

ISBN 978-1-869458-75-1 Project no. 44933

**Public** version

# [Draft] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021 [2021] NZCC XX

The Commission: Sue Begg

Elisabeth Welson John Crawford Dr Derek Johnston

Date of decision: [XX] August 2021

[Signature]
Dated at Wellington this [XX] day of August 2021
COMMERCE COMMISSION
Wellington, New Zealand

3957687

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
[XX] August 2021	[2021] NZCC [XX]	Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

3

# [Drafting notes:

- This amendment determination amends the Electricity Distribution Information
   Disclosure Determination 2012 [2012] NZCC 22 ('principal determination') to
   introduce new information disclosure requirements applying only to Aurora Energy
   Limited.
- The included amendments are made under s 52Q of the Commerce Act 1986.
- Amendments to the body of the principal determination are marked as track changes in red.]

л

# Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

# **CONTENTS**

- 1. TITLE
- 2. INTERPRETATION
- 3. DETERMINATION AMENDED
- 4. COMMENCEMENT AND APPLICATION
- 5. PRINCIPAL DETERMINATION AMENDMENTS

\_

6

### 1. TITLE

(a) This determination is the Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021.

### 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 the principal determination that are tracked in red in Appendix B.

# Appendix A:

# ELECTRICITY DISTRIBUTION INFORMATION DISCLOSURE DETERMINATION 2012

PART 1	GENERAL PROVISIONS	1112
1.1	TITLE	1112
1.2	COMMENCEMENT DATE	1112
1.3	APPLICATION	<u>11</u> 12
1.4	INTERPRETATION	1112
PART 2	DISCLOSURE REQUIREMENTS	51
2.1	INFORMATION DISCLOSURE	51
2.2	APPLICABLE INPUT METHODOLOGIES	51
2.3	FINANCIAL INFORMATION FOR THE DISCLOSURE YEAR	51
2.4	PRICING AND RELATED INFORMATION	59
2.5	NON-FINANCIAL INFORMATION RELATING TO NETWORK ASSET	S <u>68</u> 67
2.6	ASSET MANAGEMENT PLANS AND FORECAST INFORMATION	6972
2.7	EXPLANATORY NOTES TO DISCLOSED INFORMATION	<u>76</u> 74
2.8	ASSURANCE REPORTS	<u>77</u> 75
2.9	CERTIFICATES	8381
2.10	RETENTION AND CONTINUING DISCLOSURES	<u>8482</u>
2.11	EXEMPTIONS	8482
2.12	DISCLOSURE OF ERRORS IN PREVIOUSLY DISCLOSED INFORMATION	8482
ATTACHMEN <sup>*</sup>	T A ASSET MANAGEMENT PLANS	8684
ATTACHMEN <sup>-</sup>	T B CALCULATION OF NORMALISED SAIDI AND SAIFI	10199
ATTACHMEN <sup>-</sup>	T C ANNUAL DELIVERY REPORT	103101
COUEDING 1	ANALYTICAL DATIOS	102100

SCHEDULE 2 REPORT ON RETURN ON INVESTMENT	111109
SCHEDULE 3 REPORT ON REGULATORY PROFIT	113111
SCHEDULE 4 REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLI FORWARD)	LED 115 <mark>113</mark>
SCHEDULE 5A REPORT ON REGULATORY TAX ALLOWANCE	118116
SCHEDULE 5B REPORT ON RELATED PARTY TRANSACTIONS	120118
SCHEDULE 5C REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWAN	NCE <u>121</u> 119
SCHEDULE 5D REPORT ON COST ALLOCATIONS	<u>122</u> 120
SCHEDULE 5E REPORT ON ASSET ALLOCATIONS	125123
SCHEDULE 5F REPORT SUPPORTING COST ALLOCATIONS	126124
SCHEDULE 5G REPORT SUPPORTING ASSET ALLOCATIONS	129127
SCHEDULE 6A REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE Y	EAR <u>131<del>129</del></u>
SCHEDULE 6B REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOS YEAR	SURE 134132
SCHEDULE 7 COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE	136134
SCHEDULE 8 REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENU	JES <u>137</u> 135
SCHEDULE 9A ASSET REGISTER	139137
SCHEDULE 9B ASSET AGE PROFILE	140138
SCHEDULE 9C REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES	S <u>141139</u>
SCHEDULE 9D REPORT ON EMBEDDED NETWORKS	142140
SCHEDULE 9E REPORT ON NETWORK DEMAND	143141
SCHEDULE 10 REPORT ON NETWORK RELIABILITY	144142
SCHEDULE 11A REPORT ON FORECAST CAPITAL EXPENDITURE	146144
SCHEDULE 11B REPORT ON FORECAST OPERATIONAL EXPENDITURE	154152
SCHEDULE 12A REPORT ON ASSET CONDITION	<u>156</u> 154
SCHEDULE 12B REPORT ON FORECAST CAPACITY	<u>158</u> 156
SCHEDULE 12C REPORT ON FORECAST NETWORK DEMAND	159157

SCHEDULE 12D REPORT ON FORECAST INTERRUPTIONS AND DURATION	160158
SCHEDULE 13 REPORT ON ASSET MANAGEMENT MATURITY	<u>161</u> 159
SCHEDULE 14 MANDATORY EXPLANATORY NOTES	180178
SCHEDULE 14A MANDATORY EXPLANATORY NOTES ON FORECAST INFORMATION	186184
SCHEDULE 15 VOLUNTARY EXPLANATORY NOTES	<u>187</u> <del>185</del>
SCHEDULE 16 DEFINITIONS OF TERMS USED IN SCHEDULES 1 TO 15	188186
SCHEDULE 17 CERTIFICATION FOR YEAR-BEGINNING DISCLOSURES	<u>219</u> 217
SCHEDULE 18 CERTIFICATION FOR DISCLOSURES	220218

# Appendix B:

### 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 consolidates all amendments to the **principal determination** as of 3 April 2018 and applies from the commencement of **disclosure year** 2019.

### 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 section 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;
  - 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;
  - (3)(4) A reference to a 'Schedule' or to an 'Attachment' is to a Schedule or to an Attachment of this determination;
  - (4)(5) A word which denotes the singular also denotes the plural and vice versa;
  - (5)(6) An obligation to do something is deemed to include an obligation to cause that thing to be done;
  - (6)(7) Financial items must be measured and disclosed in accordance with GAAP unless otherwise required by this determination or the IM determination;

- (7)(8) Non-financial items must be measured and disclosed in accordance with standard industry practice unless otherwise required in this determination;
- (8)(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;
- (9)(10) Where any material referred to in guidance notes is inconsistent with this determination, this determination prevails; and
- (10)(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(8)-(9))

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-

### A

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 applicable CPP

determination or DPP determination

Allocated works under

construction

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

13

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

Alternate day means, for the purposes of an intended

interruption, a calendar day (dd/mm/yyyy)
eutside the notified interruption window
when that intended interruption is permitted
to occur, as specified in an additional notice
has the meaning given in the applicable CPP
determination or DPP determination

Amalgamate 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 publicly discloses

and of which Aurora presents a summary of the key features under clauses 2.5.62.5.5 and

2.5.82.5.7

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

determination

Guidance note: (refer to clause 1.4.1(8)-

(9))

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 1.4 and 1.5.3 of Attachment C;

16

- (c) the **related party transactions** information disclosed under clauses 2.3.8, 2.3.10-2.3.12; and
- (d) the explanatory notes disclosed in boxes 1 to 11 of Schedule 14 under clause 2.7; and

(d)(e) clause 1.3 of Attachment C.

Aurora Energy Limited and any

subsequent entity or entities that it becomes because of any amalgamation, merger, or

major transaction

<u>Aurora CPP</u> <u>means the Aurora Energy Limited Electricity</u>

Distribution Customised Price-Quality Path

Determination 2021 [2021] NZCC 3

<u>Aurora Pricing Region</u> <u>means Aurora's three sub-networks -</u>

(a) Dunedin;

(b) Central Otago and Wanaka; and

(c) Queenstown

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

В

Business support means operational expenditure associated

with the following corporate activities-

- (a) human resources and training (other than operational training);
- (b) finance and regulation including compliance activities, valuations and auditing;
- (c) costs of chief executive officer and board;
- (d) legal services;

17

- (e) consulting services (excluding engineering/technical consulting);
- (f) property management;
- (g) corporate communications;
- (h) corporate IT;
- (i) industry liaison and participation;
- (j) commercial activities including pricing, billing, revenue collection and marketing; or
- (k) liaison with Transpower, customers and electricity retailers

C

### **Capital contributions**

has the meaning given in the IM determination

### Capital expenditure

means-

- (a) in relation to the unallocated works under construction, costs-
  - 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-
  - 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;
  - (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)

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

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

Commission

Commissioned has the meaning given in the IM

determination

means the Commerce Commission

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

**Connection point** see the definition of ICP

Complaint means any expression of dissatisfaction made

> to or about Aurora where a response or a resolution is explicitly or implicitly expected. For example, a complaint may be made by letter, email, phone call, text message or a post on a social media page maintained by Aurora, but not on a social media page maintained by the person who has made the complaint or a third partya consumer communicates to an EDB by oral or written means regarding the EDB's supply of electricity distribution services

**Constant prices** means, in relation to the prospective disclosures made under clauses 2.6.1 and

19

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) in relation to clauses 2.4.23 and 2.4.24 of this determination, the definition given in s 54D(2) of the Act;
- (b) for the purpose of information disclosure requirements relating to Aurora's customer charter and consumer compensation scheme, a person that consumes electricity lines services; and
- (b)(c) in all other instances, a person that consumes or acquires electricity lines services

# Consumer compensation scheme

means an arrangement an EDB adopts to compensate impacted consumers in a prescribed manner if the EDB fails to meet specified minimum standards of performance in supplying electricity distribution services to 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
- (a) 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

21

 (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 an EDB uses to—

allocate target revenue amongst each of the EDB's consumer groups; and determine how the EDB sets prices in relation to each consumer group

CPP

has the meaning given in the IM determination

**CPP** determination

has the meaning given in the IM

determinationmeans a CPP determination in
relation to electricity distribution services
made by the Commission under s 52P of the

**CPP** regulatory period

means the period to which a relevant CPP determination relates

Current year or CY

means-

(a) in relation to the historic disclosures made under clause 2.3.1 of this

22

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:

(a) what consumers can expect from the EDB in its supply of electricity distribution services; and

<del>(a)</del>(b)

consumer compensation scheme

### **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
- I where a '+' precedes the 'X', the Xth year following the current year

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  $\ensuremath{\text{IM}}$ 

determination

	×	•	٠
	,		٠
-	۰,		

Series 7.5		
Dina	osure vea	100
DISC	usure vea	

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  $\ensuremath{\text{IM}}$ 

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 kV and up to and including 30 kV;
- (b) excludes those voltages used within the network in the role or manner of a subtransmission voltage

# **DPP** determination

has the meaning given in the IM

determination means a default price quality path determination in relation to electricity distribution services made by the Commission under s 52P of the Act

## 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

24

(b) network management

(c) L vegetation management

(d) connection and disconnection services

(e) | load control

**Electricity distribution services** 

has the meaning given in the 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

Engineer

has the meaning given in the IM

determination

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, for any specific feeder, that feeder's contribution to network **SAIDI** 

Feeder SAIFI

means, for any specific feeder, that feeder's contribution to network **SAIFI** 

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

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 for the purpose of clauses 2.8.5A and 2.8.5B,

has the meaning given in the IM

determination

Independent appraiser means-

(a) the independent auditor; or

(b) a person who-

 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

28

# 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** determination

### Intended interruption

has the meaning given in the applicable CPP determination or DPP determinationmeans a Class B (planned interruption on the network) that is planned by an EDB but has not yet commenced, where:

additional notice has been given; and

(a) it is recorded as a 'notified interruption' in the EDB's internal systems

# Intended interruption cancelled with notice

has the meaning given in the applicable CPP determination or DPP determinationmeans an intended interruption that Aurora cancels by giving no less than 24 hours' notice before the scheduled start time of the intended interruption (as specified in the notified interruption window or alternate day) to all persons that were provided the additional notice of the intended interruption

# Intended interruption cancelled without notice

has the meaning given in the applicable CPP determination or DPP determinationmeans an intended interruption that Aurora cancels but which is not an intended interruption cancelled with notice

### 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, 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(8)-(9))

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.

K

km means kilometre

kV means kilovolt

kVA means kilovolt ampere

kWh means kilowatt hour

30

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

M

### 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 EBD 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;

N

### 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

32

### 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

### Notified interruption window

has the meaning given in the applicable CPP determination or DPP determinationmeans the period of time within which an intended interruption is due to occur, as specified in an additional notice that specifies the start date (dd/mm/yyyy) and start time (hh:mm am/pm, or, hh:mm 24-hour format) and end date (dd/mm/yyyy) and end time (hh:mm am/pm, or, hh:mm 24-hour format) of the intended interruption

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

33

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 IM

determination

P

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

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 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 cancelled

with notice

means a planned interruption that Aurora cancels by giving, either to the public or to all electricity consumers affected by the interruption, no less than 24 hours' 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 system average interruption duration
I Idillied Shibi values	means system average meen aprion danadon

index values based on Class B (planned

interruptions on the network)

Planned SAIDI assessed value has the meaning as defined in the Aurora CPP

Planned SAIFI values means system average interruption duration index values based on Class B (planned

interruptions on the 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  $\ensuremath{\text{IM}}$  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(8)-

(9))

Commerce Commission "Input methodologies review final decision -Final decision and determinations guidance" (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-
- (a) that contract and
- (c) 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(8)-

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 system average interruption duration index values based on Class B (planned interruptions on the network) and Class C (unplanned interruptions 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 based on Class B (planned interruptions on the network) and Class C (unplanned interruptions on the network)

Secondary assets

means **network** assets, including ripple injection systems, SCADA, protection relays and telecommunications systems, that do not

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

41

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 or qualitative rating (with accompanying guidance), for example –

- (a) -using a rating from 1 to 5, with '1' being the lowest rating and '5' being the highest rating; or
- (b) using a 'traffic light' rating system with red, amber, and green ratings, with 'red' being the lowest rating and 'green' 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, -
  - (i) 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
  - (ii) 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
  - (iii) 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
  - (iv) the electricity conveyed is less than 20 **GWh** per annum; or
  - (v) the **electricity distribution services** are provided to fewer than 2000 ICPs.

Subtransmission

means-

- (a) in relation to AMPs, 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

# 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.

# support

System operations and network 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);
- (I) 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

Т

# Target revenue

means the revenue that the EDB expects to obtain from **prices** 

## 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

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

47

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 based on Class C (unplanned

interruptions on the 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 based on Class C (unplanned

interruptions on the 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 the regulated service asset values set out in clause 2.1.1 of the **IM determination** 

Value of vested assets means the consideration incurred or expected

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

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);

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

49

- (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 *q* calculated using the following formula:

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

where-

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-served consumers performing feeders

means the consumers supplied by feeder lines from an EDB's network, where those feeder lines that, in respect of the most recent [DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

50

disclosure year, are in the 90<sup>th</sup> percentile or higher for one or both of the following:

- (a) the highest SAIDI on the network, where SAIDI is calculated by reference to each feeder line on the networkfeeder SAIDI; and
- (b) the highest SAIFI on the network, where
  SAIFI is calculated by reference to each
  feeder line on the networkfeeder 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;
  - (1) every EDB must comply with the information disclosure requirements set out in this determination, except those that apply only to Aurora, being clauses 2.4.5A, 2.4.5B, 2.5.3 to 1.1.12.5.8, 2.6.1(1)(c)(i), 2.8.5A, 2.8.5B, 2.9.5, clause 17 of Attachment A, and Attachment C, which apply only to Aurora; and
  - (1)(2) Aurora must comply with the information disclosure requirements set out in this determination.

### 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 Within 5 months after the end of each **disclosure year**, every **EDB** must disclose information 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-**
    - (a) the Analytical Ratios set out in Schedule 1;
    - (b) the Report on Return on Investment set out in Schedule 2;
    - (c) the Report on Regulatory Profit set out in Schedule 3;
    - (d) the Report on Value of the Regulatory Asset Base (Rolled Forward) set out in Schedule 4;
    - (e) the Report on Regulatory Tax Allowance set out in Schedule 5a;

- (f) the Report on Related Party Transactions set out in Schedule 5b;
- (g) the Report on Term Credit Spread Differential Allowance set out in Schedule 5c;
- (h) the Report on Cost Allocations set out in Schedule 5d;
- (i) the Report on Asset Allocations set out in Schedule 5e;
- (j) the Report on Capital Expenditure for the Disclosure Year set out in Schedule 6a;
- (k) the Report on Operational Expenditure for the Disclosure Year set out in Schedule 6b;
- (I) the Comparison of Forecasts to Actual Expenditure set out in Schedule 7: and
- (2) Publicly disclosing each of those 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;
  - (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;
  - (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(8)-(9))

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(8)-(9))

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
  - (2) 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**-
  - 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-
  - 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

Formatted: Font: Bold

Formatted: Font: Bold

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;
    - (b) 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-
    - 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 non-standard contracts;
    - (b) how the EDB determines whether to use a non-standard contract, including any criteria used;
    - 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 during the CPP regulatory period

- 2.4.5A Every disclosure under clauses 2.4.1 and 2.4.2 during the CPP regulatory period by Aurora must include:
  - (1) Together with the information disclosed under clauses 2.4.1(1) and 2.4.2, sufficient information and commentary to enable interested persons to understand how Aurora has set prices for each of its sub-networksthe Aurora Pricing Regions;
  - (2) A worked example of how an average domestic consumer's prices enin each sub-networkAurora Pricing Region would be calculated; and
  - (3) Subject to clause 2.4.5B, 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.
- 2.4.5B The following applies in respect of each sost of supply model that Aurora publicly discloses under clause 2.4.5A:
  - Aurora must redact any information from the cost of supply model that identifies an individual consumer; but
    - Aurora must separately supply to the Commission a version of the cost of supply model that includes any information redacted under subclause (1).

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—
  - 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.

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

68

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 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.
- 2.5.2 If an EDB has sub-networks, within 5 months after the end of each disclosure year, an 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

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

69

(2) publicly disclose each of these reports.

Quality of service disclosure requirements for Aurora during the CPP regulatory period

- 2.5.3 During the CPP regulatory period, Aurora must-
  - 1) Before the start of each disclosure year, at all times publicly disclose:
    - (a) its customer charter and consumer compensation scheme; and
    - (b) details of any changes:
      - (i) Aurora has made to its customer charter and consumer compensation scheme relative to the versions of the customer charter and consumer compensation scheme publicly disclosed before the start of the previous disclosure yearimmediately prior to the most recent version; and
      - (ii) Aurora intends to make to its customer charter and consumer compensation scheme in the upcoming disclosure year, if any;
  - (2) Within 5 months after the end of each disclosure year during the CPP regulatory period, publicly disclose the following information for that disclosure year:
    - (a) whether, and if so how, Aurora has consulted with consumers on any proposed changes to its customer charter, or consumer compensation scheme, or the pricing methodology disclosed under clause 2.4.1;
    - (b) whether, and if so how, Aurora has improved consumer awareness of its customer charter and consumer compensation scheme; and
    - (c) the total number of each of the following:

intended interruptions cancelled with notice;

- (i) planned interruptions;
- (ii) planned interruptions cancelled with notice;
- the intended interruptions cancelled with notice under subparagraph (i) for which Aurora rescheduled the interruption without giving notice;

- (iii) the planned interruptions cancelled with notice under subparagraph (ii) for which Aurora rescheduled the interruption without giving notice;
- (iv) unplanned interruptions;
- (v) unplanned interruptions that Aurora intentionally caused to carry out work on its network that does not directly relate to a fault:
- intended interruptions cancelled without notice;
- (vi) planned interruptions cancelled without notice; and
- (vii) planned interruptions for 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
  duenotified to consumers as being scheduled to occur.

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

2.5.4 Aurora must by 31 March 2022, publicly disclose the following:

By 31 March 2022, publicly disclose the following:

(1) its 'development plan' for developing and improving its-

practices for monitoring voltage quality and compliance with applicable voltage requirements of the Electricity (Safety)
Regulations 2010 on the low voltage parts of its network, and communicating the results of that monitoring to consumers;

- (a) engagement with consumers on Aurora's customer charter and consumer compensation scheme;
- (b) planning, management, and communication of planned interruptions to consumers;
- (c) asset data collection and asset data quality practices, using information Aurora includes in its AMP under clause 17.1 of Attachment A; 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
- (v) ensure there is a clear line of sight between Aurora's network asset condition data and Aurora's expenditure forecasts and financial reporting;
- d) asset management practices, using information Aurora includes in its

  AMP under clause 17.2 of Attachment A; including to, where
  appropriate, 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; and
  - (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;
- (e) practices for identifying and mitigating 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 mitigate those issues;
- cost estimation practices, using information Aurora includes in its

  AMP under clause 17.4 of Attachment A; and
- (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; and
- (g) quality assurance practices and 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, using information Aurora includes in its AMP under clause 17.5 of Attachment A;
- (2) its 'project and programme delivery plan' detailing which of the capital
  expenditure and operational expenditure projects and programmes Aurora
  plans to deliver over the CPP regulatory period, highlighting those outlined in
  Aurora's application for the Aurora CPP it plans to deliver over the CPP
  regulatory period; and
- (3) its 'safety delivery plan' for delivering capital expenditure and operational
  expenditure setting out expected benefits of projects and programmes tethat
  will mitigate safety risks in relation to Aurora's supply of electricity
  distribution services.

  distribution services.
- 2.5.5 Aurora must by By 31 May 2022, and according to the requirements of clause
  2.5.82.5.7, present to consumers onin each of Aurora's sub-networks the Aurora

  Pricing Regions, a summary of the key features of the development plan, the project and programme delivery plan, and the safety delivery plan under subclausesclause
  2.5.4 2.5.4(1)(1)(a) to 2.5.4(3)(1)(c), respectively.

### Aurora's annual delivery report

- 2.5.6 For each disclosure year during the CPP regulatory period commencing after 31 March 2022, Aurora must—
  - (1) within 5 months after the end of that disclosure year, complete and publicly disclose an annual delivery report; and
  - (2) within 2 months after publicly disclosing an annual delivery report under subclause (1), and according to the requirements of clause 2.5.82.5.78, present to its consumers oin each of Aurora's sub-networks the Aurora Pricing Regions a summary of the key features of that annual delivery report.

2.5.7 Aurora must ensure each annual delivery report it completes and publicly discloses under clause 2.5.56(1) includes the content specified in Attachment C.

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

- 2.5.8 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 2.5.52.5.4(2), and each annual delivery report under clause 2.5.6(2)2.5.5(2), Aurora must ensure it presents in a public forum—
  - (1) and in a format, that allows consumers to understand and readily 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 the consumers.

Compliance statement with each annual delivery report

With each annual delivery report Aurora publicly discloses under clause 2.5.5(1),

Aurora must supply to the Commission a compliance statement setting out:

- a statement of whether or not **Aurora** has complied with all of the content requirements under Attachment C;
- an index table showing which parts or paragraphs of the annual delivery report are designed to meet which content requirement for the annual delivery report under Attachment C; and
- for any content requirement under Attachment C that Aurora has not complied with, the reason(s) for not complying with that requirement.

#### 2.6 ASSET MANAGEMENT PLANS AND FORECAST INFORMATION

Disclosure relating to asset management plans and forecast information

- 2.6.1 Subject to clause 2.6.3, before the start of each disclosure year-commencing with the disclosure year 2014, every-each 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 the case of each EDB, clauses 1 to 16 of Attachment A; and
  - (ii) in Aurora's case, also clause 17 of Attachment A;
- (c)(d) contains the information set out in the schedules described in clause 2.6.6; and
- (d)(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.
- 2.6.2 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 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 Every EDB must—

- (1) 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) 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, 0 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
      - 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-
  - (a) 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:
    - 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
    - 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(8)-(9))

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 December 2023March 2024, Aurora must publicly disclose an one or more expert reports, procured and prepared in accordance with clause 2.8.5B, that provides one or more independent opinions on Aurora's progress in, and any recommendations for improving on, the following:
  - (1) delivering on time the capital expenditure and operational expenditure projects and programmes outlined in Aurora's application for the Aurora CPP project and programme delivery plan referred to in clause 2.5.4 (2);
    - developing low voltage network monitoring practices referred to in clause 2.5.4(1)(a)(i);
  - developing Aurora's consultation practices with consumers, including its consultation practices with consumers regarding changes to Aurora's customer charter, consumer compensation scheme, and the pricing methodology disclosed under clause 2.4.1;
  - (2) developing asset management practices referred to in clause 17.2 of Attachment A2.5.4 (1)(d); and
  - (3) developing practices for identifying and mitigating safety risks referred to in clause 17.3 of Attachment A2.5.4 (1)(e).

### 2.8.5B For the purposes of clause 2.8.5A, Aurora must ensure the expert report(s) is—

- (1) procured according to the following requirements:
  - (a) Aurora must prepare and provide draft terms of reference to the Commission by no later than 31 October 2022;
  - (b) Aurora must finalise the terms of reference by no later than 31

    JulyMarch 2023, taking into account any feedback the Commission
    provides Aurora on the draft terms of reference, provided such
    feedback is received no later than 31 January 2023;
  - (c) before appointing an expert to provide an independent opinion on one or more of the areas under clause 2.8.5A(1)-(5), Aurora must:
    - (i) obtain the Commission's approval to appoint the expert; and
    - (ii) if the Commission approves the expert's appointment, impose on the expert an overriding duty to assist the Commission as an independent expert on relevant matters within the expert's area of expertise;

#### (2) prepared—

- (a) by one or more appropriately qualified, independent experts in the areas listed in clause 2.8.5A(1)-(54); 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 the-information that either -
  - (a) AuroraAurora has publicly disclosed publicly disclosed—
    - (i) in its AMPs and annual delivery reports for the disclosure
      years ending 31 March 2022 and 31 March 2023 and annual
      delivery report for the disclosure year ending 31 March 2023;
      and
    - (ii) under clause 2.5.3(1)2.5.3(1)(a) to (c) and clause 2.5.4; or
  - (b) is made publicly available as part of the expert report(s);

- (4) provided in draft, by no later than 31 October 2023, to the Commission for comment; and
- (5) finalised only after any comments the Commission provided have been taken into consideration, provided such comments are provided no later than 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

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

84

subsequently correctly reflected in the revised **indirectly affected data and statements**.

## Additional certificate disclosure requirement for Aurora

2.9.5 Where Aurora publicly discloses any information under clauses 2.5.3, 2.5.4, or
 2.5.56, Aurora 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 Aurora.

## 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

- 1. 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 AMPs 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-tomedium 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;

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-

• the processes used to identify asset management data requirements that cover the whole of life cycle of the assets;

- 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;
- the systems and controls to ensure the quality and accuracy of asset management information; and
- the extent to which these systems, processes and controls are integrated.
- 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-

- 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-

- 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 2.6.2 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.
- Performance indicators for which targets have been defined in clause 5 must include
   SAIDI values and SAIFI values for the next 5 disclosure years.
- 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.

- 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

- AMPs 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.

## Lifecycle Asset Management Planning (Maintenance and Renewal)

- 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
- 12.4 The asset categories discussed in clauses 12.2 and 12.3 should include at least the categories in clause 4.5.

#### Non-Network Development, Maintenance and Renewal

- AMPs 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
  - 13.4 a description of material maintenance and renewal projects (where known) planned for the next five years.

## Risk Management

- 14. AMPs 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

- AMPs 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>0</u><del>2.6</del> 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.

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

99

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;
  - The organisation structure and the processes for authorisation and business 16.2 capabilities will support the implementation of the AMP plans.

Additional AMP disclosure requirements for Aurora during the CPP regulatory period

- During the CPP regulatory period, Aurora must describesummarise in its AMP its delivery plan to develop and improve its:
  - 2.5.4 (1)(c) to-

Asset data collection and asset data quality practices as specified in clause

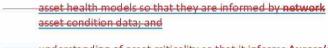
systematise Aurora's processes for collecting and collating network asset data, including data supplied by contractors and other third parties; for the purpose of informing Aurora's expenditure decisions, improve Aurora's knowledge of network asset condition so that assets are replaced in a timely manner; ensure Aurora has an audited and regularly-maintained platform for sharing network asset data with internal and external stakeholders; evaluate whether Aurora is achieving its asset management policies and objectives, and identify ways to improve the performance of Aurora's network; and ensure there is a clear line of sight between Aurora's network asset condition data and Aurora's expenditure forecasts and financial reporting;

17.1 Asset management practices, as specified in clause 2.5.4 (1)(d) including to—

-where appropriate, develop and improve Aurora's-

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021





understanding of asset criticality so that it informs Aurora's strategies for asset replacement and renewal;

improve Aurora's 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;

- 17.2 Practices for identifying and mitigating safety risks as specified in clause 2.5.4 (1)(e) in relation to Aurora's supply of electricity distribution services, including by using frameworks to prioritise identified safety issues and to justify investments to mitigate those issues;
- 17.3 Practices for estimating the costs of capital expenditure and operational expenditure projects and programmes as specified in clause 2.5.4 (1)(f)<sub>7</sub> including; and
  - a description of how Aurora plans to routinely audit, update, and manage its models for estimating costs; and
    - a description of how Aurora uses the actual costs of completed capital expenditure and operational expenditure projects and programme to improve future cost estimates;
- 17.4 Quality assurance practices and processes specified in clause 2.5.4 (1)(g)<sub>7</sub> 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.

## Attachment B Calculation of Normalised SAIDI and SAIFI

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

Formatted: Font: Bold
Formatted: Font: Bold
Formatted: Font: Bold

Formatted: Font: Bold

#### 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.  $\alpha_{SADI}$  is the average of the natural logarithm (ln) of each daily **SAIDI value** in the non-zero dataset;
- 8.  $eta_{\it SAIDI}$  is the standard deviation of the natural logarithm (In) of each daily **SAIDI value** in the non-zero dataset.
- 9. Using the non-zero dataset, calculate the SAIFI boundary value (  $B_{\it SAIFI}$  ) as follows-
- 10.  $B_{SAIFI} = e^{(\alpha_{SAIFI} + 2.5 \beta_{SAIFI})}$
- 11. where-
- 12.  $a_{\it SAIFI}$  is the average of the natural logarithm (In) of each daily **SAIFI value** in the non-zero dataset;
- 13.  $\beta_{\it SMFI}$  is the standard deviation of the natural logarithm (In) 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  $B_{SAIDI}$  -

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

102

- 15. replace the daily **SAIDI value** with  $B_{SAIDI}$ ; and
- 16. replace the daily **SAIFI value** with  $B_{\it SAIFI}$  if the daily **SAIFI value** for that day exceeds  $B_{\it SAIFI}$ .

## 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 2.5.62.5.5 and 2.5.82.5.7.

Aurora must include the following in each annual delivery report:

Overall progress update from board of directors

- 1.1 an overview from Aurora's board of directors setting out, relative to what

  Aurora proposed in its application for the Aurora CPP,—
  - 1.1.1 relative to what Aurora proposed in its application for the Aurora CPP, the key capital expenditure and operational expenditure projects and programmes that Aurora—
    - (a) has delivered on time in the most recent disclosure year;
    - (b) has not yet completed, but which are schedule with Aurora's project and programme delivery plan under clause 2.5.4(2)2.5.4(1)(b);
    - (c) has not completed on time, but had planned to complete in the most recent disclosure year; and
    - (d) has not commenced, but had planned to commence, in the most recent disclosure year;
  - 1.1.2 Aurora's overall progress in the following areas:
    - (a) 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)2.5.4(1)(b); and
    - (b) mitigating any-safety risks in relation to Aurora's supply of electricity distribution services identified in Aurora's safety delivery plan under clause 2.5.4(3)2.5.4(1)(c);
  - 1.1.3 any actions Aurora is taking to ensure its capital expenditure and operational expenditure projects and programmes are completed as effectively and efficiently as possible;
  - 1.1.4 for any safety risks in relation to Aurora's supply of electricity distribution services that Aurora has not mitigated according to its safety delivery plan under clause 2.5.4(3)2.5.4(1)(c), how, and within what timeframe, Aurora plans to manage the safety risk(s); and

1.1.5 for any key capital expenditure and operational expenditure project or programme identified in Aurora's project and programme delivery plan under clause 2.5.4 (2) that Aurora is behind schedule in completing, 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;

#### Progress in developing key processes and practices

- 1.2 -a summary of Aurora's progress and, where feasible, a self-assessment rating, and with reason(s) for the self-assessment rating, of Aurora's progress in developing in each of the following areas:
  - 1.2.1 ensuring the information Aurora publicly discloses under clause
    2.4.5A(1) enables interested persons to understand how Aurora sets prices in relation to each of its sub-networks the Aurora Pricing Regions;
  - developing low voltage network monitoring practices referred to in clause 2.5.4(1)(a)(i);
  - 1.2.2 engagement with consumers on Aurora's customer charter and consumer compensation scheme;
  - 1.2.3 planning, management, and communication of planned interruptions to consumers;
  - 1.2.4 asset data collection and asset data quality practices referred to in clause 17.1 of Attachment A2.5.4 (1)(c);
  - 1.2.5 asset management practices referred to in clause 17.2 of Attachment A2.5.4 (1)(d);
  - 1.2.6 practices for identifying and mitigating safety risks referred to in clause 17.3 of Attachment A2.5.4 (1)(e);
  - 1.2.7 cost estimation practices referred to in clause 17.4 of Attachment A2.5.4 (1)(f); and
  - 1.2.8 quality assurance practices and processes referred to in clause 17.5 of Attachment A;2.5.4 (1)(g);

#### Spending and work done in each sub-networkAurora Pricing Region

1.3 provide in respect of the most recent disclosure year, the following information relating to capital expenditure and operational expenditure

projects and programmes that Aurora is doing has completed in on each of its sub-networks the Aurora Pricing Regions:

- 1.3.1 Aurora's actual expenditure compared to the proposed expenditure identified in Aurora's project and programme delivery plan under clause 2.5.4 (2) in Aurora's application for the Aurora CPP, with any variance expressed as the percentage difference between proposed planned and actual expenditure, including in respect of:
  - (a) actual expenditure compared to the proposed expenditure for each capital expenditure project or programme orand operational expenditure project or programme for which the actual capital expenditure or operational expenditure exceeds the expenditure identified in Aurora's project and programme delivery plan under clause 2.5.4 (2)proposed in Aurora's application for the Aurora CPP by 120% or more, and for which the actual annual capital expenditure or operational expenditure is \$1 million or more, with reasons for anythe variance in the proposed and actual expenditure;
  - (b) actual capital expenditure compared to proposed planned capital expenditure 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) actual operational expenditure compared to proposed planned operational expenditure for each of:
    - service interruptions and emergencies;
    - (ii) vegetation management;
    - (iii) routine and corrective maintenance and inspection;

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

106

- (iv) asset replacement and renewal;
  - system operations and network support; and

business support;

- 1.3.2 asset replacement and renewal, including:
  - (a) for Aurora's project and programme delivery plan under clause
    2.5.4 (2), the number of assets replaced compared to the
    number of assets Aurora planned to replace 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)application for the Aurora CPP;
- 1.3.3 in relation to vegetation management, compared to Aurora's project and programme delivery plan under clause 2.5.4 (2), documented planning for vegetation management, the percentage of the network that Aurora has—
  - (a) inspected; and
  - (b) trimmed, removed, or sprayed;

Network and sub-network quality information

- 1.4 provide the following:
  - 1.4.1 for each of the Aurora Pricing Regions Aurora's sub-networks, in a time series form for each of the most recent five disclosure years, the—
    - (a) planned SAIDI values;
    - (b) planned SAIFI values;
    - (c) unplanned SAIDI values; and
    - (d) unplanned SAIFI values;
  - 1.4.2 for each of the Aurora Pricing Regions Aurora's sub-networks,—

- (a) a table with the following information on any complaints

  complaints-Aurora has received from consumers about

  Aurora's supply of electricity distribution services in the most recent disclosure year:
  - (i) the type of complainteemplaint, with Aurora determining the different types of complaint complaint by the general subject matter to which the complaints complaints relate;
  - (ii) the number of each type of complaintcomplaint;
  - (iii) the average time to resolve each type of complaintcomplaint;
  - (iv) the top three types of complaints complaints with the highest numbers of complaints complaints and how they differ to the three types of complaints complaints with the highest numbers of complaints complaints from the previous disclosure year; and
  - (v) a description of whether, and if so how, Aurora is using the learning and insights gained from handling consumer complaints complaints as a feedback loop to improve the quality and service levels of in supplying electricity distribution services;
- (b) compared to the equivalent information from the disclosure year preceding the most recent disclosure year, the following information regarding the most recent disclosure year:
  - (i) the number of asset-related safety-related incidents in relation to Aurora's supply of electricity distribution services (including any near misses, and any public hazard and protection failure incidents);
  - (ii) commentary on how the safety-related incidents occurred; and
  - (iii) any corrective actions taken in respect of these incidents;
- 1.4.3 for Aurora's network, in respect of the most recent disclosure year, the—
  - (a) planned SAIDI assessed value, unplanned SAIDI assessed value, planned accumulated SAIDI limit, and unplanned SAIDI limit; and

(b) planned SAIFI assessed value, unplanned SAIFI assessed value, planned accumulated SAIFI limit, and unplanned SAIFI limit;

#### Performance and engagement with consumers

- 1.5 regarding Aurora's performance in supplying electricity distribution services to its consumers in the most recent disclosure year,—
  - 1.5.1 provide a self-assessment rating, and reason(s) for the self-assessment rating, regarding each of the following:
    - (a) Aurora's performance in notifying and updating consumers on interruptions affecting them;
    - (b) how effectively Aurora has engaged with different consumers
      on each sub-networkin each of the Aurora Pricing Regions;
      and
    - any consultation Aurora has done with consumers on projects or programmes Aurora proposes to deprioritise or substitute;

## 1.5.2 summarise—

- (a) any feedback from consumers on Aurora's additional pricing methodology disclosures under clause 2.4.5A(1)-(3);
- (b) the different groups of consumers Aurora has engaged with;
- (c) 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;
- (d) whether Aurora met its commitments under its customer charter, and if not, the respects in which Aurora failed to do so, and the reasons for such failure; and
- (e) any payments Aurora has made in respect of each service level standard under Aurora's consumer compensation scheme;
- 1.5.3 provide the following information on Aurora's supply of electricity distribution services to its worst-served consumerson its worst-performing feeders:

#### 109

- (a) using the map Aurora publicly discloses under clause 2.3.13a
  map, or series of maps, of appropriate scale, of Aurora's
  network, the geographical location(s) of the worst-performing
  feeders feeder lines supplying the worst-served consumers;
- (b) for the worst-performing feeders feeder lines supplying the worst-served consumers:
  - (i) the planned SAIFI assessed value(s);
  - (ii) the planned SAIDI assessed-value(s);
  - (iii) the unplanned SAIFI assessed-value(s); and
  - (iv) the unplanned SAIDI assessed-value(s);
- (c) any plans Aurora has to improve supply of electricity
  distribution services to its worst-served consumers on its
  worst-performing feeders; and

#### Index table

an index table showing which parts or paragraphs of the annual delivery report are designed to meet which content requirements under this Attachment C.

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

In addition to the content specified under clause 1 of this attachment, Aurora must include in each annual delivery report it publicly discloses for the disclosure years ending 31 March 2024, 31 March 2025, and 31 March 2026, a summary of what Aurora has done in response to the independent opinion on Aurora's progress in, and any recommendations for improving on, each area covered by the expert report under clause 2.8.5A.

110

## Schedule 1 Analytical Ratios

		e.	Company Name	r		
		VI	For Year Ended	+		
V2000			II STANDON I PROBERTO			
	HEDULE 1: ANALYTICAL RATIOS	Account to the constant		arth rangers and targets to be become	ONES TO PRODUCE SERVICE AND SERVICE SERVICES.	
be i	s schedule calculates expenditure, revenue and service ratios from the informati interpreted with care. The Commerce Ommission will publish a summary and a dosed in accordance with this and other schedules, and information disclosed u information is part of audited disclosure information (as defined in section 1.4	nalysis of information ader the other requir	disclosed in accor ements of the dete	dance with the ID de rmination.	termination. This w	ill include information
sch re	rf.					
	atty F					
8	1(i): Expenditure metrics	Expenditure per GWh energy delivered to ICPs (S/GWh)	Expenditure per average no. of ICPs (S/ICP)	Expenditure per MW maximum coincident system demand (S/MW)	Expenditure per km circuit length (S/km)	Expenditure per MVA of capacity from EDB- owned distribution transformers (S/MVA)
9	Operational expenditure	15.	=	=	=	
10	Network	· ·				· ·
11	Non-network	/E	~	₩	2	*
12					77	
13	Expenditure on assets					-
14	Network	146	2	2		-
15 16	Non-network	(集)	- 3			
17	1(ii): Revenue metrics					
		Revenue per GWh energy delivered to ICPs (S/GWh)	Revenue per average no. of ICPs (S/ICP)			
18	Total consumer line charge revenue	(o) Grain	(ogreen)	ro.		
20	Standard consumer line charge revenue	122	- 3			
21	Non-standard consumer line charge revenue	1.50	-			
22		1		<u>*</u> 1		
23	1(iii): Service intensity measures					
24						
25	Demand density	1.5	-			ngth (for supply) (kW/km)
26	Volume density	76	A CONTRACTOR OF THE PARTY OF TH		English Committee Committee	r supply) (MWh/km)
27 28	Connection point density  Energy intensity	(E)		of ICPs per km of circ rered to ICPs per ave		
29	Fire SA Intensity		rotal energy den	resea to icra per ave	rage manueroj icr	s (xivig)ce)
30	1(iv): Composition of regulatory income					
31	A PART TO ANNUAL TO ANNUAL SAME SAME SAME AND AN AND AN ANALYSIS OF THE SAME SAME SAME SAME SAME SAME SAME SAM		(\$000)	% of revenue		
32	Operational expenditure	78	-	-		
33	Pass-through and recoverable costs excluding financial incent	ives and wash-ups	2	2		
34	Total depreciation		- 8	-		
35	Total revaluations		8			
36	Regulatory tax allowance	stante-st	2			
37	Regulatory profit/(loss) including financial incentives and was	1-ups	3	=		
38 39	Total regulatory income	35	=	s.		
40	1(v): Reliability					
42	Interruption rate	Į.	5.	Interruptions per	100 circuit km	

111

## Schedule 2 Report on Return on Investment

		and the same of	Ť
		any Name	
Average		'ear Ended	
	EDULE 2: REPORT ON RETURN ON INVESTMENT		
	chedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commissi ased on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes t		
EDBs n	must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).		- 10 1 22
This in	oformation is part of audited disclosure information (as defined in section 1.4 of the 10 determination), and so	is subject to the assurance report requ	ired by section 2.8.
h ref			
7	2(i): Return on Investment	CY-2	CY-1 Current Year CY
9	ROI - comparable to a post tax WACC		% %
10	Reflecting all revenue earned	1	The second
11	Excluding revenue earned from financial incentives	1	725
12	Excluding revenue earned from financial incentives and wash-ups		
13		6	
14	Mid-point estimate of post tax WACC		1
15	25th percentile estimate		E - 4
16	75th percentile estimate		
17			
18			
19	ROI – comparable to a vanilla WACC	7	-
28	Reflecting all revenue earned		070
21	Excluding revenue earned from financial incentives		
22	Excluding revenue earned from financial incentives and wash-ups	<u> </u>	
23	Page 12 April 1971 Page 12 Pag	Z <del>IC I</del>	TI TI
29	WACC rate used to set regulatory price path	d <sub>e</sub> J	
25	Apple to the company of the company	T T	T T
27	Mid-point estimate of vanilla WACC 25th percentile estimate		
28	2000/04/04/10/10/10/10/10/10/10/10/10/10/10/10/10/	-	9-
29	75th percentile estimate	<u> </u>	<del></del>
-		(F)	
30	2(ii): Information Supporting the ROI		(5000)
31			
92	Total opening RAB value		
33	plus Opening deferred tax		
34	Opening RIV		7.
95		_	
36	Line charge revenue	<u></u>	
37	Fally Andrew Concentration is No.	ř T	
38	Expenses cash outflow		
39 48	add Assets commissioned	-	
41	less Asset disposals and Tax payments		
42	less Other regulated income		
43	Mid-year net sash outflows		= P
44		1	
45	Term credit spread differential allowance	i -	
46			4//
47	Total closing RAB value	-	
48	less Adjustment resulting from asset allocation	(m)	
49	less Lost and found assets adjustment		
50	plus Clasing deferred tax	( <del>-</del>	
51	Closing RIV		50
52			2
53	ROI — comparable to a vanilla WACC		· ·
54			
55	Leverage (%)		42%
56	Cost of debt assumption (%)		
97	Corporate tax rate (%)		
58	Mary College was not dead an addition		
59	ROI – som parable to a post tax WACC		78
60			

61	Z(iii): Information Supporting th	ne Monthly ROI					
62 63	Opening RIV						N/A
64	. Spening ma						L wel
65							
66		Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows
67	April		outnow	commissioned	osposais	income	outriows
168	May						· ·
69	June						78
78	July						72
71	August						177
72 73	September October						35.
74	November						
75	December						78
76	January						32
77	February						72
78	March						V72
79	Total				=	- E	<b>100</b>
80	-						
81 82	Tax payments						N/A
82	Term credit spread differential allo	uvanca					N/A
84	term creat spread differential and	Wanse					10/8
85	Closing RiV						N/A
85	1767-2003 MPC002-						
87							
88	Monthly ROI comparable to a vanilla	WACC					N/A
89							
90	Monthly ROI —comparable to a post to	ex WACC					N/A
91	2(iv): Year-End ROI Rates for Co	mparison Purposes					
93	Z(IV). Tear-chartor nates for ca	inparison rui poses					
94	Year-end ROI - comparable to a vanilla	WACC:					- 1
95	10						
96	Year-end RO! – comparable to a post t	ax WACC					- 22
97							3-
98	* these year-end ROI values are compa	rable to the ROI reported in pre 28	012 disdosures by EDBs	and do not represent t	he Cammission's our	ent view on ROL	
99	2(v): Financial Incentives and W	hab tha					
101	Z(v). Financial incentives and w	asirops					
102	Net recoverable costs allowed und	er incremental calling incentive	schame			E	1
103	Purchased assets - avoided transm						°
104	Energy efficiency and demand ince						
105	Quality incentive adjustment						
106	Other financial incentives						
107	Financial incentives						× 1
108	the contract of the contract o						
110	Impact of financial incentives on ROI						
111	Input methodology claw-back						1/6
112	CPP application recoverable costs						
113	Catastrophic event allowance						i
114	Capex wash-up adjustment						
115	Transmission asset wash-up adjus	tment					
115	2013-15 NPV was h-up allowance						
117	Reconsideration eyent allowance						8
118	Other wash-ups						1
120	Wash-up costs						
121	im pact of wash-up costs on ROI						74 T
	VIVI necessit tale (Unitario de editividado)						

113

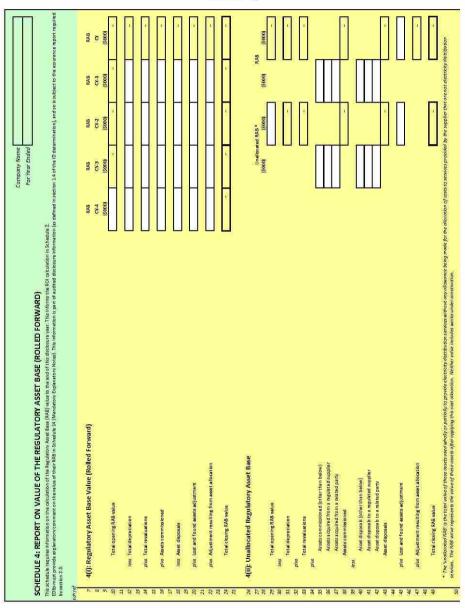
## Schedule 3 Report on Regulatory Profit

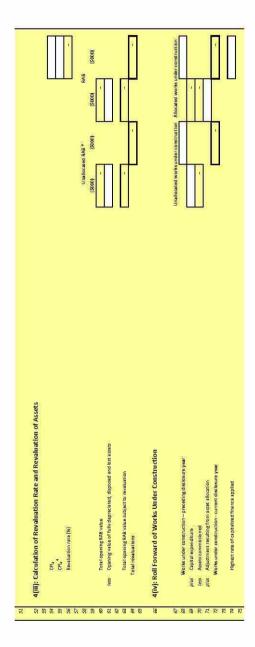
		general grant	
		Company Name	
		For Year Ended	
		3: REPORT ON REGULATORY PROFIT	
their	regulatory	quires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all profit in Schedule 14 (Mendiatory Explanatory Novel) is part of audite disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the ass	W 27 W
sch rej	ri .		
7	3(i): R	egulatory Profit	(\$000)
8	2.2	Income	
9		Line charge revenue	-
10	plus	Gains / (losses) on asset disposals	
11	plus	Other regulated income (other than gains / (losses) on asset disposals)	
12		9	
13		Total regulatory income	= 1
14		Expenses	
15	Jess	Operational expenditure	
16	Mare		<u> </u>
17	less	Pass-through and recoverable costs excluding financial incentives and wash-ups	<u> </u>
19		Operating surplus / (deficit)	
20		operating an para / factory	1
21	iess	Total depreciation	_ 1
22			
23	plus	Total revaluations	
24			<u> </u>
25		Regulatory profit / (loss) before tax	
26			
27	less	Term credit spread differential allowance	
28 29	less		
30	1600	Regulatory tax allowance	<del></del>
31		Regulatory profit/(loss) including financial incentives and wash-ups	=-1
32			<del> </del>
33	3(ii): F	ass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups	(5000)
34	30.90	Pass through costs	
35		Rates	14
36		Commerce Actievies	
37		Industry lexies	
38		CPP specified pass through costs	
39		Recoverable costs excluding financial incentives and wash-ups	<u> </u>
40		Electricity lines service charge payable to Transpower	
41		Transpower new investment contract charges	
42		System operator services	
43		Distributed generation allowance	
44		Extended reserves allowance Other recoverable costs excluding financial incentives and wash-ups	U III
46		Pass-through and recoverable costs excluding financial incentives and wash-ups	-
47		4	

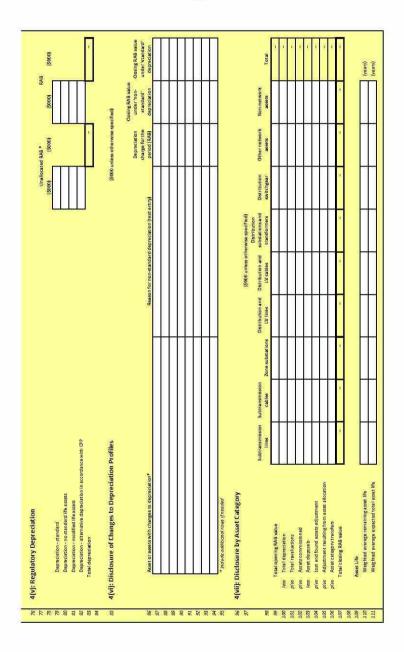
 $[\mathsf{DRAFT}] \ \mathsf{Electricity} \ \mathsf{Distribution} \ \mathsf{Information} \ \mathsf{Disclosure} \ (\mathsf{Aurora} \ \mathsf{Energy} \ \mathsf{Limited}) \ \mathsf{Amendment} \ \mathsf{Determination} \ \mathsf{2021}$ 

48	3(iii): Increme	ntal Rolling Incentive Scheme	(5	000)
49 50			CY-1	CY
51	Allowed cor	strollable opex		Ĭ.
52	Actual contr	tollable opex		
53			W-	12
54	Incrementa	change in year		
55			Previous years' Incremental change	Previous years incremental change adjusted for inflation
57	CY-5	[year]		- CONTROL OF THE CONT
58	CY-4	[year]		
59	CV-3	[year]		
60	CY-2	[year]		
61	CY-1	[year]		
62 63	Net incremen	tal rolling incentive scheme	,	-
64	Net recoveral	ble costs allowed under incremental rolling incentive scheme		=
65	3(iv): Merger an	d Acquisition Expenditure		
70				(\$000)
66	Merger and	acquisition expenditure		
67				
68		nmentary on the benefits of merger and acquisition expenditure to the electricity distribution business in Schedule 14 (Mandatory Explanatory Notes)	including required disclosures i	n accordance with
69	3(v): Other Discl	osures ·		
70 71	Self-insuran	ce allowance		(\$000)

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







118

## Schedule 5a Report on Regulatory Tax Allowance

		Company Name	
		For Year Ended	
SCI	HEDULE S	5a: REPORT ON REGULATORY TAX ALLOWANCE	_
100000	TO STATE OF THE PARTY.	aires 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 Explanatory Notes).	
		part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.6	8
sch ref			
suntes			
7	5a(i): R	egulatory Tax Allowance (5000)	
8		Regulatory profit / [loss] before tax —	
9			_
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		<u></u>	
16	less	Total revaluations	
17		Income included in regulatory profit / (loss) before tax but not taxable	
18		Discretionary discounts and customer rebates:	
19		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	
20		Notional deductible interest:	_
21			
22	-	2.00.2.00	<b>-</b> 1
23	- 8	Regulatory taxable income —	
25	less	Utilised tax losses	
26	W6990	Regulatory net taxable income	7
27			_
28		Corporate tax rate (%)	
29	i i	Regulatory tax allowance –	
30			
31	* Worki	ings to be provided in Schedule 14	
5,000	- market		
32	Salii): L	Disclosure of Permanent Differences	
33		In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule Sa(i).	
34	Safiii): /	Amortisation of Initial Difference in Asset Values (5000)	
35			
36		Opening unamortised initial differences in asset values	
37	less		
38	plus	September 1997 April 1997 September 1	
39	less	Adjustment for unamortised initial differences in assets disposed	
40	Christia.	Closing unamortised initial differences in asset values —	
41			=
42		Opening weighted average remaining useful life of relevant assets (years)	
43		J. Control of the con	

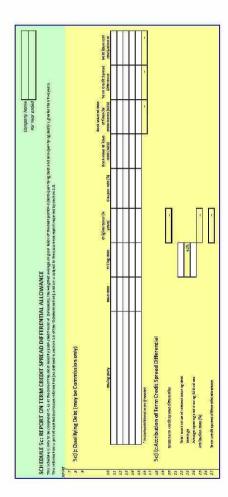
44	5a(iv):	Amortisation of Revaluations	(\$000)
45 46		Opening sum of RAB values without revaluations	
47		(Opening source town abuses with teach example of the source of the sour	<u> </u>
48		Adjusted depreciation	
49		Total depredation	2 3
50		Amortisation of revaluations	
51	= 7.00		Automati'
52	5a(v): I	Reconciliation of Tax Losses	(\$000)
53 54		Opening tax losses	
55	plus	12-03 pp 100 (1) p 100 p	
56	less		
57		Closing tax losses	
58	5a(vi):	Calculation of Deferred Tax Balance	(\$000)
59			<del>*</del>
60		Opening deferred tax	
62	plus	Tax effect of adjusted depreciation	- 1
63	man.	The Cit Co. of Sept. Science of the Co.	
64	less	Tax effect of tax depreciation	
65			
66	plus	Tax effect of other temporary differences*	
67	400		
68 69	less	Tax effect of amortisation of initial differences in asset values	
70	plus	Deferred tax balance relating to assets acquired in the disclosure year	
71		The state of the s	
72	less	Deferred tax balance relating to assets disposed in the disclosure year	8
73			
74	plus	Deferred tax cost allocation adjustment	-
76		Closing deferred tax	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Choosing Marchica dax	
77			
78	5a(vii):	: Disclosure of Temporary Differences	
10.000		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 80		differences).	
81	5a(viii)	: Regulatory Tax Asset Base Roll-Forward	
82	1440.0100.0	The state of the s	(5000)
83		Opening sum of regulatory tax asset values	
84	less	- <u>(2018</u> 0.0000000000000000000000000000000000	
85	plus		
86	less	A Committee of the Comm	
87	plus		
88	plus		
89 90	plus	Other adjustments to the RAB tax value Closing sum of regulatory tax asset values	
20		Shoring with All Legislator, y. MA. GOSCE VOLLES.	

120

## Schedule 5b Report on Related Party Transactions

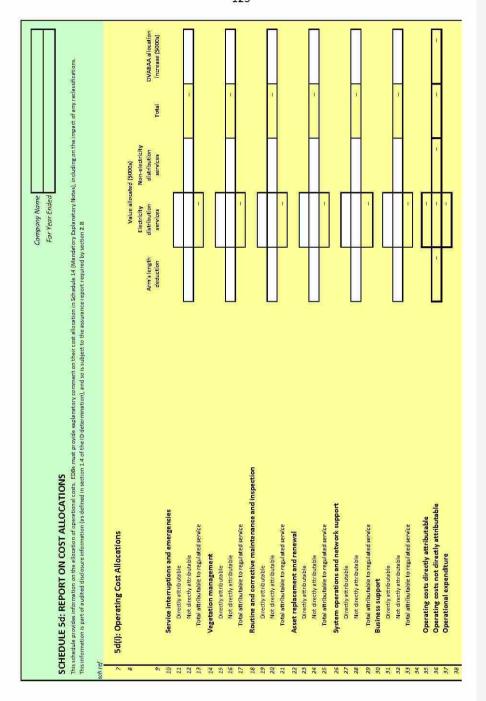
	Company Name	i i
	For Year Ended	-10
This	HEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS schedule provides information on the valuation of related party transactions, in accordance with clause 2.8.6 of the ID determination. information is part of audited disclosure information (as defined in clause 1.4 of the ID determination), and so is subject to the assurance report required.	by clause 2.8.
sah rej	f	
7	5b(i): Summary—Related Party Transactions (5000)	(\$000)
8	Total regulatory income	
9	Market value of asset disposals	
11	<u></u>	
12	Service interruptions and emergencies  Vegetation management:  —	
14	Routine and corrective maintenance and inspection	
15	Asset replacement and renewal (opex)	
16	Networkopex	
17	Business support —	
19	System operations and network support  Operational expenditure	i
20	Consumer connection =	
21	System growth	
22	Asset replacement and renewal (capex)  Asset relocations —	
24	Quality of supply	
25	Legislative and regulatory —	
26	Other reliability, safety and environment -	
27	Expenditure on non-network assets	- 7
29	Expenditure on assets Cost of financing	
30	Value of capital contributions	
31	Value of vested assets	
32	Capital Expenditure	
33 34	Total expenditure	
35	Other related party transactions	
36	5b(iii): Total Opex and Capex Related Party Transactions	
3D	Soling: Intel Opex and Capex Related Party Transactions	
		Total value of
2011	Nature of open or capex service	transactions
37	Name of related party provided  [Selections]	(\$000)
39	[Selections]	
40	[Selections]	
41	[Selections]	
42 43	[Selectione]	
44	[Selections]	
45	[Selections]	
46	[Selections]	
47	[Selections]	
48	[Selections]	-
50	[Selections]	
51	[Selectione]	
52	[Selectione]	
53 54	Total value of related party transactions *include additional rows if needed	= =
55	There is a second of the second	

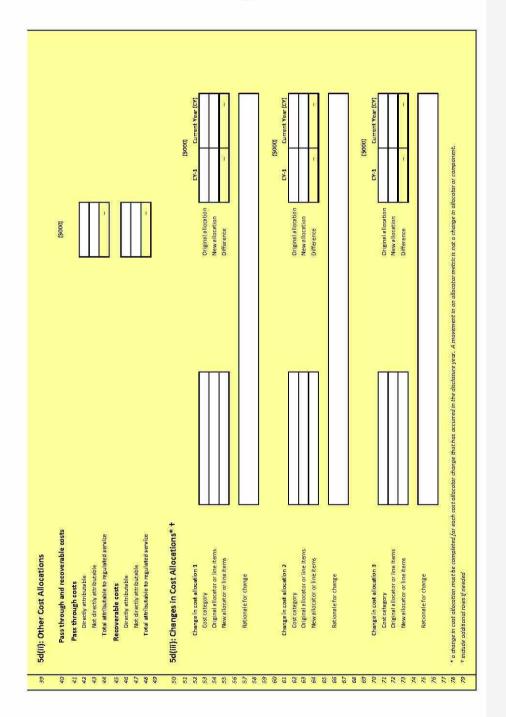
Schedule 5c Report on Term Credit Spread Differential Allowance



122

#### Schedule 5d Report on Cost Allocations





125

## Schedule 5e Report on Asset Allocations

		Company Name
		For Year Ended
SC	HEDULE 5e: REPORT ON ASSET ALLOCA	TIONS
		This information supports the calculation of the RAB value in Schedule 4.
EDBS	must provide explanatory comment on their cost allocation in	Schedule 14 (Mandatory Explanatory hotes), including on the impact of any changes in asset allocations. This information is part of audited
discl	osure information (as defined in section LA of the ID determin	tion), and so is subject to the assurance report required by section 2.8.
sch re	f:	
2		
7	5e(i): Regulated Service Asset Values	
~		Value allocated
127001		Value allocated [S000s]
		Electricity distribution
9		services
10	Subtransmission lines	
#	Directly attributable	
12	not directly attributable	
13	Total attributable to regulated service	The state of the s
14	Subtransmission cables	the state of the s
15	Directly attributable	
16	Not directly attributable	
27	Total attributable to regulated service	
18	Zone Substations	()
		Programme and the control of the con
29	Directly attributable	
	Not directly attributable	
21	Total attributable to regulated service	
22	Distribution and LV lines	
23	Directly attributable	
24	Not directly attributable	
25	Total attributable to regulated service	
26	Distribution and LV cables	
27	Directly attributable	
28	Not directly attributable	
29	Total attributable to regulated service	
30	Distribution substations and transformers	
30	Directly attributable	
32	Not directly attributable	
39	Total attributable to regulated service	( <del></del>
34	Distribution switchgear	
35	Directly attributable	
36	Not directly attributable	
37	Total attributable to regulated service	
36	Other network assets	
39	Directly attributable	
40	Not directly attributable	
40	Total attributable to regulated service	The state of the s
42	Non-network assets	
49	Directly attributable	
44	Not directly attributable	
45	Total attributable to regulated service	(##C
46		200
47	Regulated service asset value directly attributable	
46	Regulated service asset value not directly attribute	ble
49	Total closing RAB value	
50		
	_ MS 2	
5X	Se(ii): Changes in Asset Allocations* †	
52		[5000]
53	change in asset value allocation 1	CV-1 Current Year (CV)
54	Asset category	Original allocation
55	Original allocator or line items	New allocation
56	new allocator or line items	Difference
57 58	Dating later the sec	
59	Rationale for change	
50		La contraction of the contractio
න න		(0002)
82 82	change in asset value allocation 2	CY-1 Carrent Year [CY]
63	Asset category	Original allocation
64	Original allocator or line items	New allocation
65	New allocator or line items	Difference
66	The analysis of the species	**************************************
67	Rationale for change	
25	A STATE OF THE STATE OF THE STATE OF	
89		
70		[0008]
71	Change in asset value allocation 3	CV-1 Current Year [CV]
72	Asset category	Original allocation
73	Original allocator or line items	New allocation
74	new allocator or line items	Difference
75		×
76	Rationale for change	
77		
78		
729		Hocator or companent change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or companent
80	t include additional rows if needed	
10		

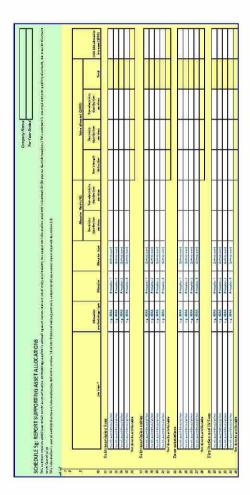
Schedule 5f Report Supporting Cost Allocations

							ST-CENTED			
for there	Aforation me Prodongs 1950	S) about	all solutions	Bearing Calcifornies access	Mounter Marie (S)	Arm's larg th	Technish danibases arries	Allow Mountain (S000)	P. P	OVARIA aleudor Incress (Scool)
Service interruptions and emorgencies										
Party Martification (See	WAY TO	American 1	Tarrey see							
Fazzi sacidescifica	TANA TA	America	Services!							
Faces description	C2 ABAA	Wibcalanz	Seint out							
Parent con the collection	TA ARM	Albertoid	Services!							
You should us the state of the	0.00							8 9		
Faces New Coles and politics	AND CO.	Mincalan 1	Services							
(serif outlitroliplier	12 5555	Albertoi.2	Service of					.13		
A PERSON NAME OF PARTY AND ADDRESS OF PARTY AND ADD	TA ASAA	Alesatera	(Bussess)							
Count was the party black	WHY Es	America 8	Tarrect may							
Ver deventy artifortable. So utilise and corrective maintenance and inspection						250	154			
- Application and a second	- A AGAA	Alegaist)	Bestear					0		L
Participating and a second and	WIN E-	Attendant 2	Services							
Count continue of the continue	THE ALLA	Amendosis	Service Land							
1 such and description	ANIA T-	Attendant &	Selection:							
Ver Greenfranklings							1	20		
Asset replacement and renewal										
Capati San Life (Science)	ANIA LT	Attacates 1	Service cont.					200		
same cauthry pipes	THE ABOUT	Attended 2	Delectors							
Course that the publishing	ANIA ET	Alterates a	See the S	-20	9					
Harris see throughless	** ASAA	Alexates 4	British							

Insert cox description Insert cox description Insert cox description Insert cox description Nor directly attributable Business support Insert cox description Nor directly attributable	E.B. ABAA		The same of the sa						
Insert cost description Insert cost description Nor directly attributable Business support Insert cost description Nor directly attributable Nor directly attributable		Allocator 2	[Select one]					3	
Insert cost description  Not directly artibusable  Business support  Insert cost description  Insert cost description  Insert cost description  Insert cost description  Not directly artibusable  Not directly artibusable	e.g. ABAA	Allocator 3	[Select phe]					20	
Not directly attributable  Business support  finer cos description finer cost description finer cost description finer cost description finer cost description Not directly attributable Not directly attributable	e.g. ABAA	Allocator 4	[Selectione]					-8	
Business support inter cost description Nord description Nord description					0.	V.	, C		
Insert cox description And other cox description And other cox description		100							
Insert cost description Insert cost description Insert cost description Insert cost description Not different attributable	E.S. ABAA	Allocator 1	[Selectione]					8	
Insert cost description Insert cost description Not directly attributable	E.B. ABAA	Allocator 2	(Select one)					32	
Insert cost description Not directly attributable	e.g. ABAA	Allocator S	[Selectione]					56	
Not directly attributable	e.g. ABAA	Allocator 4	[Select one]					**	
					15	10	20		
Operating costs not directly attributable				<b>L</b> .	2.5	77			,
Pass through and recoverable costs									
Pass through costs									
Insert cost description	e.g. ABAA	Allocator 1	(Select one)		-			20	
Insert cost description	E.B. ABAA	Allocator 2	[Selections]					25	
Insert cost description	E.B. ABAA	Allocator 3	[Select one]						
Insert cost description	e.g. ABAA	Allocator 4	[Selectione]					48	
Not directly attributeble					(t)	U	J.		
Recoverable costs		110							
Insert cost: description	E-B ABAA	Allocator 1	[Selectione]					25	
Insert cost description	P. E. ABAA	Allocator 2	[Selections]					*	
Insert cost description	E B ABAA	Allocator 3	(Select one)					83	
Insert cost description	e.g. ABAA	Allocator 4	[Selections]:					2)	
Not directly attributable					70	100		25.	

129

# Schedule 5g Report Supporting Asset Allocations

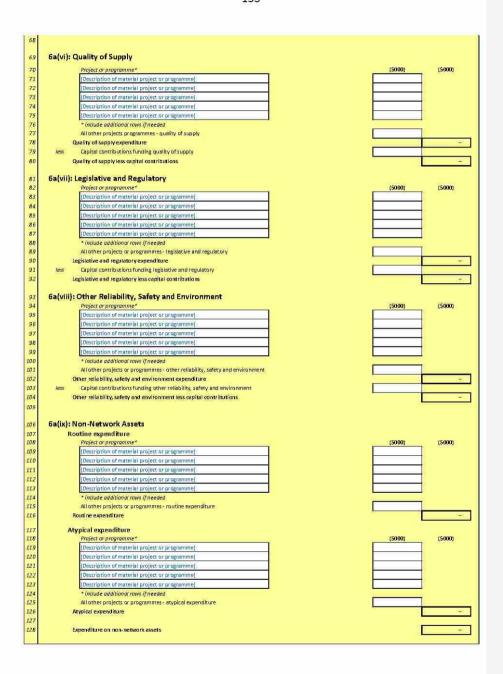


Insert asset description	E.S. ABAA	Allocator 1	(Select one)				10
Insert asset description	eg ABAA	Allocator 2	[Selectione]				100
Insert asset description	es ABAA	Allocator 9	[Selectione]				7
Insert asset description	P.B. ABAA	Allocator 4	(Selectional)				17
kot directly attributable					20	T)	- 0,1
Distribution substations and transformers							
Insert asset description	eg ABAA	Allocator 1	[Selectione]				2.
Insert asset description	ES. ABAA	Allocator 2	[Selectione]				2.
Insert asset description	E.B. ABAA	Allocator 3	[Select one]				7,4
noticities asset asset institution	eg ABAA	Allocator 4	[Selections]				. Xi
Not directly attributable			T.		**	A.	T.
Incept accept de controlle	P ARKA	Alloyator 1	a section and	-			
Insert asset description	ER ABAA	Allocator 2	(Select one)				
Insert asset description	e.g. ABAA	Allocator 3	[Selectione]				10.
Insert asset description	eg ABAA	Allocator 4	[Selectione]				1
Not directly attributable			2 0 0		A.C.	100	12
Other network assets				20			
maintain asset description	ES ABAA	Allocator 1	(Selectrone)				P.
Insert asset description	e.g. ABAA	Allocator 2	[Selectione]				
Insert asset description	ES ABAA	Allocator 3	Selectional				-
Insert asset description	EB ABAA	Allocator 4	(Select one)				17
Not directly attributable					-0	7	10
Non-network assets							
Insert asset description	eg ABAA	Allocator 1	(Selectional				. At
Insert asset description	E B ABAA	Affocator 2	(Selectione)				£
Insert asset description	ES. ABAA	Allocator 3	(Selectione)				W.
Insert asset description	ES. ABAA	Allocator 4	[Selectione]				7.5
Antibutable stributable					A.C.	10	
Regulated service asset value not directly attributable				Ļ	×	T.	
The state of the s							1

131

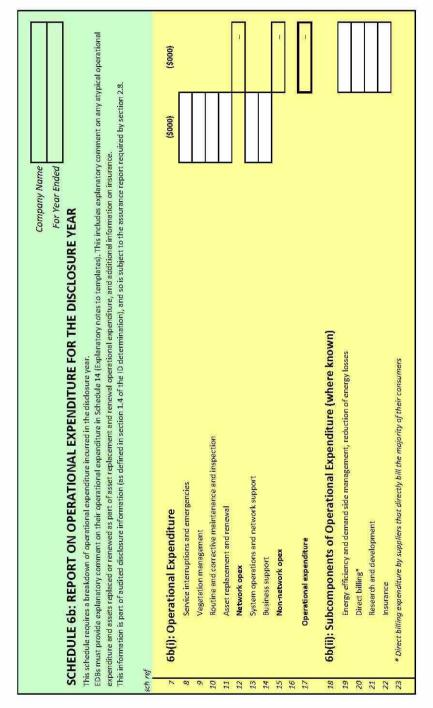
Schedule 6a Report on Capital Expenditure for the Disclosure Year

	Company Name
	For Year Ended
SC	HEDULE 68: 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
	uding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs, a must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates).
	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 required by section 2.8.
sch re	
7	6a(i): Expenditure on Assets (5000) (5000)
8	Consumer connection -
9	System growth —
10	Asset replacement and renewal
11	Asset relocations
12	Reliability, safety and environment:  Quality of supply
14	Legislative and regulatory
15	Other reliability, safety and environment
16	Total reliability, safety and environment
17	Expenditure on network assets
18	Expenditure on non-network assets
19	
20	Expenditure on assets  plus Cost of financine
22	Ess Value of capital contributions
23	plus Value of vexted assets
24	
25	Capital expenditure
26	6a(ii): Subcomponents of Expenditure on Assets (where known) (5000)
27	Energy efficiency and demand side management, reduction of energy losses
28	Overhead to underground conversion
29	Research and development
30	6a(iii): Consumer Connection
31	Consumer types defined by EDB* (\$000)
32 33	[EDB consumer type]
34	[EDB consumer type]
35	[EDB consumer type]
36	[ED8 consumer type]
37	* include additional rows if needed
38 39	Consumer connection expenditure
40	Ess Capital contributions funding consumer connection expenditure
41	Consumer connection less capital contributions
	Asset
42	6a(iv): System Growth and Asset Replacement and Renewal System Growth Renewal
44	(\$000) (\$000)
45	Su btrensmission
46	Zone substations
47	Distribution and LV lines
48	Distribution and LV cables Distribution substations and transformers
50	Distribution substations and transformers.  Distribution switchee'r
51	Other network assets
52	System growth and asset replacement and renewal expenditure
53	Ass Capital contributions funding system growth and asset replacement and renewal
54	System growth and esset replacement and renewal less capital contributions
55	
56	6a(v): Asset Relocations
57	Project or programme* (5000) (5000)
58	[Description of material project or programme]
59	[Description of meterial 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 64	* include additional rows if needed  All other projects or programmes - asset relocations
65	Asset relocations expenditure
66	ess Capital contributions funding asset relocations
67	Asset relocations less capital contributions



134

Schedule 6b Report on Operational Expenditure for the Disclosure Year



136

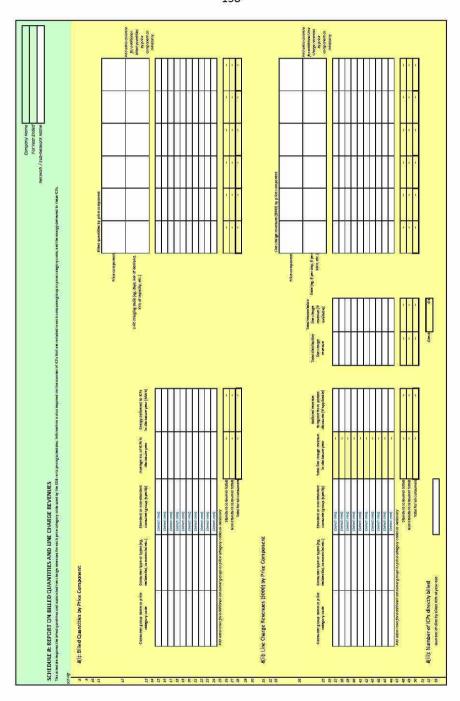
## Schedule 7 Comparison of Forecasts to Actual Expenditure

	Company Name			15								
	For Year Ended											
S	SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE											
Thi the ED Exp ass	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 r	ef .											
7	7(i): Revenue	Target (\$000) 1	Actual (\$000)	% variance								
8	Line charge revenue		· · · · ·	*								
9	7(ii): Expenditure on Assets	Forecast (\$000) <sup>2</sup>	Actual (\$000)	% variance								
10	Consumer connection	-	₹ <u>2</u>	72								
11	System growth  Asset replacement and renewal	_	78									
13	Asset relocations											
14	Reliability, safety and environment:	V										
15 16	Quality of supply	-										
17	Legislative and regulatory Other reliability, safety and environment		75	- 12								
18	Total reliability, safety and environment	-										
19	Expenditure on network assets	V <del>e</del>	3.5	3.5								
20	Expenditure on non-network assets	72	) // <u>2</u>	72								
21	Expenditure on assets											
22	7(iii): Operational Expenditure											
23	Service interruptions and emergencies		(E)	~								
24 25	Vegetation management  Routine and corrective maintenance and inspection	-	794	78-								
26	Asset replacement and renewal	+	72 72	72								
27	Network opex	100		700								
28	System operations and network support		j.	· · ·								
29 30	Business support Non-network opex	11	(5									
31	Operational expenditure	-		-								
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	-		, E								
35	Research and development											
36	A constraint for the constraint but all the											
2722	7/ ) (.)	v.										
37	7(v): Subcomponents of Operational Expenditure (where known	1										
38 39	Energy efficiency and demand side management, reduction of energy losses Direct billing			(55 (42								
40	Research and development											
41	Insurance		38	3 <del>e</del>								
42	1. From the naminal daller treast enurging 6. st. division in the state of the stat	1/2) of this datase	ntion									
43	<ol> <li>From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3</li> <li>From the CY+1 nominal dollar expenditure forecasts disclosed in accordance with clause 2.</li> </ol>	WINDS TO THE STATE OF STREET		e beginning of the								
44	2 From the GF+1 nominia donar experiments forecasts assubsed in accordance with crosse 2. disclosure year (the second to last disclosure of Schedules 11a and 11b)	oro tor me torement	erina startină at tu	e nedmining of cits								

137

Schedule 8 Report on Billed Quantities and Line Charge Revenues

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021



139

## Schedule 9a Asset Register

				Company Name			
				For Year Ended			
		Net	work/Su	b-network Name			
EDULE 9	a: ASSET REGISTER						
hedule requ	ires a summary of the quantity of ass	ets that make up the network, by asset category and asset class. All units rela	ting to cab	le and line assets, th	rt are expressed in I	km, refer to circuit le	ngths.
			300000000000000000000000000000000000000	2000 9170 220 9170 207 708 709	and common production is no	27.34.127.127.137.020.024.000	1.87775
				- 8	- 250		
Voltage	V 44002 22200000	MATERIAL	112502	items at start of	ttems at end of	Net change	Data accur
	Asset category	Asset class	Units	year [quantity]	year [quantity]	net change	[1-4] (Select o
AH	Overhead Line	Concrete poles / steel structure	No.				
All	Overhead Line	woos poles	NO.				[Select o
AH	Overhead Line	Other pole types	No.				[Select o
HV	Subtransmission Line	Subtransmission OH up to 6 6kV conductor	km			2	[Select o
HV	Subtransmission Line	Subtransmission OH 110W+conductor	km				Selection
HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km				Select or
HV	Subtransmission Cable	Subtransmission uG up to 66kV [OII pressurises]	km				Belector
HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas. pressurised)	km			- 2	Selector
HV	Subtransmission Cable	Subtransmission big up to 66kV [PILC]	km			법	(Select o
HV	Subtransmission Cable	Subtransmission UG 110kW+  XLPE	km			2	[Select or
HV	Subtransmission Cable	Subtransmission us 110kW+ (Oil pressurised)	km			9	[Selection
HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km			8	(Selection
HV	Subtransmission Cable	Subtransmission LiG 110kV+ [PILC]	km			5	[Select or
HV	Subtransmission Cable	Subtransmission submarine cable	km				[Select or
HIV	Zone substation fulldings	Zone's abstations up to 66 kV	No			-	Selector
HV	Zone substation Buildings	Zone substations 11 OkV+	No.			벨	Selector
HV	Zone substation switchgear	50/66/110 kV CB [Indoor]	No			별	(Select or
HV	Zone substation switchgear	30/66/110W/CB/Quitdoor)	No.			2	[Select o
BV	Zone substation switchgear	3SkV Switch [Ground Mounted]	No.				(Select o
HV	Zone substation switchgean	53kV Switch [Pole Mounted]	No.				(Select or
HV	Zone substation switchgear	33KV RMU	но		-	-	Estacto
HV	Zose substation switchgear	22/53kVCB [ladoor]	No			- 8	Delecto
HOV	Zone substation switchgear	22/53kVCB (Gutdoor)	No.			-	Selector
HV	Zone substation switchgear	3.3/5.6/11/22kV CB [ground mounted]	No.			9	Selector
HV	Zone substation switchees	3.3/6.6/11/22kV CB (pole mounted)	NO.	-	-	194	(Select or
HV	Zone Substation Transformer	Zone Substation Transformers	No.			<u>u</u>	Selecto
HV	Distribution Line	Distribution OH Open Wire Conductor	km			2	[Selection
HV	Distribution Line	Distribution OH Aeria   Cable Conductor	km			3	(Selection
HV	Distribution Line	SWER conductor	km				[Select or
HV	Distribution Cable	Distribution uG XLPE or PVC	km				[Select or
HOV	Distribution Cable	Distribution BG PILC	km				[Select or
HV	Distribution Cable	Distribution Submarine Cable	km			世	[Select or
HA	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	NO.			병	(Select or
HV	Distribution switchges r	3.5/6.6/1 1/22kV CB [Indoorg	No				Selecto
HV	Distribution switchges r	3.3/6.6/1.1/22kV Switches and fuses [pole mounted]	No.			2	[Select o
HV	Distribution switchges r	3.3/6.6/11/22kV Switch Iground mounted ( - except RMU	NO.			5	(Selection
HV	Distribution switchgear	3.3/6.6/(1/22kV RMU	No		1	-	Estimotion
HV	Distribution Transformer	Pole Mounted Transformer	No			-	Belecto
HIV	Distribution Transformer	Ground Mounted Transformer	No			_	(Select o
HV	Distribution Transformer	Voltage regulators	No.			받	Selector
HV	Distribution Substations	Ground Mounted Substation Housing	NO.			반	[Select or
100	LV Line	IV OH Conductor	km			9	Selecto
- DV	LVCable	IV ug cable	km				(Selection
LV	LV Street lighting	IV OH/UG Streetlight circuit	km			-	Selector
LV LV	Connectines				-		
	(VI) C (VII) C (VI	OH/UG consumer service connections	но			= =	[Select or
All	Protection	Protection relays Jelectromechanical, solid state and numeric	No				Belecto
All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot			-	Selector
AH	Capacitor Banks	Capacitors including controls	HO			- 2	[Select or
All	Load Control	Centralised plant	Lot			9	(Select or
All	Load Control	Relays	No			ם	Selector
All	civits	Cable Tunnels	km			8	[Selection

# Schedule 9b Asset Age Profile

b: ASSET AGE PROFILE	el en year all myselfenning of year activities made agriculture one is, but as	ar migs	n yand mass da	o: All ores esta	ung or stakles	nd live man	ube er er	proceed on h	m, (46 to 1011	an lengh											Meterody/	Por Pe	ay Name ai Ended sk Name												
Distance of two (year soules)	- E	Ī							Floriton	*	alless som pe		to salie la n d	lete /																					
		-		a40 as			abau																									age and	unium fö ufgen d	default 1	à
Asian conguly Out hand line	Assert date Concrete policy / Lond as upquire	Order	Ba-1340 -	-1343 -13	-19@	-1979	~43 M3	-1353	335.000	2001	2002 1	(COD)	2004	2000	2004 200	7 2000	2023	3010	2017 2012	763	2014	2015	2016	2017 2	GTH 30	202	2021	1023	1003	2024 202	2 10	mirror (Que	ender/y	dras	Т
Overhead time	Wood pole.	No.				-																			=		_				$\rightarrow$	- 1	10.		
Operated has	Culture professioners	He																																	
Sebtrarromascon time	Salar promocosa O I up op 666// condutops	Len																											=				-		
Sanammoler line	Seter anumicaren G & F) BMV (conductor	lon																		1	1		- 1		$\rightarrow$				$\rightarrow$				-		
Sabinaro mission Cobia	Sadar promovarion INS agran 6650/ DOLFLY	len		_		-	-	-	-	_	-	_	_	_	-	-		_	-	-		-		_	$\rightarrow$	_		-	$\rightarrow$	_	-	_	-		-
Submernymesores Cabile	Sullay provinces of Supple SSAV (Citip de sustant)	Ages Ages	-	_	_	-	-	-		_	_	_	_	_	_	+	-	-+	_	+	+			_	-	_	+-	+	$\rightarrow$	-	-	_	_		0
Submanimission Cable Submanimission Cable	Substantinum Science (SAV (CSC pressurrent) Substantinum PC apro 66/07 (RPG	Som	+	_	_	+	+	-		$\rightarrow$		_	-	_	_	_	$\rightarrow$	-		_	1			_	+	_	+	+	$\rightarrow$	-	+	$\overline{}$	-		5
Sabinary message Cable	Substanting of LIDMS (CIVI)	lan	-	_	_	_				_			_					_						_	+	_	+	+	-	-	+	-	_		-
Submerni mooren Cabile	Salar programmers PC (100W (CS), pressure (seek)	lan		_	-	_				=			-	-	-			-						_	-	_	-	+	=	=	-	_			0
Substanting State	Solar promococar INS 110101 (Cho. It mock comb.	Aem						$\overline{}$		$\neg$								-	-						$\neg$		$\neg$	-	$\neg$	-	-				6
Salaramoson Cable	Salar anumusana DC (1069) (N1C)	form																		3	1 1	1 3							=				1-		
Sebicaromission Cable	Sales promissions sultere con milite	len	4															- 1	-3	3								1 1				- 1	14		
Jeresulerman Authors	Denie autocomornia up co. 66507	Ha	4		_	_	-	_		-		_	_	_				_		_					$\rightarrow$	_		-	$\rightarrow$	-	-				0
James utocarron Burlaings	Jens subscalings 110KA	HE	_		_		-		-	$\rightarrow$		_		_			_	_	_		-	_	_		$\rightarrow$	_		+	$\rightarrow$	-	-		_		4
Janes a la comerce a With greek	SQG() Block (Species)	Ha.	_	_		-	-	_	-	_	-	-	_	_	_	-	_	-	_	-	_	_	_	_	-	_		+	$\rightarrow$	_	-	_	-		2
Janus atternation a verdigene Januaria transport	23/V Swinth (Ground (Morent)	His .	+	_	_	+-					_	_	_	_	_	_		_	_				-	-+	-	_	-	+	-	-	-	_	-		1
Amesularmen switthgen	336 Secola (Folia Magnissi)	100	4		_	_	_	_		$\rightarrow$		_		_		-		_	_	_	_				-	_	_	+-+	-	-	-	_			
Janus u tora var s wich ges	33W 110P	100		_		_	_	-		-		_							_	_	_			_	-			+	-	_	_		7.0		6
Zanasuto iainn swichges	22/200/c4 (Josep )	Ma	4 -															- 3	- 2	3	3	- 3	- 3		=								7-		a
Amelula ison i with gene	27/3316/CE(Guelen)	Mar																																	0
Seguina en a la constante de l	3.3,6.6 (177K/CElground mauriset)	Ha																											=		=				*
Janua Uloranama Wichges	33/6.6/I (/27/e/CEQuinmunial)	183		_								_	_	_											$\rightarrow$			$\perp$	$\rightarrow$		_		-		0
Jonetatainen Irenterme	Danie Subscientini Appialiti meny	Ha	-	_	_	-	-	-	-	_	-	_	_	_	_	-	_	-	_	4	-	_		_	$\rightarrow$	_		+	$\rightarrow$	-	-	_	_		h
Distribution from	Draw Harrison O & Opper Wine Constitution Draw Harrison O & America Carble Constitution	ien	4				-	-	-	$\rightarrow$		-	-	-	_	-		_		-	-	_	-	_+	-	-		+	$\rightarrow$		-	_	_		5
Distribution litre	Styl Exercises of Execution Carbon Conduction SINT Exercises to	hem	1	_	_	_	_	-	-	-	_	_	_	_	_	_		-	_	_	_			_	-	_	-	+	$\rightarrow$	-	-	-	_		6
Dombura Cabre	Painthoon US XIVI or PV	iam	-		_	_	-					_			-			_	_	7	1 1	-	-		-	_		+	-	-	-		_		
Describsteren Calula	Draw charges OG #16	len				1 -						-						-1							=		$\neg$	-	=		-				4
Drinibraries Cable	Depresance Selection California	Ages																																	0
Distribution sourcegons	3.3 (6.6 // 1/27)(4) CEQual amount red) - reduces and separation s	HE.																															-		ś
brantistan paritigas	3.3% 6/I Q22MV (Attinion)	160.										-		-																	-		100		5
Drambaum yourtem	2.3/6.6/1 (/27/WS-archic and Law Spilarmores)	He				4				=			-			4												-	=		-		1		6
Delember men regions	3,3/6.6/1 I/27KY5 with Special maximal /- ecopy # KIV	He		_	_	-	-	_				_				-		_		_	-				_	_		$\rightarrow$	$\rightarrow$		_				0
Describation correspond	33,641 1777(v 8H U	Man	-	_	_	-	-	_	_	$\rightarrow$	_	_	_	_	_	_	_	-	_	-		_	_		-	_	-	+	$\rightarrow$	-	-	_	-		- 6
Esperitures le angle me Distribution le angle me	Fale Mounted Installante Grant Mannet francisme	Ha.	+		_	+	1	_		$\rightarrow$	-	-	$\rightarrow$	-		+	+	-+	_	-	1			_	-		+-	+	$\rightarrow$	-	-	_	-		9
Drienburge is projected	Mingring and a second		+	_	-	_	+	-		$\rightarrow$	-	_	-	_	_	-		-	_	_	_			_	-	_	+	+	$\rightarrow$	-	+	_	-		1
Osimburan Setoraman	G aunt Haunel Schuleren Touring	1772		_	_	_	_	-		-	_	_			_	-		_	_		_			_	-	-	-	+	-	-	-	-	_		1
Whee	(VO) Contracts	hem			_	_	1			=		_	-	_				_	_		1 1				-	-1-	-	-	-		-	-	7.		
f/Cubia	Py NGCable	len						-												7															-
I/ So me lighting	IVOI/8551 metals order	Jan									. 13									4	1 1	- 1							=						
Commerces	G 1/00 conjume se see connections	He			_			$\vdash$			-	-	-								$\perp$				-		_	$\perp$	$\equiv$	=	$ \square$			_	4
A demonstration of the last of	Processors of also becomes transcal, salid conserved numerics	180		_	_	_							_	_											_	_		4	-	-	-		-		0
SCACA and communication.	SCARA and communicacions equipment operating as a single school	m by	4		_	-						_			- 1	-		_	_	-	1							+	$\rightarrow$	_	_				2
Coperator Barks	Coprocess including consults		-	_	_	-	-	-	_	_	-	_	_	_	-	_	_	_	-	-	-	-	_	_	$\rightarrow$	_	-	+	$\rightarrow$	_	-	_	_		1
tend Covered tend Covered	Care Microf plans Entry	7	+	_	-	-	+	<del>-</del>	$\vdash$	-	$\rightarrow$	-	-	-	_	_	-+	$\rightarrow$	_	-	+	_	-	_	$\rightarrow$	$\rightarrow$	-	+	$\rightarrow$		-	_	_		8
Quis.	Cable homes	im	-					_																							-	_		-	

141

# Schedule 9c Report on Overhead Lines and Underground Cables

		State Activities
	Company	Name
	For Year	Ended
	Network / Sub-network	k Name
SCHE	DULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABL	20) (4) (4)
TO SECTION ASSESSMENT		
circuit le	edule requires a summary of the key characteristics of the overhead line and underground cable network. All r maths	units relating to cable and line assets, that are expressed in km, reter to
CHEDICIE	-1454-145.	
sch ref		
1		
9		
		Total circuit length
10	Circuit length by operating voltage (at year end)	Overhead (km) Underground (km) (km)
11	> 56kV	
12	50KV & 66KV	
13	33KV	
14	SWER (all SWER voltages)	
15	22kV (other than SWER)	
16	5.6KV to 11kV (inclusive—other than SWER)	
17	Low voltage (< 1kV)	
18	Total circuit length (for supply)	
19		The state of the s
20	Dedicated street lighting circuit length (km)	-
21 22	Circuit in sensitive areas (conservation areas, lwi territory etc) (km)	
44		Ø of total
23	Overhead circuit length by terrain (at year end)	Circuit length (km) overhead length)
24	Urban	(F)
25	Rural	
26	Remote only	
27	Rugged only	# <del>3</del>
28	Remote and rugged	
29	Unallocated overhead lines	
30	Total overhead length	
31		20030 500 0
20		(% of total circuit Circuit length (km) length)
32	Length of circuit within 10km of coastline or geothermal areas (where known)	chean engar (any length)
33	Length of circuit within 10km of coastine of geothermal areas (where known)	
2.0		(% of total
34		Circuit length (km) overhead length)
35	Overhead circuit requiring vegetation management	

 $[\mathsf{DRAFT}] \ \mathsf{Electricity} \ \mathsf{Distribution} \ \mathsf{Information} \ \mathsf{Disclosure} \ (\mathsf{Aurora} \ \mathsf{Energy} \ \mathsf{Limited}) \ \mathsf{Amendment} \ \mathsf{Determination} \ \mathsf{2021}$ 

142

## Schedule 9d Report on Embedded Networks

		Company Name		
		For Year Ended		
CUEDU	HE OF BEDOM ON EMBEDDED NETWORKS			
	ILE 9d: REPORT ON EMBEDDED NETWORKS  requires information concerning embedded networks owned by an EDB that are embedded in another EDB's ne	twork or in another er	mbedded network	
ref			Wester Wilde	
/e)			Number of ICPs	Line charge revenue
r c	Location *		served	(\$000)
2		1		
ğ		Ī		
		[		
		Į.		
				ļ:
		-		
	-			
	-	1		
		ŀ		
				6
	-	ŀ		†"·
		İ		
				ľ
* 6	Extend embedded distribution networks table as necessary to disclose each embedded network owned by the EDI	which is embedded in	another EDB's netwo	ork or in another
em	ribedded network			

143

#### Schedule 9e Report on Network Demand

	Company Name
	For Year Ended
	Network / Sub-network Name
SC	HEDULE 9e: REPORT ON NETWORK DEMAND
	schedule requires a summary of the key measures of network utilisation for the disclosure year (number of new connections including ributed generation, peak demand and electricity volumes conveyed).
sch ne	t en
8	9e(i): Consumer Connections
9	Number of ICPs connected in year by consumer type
	Number of
10	Consumer types defined by EDB*  connections (ICPs)
11	[EDB consumer type]
12	[EDB consumer type]
13	[EDB consumertype]
14	[EDB consumer type]
15	[EDB consumer type]
16 17	* include additional rows if needed  Connections total –
18	Connections County
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	
24	Demand at time of
	maximum
	coincident
25	Maximum coincident system demand 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
31	Electricity volumes carried Energy (GWh)
32	Electricity supplied from GXPs
33	Jess Electricity exports to GXPs
34 35	plus Electricity supplied from distributed generation less Net electricity supplied to (from) other EDBs
36	Electricity entering system for supply to consumers' connection points
37	Jess Total energy delivered to ICPs –
38	Electricity losses (loss ratio)
39	
40	Load factor -
41	9e(iii): Transformer Capacity
42	(MVA)
43	Distribution transformer capacity (EDB owned)
44	Distribution transformer capacity (Non-EDB owned, estimated)
45	Total distribution transformer capacity
46 47	Zone substation transformer capacity
	The state of the s

 $[\mathsf{DRAFT}] \ \mathsf{Electricity} \ \mathsf{Distribution} \ \mathsf{Information} \ \mathsf{Disclosure} \ (\mathsf{Aurora} \ \mathsf{Energy} \ \mathsf{Limited}) \ \mathsf{Amendment} \ \mathsf{Determination} \ \mathsf{2021}$ 

144

## Schedule 10 Report on Network Reliability

	Company Name	
	For Year Ended	
Network / Su	b-network Name	
IEDILLE 10: DEDORT ON NETWORK DELIABILITY		
	or the disclasure year	EDBs must around a suplanation community on their
determination), and so is subject to the assurance report required by section 2.8.		
10(i): Interruptions		
20(1). Incertaptions	Marrish of	
Interruptions by class	interruptions	
		1
Class C (unplanned interruptions on the network)		
The second secon		
Class F (unplanned interruptions of generation owned by others)		
Class G (unplanned interruptions caused by another disclosing entity)		
Class H (planned interruptions caused by another disclosing entity)		
Class I (interruptions caused by parties not included above)		
Total	=	
Interruption restoration	≤3Hrs	>3hrs
Class C interruptions restored within		
SAIFI and SAIDI by class	SAIFI	SAID
Class A (planned interruptions by Transpower)		
Class B (planned interruptions on the network)		
Class C (unplanned interruptions on the network)		
Class D (unplanned interruptions by Transpower)		
Class E (unplanned interruptions of EDB owned generation)		
Class F (unplanned interruptions of generation owned by others)		
Class 5 (unplanned interruptions caused by another disclosing entity)		
Class H (planned interruptions caused by another disclosing entity)		
Total		3.65
grander and confidence of the confidence		
to an account of the contract	Normalised SAIFI	Normalised SAIDI
Classes B& E (interruptions on the network)		
	EDULE 10: REPORT ON NETWORK RELIABILITY  thedule requires a summary of the key measures of network reliability (interruptions, SAID), SAFF and SAID informati determined only, and so is subject to the assurance report required by section 2.8.  10(i): Interruptions  Interruptions by class  Class A (planned interruptions by Transpower)  Class B (planned interruptions on the network)  Class D (unplanned interruptions on the network)  Class D (unplanned interruptions by Transpower)  Class E (unplanned interruptions on the network)  Class D (unplanned interruptions by Transpower)  Class E (unplanned interruptions on the network)  Class E (unplanned interruptions to planned generation)  Class E (unplanned interruptions of generation nowned by shibers)  Class E (unplanned interruptions of generation nowned by shibers)  Class E (unplanned interruptions caused by another disclasing entity)  Class I (planned interruptions caused by another disclasing entity)  Class I (planned interruptions to a under the class in a continuation of the contin	For Year Ended Network / Sub-network Name  EDULE 10: REPORT ON NETWORK RELIABILITY  thidule requires a summary of thekey measures of network reliability (interruptions, SAIO), SAIFI and fault reats) for the disclosure year in Schedule 24 (Explanatory notes to templates). The SAIFI and SAIOI information is part of audited determination), and so is subject to the assurance report required by section 2.8.  10(ii): Interruptions  Interruptions by class  Class A (planned interruptions by Transpower)  Class B (planned interruptions by Transpower)  Class D (unplanned interruptions by Transpower)  Class E (unplanned interruptions by Transpower)  Class I (unplanned interruptions by Transpower)  Class I (unplanned interruptions by Transpower)  Class I (unplanned interruptions caused by another disclosing entity)  Class I (interruption restoration  Class C (interruptions caused by parties not included above)  Total  Interruption restoration  SAIFI and SAIDI by class  Class B (planned interruptions by Transpower)  Class B (planned interruptions on the network)  Class E (unplanned interruptions on the network)  Class E (unplanned interruptions and the network)  Class E (unplanned interruptions and the network)  Class E (unplanned interruptions caused by another disclosing entity)  Class E (unplanned interruptions caused by another disclosing entity)  Class E (unplanned interruptions caused by another disclosing entity)  Class E (unplanned interruptions caused by another disclosing entity)  Class E (unplanned interruptions caused by another disclosing entity)  Class E (unplanned interruptions caused by another disclosing entity)  Class E (unplanned interruptions caused by another disclosing entity)

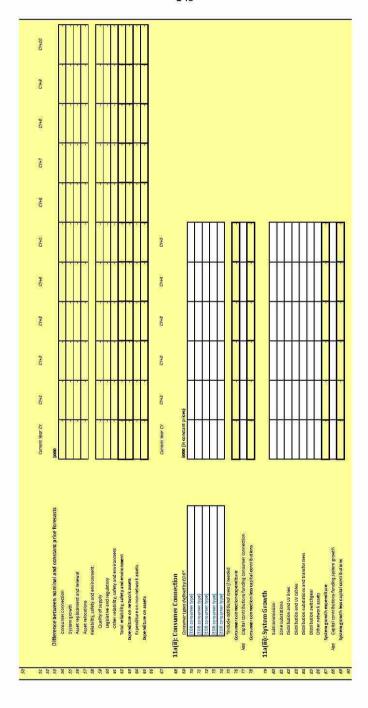
 $[\mathsf{DRAFT}] \ \mathsf{Electricity} \ \mathsf{Distribution} \ \mathsf{Information} \ \mathsf{Disclosure} \ (\mathsf{Aurora} \ \mathsf{Energy} \ \mathsf{Limited}) \ \mathsf{Amendment} \ \mathsf{Determination} \ \mathsf{2021}$ 

42	10(ii): Class C Interruptions and Duration by Cause		
43			
		parel	24.00
44	Cause	SAIFI	SAIDI
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			
7,100		•17	
55	10(iii): Class B Interruptions and Duration by Main Equipment Involved	1	
56			
57	Main equipment involved	SAIFI	SAIDI
58	Subtransmission lines		
59	Subtransmission cables		
60	Subtransmission other		
61	Distribution lines (excluding LV)		
62	Distribution cables (excluding LV)		
63	Distribution other (excluding LV)		
000	10(iv): Class C Interruptions and Duration by Main Equipment Involved		
64 65	Tolia): class c interruptions and Duration by Main Equipment involved	•	
17151	227 4 50 100	2000	22767
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)	100	
73	10(v): Fault Rate		
100			
74	Main equipment involved	Number of Faults	Circuit length (km)
75	Subtransmission lines		
76	Subtransmission rables	-	
77	Subtransmission other		
78			
	Distribution lines (excluding LV)		
79	Distribution cables (excluding (V)	-	
81	Distribution other (excluding LV)  Total		
6.1	TOTAL		

146

Schedule 11a Report on Forecast Capital Expenditure

SCHEDULE 11a: REPORT, ON FORECAST CAPITAL EXPENDITURE	The section for the state of production of the state of t	Durent World C	11a(i): Expenditure on Assets Forecast	Specin growing Asset replacement and renewal	The state of the s	Reliability, safety and environment:	Degislative and regulatory Other reliability, cafety and emitorement	Course responses and supported in	Steendluse on retwork assets	Expenditure on non-network assets			Value or capital scontributions Value of vested ascets	Capital expenditure forecast		Current Neor Cir	\$000 [in constant prices)			Asset replacement and renewal	Asset Intocators  odishim sataniand aminormant		Legislative and regulatory	Other reliability, safety and environment	Total reliability, safety and environment	Expenditure on remonk assets	Expenditure on non-network assets		Subcomponents of emperalities on assets (where known)	Energy efficiency and demand side management, reduction of energy losses	Overhead to underground conversion	Research and development
	sts snould be consistent with the shedule 144 (Mandatory Explanato	D4:2		_		3.0					10	1				245		- 17					u.	30	7.							
	supporting information and out in	F-10 E-10														P40 E40			-1				- 18-2									F-1-76
	mitte AMP. The forecast a to be	5+40					1				+	-			-	5+40		7,	10		0.00	7.	O.T.	1.0	A.	.V	10.	W			SK-S	
Company Name AMP Planning Period	expressed in both constant it	240 340				200								-	-	240 940				-					-	70 e	_	: 103		-		
	rice and bo minel dollar leer ma.	3									70					b sto										AV.		V.X.			Sept.	
	iso required is a forecast of	D++0 C++70		+		3.6			ľ						-	CH+30						-			4			-		_		Les



5442	\$ 58	90	
7	¥5	5440	
<b>1</b>	**	240	
DI+2	2443	250	
ž	5%3 C	200	
Current Year Or	Correct Year O'	Soo (In contain prime)	Stood (In constaint pikes)
	119 (b); Asset Replacement and Renewal statements and seasonal statements and statements and seasonable season	11a/(y).Asset Relocations    Provide a programmed     Provide a program	Tale (w) Countity of Supply  region in growing and an advantage of the programmed process growing a process of the process of
92 55	25 25 25 25 25 25 25 25 25 25 25 25 25 2	100 200 200 200 210 212 213 214 215 216 217 218 218 218 218 218 218 218 218 218 218	222 223 224 225 226 226 227 227 227 227 227 227 227 227

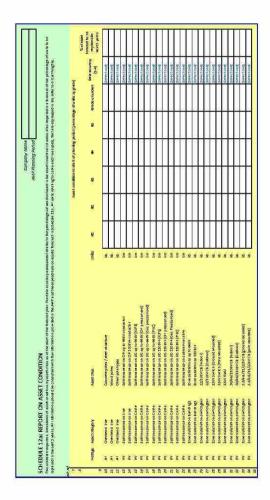
5940	\$500 Section 1	
ŧ	4 6	
E-HG	8	\$
240	700	
Ē	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Current Year CY	Comment were Co	
255.	tradical in the second of the	Total profess of statement project on the programming profess of statement profess of statement project on the programming profess of statement project on the programming profess of statement projects of statement projec

154

Schedule 11b Report on Forecast Operational Expenditure

	CI+430					-						0.1+1.0							-			3	J.								CV+12						,					
om inal dollar ter	64.0		L				L			ļ		691,13										al.	e de								6440			-							,	
onstant price and n	S+4/3											SHID																			CY48											
Company Name AMP Planning Period to be expressed in both co	(645)						L					2413							~												CH43											
AME.	9+A.J											C746																			CY+6											
et out in the AMP. T	SHAD					MA.			Mi	8		54/3							8				O.C.								CV45			,th	,0	78.0				Mir	Mil	V)
orting informations	740					-).						**											eller e								Creed				3							
istent with the supp Mandatory is plane	EAAG					100			M	č		2910							8			37	O.V.								DANG			,th		1.0	16		5.	Mir	di	d)
casts should be core	Z+1.0											C1.45											. Kit								CV+2											
ing period. The fore	CN42	Si pi is				100			M			C147		rices)					20			8	O.V.								DM-2			JA)	20	X			5)	die	di	C)
ENDITURE anda soyear plann al dellar operational	Current Yeor CY	\$000 (in nominal dollars)										Current Year CY		\$000 (in constant prices)								,	e de la companya de l								Current Yeor CY		2000	9			7.0					.0
SCHEDULE 11b: REPORT ON FORECAST OPERATIONAL EXPENDITURE  AAAR Planning period  This random requires been been required to the delicative was made a loyest planning period. The forestate should be consistent with the supporting information and court in the delicative was made a loyest planning period. The forestate should be consistent with the supporting information and out in the dates are been received to be delicative price and norminal deliar operation in superature for increase in the many of the delicative and norminal deliar operation in the superature for increase and norminal deliar operation in the many of the superature for the delicative and norminal deliar operation in the many of the superature for the superatu		Operational Expenditure Forecast	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					Service interruptions and entergencies	Vegetation management	Routine and corrective maintenance and inspection	Asset replacement and renewal	Network Opes	System operations and network support	Business support	Non-network opex	Operational expenditure	Subcomponents of operational expenditure (where known)	Energy efficiency and demandside management, reduction of	energy tosses	Direct billing*	Research and Development	Insurance	Direct billing expanditure by suppliers that direct bill the majority of their consumers.			Difference between nominal and real forecasts	Service Interruptions and emergencies	Vegetationmanagement	Routine and corrective maintenance and inspection	Asset replacement and renewal	Accessive Control	system operations and network support	Business support	Non-network opex	Operational expenditure
CHEDI Sasthedu (8. must g	2 s		2 22										22						520					H						•	330	8								9		

Schedule 12a Report on Asset Condition



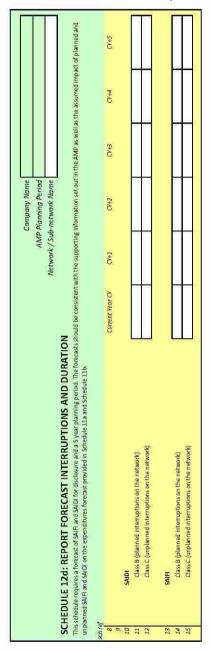
The proposal part of the propo	Amang chair  The financians (South displaces) The financian (S	*		the territory managed	90 00 000	us on it no	of on the	us on Ca Me	ut on Cable	ut on Ca Ne	UN OBSINERS	US OR SIN KING	Stat We so th	US OR SINK RING	ut on aw feligi	us on Transfer	ut on Transfe	ur on Transfo	us on 3 ubster			Sugar	tions	uon.	and confirms	lor Brinks	outro	No the call
See a section in the form to the section of the sec		3		of mer							ž	ž	ant.	N.	N.	Title:	times	ricer	ous						ca total			
	4 4111114444444111443434	their class.		Zonesubstation financia (mess	Drists Button OR O pen Whre Conductor	Draft Button, Olf Aen at Cattle Conductor	SWE conductor	Distribution DEXIPLOTING	Distribution USPIC	Distribution Saltins nie-Cable	3.4/6.6/11/2239 CE  pole munified] - redozens a nd sectional sens	3.4/66/11/223VC8 [Indoor]	3.3/65/11/223V3W Khesand tuses [potemounted]	3.3/65/33/223VSwxn ground mounted) - exem RMU	3.3/6/6/31/220V RWU	Pole Mounted Transformer	Ground Mounted Transformer	Voluge regulators	Ground Mounted Substitution Pousing	IV OR Conductor	IV DECIMe	IV CH/US Sineeright on run!	DP/UG consumer service condections	Projection relays [electromecha incal, solid state and numeric)	SCADE and communications equipment operating as a single system.	Capacito sa saluda gcontrola	Centrali and plant	The same
# T		¥																										
	<del>a</del>	2					L																					
<u>e</u>		ž		50													8			2		200						
e e	•	2																										
E	e e	Grade un arrow		100													25		500	3		169				-		
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	g.			Sefections	Befectionel	Belectons]	[selections]	[Befortone]	Befortobel	Betec10093	Section	[56/002009]	Befortons	[Section]	Selections)	Belections]	Selections.	Befortobel	[Befortone]	Selections!	Sefection)	Sefections:	Seectone)	Sefections	Befections	Belectons]	Befections)	Illafoctonell
William State of the State of t	M. M	D Amery	ŀ		Ц		L			- 3										3		9						

Schedule 12b Report on Forecast Capacity

ON FORECAST CAPACITY  ON FORE SUbstations  On Forecast Capacity and only the information provides and connection for the information of the information o										Сотрапу Мате		Т
Intilación of intelación of intilación of intilación of intilación of intilación of intelación of in	Intilation of Intelation of In	E 12b: REPORT ON FORECAST CAPACITY BY INSTRUMES DESIDENCY OF CAPACITY	for for each spire settlet	ion and current	stribution transformers	apacity. The data pr	by ded should be co	Dositent with the of	demation provided	AMP Planning Period		П
The control of the co	Interaction of the capacity of supply   Intellection of the capacity   Intellection of the	out retain to the operation of the returner in its normal steady.	the configuration.									T
	Indication   Ind	il: System Growth - Zone Substations					To collection		To controll 41			
			Current Peak Load	installed Firm Capacity		Transfer Capacity	Installed Firm	mstalled Firm Capacity 45 years	Installed Firm Capacity + 5yrs	Installed Firm Capacity Constraint +5 years		
		Existing Zone Substantins	MVA	MAYA	NP.	MVA	£	MVA			Explanation	Ī
		[Done Substation_01]							.53	Selections		Î
		[Zone Substation_02]								Seections		ń
		[Zone Substation_O3]								Select deal		
		[Zoee Substation 04]								Sections]		
		[Zoes Substation_03]								Seed one		_
		[Down Substation 06]								Sections[		T
		[Dose Substation_07]								[and the sale		n
		[Zoes Substation 08]								Sections		ř
		[bose Substation 09]								Sections		i
		[Does Substation_10]					+			[asectoses]		
		[Dove Substation_11]		2/10	ete		Ť			Sections		
		[Stree Substation_12]			atro	*	1			Seattons]		m
		[Dove Sutstation 13]				*				Swctore]		
		[Dove Substation_14]								Seactonal		
		[Down Substation 15]	-10			ir				Sections		Γ"
		[Zowe Substation 16]								Sections		
		[204e Substation_17]							1	Sections		
		[Solve Substation_18]								Selectional		П
		[Zone Substation_19]								Sett oral		
	The analysis of the contract o	[Zone Substation_20]								Seect one)		Г

Schedule 12c **Report on Forecast Network Demand** 56,10 CY+5 440 CY+4 CV+3 Number of connections CN+2 CN+3 Company Name AMP Planning Period C),+5 SCHEDULE 12C: REPORT ON FORECAST NETWORK DEMAND
This arbefule requires a forecast of new connections by consumer type), peak demand and energy volumes for the disclosure year and a5 year planning period. The forecasts si CY+I CV+I Current Year CY Current Year CY Demand on system for supply to consumers' connection points Number of connections Capacity of distributed generation installed in year (MNA) GKP demand
plus Distributed generation output at tH/ and above
Waxinum coincident system demand
less Net transfers to (from) other EDBs at HV and above Maximum coincident system demand (MW) Electricity supplied from distributed generation
Net electricity supplied to (from) other EDBs
Electricity entering system for supply to ICPs Electricity volumes carried (GWh)
Electricity supplied from GXPs Connections total
\*Include additional rows if needed
Distributed generation 12c(i): Consumer Connections Electricity exports to GXPs 12c(ii) System Demand 

Schedule 12d Report on Forecast Interruptions and Duration



## Schedule 13 Report on Asset Management Maturity

- 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-
      - 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.
  - 1.2 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.

- 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
  - 2.9 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.

						55 550 <b>3</b>		
						Company Name		
						AMP Planning Period		i i
						Asset Management Standard Applied		
The state of the s		ASSET MANAGEMENT MATUR		9 8				
This schedule require	s information on the El	DB'Sself-assessment of the maturity of its asse	t ma nagem	ent practices				
Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information
	Asset	To what extent has an asset	June	evidence—Junimary		Widely used AM practice standards require an		The organisation's asset management policy, its
	manage ment policy	management policy been documented, authorised and communicate d?					overall responsibility for asset management.	organisational strategic plan, documents indicating how the asset management policy was based upon the neeth of the organisation and evidence of communication.
10	Asset manage ment strategy	What has the organisation done to ensure that its asset management strategy is consistent with other appropriate organisational policies and strategies, and the needs of stakeholders?					responsibility for asset management.	The organisation's asset management strategy document and other related log anisational politics and strategies. Other than the organisation's strategie plan, these could include those relating to health and safety, environmental, etc. Results of stakeholder consultation.
11	Asset management strategy	In what way does the organisation's asset management strategy take account of the lifecycle of the assets, asset types and asset system over which the organisation has site wartiship?				A key component of this is the need to take account of the lifecycle of the assets, asset types and asset systems. (For example, this requirement is recognised in 4.3.1 o) of PAS 55). This question explores what an	Top management. People in the organisation with expert knowledge of the assets, asset types, asset systems and their associated life-cycles. The management them that has overall responsibility for asset management. Those responsible for developing and adopting methods and processes used in asset management.	The organisation's documented asset management strategy and supporting working documents.
	Asset management plan(s)	How cloes the organisation establish and document its asset management plans) across the life cycle activities of its assets and assetsystems?				into practical plan(s) so that all parties know how the	The management team with overall responsibility for the asset management system. Operations, maintenance and engineering managers.	The organisation's asset management plan(s).

					Campany Name		
					AMP Planning Period		
AND THE STATE OF T					Asset Management Standard Applied		
CHEDULE 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
3	Asset menagement policy	To what extent has an asset management policy been documented, authorised and communicated?	The organisation does not have a documented asset management policy.	The organisation has an asset management policy, but it has not been authorised by top management, or it is not influencing the management of the assets.	The organisation has an asset management policy, which has been authorised by top management, but it has had limited circulation. It may be in use to influence development of strategy and planning but its effect is limited.		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.
.10	Asset management strategy	What has the organisation done to ensure that its asset management strategy is consistent with other appropriate organisational policies and strategies, and the needs of stakehol ders?	need to ensure that its asset management strategy is appropriately aligned with the organisation's other organisational policies and strategies or with stakeholder requirements.	The need to align the asset management strategy with other organisational policies and strategies as well as stalkeholder requirements is understood and work has started to identify the linkages or to incorporate them in the drafting of asset management strategy.	Some of the linkages between the long- term asset management strategy and other organisational politics, strategies and stakeholder requirements are defined but the work is fairly well advanced but still incomplete.		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.
11	Asset management strategy	In what way does the organisation's asset management strategy take account of the lifecycle of the assets, asset types and asset systems over which the organisation has stewardship?	The organisation has not considered the need to ensure that its asset management strategy is produced with due regard to the lifecycle of the assets, asset types or asset systems that it manages.  OR  The organisation does not have an asset management strategy.	The need is understood, and the organisation is drafting its asset management strategy to address the lifecycle of its assets, asset types and asset systems.	The long-term asset management strategy takes account of the lifecycle of some, but not all, of its assets, asset types and asset systems.	The asset management strategy takes account of the lifecycle of all of its assets, asset types and asset systems.	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.
26	Asset mariagement plan(s)	How does the organisation establish and document its asset management plan(s) across the life cycle activities of its assets and asset systems?		The organisation has asset management plan(s) but they are not aligned with the asset management strategy and objectives and do not take into consideration the full asset life cycle (including asset creation, a cquisition, enhancement, utilisation, maintenance decommissioning and disposal).	putting in place comprehensive, documented asset management plan(s)	Asset management plan(s) are established, documented, implemented and maintained for asset systems and critical assets to achieve the asset management strategy and asset management objectives a cross all life-cycle phases:	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.

#### Campany Name AMP Planning Period Asset Management Standard Applied SCHEDULE 13: REPORT ON ASSET MANAGEMENT MATURITY (cont) Evidence - Summary Record/documented Information Function How has the organisation Plans will be ineffective unless they are communicated. The management team with overall responsibility for Distribution lists for plan(s). Documents derived from Asset communicated its plan(s) to all to all those. Including contracted suppliers and those the asset management system. Delivery functions and plan(s) which detail the receivers role in plan delivery management relevant parties to a level of detail who undertake enabling function(s). The plan(s) need plan(s) Evidence of communication. appropriate to the receiver's role in to be communicated in a way that is relevant to those their delivery? who need to use them. 29 How are designated responsibilities The implementation of asset management plan(s) relies The management team with overall responsibility for The organisation's asset management plan(s) nanagement for delivery of asset plan actions on (1) actions being clearly identified, (2) an owner the asset management system. Operations, Documentation defining roles and responsibilities of documented? allocated and (3) that owner having sufficient maintenance and engineering managers. If individuals and organisational departments delegated responsibility and authority to carry out the appropriate, the performance management team. 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. 31 Asset What has the organisation done to It is essential that the plan(s) are realistic and can be The management team with overall responsibility for The organisation's asset management plan(s). rnanagement ensure that appropriate arrangement implemented, which requires appropriate resources to the asset management system. Operations, Documented processes and procedures for the delivery are made available for the efficient be available and enabling mechanisms in place. This maintenance and engineering managers. If of the asset management plan. and cost effective implementation of question explores how well this is achieved. The appropriate, the performance management team. If the plan(s)? plan(s) not only need to consider the resources directly appropriate, the performance management team. required and timescales, but also the enabling Where appropriate the procurement team and service (Note this is about resources and activities, including for example, training requirements, providers working on the organisation's asset-related enabling support) supply chain capability and procurement timescales. activities 33 Contingency What plan(s) and procedure(s) does Widely used AM practice standards require that an The manager with responsibility for developing The organisation's plan(s) and procedure(s) for dealing the organisation have for identifying organisation has plan(s) to identify and respond to emergency plan(s). The organisation's risk assessment with emergencies. The organisation's risk assessments and responding to incidents and emergency situations. Emergency plan(s) should team. People with designated duties within the plan(s) and risk registers. emergency situations and ensuring and procedure(s) for dealing with incidents and outline the actions to be taken to respond to specified continuity of critical asset emergency situations and ensure continuity of critical emergency situations. management activities? asset management activities including the ommunication 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.

					Company Name		
					AMP Planning Period		
					Asset Management Standard Applied		
HEDULE 1	3: REPORT ON	ASSET MANAGEMENT MATUR	ITY (cont)				
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.	detail appropriate to their participation or business interests in the delivery of the plan(s) and there is confirmation	The organisation's process(es) surpa 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.
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.		document responsibilities for the delivery of actions but responsibility/authority levels are	detail to enable delivery of actions.  Designated responsibility and authority	The organisation's process(es) surpaid 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.
<b>851</b> -	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 plans(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 easisting 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) surpai 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 plank) and procedure(s) to identify and respond to incidents and emergency situations.		situations are identified. Either	activities consistent with policies and	The organisation's process(es) surpar 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 Florating Period

Asset Management Standard Applied

#### SCHEDULE 13: REPORT ON ASSET MANAGEMENT MATURITY (cont)

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 deliver the requirements, objectives and plan(s)?				In order to ensure that the organisation's assets and asset systems deliver the requirements of the asset management policy, strategy and objectives responsibilities need to be allocated to appropriate people who have the necessary subhority to fulfil their responsibilities. (This question, relates to the organisation's assets eg, para (t), 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).	Top management. People with management responsibility for the delivery of asset management policy, strategy, objectives and plan(s). People working on asset-related activities.	Evidence that managers with responsibility for the delivery of asset management policy, strategy, objectives and plan(s) have been appointed and have assumed their responsibilities. Evidence may include the organisations' 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.	Top management. The management team that has overall responsibility for asset management. Risk management team. The organisation's managers involved in dayst-oday 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 walk-abouts 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 fits 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 compilance 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 compilance of outsourced activities.

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	Top management understands 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 plants). They have been given the necessary authority to achieve this.	The organisation's process(es) surpas the standard required to comply with requirements set out in a recognised standard.
40	Structure, authority and responsibilities	What evidence can the organisation's top management provide to demonstrate that sufficient resources are available for asset management?	The organisation's top management has not considered the resources required to deliver asset management.	The organisations top management understands the need for sufficient resources but there are no effective mechanisms in place to ensure this is the case.	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.	asset management and sufficient resources are available. It can be demonstrated that resources are matched to asset management requirements.	The organisation's process(es) surpas 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 organisations top management understands the need to communicate the importance of meeting its asset management requirements but does not do so.	Top management communicates the importance of meeting its asset management requirements but only to: parts of the organisation.	importance of meeting its asset management requirements to all relevant parts of the organisation.	The organisation's process(es) surpa 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?	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.	Controls systematically considered but currently only provide for the compliant delivery of some, but not all, aspects of the organisational strategic plan and/or its asset management policy and strategy. Gaps exist.	controlled to provide for the compliant delivery of the organisational strategic plan, asset management policy and strategy, and that these controls are	The organisation's process(es) surpar 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	}	
						AM P Planning Period		
						Asset Management Standard Applied		
SCHEDULE 1	B: REPORT ON A	ASSET MANAGEMENT MATUR	RITY (cor	it)				
Question No.	Function	Question	Scare	Evidence—Summary	User Guidance	Why	Who	Record/documents/d Information
48	Training, awareness and	How does the organisation develop plan(s) for the human resources				There is a need for an organisation to demonstrate that it has considered what resources are required to	plan(s). Managers responsible for developing asset	Evidence of analysis of future work load plan(s) in terms of human resources. Document(s) containing
	competence	required to undertake asset menagement activities - including the development and delivery of asset management strategy, process(es), objectives and planis)?				develop and implementix asset menagements ystem. There is also need for the organisation to demonstrate that it has assessed what development plants) are required to provide its human resources with the skills and competencies to develop and implement its asset menagement systems. The times coles over which the planting har relevant hould be commensurate with the planning har isons within the asset menagement strategy considers 5, 10 and 15 year time scales then the human resources development plants) should align with these. Resources include both 'in house' and external resources who undertake asset management activities.		enabysis of the organization's own direct resources and contractors resource appelling over suitable timescales. Evidence, such as minutes of meetings, that suitable management forums are monitoring human resource development plan(s). Training plan(s), personal development plan(s), contract and service level agreements.
49	Training, awareness and competence	How does the organisation identify competency requirements and then plan, provide and record the training necessary to achieve the competencies?				Widely used AM standards require that organisations to undertake a systematic identification of the asset management awareness and competencies required at each level and function within the organisation. Once identified the training required to provide the necessary competencies should be planned for delivery in a timely and systematic way. Any training provided must be recorded and melimitated in a suitable format. Where an organisation has contracted service provides in place then it should have a means to demonstrate that this requirement is being met for their employees. (eg. PAS 55 refers for fareworks suitable for identifying competency requirements).	plan(s). Managers responsible for developing asset management strategy and plan(s). Managers with responsibility for development and recruitment of staff (including HR functions). Staff responsible for training.	Evidence of an established and applied competency requirements assessment process and plan(s) in place to deliver the required training. Evidence that the training programme is part of a wider, co-ordinated asset management activities training and competency programme. Evidence that training activities are recorded and that records are readily available [for both direct and contracted service provider staff); e.g. via organisation wide information system or local records database.
50	Training, awareness and competence	How does the organization ensure that persons under its direct control undertaking assert management related activities have an appropriate level of competence in terms of education, training or experience?				A critical success factor for the effective development and implementation of an asset management systemis the competence of persons understaring these activities organisations should have effective means in place for ensuring the competence of engologies to carry out their designated as set management function(s). Where an organisation has contracted service provides undestabling elements of its asset management system them the organisation shall assure itself that the outcomes of the competencies of the competencies of its employees. The organisation should ensure that the introducion and competencies it requires are in place and actively monitor, develop and maintain an appropriate balance of these competencies.	seveloping training programmes. Staff responsible for procurement and sevice agreements. HR staff and those responsible for recruitment.	Evidence of a competency assessment framework that aligns with established frameworks such as the asset management. Competencies Requirements Framework (Version 2.0): National Occupational Standards for Menagement and Leadership: UK Standard for Phofessional Engineering Competence, Engineering Council, 2005.

#### Campany Name AMP Planning Period Asset Management Standard Applied SCHEDULE 13: REPORT ON ASSET MANAGEMENT MATURITY (cont) Question No. Maturity Level 1 Maturity Level 2 Maturity Level 3 Maturity Level 4 Maturity Level 0 Function Question low does the organisation develop The organisation has not recognised the The organisation has recognised the The organisation has developed a The organisation can demonstrate that he organisation's process(es) surpass awareness and 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 ne standard required to comply with competence required to undertake asset requirements to develop and implement frequirements and to develop a plan(s). competencies and human resources to matching competencies and capabilities equirements set out in a recognised management activities - including the lits asset management system. There is limited recognition of the need the asset management system including to the asset management system andard development and delivery of asset to align these with the development and the asset management plan but the work including the plan for both internal and management strategy, process(es), implementation of its asset s incomplete or has not been contracted activities. Plans are he assessor is advised to note in the objectives and plan(s)? management system. consistently implemented. reviewed integral to asset managemen vidence section why this is the case system process(es). Training, awareness and low does the organisation identify The organisation does not have any he organisation has recognised the The organisation is the process of Competency requirements are in place he organisation's process(es) surpass he standard required to comply with and aligned with asset management need to identify competency identifying competency requirements ompetency requirements and then means in place to identify competency plan, provide and record the training requirements and then plan, provide and aligned to the asset management plan(s). Plans are in place and effective competence requirements. quirements set out in a recognised n providing the training necessary to necessary to achieve the record the training necessary to achieve plan(s) and then plan, provide and the competencies. record appropriate training. It is chieve the competencies. A structure complete or inconsistently applied means of recording the competencies he assessor is advised to note in the achieved is in place. vidence section why this is the case: and the evidence seen. low does the organization ensure The organization has not recognised the Competency of staff undertaking asset. The organization is in the process of Competency requirements are identified The organisation's processies) surpass awareness and 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 he standard required to comply with undertaking asset management person(s) undertaking asset managed or assessed in a structured the competence of person(s) involved in asset management related activities equirements set out in a recognised related activities have an appropriate management related activities. way, other than formal requirements for asset management activities including internal and contracted. Requirements 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. nconsistencies. appropriate intervals aligned to asset e assessor is advised to note in the management requirements. vidence section why this is the case and the evidence seen.

						Company Name		
						AMP Planning Period		
						Asset Management Standard Applied		
IEDULE 1	3: REPORT ON	ASSET MANAGEMENT MATUR	RITY (cont	()				
		2 11		2017 474	VA PECPE			
sestion No.	Function	Question	Score	Evide noe — Su mmary	User Guidance	Why	Who	Record/documented information
*55	Communication, participation and consultation	How does the organisation ensure that perinder asset management information is effectively communicated to and from employees and other stakeholders, including contracted service providers?				Wilely used AM practice standards require that positioner asset managemen information is effectively, communicated to and from employees and other statisholders 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.	Top management and senior management reprise neutrality's, employee's representative(s); employee's trade union representative(s); contracted service provider management and employee, representative(s); representative(s) from the organisation's Health, Safety and Environmental team. Key stakeholder representative(s).	Asset me angement policy statement prominently displayed on notice boards, internet and internet; us organisation's website for displaying asset perform date, evidence of formal briefings to employees, stateholders and contracted service provides; evid of inclusion of asset management issues in team meetings and contracted service provider contract meetings; news letters, etc.
-659-X	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 undestood, 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 attivities.	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?				Effective asset management requires appropriate information to be available. Widely used AM standards therefore require the organisation to identify the asset management information it requires in order to support its asset management system. Some of the information required may be held by suppliers.  The maintenance and development of asset management information systems is a poorly undestood specialist activity that is akin to IT management but different from IT management. This group of questions provides some indications as to whether the capability is available and applied. Note: To be effective, an asset information management system requires the mobilisation of technology, people and process(eg) that create, secure, make available and destroy the information required to support the asset management system.	asset management Information management team.	Details of the process the organisation has employed determine what its asset information system should contain in order to support its asset management system. Evidence that this has been effectively implemented.
163	Information management	How does the organisation maintain its asset management information systemis) and ensure that the data held within (them) is of the requisite quality and accuracy and is consistent?				The response to the questions is progressive. A higher scale cannot be a worded 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. Use is of the organisational information systems:	The asset menagement information system, togeth with the policies, procedure(s), improvement initiati and audits regarding information controls.

					Company Name		
					AMP Planning Period		
					Asset Management Standard Applied		
EDULE 13	: REPORT ON A	SSET MANAGEMENT MATUR	ITY (cont)				
estion No.	Function	Question	Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
59	Communication,	How does the organisation ensure	The organisation has not recognised the		The organisation has determined	Two way communication is in place	The organisation's process(es) surpa
	participation and consultation	that pertinent asset management information is effectively communicated to and from employees and other stakeholders, including contracted service providers?	need to formally communicate any asset management information.	asset menagement information to be shared along with those to share it with is being determined.	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.	requirements of asset management	the standard required to comply, with requirements set out in a recognised standard.  The assessor is a divised to note in the Evidence section why this is the case and the evidence seen.
590	Asset Management System documentation	What documentation has the organisation established to describe the main elements of its asset; management system and interactions between them?	elements of the asset management system.	The organisation is aware of the need to 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	The organisation has established 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 organisation's process(es) surpaths standard requires to comply, with requirements set out in a recognised standard.  The assessor is a twisted to note in the Evidence section why this is the case and the evidence seen.
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?	required.	The organisation is aware of the need to determine in a structured manner what it is asset information systems housing contain in order to support its asset management system and is in the process, of deciding how to do this.	structured process to determine what	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) surpaths standard required to comply with requirements set out in a recognised standard.  The assessor is a divised 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) so of the requisite quality and accuracy and is consistent?		The organisation is aware of the need for effective controls and is in the process of developing an appropriate control process(es).			The organisation's process(es) surpathe standard required to comply with requirements set out in a recognised standard.  The assessor is a twised 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 1	3: REPORT ON	ASSET MANAGEMENT MATU	RITY (cor	nt)		-		
Question No.	Function	Question	Score	Evidence—Summary	User Guidance	Why	Who	Record/documented Information

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 organisations 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 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).		that deal with risk control mechanisms. Evidence that
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 its 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 \$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 nesponsibility 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

# Company Name AMP Planning Period Asset Management Standard Applied

### 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
64	Information	How has the organisation's ensured		The organisation understands the need	The organisation has developed and is	The organisation's asset management	The organisation's process(es) surpass
	management	its asset management information	need to determine the relevance of its	to ensure its asset management	implementing a process to ensure its	information system aligns with its asset	the standard required to comply with
		system is relevant to its needs?	management information system. At	Information system is relevant to its	asset management information system	management requirements. Users can	requirements set out in a recognised
			present there are major gaps between	needs and is determining an appropriate	is relevant to its needs. Gaps between	confirm that it is relevant to their needs.	standard.
			what the information system provides	means by which it will achieve this. At	what the information system provides		
			and the organisations needs.	present there are significant gaps	and the organisations needs have been		The assessor is advised to note in the
			The state of the s	between what the information system	identified and action is being taken to		Evidence section why this is the case
				provides and the organisations needs.	close them.		and the evidence seen.
				Alter and Alter	10 pt		A CONTRACTOR OF STREET
69	Dielemanagament	How has the organisation	The organisation has not considered the	The organisation is aware of the need to	The amonication is in the among of	identification and assessment of asset	The organisation's process(es) surpass
03						100	
	process(es)	documented process(es) and/or	need to document process(es) and/or	document the management of asset	documenting the identification and	related risk across the asset lifecycle is	the standard required to comply with
			procedure(s) for the identification and	related risk across the asset lifecycle.		fully documented. The organisation can	requirements set out in a recognised
		assessment of asset and asset	assessment of asset and asset	The state of the s	the asset lifecycle but it is incomplete or	Secretary and the secretary an	standard.
			management related risks throughout	document all relevant process(es) and	there are inconsistencies between	documented mechanisms are integrated	
		the asset life cycle?	the asset life cycle.	procedure(s) or has already commenced	approaches and a lack of integration.	across life cycle phases and are being	The assessor is advised to note in the
				this activity.		consistently applied.	Evidence section why this is the case
							and the evidence seen.
79	Use and	How does the organisation ensure	The amorication has not considered the	The organisation is aware of the need to	The experientian is in the amount	Outputs from risk assessments are	The organisation's process(es) surpass
73	maintenance of		need to conduct risk assessments.	consider the results of risk assessments			
		that the results of risk assessments			ensuring that outputs of risk assessment		the standard required to comply with
	CONTRACTOR	provide input into the identification of		and effects of risk control measures to		inputs to develop resources, training and	
	information	adequate resources and training and		provide input into reviews of resources,	for resources and training. The	competency requirements. Examples	standard.
		competency needs?		training and competency needs. Current		and evidence is available.	
				input is typically ad-hoc and reactive.	are gaps and inconsistencies.		The assessor is advised to note in the
							Evidence section why this is the case
							and the evidence seen.
82	Legal and other	What procedure does the	The conservation has not accorded at the	The organisation identifies some its	The organisation has procedure(s) to	Evidence exists to demonstrate that the	The organisation's process(es) surpas
DZ			The organisation has not considered the				the standard required to comply with
	requirements	organisation have to identify and	need to identify its legal, regulatory,	legal, regulatory, statutory and other	identify its legal, regulatory, statutory	organisation's legal, regulatory,	
			statutory and other asset management	asset management requirements, but	and other asset management	statutory and other asset management	requirements set out in a recognised
		statutory and other asset	requirements:	this is done in an ad-hoc manner in the	requirements, but the information is not	requirements are identified and kept up	standard.
		management requirements, and how		absence of a procedure.	kept up to date, inadequate or	to date. Systematic mechanisms for	THE PROPERTY OF THE SECOND PROPERTY OF THE SE
		is requirements incorporated into the			inconsistently managed.	identifying relevant legal and statutory	The assessor is advised to note in the
		asset management system?				requirements:	Evidence section why this is the case
		555				"	and the evidence seen.

						AMP Planning Period		
						Asset Management Standard Applied		
EDULE 13	B: REPORT ON	ASSET MANAGEMENT MATUR	ITY (con	t)				
estion No.	Function	Question	Score	Evidence—Summary	UserGuidance	Why	Who	Record/documented Information
88	Life Cycle	How does the organisation establish	ocut.	and the south and	e soli e si di di di	Life cycle activities are about the implementation of	Asset managers, design staff, construction staff and	Documented process(es) and procedure(s) which an
	Activities	Implement and maintain process(e) for the implementation of its assess management plan(s) and control of activities across the creation, acquisition of enhancement of assets. This includes design, modification, procurement, construction and commissioning activities?				asset management plan(s) is, 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, addly used standards (eg. PAS 55 s 4.5.1) require organisations to have in place appropriate process(es) and proceduric(s) for the implementation of asset management plan(s) and control of lifecycle activities. This question explores those appetur relevant to asset treation.	project managers from other impacted areas of the business, e.g. Procurement	relevant to demonstrating the effective management and control of the cycle activities during asset (rea acquisition, enhancement including design, modification, procurement, construction and commissioning.
91	Life Cycle Activities	How does the organisation ensure that processlest) 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 and entire 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 amaner consistent with the asset management policy, strategy and objectives and in such a way that cost, ris knod asset system performance are appropriately controlled is critical. They are an essential part of turning intention into action (e.g., 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 provious audits, improvement autions and documen 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 stendards require that organisations establish implement and maintain procedure(s) to motion 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 injust to corrective actions and continual improvement. There is an expectation that performance and condition monitoring will provide injust to mystoring asset management strategy, objectives and plan(s).	This should include contactors and other relevant third	Functional policy and/or strategy documents for performance or condition monitoring and undexurem the organisation's performance monitoring framework belance discoreards etc. Evidence of the reviews or any appropriate performance includents and the actilists resulting from these reviews. Reports and tren analysis using performance and condition information shaping improvements and supporting asset management strategy, objectives and plan(s).
93	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 energency situations and non conformance is clear, unambiguous, understood and communificated?				Widely used AM standards require that the organisation entablishes 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. People who have appointed roles within the asset- related investigation procedure, from those who carry out the investigations to senior management who	Process(es) and procedure(s) for the handling, investigation and mitigation of asset-related failure incidents and emergency situations and non conformances. Documentation of assigned reaponsibilities and authority to employees. Job Descriptions, Audit reports, Common communication systems I. e. all Job Descriptions on Internet etc.

#### Company Name AMP Planning Period Asset Management Standard Applied SCHEDULE 13: REPORT ON ASSET MANAGEMENT MATURITY (cont) Question No. Function Maturity Level 0 Maturity Level 1 Maturity Level 2 Maturity Level 3 Maturity Level 4 Life Cycle ow does the organisation establish he organisation's process(es) surpass The organisation is in the process of Activities mplement and maintain process(es) ocess(es) in place to manage and have process (es) and procedure(s) in putting in place process(es) and are in place to manage and control the he standard required to comply with or the implementation of its asset ontrol the implementation of asset place to manage and control the rocedure(s) to manage and control the equirements set out in a recognised management plan(s) and control of nanagement plan(s) during activities implementation of asset management inplementation of asset management plan(s) during activities related to asset standard ctivities across the creation, plan(s) during activities related to asset plan(s) during activities related to asset creation including design, modification, acquisition or enhancement of assets design, modification, procurement, creation including design, modification, creation including design, modification, procurement, construction and This includes design, modification, construction and commissioning. procurement, construction and rocurement, construction and ommis sioning. Evidence section why this is the case procurement, construction and ommissioning but currently do not have commissioning. Gaps and and the evidence seen. mmissioning activities? these in place (note: procedure(s) may inconsistencies are being addressed exist but they are inconsistent/incomplete) Life Cycle How does the organisation ensure The organisation does not have The organisation is aware of the need to The organisation is in the process of The organisation has in place The organisation's process(es) surpass Activities that process(es) and/or procedure(s) process(es)/procedure(s) in place to have process (es) and procedure(s) in putting in place process(es) and process(es) and procedure(s) to manage the standard required to comply with for the implementation of asset ontrol or manage the implementation of place to manage and control the procedure(s) to manage and control the land control the implementation of asset frequirements set out in a recognised management plan(s) and control of asset management plan(s) during this implementation of asset management molementation of asset management | management plan(s) during this life standard activities during maintenance (and life cycle phase. plan(s) during this life cycle phase but plan(s) during this life cycle phase. They cycle phase. They include a process, inspection) of assets are sufficient to currently do not have these in place include a process for confirming the which is itself regularly reviewed to The accessoris advised to note in the nsure activities are carried out unde and/or there is no mechanism for rocess(es)/procedure(s) are effective nsure it is effective, for confirming the Evidence section why this is the case specified conditions; are consistent confirming they are effective and where and if necessary carrying out process(es)/ procedure(s) are effective and the evidence seen. with asset management strategy and needed modifying them. nodifications and if necessary carrying out control cost, risk and performance? modifications low does the organisation measure The organisation is developing coherent | Consistent asset performance he organisation's process(es) surpass condition he performance and condition of its how to monitor the performance and monitoring asset performance but has asset performance monitoring linked to monitoring linked to asset management equirements set out in a recognised not developed a coherent approach. asset management objectives. Reactive objectives is in place and universally Measures are incomplete, predominantly and proactive measures are in place. used including reactive and proactive reactive and lagging. There is no Use is being made of leading indicators measures. Data quality management linkage to asset management objectives, and analysis. Gaps and inconsistencies and review process are appropriate. Evidence of leading indicators and Evidence section why this is the case The organisation has not considered the The organisation understands the The organisation are in the process of The organisation have defined the The organisation's processies) surpass Investigation of How does the organisation ensure asset-related esponsibility and the authority for need to define the appropriate requirements and is in the process of defining the responsibilities and appropriate responsibilities and the standard required to comply with the handling, investigation and authorities with evidence. Alternatively lauthorities and evidence is available to failures, incident esponsibilities and the authorities determining how to define them. requirements set out in a recognised itigation of asset-related failures. there are some gaps or inconsistencies show that these are applied across the standard nonconformities ncidents and emergency situations in the identified ousiness and kept up to date. and non conformances is clear. esponsibilities/authorities the accessor is advised to note in the unambiguous, understood and Evidence section why this is the case communicated? and the evidence seen.

						Company Name		
						AMP Planning Period		
THEOLUE **	A DEDONT ON	APPET BASSIANTERATAIT SAATIIO	ITV (	***		Asset Management Standard Applied	Vir	
HEDULE 1	F. KEPUR I DN	ASSET MANAGEMENT MATUR	ary (cor	ių				
uestion No.	Function	Question	Score	Bride nce —Summary	User Guidance	Why	Who	Record/documented Information
105)	Audit	What has the organisation done to setablish procedun(s) for the audit of its asset management system (process[as])?				has done to comply with the standard practice AM audit requirements (eg, the associated requirements of PAS	The nanagement team responsible for its asset management producting). The team with over all responsibility for the management of the assets. Audit teams, together with keystelf responsible for asset management. For ear mole, Asset Management Director, Engineering Director. People with responsibility for carrying out risk assessments	The organisation's asset-halted audit proceedingly. The organisation's methodologyligh by which it determined the scope and frequency of the audits and the ordanis by which it identified the appropriate audit personnel. Audit schedules, reports etc. Evidence of the procedurally by which the audit results are presented, together with any subtequent communications. The rick assessment schedule or ris registers.
309	Cornective & Preventative action	Now does the organization institute appropriate corrective and/or proventive storage of provincing actions to allowance or proventive actions to allowance or provincing the causes of identified poor performs ace and non conformance?				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	The management team responsible for its asset management procedure(s). The team with owns! responsibility for its management of the assets. Audit and include linearing attorn teams. Staff responsible for planning and managing corrective and preventive actions.	Analysis records, meeting notes and minutes, modification neonis. Asset management planic, modification neonis. Asset management planic, investigation negative, audit respons, improvement programmes and projects. Recorded thanges to asset management, procedurally and prosessing). Condition and performance reviews. Maintenance reviews
113	Continual Improvement	Now does the organization achieve continual improvement in the optimal combination of costs, assert related risks and the performance and condition of assets and asset systems across the whole life cycle?				establish, implement and maintain process(es)/procedure(s) for identifying, assessing, prioritising and implementing actions to achieve	The top management of the organization. The management muspool bile for managing the organization's seat management system, including its continual improvement. Management system, including its policy development and implementation.	Records showing systems to exploration of improvements. Evidence of new techniques being explored and implemented. Changes in procedurally and process[es] rat lecting improved use of optimisatio tools/fackingues and variables information. Evidence of working parties and research.
235	Continual Improvement	How does the organisation seek and acquire knowledge about new sists management related the thrology and practices; and evaluate their potential benefit to the organisation?			:	organisation which does this (eg. by the PAS 55 s 4.6 standards) will be able to demonstrate that it	The top management of the organisation. The management per	Research and development projects and records, benchminding and participation browledge section, propriessional forms. Evidence of correspondence making to knowledge acquisition. Examples of chang implementation and evaluation of new tools; and techniques linked to asset management strategy and objectives.

uestion 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	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	The organisation can demonstrate that its audit 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 cause of identified poor performance and non conformance?	The organisation does not recognise the need to have systematic approaches to insignify any contractive or presentive actions.	The organisation recognises the need to have systematic approaches to instigating corrective or preventive actions. Then is de-the implementation for corrective actions to address failures of assets but not the asset management system.	instigation of preventive and corrective actions to address root causes of non	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 disks 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 athos is recognised as beneficial, however it has just been standd, and occovers 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(as) surpass the standard required to comply with requirements are but in a recognised standard.  The assessor is advised to note in the Evidence suction why this is the case and the evidence seen.
115	Continual Improvement	How does the organisation seek and acquire knowledge about new asset management nated technology and practices, and evaluate their potential benefit to the organisation?	The organisation makes no attempt to seek.fxm/idege about new asset management related technology or practices:	The organisation is inward looking, however it recognises that asset management is not settor 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 hew to sector asset management practices and seeks to availuate them.	management practitioners, professional bodies and relevant conferences, Actively investigates, and evaluates new practices and evolves its asset	The organisation's process(te) 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).
- 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)

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)

 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)
- 6.2 any other commentary on the benefits of the merger and acquisition expenditure to the EDB.

Box 3: Explanatory comn	ent 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.

 $[\mathsf{DRAFT}] \ \mathsf{Electricity} \ \mathsf{Distribution} \ \mathsf{Information} \ \mathsf{Disclosure} \ (\mathsf{Aurora} \ \mathsf{Energy} \ \mathsf{Limited}) \ \mathsf{Amendment} \ \mathsf{Determination} \ \mathsf{2021}$ 

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-
  - 12.1 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),

[DRAFT] Electricity	/ Distribution	Information	Disclosure	(Aurora	Energy	Limited).	Amend men	t Determinat	ion
2021									

ox 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 expenditure for the disclosure 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)

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

Box 13: Commentary on network reliability fo	r 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]

#### 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 forecas	ts
[Insert text here]	

#### Schedule 15 Voluntary Explanatory Notes

- 1. This schedule enables EDBs to provide, should they wish to
  - additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 0 and 2.5.2;
  - information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.
- 2. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.
- 3. Provide additional explanatory comment in the box below.

Box 1: Voluntary	explanatory commen low]	nt on disclosed informa	rtion	

#### 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		

nce note: (refer to clause 1.4.1(8)-(9))
nce note: (refer to clause 1.4.1(8)-(9))
e 1.1.2(4) of the IM determination sets out when various amendments to
d determination apply as a result of our 2016 input methodologies
v. Changes to Part 3 and Part 4 of the IM determination only apply for a
n force from 1 April 2020 (see clause 1.1.2(4)(c)(i) and 1.1.2(4)(d)).
dingly, for an EDB subject to a default price-quality path after 1 April
see clause 3.1.3(1)(r) of the IM determination.
aning given in the IM determination
elation to-
losure year, expenditure for that disclosure year
story period, expenditure for the disclosure years from the start of the
etory period to the current disclosure year
aning given in the IM determination
assets acquired from another regulated supplier, the value of the
ed initial differences in asset values for those assets acquired as
ed initial differences in asset values is determined in accordance with
nethodologies that apply to the regulated goods or services supplied by
ted supplier
value of opening unamortised initial differences in asset values for
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:			
	\[ \alpha = \text{ total closing RAB value} \]			
	b = total opening RAB value			
	$oldsymbol{\mathcal{C}}$ = 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			

 $[{\tt DRAFT}] \ {\tt Electricity \ Distribution \ Information \ Disclosure \ (Aurora \ {\tt Energy \ Limited}) \ Amendment \ {\tt Determination \ 2021}$ 

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 accondition categories (H1 to 5), reflecting the likelihood of short, medium or lor 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	means-	
regulated supplier	(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	means-	
related party	<ul> <li>(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;</li> <li>(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</li> </ul>	
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	$means: q = \frac{a \times b}{c}$	
	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 closing RAB values	means; $q = \frac{a+b}{2}$	
	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
	(a) HR and training (other than operational training);
	(b) finance and regulation including compliance activities, valuations and auditing;
	(c) CEO and director costs;
	(d) legal services;
	(e) consulting services (excluding engineering/technical consulting);
	(f) property management;
	(g) corporate communications;
	(h) corporate IT;
	(i) industry liaison and participation;
	(i) commercial activities including pricing, billing, revenue collection and
	marketing, or
	(k) 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(8)-(9))  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)(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	means the value of capital contributions that are paid to the EDB in relation to
funding consumer connection	consumer connection expenditure
Capital contributions funding legislative and regulatory	means the value of capital contributions that are paid to the EDB in relation to legislative and regulatory expenditure
Capital contributions funding other reliability, safety and environment	means the value of capital contributions that are paid to the EDB in relation to other reliability, safety and environment expenditure

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

Capital contributions	means the value of capital contributions that are paid to the EDB in relation to	
funding quality of supply	quality of supply expenditure	
Capital contributions	means the value of capital contributions that are paid to the EDB in relation to	
funding system growth	system growth expenditure	
	(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	
	Guidance note: (refer to clause 1.4.1(8)-(9))	
	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 operating voltage (at year end)	means the total length of all circuits operating at the prescribed voltage(s)	
Class A (planned interruptions by Transpower)	means a planned interruption initiated by Transpower	
Class D (unplanned interruptions by Transpower)	means an unplanned interruption originating within the works of Transpower, where those works are used for carrying out line business activities.	
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 initial differences in asset values	means closing unamortised initial differences in asset values determined in accordance with clause 2.3.5(6) of the IM determination	
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;
	(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 <sub>4</sub>	has the meaning given in clause 2.2.9(4) of the IM determination
CPI4 <sup>-4</sup>	has the meaning given in clause 2.2.9(4) of the IM determination
CPP application	means costs specified in either clause 3.1.3(1)(h),(i),(j),(k) or (l) of the IM
recoverable costs	determination
CPP specified pass	means a cost specified in clause 3.1.2(1)(b) of the IM determination
through costs	
Current Peak Load	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
Current period tax losses	has the meaning given in clause 2.3.2(5) of the IM determination

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

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, either mechanical or electrical	
Deferred tax balance relating to assets acquired in the disclosure year	has the meaning given in clause 2.3.7(3) of the IM determination	
Deferred tax balance relating to assets disposed in the disclosure year	means the amount of deferred tax associated with asset disposals. The definition assumes a deferred tax asset position. If the deferred tax balances relating to the asset disposals is a liability it must be entered as a negative amount	
Deferred tax cost allocation adjustment	means cost allocation adjustments as defined in clause 2.3.7(5) of the IM determination	
Depreciation - alternative depreciation in accordance with CPP	means- (a) in relation to the unallocated RAB, the sum of unallocated depreciation 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 life assets	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; 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	

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

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	
Depreciation charge for the period (RAB)	means the depreciation or sum of depreciation as determined in accordance with the IM determination for the relevant asset or assets with non-standard depreciation	
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 allowance	means a cost specified in clause 3.1.3(1)(f) of the IM determination	
Distributed generation – Number of connections made in year	means the number of distributed generation connections added to the EDB's network in the disclosure year	
Distributed generation output at HV and above	means the total rate of power output, coincident with the GXP demand, of all distributed generation that is connected to the network at a voltage of HV and higher, measured in MW	
Distribution and LV cables	means all underground power cables operated at distribution voltage or low voltage	
Distribution and LV lines	means all overhead power lines operated at distribution voltage or low voltage.	
Distribution cables (excluding LV)	means all underground power cables operated at distribution voltage excluding low voltage cables	
Distribution line charge revenue	means line charge revenue that is not transmission line charge revenue	
Distribution lines (excluding LV)	means all overhead power lines operated at distribution voltage excluding low voltage lines	

Distribution other	means network assets operated at distribution voltage which are not distribution	
(excluding LV)	cables or distribution lines and excluding low voltage assets	
Distribution	means-	
substations and	<ul> <li>(a) substations, including all associated pole mountings, ground pads and covers, and kiosks and components used to install transformers; and</li> </ul>	
transformers	The Control of the Co	
	(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	
Distribution	means all switchgear operated at distribution voltage. This includes disconnectors,	
switchgear	fuses (including drop outs and fuse switches), circuit breakers, reclosers,	
switchgear	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 (EDB owned)	means the sum of the capacities of all distribution transformers that are part of, or supplied by, the network and owned by the EDB, expressed in MVA	
Distribution transformer	means the sum of the capacities of all distribution transformers that are part of, or	
capacity (Non-EDB	supplied by, the network and not owned by the EDB, expressed in MVA. EDBs	
owned, estimated)	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 exports to	means the total volume of electricity exported from the EDBs network through	
GXPs	every GXP to which the network is connected, measured in GWh.	
Electricity lines service	means a cost specified in clause 3.1.3(1)(b) of the IM determination	
charge payable to		
Transpower		
Electricity losses (loss	means (for electricity losses) electricity entering system for supply to consumers'	
ratio)	connection points less total energy delivered to ICPs and (for the loss ratio) is	
	electricity losses divided by electricity entering system for supply to consumers'	
	connection, expressed as a percentage. Non-metered energy supplied should be	
	estimated.	
	(Note: the resulting loss ratio will comprise both technical and non-technical losses	
Electricity supplied from distributed generation	means the net volume of electricity supplied into the EDB's network from all distributed generation connected to the network, measured in GWh	
Electricity supplied from	1.77	
GXPs	means the total volume of electricity supplied into the EDB's network through every GXP to which the network is connected, measured in GWh	
Electricity volumes	means the volume of electricity measured at the specified location within the	
carried	power system in the specified year, in GWh	
Energy efficiency and	means a cost specified in clause 3.1.3(1)(m) of the IM determination	
demand incentive		
allowance		

 $[{\tt DRAFT}] \ {\tt Electricity \ Distribution \ Information \ Disclosure \ (Aurora \ {\tt Energy \ Limited}) \ Amendment \ {\tt Determination \ 2021}$ 

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.  means the identifier of an existing zone substation	
substations		
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	<ul> <li>(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</li> <li>(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</li> <li>Guidance note: (refer to clause 1.4.1(8)-(9))</li> <li>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.</li> </ul>	

Financial incentives	means the sum of-
	(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
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 spread	means the sum of term credit spread difference and debt issue cost readjustment
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(8)-(9))
	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
	Guidance note: (refer to clause 1.4.1(8)-(9))
	This grade is derived from Figure 1 of the Electricity Engineers' Association
	Asset Health Indicator Guide, published January 2016.
Н3	means end of life drivers for replacement present, increasing asset related risk
	Guidance note: (refer to clause 1.4.1(8)-(9))
	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
	Guidanca nota: /rafar ta ciauca 1.4.1/91 /011
	Guidance note: (refer to clause 1.4.1(8)-(9))  This grade is derived from Figure 1 of the Electricity Engineers' Association
	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(8)-(9)) 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 $a=ROI-comparable to a vanilla WACC-reflecting all revenue earned b=ROI-comparable to a vanilla WACC-excluding revenue earned from financial incentives$	
Impact of wash-up costs on ROIs	means- q = a - 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(8)-(9)) 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

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

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	
Location	where $b \times c$ $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	
Market value of asset disposals	means physical location of the embedded network  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 vanilla WACC	means the mid-point estimate of vanilla 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-year net cash outflows	means expenses cash outflow plus assets commissioned less asset disposals plus tax payments less other regulated income	
Monthly net cash outflows	means expenses cash outflow plus assets commissioned less asset disposals less 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 — comparable to a vanilla WACC	means the internal rate of return for a schedul to a schedule of dates where the schedules of Cash flows - Opening RIV - Monthly net cash outflows Line charge revenue - Tax payments - Term credit spread differential allowance Closing RIV	•
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 allowed under incremental rolling incentive scheme	means, where- (a) net incremental rolling incentive scheme is positive, net incremental rolling 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	

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

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 defaulinstallation 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(8)-(9)) 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	

 $[{\tt DRAFT}] \ {\tt Electricity \ Distribution \ Information \ Disclosure \ (Aurora \ {\tt Energy \ Limited}) \ Amendment \ {\tt Determination \ 2021}$ 

Original tenor	means-
ŭ	<ul> <li>(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;</li> <li>(b) where the qualifying debt or non-qualifying debt is issued to a related party, the shorter of the-</li> <li>(i) the tenor of the qualifying debt; or</li> </ul>
	(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 the RAB tax value	means
the NAB tax value	q = a - (b + c - d - e + f + g)
	where:
	a = closing sum of regulatory tax asset values
	$b_{\parallel}$ = opening sum of regulatory tax asset values
	c = regulatory tax asset value of assets commissioned
	d = regulatory tax asset value of asset disposals
	$oldsymbol{e}$ = tax depreciation
	f = lost and found assets adjustment
	g = adjustment resulting from asset allocation
Other financial incentives	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 '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 using
excluding financial incentives and wash-ups	an input methodology variation under clause 53V(2)(c) of the Act, excluding other financial incentives and other wash-ups
Other regulated income	has the meaning given in the IM determination
Other regulated income (other than gains / (losses) on asset disposals)	means other regulated income excluding 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 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	has the meaning given in the IM determination	
increase	ind the meeting given in the improvement	
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, 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 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.	
Pass through and recoverable costs excluding financial incentives and wash-up	means the sum of- (a) rates; (b) Commerce Act levies; (c) industry levies;	
costs	(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;	
Previous years'	(i) extended reserves allowance; and (j) other recoverable costs excluding financial incentives and wash-ups means the incremental change and incremental adjustment term for the	
incremental gain/(loss)	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	

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

Quality incentive	means-	
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	
Date	Guidance note: (refer to clause 1.4.1(8)-(9)) 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	means-	
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';	
	(c) in relation to assets or groups of assets where depreciation is included in depreciation - alternative depreciation determined in accordance with 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	
	Guidance note: (refer to clause 1.4.1(8)-(9))  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 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	means the value of $q$ calculated using the following formula: $q = a - b + c$ where: $a = \text{operating surplus / (deficit)}$ $b = \text{total depreciation}$ $c = \text{total revaluations}$	
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 value of asset disposals	means the sum of regulatory tax asset values for assets that have a value in asset disposals	
Regulatory tax asset value of assets commissioned	means the sum of regulatory tax asset values for assets that have a value in assets 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	
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-	
	<ul> <li>implementing an original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge or understanding; or</li> </ul>	
	<ul> <li>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.</li> </ul>	
Revaluation rate	has the meaning given in the IM determination	
RMU	means ring main unit	
ROI	means return on investment	

ROI — comparable to a	means-	
post tax WACC	(d)	in relation to the ROI – comparable to a post tax WACC reflecting all revenue earned
		$q = a - (d \times e \times f)$
	(e)	in relation to the ROI – comparable to a post tax WACC excluding revenue earned from financial incentives
		$q = b - (d \times e \times f)$
	(f)	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 es
		- comparable to a vanilla WACC excluding revenue earned from financial es and wash-ups
	d = cost	of debt assumption
	e = lever	rage
	f = corp	orate tax rate

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

ROI – comparable to a	means the internal rate of return for a schedule of	=		
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		
	(C) in relation to the ROI — comparable to a vanilla WACC excluding revenue earned from financial incentives and wash-ups, are-			
	Cash flows	Dates		
	- Opening RIV	365 days before year-end		
	- (Mid-year net cash outflows less (financial incentives and wash-ups multiplied by the corporate tax rate))	182 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 gr and non standard line construction designs are emp conditions			
Rural	means a circuit, or a section of a circuit, installed in average HV span length is approximately 70 - 80 me			
	those circuits located in remote and/or rugged areas			

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-	
	<ul> <li>N, means that the current peak load may only be supplied without curtailment or interruption if all zone substation transformers are operating;</li> </ul>	
	<ul> <li>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;</li> </ul>	
	<ul> <li>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;</li> </ul>	
	<ul> <li>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;</li> </ul>	
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	means the tax effect of amortisation of initial differences in asset values, using the	
amortisation of initial	definition of "tax effect" and "amortisation of initial difference in asset values" in	
differences in asset	this schedule	
values		
Tax effect of other	means the tax effect of positive temporary differences less negative temporary	
temporary differences	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	means the tax effect of total tax depreciation using the definitions of "tax effect"	
depreciation	and "tax depreciation" in this schedule	
Tax payments	means regulatory tax allowance less opening deferred tax plus closing deferred tax	
Term credit spread	has the meaning given in the IM determination	
difference		
Term credit spread	has the meaning given in the IM determination	
differential allowance		
Third party interference	means all unplanned customer interruptions resulting from external contractors or	
	members of the public, includes Dig-In, Overhead Contact, Vandalism, and Vehicle	
	Damage.	
Total attributable to	means the sum of directly attributable costs or assets and not directly attributable	
regulated service	costs or assets that are attributable to electricity distribution services	
Total book value of	means the sum of book value of qualifying debt and non-qualifying debt at the date	
interest bearing debt	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 connection	
to ICPs	points, as measured at connection points, in GWh	

[DRAFT] Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021

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 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 transactions	means the total value of the related party transactions with a related party, as 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
Transformer capacity	of MVA.  means the total capacity (in kVA) of the following transformers on the network:
Transformer capacity	means the total capacity (mixery) 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
	<ul> <li>(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)</li> </ul>
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
	Guidance note: (refer to clause 1.4.1(8)-(9)) 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 charge	means line charge revenue relating to transmission charges

_			
Transpower	has the meaning as defined in s 54B of the Act		
Transpower new investment contract charges	means a cost specified in clause 3.1.3(1)(c) of the IM determination		
Unallocated overhead lines	means a circuit, or a section of a circuit, installed in an area that is not an urban, rural, remote or rugged area		
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		
Vegetation	means all unplanned customer interruptions resulting from vegetation contact, includes debris, grass and tree contact.		
WACC rate used to set regulatory price path	means- (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(8)-(9))  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	means the weighted average expected total asset life of assets calculated by using		
expected total asset life	the opening RAB values as weights where opening RAB value has the meaning		
	given in the IM determination		
Weighted average	means the weighted average remaining asset life of assets calculated by using the		
remaining asset life	opening RAB values as weights where remaining asset life and opening RAB value		
	has the meaning given in the IM determination		
Wildlife	means all unplanned customer interruptions resulting from wildlife contact -		
	includes birds, possums, vermin, cats etc.		
Year-end ROI –	means the year-end ROI comparable to the vanilla WACC less the product of the		
comparable to a post	cost of debt assumption(%), the leverage and the corporate tax rate		
tax WACC			
Year-end ROI –	means:		
comparable to a vanilla	(1 + x)		
WACC	$q = \frac{a - (b + c)}{d + (e \times 5)}$		
	$d+(e\times.5)$		
	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	means the sum of the capacities of all zone substation transformers that are part o		
transformer capacity	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 Year-end 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 '2.5.3 to 2.5.62.5.5,'] 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]

<sup>\*</sup> Delete if inapplicable