available (for both
						recorded and maintained in a suitable format. Where		direct and contracted service provider staff) e.g. via
						an organisation has contracted service providers in		organisation wide information system or local records
						place then it should have a means to demonstrate that		database.
						this requirement is being met for their employees. (eg, PAS 55 refers to frameworks suitable for identifying		
						competency requirements).		
						competency requirements).		
50	Training,	How does the organization ensure				A critical success factor for the effective development	Managers, supervisors, persons responsible for	Evidence of a competency assessment framework that
	awareness and	that persons under its direct control				and implementation of an asset management system is		aligns with established frameworks such as the asset
	competence	undertaking asset management				the competence of persons undertaking these activities.		management Competencies Requirements Framework
		related activities have an appropriate level of competence in terms of				organisations should have effective means in place for ensuring the competence of employees to carry out	those responsible for recruitment.	(Version 2.0); National Occupational Standards for Management and Leadership; UK Standard for
		education, training or experience?				their designated asset management function(s). Where		Professional Engineering Competence, Engineering
		education, training or experience?				an organisation has contracted service providers		Council, 2005.
						undertaking elements of its asset management system		2003.
						then the organisation shall assure itself that the		
						outsourced service provider also has suitable		
						arrangements in place to manage the competencies of		
						its employees. The organisation should ensure that the		
						individual and corporate competencies it requires are in		
						place and actively monitor, develop and maintain an		
						appropriate balance of these competencies.		

					Company Name		
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					Asset Management Standard Applied		
SCHEDULE 13:	REPORT ON A	SSET MANAGEMENT MATUR	ITY (cont)				
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Question No. 48	Function Training,	Question How does the organisation develop	Maturity Level 0 The organisation has not recognised the	Maturity Level 1 The organisation has recognised the	Maturity Level 2 The organisation has developed a	Maturity Level 3 The organisation can demonstrate that	Maturity Level 4 The organisation's process(es) surpass
40		plan(s) for the human resources	need for assessing human resources	need to assess its human resources	strategic approach to aligning	plan(s) are in place and effective in	the standard required to comply with
	competence	required to undertake asset	requirements to develop and implement	requirements and to develop a plan(s).	competencies and human resources to	matching competencies and capabilities	requirements set out in a recognised
		management activities - including the		There is limited recognition of the need		to the asset management system	standard.
		development and delivery of asset		ů .	the asset management plan but the work	o ,	
		management strategy, process(es),		implementation of its asset	is incomplete or has not been	contracted activities. Plans are	The assessor is advised to note in the
		objectives and plan(s)?		management system.	consistently implemented.	reviewed integral to asset management	Evidence section why this is the case
						system process(es).	and the evidence seen.
49	Training,	How does the organisation identify	The organisation does not have any	The organisation has recognised the	The organisation is the process of	Competency requirements are in place	The organisation's process(es) surpass
45	0.	competency requirements and then	means in place to identify competency	need to identify competency		and aligned with asset management	the standard required to comply with
		plan, provide and record the training	requirements.	requirements and then plan, provide and		plan(s). Plans are in place and effective	requirements set out in a recognised
		necessary to achieve the		record the training necessary to achieve	plan(s) and then plan, provide and	in providing the training necessary to	standard.
		competencies?		the competencies.	record appropriate training. It is	achieve the competencies. A structured	
					incomplete or inconsistently applied.	means of recording the competencies	The assessor is advised to note in the
						achieved is in place.	Evidence section why this is the case
							and the evidence seen.
50	Training,	How does the organization ensure	The organization has not recognised the	Compotency of staff undertaking asset	The organization is in the process of	Competency requirements are identified	The organisation's process(os) surpass
30		that persons under its direct control	need to assess the competence of	management related activities is not	putting in place a means for assessing	and assessed for all persons carrying out	the standard required to comply with
	competence	undertaking asset management	person(s) undertaking asset	managed or assessed in a structured		asset management related activities -	requirements set out in a recognised
		related activities have an appropriate			asset management activities including	internal and contracted. Requirements	standard.
		level of competence in terms of		legal compliance and safety	contractors. There are gaps and	are reviewed and staff reassessed at	
		education, training or experience?		management.	inconsistencies.	appropriate intervals aligned to asset	The assessor is advised to note in the
						management requirements.	Evidence section why this is the case
							and the evidence seen.

						Company Name					
						AMP Planning Period					
						Asset Management Standard Applied					
SCHEDULE 13	3: REPORT ON A	ASSET MANAGEMENT MATUR	RITY (co	nt)							
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Question No.	Function Communication,	Question How does the organisation ensure	Score	Evidence—Summary	User Guidance	Why Widely used AM practice standards require that	Who Top management and senior management	Record/documented Information Asset management policy statement prominently			
33	participation and consultation	that pertinent asset management information is effectively communicated to and from employees and other stakeholders, including contracted service providers?				pertinent asset management information is effectively communicated to and from employees and other stakeholders including contracted service providers. Pertinent information refers to information required in order to effectively and efficiently comply with and deliver asset management strategy, plan(s) and objectives. This will include for example the communication of the asset management policy, asset performance information, and planning information as appropriate to contractors.	representative(s), employee's representative(s), employee's trade union representative(s); contracted	displayed on notice boards, intranet and internet; use of organisation's website for displaying asset performance data; evidence of formal briefings to employees, stakeholders and contracted service providers; evidence of inclusion of asset management issues in team meetings and contracted service provider contract meetings; newsletters, etc.			
59	Asset Management System documentation	What documentation has the organisation established to describe the main elements of its asset management system and interactions between them?				Widely used AM practice standards require an organisation maintain up to date documentation that ensures that its asset management systems (ie, the systems the organisation has in place to meet the standards) can be understood, communicated and operated. (eg, s 4.5 of PAS 55 requires the maintenance of up to date documentation of the asset management system requirements specified throughout s 4 of PAS 55).	The management team that has overall responsibility for asset management. Managers engaged in asset management activities.	The documented information describing the main elements of the asset management system (process(es)) and their interaction.			
62	Information management	What has the organisation done to determine what its asset management information system(s) should contain in order to support its asset management system?					The organisation's strategic planning team. The management team that has overall responsibility for asset management. Information management team. Operations, maintenance and engineering managers	Details of the process the organisation has employed to determine what its asset information system should contain in order to support its asset management system. Evidence that this has been effectively implemented.			
63	Information management	How does the organisation maintain its asset management information system(s) and ensure that the data held within it (them) is of the requisite quality and accuracy and is consistent?				The response to the questions is progressive. A higher scale cannot be awarded without achieving the requirements of the lower scale. This question explores how the organisation ensures that information management meets widely used AM practice requirements (eg, s 4.4.6 (a), (c) and (d) of PAS 55).	The management team that has overall responsibility for asset management. Users of the organisational information systems.	The asset management information system, together with the policies, procedure(s), improvement initiatives and audits regarding information controls.			

					Company Name		
					AMP Planning Period		
					Asset Management Standard Applied		
SCHEDULE 13:	REPORT ON A	SSET MANAGEMENT MATUR	ITY (cont)				
Question No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
53	Communication, participation and consultation	How does the organisation ensure that pertinent asset management information is effectively communicated to and from employees and other stakeholders, including contracted service providers?	The organisation has not recognised the need to formally communicate any asset management information.	There is evidence that the pertinent asset management information to be	The organisation has determined pertinent information and relevant parties. Some effective two way communication is in place but as yet not all relevant parties are clear on their roles and responsibilities with respect to asset management information.	Two way communication is in place between all relevant parties, ensuring that information is effectively communicated to match the requirements of asset management	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
59	Asset	What documentation has the	The organisation has not established	The organisation is aware of the need to	= -	The organisation has established	The organisation's process(es) surpass
	System documentation	organisation established to describe the main elements of its asset management system and interactions between them?	elements of the asset management	put documentation in place and is in the process of determining how to document the main elements of its asset management system.	documenting its asset management system and has documentation in place that describes some, but not all, of the main elements of its asset management system and their interaction.	documentation that comprehensively describes all the main elements of its asset management system and the interactions between them. The documentation is kept up to date.	the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
62		What has the organisation done to determine what its asset management information system(s) should contain in order to support its asset management system?	The organisation has not considered what asset management information is required.	The organisation is aware of the need to determine in a structured manner what its asset information system should contain in order to support its asset management system and is in the process of deciding how to do this.	The organisation has developed a structured process to determine what its asset information system should contain in order to support its asset management system and has commenced implementation of the process.	The organisation has determined what its asset information system should contain in order to support its asset management system. The requirements relate to the whole life cycle and cover information originating from both internal and external sources.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
63	Information management	How does the organisation maintain its asset management information system(s) and ensure that the data held within it (them) is of the requisite quality and accuracy and is consistent?	There are no formal controls in place or controls are extremely limited in scope and/or effectiveness.	The organisation is aware of the need for effective controls and is in the process of developing an appropriate control process(es).		The organisation has effective controls in place that ensure the data held is of the requisite quality and accuracy and is consistent. The controls are regularly reviewed and improved where necessary.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.

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Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
64	Information management	How has the organisation's ensured its asset management information system is relevant to its needs?				Widely used AM standards need not be prescriptive about the form of the asset management information system, but simply require that the asset management information system is appropriate to the organisation needs, can be effectively used and can supply information which is consistent and of the requisite quality and accuracy.	The organisation's strategic planning team. The management team that has overall responsibility for asset management. Information management team. Users of the organisational information systems.	The documented process the organisation employs to ensure its asset management information system aligns with its asset management requirements. Minutes of information systems review meetings involving users.
69	Risk management process(es)	How has the organisation documented process(es) and/or procedure(s) for the identification and assessment of asset and asset management related risks throughout the asset life cycle?				Risk management is an important foundation for proactive asset management. Its overall purpose is to understand the cause, effect and likelihood of adverse events occurring, to optimally manage such risks to an acceptable level, and to provide an audit trail for the management of risks. Widely used standards require the organisation to have process(es) and/or procedure(s) in place that set out how the organisation identifies and assesses asset and asset management related risks. The risks have to be considered across the four phases of the asset lifecycle (eg, para 4.3.3 of PAS 55).	The top management team in conjunction with the organisation's senior risk management representatives. There may also be input from the organisation's Safety, Health and Environment team. Staff who carry out risk identification and assessment.	The organisation's risk management framework and/or evidence of specific process(es) and/ or procedure(s) that deal with risk control mechanisms. Evidence that the process(es) and/or procedure(s) are implemented across the business and maintained. Evidence of agendas and minutes from risk management meetings. Evidence of feedback in to process(es) and/or procedure(s) as a result of incident investigation(s). Risk registers and assessments.
79	Use and maintenance of asset risk information	How does the organisation ensure that the results of risk assessments provide input into the identification of adequate resources and training and competency needs?				Widely used AM standards require that the output from risk assessments are considered and that adequate resource (including staff) and training is identified to match the requirements. It is a further requirement that the effects of the control measures are considered, as there may be implications in resources and training required to achieve other objectives.	responsible for developing and approving resource and training plan(s). There may also be input from the	The organisations risk management framework. The organisation's resourcing plan(s) and training and competency plan(s). The organisation should be able to demonstrate appropriate linkages between the content of resource plan(s) and training and competency plan(s) to the risk assessments and risk control measures that have been developed.
82	Legal and other requirements	What procedure does the organisation have to identify and provide access to its legal, regulatory, statutory and other asset management requirements, and how is requirements incorporated into the asset management system?				In order for an organisation to comply with its legal, regulatory, statutory and other asset management requirements, the organisation first needs to ensure that it knows what they are (eg, PAS 55 specifies this in s 4.4.8). It is necessary to have systematic and auditable mechanisms in place to identify new and changing requirements. Widely used AM standards also require that requirements are incorporated into the asset management system (e.g. procedure(s) and process(es))	Top management. The organisations regulatory team. The organisation's legal team or advisors. The management team with overall responsibility for the asset management system. The organisation's health and safety team or advisors. The organisation's policy making team.	The organisational processes and procedures for ensuring information of this type is identified, made accessible to those requiring the information and is incorporated into asset management strategy and objectives

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AMP Planning Period	
Asset Management Standard Applied	
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Question No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
64	Information management	How has the organisation's ensured its asset management information system is relevant to its needs?	The organisation has not considered the need to determine the relevance of its management information system. At present there are major gaps between what the information system provides and the organisations needs.	The organisation understands the need to ensure its asset management information system is relevant to its needs and is determining an appropriate means by which it will achieve this. At present there are significant gaps between what the information system provides and the organisations needs.	The organisation has developed and is implementing a process to ensure its asset management information system is relevant to its needs. Gaps between what the information system provides and the organisations needs have been identified and action is being taken to close them.	The organisation's asset management information system aligns with its asset management requirements. Users can confirm that it is relevant to their needs.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
69	Risk management process(es)	assessment of asset and asset	The organisation has not considered the need to document process(es) and/or procedure(s) for the identification and assessment of asset and asset management related risks throughout the asset life cycle.	The organisation is aware of the need to document the management of asset related risk across the asset lifecycle. The organisation has plan(s) to formally document all relevant process(es) and procedure(s) or has already commenced this activity.	documenting the identification and	Identification and assessment of asset related risk across the asset lifecycle is fully documented. The organisation can demonstrate that appropriate documented mechanisms are integrated across life cycle phases and are being consistently applied.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
79	Use and maintenance of asset risk information	How does the organisation ensure that the results of risk assessments provide input into the identification of adequate resources and training and competency needs?	The organisation has not considered the need to conduct risk assessments.	The organisation is aware of the need to consider the results of risk assessments and effects of risk control measures to provide input into reviews of resources, training and competency needs. Current input is typically ad-hoc and reactive.	The organisation is in the process ensuring that outputs of risk assessment are included in developing requirements for resources and training. The implementation is incomplete and there are gaps and inconsistencies.	inputs to develop resources, training and competency requirements. Examples	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
82	Legal and other requirements	What procedure does the organisation have to identify and provide access to its legal, regulatory, statutory and other asset management requirements, and how is requirements incorporated into the asset management system?	The organisation has not considered the need to identify its legal, regulatory, statutory and other asset management requirements.	The organisation identifies some its legal, regulatory, statutory and other asset management requirements, but this is done in an ad-hoc manner in the absence of a procedure.	The organisation has procedure(s) to identify its legal, regulatory, statutory and other asset management requirements, but the information is not kept up to date, inadequate or inconsistently managed.	Evidence exists to demonstrate that the organisation's legal, regulatory, statutory and other asset management requirements are identified and kept up to date. Systematic mechanisms for identifying relevant legal and statutory requirements.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.

						Company Name		
						AMP Plannina Period		
						Asset Management Standard Applied		
SCHEDULE 13	B: REPORT ON	ASSET MANAGEMENT MATUR	ITY (co	nt)				
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Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
88	Life Cycle Activities	How does the organisation establish implement and maintain process(es) for the implementation of its asset management plan(s) and control of activities across the creation, acquisition or enhancement of assets. This includes design, modification, procurement, construction and commissioning activities?				Life cycle activities are about the implementation of asset management plan(s) i.e. they are the "doing" phase. They need to be done effectively and well in order for asset management to have any practical meaning. As a consequence, widely used standards (eg, PAS 55 s 4.5.1) require organisations to have in place appropriate process(es) and procedure(s) for the implementation of asset management plan(s) and control of lifecycle activities. This question explores those aspects relevant to asset creation.	Asset managers, design staff, construction staff and project managers from other impacted areas of the business, e.g. Procurement	Documented process(es) and procedure(s) which are relevant to demonstrating the effective management and control of life cycle activities during asset creation, acquisition, enhancement including design, modification, procurement, construction and commissioning.
91	Life Cycle Activities	How does the organisation ensure that process(es) and/or procedure(s) for the implementation of asset management plan(s) and control of activities during maintenance (and inspection) of assets are sufficient to ensure activities are carried out under specified conditions, are consistent with asset management strategy and control cost, risk and performance?				Having documented process(es) which ensure the asset management plan(s) are implemented in accordance with any specified conditions, in a manner consistent with the asset management policy, strategy and objectives and in such a way that cost, risk and asset system performance are appropriately controlled is critical. They are an essential part of turning intention into action (eg, as required by PAS 55 s 4.5.1).	Asset managers, operations managers, maintenance managers and project managers from other impacted areas of the business	Documented procedure for review. Documented procedure for audit of process delivery. Records of previous audits, improvement actions and documented confirmation that actions have been carried out.
95	Performance and condition monitoring	How does the organisation measure the performance and condition of its assets?				Widely used AM standards require that organisations establish implement and maintain procedure(s) to monitor and measure the performance and/or condition of assets and asset systems. They further set out requirements in some detail for reactive and proactive monitoring, and leading/lagging performance indicators together with the monitoring or results to provide input to corrective actions and continual improvement. There is an expectation that performance and condition monitoring will provide input to improving asset management strategy, objectives and plan(s).		Functional policy and/or strategy documents for performance or condition monitoring and measurement. The organisation's performance monitoring frameworks, balanced scorecards etc. Evidence of the reviews of any appropriate performance indicators and the action lists resulting from these reviews. Reports and trend analysis using performance and condition information. Evidence of the use of performance and supporting asset management strategy, objectives and plan(s).
99	Investigation of asset-related failures, incidents and nonconformities	How does the organisation ensure responsibility and the authority for the handling, investigation and mitigation of asset-related failures, incidents and emergency situations and non conformances is clear, unambiguous, understood and communicated?				Widely used AM standards require that the organisation establishes implements and maintains process(es) for the handling and investigation of failures incidents and non-conformities for assets and sets down a number of expectations. Specifically this question examines the requirement to define clearly responsibilities and authorities for these activities, and communicate these unambiguously to relevant people including external stakeholders if appropriate.	management team. The team with overall responsibility for the management of the assets.	Process(es) and procedure(s) for the handling, investigation and mitigation of asset-related failures, incidents and emergency situations and non conformances. Documentation of assigned responsibilities and authority to employees. Job Descriptions, Audit reports. Common communication systems i.e. all Job Descriptions on Internet etc.

		Company Name	
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SCHEDULE 13: REPORT ON ASSET MANAGEMENT MATUR	ITY (cont)		
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uestion No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
88	Life Cycle Activities	How does the organisation establish implement and maintain process(es) for the implementation of its asset management plan(s) and control of activities across the creation, acquisition or enhancement of assets. This includes design, modification, procurement, construction and commissioning activities?	The organisation does not have process(es) in place to manage and control the implementation of asset management plan(s) during activities related to asset creation including design, modification, procurement, construction and commissioning.	The organisation is aware of the need to have process(es) and procedure(s) in place to manage and control the implementation of asset management plan(s) during activities related to asset creation including design, modification, procurement, construction and commissioning but currently do not have these in place (note: procedure(s) may exist but they are inconsistent/incomplete).	putting in place process(es) and procedure(s) to manage and control the implementation of asset management plan(s) during activities related to asset creation including design, modification, procurement, construction and	Effective process(es) and procedure(s) are in place to manage and control the implementation of asset management plan(s) during activities related to asset creation including design, modification, procurement, construction and commissioning.	The organisation's process(es) support the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the cas and the evidence seen.
91	Life Cycle Activities	How does the organisation ensure that process(es) and/or procedure(s) for the implementation of asset management plan(s) and control of activities during maintenance (and inspection) of assets are sufficient to ensure activities are carried out under specified conditions, are consistent with asset management strategy and control cost, risk and performance?	The organisation does not have process(es)/procedure(s) in place to control or manage the implementation of asset management plan(s) during this life cycle phase.	The organisation is aware of the need to have process(es) and procedure(s) in place to manage and control the implementation of asset management plan(s) during this life cycle phase but currently do not have these in place and/or there is no mechanism for confirming they are effective and where needed modifying them.	putting in place process(es) and procedure(s) to manage and control the implementation of asset management plan(s) during this life cycle phase. They include a process for confirming the process(es)/procedure(s) are effective	The organisation has in place process(es) and procedure(s) to manage and control the implementation of asset management plan(s) during this life cycle phase. They include a process, which is itself regularly reviewed to ensure it is effective, for confirming the process(es)/ procedure(s) are effective and if necessary carrying out modifications.	The organisation's process(es) surp the standard required to comply wirequirements set out in a recognise standard. The assessor is advised to note in the Evidence section why this is the call and the evidence seen.
95	Performance and condition monitoring	How does the organisation measure the performance and condition of its assets?	The organisation has not considered how to monitor the performance and condition of its assets.	The organisation recognises the need for monitoring asset performance but has not developed a coherent approach. Measures are incomplete, predominantly reactive and lagging. There is no linkage to asset management objectives.	asset performance monitoring linked to asset management objectives. Reactive and proactive measures are in place. Use is being made of leading indicators	Consistent asset performance monitoring linked to asset management objectives is in place and universally used including reactive and proactive measures. Data quality management and review process are appropriate. Evidence of leading indicators and analysis.	The organisation's process(es) sur the standard required to comply w requirements set out in a recognis standard. The assessor is advised to note in Evidence section why this is the call and the evidence seen.
99	Investigation of asset-related failures, incidents and nonconformities	How does the organisation ensure responsibility and the authority for the handling, investigation and mitigation of asset-related failures, incidents and emergency situations and non conformances is clear, unambiguous, understood and communicated?	The organisation has not considered the need to define the appropriate responsibilities and the authorities.	The organisation understands the requirements and is in the process of determining how to define them.	The organisation are in the process of defining the responsibilities and authorities with evidence. Alternatively there are some gaps or inconsistencies in the identified responsibilities/authorities.	The organisation have defined the appropriate responsibilities and authorities and evidence is available to show that these are applied across the business and kept up to date.	The organisation's process(es) sur the standard required to comply w requirements set out in a recognis standard. The assessor is advised to note in Evidence section why this is the co and the evidence seen.

						Company Name		
						AMP Planning Period		
						Asset Management Standard Applied		
SCHEDULE 13	: REPORT ON A	ASSET MANAGEMENT MATUR	ITY (co	nt)				
Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
105	Audit	What has the organisation done to establish procedure(s) for the audit of its asset management system (process(es))?				This question seeks to explore what the organisation has done to comply with the standard practice AM audit requirements (eg. the associated requirements of PAS 55 s 4.6.4 and its linkages to s 4.7).		The organisation's asset-related audit procedure(s). The organisation's methodology(s) by which it determined the scope and frequency of the audits and the criteria by which it identified the appropriate audit personnel. Audits chedules, reports etc. Evidence of the procedure(s) by which the audit results are presented, together with any subsequent communications. The risk assessment schedule or risk registers.
109	Corrective & Preventative action	How does the organisation instigate appropriate corrective and/or preventive actions to eliminate or prevent the causes of identified poor performance and non conformance?				Having investigated asset related failures, incidents and non-conformances, and taken action to mitigate their consequences, an organisation is required to implement preventative and corrective actions to address root causes. Incident and failure investigations are only useful if appropriate actions are taken as a result to assess changes to a businesses risk profile and ensure that appropriate arrangements are in place should a recurrence of the incident happen. Widely used AM standards also require that necessary changes arising from preventive or corrective action are made to the asset management system.	actions.	Analysis records, meeting notes and minutes, modification records. Asset management plan(s), investigation reports, audit reports, improvement programmes and projects. Recorded changes to asset management procedure(s) and process(es). Condition and performance reviews. Maintenance reviews
113	Continual Improvement	How does the organisation achieve continual improvement in the optimal combination of costs, asset related risks and the performance and condition of assets and asset systems across the whole life cycle?				Widely used AM standards have requirements to establish, implement and maintain process(es)/procedure(s) for identifying, assessing, prioritising and implementing actions to achieve continual improvement. Specifically there is a requirement to demonstrate continual improvement in optimisation of cost risk and performance/condition of assets across the life cycle. This question explores an organisation's capabilities in this area—looking for systematic improvement mechanisms rather that reviews and audit (which are separately examined).	The top management of the organisation. The manager/team responsible for managing the organisation's asset management system, including its continual improvement. Managers responsible for policy development and implementation.	Records showing systematic exploration of improvement. Evidence of new techniques being explored and implemented. Changes in procedure(s) and process(es) reflecting improved use of optimisation tools/techniques and available information. Evidence of working parties and research.
115	·	How does the organisation seek and acquire knowledge about new asset management related technology and practices, and evaluate their potential benefit to the organisation?				One important aspect of continual improvement is where an organisation looks beyond its existing boundaries and knowledge base to look at what 'new things are on the market'. These new things can include equipment, process(es), tools, etc. An organisation which does this (eg. by the PAS 55 \$ 4.6 standards) will be able to demonstrate that it continually seeks to expand its knowledge of all things affecting its asset management approach and capabilities. The organisation will be able to demonstrate that it identifies any such opportunities to improve, evaluates them for suitability to its own organisation and implements them as appropriate. This question explores an organisation's approach to this activity.	continual improvement. People who monitor the various items that require monitoring for 'change'.	Research and development projects and records, benchmarking and participation knowledge exchange professional forums. Evidence of correspondence relating to knowledge acquisition. Examples of change implementation and evaluation of new tools, and techniques linked to asset management strategy and objectives.

					Company Name		
					AMP Planning Period		
					Asset Management Standard Applied		
SCHEDULE 13:	REPORT ON A	SSET MANAGEMENT MATUR	ITY (cont)				
Question No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
105	Audit	What has the organisation done to establish procedure(s) for the audit of its asset management system (process(es))?	The organisation has not recognised the need to establish procedure(s) for the audit of its asset management system.	The organisation understands the need for audit procedure(s) and is determining the appropriate scope, frequency and methodology(s).	The organisation is establishing its audit procedure(s) but they do not yet cover all the appropriate asset-related activities.	The organisation can demonstrate that its odit procedure(s) cover all the appropriate asset-related activities and the associated reporting of audit results. Audits are to an appropriate level of detail and consistently managed.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
109	Corrective & Preventative action	How does the organisation instigate appropriate corrective and/or preventive actions to eliminate or prevent the causes of identified poor performance and non conformance?	The organisation does not recognise the need to have systematic approaches to instigating corrective or preventive actions.	for corrective actions to address failures	The need is recognized for systematic instigation of preventive and corrective actions to address root causes of non compliance or incidents identified by investigations, compliance evaluation or audit. It is only partially or inconsistently in place.	Mechanisms are consistently in place and effective for the systematic instigation of preventive and corrective actions to address root causes of non compliance or incidents identified by investigations, compliance evaluation or audit.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
113	Continual Improvement	How does the organisation achieve continual improvement in the optimal combination of costs, asset related risks and the performance and condition of assets and asset systems across the whole life cycle?	The organisation does not consider continual improvement of these factors to be a requirement, or has not considered the issue.	A Continual Improvement ethos is recognised as beneficial, however it has just been started, and or covers partially the asset drivers.	Continuous improvement process(es) are set out and include consideration of cost risk, performance and condition for assets managed across the whole life cycle but it is not yet being systematically applied.	continuous improvement process(es) which include consideration of cost risk, performance and condition for assets managed across the whole life cycle are being systematically applied.	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.
115		How does the organisation seek and acquire knowledge about new asset management related technology and practices, and evaluate their potential benefit to the organisation?	The organisation makes no attempt to seek knowledge about new asset management related technology or practices.	The organisation is inward looking, however it recognises that asset management is not sector specific and other sectors have developed good practice and new ideas that could apply. Ad-hoc approach.	The organisation has initiated asset management communication within sector to share and, or identify 'new' to sector asset management practices and seeks to evaluate them.	bodies and relevant conferences. Actively investigates and evaluates new practices and evolves its asset	The organisation's process(es) surpass the standard required to comply with requirements set out in a recognised standard. The assessor is advised to note in the Evidence section why this is the case and the evidence seen.

Schedule 14 Mandatory Explanatory Notes

- 1. This schedule requires EDBs to provide explanatory notes to information provided in accordance with clauses 2.3.1, 2.4.21, 2.4.22, and subclauses 2.5.1(1)(f), and 2.5.2(1)(e).
- 2. This schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.1. Information provided in boxes 1 to 11 of this schedule is part of the audited disclosure information, and so is subject to the assurance requirements specified in section 2.8.
- 3. Schedule 15 (Voluntary Explanatory Notes to Schedules) provides for EDBs to give additional explanation of disclosed information should they elect to do so.

Return on Investment (Schedule 2)

4. In the box below, comment on return on investment as disclosed in Schedule 2. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 1: Explanatory comment on return on investment	
[Insert text here]	

Regulatory Profit (Schedule 3)

- 5. In the box below, comment on regulatory profit for the disclosure year as disclosed in Schedule 3. This comment must include-
 - 5.1 a description of material items included in other regulated income (other than gains / (losses) on asset disposals), as disclosed in 3(i) of Schedule 3
 - 5.2 information on reclassified items in accordance with subclause 2.7.1(2).

Box 2: Explanatory comment on regulatory profit [Insert text here]	

Merger and acquisition expenses (3(iv) of Schedule 3)

6. If the EDB incurred merger and acquisitions expenditure during the disclosure year, provide the following information in the box below-

- 6.1 information on reclassified items in accordance with subclause 2.7.1(2)
- any other commentary on the benefits of the merger and acquisition expenditure to the EDB.

Box 3: Explanatory comment on merger and acquisition expenditure
[Insert text here]

Value of the Regulatory Asset Base (Schedule 4)

7. In the box below, comment on the value of the regulatory asset base (rolled forward) in Schedule 4. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 4: Explanatory comment on the value of the regulatory asset based (rolled forward) [Insert text here]

Regulatory tax allowance: disclosure of permanent differences (5a(i) of Schedule 5a)

- 8. In the box below, provide descriptions and workings of the material items recorded in the following asterisked categories of 5a(i) of Schedule 5a-
 - 8.1 Income not included in regulatory profit / (loss) before tax but taxable;
 - 8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible;
 - 8.3 Income included in regulatory profit / (loss) before tax but not taxable;
 - 8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax.

Box 5: Regulatory tax allowance: permanent differences
[Insert text here]

Regulatory tax allowance: disclosure of temporary differences (5a(vi) of Schedule 5a)

9. In the box below, provide descriptions and workings of material items recorded in the asterisked category 'Tax effect of other temporary differences' in 5a(vi) of Schedule 5a.

Box 6: Tax effect of other temporary differences (current disclosure year) [Insert text here]	

Cost allocation (Schedule 5d)

10. In the box below, comment on cost allocation as disclosed in Schedule 5d. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 7: Cost allocation [Insert text here]			
,			

Asset allocation (Schedule 5e)

11. In the box below, comment on asset allocation as disclosed in Schedule 5e. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 8: Commentary on asset allocation [Insert text here]	

Capital Expenditure for the Disclosure Year (Schedule 6a)

- 12. In the box below, comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment must include
 - a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;
 - 12.2 information on reclassified items in accordance with subclause 2.7.1(2),

Box 9: Explanation of capital expenditure for the disclosure year [Insert text here]

Operational Expenditure for the Disclosure Year (Schedule 6b)

- 13. In the box below, comment on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This comment must include-
 - 13.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;
 - 13.2 Information on reclassified items in accordance with subclause 2.7.1(2);
 - 13.3 Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

Box 10: Explanation of	operational expe	nditure for the di	sclosure year	
[Insert text here]				

Variance between forecast and actual expenditure (Schedule 7)

14. In the box below, comment on variance in actual to forecast expenditure for the disclosure year, as reported in Schedule 7. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 11: Explanatory comment on variance in actual to forecast expenditure
[Insert text here]

Information relating to revenues and quantities for the disclosure year

15. In the box below provide-

- 15.1 a comparison of the target revenue disclosed before the start of the disclosure year, in accordance with clause 2.4.1 and subclause 2.4.3(3) to total billed line charge revenue for the disclosure year, as disclosed in Schedule 8; and
- 15.2 explanatory comment on reasons for any material differences between target revenue and total billed line charge revenue.

Box 12: Explanatory comment relating to revenue for the disclosure year
[Insert text here]

Network Reliability for the Disclosure Year (Schedule 10)

16. In the box below, comment on network reliability for the disclosure year, as disclosed in Schedule 10.

Box 13: Commentary on network reliability for the disclosure year	
[Insert text here]	

Insurance cover

- 17. In the box below, provide details of any insurance cover for the assets used to provide electricity distribution services, including-
 - 17.1 The EDB's approaches and practices in regard to the insurance of assets used to provide electricity distribution services, including the level of insurance;
 - 17.2 In respect of any self insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance.

Box 14: Explanation of insurance cover		
[Insert text here]		
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Amendments to previously disclosed information

- 18. In the box below, provide information about amendments to previously disclosed information disclosed in accordance with clause 2.12.1 in the last 7 years, including:
 - 18.1 a description of each error; and
 - 18.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

Box 15: Disclosure of amendment to previously disclosed information	
[Insert text here]	

Schedule 14a Mandatory Explanatory Notes on Forecast Information

1. This Schedule requires EDBs to provide explanatory notes to reports prepared in accordance with clause 2.6.6.

This Schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.2. This information is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

Commentary on difference between nominal and constant price capital expenditure forecasts (Schedule 11a)

2. In the box below, comment on the difference between nominal and constant price capital expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11a.

Box 1: Commentary on difference between nominal and constant price capital expenditure forecasts [Insert text here]

Commentary on difference between nominal and constant price operational expenditure forecasts (Schedule 11b)

3. In the box below, comment on the difference between nominal and constant price operational expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11b.

Box 2: Commentary on difference between nominal and constant price operational expenditure forecasts [Insert text here]

Schedule 15 Voluntary Explanatory Notes

- 4. This schedule enables an EDBs to provide, should they it wish to-
 - 4.1 additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1_-and 2.5.2;
 - 4.2 information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.
- 5. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.82.8.
- 6. Provide additional explanatory comment in the box below.

Box 1: Voluntary explanatory comment on disclosed information
[Insert text below]

Schedule 16 Definitions of terms used in Schedules 1 to 15

- 1. This schedule provides definitions for terms used in Schedules 1 to 15 of this determination.
- 2. Where terms used in the schedules are defined in section 1.4 of this determination but are not defined below, they have the meanings set out in section 1.4 of this determination. Terms used in the schedules that are defined in the IM determination have the meanings set out in the IM determination. Otherwise, unless defined below, terms used in the schedules have meanings consistent with industry practice.

Term	Definition
% of asset forecast to be replaced in next 5 years	means the % of asset quantity forecast to be replaced in next 5 years consistent with the capital expenditure forecast
% variance	means: $q = \frac{a-b}{b} \times 100$ where:
	a = actual expenditure
	b= forecast expenditure
> 66 kV	means a circuit operating at a nominal voltage in excess of 66 kV
6.6kV to 11kV (inclusive—other than SWER)	means a circuit operating at a nominal voltage of at least 6.6kV and no more than 11kV that is not a SWER circuit
22 kV (other than SWER)	means a circuit operating at a nominal voltage of 22 kV that is not a SWER circuit
25th percentile estimate	means the 25th percentile estimate for the range of the mid-point post tax WACC or mid-point vanilla WACC determined by the Commission in accordance with clause 2.4.5 of the IM determination
33 kV	means a circuit operating at a nominal voltage of 33 kV
50 kV & 66 kV	means a circuit operating at a nominal voltage of 50 kV or 66 kV
75th percentile estimate	means the 75th percentile estimate for the range of the mid-point post tax WACC or mid-point vanilla WACC determined by the Commission in accordance with clause 2.4.5 of the IM determination

2013-15 NPV wash-up	means a cost specified in clause 3.1.3(1)(s) of the IM determination
allowance	Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April 2020, see clause 3.1.3(1)(r) of the IM determination.
Actual controllable opex	has the meaning given in the IM determination
Actual expenditure	means, in relation to- (a) a disclosure year, expenditure for that disclosure year (b) regulatory period, expenditure for the disclosure years from the start of the regulatory period to the current disclosure year
Adjusted depreciation	has the meaning given in the IM determination
Adjustment for unamortised initial differences in assets acquired	means for assets acquired from another regulated supplier, the value of the unamortised initial differences in asset values for those assets acquired as unamortised initial differences in asset values is determined in accordance with the input methodologies that apply to the regulated goods or services supplied by that regulated supplier
Adjustment for unamortised initial differences in assets disposed	means the value of opening unamortised initial differences in asset values for assets that are disposed of during the disclosure year

Adjustment resulting	means
from asset allocation	(a) in relation to the works under construction roll-forward, the change in works under construction resulting from a change in asset allocation assumptions for assets included in works under construction, where increases in the value of works under construction are positive and decreases are negative
	(b) in relation to the regulatory tax asset base roll-forward, the change in sum of regulatory tax asset values resulting from a change in asset allocation assumptions for assets included in sum of regulatory tax asset values, where increases in the value of sum of regulatory tax asset values are positive and decreases are negative
	(c) in all other instances, the value of q calculated using the following formula:
	q = a - (b - c + d + e - f + g)
	where:
	a = total closing RAB value
	b = total opening RAB value
	$\mathcal{C}_{}$ = total depreciation
	d = total revaluations
	e = assets commissioned
	f = asset disposals
	g = lost and found assets adjustment
	The formula must be calculated using component values that relate to the RAB. These component values are the values that result from the application of clause 2.1.1 of the IM determination;
Adverse environment	means all unplanned interruptions where the primary cause is adverse environment, such as slips or seismic events.
Adverse weather	means all unplanned interruptions where the primary cause is adverse weather, other than those caused by directly by lightning, vegetation contact or adverse environment
All other projects or programmes	means, within an expenditure category, the total of projects and programmes that are not material projects and programmes.
Allocator metric	has the meaning given in the IM determination
Allocator type	has the meaning given in the IM determination
Allowed controllable opex	has the meaning given in the IM determination
Amortisation of initial differences in asset values	has the meaning given in paragraph (a) of the defined term in the IM determination
Amortisation of revaluations	has the meaning given in paragraph (a) of the defined term in the IM determination

Arm's length deduction	has the meaning given in the IM determination
Asset category transfers	means the value of an asset transferred between asset categories
Asset condition at start of planning period (percentage of units by grade)	means the proportion of the quantity of each asset class assessed against the asset condition categories (H1 to 5), reflecting the likelihood of short, medium or longer term intervention. Suppliers are able to apply their own criteria for intervention when populating the table.
Asset disposals	means- (a) in relation to the unallocated RAB, the sum of unallocated opening RAB values less regulatory depreciation of disposed assets, as determined in accordance with input methodologies applicable to that asset in the IM determination; (b) in relation to the RAB, the value (as determined in accordance with paragraph (a)) which was allocated to electricity distribution services in accordance with clause 2.1.1 of the IM determination
Asset disposals (other than below)	means asset disposals other than asset disposals to a regulated supplier and asset disposals to a related party
Asset disposals to a regulated supplier	means asset disposals disposed of to a regulated supplier
Asset disposals to a related party	means asset disposals disposed of to a related party
Asset or assets with changes to depreciation	means a description of assets or groups of assets where the supplier has changed the asset(s)' depreciation profile or the asset(s) was commissioned during the disclosure year; and at least one of the following applies- (a) the asset(s) depreciation profile was changed or set in accordance with the CPP process
	(b) the asset(s) physical service life potential was determined by an engineer in accordance with clause 2.2.8(3) of the IM determination
	(c) the EDB chooses to disclose details about the asset(s) depreciation profile
	(d) the asset is a composite asset (as that term is used in clause 2.2.8(5) of the IM determination) and at least one of the clauses (a) to (c) applies to one of its component assets
Assets acquired from a regulated supplier	 means- (a) in relation to the unallocated RAB, the sum of value of assets acquired from another regulated supplier as determined in accordance with clause 2.2.11(1)(e) of the IM determination; (b) in relation to the RAB, the value of the assets (as determined in accordance with paragraph (a)) which is allocated to the electricity distribution services in accordance with clause 2.1.1 of the IM determination

Assets acquired from a	moans
· ·	means-
related party	(a) in relation to the unallocated RAB, the sum of value of assets acquired from
	a related party as determined in accordance with clauses 2.2.11(1)(f) and (g)
	of the IM determination;
	(b) in relation to the RAB, the sum of value of the assets (as determined in
	accordance with paragraph (a)) which is allocated to the electricity
	distribution services in accordance with clause 2.1.1 of the IM
	determination
Assets commissioned	means assets commissioned other than assets acquired from a regulated supplier
(other than below)	and assets acquired from a related party
Attribution rate	means: $q = \frac{a \times b}{a}$
	c
	where:
	a = average opening and closing RAB values
	b = a leverage rate of 42%
	c = total book value of interest bearing debt
Atypical expenditure	means expenditure on non-network assets that is 'one-off' or 'exceptional'
Average opening and	maana
closing RAB values	means;
	$q = \frac{a+b}{2}$
	$q = \overline{2}$
	where:
	a = Total opening RAB values
	b = Total closing RAB values
Billed quantities	means the quantities associated with price components upon which the
	consumer's bill for electricity lines services is based expressed in the units of
	measure used by the EDB for setting prices (for example volumes of electricity
	delivered in kWh)
Book value	means-
	(a) in relation to the issue date, the book value in New Zealand dollars of a
	qualifying debt or non-qualifying debt on the issue date
	(b) in relation to the date of financial statements, the book value in New
	Zealand dollars of a qualifying debt or non-qualifying debt as at the end of
	the period of the EDB's latest general purpose financial statements

Business support	means operational expenditure associated with the following corporate activities-
	HR and training (other than operational training);
	finance and regulation including compliance activities, valuations and auditing;
	CEO and director costs;
	legal services;
	consulting services (excluding engineering/technical consulting);
	property management;
	corporate communications;
	corporate IT;
	industry liaison and participation;
	commercial activities including pricing, billing, revenue collection and marketing; or
	liaison with Transpower, customers and electricity retailers
Capacity of distributed generation installed in year (MVA)	means the total capacity of all distributed generation added to the EDB's network in the disclosure year, measured in MVA
	means-
	(a) for an EDB subject to a customised price-quality path commencing after 20 December 2016, a cost specified in clause 3.1.3(1)(p) of the IM determination; or
	(b) for an EDB subject to a default price-quality path, a cost specified in clause 3.1.3(1)(q) of the IM determination
Capex wash-up	
adjustment	Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April
Canital aantuihutiana	2020, see clause 3.1.3(1)(p) of the IM determination.
Capital contributions funding asset relocations	means the value of capital contributions that are paid to the EDB in relation to asset relocation expenditure
Capital contributions funding asset replacement and renewal	means the value of capital contributions that are paid to the EDB in relation to asset replacement and renewal expenditure
Capital contributions funding consumer connection	means the value of capital contributions that are paid to the EDB in relation to consumer connection expenditure

Comital against the sale of	
Capital contributions	means the value of capital contributions that are paid to the EDB in relation to
funding legislative and regulatory	legislative and regulatory expenditure
Capital contributions	means the value of capital contributions that are paid to the EDB in relation to
funding other reliability,	other reliability, safety and environment expenditure
safety and environment	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Capital contributions	means the value of capital contributions that are paid to the EDB in relation to
funding quality of	quality of supply expenditure
supply	
Capital contributions	means the value of capital contributions that are paid to the EDB in relation to
funding system growth	system growth expenditure
	means-
	(a) for an EDB subject to a customised price-quality path commencing after 20 December 2016, a cost specified in clause 3.1.3(1)(m) of the IM determination; or
Catastrophic event	(b) for an EDB subject to a default price-quality path, a cost specified in clause 3.1.3(1)(n) of the IM determination
allowance	Guidance note: (refer to clause 1.4.1(9)-(10))
	Clause 1.1.2(4) of the IM determination sets out when various amendments
	to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for
	a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)).
	Accordingly, for an EDB subject to a default price-quality path after 1 April
	2020, see clause 3.1.3(1)(m) of the IM determination.
Cause	means the primary contributing factor
СВ	means circuit breaker
Circuit length	means all lines and cables with the exception of services, street lighting, and
	private lines (and, when a pole or tower carries multiple circuits, the length of
	each of the circuits is to be calculated individually).
Circuit length by	means the total length of all circuits operating at the prescribed voltage(s)
operating voltage (at	
year end)	
Class A (planned	means a planned interruption initiated by Transpower
interruptions by	
Transpower)	
Class D (unplanned	means an unplanned interruption originating within the works of Transpower,
interruptions by	where those works are used for carrying out line business activities.
Transpower)	

Class E (unplanned interruptions of EDB owned generation)	means an unplanned interruption originating within works used, by the EDB, for the generation of electricity.
Class F (unplanned interruptions of generation owned by others)	means an unplanned interruption originating within works used, by persons other than the EDB, for the generation of electricity.
Class G (unplanned interruptions caused by another disclosing entity)	means an unplanned interruption caused by another EDB.
Class H (planned interruptions caused by another disclosing entity)	means a planned interruption caused by another EDB
Class I (interruptions caused by parties not included above)	means an interruption not referred to in any of classes A-H
Closing deferred tax	has the meaning given in clause 2.3.7(2) of the IM determination
Closing RAB value under 'non-standard' depreciation	means the closing RAB value or sum of closing RAB values as determined in accordance with Part 2, Subpart 2 of the IM determination for the relevant asset or assets with non-standard depreciation
Closing RAB value under 'standard' depreciation	 means- (a) in relation to assets or groups of assets where depreciation is included in depreciation - no standard life asset, 'not applicable' (b) in relation to assets or groups of assets where depreciation is included in depreciation - modified life assets or depreciation - alternative depreciation determined in accordance with CPP, the sum of closing RAB values as determined in accordance with the IM determination as if the closing RAB value and all proceeding closing RAB values had been calculated in accordance with clause 2.1.1 of the IM determination applying a physical asset life determined in accordance with either clause 2.2.8(1)(i)(iii) or (j) of the IM determination for the relevant asset or assets with non-standard depreciation
Closing RIV	means total closing RAB values less adjustment resulting from asset allocation less lost and found assets adjustment plus closing deferred tax
Closing sum of regulatory tax asset values	means the sum of regulatory tax asset values for assets that have a value included in total closing RAB value plus the regulatory tax asset values of assets referred to in clause 2.3.9(4)(b) of the IM determination
Closing tax losses	has the meaning given in clause 2.3.2(4) of the IM determination

Closing unamortised	means closing unamortised initial differences in asset values determined in
initial differences in	accordance with clause 2.3.5(6) of the IM determination
asset values	. ,
Commerce Act levies	means a cost specified in clause 3.1.2(2)(b)(i) of the IM determination
Conservation area	means any land or foreshore that is-
	(a) land or foreshore for the time being held under the Conservation Act 1987 for
	conservation purposes; or
	(b) land in respect of which an interest is held under the Conservation Act 1987
	for conservation purposes
Consumer type	means a category of consumers as defined by the EDB that is typical of the type of
	consumer connected to the network. This may refer to consumer groups as used
	for pricing, physical connection attributes or any other attribute that the EDB
	considers appropriate.
Corporate tax rate	has the meaning given in the IM determination
Cost of debt assumption	means the sum of the risk free rate, average debt premium estimates and debt
	issuance costs as published by the Commission in accordance with clauses 2.4.1
	to 2.4.9 of the IM determination for each disclosure year
Coupon rate	means-
	(a) where the information is available publicly, the nominal coupon rate of
	interest of a qualifying debt on the issue date;
	interest of a qualifying debt on the issue date; (b) where the nominal coupon rate of interest of a qualifying debt on the issue
	(b) where the nominal coupon rate of interest of a qualifying debt on the issue
	(b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or
	(b) where the nominal coupon rate of interest of a qualifying debt on the issue
CPI4	(b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date
CPI ₄	(b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying
CPI ₄	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination
	(b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date
	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination
CPI4 ⁻⁴	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination
CPI ₄ -4 CPP application	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM
CPI ₄ -4 CPP application	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM
CPI ₄ -4 CPP application recoverable costs CPP specified pass	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM determination
CPI ₄ -4 CPP application recoverable costs	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM determination
CPI ₄ -4 CPP application recoverable costs CPP specified pass	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (I) of the IM determination means a cost specified in clause 3.1.2(1)(b) of the IM determination
CPI ₄ -4 CPP application recoverable costs CPP specified pass through costs	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM determination
CPI ₄ -4 CPP application recoverable costs CPP specified pass through costs	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM determination means a cost specified in clause 3.1.2(1)(b) of the IM determination means the maximum total load measured as being supplied by the existing zone
CPI ₄ -4 CPP application recoverable costs CPP specified pass through costs	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM determination means a cost specified in clause 3.1.2(1)(b) of the IM determination means the maximum total load measured as being supplied by the existing zone
CPI ₄ -4 CPP application recoverable costs CPP specified pass through costs Current Peak Load	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM determination means a cost specified in clause 3.1.2(1)(b) of the IM determination means the maximum total load measured as being supplied by the existing zone substation at any time in the disclosure year, expressed in units of MVA
CPI ₄ -4 CPP application recoverable costs CPP specified pass through costs Current Peak Load Current period tax	 (b) where the nominal coupon rate of interest of a qualifying debt on the issue date is not available publicly, either the nominal coupon rate of interest or the basis for determining the nominal coupon rate of interest of a qualifying debt on the issue date has the meaning given in clause 2.2.9(4) of the IM determination has the meaning given in clause 2.2.9(4) of the IM determination means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM determination means a cost specified in clause 3.1.2(1)(b) of the IM determination means the maximum total load measured as being supplied by the existing zone substation at any time in the disclosure year, expressed in units of MVA

Data accuracy (1–4)	means the EDB's assessment of the accuracy of the data provided, using one of the following options-
	1 – means that good quality data is not available for any of the assets in the category and estimates are likely to contain significant error
	2 – means that good quality data is available for some assets but not for others and the data provided includes estimates of uncounted assets within the category
	3 – means that data is available for all assets but includes a level of estimation where there is understood to be some poor quality data for some of the assets within the category
	4 – means that good quality data is available for all of the assets in the category
Debt issue cost readjustment	has the meaning given in clause 2.4.9(4) of the IM determination
Dedicated street lighting circuit length	means the length in km of circuit that only provides electricity to street lighting
Defective equipment	means all unplanned customer interruptions resulting from equipment failure,
Deferred tax balance	either mechanical or electrical has the meaning given in clause 2.3.7(3) of the IM determination
relating to assets	has the meaning given in clause 2.3.7(3) of the five determination
acquired in the	
disclosure year	
Deferred tax balance	means the amount of deferred tax associated with asset disposals. The definition
relating to assets	assumes a deferred tax asset position. If the deferred tax balances relating to the
disposed in the	asset disposals is a liability it must be entered as a negative amount
disclosure year	
Deferred tax cost allocation adjustment	means cost allocation adjustments as defined in clause 2.3.7(5) of the IM determination
Depreciation -	means-
alternative depreciation	(a) in relation to the unallocated RAB, the sum of unallocated depreciation
in accordance with CPP	calculated in accordance with clause 2.2.6 of the IM determination;
	(b) in relation to the RAB, depreciation calculated in accordance with clause 2.2.6 of the IM determination
Depreciation - modified	means-
life assets	(a) in relation to the unallocated RAB, the sum of unallocated depreciation
	calculated in accordance with clause 2.2.5(1) of the IM determination;
	(b) in relation to the RAB, depreciation calculated in accordance with clause 2.2.5(2) of the IM determination;
	of assets with a physical asset life determined in accordance with clauses
	2.2.8(1)(b) or 2.2.8(2) of the IM determination or where clauses 2.2.8(1)(e) and
	2.2.8(1)(i)(iv) of the IM determination apply with reference to assets with a
	physical asset life determined in accordance with clauses 2.2.8(1)(b) or 2.2.8(2) of
	the IM determination

Depreciation - no	means-
standard life assets	(a) in relation to the unallocated RAB, the sum of unallocated depreciation
	calculated in accordance with clause 2.2.5(1) of the IM determination;
	(b) in relation to the RAB, depreciation calculated in accordance with clause
	2.2.5(2) of the IM determination;
	of assets with a physical asset life determined in accordance with clauses
	2.2.8(1)(a) or 2.2.8(1)(i)(iv)-(v) of the IM determination or where clauses
	2.2.8(1)(e) and 2.2.8(1)(i)(iv) of the IM determination apply with reference to
	assets with a physical asset life determined in accordance with clauses 2.2.8(1)(a)
	or 2.2.8(1)(e) or 2.2.8(1)(i)(iv)-(v) or 2.2.8(1)(k) of the IM determination
Depreciation - standard	means-
	(a) in relation to the unallocated RAB, the sum of unallocated depreciation
	calculated in accordance with clause 2.2.5(1) of the IM determination;
	(b) in relation to the RAB, depreciation calculated in accordance with clause
	2.2.5(2) of the IM determination;
	excluding depreciation - alternative depreciation in accordance with CPP,
	depreciation - modified life assets, and depreciation - no standard life assets
Depreciation charge for	means the depreciation or sum of depreciation as determined in accordance with
the period (RAB)	the IM determination for the relevant asset or assets with non-standard
	depreciation
<u>Dig-in</u>	means any unintended damage to any underground network asset caused by a
	third party
Directly billed	means invoiced directly by the EDB for electricity distribution services, rather than
	by an electricity retailer or other person in an interposed billing relationship
	between the EDB and the consumer
Disposed asset	has the meaning given in paragraph (a) of the defined term in the IM
	determination
Distributed generation	means a cost specified in clause 3.1.3(1)(f) of the IM determination
allowance	
Distributed generation –	means the number of distributed generation connections added to the EDB's
Number of connections	network in the disclosure year
made in year	
Division of the second	
Distributed generation	means the total rate of power output, coincident with the GXP demand, of all
output at HV and above	distributed generation that is connected to the network at a voltage of HV and
B: 1 '1 1' 111'	higher, measured in MW
Distribution and LV	means all underground power cables operated at distribution voltage or low
cables	voltage
Distribution and LV lines	means all overhead power lines operated at distribution voltage or low voltage.
Distribution and LV IIIIes	means an overhead power lines operated at distribution voltage or low voltage.
Distribution cables	means all underground power cables operated at distribution voltage excluding
(excluding LV)	low voltage cables
, ,	
Distribution line charge	means line charge revenue that is not transmission line charge revenue
1	
revenue	

Distribution other (excluding LV) Distribution substations and transformers (a) substations, including all associated pole mountings, ground pads and covers, and kinds and components used to install transformers; and (b) transformers used to convert between distribution switchgear installed at distribution substations but includes using a restored installed at distribution substations but includes using a restored installed at distribution substations but includes using a restored installed at distribution substations but includes using a restored installed at distribution substations but includes using a restored installed at distribution substations but includes using a restored installed at distribution substations but includes using a restored installed at the switchgear includes the value of the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear. Distribution transformer capacity (Non-EDB owned, estimated) The switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and one that are part of, or supplied by, the network and owned by the EDB, expressed in MVA. EDBs should make reasonable inquiries in order to obtain an estimate where it is not alread	Distribution lines	means all overhead power lines operated at distribution voltage excluding low
means network assets operated at distribution voltage which are not distribution cables or distribution lines and excluding low voltage assets means- and transformers (a) substations, including all associated pole mountings, ground pads and covers, and kiosks and components used to install transformers; and (b) transformers used to convert between distribution voltage and low voltage. For the purpose of the RAB disclosure this excludes distribution switchgear installed at distribution substations but includes surge arrestors means all switchgear operated at distribution voltage. This includes disconnectors, sectionalisers, ring main units and voltage regulators. For the purpose of RAB, the value of the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment installed on the switchgear includes the value of protection and controls equipment or supplied by, the network and owned by the EDB, expressed in MVA. EDBs owned, estimated) Distribution transformer capacity (Non-EDB owned, estimated) Distribution transformer capacity (Non-EDB owned, estimated) Distribution fransformer capacity (Non-EDB owned, estimated) The network and owned by the EDB, expressed in MVA. EDBs should make reasonable inquiries in order to obtain an estimate where it is not already known. Duration (Min) means the number of minutes between the start and end of the interruption Electricity lines service charge payable to Transpower Electricity lines service charge	(excluding LV)	
cables or distribution lines and excluding low voltage assets		
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(a) substations, including all associated pole mountings, ground pads and covers, and klosks and components used to install transformers; and (b) transformers used to convert between distribution voltage and low voltage. For the purpose of the RAB disclosure this excludes distribution switchgear installed at distribution substations but includes surge arrestors The purpose of the RAB disclosure this excludes distribution switchgear installed at distribution substations but includes surge arrestors means all switchgear operated at distribution voltage. This includes disconnectors, fuses (including drop outs and fuse switches), circuit breakers, reclosers, sectionalisers, ring main units and voltage regulators. For the purpose of RAB, the value of the switchgear includes the value of protection and controls equipment installed on the switchgear. Distribution transformer capacity (Non-EDB owned) means the sum of the capacities of all distribution transformers that are part of, or supplied by, the network and onto owned by the EDB, expressed in MVA. EDBs should make reasonable inquiries in order to obtain an estimate where it is not already known. Duration (Min) Electricity exports to capacity (Non-EDB owned) Electricity exports to capacity (Non-EDB owned) Electricity losses evice capacity (Non-EDB owned) Electricity losses (loss capacity (Non-EDB owned) Transpower Electricity losses (loss capacity (Non-EDB owned) Electricity supplied from capacity (Non-	(excluding LV)	cables or distribution lines and excluding low voltage assets
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Energy efficiency and demand incentive means a cost specified in clause 3.1.3(1)(m) of the IM determination	· ·	
demand incentive	carried	power system in the specified year, in GWh
demand incentive	Energy efficiency and	means a cost specified in clause 3.1.3(1)(m) of the IM determination

Energy efficiency and demand side management, reduction of energy losses	means, in relation to expenditure, expenditure on assets or operational expenditure where the primary driver is to improve the efficient provision of electricity line services by- (a) improving energy efficiency, including by increasing the amount of energy services consumed or able to be consumed per unit of energy input; (b) encouraging demand side management, including by managing consumers' rate or timing of electricity consumption; or (c) implementing initiatives that reduce electricity losses; (d) implementing initiatives that reduce reactive power flows in the network.
Existing zone substations	means the identifier of an existing zone substation
Expenditure on non- network assets	means expenditure on assets relating to non-network assets
Expenditure or loss deductible but not in regulatory profit / (loss) before tax	means expenditure or loss deductible but not in regulatory profit / (loss) before tax as determined in accordance with clause 2.3.3(4)(b) of the IM determination
Expenditure or loss in regulatory profit / (loss) before tax but not deductible	means expenditure or loss in regulatory profit / (loss) before tax but not deductible as determined in accordance with clause 2.3.3(2)(b) of the IM determination
Expenses cash outflow	means operational expenditure plus pass through and recoverable costs excluding financial incentives and wash-ups
Explanation	means a description or information relevant to the information provided in respect of the existing zone substation that provides additional context or clarification
Extended reserves allowance	means-
	(a) for an EDB subject to a customised price-quality path commencing after 20 December 2016, a cost specified in clause 3.1.3(1)(n) of the IM determination; or
	(b) for an EDB subject to a default price-quality path, a cost specified in clause 3.1.3(1)(o) of the IM determination
	Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April 2020, see clause 3.1.3(1)(n) of the IM determination.

Financial incentions	means the sum of-
Financial incentives	(a) net recoverable costs allowed under net incremental rolling incentive
	scheme;
	(b) purchased assets - avoided transmission charge;
	(c) energy efficiency and demand incentive allowance;
	(d) quality incentive adjustment; and
	(e) other financial incentives
Caina / (lassas) an assat	, ,
Gains / (losses) on asset	means, in relation to-
disposals	(a) asset disposals to a related party, nil; (b) asset disposals to a regulated supplier, nil;
	(c) asset disposals (other than below), means-
	q = a - b
	where
	a = total sale price of the assets
	b = asset disposals (other than below)
Grade unknown	means condition unknown or not yet assessed
Gross term credit	means the sum of term credit spread difference and debt issue cost readjustment
spread differential	for qualifying debt
GXP	means grid exit point
GXP demand	means the maximum coincident import demand of the total of each of the EDB's
	GXP demands, measured in MW. All exports from the EDB's network at the time
	of measurement should be subtracted from the total.
H1	means replacement recommended
	Guidance note: (refer to clause 1.4.1(9)-(10))
	This grade is derived from Figure 1 of the Electricity Engineers' Association
	Asset Health Indicator Guide, published January 2016.
H2	means end of life drivers for replacement present, high asset related risk
nz	means end of the drivers for replacement present, fligh asset related risk
	Guidance note: (refer to clause 1.4.1(9)-(10))
	This grade is derived from Figure 1 of the Electricity Engineers' Association
	Asset Health Indicator Guide, published January 2016.
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Н3	means end of life drivers for replacement present, increasing asset related risk
	Guidance note: (refer to clause 1.4.1(9)-(10))
	This grade is derived from Figure 1 of the Electricity Engineers' Association
	Asset Health Indicator Guide, published January 2016.
H4	means asset serviceable – no drivers for replacement, normal in service
	deterioration
	Guidance note: (refer to clause 1.4.1(9)-(10))
	This grade is derived from Figure 1 of the Electricity Engineers' Association
	Asset Health Indicator Guide, published January 2016.

H5	means as new condition – no drivers for replacement	
	Guidance note: (refer to clause 1.4.1(9)-(10)) This grade is derived from Figure 1 of the Electricity Engineers' Association Asset Health Indicator Guide, published January 2016.	
HV	means high voltage, a nominal AC voltage of 1000 volts and more, or the assets of the EDB that are directly associated with the transport or delivery of electricity at those voltages	
Highest rate of capitalised finance applied	means the highest rate of finance used as the cost of financing capitalised in works under construction	
Human error	means all unplanned customer interruptions resulting from contractors or staff, commissioning errors, incorrect protection settings, SCADA problems, switching errors, dig-in and overhead contact.	
Impact of financial incentives on ROIs	means- $q=a-b$ where $a=\mathrm{ROI}-\mathrm{comparable}$ to a vanilla WACC – reflecting all revenue earned $b=\mathrm{ROI}-\mathrm{comparable}$ to a vanilla WACC - excluding revenue earned from financial incentives	
Impact of wash-up costs on ROIs	 means- q = α - b where a = ROI – comparable to a vanilla WACC – excluding revenue earned from financial incentives b = ROI – comparable to a vanilla WACC – excluding revenue earned from financial incentives and wash-up costs 	
Income included in regulatory profit / (loss) before tax but not taxable	means income included in regulatory profit / (loss) before tax but not taxable as determined in accordance with clause 2.3.3(4)(a) of the IM determination excluding total revaluations	
Income not included in regulatory profit / (loss) before tax but taxable	means income not included in regulatory profit / (loss) before tax that is taxable as determined in accordance with clause 2.3.3(2)(a) of the IM determination	
Incremental gain/(loss) in year	means the incremental change or incremental adjustment term for the disclosure year determined in accordance with clause 3.3.1 of the IM determination	

Industry levies	means-	
·	(a) for an EDB subject to a customised price-quality path commencing after 20 December 2016, a cost specified in clauses 3.1.2(1)(b) and 3.1.2(2)(b)(ii)-(iii) of the IM determination; or	
	(b) for an EDB subject to a default price-quality path, a cost specified in clauses 3.1.2(1)(b)(i) and 3.1.2(2)(b)(ii)-(iii) of the IM determination	
	Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April 2020, see clauses 3.1.2(1)(b) and 3.1.2(2)(b)(ii)-(iii) of the IM determination.	
Input methodology claw-back	means a cost specified in clause 3.1.3(1)(g) of the IM determination	
Installed Firm Capacity	means the capacity as at the last day of the disclosure year that can be delivered from an existing zone substation following:	
	(a) an outage of the highest capacity item of primary equipment within the zone substation; or	
	(b) the highest capacity circuit supplying the zone substation.	
	For the purpose of this definition, primary equipment includes the low voltage circuit of a zone transformer and excludes the low voltage switchboard. Installed Firm Capacity shall be measured in units of MVA	
Installed Firm Capacity + 5 years	means the Installed Firm Capacity forecast by the EDB to be installed at the end of the year that is 5 years after the disclosure year, expressed in MVA	
Installed Firm Capacity Constraint +5 years (cause)	means the cause of any capacity constraint that is forecast by the EDB to impact the existing zone substation at the end of the year that is 5 years after the disclosure year. The cause must be selected from the following options-	
	subtransmission circuit	
	transformer	
	ancillary equipment	
	Transpower	
	• other	
	no constraint forecast within 5 years	
Insurance	means a contract of insurance as defined in the Insurance (Prudential Supervision) Act 2010	

Issue date	means the day on which a qualifying debt or non-qualifying debt is issued	
Items at end of year (quantity)	means the total quantity of assets in the prescribed asset category and asset class installed in the network at the end of the disclosure year, expressed in the prescribed unit	
Items at start of year (quantity)	means the total quantity of assets in the prescribed asset category and asset class installed in the network at the start of the disclosure year, expressed in the prescribed unit	
kWh	means kilowatt-hour	
Length of circuit within 10km of coastline or geothermal areas (where known)	means a circuit, or a section of a circuit, installed within 10 km of any coastline or in any geothermal area, where this information is known to the EDB	
Leverage	has the meaning given in the IM determination	
Lightning	means all unplanned customer interruptions where the primary cause is a lightning strike, resulting in insulation breakdown and or flashovers. Typically protection is the only observable operation.	
Line item	has the meaning given in the IM determination	
Load factor	means	
	a	
	where $a = $ electricity entering system for supply to customers' connection points $b = $ demand on the system for supply to customers' connection points $c = $ number of hours in the disclosure year	
Location	means physical location of the embedded network	
Market value of asset disposals	means the market value of disposed assets sold or transferred to a related party	
Maximum coincident system demand	means the aggregate peak demand for the EDB's network, being the coincident maximum sum of GXP demand and distributed generation output at HV and above, measured in MW	
Merger and acquisition expenditure	means expenditure related to merger and acquisition activities irrespective of the outcome of the merger or acquisition, but proportionate to the extent the benefits of the merger or acquisition would relate to electricity distribution services. Disclosure of benefits to electricity distribution services is required for the merger or acquisition expenditure to be recognised.	
Mid-point estimate of post tax WACC	means the mid-point estimate of post tax WACC for the 5 year period commencing on the first day of the disclosure year determined by the Commission in accordance with clause 2.4.1 of the IM determination	

Mid-point estimate of	means the mid-point estimate of vanilla WAC	C for the 5 year period commencing	
vanilla WACC	on the first day of the disclosure year determined by the Commission in		
	accordance with clause 2.4.1 of the IM determination		
Mid-year net cash	means expenses cash outflow plus assets con	nmissioned less asset disposals plus	
outflows	tax payments less other regulated income		
Monthly net cash	means expenses cash outflow plus assets commissioned less asset disposals less		
outflows	other regulated income		
Monthly ROI — comparable to a post tax WACC	means the monthly ROI comparable to the vanilla WACC less the product of the cost of debt (%), the leverage and the corporate tax rate		
Monthly ROI —	means the internal rate of return for a schedu	means the internal rate of return for a schedule of cash flows that occur according	
comparable to a vanilla	to a schedule of dates where the schedules of	f cash flows and dates are-	
WACC	<u>Cash flows</u>	<u>Dates</u>	
	- Opening RIV	365 days before year-end	
	- Monthly net cash outflows	15 th of the month incurred	
	Line charge revenue	20 th of the month following accrual	
	- Tax payments	182 days before year-end	
	- Term credit spread differential allowance	Year-end	
	Closing RIV	Year-end	
Name of related party	means the name of the related party that has entered into a transaction with the EDB		
Net electricity supplied to (from) other EDBs	means the volume of electricity supplied from (to) the disclosing EDB's network to (from) other EDBs		
Net incremental rolling incentive scheme	means the sum of previous years' incremental gain/loss from the 5 disclosure years preceding the current disclosure year		
Net recoverable costs	means, where-		
allowed under incremental rolling	(a) net incremental rolling incentive scheme is positive, net incremental rolling incentive scheme;		
incentive scheme	(b) net incremental rolling incentive scheme is nil or negative, nil		
Net transfers to (from) other EDBs at HV and above	means the total rate of power transfer to (from) other EDB's networks to which the EDB's network is connected, measured in MW		
Network opex	means the sum of operational expenditure relating to service interruptions and emergencies, vegetation management, routine and corrective maintenance and inspection, and asset replacement and renewal		
New allocation	means the operating costs or regulated service asset values allocated to electricity distribution services in accordance with the new allocator and line items for each of the relevant disclosure years		
New allocator or line item	means the allocator or line items that are used subsequent to the change in allocator or line items		

No. with age unknown	means the total quantity of assets in the prescribed asset category and asset class installed in the network for which no installation information is known and no default date has been assigned	
No. with default dates	means the total quantity of assets in the prescribed asset category and asset class installed in the network at the end of the disclosure year where the original installation year is unknown and that have accordingly been allocated to a default installation year, expressed in the prescribed unit	
Non-electricity distribution services	means services of the EDB that are not electricity distribution services	
Non-network opex	means the sum of operational expenditure relating to system operations and network support, and business support	
Non-qualifying debt	means interest bearing debt that is not a qualifying debt	
Non-standard consumer	means any consumer that is not a standard consumer	
Normalised SAIDI	has the meaning specified in Attachment B	
Normalised SAIFI	has the meaning specified in Attachment B	
Notional deductible interest	has the meaning given in clause 2.3.4(2) of the IM determination	
Notional revenue foregone from posted discounts	means, for the purposes of Schedule 8, the revenue anticipated from posted discounts had they not been applied. Posted discounts has- (a) for EDBs subject to a customised price-quality path commencing after 20 December 2016, the meaning for 'discount' given in clause 3.1.1(11) of the IM determination; or (b) for EDBs subject to a default price-quality path, the meaning given in clause 3.1.1(5) of the IM determination. Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April 2020, see the meaning for 'discount' given in clause 3.1.1(11) of the IM determination.	
Number of assets at disclosure year end by installation date	means the total quantity of assets in the prescribed asset category and asset class installed in the network at the end of the disclosure year that were first installed in the prescribed year, expressed in the prescribed unit	
Number of connections (ICPs)	means the number of points of connection, as represented by unique ICP identifiers having a status of active or inactive, recorded on the registry in accordance with the Electricity industry Participation Code 2010	
Number of ICPs served	means the number of ICPs served by the embedded network	

ОН	means overhead	
Opening deferred tax	has the meaning given in the IM determination	
Opening RIV	means the sum of total opening RAB values plus opening deferred tax	
Opening sum of RAB values without revaluations	means the sum of opening RAB values as determined in accordance with the IM determination, calculated as if no amount of revaluation calculated in accordance with the IM determination had been included in the calculation of any of those opening RAB values following the determination of the initial RAB	
Opening sum of regulatory tax asset values	means the sum of regulatory tax asset values for assets included in the total opening RAB value plus the regulatory tax asset values of assets referred to in clause 2.3.9(4)(b) of the IM determination	
Opening tax losses	has the meaning given in clause 2.3.2(3) of the IM determination	
Opening unamortised initial differences in asset values	has the meaning given in clause 2.3.5(2) of the IM determination	
Opening value of fully depreciated, disposed and lost assets	means (a) in relation to the unallocated RAB, the sum of unallocated RAB included in the total opening RAB values, values of assets that are fully depreciated during the disclosure year, asset disposals and lost assets included in lost and found assets adjustment; (b) in relation to the RAB, the sum of RAB values of assets included in the total opening RAB values that are fully depreciated during the disclosure year, asset disposals and lost assets included in the lost and found assets adjustment	
Opening weighted average remaining useful life of relevant assets (years)	has the meaning given in clause 2.3.5(4) of the IM determination	
Operating surplus / (deficit)	means total regulatory income less operational expenditure less pass through and recoverable costs excluding financial incentives and wash-ups	
Original allocation	means the operational expenditure or regulated service asset values allocated to electricity distribution services in accordance with the allocations and line items made in the previous disclosure year	
Original allocator or line items	means the allocator or line items that were used prior to the change in allocator or line items	

Original tenor	means-
	 (a) where the qualifying debt or non-qualifying debt is not issued to a related party, the term of a qualifying debt or non-qualifying debt at the issue date; (b) where the qualifying debt or non-qualifying debt is issued to a related party, the shorter of the- (i) the tenor of the qualifying debt; or (ii) the period from the qualifying debt's issue date to the earliest date on which its repayment is or may be required
Other adjustments to	means
the RAB tax value	q = a-(b+c-d-e+f+g)
	where:
	a = closing sum of regulatory tax asset values
	b = opening sum of regulatory tax asset values
	c = regulatory tax asset value of assets commissioned
	d = regulatory tax asset value of asset disposals
	$oldsymbol{\mathcal{C}}$ = tax depreciation
	f = lost and found assets adjustment
	g = adjustment resulting from asset allocation
Other financial	means recoverable costs specified by the Commission in a CPP determination
incentives	using an input methodology variation under clause 53V(2)(c) of the Act, and classified by the Commission as a 'financial incentive' in that CPP determination
Other network assets	means network assets used by the EDB to provide electricity lines services that are
	not subtransmission, zone substation, distribution and LV lines, distribution and
	LV cables, distribution substations and transformers or distribution switchgear, and includes central facilities for SCADA and telecommunications systems
Other recoverable costs	means recoverable costs specified by the Commission in a CPP determination
excluding financial	using an input methodology variation under clause 53V(2)(c) of the Act, excluding
incentives and wash-ups	other financial incentives and other wash-ups
Other regulated income	has the meaning given in the IM determination
Other regulated income	means other regulated income excluding gains / (losses) on asset disposals
(other than gains /	
(losses) on asset	
disposals)	
Other related party	means the value of related party transactions that are not disclosed as total
transactions	regulatory income, operational expenditure, capital expenditure or market value
	of asset disposals

Other wesh ups	manns resourced a sects specified by the Commission in a CDD determination	
Other wash-ups	means recoverable costs specified by the Commission in a CPP determination using an input methodology variation under clause 53V(2)(c) of the Act, and classified by the Commission as a 'wash-up' in that CPP determination	
OVABAA allocation increase	has the meaning given in the IM determination	
Overhead	means circuits installed as overhead lines, expressed in km	
Overhead circuit length by terrain (at year end)	means the total length of all circuits operating within the prescribed terrain type	
Overhead circuit requiring vegetation management	means a circuit, or a section of a circuit, which meets the definition of 'conductor' in the Electricity (Hazards from Trees) Regulations 2003 and is installed as an overhead line in an area in which vegetation falls within the 'notice zone' as defined in the Electricity (Hazards from Trees Regulations) 2003-installed in an area that has been identified as requiring ongoing vegetation management due to its proximity with adjacent vegetation that may interfere with the safe and/or secure operation of the circuit	
Overhead contact	means any form of unintended damage to any above ground network asset caused by contact that is not related to vegetation, animals, or ground vehicles	
Overhead to underground conversion	in relation to expenditure, means expenditure on assets incurred in developing underground circuits in circumstances where these primarily replace equivalent existing overhead circuits.	
Passthrough cost	has the meaning specified in clause 3.1.2(1) of the IM determination	
Passthrough and recoverable costs excluding financial incentives and wash-up costs	means the sum of- (a) rates; (b) Commerce Act levies; (c) industry levies; (d) CPP specified pass through costs; (e) electricity lines services charge payable to Transpower; (f) Transpower new investment contract charges; (g) system operator services; (h) distributed generation allowance; (i) extended reserves allowance; and (j) other recoverable costs excluding financial incentives and wash-ups	
Planned interruption cancelled at short notice	A planned interruption cancelled with less than 24 hours' notice	
Planned interruption proceeding on time	Planned interruption proceeding on the date notified and completed within the notified interruption window	
Previous years' incremental gain/(loss)	means the incremental change and incremental adjustment term for the disclosure year in question determined in accordance with clause 3.3.1 of the IM determination	

Previous years' incremental gain/(loss) adjusted for inflation	means the previous years' incremental gain/(loss) carried forward by applying the inflation rate in accordance with clause 3.3.2(1) of the IM determination		
Price category code	means the relevant code in the schedule published by the EDB that uniquely identifies a consumer group for an ICP		
Pricing date	means the day on which a qualifying debt is priced		
Purchased assets - avoided transmission charge	means a cost specified in clause 3.1.3(1)(e) of the IM determination		
Qualifying debt	has the meaning given in paragraph (a) of the defined term in clause 1.1.4(2) of the IM determination		
Quality incentive adjustment	 (a) for an EDB subject to a customised price-quality path commencing after 20 December 2016, a cost specified in clause 3.1.3(1)(o) of the IM determination; or (b) for an EDB subject to a default price-quality path, a cost specified in clause 3.1.3(1)(p) of the IM determination 		
	Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April 2020, see clause 3.1.3(1)(o) of the IM determination.		
Rates	means a cost specified in clause 3.1.2(2)(a) of the IM determination		
Rationale for change	means the rationale for changing the allocator or line items, including whether the change occurred because of change in circumstance or another reason		
Reason for non- standard depreciation	 (a) in relation to assets or groups of assets where depreciation is included in depreciation - no standard life asset, 'no standard life'; (b) in relation to assets or groups of assets where depreciation is included in depreciation - modified life assets, 'modified life'; and 		
	(C) in relation to assets or groups of assets where depreciation is included in depreciation - alternative depreciation determined in accordance with a CPP, 'CPP amendment'		

Reconsideration event	means-	
allowance	(a) for an EDB subject to a customised price-quality path commencing after 20 December 2016, a cost specified in clause 3.1.3(1)(s) of the IM determination; or	
	(b) for an EDB subject to a default price-quality path, a cost specified in clause 3.1.3(1)(t) of the IM determination	
Decoverable costs	Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April 2020, see clause 3.1.3(1)(s) of the IM determination.	
Recoverable costs	has the meaning set out in <u>clause 3.1.3(1)</u> the IM determination	
Regulated supplier	has the meaning given in the IM determination	
Regulatory investment value	means opening RIV	
Regulatory net taxable income	has the meaning given in clause 2.3.1(2) of the IM determination	
Regulatory profit / (loss) before tax	(loss) means the value of q calculated using the following formula: $q = a - b + c$	
	<pre>where: a = operating surplus / (deficit) b = total depreciation c = total revaluations</pre>	
Regulatory profit / (loss) including financial incentives and wash-ups	means the regulatory profit / (loss) before tax less the regulatory tax allowance less term credit spread differential allowance	
Regulatory tax allowance	has the meaning given in clause 2.3.1 of the IM determination	
Regulatory tax asset value	has the meaning given in the IM determination	
Regulatory tax asset	means the sum of regulatory tax asset values for assets that have a value in asset	
value of asset disposals	disposals	
Regulatory tax asset	means the sum of regulatory tax asset values for assets that have a value in assets	
value of assets	commissioned	
commissioned		
Regulatory taxable income	has the meaning given in the IM determination	
Remote	means a circuit, or a section of a circuit, installed in an area which are situated more than 75 km from the EDB's, or the EDB's contractor's, nearest works depot	

 applying research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use. Revaluation rate RMU means ring main unit ROI ROI - comparable to a post tax WACC (a) in relation to the ROI - comparable to a post tax WACC reflecting all revenue earned q = a - (d × e × f) (b) in relation to the ROI - comparable to a post tax WACC excluding revenue earned from financial incentives q = b - (d × e × f) (c) in relation to the ROI - comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups q = c - (d × e × f) where a = ROI - comparable to a vanilla WACC reflecting all revenue earned b = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives c = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives d = cost of debt assumption e = leverage f = corporate tax rate 	Research and development	 in relation to expenditure, means expenditure on assets or operational expenditure where the primary driver for the expenditure relates to increasing the efficient provision of electricity lines services through- implementing an original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge or understanding; or 		
RMU means ring main unit ROI means return on investment ROI – comparable to a post tax WACC (a) in relation to the ROI – comparable to a post tax WACC reflecting all revenue earned $q = a - (d \times e \times f)$ (b) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives $q = b - (d \times e \times f)$ (c) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups $q = c - (d \times e \times f)$ where $a = ROI - comparable to a vanilla WACC reflecting all revenue earned b = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives c = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives d = cost of debt assumption e = \text{leverage}$		 applying research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production 		
ROI — comparable to a post tax WACC (a) in relation to the ROI — comparable to a post tax WACC reflecting all revenue earned $q = a - (d \times e \times f)$ (b) in relation to the ROI — comparable to a post tax WACC excluding revenue earned from financial incentives $q = b - (d \times e \times f)$ (c) in relation to the ROI — comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups $q = c - (d \times e \times f)$ where $a = ROI — comparable to a vanilla WACC reflecting all revenue earned b = ROI — comparable to a vanilla WACC excluding revenue earned from financial incentives c = ROI — comparable to a vanilla WACC excluding revenue earned from financial incentives d = cost of debt assumption e = leverage$	Revaluation rate	has the meaning given in the IM determination		
ROI – comparable to a post tax WACC (a) in relation to the ROI – comparable to a post tax WACC reflecting all revenue earned $q = a - (d \times e \times f)$ (b) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives $q = b - (d \times e \times f)$ (c) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups $q = c - (d \times e \times f)$ where $a = \text{ROI} - \text{comparable to a vanilla WACC reflecting all revenue earned}$ $b = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives}$ $c = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives}$ $d = \text{cost of debt assumption}$ $e = \text{leverage}$	RMU	means ring main unit		
post tax WACC (a) in relation to the ROI – comparable to a post tax WACC reflecting all revenue earned $q = a - (d \times e \times f)$ (b) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives $q = b - (d \times e \times f)$ (c) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups $q = c - (d \times e \times f)$ where $a = ROI - comparable to a vanilla WACC reflecting all revenue earned b = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives c = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives d = cost of debt assumption e = leverage$	ROI	means return on investment		
 q = a - (d × e × f) (b) in relation to the ROI - comparable to a post tax WACC excluding revenue earned from financial incentives q = b - (d × e × f) (c) in relation to the ROI - comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups q = c - (d × e × f) where a = ROI - comparable to a vanilla WACC reflecting all revenue earned b = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives c = ROI - comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups d = cost of debt assumption e = leverage 	•	(a) in relation to the ROI – comparable to a post tax WACC		
revenue earned from financial incentives $q = b - (d \times e \times f)$ (c) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups $q = c - (d \times e \times f)$ where $a = \text{ROI} - \text{comparable to a vanilla WACC reflecting all revenue earned}$ $b = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives}$ $c = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives}$ $d = \text{cost of debt assumption}$ $d = \text{cost of debt assumption}$ $e = \text{leverage}$				
(c) in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives and wash-ups $q = c - (d \times e \times f)$ where $a = \text{ROI} - \text{comparable to a vanilla WACC reflecting all revenue earned}$ $b = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives}$ $c = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups}$ $d = \text{cost of debt assumption}$ $e = \text{leverage}$				
revenue earned from financial incentives and wash-ups $q = c - (d \times e \times f)$ where $a = \text{ROI} - \text{comparable to a vanilla WACC reflecting all revenue earned}$ $b = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives}$ $c = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups}$ $d = \text{cost of debt assumption}$ $e = \text{leverage}$		$q = b - (d \times e \times f)$		
where $a = \text{ROI} - \text{comparable to a vanilla WACC reflecting all revenue earned}$ $b = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives}$ $c = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups}$ $d = \text{cost of debt assumption}$ $e = \text{leverage}$				
$a={\sf ROI}$ – comparable to a vanilla WACC reflecting all revenue earned $b={\sf ROI}$ – comparable to a vanilla WACC excluding revenue earned from financial incentives $c={\sf ROI}$ – comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups $d={\sf cost}$ of debt assumption $e={\sf leverage}$		$q = c - (d \times e \times f)$		
$b={ m ROI}-{ m comparable}$ to a vanilla WACC excluding revenue earned from financial incentives $c={ m ROI}-{ m comparable}$ to a vanilla WACC excluding revenue earned from financial incentives and wash-ups $d={ m cost}$ of debt assumption $e={ m leverage}$		where		
incentives $c = \text{ROI} - \text{comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups}$ $d = \text{cost of debt assumption}$ $e = \text{leverage}$		a = ROI – comparable to a vanilla WACC reflecting all revenue earned		
incentives and wash-ups $d = {\rm cost\ of\ debt\ assumption}$ $e = {\rm leverage}$				
e = leverage		·		
		d = cost of debt assumption		
f = corporate tax rate		e = leverage		
		f = corporate tax rate		

ROI – comparable to a	means the internal rate of return for a schedule of cash flows that occur according		
vanilla WACC	to a schedule of dates where the schedules of cash flows and dates-		
	(a) in relation to the ROI — comparable to a vanilla WACC reflecting all		
	revenue earned, are-		
	<u>Cash flows</u>	<u>Dates</u>	
	- Opening RIV	365 days before year-end	
	- Mid-year net cash outflows	182 days before year-end	
	Line charge revenue	148 days before year-end	
	- Term credit spread differential allowance	Year-end	
	Closing RIV	Year-end	
	(b) in relation to the ROI – comparable to a va	anilla WACC excluding revenue	
	earned from financial incentives, are-		
	<u>Cash flows</u>	<u>Dates</u>	
	- Opening RIV	365 days before year-end	
	- (Mid-year net cash outflows less (financial	182 days before year-end	
	incentives multiplied by the corporate tax rate))		
	Line charge revenue less financial incentives	148 days before year-end	
	- Term credit spread differential allowance	Year-end	
	Closing RIV	Year-end	
		anilla WACC excluding revenue	
	(c) in relation to the ROI — comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups, are-		
	<u>Cash flows</u>	<u>Dates</u>	
	- Opening RIV	365 days before year-end	
	- (Mid-year net cash outflows less (financial	182 days before year-end	
	incentives and wash-ups multiplied by the corporate tax rate))	102 days before year end	
	Line charge revenue less financial incentives and wash-up costs	148 days before year-end	
	- Term credit spread differential allowance	Year-end	
	Closing RIV	Year-end	
Routine expenditure	means expenditure on assets related to non-network assets that is not atypical expenditure		
Rugged	means a circuit, or a section of a circuit, installed in an area where normal line construction vehicles and plant cannot be used and where it is necessary to use		
	helicopters, tracked vehicles, boats, or other specialised plant or where difficult		
	physical or climatic conditions involving swampy ground, high winds or snow exist		
and non standard line construction designs are employed to accommod conditions			
Rural	means a circuit, or a section of a circuit, installed in	n a ruralised area where the	
average HV span length is approximately 70 - 80 metres, and does not		etres, and does not include	
	those circuits located in remote and/or rugged area	as	

SAIDI reliability limit	means the SAIDI reliability limit that applies to the non-exempt EDB in respect of the disclosure year under an applicable s52P determination
SAIFI reliability limit	means the SAIFI reliability limit that applies to the non-exempt EDB in respect of the disclosure year under an applicable s52P determination
Security of supply classification	means the classification of the existing zone substation on the basis of the ability to supply the current peak load without curtailment or interruption if 1 or more zone substation transformers installed at the existing zone substation are not operating. Valid classification types are-
	 N, means that the current peak load may only be supplied without curtailment or interruption if all zone substation transformers are operating;
	 N minus 1 (or N-1), means that the current peak load may be supplied without curtailment or interruption including if the largest zone substation transformer is not operating;
	 N minus 2 (or N-2), means that the current peak load may be supplied without curtailment or interruption including if the largest 2 zone substation transformers are not operating;
	 N minus 1 switched (or N-1 switched), means that the current peak load may be supplied following a brief interruption during which switching is carried out to re-establish supply following an unexpected outage of the largest zone substation transformer;
Self-insurance allowance	means any self-insurance allowance allowed by the Commission through a CPP
Standard consumer	means a consumer of the EDB that has a standard contract with that EDB for the provision of electricity lines services
Subtransmission cables	means all power cables operated at a subtransmission voltage
Subtransmission lines	means all power lines operated at a subtransmission voltage
SWER	means single wire earth return
System operator services	means a cost specified in clause 3.1.3(1)(d) of the IM determination
Tax depreciation	has the meaning given in clause 2.3.8(3) of the IM determination
Tax effect	has the meaning given in the IM determination
Tax effect of adjusted depreciation	means the tax effect of adjusted depreciation, using the definitions of "tax effect" and "adjusted depreciation" in this schedule

Tax effect of amortisation of initial differences in asset values	means the tax effect of amortisation of initial differences in asset values, using the definition of "tax effect" and "amortisation of initial difference in asset values" in this schedule
Tax effect of other temporary differences	means the tax effect of positive temporary differences less negative temporary differences but excluding deferred tax balances relating to assets disposed in the disclosure year. Positive temporary differences and negative temporary differences have the meanings set out in clause 2.3.8(4) and (5) of the IM determination
Tax effect of tax depreciation	means the tax effect of total tax depreciation using the definitions of "tax effect" and "tax depreciation" in this schedule
Tax payments	means regulatory tax allowance less opening deferred tax plus closing deferred tax
Term credit spread difference	has the meaning given in the IM determination
Term credit spread differential allowance	has the meaning given in the IM determination
Third party interference	means all unplanned customer interruptions resulting from external contractors or members of the <u>public and includes dig-in</u> , <u>overhead contact</u> , <u>vandalism</u> , <u>and vehicle damage</u>
Time taken to quote new connections and alterations to existing connections	means the time taken for an EDB to provide a quote for the physical works for a new connection or an alternation to an existing connection, beginning with the EDB's receipt of the customer request and ending with the customer's receipt of the EDB's quote
Time taken to install new connections and alterations to existing connections	means the time taken for an EDB to install a new ICP or alter an existing ICP beginning with the later of the customer's agreement to the proposed design and quote, payment of any required upfront payment by the customer, and readying of the site by the customer, and ending with the receipt of the certificate of compliance for new connections or power restoration to the customer's ICP for alterations
Total attributable to regulated service	means the sum of directly attributable costs or assets and not directly attributable costs or assets that are- attributable to electricity distribution services
Total book value of interest bearing debt	means the sum of book value of qualifying debt and non-qualifying debt at the date of the latest general purpose financial statements
Total closing RAB value	means- (a) in relation to the unallocated RAB, the sum of unallocated closing RAB values as determined in accordance with the IM determination; (b) in relation to the RAB, the sum of closing RAB values as determined in accordance with the IM determination

Total depreciation	means-
	(a) in relation to the unallocated RAB, the sum of unallocated depreciation as
	determined in accordance with the IM determination;
	(b) in relation to the RAB or regulatory profit, the sum of depreciation as
	determined in accordance with the IM determination
Total distribution	means the sum of the distribution transformer capacity (EDB owned) and the
transformer capacity	distribution transformer capacity (Non-EDB owned), expressed in MVA
Total energy delivered	means the volume of electricity supplied through the EDB's network to
to ICPs	connection points, as measured at connection points, in GWh
Total opening RAB value	means-
subject to revaluation	(a) in relation to the unallocated RAB, total opening RAB values - unallocated
	RAB less opening value of fully depreciated, disposed and lost assets -
	unallocated RAB;
	(b) in relation to the RAB, total opening RAB values - RAB less opening value of
T-t-luul-tiu	fully depreciated, disposed and lost assets - RAB
Total regulatory income	means-
	(a) in relation to the Report on Regulatory Profit, the sum of line charge
	revenue, gains / (losses) on asset disposals and other regulated income
	(b) in relation to the Report on Related Party Transactions, the income from
	related party transactions after applying clause 2.3.6 of this determination
Total revaluations	means-
	(a) in relation to the unallocated RAB, the sum of unallocated revaluation as determined in accordance with the IM determination;
	(b) in relation to the RAB or regulatory profit, the sum of revaluations as
	determined in accordance with the IM determination
Total value of	means the total value of the related party transactions with a related party, as
transactions	determined in accordance with clause 2.3.6 of this determination and clauses
	2.2.11(1)(g) and 2.2.11(5) of the IM determination
Transfer capacity	means the additional capacity, transferable within the time frame of the EDB's
	security standards, that is available to augment the capacity of the existing zone
	substation by switching circuits, via the distribution feeder network, that may
	supply the existing zone substation from other zone substations. Expressed in units of MVA.
	diffes of MVA.
Transformer capacity	means the total capacity (in kVA) of the following transformers on the network:
	(a) those transformers with secondary voltages of 230 volts or 400 volts (using
	the lower continuous rating if a dual rating is applied); and
	(b) any other transformers operating at voltages higher than those specified in
	paragraph (a) and through which electricity consumers are directly supplied
	with electricity (using the lower continuous rating if a dual rating is applied)

Transitional SAIDI value	means SAIDI value as defined in the Electricity Distribution Information Disclosure
	Determination 2012 (prior to the 2022 amendments), determined by adopting the
	same method the EDB applied for disclosure year 2022 (ie, recording and
	including any interruptions that follow an initial interruption that either: (a) relate
	directly to that initial interruption; or (b) occur as part of the process of restoring
	supply of electricity lines services following that initial interruption).
<u>Transitional SAIFI value</u>	means SAIDI value as defined in the Electricity Distribution Information Disclosure
	Determination 2012 (prior to the 2022 amendments), determined by adopting the
	same method the EDB applied for disclosure year 2022 (ie, recording and
	including interruptions that follow an initial interruption that either: (a) relate
	directly to that initial interruption; or (b) occur as part of the process of restoring
	supply of electricity lines services following that initial interruption).
Transmission asset	means-
wash-up allowance	(a) for an EDB subject to a customised price-quality path commencing after 20
'	December 2016, a cost specified in clause 3.1.3(1)(q) of the IM
	determination; or
	(b) for an EDB subject to a default price-quality path, a cost specified in clause
	3.1.3(1)(r) of the IM determination
	σ. <u>σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.σ.</u>
	Guidance note: (refer to clause 1.4.1(9)-(10))
	Clause 1.1.2(4) of the IM determination sets out when various amendments
	to the IM determination apply as a result of our 2016 input methodologies
	review. Changes to Part 3 and Part 4 of the IM determination only apply for
	a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)).
	Accordingly, for an EDB subject to a default price-quality path after 1 April
	2020, see clause 3.1.3(1)(q) of the IM determination.
Transmission line	means line charge revenue relating to transmission charges
	ineans line charge revenue relating to transmission charges
charge revenue	
Transpower	has the meaning as defined in s 54B of the Act
Transpower new	means a cost specified in clause 3.1.3(1)(c) of the IM determination
investment contract	
charges	
Unallocated overhead	means a circuit, or a section of a circuit, installed in an area that is not an urban,
lines	rural, remote or rugged area
iiies	Tural, remote or rugged area
<u>Unplanned</u>	Unplanned interruptions that the EDB intentionally initiated to carry out work on
interruptions not	its network that did not directly relate to a fault, eg, planned interruptions that
directly related to a	are recorded as unplanned because they are not properly notified.
<u>fault</u>	
Underground	means the total length of all circuits that are installed as underground cables,
	expressed in km
	'
Unknown	means all unplanned interruptions where the cause is not known

Urban	means a circuit, or a section of a circuit, installed in an area where the average HV span length is approximately 40 - 50 metres, located in urbanised locations but does not include those circuits located in rural, remote and/or rugged areas
Utilisation of Installed Firm Capacity %	means the current peak load expressed as a percentage of the Installed Firm Capacity
Utilisation of Installed Firm Capacity + 5yrs %	means the Utilisation of Installed Firm Capacity forecast by the EDB at the end of the year that is 5 years after the disclosure year, expressed in MVA
Utilised tax losses	has the meaning given in paragraph (a) of the defined term in the IM determination
Vandalism	means any unintended destruction of, or damage to, any network asset
Vegetation	means all unplanned customer interruptions resulting from vegetation contact, includes debris, grass and tree contact.
Vehicle damage	means any unintended damage to any network assets caused by a ground vehicle
WACC rate used to set regulatory price path	 (a) in relation to an EDB subject to a section 52P determination setting out the requirements of a default price-quality path, the WACC estimate determined in accordance with clause 4.4.7(1) of the IM determination for the DPP regulatory period the disclosure year falls within; Guidance note: (refer to clause 1.4.1(9)-(10)) Clause 1.1.2(4) of the IM determination sets out when various amendments to the IM determination apply as a result of our 2016 input methodologies review. Changes to Part 3 and Part 4 of the IM determination only apply for a DPP in force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)). Accordingly, for an EDB subject to a default price-quality path after 1 April 2020, see clause 4.4.5(1)-(2) of the IM determination. (b) in relation to an EDB subject to an amendment to a section 52P determination setting out the requirements of a CPP, the WACC estimate used to set that CPP determination for the disclosure year; and (c) in relation to an EDB not subject to price-quality regulation, 'n/a'
Wash-up costs	means the sum of- (a) input methodology claw-back; (b) CPP application recoverable costs; (c) catastrophic event allowance; (d) capex wash-up adjustment; (e) transmission asset wash-up allowance; (f) 2013-15 NPV wash-up allowance; (g) reconsideration event allowance; and (h) other wash-ups
Weighted average expected total asset life	means the weighted average expected total asset life of assets calculated by using the opening RAB values as weights where opening RAB value has the meaning given in the IM determination
Weighted average remaining asset life	means the weighted average remaining asset life of assets calculated by using the opening RAB values as weights where remaining asset life and opening RAB value has the meaning given in the IM determination

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Wildlife	means all unplanned customer interruptions resulting from wildlife contact - includes birds, possums, vermin, cats etc.
Year-end ROI – comparable to a post tax WACC	means the year-end ROI comparable to the vanilla WACC less the product of the cost of debt assumption(%), the leverage and the corporate tax rate
Year-end ROI — comparable to a vanilla WACC	means: $q = \frac{a - (b + c)}{d + (e \times .5)}$ where:
	 a = Regulatory profit / (loss) including financial incentives and wash-ups b = Financial incentives c = Wash-ups d = Opening RIV e = Assets commissioned
Zone substation transformer capacity	means the sum of the capacities of all zone substation transformers that are part of the network

Schedule 17 Certification for Year-beginning Disclosures

Clause 2.9.1

We, [insert full names], being directors of [name of EDB] certify that, having made all reasonable enquiry, to the best of our knowledge:

- a) the following attached information of [name of EDB] prepared for the purposes of clauses 2.4.1, 2.6.1, 2.6.3, 2.6.6 and 2.7.2 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.
- b) The prospective financial or non-financial information included in the attached information has been measured on a basis consistent with regulatory requirements or recognised industry standards.
- c) The forecasts in Schedules 11a, 11b, 12a, 12b, 12c and 12d are based on objective and reasonable assumptions which both align with [name of EDB]'s corporate vision and strategy and are documented in retained records.

[Signatures of 2 directors] [Date]

Schedule 18 Certification for Disclosures

Clauses 2.9.2 and 2.9.5

We, [insert full names], being directors of [name of EDB] certify that, having made all reasonable enquiry, to the best of our knowledge-

- a) the information prepared for the purposes of clauses 2.3.1, 2.3.2, 2.4.21, 2.4.22, 2.5.1, 2.5.2, [if the EDB is Aurora Energy Limited, insert '1.1.1, 2.5.4(1) to (3), 2.5.5(1), 2.5.6(2),'] and 2.7.1 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination; and
- b) the historical information used in the preparation of Schedules 8, 9a, 9b, 9c, 9d, 9e, 10, and 14 has been properly extracted from the [name of EDB]'s accounting and other records sourced from its financial and non-financial systems, and that sufficient appropriate records have been retained [and if not, what records and systems were used].
- c) *[In respect of information concerning assets, costs and revenues valued or disclosed in accordance with clause 2.3.6 of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012, we are satisfied that
 - i. the costs and values of assets or goods or services acquired from a related party comply, in all material respects, with clauses 2.3.6(1) and 2.3.6(3) of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5)(a)-2.2.11(5)(b) of the Electricity Distribution Services Input Methodologies Determination 2012; and
 - ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the Electricity Distribution Information Disclosure Determination 2012.]
- d) * [in respect of the application of OVABAA in the allocation of costs or assets in accordance with clause 2.1.4 of the Electricity Distribution Services Input Methodologies Determination 2012, we are satisfied that the unregulated service would be unduly deterred if the OVABAA allocation was less than that disclosed.]

[Signatures of 2 directors] [Date]

^{*} Delete if inapplicable