

# Energex

## Annual Reporting RIN Basis of Preparation

2017/18



positive energy

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# 1 BoP 2.11.3 Labour / Non Labour Expenditure Split

The AER requires Energex to provide the following categories relating to RIN table 2.11.3.1 Labour / Non-labour Expenditure Split – Opex:

- In-house labour expenditure
- Labour expenditure outsourced to related parties
- Labour expenditure outsourced to unrelated parties
- Controllable non-labour expenditure
- Uncontrollable non-labour expenditure
- Total
- Total including margins (Reconciliation with Opex worksheets – SCS)

The AER requires Energex to provide the following categories relating to RIN table 2.11.3.2 Labour / Non-labour Expenditure Split – Capex:

- In-house labour expenditure
- Labour expenditure outsourced to related parties
- Labour expenditure outsourced to unrelated parties
- Controllable non-labour expenditure
- Uncontrollable non-labour expenditure
- Total

Total including margins (Reconciliation with Capex worksheets – SCS)

## 1.1 Consistency with AR RIN Requirements

Table 1.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 1.1.1 Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p><b>Labour Expenditure</b></p> <p>Energex must include all expenditure used to deliver standard control services that is associated with people. Labour expenditure relates to:</p> <ul style="list-style-type: none"> <li>• full time, part time and casual employees</li> <li>• ongoing and temporary employment contracts</li> <li>• labour hire contracts</li> </ul> <p>Labour expenditure includes wages, salaries, overtime payments, bonuses, allowances, incentive payments, superannuation</p>	<p>Energex has reported Labour expenditure in accordance with the requirements and definitions specified by the AER.</p>



Requirements (instructions and definitions)	Consistency with requirements
contributions, taxes (e.g. payroll and fringe benefits taxes), termination and redundancy payments, workers compensation, training and study assistance, purchases made on behalf of employees (e.g. protective clothing).	
<b>Non-labour expenditure</b> Energex must include expenditure other than Labour expenditure.	Energex has reported Non-labour expenditure in accordance with the requirements and definitions specified by the AER.
<b>Controllable non-labour expenditure</b> is all non-labour expenditure that is not Uncontrollable non-labour expenditure. Such costs include materials and fuels, insurance and guaranteed service level payments.	Energex has reported Controllable non-labour expenditure in accordance with the requirements and definitions specified by the AER.
<b>Uncontrollable non-labour expenditure</b> is all non-labour expenditure over which Energex has no control. Uncontrollable non labour expenditure is imposed by an independent (that is, not a related party to Energex) government body (federal, state or local) so Energex has no ability to influence any amount of the expenditure incurred by the manner in which Energex operates its business. Such costs include solar feed in tariff payments, jurisdictional levies/taxes and local government rates. Insurance costs and guaranteed service level payments are not uncontrollable.	Energex has reported Uncontrollable non-labour expenditure in accordance with the requirements and definitions specified by the AER.

## 1.2 Sources

Table 1.2.1 - Data Sources below demonstrates the sources from which Energex obtained the required information:

**Table 1.2.1 - Data Sources**

Variable	Source
In-house labour expenditure	Direct costs are specifically identified via a segment (expense element) of the account code within the Ellipse General Ledger (GL) and mapped to this reporting category. Shared costs are allocated based on the nature of the raw costs identified via GL expense element. For further detail refer to the Approach section below.
Labour expenditure outsourced to related parties	Direct costs are specifically identified via a segment (expense element) of the account code within the Ellipse General Ledger (GL) and mapped to this reporting category. Shared costs are allocated based on the nature of the raw costs identified via GL expense element. For

Variable	Source
	further detail refer to the Approach section below.
Labour expenditure outsourced to unrelated parties	Direct costs are specifically identified via a segment (expense element) of the account code within the Ellipse General Ledger (GL) and mapped to this reporting category. Shared costs are allocated based on the nature of the raw costs identified via GL expense element. For further detail refer to the Approach section below.
Controllable non-labour expenditure	Direct costs are specifically identified via a segment (expense element) of the account code within the Ellipse General Ledger (GL) and mapped to this reporting category. Shared costs are allocated based on the nature of the raw costs identified via GL expense element. For further detail refer to the Approach section below.
Uncontrollable non-labour expenditure	Direct costs are specifically identified via a segment (expense element) of the account code within the Ellipse General Ledger (GL) and mapped to this reporting category. Shared costs are allocated based on the nature of the raw costs identified via GL expense element. For further detail refer to the Approach section below.

## 1.3 Methodology

### Capitalisation of Regulated Overheads

Methodology for the Labour / Non Labour Expenditure Split reporting is detailed below.

#### 1.3.1 Assumptions

No assumptions were made in the reporting of the labour / non-labour expenditure split template.

#### 1.3.2 Approach

Direct costs are attributed to the specific Labour/ Non Labour Expenditure categories based on Ellipse expense element sourced from the Ellipse General Ledger. Reporting is achieved by extracting from the general ledger the amounts and mapping these expense element codes into the appropriate reporting category based on the reporting requirements / definitions specified by the AER.

Apportionment of the allocated / shared costs (i.e. overhead, on-costs) is based on the analysis of the raw / source costs, and proportions of the total costs are determined for each reporting category. This reflects the underlying nature of the transactions.

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A significant portion of Energex's external contractors are engaged based on a Schedule of Rates or Design and Construct (D&C) contract basis to deliver services. The Schedule of Rates or D&C contract include the total cost of the contractors' labour, provision of plant and equipment, materials and overhead costs. This approach was acknowledged in the AER Preliminary decision Energex distribution determination Attachment 7 OPEX - April 2015 (pg. 7-280) – "This is because the contract is for the provision of a service at a set price rather than for the provision of a unit of labour". The established rate may also include volume discounts. Consequently invoices provided by contractors do not differentiate between labour and other costs.

To differentiate would require the contractor to implement or modify processes and systems to explicitly capture their costs at a detailed level and provide invoices incorporating a breakdown of costs by category. Energex's accounts payable processes and corporate financial systems would also need to be modified to capture contractor costs at this more detailed level. Imposing a requirement on all contractors to modify their processes and systems to facilitate cost category breakdown is unrealistic and would impose significant additional costs. In some circumstances, particularly for smaller contractors, this additional cost may cause financial hardship especially in a competitive tendering market. Additional costs incurred would need to be incorporated into the contractors costs charged to Energex and ultimately would be borne by electricity customers.

Energex's corporate financial system has not been structured to capture and differentiate contractor costs at a cost category level as Energex does not manage contractor expenditure for operating programs at this detailed level. Management of contractor costs are generally at the market tender phase where the Schedule of Rates are assessed and analysed for prudence and efficiency. For capital programs a significant proportion of contractor spend is for D & C projects, where the contractor is responsible for all phases of the project. Imposing additional requirements on contractors and modifying Energex's financial systems and processes would ultimately impose significant additional costs on electricity customers to enable this RIN reporting capability.

Due to the inability to differentiate contractor costs as described above, Energex has included total contractor costs in the 'Labour expenditure outsourced to unrelated parties' category.

## **1.4 Estimated Information**

No estimated data was reported in this template.

### **1.4.1 Justification for Estimated Information**

Not applicable.

### **1.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

### **1.4.3 Basis for Estimated Information**

Not applicable.

## 2 BoP 3.6.6 Complaints – Technical Quality of Supply

The AER requires Energex to provide the following information in RIN table 3.6.6.1 Complaints-Technical Quality of Supply – Technical Quality of Supply:

- Number of complaints - technical quality of supply

The AER requires Energex to provide the following information in RIN table 3.6.6.2 Complaints-Technical Quality of Supply – Percentage of Complaints by Category :

- Low voltage supply
- Voltage dips
- Voltage swell
- Voltage spike (impulsive transient)
- Waveform distortion
- TV or radio interference
- Solar related
- Noise from appliances
- Other

The AER requires Energex to provide the following information in RIN table 3.6.6.3 Complaints-Technical Quality of Supply – Percentage of Complaints by Likely Cause :

- Network equipment faulty
- Network interference by NSP equipment
- Network interference by another customer
- Network limitation
- Customer internal problem
- No problem identified
- Environmental
- Other

### 2.1 Consistency with AR RIN Requirements

Table 2.1.1 Table 1.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 2.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p><b>3.6.6.1</b> The total number of complaints made to Energex where the complaint raised issues about voltage variations.</p> <p><b>Complaint</b> is a written or verbal expression of dissatisfaction about an action, a proposed action, or a failure to act by a distributor, its employees or contractors. This includes failure by a distributor to observe its published practices or procedures</p>	<p>Demonstrated in section 2.3 (Methodology)</p>

Requirements (instructions and definitions)	Consistency with requirements
<p><b>3.6.6.2</b> The proportion of complaints made to Energex where the complainant raised issues about:</p> <ul style="list-style-type: none"> <li>• low voltage supply</li> <li>• voltage dips</li> <li>• voltage swell</li> <li>• voltage spike (impulsive transient)</li> <li>• waveform distortion</li> <li>• TV or radio interference</li> <li>• solar related</li> <li>• noise from appliances</li> <li>• other - any matter that is not low voltage supply, voltage dips, voltage swell, voltage spike, TV or radio interference, waveform distortion or noise from appliances.</li> </ul>	Demonstrated in section 2.3 (Methodology)
<p><b>3.6.6.3</b> The proportion of complaints where the event that gave rise to the complaint was:</p> <ul style="list-style-type: none"> <li>• likely to be faulty network equipment</li> <li>• likely to be network interference by network service provider equipment</li> <li>• likely to be network interference by another customer</li> <li>• likely to be a network limitation</li> <li>• likely to be a customer internal problem</li> <li>• not able to be identified</li> <li>• likely to be environmental</li> <li>• likely to be a cause other than faulty network equipment, network interference by network service provider equipment, network interference by another customer, a network limitation, a customer internal problem, environmental, or not able to be identified.</li> </ul>	Demonstrated in section 2.3 (Methodology)

## 2.2 Sources

Table 2.2.1 below demonstrates the sources from which Energex obtained the required information

**Table 2.2.1 - Data Sources**

Variable	Source
3.6.6.1 – Technical Quality of Supply	Ellipse and reported in DMA report PQU010
3.6.6.2 – Percentage of Complaints by Category	Ellipse and reported in DMA report PQU010

Variable	Source
3.6.6.3 - Percentage of Complaints by Likely Cause	Ellipse and reported in DMA report PQU010

## 2.3 Methodology

Complaints made to Energex are classified with a symptom code at time of entry. These codes are audited by quality of supply officers at the time a work request is raised, and again reviewed on completion of the investigation. Once the investigation has been completed the likely cause is allocated.

### 2.3.1 Assumptions

That the information relating to the complaint is described at the time of creation and that the field staff enter the resultant cause following investigations.

### 2.3.2 Approach

Each voltage complaint requires initial desktop investigation. This may include contacting the customer first and gather relevant information prior to visiting the site. Depending on the nature of the complaint, power quality monitoring may be required for some complaints.

Based on the site monitoring, voltage complaints can be rectified and root cause of the complaint will be reported.

Further reference can be made to Energex's customer standard, "Managing Quality of Supply issues – Customer Standard, 00801."

## 2.4 Estimated Information

No estimated data was reported in this template.

### 2.4.1 Justification for Estimated Information

Not applicable.

### 2.4.2 Steps to ensure Energex can provide Actual Information

Not applicable.

### 2.4.3 Basis for Estimated Information

Not applicable.

## 3 BoP 3.6.7 Customer Service Metrics

The AER requires Energex to provide the following categories in RIN table 3.6.7.1 Customer Service Metrics – Timely Provision of Services:

- Number of connections made
- Number of connections not made on or before agreed date

The AER requires Energex to provide the following categories in RIN table 3.6.7.2 Customer Service Metrics – Timely Repair of Faulty Street Lights:

- Street lights - average monthly number "out"
- Street lights - not repaired by "fix by" date
- Street lights - average number of days to repair
- Total number of street lights

The AER requires Energex to provide the following categories in RIN table 3.6.7.3 Customer Service Metrics – Call Centre Performance:

- Calls to call centre fault line
- Calls to fault line answered within 30 seconds
- Calls to fault line - average waiting time before call answered
- Call centre - number of overload events
- Percentage of calls abandoned

The AER requires Energex to provide the following categories in RIN table 3.6.7.4 Customer Service Metrics – Number of Customer Complaints:

- Complaint - reliability of supply
- Complaint - technical quality of supply
- Complaint - administrative process or customer service
- Complaint - connection or augmentation
- Complaint – other
- Total number of complaints

### 3.1 Consistency with AR RIN Requirements

Table 3.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 3.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<b>3.6.7.1 Timely Provision of Services</b>	
As per definition in STPIS guideline November 2009:	Volumes of new connections to the network are sourced from corporate service order reports which identify each service order's market



Requirements (instructions and definitions)	Consistency with requirements
<p>New connections: the connection of electricity supply to customer's premises on or before the date agreed to with the customer. For the 'customer service' component, this is expressed as a percentage of the total number of new connections.</p> <p>Note: Does not include re-energisation of existing premises.</p>	<p>outcome status (complete, incomplete, and cancelled). Only those with a status of "complete" for the financial year were included in figures reported.</p>
<b>3.6.7.2 Timely Repair of Faulty Street Lights</b>	
<p><b>Streetlights - average monthly number "out"</b> is the total number of street lights reported by customers as not working over the year, divided by twelve.</p>	<p>The data is sourced from the Ellipse MSQ620 report. The data range is – 16/17 financial year, workgroup is CXOXCDP, Category of work is 13/01 Streetlight Repairs/Mntce (PEACE)</p>
<p><b>Streetlight repair - Faulty streetlights not repaired within 5 business days of fault report or agreed date</b> is the number of streetlights reported as not working within the reporting period that were not repaired within 5 business days of the fault report, or were not repaired by the agreed date.</p>	<p>The data is sourced from Report Explorer ELL00195 Outstanding / Not on time report. The data range is- 16/17 financial year, workgroup is CXOXCDP.</p>
<p><b>Streetlights - average number of days to repair</b> is the average number of days to repair street lights that were reported as not working.</p>	<p>This data is sourced from our contractor supplied quarterly report Mean days to Repair. Job with "complex attributions" are emitted from the report e.g. traffic control required, major circuit maintenance required and on by day lights.</p>
<p><b>Streetlight repair - number of streetlight faults</b> is The number of streetlights reported by customers as not working in the reporting period.</p>	<p>The data is sourced from the Network Data Group. There is a data base which is maintained by this group which controls all public lighting asset information. The total number of street lights is for all Rate 1 and Rate 2 street lights only, Rate 3 lights have been emitted.</p>
<b>3.6.7.3 Call Centre Performance</b>	
<p><b>Calls to call centre fault line</b> is the total number of calls to call centre fault line to be reported:</p> <p>(a) including any answered by an automated response service and terminated without being answered by human operator; and</p> <p>(b) excluding missed calls where the call centre fault line is overloaded.</p>	<p>Data is sourced from Cisco Unified Intelligence Center (CUIC) which records all calls that are made to the Energex fault lines.</p>
<p><b>Calls to fault line answered within 30 second</b></p> <p>As per definition in STPIS guideline November 2009:</p> <p><b>Telephone Answering</b></p> <p>Calls to the fault line answered in 30 seconds</p>	<p>Data is extracted from the telephony system through CUIC. There is a metric to show all calls that were answered or abandoned within 30 seconds. Calls to the automated lines were excluded from the count</p>



Requirements (instructions and definitions)	Consistency with requirements
<p>where the time to answer a call is measured from when the call enters the telephone system of the call centre (including that time when it may be ringing unanswered by any response) and the caller speaks with a human operator, but excluding the time that the caller is connected to an automated interactive service that provides substantive information. This measure does not apply to:</p> <ul style="list-style-type: none"> <li>calls to payment lines and automated interactive services;</li> <li>calls abandoned by the customer within 30 second of the call being queued for response by a human operator. Where the time in which a telephone call is abandoned is not measured, then an estimate of the number of calls abandoned within 30 seconds will be determined by taking 20 per cent of all calls abandoned.</li> </ul>	
<p><b>Calls to fault line - average waiting time before call answered</b> is the average time in seconds from when calls enter the system (including that time when a call may be ringing unanswered) and the caller speaks to a human operator or is connected to an interactive service that provides the information requested</p>	<p>Data is extracted from CUIC. There is no measure to ascertain if a terminated call in the automated interactive service has been provided the information requested. Therefore the average wait time was reported on calls that have been queued for answer by a human operator.</p>
<p><b>Call centre - number of overload events</b> is the number of times that the call centre queuing system is inadequate to queue all incoming calls.</p>	<p>There was no overload or avalanching of the telephony system during this period.</p>
<p><b>Calls abandoned - percentage</b> is (calls abandoned/calls to call centre fault line)* 100</p> <p><b>Calls abandoned</b> include all calls received and queued for a response by a human operator but are abandoned before being answered by the operator. This includes those calls abandoned prior to 30 seconds.</p>	<p>Data was extracted using CUIC. Queues aligned with those for the "calls to call centre fault line" metric.</p>
<h3>3.6.7.4 Number of Customer Complaints</h3>	
<p><b>Complaint - reliability of supply</b> is the number of complaints relating to the reliability of supply.</p>	<p>With the exception of the Reliability of Supply complaints, the categories required within table 3 of the RIN do not exist within the Energex systems. A process of aligning Energex system with the categories in table 3 was undertaken and is explained in more detail in the methodology section.</p>

Requirements (instructions and definitions)	Consistency with requirements
<b>Complaint - technical quality of supply</b> is the number of complaints relating to the technical quality of supply.	
<b>Complaint - administrative process or customer service</b> is the number of complaints relating to the administrative process or customer service of the Energex, excluding those reported under 'connection and augmentation'.	With the exception of the Reliability of Supply complaints, the categories required within table 3 of the RIN do not exist within the Energex systems. A process of aligning Energex system with the categories in table 3 was undertaken and is explained in more detail in the methodology section.
<b>Complaint - connection or augmentation</b> is the number of complaints about:  (a) the quality and timeliness of a new connection; and  (b) the cost, timeliness and quality of augmentation works	With the exception of the Reliability of Supply complaints, the categories required within table 3 of the RIN do not exist within the Energex systems. A process of aligning Energex system with the categories in table 3 was undertaken and is explained in more detail in the methodology section.
<b>Complaint - other</b> is the number of complaints that are not under the categories of 'connection & augmentation', 'reliability of supply', 'quality of supply' and 'administrative process or customer service'.	With the exception of the Reliability of Supply complaints, the categories required within table 3 of the RIN do not exist within the Energex systems. A process of aligning Energex system with the categories in table 3 was undertaken and is explained in more detail in the methodology section.

## 3.2 Sources

Table 3.2.1 below demonstrates the sources from which Energex obtained the required information

**Table 3.2.1 - Data Sources**

Variable	Source
<b>3.6.7.1 Timely Provision of Services</b>	
Number of connections made	EPM sourced from PEACE CIS
Number of connections not made on or before agreed date	EPM sourced from PEACE CIS
<b>3.6.7.2 Timely Repair of Faulty Street Lights</b>	
Street lights - average monthly number "out"	Ellipse MSQ620

Street lights - not repaired by "fix by" date	Report Explorer ELL00195
Street lights - average number of days to repair	Contractor supplied quarterly report, Mean days to Repair
Total number of street lights	Network Data Group
<b>3.6.7.3 Call Centre Performance</b>	
Calls to call centre fault line	Cisco Unified Intelligence Centre (CUIC)
Calls to fault line answered within 30 seconds	CUIC
Calls to fault line - average waiting time before call answered	CUIC
Call centre - number of overload events	N/A
Percentage of calls abandoned	CUIC
<b>3.6.7.4 Number of Customer Complaints</b>	
Complaint - reliability of supply	EPM sourced from Cherwell (Complaint Management System)
Complaint - technical quality of supply	
Complaint - administrative process or customer service	EPM sourced from Cherwell
Complaint - connection or augmentation	EPM sourced from Cherwell
Complaint – other	EPM sourced from Cherwell
Total number of complaints	EPM sourced from Cherwell

## 3.3 Methodology

### 3.3.1 Assumptions

#### Call Centre Performance

- Energex has a number of phone numbers including a Loss of Supply line, Emergency line and General Enquiry line. In accordance with the STPIS specification, calls reported are calls to the Loss of Supply line only. The Loss of

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Supply line uses an IVR which has the capability to automatically identify the location of a caller (where Energex recognises the number through Call Line Identification-CLI) and to provide specific outage advice to those callers. This automated IVR information positively satisfies a large proportion of the callers to the Loss of Supply line. Calls that proceed through the IVR are subsequently recorded at various stages, such as when they are answered and when the call ends. This allows collection of data such as average wait time and volume of calls answered within 30 seconds.

### **Calls to fault line - average waiting time before call answered & Calls Abandoned - Percentage**

- Any call that disconnects whilst in the automated interactive services (IVR) is pegged as abandoned in CUIC and therefore it is difficult to identify if they have been provided the information they requested by the IVR. These calls are recorded in a separate part of the call flow and can therefore be excluded from calls that abandon whilst being queued for answer by a human operator. To ensure a more precise measure and avoid making assumptions on the IVR data, calls to the IVR have been removed from the measure for both of these metrics.

### **Customer Complaints**

Customer complaints can be received through various channels however the primary ones are via telephone or email interactions. Complaints are entered into the Energex Complaint Management System, Cherwell. These are handled by the Customer Investigations and Resolutions (CIR) team, during their process they determine the validity of the complaint and come to a resolution with the customer. Complaints that are not valid due to either not meeting the definition of a complaint or a duplicate are changed to enquiries or withdrawn respectively.

Definition of a complaint as per our Customer Service Standard (03808):

An expression of dissatisfaction made to or about an organization, related to its products, services, staff or the handling of a complaint, where a response or resolution is explicitly or implicitly expected or legally required.

This definition aligns with the Australian/New Zealand Standard (AS/NZS 10002:2014)

- Additionally, the CIR team will categorise the complaint with a type and up to 3 sub categories based upon the details of the complaint. With the exception of Reliability of Supply, the categories utilised in Cherwell do not align with the categories provided by the AER. A process was undertaken to best fit the complaint categories in Cherwell to the AER definitions. Each year this process is carried out for any additional categories that have been added or haven't previously been used. A brief overview of the decision making process for each category is described below.
- Complaints relating to the connection, maintenance or alteration to the network have been categorised within the Connection or Augmentation category (cell D69).
- Complaints relating to staff behaviour, meter reading, communication and correspondence and marketing or media have been categorised within the Administrative Process or Customer Service category (cell D68).

- Complaints relating to the driving and/or parking of Energex vehicles and general feedback relating to suppliers or installers have been categorised within the Other category (cell D70).

### **3.3.2 Assumptions**

#### **Connection Volumes**

New connection volumes are sourced from PEACE via the use of the corporate reporting solution, EPM. The report provides information on completion status and timeliness. These are used to populate the relevant metrics.

#### **Call Centre/Telephony**

As per the assumptions above, calls that are made to Energex are recorded at certain intervals as the call transitions between the automated IVR and queuing for answer by a human operator. The call data is recorded by the Cisco system managed jointly by Optus and Energy Queensland. This data is extracted using the Cisco Unified Intelligence Centre, a web based application. After the RIN audit meetings for the 2016/17 financial year confirmation was sought from Optus that the settings were correct for all fault lines. Screenshots were provided and are available for review if required. No changes to these lines have been made in the 2017/18 financial year.

A pre-existing report was utilised in CUIC to report on the measures required for STPIS/RIN. These reports were run and the data extracted to provide the figures required. In addition, throughout the year, the Customer Performance team tracks our performance against STPIS on a daily basis. The extracted data is crosschecked against this for validation.

#### **Complaint Data**

The complaint data is extracted from the data warehouse using a corporate report – CUS011 Feedback Detail. This report was filtered to only show complaint data. This report shows the Energex complaint categorisation and this is used to assign it an AER complaint category. Any issues with the data are referred back to the CIR team to investigate as subject matter experts.

For data validation purposes, a search of all complaints actioned in Cherwell is carried out to ensure the number provided by the EPM report is accurate.

### **3.4 Estimated Information**

No estimated data was reported in this template.

#### **3.4.1 Justification for Estimated Information**

Not applicable.

#### **3.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

#### **3.4.3 Basis for Estimated Information**

Not applicable.

## 4 BoP 3.6.8 Network Feeder Reliability

The AER requires Energex to provide the following information relating to RIN table 3.6.8:

- Feeder ID / name
- Description of the service area for the feeder
- Feeder classification
- Number of distribution customers
- Length of high voltage distribution lines
  - Overhead
  - Underground
- Maximum demand (MVA)
- Energy not supplied (MWh)
  - Unplanned
  - Planned
- Unplanned Outages
  - Total number of unplanned outages
  - Unplanned customer minutes off-supply (SAIDI)
    - Including excluded events and MEDs
    - After removing excluded events and MED
  - Unplanned interruptions (SAIFI)
    - Including excluded events and MEDs
    - After removing excluded events and MED
- Planned Outages
  - Total number of planned outages
  - Planned customer minutes off-supply (SAIDI)
    - Including MEDs
    - After removing MED
  - Planned interruptions (SAIFI)
    - Including MEDs
    - After removing MED

### 4.1 Consistency with AR RIN Requirements

Table 4.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 4.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
Feeder ID/name is the unique code or feeder identifier that the DNSP uses internally.	Energex used its unique identifier for each feeder in the reported data. Where this was unavailable the entry "Invalid Asset Type" was used as the unique identifier.

Requirements (instructions and definitions)	Consistency with requirements
A description of the service area of the feeder.	The feeder service area consists of the suburbs traversed by the feeder. Where a feeder has no customers allocated the location data may not be available. (ie Feeder is decommissioned or reconfigured)
<p>As per definition in the STPIS guideline November 2009:</p> <p><b>CBD:</b> a feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground distribution network containing significant interconnection and redundancy when compared to urban areas</p> <p><b>Urban:</b> a Feeder, which is not a CBD Feeder, with actual maximum demand over the reporting period per total feeder route length greater than 0.3 MVA/km</p> <p><b>Rural Short:</b> a feeder which is not a CBD or urban feeder with a total feeder route length less than 200 km</p> <p><b>Rural Long:</b> a feeder which is not a CBD or urban feeder with a total feeder route length greater than 200 km</p>	<p>CBD feeders – Energex has applied the AER mandated definition in the categorisation of CBD feeders.</p> <p>Urban Feeders – Energex has classified urban feeders as those exceeding the load density of 0.3 MVA/Km and excluding those feeders classified as CBD.</p> <p>Rural Short – Energex has classified Short Rural feeders as those not being CBD or Urban feeders and those with a load density below the 0.3 MVA/Km threshold.</p> <p>Rural Long – Energex has no Rural Long feeders.</p>
<p>As per STIPS guideline November 2009</p> <p><b>The number of distribution customers</b> is calculated as the average of the number of customers at the beginning of the reporting period and the number of customers at the end of the reporting period.</p>	Category based distribution customers are calculated as per the STPIS guideline being an average of the customers at the start and end of the reporting period.
<p><b>Length of high voltage distribution lines (overhead)</b></p> <p>The route length (measured in kilometres) of overhead lines in service (the total length of Feeders including all spurs), where each SWER line, single-phase line, and three-phase line counts as one line. A double circuit line counts as two lines.</p>	Energex has applied the Overhead route length measurement where available as per the STPIS guidelines
<p><b>Length of high voltage distribution lines (underground)</b></p> <p>The route length (measured in kilometres) of underground lines in service (the total length of Feeders including all spurs), where each SWER line, single-phase line, and three-phase line counts as one line. A double circuit line counts as two lines.</p>	Energex has applied the Underground route length measurement where available as per the STPIS guidelines
<b>MVA</b> is the recorded maximum demand for the feeder.	Where available the maximum demand for a distribution feeder is supplied. Feeders with no customers may still show historical maximum



Requirements (instructions and definitions)	Consistency with requirements
	demand applicable during the reporting year.
<p><b>Energy not supplied (Unplanned)</b></p> <p>The estimate of energy not supplied (due to unplanned outage) to be based on average Customer demand (multiplied by number of customers interrupted and the duration of the interruption). Average customer demand to be determined from (in order of preference):</p> <p>(a) average consumption of the customers interrupted based on their billing history</p> <p>(b) feeder demand at the time of the interruption divided by the number of customers on the feeder</p> <p>(c) average consumption of customers on the feeder based on their billing history</p> <p>(d) average feeder demand derived from feeder maximum demand and estimated load factor, divided by the number of customers on the feeder.</p> <p>This is to be exclusive of the effect of <i>Excluded Outages</i>.</p>	
<p><b>Energy not supplied (Planned)</b></p> <p>Total energy not supplied (measured in MWh) minus Energy not supplied - Unplanned. This is to be exclusive of the effect of <i>Excluded Outages</i>.</p>	
<p><b>Unplanned outage</b></p> <p>The number of unplanned events causing interruptions on the DNSP's network, including deliberate interruptions in response to an emergency event but does not include:</p> <p>(a) momentary outages and single premise outages</p> <p>(b) subsequent outages caused by network switching during fault finding.</p>	Unplanned outages are classified in accordance with the STPIS definition.
<p>As per definition in the STPIS guideline November 2009:</p> <p><b>Unplanned SAIDI:</b> the sum of the duration of each unplanned sustained customer interruptions (in minutes) divided by the total number of distribution customer. Unplanned SAIDI excludes momentary interruptions (one minute or less).</p> <p><b>Unplanned SAIFI:</b> the total number of unplanned sustained customer interruptions divided by the total number of distribution customers.</p>	Unplanned SAIDI and SAIFI are supplied in accordance with the AER mandated method.



Requirements (instructions and definitions)	Consistency with requirements
Unplanned SAIFI excludes momentary interruptions (one minute or less). SAIFI is expressed per 0.01 interruptions.	
<b>Planned outage</b> is the number of planned events causing interruptions, including single premise interruptions.	Planned outages are classified in accordance with the STPIS definition.
<p><b>Planned SAIDI</b></p> <p>The sum of the duration of each planned sustained Customer interruption (in minutes) divided by the total number of <i>Customers</i>. Planned SAIDI excludes momentary interruptions (one minute or less).</p> <p>The number of <i>Customers</i> used to derive SAIDI should reflect the relevant network type:</p> <ul style="list-style-type: none"> <li>• Whole network – total <i>Customers</i></li> <li>• Network classification (CBD/Urban/Rural short/Rural long) – CBD/Urban/Rural short/Rural long <i>Customers</i> respectively</li> <li>• Individual Feeder – <i>Customers</i> on that Feeder.</li> </ul> <p>Note: The number of <i>Customers</i> used to derive SAIDI and SAIFI is defined in the STPIS as: the average of the number of customers at the beginning of the reporting period and the number of <i>Customers</i> at the end of the reporting period.</p>	<p>Planned SAIDI is supplied with compliance to the mandated method.</p> <p>Customers used to derive SAIDI reflect the network type.</p> <p>Whole of network customers are the summation of the category customer numbers being CBD, Urban and Short Rural. (Energex doesn't have any long rural feeders)</p> <p>Individual feeder customer numbers are those on the feeder at the end of the reporting period.</p> <p>Customers used to derive SAIDI and SAIFI are an average by category of those customers at the start and the end of the reporting period.</p>
<p><b>Planned interruptions (SAIFI)</b></p> <p>The total number of planned sustained customer interruptions divided by the total number of distribution customers. Planned SAIFI excludes momentary interruptions (one minute or less). SAIFI is expressed per 0.01 interruptions.</p> <p>The number of <i>Customers</i> used to derive SAIFI should reflect the relevant network type:</p> <ul style="list-style-type: none"> <li>• Whole network – total <i>Customers</i></li> <li>• Network classification (CBD/Urban/Rural short/Rural long) – CBD/Urban/Rural short/Rural long <i>Customers</i> respectively</li> <li>• Individual Feeder – <i>Customers</i> on that Feeder.</li> </ul> <p>Note: The number of <i>Customers</i> used to derive SAIDI and SAIFI is defined in the STPIS as: the average of the number of <i>Customers</i> at the beginning of the reporting period and the number of <i>Customers</i> at the end of the reporting period.</p>	<p>Planned SAIFI is supplied with compliance to the mandated method.</p> <p>Customers used to derive SAIFI reflect the network type.</p> <p>Whole of network customers are the summation of the category customer numbers being CBD, Urban and Short Rural. (Energex doesn't have any long rural feeders)</p> <p>Individual feeder customer numbers are those on the feeder at the end of the reporting period.</p> <p>Customers used to derive SAIDI and SAIFI are an average by category of those customers at the start and the end of the reporting period.</p>

## 4.2 Sources

Table 4.2.1 below demonstrates the sources from which Energex obtained the required information

**Table 4.2.1 - Data Sources**

Variable	Source
Network feeder outage data	PON/EPM
Network Asset Information	NFM
Feeder maximum demand	NETPLAN

## 4.3 Methodology

### 4.3.1 Assumptions

Energex has supplied outage data from the corporate reporting system EPM (Energex Performance Management). In classifying each interruption by category there were individual transformer interruptions where a category could not be retrieved (Null category) and these are therefore not included in the reported figures as listed below.

**Note:** the below accuracy levels are with excluded outages and major event day records removed.

- Unplanned Sustained events:

Unplanned sustained interruptions with **no category** totalled a Customer Minutes Lost (CML) of 3748 and a Customers Interrupted (CI) of 78. This equates to a System SAIDI of 0.0026 and a System SAIFI of 0.000054 interruptions. The percentage error against the normalised unplanned reported values are:

- STPIS SAIDI Error % =  $0.026/67.56 = 0.00017 = 0.019\%$
- STPIS SAIFI Error % =  $0.000054/0.8944 = 0.00006 = 0.0016\%$

Unplanned sustained interruptions with **no cause** totalled a Customer Minutes Lost (CML) of 13,050 and a Customers Interrupted (CI) of 125. This equates to a System SAIDI of 0.0089 and a System SAIFI of 0.000086 interruptions. The percentage error against the normalised unplanned reported values are:

- STPIS SAIDI Error % =  $0.026/67.56 = 0.00017 = 0.019\%$
- STPIS SAIFI Error % =  $0.000054/0.8944 = 0.00006 = 0.0016\%$

The list of feeders supplied is a combination of the current feeder category combination at the end of the reporting period, with associated distribution customer numbers and a

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historical listing of feeder category combinations experiencing outages through the reporting period.

With the above approach it should be noted that:

- A feeder may appear twice on the list if the category has changed during the year.
- Not all listed feeders have had an outage

#### **4.3.2 Approach**

Energex queried the corporate reporting system EPM/PON to retrieve:

- outage data by transformer with the associated attributes of allocated feeder, category, duration, customer minutes lost and customers interrupted and feeder customer numbers.
- Current 11kv feeders at the end of the reporting period with customers allocated.
- Category customer numbers aligned to the AER mandated method for each outage.

Energex queried the corporate reporting system NFM (Network Facilities Management) to retrieve:

- Feeder location data.
- Feeder length overhead and underground.

Energex queried the corporate reporting system NETPLAN to retrieve:

- Maximum demand for a feeder where available.

This data was combined to produce table 3.6.8 Network Feeder Reliability.

The individual customer count against each feeder in template 3.6.8 was at the end of the reporting period.

### **4.4 Estimated Information**

No estimated data was reported in this template.

#### **4.4.1 Justification for Estimated Information**

Not applicable.

#### **4.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

#### **4.4.3 Basis for Estimated Information**

Not applicable.

## 5 BoP 3.6.9 Network Feeder Reliability – Planned Outages

The AER requires Energex to provide the following information in table 3.6.9.1 – Planned Minutes Off Supply (SAIDI) and table 3.6.9.2 Planned Interruptions to Supply (SAIFI):

- CBD
- Urban
- Short rural

### 5.1 Consistency with AR RIN Requirements

Table 5.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 5.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p><b>3.6.9.1 Planned Minutes Off Supply( SAIDI)</b></p> <p>The sum of the duration of each planned sustained <i>Customer</i> interruption (in minutes) divided by the total number of <i>Customers</i>. Planned SAIDI excludes momentary interruptions (one minute or less).</p> <p>The number of <i>Customers</i> used to derive SAIDI should reflect the relevant network type:</p> <ul style="list-style-type: none"> <li>• Whole network – total Customers</li> <li>• Network classification (CBD/Urban/Rural short/Rural long) – CBD/Urban/Rural short/Rural long Customers respectively</li> <li>• Individual Feeder – Customers on that Feeder.</li> </ul> <p>Note: The number of <i>Customers</i> used to derive SAIDI and SAIFI is defined in the STPIS as: the average of the number of customers at the beginning of the reporting period and the number of <i>Customers</i> at the end of the reporting period.</p>	<p>Planned interruptions to supply SAIDI were calculated in accordance with the AER mandated method specified in 3.6.9.1.</p> <p>Number of customers used to derive SAIFI is in accordance with the AER method.</p>
<p><b>3.6.9.2 Planned Interruptions to Supply (SAIFI)</b></p> <p>The total number of planned sustained customer interruptions divided by the total number of distribution customers. Planned SAIFI excludes momentary interruptions (one minute or less). SAIFI is expressed per 0.01 interruptions.</p> <p>The number of <i>Customers</i> used to derive SAIFI</p>	<p>Planned interruptions to supply SAIFI were calculated in accordance with the AER mandated method specified in 3.6.9.2.</p>

Requirements (instructions and definitions)	Consistency with requirements
<p>should reflect the relevant network type:</p> <ul style="list-style-type: none"> <li>• Whole network – total Customers</li> <li>• Network classification (CBD/Urban/Rural short/Rural long) – CBD/Urban/Rural short/Rural long Customers respectively</li> <li>• Individual Feeder – Customers on that Feeder.</li> </ul> <p>Note: The number of <i>Customers</i> used to derive <i>SAIDI</i> and <i>SAIFI</i> is defined in the <i>STPIS</i> as: the average of the number of <i>Customers</i> at the beginning of the reporting period and the number of <i>Customers</i> at the end of the reporting period.</p>	<p>Number of customers used to derive SAIFI is in accordance with the AER method.</p>

## Sources

Table 5.1.2 below demonstrates the sources from which Energex obtained the required information.

**Table 5.1.2 - Data Sources**

Variable	Source
Network planned outage data	PON/EPM

## 5.2 Methodology

### 5.2.1 Assumptions

Energex used planned events that had a valid category at the time of the outage and inclusive of those planned events occurring on a major event day. This enabled planned reporting in accordance with requirements specified at 3.6.9.1 and 3.6.9.2.

“Unallocated” Transformers (Transformers with Null category assigned) are not able to be assigned to a feeder and are therefore not included in the data reported. For planned outages there were 44 sustained transformer records with no category. This resulted in a Customer Minutes Lost (CML) of 265,930 and a Customers Interrupted (CI) of 855. This equates to a MSS system SAIDI of 0.18 minutes and a system SAIFI of 0.0005 interruptions.

### 5.2.2 Approach

Energex queried the transformer outage data from EPM to establish the CML and CI and for the reporting period. This was then combined with the category customer base to produce the planned SAIDI and SAIFI measures.

## 5.3 Estimated Information

No estimated data was reported in this template.

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### **5.3.1 Justification for Estimated Information**

Not applicable.

### **5.3.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

### **5.3.3 Basis for Estimated Information**

Not applicable.

## 6 BoP 6.2 STPIS Reliability

The AER requires Energex to provide the following information in RIN table 6.2.1 Unplanned Minutes Off Supply (SAIDI):

- Total sustained minutes off supply
  - CBD
  - Urban
  - Short Rural
  - Whole Network
- Total of excluded events
  - CBD
  - Urban
  - Short Rural
  - Whole Network
- Total sustained minutes off supply after removing excluded events
  - CBD
  - Urban
  - Short Rural
  - Whole Network

The AER requires Energex to provide the following information in RIN table 6.2.2 Unplanned Interruptions to Supply (SAIFI):

- Total sustained interruptions
  - CBD
  - Urban
  - Short Rural
  - Whole Network
- Total of excluded events
  - CBD
  - Urban
  - Short Rural
  - Whole Network
- Total sustained interruptions after removing excluded events
  - CBD
  - Urban
  - Short Rural
  - Whole Network

The AER requires Energex to provide the following information in RIN table 6.2.4 Distribution Customer Numbers:

- Customer numbers at the start of the period
  - CBD
  - Urban
  - Short Rural
  - Whole Network

- Customer numbers at the end of the period
  - CBD
  - Urban
  - Short Rural
  - Whole Network

## 6.1 Consistency with AR RIN Requirements

Table 6.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 6.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<b>STPIS</b> is the service target performance incentive scheme applying to <i>Energex</i> as set out in the <i>2015-20 Distribution Determination</i> .	Energex has complied with the requirements set out in the 2015-20 Distribution Determination.
As per definition in the STPIS guideline November 2009:  <b>Unplanned SAIDI:</b> the sum of the duration of each unplanned sustained customer interruptions (in minutes) divided by the total number of distribution customer. Unplanned SAIDI excludes momentary interruptions (one minute or less).  <b>Unplanned SAIFI:</b> the total number of unplanned sustained customer interruptions divided by the total number of distribution customers. Unplanned SAIFI excludes momentary interruptions (one minute or less). SAIFI is expressed per 0.01 interruptions.	Unplanned SAIDI has been calculated in accordance with the definition specified by the AER except where specified in paragraph 6.3.1  Unplanned SAIFI has been calculated in accordance with the definition specified by the AER except where specified in paragraph 6.3.1
<b>Number of Customers</b> is the average of the number of Customers at the beginning of each Relevant Regulatory Year and the number of Customers at the end of the Relevant Regulatory Year.	Customer data complies with the AER mandated method of an averaged number based on the customers at the start and end of the reporting period.

## 6.2 Sources

Table 6.2.1 below demonstrates the sources from which Energex obtained the required information

**Table 6.2.1 - Data Sources**

Variable	Source
All asset outage data	PON/EPM
Customer base by category and system	PON/EPM



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## **6.3 Methodology**

### **6.3.1 Assumptions**

Energex has supplied outage data from the corporate reporting system EPM (Energex Performance Management). In classifying each interruption by category there were individual transformer interruptions where a category could not be retrieved (Null category) and are therefore not included in the reported figures.

For all unplanned outages with null category the Customer Minutes Lost (CML) was 4149 and the CI 80. This equated to a system SAIDI of 0.0028 minutes and a system SAIFI of 0.000055.

When the data was normalised with Major Event Data and excluded cause codes removed the impact to system SAIDI was a CML of 3,748 and a Customers Interrupted (CI) of 78. This produced a normalised system SAIDI error of 0.0026 minutes and a system SAIFI error of 0.000054.

### **6.3.2 Approach**

Energex queried the corporate reporting system EPM to retrieve all unplanned sustained transformer interruptions. Associated fields such as category, duration, cause, CML and CI were recorded against these interruptions.

Customer data was queried from the corporate reporting system EPM by category for the first and last days of the reporting period with the system number being the summation of the three. Averaged numbers by category and system were calculated from this data.

With CML, CI and the customer base for unplanned outages; template 6.2 was populated for all unplanned events and unplanned events with excluded outage data removed (Normalised).

## **6.4 Estimated Information**

No estimated data was reported in this template.

### **6.4.1 Justification for Estimated Information**

Not applicable.

### **6.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

### **6.4.3 Basis for Estimated Information**

Not applicable.

## 7 BoP 6.6 STPIS Customer Service

The AER requires Energex to provide the following information relating to RIN table 6.6.1 Telephone Answering:

- Number of calls received
- Number of calls answered within 30 seconds

### 7.1 Consistency with AR RIN Requirements

Table 7.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 7.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p>As per definition in STPIS guideline November 2009:</p> <p><b>Telephone Answering</b></p> <p>Calls to the fault line answered in 30 seconds where the time to answer a call is measured from when the call enters the telephone system of the call centre (including that time when it may be ringing unanswered by any response) and the caller speaks with a human operator, but excluding the time that the caller is connected to an automated interactive service that provides substantive information. This measure does not apply to:</p> <ul style="list-style-type: none"> <li>• calls to payment lines and automated interactive services;</li> <li>• calls abandoned by the customer within 30 second of the call being queued for response by a human operator. Where the time in which a telephone call is abandoned is not measured, then an estimate of the number of calls abandoned within 30 seconds will be determined by taking 20 per cent of all calls abandoned.</li> </ul>	<p>Using a custom report in CUIC, data is filtered to ensure that only calls to the loss of supply lines that have been queued for a human operator are extracted. The data is split into daily intervals to comply with removal of MEDs as per STPIS requirements.</p>

## 7.2 Sources

Table 7.2.1 below demonstrates the sources from which Energex obtained the required information

**Table 7.2.1 - Data Sources**

Variable	Source
Telephone Answering	Cisco Unified Intelligence Center (CUIC)

## 7.3 Methodology

### 7.3.1 Assumptions

Energex has a number of phone numbers including a Loss of Supply line, Emergency line and General Enquiry line. In accordance with the STPIS specification, calls reported are calls to the Loss of Supply line only. The Loss of Supply line uses an IVR which has the capability to automatically identify the location of a caller (where Energex recognises the number through Call Line Identification- CLI) and to provide specific outage advice to those callers. This automated IVR information positively satisfies a large proportion of the callers to the Loss of Supply line. Calls that proceed through the IVR are subsequently recorded at various stages, such as when they are answered and when the call ends. This allows collection of data such as average wait time and volume of calls answered within 30 seconds.

### 7.3.2 Approach

As per the assumptions above, calls that are made to Energex are recorded at certain intervals as the call transitions between the automated IVR and queuing for answer by a human operator. The call data is recorded by the Cisco system managed jointly by Optus and Energy Queensland. This data is extracted using the Cisco Unified Intelligence Centre, a web based application. After the RIN audit meetings for the 2016/17 financial year confirmation was sought from Optus that the settings were correct for all fault lines. Screenshots were provided and are available for review if required. No changes to these lines have been made in the 2017/18 financial year.

A pre-existing report was utilised in CUIC to report on the measures required for STPIS/RIN. These reports were run and the data extracted to provide the figures required. In addition, throughout the year, the Customer Performance team tracks our performance against STPIS on a daily basis. The extracted data is crosschecked against this for validation.

An additional report in EPM created by the Network Reliability team (RNP026) is used to confirm STPIS MED dates.

## 7.4 Estimated Information

No estimated data was reported in this template.

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#### **7.4.1 Justification for Estimated Information**

Not applicable.

#### **7.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

#### **7.4.3 Basis for Estimated Information**

Not applicable.

## 8 BoP 6.7 STPIS Daily Performance

The AER requires Energex to provide the following information in RIN table 6.7.1 Daily Performance Data – Unplanned:

- Number of calls received ( after removing excluded events)
- Number of calls answered in 30 second (after removing excluded events)

### 8.1 Consistency with AR RIN Requirements

Table 8.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 8.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p>The excluded events to be removed from the data refer only to events listed in clause 3.3(a) of the STPIS, with respect to reliability data, and in clause 5.4 of the STPIS with respect to customer service parameters.</p> <p>Customer service information must be reported as per the definitions in the STPIS, that is excluding:</p> <ul style="list-style-type: none"><li>• calls to payment lines and automated interactive services</li><li>• calls abandoned by the customer within 30 seconds of the call being queued for response by a human operator (where the time in which a telephone call is abandoned is not measured, then an estimate of the number of calls abandoned within 30 seconds will be determined by taking 20 per cent of all calls abandoned).</li></ul>	<p>Using several reports in CUIC, relevant data is extracted for the fault lines that have been queued for a human operator.</p>

### 8.2 Sources

Table 8.2.1 below demonstrates the sources from which Energex obtained the required information

**Table 8.2.1 - Data Sources**

Variable	Source
Telephony Data	Cisco Unified Intelligence Center (CUIC) EPM Report – RNP026 – MED List

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## **8.3 Methodology**

### **8.3.1 Assumptions**

Energex has a number of phone numbers including a Loss of Supply line, Emergency line and General Enquiry line. In accordance with the STPIS specification, calls reported are calls to the Loss of Supply line only. The Loss of Supply line uses an IVR which has the capability to automatically identify the location of a caller (where Energex recognises the number through Call Line Identification- CLI) and to provide specific outage advice to those callers. This automated IVR information positively satisfies a large proportion of the callers to the Loss of Supply line. Calls that proceed through the IVR are subsequently recorded at various stages, such as when they are answered and when the call ends. This allows collection of data such as average wait time and volume of calls answered within 30 seconds.

### **8.3.2 Approach**

As per the assumptions above, calls that are made to Energex are recorded at certain intervals as the call transitions between the automated IVR and queuing for answer by a human operator. The call data is recorded by the Cisco system managed jointly by Optus and Energy Queensland. This data is extracted using the Cisco Unified Intelligence Centre, a web based application. After the RIN audit meetings for the 2016/17 financial year confirmation was sought from Optus that the settings were correct for all fault lines. Screenshots were provided and are available for review if required. No changes to these lines have been made in the 2017/18 financial year.

A pre-existing report was utilised in CUIC to report on the measures required for STPIS/RIN. These reports were run and the data extracted to provide the figures required. In addition, throughout the year, the Customer Performance team tracks our performance against STPIS on a daily basis. The extracted data is crosschecked against this for validation.

An additional report in EPM created by the Network Reliability team (RNP026) is used to confirm STPIS MED dates.

## **8.4 Estimated Information**

No estimated data was reported in this template.

### **8.4.1 Justification for Estimated Information**

Not applicable.

### **8.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

### **8.4.3 Basis for Estimated Information**

Not applicable.

## 9 BoP 6.9 STPIS – Guaranteed Service Level

The AER requires Energex to provide 2017/18 Volume and Value of GSL payments for RIN table 6.9.1 Guaranteed Service Levels – Jurisdictional GSL Scheme in the following category:

- Appointments
- Connections
- Reliability of Supply
- Street lights
- Planned Interruptions

The AER requires Energex to provide 2017/18 Volume and Value of GSL payments for RIN table 6.9.2 Guaranteed Service Levels – AER GSL Scheme in the following category if the AER's GSL scheme is applied at any time during the regulatory year:

- New Connections
  - Number of connections made
  - Number of connections not made on or before the day agreed
  - Connections - GSL payments – 1-6 day delay
  - Connections - GSL payments – 7+ day delay
- Reliability of supply
  - Frequency of interruptions – CBD feeders – 9 interruptions
  - Frequency of interruptions – Urban feeders – 9 interruptions
  - Frequency of interruptions – Rural (short and long) feeders – 15 interruptions
  - Interruptions – CBD feeders – 12 hours duration
  - Interruptions – Urban feeders – 12 hours duration
  - Interruptions – Rural (short and long) feeders – 18 hours duration
  - Total duration of interruptions Level 1 – 20 hours
  - Total duration of interruptions Level 2 – 30 hours
  - Total duration of interruptions Level 3 – 60 hours
- Street Lights
  - Streetlight repair 5 days – GSL payments
- Planned Interruptions
  - Notice of planned interruptions – 4 business days notice not given

### 9.1 Consistency with AR RIN Requirements

Table 9.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 9.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
Table 6.9.1 collects information relating to jurisdiction GSL scheme parameters. These parameters can be found in the jurisdictional scheme relevant to NSP. Please identify each	GSLs have been reported as per their categorisation in the Electricity Distribution Network Code (Section 2.3).

Requirements (instructions and definitions)	Consistency with requirements
parameter in the relevant sub-tables and provide the volume and value of GSL payments.  For GSL parameters that do not fit within the provided sub-tables provided, please enter a heading and identify the relevant parameter(s).	

## 9.2 Sources

Table 9.2.1 below demonstrates the sources from which Energex obtained the required information

**Table 9.2.1 - Data Sources**

Variable	Source
GSL Data – Responsible Area	Cherwell (Complaints Management System)
GSL Data – Count and Payment Value	EPM

## 9.3 Methodology

### 9.3.1 Assumptions

GSL's have been identified using the categories in the Queensland Competition Authority's (QCA) Electricity Distribution Network Code (EDNC).

### 9.3.2 Approach

Guaranteed Service Level payments are processed using the corporate Complaint Management System (Cherwell). The implementation of Cherwell allowed GSL's to be automatically identified in the vast majority of instances; additionally customers/staff can manually raise a GSL request. Over 99% of the GSL's paid in the 2017/18 financial year were created automatically.

On a daily basis the information contained in Cherwell undergoes an ETL process and is made available in the Energex Data Warehouse. This data is able to be accessed via the Energex Performance Management (EPM) platform.

Once the data is extracted it goes through a series of checks to ensure its veracity. These include but are not limited too;

- Cross referencing of data to the quarterly EDNC reports provided to the QCA
- Data validation against the dollar values and analysis of any abnormalities using the source system
- Sample set randomly selected and checked against the source system



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These methods in combination with the processes utilised by the Customer Investigations and Resolutions team ensure that the data provided is accurate.

Please note, that the dollar figure for each category will not always be divisible by the GSL payment amount. These instances have been investigated and it has been identified that this is the result of one or more premises reaching the payment cap for GSL's for the financial year (\$454).

## **9.4 Estimated Information**

No estimated data was reported in this template.

### **9.4.1 Justification for Estimated Information**

Not applicable.

### **9.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

### **9.4.3 Basis for Estimated Information**

Not applicable.

# 10 BoP 7.8 Avoided TUOS Payment

The AER requires Energex to provide the following information relating to RIN table 7.8.1 Avoided TUOS Payments:

- Embedded generators
- Market network service providers
- Other

## 10.1 Consistency with AR RIN Requirements

Table 10.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 10.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p><b>Avoided TUOS payment</b> are the payments made by Energex in accordance with clause 5.5(h) of the <u>NER</u>:</p> <p>A Distribution Network Service Provider must pass through to a Connection Applicant the amount calculated in accordance with paragraph (i) for the locational component of prescribed TUOS services that would have been payable by the Distribution Network Service Provider to a Transmission Network Service Provider had the Connection Applicant not been connected to its distribution network ('avoided charges for the locational component of prescribed TUOS services').</p>	<p>Energex has reported Avoided TUOS payment in accordance with the clause 5.5(h) of the NER.</p>
<p><b>Embedded generators</b> <u>NER</u> definition:</p> <p>A Generator who owns, operates or controls an embedded generating unit.</p>	<p>Energex has reported Avoided TUOS payment in accordance with the NER definition for Embedded Generators.</p> <p>Energex has applied these definitions consistently.</p>
<p><b>Market network service providers</b> <u>NER</u> definition:</p> <p>A Network Service Provider who has classified any of its network services as a market network service in accordance with Chapter 2 and who is also registered by AEMO as a Market Network Service Provider under Chapter 2.</p>	<p>Not applicable</p>
<p><b>Other (avoided TUOS payment)</b> is any avoided TUOS payment made by a person that is not an Embedded Generator or Market Network Service Provider.</p>	<p>Not applicable</p>

## 10.2 Sources

Table 10.2.1 below demonstrates the sources from which Energex obtained the required information.

**Table 10.2.1 - Data Sources**

Variable	Source
Embedded generators	Separately identified in the Ellipse General Ledger
Market network service providers	Not applicable
Other	Not applicable

## 10.3 Methodology

Methodology for the Avoided TUOS Payment reporting is detailed below.

### 10.3.1 Assumptions

No assumptions were made.

### 10.3.2 Approach

A specific account code from the Ellipse General Ledger is used to identify Avoided TUOS payments.

## 10.4 Estimated Information

No estimated data was reported in this template.

### 10.4.1 Justification for Estimated Information

Not applicable.

### 10.4.2 Steps to ensure Energex can provide Actual Information

Not applicable.

### 10.4.3 Basis for Estimated Information

Not applicable.

# 11 BoP 7.10 Jurisdictional Schemes

The AER requires Energex to provide information for RIN table 7.10.1 Jurisdictional Scheme Payment in the following category:

- Jurisdictional Scheme Name
- Description
- Date DNSP Became Subject to Scheme
- Descriptions of Cost Recovery method
- Total Scheme Payments

## 11.1 Consistency with AR RIN Requirements

Table 11.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 11.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p>Business must list each relevant jurisdictional scheme individually and report information for each scheme separately from other schemes.</p> <p><b>Jurisdictional Scheme Payment</b></p> <p>In respect of a <i>Jurisdictional Scheme</i>, the amounts Energex is required under the <i>Jurisdictional Scheme</i> obligations to:</p> <p>(a) pay to a person</p> <p>(b) pay into a fund established under an Act of a participating jurisdiction</p> <p>(c) credit against charges payable by a person</p> <p>(d) reimburse a person</p> <p>less any amounts recovered by the <i>DNSP</i> from any person in respect of those amounts other than under the <i>NER</i>.</p>	<p>The Queensland Solar Bonus Scheme (SBS) established under section 55A of the Electricity Act is classified as a jurisdictional scheme pursuant to clause 6.18.7A of the National Electricity Rules (NER).</p> <p>The Australian Energy Market Commission (AEMC) Levy is also classified as a jurisdictional scheme in accordance with rule 6.18.7A of the NER.</p>

## 11.2 Sources

Table 11.2.1 below demonstrates the sources from which Energex obtained the required information.

**Table 11.2.1 - Data Sources**

Variable	Source
Solar PV	Ellipse General Ledger

Variable	Source
Australian Energy Market Commission Levy	Ellipse General Ledger

## 11.3 Methodology

### 11.3.1 Assumptions

No assumptions were made.

### 11.3.2 Approach

- Solar PV – specific account code from the Ellipse general ledger is used to identify Solar PV payments.
- AEMC Levy – specific account code from the Ellipse general ledger is used to identify the AEMC levy payments.

## 11.4 Estimated Information

No estimated data was reported in this template.

### 11.4.1 Justification for Estimated Information

Not applicable.

### 11.4.2 Steps to ensure Energex can provide Actual Information

Not applicable.

### 11.4.3 Basis for Estimated Information

Not applicable.

## 12 BoP 7.11 Demand Management Incentive Scheme

The AER requires Energex to provide the following information in RIN table 7.11.1 DMIA – Projects Submitted for Approval:

- Name of Project
- Total amount of the DMIA spent in 2017-18
  - Operating expenditure
  - Capital expenditure
  - Total

### 12.1 Consistency with AR RIN Requirements

Table 12.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 12.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
The Demand Management Incentive Scheme applying to <i>Energex</i> as set out in the <i>2015-20 Distribution Determination</i> .	<p>The AER approved the current DMIA allowance of \$1 million (\$2014/15) per annum for the 2015-2020 regulatory period.</p> <p>The actual spend for DMIA projects in 2017-18 do not exceed the \$1 million annual allowance.</p>
<p>Schedule 1 of the Regulatory Information issued to Energex:</p> <p><b>Demand Management Incentive Allowance</b></p> <p>Identify each demand management project or program for which Energex seeks approval.</p> <p>For each demand management project or program identified in the response to:</p> <p>(a) explain:</p> <ul style="list-style-type: none"> <li>– how it complies with the Demand Management Innovation Allowance criteria detailed at section 3.1.3 of the demand management incentive scheme;</li> <li>– its nature and scope;</li> <li>– its aims and expected outcomes;</li> <li>– the process by which it was selected, including its business case and consideration of any alternatives;</li> <li>– how it was/is to be implemented;</li> </ul>	<p>Template 7.11 – Demand Management Incentive Scheme for 2017-18 has been completed outlining the DMIA projects submitted for approval as part of Schedule 1.</p>

Requirements (instructions and definitions)	Consistency with requirements
<ul style="list-style-type: none"> <li>– its implementation costs; and</li> <li>– any identifiable benefits that have arisen from it, including any off peak or peak demand reductions;</li> </ul> <p>(b) confirm that its associated costs are not:</p> <ul style="list-style-type: none"> <li>– recoverable under any other jurisdictional incentive scheme;</li> <li>– recoverable under any other Commonwealth or State Government scheme; and</li> <li>– included in the forecast capital or expenditure approved in the 2015-20 Distribution Determination or recoverable under any other incentive scheme in the determination; and:</li> </ul> <p>(c) state the total amount of the Demand Management Innovation Allowance spent in the Relevant Regulatory Year and how this amount has been calculated.</p>	

## 12.2 Sources

Table 12.2.1 below demonstrates the sources from which Energex obtained the required information.

**Table 12.2.1 - Data Sources**

Variable	Source
DMIA Projects submitted for Approval (Operating Expenditure and Capital Expenditure)	Ellipse General Ledger

## 12.3 Methodology

### 12.3.1 Assumptions

No assumptions were made.

### 12.3.2 Approach

The information provided in Table 7.11. DMIA Projects submitted for approval are consistent with what is reported in Schedule 1 of the RIN. Operating and capital expenditure for each project is obtained from the Ellipse General Ledger. Each project can be identified by its unique project number.

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## **12.4 Estimated Information**

No estimated data was reported in this template.

### **12.4.1 Justification for Estimated Information**

Not applicable.

### **12.4.2 Steps to ensure Energex can provide Actual Information**

Not applicable.

### **12.4.3 Basis for Estimated Information**

Not applicable.



# 13 BoP 8.1.1 Income Statement

The AER requires Energex to provide the following information in RIN table 8.1.1 Income Statement:

- Audit Statutory Accounts
- Adjustments
- Distribution business
- Standard Control Services
- Alternative Control Services
  - Public Lighting
  - Other
    - Connection services
    - Metering services
    - Ancillary network services

For each of following category:

## 8.1.1.1 – Revenue:

- Distribution revenue
- Cross boundary revenue
- Contributions
- Jurisdictional scheme amounts
- Profit from sale of fixed assets
- TUOS revenue
- Pass through revenue (F-factor)
- Other Revenue
- Total Revenue

## 8.1.1.2 – Expenditure:

- TUOS expenditure
- Avoided TUOS expenditure
- Cross boundary expenditure
- Depreciation
- Finance charges
- Impairment losses
- Jurisdictional scheme amounts
- Loss from sale of fixed assets
- Maintenance expenditure
- Operating expenditure excluding maintenance expenditure
- Other

## 8.1.1.3 – Profit

- Profit before tax (PBT)
- Income tax expenses(/benefit)
- Profit after tax

## 13.1 Consistency with AR RIN Requirements

Table 13.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 13.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<b>Audited statutory accounts</b> Energex is required to provide the audited set of <i>Statutory Accounts</i> prepared in accordance with Australian Securities and Investment Commission (ASIC) requirements.	All disclosures have been reconciled to the Audited Statutory Accounts of Energex's Parent Entity, Energy Queensland Limited. Please refer to Note 28(B) of the Energy Queensland Limited Audited Statutory Accounts.
The <b>adjustments</b> made to <i>Audited statutory accounts</i> to arrive at the accounts for the <i>Distribution Business</i> . The adjustments should include unregulated activities and any other adjustments.	Adjustments reflect both regulated and unregulated adjustments. Regulated adjustments relate to reclassifications within the Annual Performance Regulatory Information Notice (AR RIN) while unregulated adjustments relate to items that are treated as unregulated under the AER service classification framework.
<b>Distribution Business</b> comprises standard control services + alternative control services + negotiated services.	As Energex does not currently have negotiated services, Distribution Business comprises both Standard Control Services and Alternative Control Services only.
<b>Standard control services</b> as defined in the 2015-20 Distribution Determination.	Standard control services have been reported in line with the AERs Final Decision for the 2015-20 Regulatory control period.
<b>Alternative control services</b> must align with those alternative control services set out in the 2015-20 Distribution Determination (Attachment 13 – Classification of services October 2015)	Alternative control services align with the services set out in Attachment 13 – Classification of Services October 2015.
<b>8.1.1.1.1 Revenue - Definition</b>  <b>Distribution Revenue</b> is revenue earned from the provision of <i>standard control services</i> , <i>alternative control services</i> and <i>negotiated services</i> and excludes <i>capital contributions</i> .  <b>Cross boundary revenue</b> is Inter-DNSP revenue which is revenue from another DNSP for using Energex's distribution network.  <b>TUOS revenue</b> is revenue from TUOS charges.  <b>Jurisdictional scheme amounts</b> has the meaning given in clause 6.18.7A(d)	Distribution revenue reflects both standard control and alternative control services. Capital contributions are excluded. Energex does not currently have any negotiated services.  Not applicable as no cross boundary revenue is reported.  TUOS revenue has been reconciled to the Audited Statutory Accounts.  Jurisdictional scheme amounts represent Solar PV government grant revenue.
<b>8.1.1.2 – Expenditure – Definition</b>  <b>TUOS cost</b> is transmission charges to be paid to	TUOS costs reflect payments made to transmission network service providers. As per the requirements of Template 8.1.1 avoided

Requirements (instructions and definitions)	Consistency with requirements
<p>transmission network service providers which include Avoided TUOS payments.</p> <p><b>Cross boundary charges</b> are inter-DNSP payments which are the cost of using another DNSP's distribution network.</p> <p><b>Finance charges</b> include for the purpose of the Financial Information Templates (Income worksheet) interest expenses.</p> <p><b>Impairment losses</b> are a special, non-recurring charge taken to write down an asset with an overstated book value.</p> <p><b>Jurisdictional Scheme Payment</b></p> <p>In respect of a Jurisdictional Scheme, the amounts a DNSP is required under the Jurisdictional Scheme obligations to:</p> <p>(a) pay to a person</p> <p>(b) pay into a fund established under an Act of a participating jurisdiction</p> <p>(c) credit against charges payable by a person</p> <p>(d) reimburse a person</p> <p>less any amounts recovered by the DNSP from any person in respect of those amounts other than under the NER.</p> <p><b>Maintenance expenditure</b> is those expenditures which are directly and specifically attributable to Maintenance that are not Capital Expenditure.</p> <p><b>Operating expenditure excluding maintenance expenditure</b> is Energex's operating expenditure excluding any Maintenance expenditure.</p>	<p>TUOS payments are disclosed separately.</p> <p>Cross boundary costs are recognised separately from TUOS costs.</p> <p>Finance charges include capitalised interest, discounting of non-current long service leave and intercompany interest charges.</p> <p>Impairment losses are included in depreciation, amortisation and impairment expense in statutory accounts but have been disclosed separately for AR RIN reporting purposes.</p> <p>The Queensland Solar Bonus Scheme (SBS) established under section 55A of the Electricity Act is classified as a jurisdictional scheme pursuant to clause 6.18.7A of the National Electricity Rules.</p> <p>The Australian Energy Market Commission (AEMC) Levy is also classified as a jurisdictional scheme in accordance with rule 6.18.7A of the NER.</p> <p>Maintenance expenditure has been reported in line with the AERs specified requirements.</p> <p>Operating expenditure has been reported in line with the AERs specified requirements.</p>

## 13.2 Sources

Table 13.2.1 below demonstrates the sources from which Energex obtained the required information.

**Table 13.2.1 - Data Sources**

Variable	Source
Distribution revenue	Ellipse General Ledger
Cross boundary revenue	Not applicable as no revenue reported
Contributions	Ellipse General Ledger

Variable	Source
Interest income	Ellipse General Ledger
Jurisdictional scheme amounts	Ellipse General Ledger
Profit from sale of fixed assets	Ellipse General Ledger
TUOS revenue	Ellipse General Ledger
Pass through revenue (F-factor)	Not applicable as no revenue reported
Other revenue	Ellipse General Ledger
TUOS expenditure	Ellipse General Ledger
Avoided TUOS expenditure	Ellipse General Ledger
Cross boundary expenditure	Ellipse General Ledger
Depreciation	Ellipse General Ledger, Ellipse fixed asset register, RFM, EB RIN Assets
Finance charges	Ellipse General Ledger
Impairment losses	Ellipse General Ledger
Jurisdictional scheme amounts	Ellipse General Ledger
Loss from sale of fixed assets	Ellipse General Ledger, Ellipse fixed asset register
Maintenance expenditure	Ellipse General Ledger, Opex accounts
Operating expenditure excluding maintenance expenditure	Ellipse General Ledger, Opex accounts
Other	Ellipse General Ledger
Income tax expense	Ellipse General Ledger, Ellipse fixed asset register

## 13.3 Methodology

Methodology for the Income Statement reporting is detailed below.

### 13.3.1 Assumptions

No assumptions were made.

### 13.3.2 Approach

#### Audited Statutory Accounts

The audited statutory accounts information is extracted from the Ellipse general ledger. Adjustments are made between the audited statutory accounts and the AR RIN.

#### Adjustments

Adjustments reflect both regulated and unregulated adjustments. Regulated adjustments relate to reclassifications within the regulatory accounts while unregulated adjustments relate to items that are treated as unregulated under the AER framework. Further details on these adjustments can be found in Schedule 1 section 1.1(c).

#### Distribution Services – Standard Control Services and Alternative Control Services

Revenue Variable	Approach
Distribution revenue	Separately identified in the Ellipse General Ledger into their respective SCS and ACS components
Cross boundary revenue	Not applicable
Contributions	Separately identified in the Ellipse General Ledger into their respective SCS and ACS components
Interest income	Classified as Unregulated under the AER framework
Jurisdictional scheme amounts	Separately identified in the Ellipse General Ledger
Profit from sale of fixed assets	Written down value (WDV) of disposed assets is reclassified to Loss from Sale of Fixed Assets. Gross proceeds from sale of assets are classified as unregulated.
TUOS revenue	Separately identified in the Ellipse General Ledger

Revenue Variable	Approach
Pass through revenue (F-factor)	Not applicable
Other revenue	Separately identified in the Ellipse General Ledger

Expense Variable	Approach
TUOS expenditure	Separately identified in the Ellipse General Ledger
Avoided TUOS expenditure	Separately identified in the Ellipse General Ledger
Cross boundary expenditure	Separately identified in the Ellipse General Ledger
Depreciation	<p>Separately identified from the RFM into their respective SCS and ACS Public lighting and Metering services components.</p> <p>Consistent with the 2015-20 Framework and Approach (page 91) 'actual' depreciation is determined based on updating the Roll Forward Model (RFM) for 'actual' capex and disposals.</p> <p>To determine the 'actual' depreciation reported in the Income Statement, Energex has used the RFM from the 2015-20 Final Determination and rolled it forward for 2017-18 populating with actual 2017-18 capex and disposals.</p>
Finance charges	<p>Finance charges are reported as a credit balance in the statutory column in 2017-18, this is mainly due to the interest on long term debt now reported in the parent entity Energy Queensland Limited (EQL). Most of the remainder is Capitalised Interest and Discount of non-current liability.</p> <p>Following the transfer of ownership of Ergon and Energex from the state to Energy Queensland Limited (EQL) on the 30 June 2016, transfers of debt for both DNSPs were made in order to comply with the Government Owned Corporations Regulation 2016 (Regulation).</p> <p>The share of the State Government debt pool held by the DNSPs prior to the formation of the group was a liability held by each DNSP. In</p>

Expense Variable	Approach
	<p>accordance with the Regulation, all DNSP debt (Queensland Treasury Corporation Loans) was transferred back to the Government debt pool. It was then transferred to the parent entity (EQL) at the carrying amount, such that a share of Queensland debt is held in the EQL parent entity. Consistent with the prior year, no debt raising costs were incurred by the DNSPs during 2017-18 as no debt was raised or refinanced.</p> <p>Finance charges do not include any interest expense for long term debt or finance charges in 2017-18.</p> <p>Interest expense is not a direct control service in the AER FDD Attachment 13, yet debt raising costs are an approved AER forecast cost.</p> <p>The adjustments column consists of:</p> <ul style="list-style-type: none"> <li>• Capitalised interest</li> <li>• Discount of non-current liability</li> <li>• Intercompany interest expense</li> </ul>
Impairment losses	<p>Impairment losses are not permitted for regulatory reporting without prior approval by the AER and are recognised as an unregulated expense.</p>
Jurisdictional scheme amounts	<p>Separately identified in the Ellipse General Ledger</p>
Loss from sale of fixed assets	<p>Components separately identified:</p> <ul style="list-style-type: none"> <li>• WDV of disposed assets reclassified to Loss from Sale of Fixed Assets</li> <li>• WDV of assets disposed relating to unregulated assets</li> </ul>
Maintenance expenditure	<p>Separately identified in the Ellipse General Ledger into their respective SCS and ACS public lighting components. SCS maintenance expenditure includes:</p> <ul style="list-style-type: none"> <li>• Inspection</li> <li>• Planned maintenance</li> <li>• Corrective repair</li> <li>• Vegetation</li> </ul>
Operating expenditure excluding maintenance expenditure	<p>Separately identified in the Ellipse General Ledger into their respective SCS and ACS components. Other Support Costs are allocated between service classifications (i.e. SCS and ACS) based on the budgeted total direct spend for each service. Further details can be found in BoP 8.4.1 Operating &amp; Maintenance Expenditure</p>

Expense Variable	Approach
	– by Purpose.
Other	Cost of sale is recognised as Unregulated under the AER framework.
Income tax expense / (benefit)	Separately identified in the Ellipse General Ledger allocated to SCS and ACS in proportion to the written down value of property, plant and equipment for each service segment.

## 13.4 Estimated Information

No estimated data was reported in this template.

### 13.4.1 Justification for Estimated Information

Not applicable.

### 13.4.2 Steps to ensure Energex can provide Actual Information

Not applicable.

### 13.4.3 Basis for Estimated Information

Not applicable.



# 14 BoP 8.2.1 Capex

## 8.2.1 Capex by Purpose – Standard Control Services

The AER requires Energex to provide the following expenditure information in RIN table 8.2.1 Capex by Purpose – Standard Control Services:

- Description
- CPI adjusted Forecast
- Actual
- Difference (%)
- Related Party Margin

## 8.2.2 Capex by Purpose - Material Difference Explanation

The AER requires Energex to provide description and reason for material difference in table 8.2.2 Capex By Purpose – Material Difference Explanation.

## 8.2.3 Capex Other

The AER requires Energex to provide the following expenditure information in RIN table 8.2.3 Capex Other:

- CPI adjusted Forecast
- Actual
- Difference (%)
- Related Party Margin

For each of the following Capex Other category

Public Lighting:

- Total

Alternative Control Services:

- Connection services
- Metering services
- Ancillary network services

Negotiated Services:

Negotiated services

## 8.2.4 Capex by Asset Class

The AER requires Energex to provide the following information in RIN table 8.2.4 Capex by Asset Class:

- Asset class
- CPI adjusted Forecast
- Actual
- Difference (%)
- Movements in provisions allocated to as – incurred capex

## 8.2.5 Capital Contribution by Asset Class

The AER requires Energex to provide the following information in RIN table 8.2.5 Capital Contributions by Asset Class:

- Asset class
- CPI adjusted Forecast
- Actual
- Difference (%)

## 8.2.6 Disposals by Asset Class

The AER requires Energex to provide the following information in RIN table 8.2.6 Disposal by Asset Class:

- Asset class
- CPI adjusted Forecast
- Actual
- Difference (%)

# 14.1 Consistency with AR RIN Requirements

Table 14.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 14.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p>Reported expenditure must <b>EXCLUDE</b> capital contributions (except tables 8.2.1 and 8.2.5 which should include all capital contributions).</p> <p>Forecast expenditure is to be taken from Energex's 2015-20 Distribution Determination</p> <p>If allocating based on assumptions then provide method in Basis of Preparation. All adjustments must be explained in Basis of Preparation with supporting documentation attached.</p>	<p>Energex has reported Capital contributions for both Standard Control Services (SCS) and Alternative Control Services (ACS) (excluding public lighting) in Table 8.2.1. Capital contributions are included in the 'Connections and customer-initiated works' line item.</p>
<p>For tables 8.2.1 and 8.2.3: Reported expenditure must <b>INCLUDE</b> any profit margins or management fees paid directly or indirectly to related party contractors (not including actual incurred expenses of the related party contractor) for the regulatory reporting period.</p> <p>'Related Party Margin Expenditure' must <b>COMPRISE ONLY</b> profit margins or management fees paid directly or indirectly to related party contractors (not including actual incurred expenses of the related party contractor) for the regulatory reporting period.</p>	<p>Energex has reported all 'Related Party Margin Expenditure' including profit margins or management fees paid directly or indirectly to related party contractors (not including actual incurred expenses of the related party contractor) for the regulatory reporting period.</p> <p>The 'Related Party Margin Expenditure' only comprises of profit margins or management fees paid directly or indirectly to related party contractors (not including actual incurred expenses of the related party contractor) for the regulatory reporting period.</p>

Requirements (instructions and definitions)	Consistency with requirements
<p><b>8.2.1 Capex by purpose – Standard Control Services</b></p> <p>Each line item in this table 8.2.1 must INCLUDE the capital contributions. Total capital contributions should also be identified in the last item in the table.</p> <p><b>Capex by purpose</b> (or driver) categories must reflect the categories in Energex's 2015-20 Distribution Determination to enable a direct comparison to be made between forecast and actual data. (These categories should match those in Worksheet 2.1 (Expenditure Summary), Table 2.1.1 of Energex's Reset RIN response, except where specific adjustments were made by the AER in its determination).</p> <p><b>Adjusted forecast</b> to be in equivalent dollar terms to the actual expenditure for the Relevant Regulatory Year.</p>	<p>Energex has reported Capital contributions for both Standard Control Services and Alternative Control Services (excluding public lighting) in Table 8.2.1. Capital contributions are included in the 'Connections and customer-initiated works' line item.</p> <p>Energex has reported Capex in accordance with Energex's 2015-20 Distribution Determination.</p> <p>The adjusted forecast methodology is documented in the 'Approach' section below. This approach also applies to tables 8.2.3, 8.2.4, 8.2.5 and 8.2.6.</p>
<p><b>8.2.2 Capex by purpose – material difference explanation</b></p> <p>Where the difference between forecast and actual expenditure shown in table 8.2.1 is a Material Difference please explain the main factors driving the difference.</p>	<p>All material differences identified in table 8.2.1 are explained in table 8.2.2.</p>
<p><b>8.2.3 Capex Other</b></p> <p><b>Alternative control services</b> must align with those alternative control services set out in the 2015-20 Distribution Determination (Attachment 13 – Classification of services October 2015)</p>	<p>Energex has reported Alternative Control Services in accordance with the 2015-20 Distribution Determination (Attachment 13 – Classification of Services October 2015).</p> <p>Capital contributions have been excluded.</p>
<p>Related Party Margin</p>	<p>Ellipse system entries of Ergon accounts payable transactions and intercompany transactions with Inter District Indicators (IDIs). Margin amount is provided by the relevant Ergon department.</p>
<p><b>8.2.4 Capex by Asset Class</b></p> <p>Energex to enter in Table 8.2.4 each Asset Class specified in 2015-20 distribution determination as listed in the AER's final decision in its Roll Forward Model and Post – tax Revenue Model and enter information against that asset class.</p>	<p>Energex has entered information against each asset class specified in the 2015-20 Distribution Determination.</p> <p>Energex has excluded capital contributions from each asset class, as per the AER instructions for this table.</p>
<p><b>8.2.5 Capital Contributions by Asset Class</b></p> <p><b>Capital contribution</b> is cash or in kind contributions to capital expenditure projects and gifted assets</p> <p><b>Asset class</b> is the classes set out in Energex's</p>	<p>Energex has reported capital contributions for each asset class set out in Energex's PTRM and RFM as approved in the 2015-20 Distribution Determination.</p>

Requirements (instructions and definitions)	Consistency with requirements
PTRM and RFM as approved in the 2015-20 Distribution Determination.	
<b>8.2.6 Disposal by Asset Class</b> <b>Disposal</b> is the gross proceeds from the sale of assets.	Energex has reported disposals as the gross proceeds from the sale of assets.

## 14.2 Sources

Table 14.2.1 below demonstrates the sources from which Energex obtained the required information.

**Table 14.2.1 - Data Sources**

Variable	Source
<b>AR RIN Template 8.2.1 Capex by Purpose – Standard Control Services</b>	
Asset replacement	Ellipse General Ledger, ABS, 2015 Determination
Augmentation	Ellipse General Ledger, ABS, 2015 Determination
Connections and customer-initiated works	Ellipse General Ledger, ABS, 2015 Determination
Non-network	Ellipse General Ledger, ABS, 2015 Determination, Energex Cost Allocation Method (CAM) effective 1 July 2015, 2017/18 Energex CAM Work paper (CAM WP)
Capitalised overheads	Ellipse General Ledger, ABS, 2015 Determination
Related Party Margins	Ergon provided Margin information based on invoice numbers issued to Energex that fall within Energex's AP data. The transactions with related party margins were mapped into the AR RIN categories.
<b>AR RIN Template 8.2.3 Capex Other</b>	
Public lighting	Ellipse General Ledger, ABS, Energex CAM, CAM WP
Connection services	Energex CAM, CAM WP
Metering services	Ellipse General Ledger, ABS, Energex CAM, CAM WP
Ancillary network services	Energex CAM, CAM WP

Variable	Source
Related Party Margins	Ergon provided Margin information based on invoice numbers issued to Energex that fall within Energex's AP data. The transactions with related party margins were mapped into the AR RIN categories.
<b>AR RIN Template 8.2.4 Capex by Asset Class</b>	
Each individual asset class listed in the AER - Final decision - Energex distribution determination - Post tax revenue model - October 2015	Ellipse General Ledger, ABS, Energex CAM, CAM WP
<b>AR RIN Template 8.2.5 Capital Contributions by Asset Class</b>	
Each individual asset class listed in the AER - Final decision - Energex distribution determination - Post tax revenue model - October 2015	Ellipse General Ledger, ABS
<b>AR RIN Template 8.2.6 Disposals by Asset Class</b>	
Each individual asset class listed in the AER - Final decision - Energex distribution determination - Post tax revenue model - October 2015	Ellipse fixed asset register, ABS

## 14.3 Methodology

### AR RIN Template 8.2.1 Capex by Purpose – Standard Control Services

The appropriate disaggregation of the Forecast amounts has been determined based on the AER's Queensland Distribution Determination 2015-16 to 2019-20 (the Final Decision), which is the culmination of:

- Energex's proposed expenditure and revenue requirements sourced from Energex's Regulatory Proposal 2015-2020 (the Proposal);
- Amendments to the Proposal's capital and operating programs as directed by the AER in the Final Decision; and
- Amendments to the Proposal's expenditure and revenue requirements (including escalation factors) as directed by the AER in the Final Decision.

Energex prepared detailed Forecast calculations which formed the Forecast totals included in the Final Decision. The detailed information was sourced from the Proposal at the detailed level and updated based on the AER Final Decision.

In recognition of the use of non-network assets in the delivery of ACS, an allocation of non-network capex is made in accordance with Energex approved CAM.

An adjustment is made to non-network capital expenditure to reclassify a portion of SCS non-network capex to ACS and Unregulated. This allocation was included in the 2015-2020 CAM as a result of cessation of the transitional provisions at 30 June 2015 whereby all non-

network assets were previously recognised in the SCS RAB during the 2010-2015 regulatory period. The AER approved the allocation method of non-network assets to service classifications based on causal drivers representing the most appropriate utilisation of the underlying assets. This adjustment is also reflected in Template 8.2.3 Capex Other (to include the ACS allocation) and Template 8.2.4 Capex by Asset Class (to reduce non-network assets).

Ergon provided Margin information based on invoice numbers issued to Energex that fall within Energex's AP data. The transactions with related party margins were mapped into the AR CAPEX RIN categories.

### **AR RIN Template 8.2.3 Capex Other**

Refer to Template 8.2.1 for the methodology applied to derive the Forecast amounts and the non-network capital expenditure allocation.

Each ACS line item has been increased to reflect the non-network capital allocation discussed above in Template 8.2.1 Capex by Purpose. Metering capex includes Energex Initiated Meter Replacement capital expenditure only. Customer Requested Meter installation capex and Ancillary Network Services capex for rearrangement of network assets are excluded on the basis that this expenditure is funded by the customer and is not added to the relevant asset base for regulatory purposes. These activities are recognised as capex for statutory reporting purposes.

Capital contributions have been excluded for all ACS service types. In certain instances, there may be differences between the capital expenditure incurred and the revenue billed to the customer due to timing differences. A summary of these timing differences is provided below:

<b>Service Type</b>	<b>Expenditure</b>	<b>Revenue</b>	<b>Variance</b>
Connection Services	53,129,471.03	52,997,147.79	132,323.24
Metering Services	10,198,388.74	9,308,412.19	889,976.55
Ancillary Network Services	10,107,709.57	10,530,809.49	- 423,099.92

Energex does not have any Negotiated Services.

Ergon provided Margin information based on invoice numbers issued to Energex that fall within Energex's AP data. The transactions with related party margins were mapped into the AR CAPEX RIN categories.

### **AR RIN Template 8.2.4 Capex by Asset Class**

Refer to Template 8.2.1 for the methodology applied to derive the Forecast amounts and the non-network capital expenditure allocation.

Capex projects which do not have specific asset categories assigned are allocated to regulatory asset categories based on the general ledger activity code used for the project.

Forecast and actual amounts exclude capital contributions for connections, large customer connections and subdivisions.

Each SCS non-network asset class has been decreased to reflect the non-network capital allocation to other service classifications discussed above in Template 8.2.1 Capex by Purpose.

Movements in provisions are allocated on a pro-rata basis to as-incurred capex for the various asset classes and are deducted from each asset class capex spend.

### **AR RIN Template 8.2.5 Capital Contributions by Asset Class**

Refer to Template 8.2.1 for the methodology applied to derive the Forecast amounts.

Capital contributions for both Standard Control Services and Alternative Control Services (excluding public lighting) have been included.

Capital Contributions that do not have specific asset categories recorded against them are allocated to regulatory asset categories based on the proportions of identified asset categories. In instances where this results in an allocation of a capital contributions balance to a regulatory asset category that would not otherwise have capital contributions, the balance is allocated to the most material category with capital contributions. For 2017/18 this adjustment was \$52,142.

### **AR RIN Template 8.2.6 Disposals by Asset Class**

Refer to Template 8.2.1 for the methodology applied to derive the Forecast amounts.

## **14.3.1 Assumptions**

No assumptions were made.

## **14.3.2 Approach**

For the AR RIN, the Forecast amounts also include an adjustment for the actual Consumer Price Index (CPI). In accordance with the Final Decision, the CPI applied is for the December to December Weighted Average of Eight Capital Cities as per the Australian Bureau of Statistics.

Variable	Approach
<b>AR RIN Template 8.2.1 Capex by Purpose – Standard Control Services</b>	
Asset replacement	Separately identified in the Ellipse General Ledger
Augmentation	Separately identified in the Ellipse General Ledger
Connections and customer-initiated works	Separately identified in the Ellipse General Ledger
Non-network	Separately identified in the Ellipse General Ledger. Non-network capital expenditure is allocated to service classifications based on the proportion of labour incurred in delivering services within each classification based on Energex CAM.
Capitalised overheads	Separately identified in the Ellipse General



Variable	Approach
	Ledger
Related Party Margins	Ergon provided Margin information based on invoice numbers issued to Energex that fall within Energex's AP data. The transactions with related party margins were mapped into the AR RIN categories.
<b>AR RIN Template 8.2.3 Capex Other</b>	
Public lighting	Separately identified in the Ellipse General Ledger. Disclosure includes capitalised overhead and non-network capital expenditure allocation and excludes capital contributions.
Connection services	Disclosure represents non-network capital expenditure allocation and excludes capital contributions.
Metering services	Separately identified in the Ellipse General Ledger for meter replacement program capex. Disclosure includes capitalised overhead and non-network capital expenditure allocation and excludes capital contributions.
Ancillary network services	Disclosure represents non-network capital expenditure allocation and excludes capital contributions.
Related Party Margins	Ergon provided Margin information based on invoice numbers issued to Energex that fall within Energex's AP data. The transactions with related party margins were mapped into the AR RIN categories.
<b>AR RIN Template 8.2.4 Capex by Asset Class</b>	
Each individual asset class listed in the AER - Final decision - Energex distribution determination - Post tax revenue model - October 2015	Separately identified in Ellipse. SCS system assets exclude SCS capital contributions. SCS non-network asset classes are reduced by the non-network capex allocation to ACS and Unregulated.
<b>AR RIN Template 8.2.5 Capital Contributions by Asset Class</b>	
Each individual asset class listed in the AER - Final decision - Energex distribution determination - Post tax revenue model - October 2015	Connections capital contributions for both SCS and ACS are separately identified in the Ellipse General Ledger



Variable	Approach
<b>AR RIN Template 8.2.6 Disposals by Asset Class</b>	
Each individual asset class listed in the AER - Final decision - Energex distribution determination - Post tax revenue model - October 2015	Separately identified in the Ellipse fixed asset register

## 14.4 Estimated Information

There is no estimated information for this template.

### 14.4.1 Justification for Estimated Information

Not applicable.

### 14.4.2 Steps to ensure Energex can provide Actual Information

Not applicable.

### 14.4.3 Basis for Estimated Information

Not applicable.

# 15 BoP 8.2 Capex – Voltage Level

## 8.2.1 Capex by Purpose – Standard Control Services

The AER requires Energex to provide the following expenditure information in RIN table 8.2.1 Capex by Purpose – Standard Control Services:

- Voltage Level
  - Subtransmission
  - HV
  - LV
  - Other

For each of the following Capex Other category

- Asset Replacement
- Augmentation
- Connections and customer-initiated works
- Non network
- Capitalised Overhead

## 8.2.3 Capex Other

The AER requires Energex to provide the following expenditure information in RIN table 8.2.3 Capex Other:

- Voltage Level
  - Subtransmission
  - HV
  - LV
  - Other

For each of the following Capex Other category

Public Lighting:

- Total

Alternative Control Services:

- Connection services
- Metering services
- Ancillary network services

Negotiated Services:

- Negotiated services

## 15.1 Consistency with AR RIN Requirements

Table 15.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 15.1.1 - Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<b>8.2.1 Capex by Purpose – SCS – Voltage Level (Subtransmission, HV, LV, other)</b>	
Asset Replacement	Demonstrated in section 15.3.2 Approach
Augmentation	Demonstrated in section 15.3.2 Approach
Connections and customer-initiated works	Demonstrated in section 15.3.2 Approach
<b>8.2.3 Capex Other - Voltage Level (Subtransmission, HV, LV, other)</b>	
Public lighting	Demonstrated in section 15.3.2 Approach
Connection services	Demonstrated in section 15.3.2 Approach
Metering services	Demonstrated in section 15.3.2 Approach
Ancillary network services	Demonstrated in section 15.3.2 Approach

## 15.2 Sources

Table 15.2.1 below demonstrates the sources from which Energex obtained the required information.

**Table 15.2.1 - Data Sources**

Variable	Source
<b>8.2.1 Capex by Purpose – SCS – Voltage Level (Subtransmission, HV, LV, other)</b>	
Asset replacement	DMA RIN Solution
Augmentation	DMA RIN Solution
Connections and customer-initiated works	DMA RIN Solution
<b>8.2.3 Capex Other - Voltage Level (Subtransmission, HV, LV, other)</b>	
Public lighting	Ellipse General Ledger

Variable	Source
Connection services	DMA RIN Solution
Metering services	
Ancillary network services	DMA RIN Solution

## 15.3 Methodology

### Connections

- Connections Capex in Table 8.2.3 has been classified as “Other”. This represents the allocation of non-network Capex made in accordance with Energex approved CAM. Further details can be found in BoP 8.2 Capex

### 15.3.1 Assumptions

#### Asset Replacement

- AR RIN Asset replacement expenditure is obtained by mapping Category Analysis (CA) RIN template Table 2.2.1 AER asset class to respective Annual Reporting (AR) RIN category (LV, HV, Sub Transmission and others) based on voltage level (refer section Table 15.3.1 **Error! Reference source not found.** below).
- For full details on CA RIN Table 2.2.1 process, refer basis of preparation document BoP 2.2.1 Repex Expenditure and Volume.

### 15.3.2 Approach

Table 15.3.1 below demonstrates the approach used to obtain the required information.

**Table 15.3.1 – Approach for Capex at Voltage Level**

Variable	Approach
8.2.1 Capex by Purpose – SCS – Voltage Level (Subtransmission, HV, LV, other)	
Asset replacement	The Category Analysis (CA) RIN Repex AER Asset classes have been mapped based on AR RIN requirement as follows:

Variable	Approach										
	<table> <tr> <td>AER assets (e.g.: Batteries, OHEW)</td><td></td></tr> </table> <p>CA RIN Repex expenditure for respective AER asset classes were consolidated and allocated accordingly to AR RIN categories.</p>	AER assets (e.g.: Batteries, OHEW)									
AER assets (e.g.: Batteries, OHEW)											
Augmentation	<p>The Category Analysis (CA) RIN Augex AER Asset classes have been mapped based on AR RIN requirement as follows:</p> <table> <tr> <th>CA RIN Augmentation CAPEX Category</th><th>AR RIN Category</th></tr> <tr> <td>'LV Feeders'</td><td>LV</td></tr> <tr> <td>'HV Feeders' and 'Distribution Substations'</td><td>HV</td></tr> <tr> <td>'Subtransmission Lines' and 'Subtransmission Substations, Switching Stations, Zone Substations'</td><td>Sub-Transmission</td></tr> <tr> <td>'Other Assets' and 'Land Purchases and Easements'</td><td>Other</td></tr> </table> <p>The CA RIN categories were consolidated and allocated accordingly to AR RIN categories.</p>	CA RIN Augmentation CAPEX Category	AR RIN Category	'LV Feeders'	LV	'HV Feeders' and 'Distribution Substations'	HV	'Subtransmission Lines' and 'Subtransmission Substations, Switching Stations, Zone Substations'	Sub-Transmission	'Other Assets' and 'Land Purchases and Easements'	Other
CA RIN Augmentation CAPEX Category	AR RIN Category										
'LV Feeders'	LV										
'HV Feeders' and 'Distribution Substations'	HV										
'Subtransmission Lines' and 'Subtransmission Substations, Switching Stations, Zone Substations'	Sub-Transmission										
'Other Assets' and 'Land Purchases and Easements'	Other										
Connections and customer-initiated works	<table> <tr> <th>CA RIN AER Asset Class with Voltage</th><th>AR RIN category</th></tr> <tr> <td>&lt;=1KV</td><td>LV</td></tr> <tr> <td>&gt;1kV&lt;=22kV</td><td>HV</td></tr> <tr> <td>&gt;22kV</td><td>Sub-Transmission</td></tr> <tr> <td>N/A</td><td>Other</td></tr> </table>	CA RIN AER Asset Class with Voltage	AR RIN category	<=1KV	LV	>1kV<=22kV	HV	>22kV	Sub-Transmission	N/A	Other
CA RIN AER Asset Class with Voltage	AR RIN category										
<=1KV	LV										
>1kV<=22kV	HV										
>22kV	Sub-Transmission										
N/A	Other										

Variable	Approach
<b>8.2.3 Capex Other - Voltage Level (Subtransmission, HV, LV, other)</b>	
Public lighting	LV
Connection services	N/A
Metering services	LV
Ancillary network services	N/A

## 15.4 Estimated Information

There is no estimated information for this template.

### 15.4.1 Justification for Estimated Information

Not applicable.

### 15.4.2 Steps to ensure Energex can provide Actual Information

Not applicable.

### 15.4.3 Basis for Estimated Information

Not applicable.

# 16 BoP 8.4. Opex

## 8.4.1 Operating & Maintenance Expenditure – by Purpose

The AER requires Energex to provide the following information in RIN table 8.4.1 Operating & Maintenance Expenditure – By Purpose

- Opex Category
- Audit Statutory Accounts
- Adjustments
- Distribution business
- Standard Control Services
  - CPI Adjusted Forecast
  - Actual
  - Difference (%)
- Alternative Control Services
  - Public Lighting
  - Other
    - Connection services
    - Metering services
    - Ancillary network services

## 8.4.2 Operating & Maintenance Expenditure – by Purpose Margins Only

The AER requires Energex to provide the following information in RIN table 8.4.2 Operating & Maintenance Expenditure – By Purpose – Margin Only

- Opex Category
- Audit Statutory Accounts
- Adjustments
- Distribution business
- Standard Control Services
  - CPI Adjusted Forecast
  - Actual
  - Difference (%)
- Alternative Control Services
  - Public Lighting
  - Other
    - Connection services
    - Metering services
    - Ancillary network services

## 8.4.3 Operating & Maintenance Expenditure – Explanation of Material Difference

The AER requires Energex to provide explanation for each Opex category that has material difference in table 8.4.3 Operating & Maintenance Expenditure – Explanation of Material differences.

## 16.1 Consistency with AR RIN Requirements

Table 16.1.1 below demonstrates how the information provided by Energex is consistent with each of the requirements specified by the AER.

**Table 16.1.1- Demonstration of Compliance**

Requirements (instructions and definitions)	Consistency with requirements
<p><b>8.4.1 Operating &amp; Maintenance Expenditure – by Purpose</b></p> <p>Energex is to list the operating expenditure categories identified in Energex's regulatory proposal at table 3.2.1.1 current Opex categories and cost allocations</p> <p>Energex must specify any expenditure category where the expense is more than 5 per cent of the total standard control services operating expenditure</p> <p>Reported operating expenditure must <b>INCLUDE</b> any profit margins or management fees paid directly or indirectly to related party contractors (not including actual incurred expenditure of the related party contractor) for the regulatory reporting period.</p>	<p>Energex has reported Opex in accordance with the categories identified in Energex's regulatory proposal and approved cost allocations.</p> <p>Energex has specified any expenditure category where the expense is more than 5 per cent of the total standard control services.</p> <p>No profit margins or management fees were paid directly or indirectly to related party contractors for the regulatory reporting period.</p>
<p><b>8.4.2 Operating &amp; Maintenance Expenditure – By Purpose – Margins only</b></p> <p>"Related party margin expenditure" must COMPRISE ONLY profit margins or management fees paid directly or indirectly to related party contractors (for expenditure that is not an actual incurred expenditure of the related party contractor) for the regulatory reporting period.</p> <p><b>Adjusted forecast</b> to be in equivalent dollar terms to the actual expenditure for the Relevant Regulatory Year</p>	<p>Energex reported all 'Related Party Margin Expenditure' including any profit margins or management fees paid directly or indirectly to related party contractors (not including actual incurred expenses of the related party contractor) for the regulatory reporting period.</p>
<p><b>8.4.3 Operating &amp; Maintenance Expenditure – Explanation of Material Difference</b></p> <p>Where the difference between forecast and actual expenditure shown in table 8.4.1, column I is a Material Difference please explain the main factors driving the difference.</p>	<p>All material differences identified in table 8.4.1 are explained in table 8.4.3.</p>



## 16.2 Sources

Table 16.2.1 below demonstrates the sources from which Energex obtained the required information.

**Table 16.2.1 - Data Sources**

Variable	Source
Inspection	Ellipse General Ledger, ABS, 2015-20 Determination
Planned Maintenance	Ellipse General Ledger, ABS, 2015-20 Determination
Corrective repair	Ellipse General Ledger, ABS, 2015-20 Determination
Vegetation	Ellipse General Ledger, ABS, 2015-20 Determination
Emergency response/storms	Ellipse General Ledger, ABS, 2015-20 Determination
Other network maintenance costs	Ellipse General Ledger, ABS, 2015-20 Determination
Network operating costs	Ellipse General Ledger, ABS, 2015-20 Determination
Network billing and other energy market services (inc Meter Reading)	Ellipse General Ledger, ABS, 2015-20 Determination
Customer services (inc call centre)	Ellipse General Ledger, ABS, 2015-20 Determination
DSM initiatives	Ellipse General Ledger, ABS, 2015-20 Determination
Levies	Ellipse General Ledger, ABS, 2015-20 Determination
Debt raising costs	Ellipse General Ledger, ABS, 2015-20 Determination
Other operating costs (inc self-insurance)	Ellipse General Ledger, ABS, 2015-20 Determination
Related Party Margin	Ellipse system entries of Ergon accounts payable transactions and intercompany transactions with

Variable	Source
	Inter District Indicators (IDIs). Margin amount is provided by the relevant Ergon department.

## 16.3 Methodology

Methodology for the Opex reporting is detailed below.

### 16.3.1 Assumptions

No assumptions were made.

### 16.3.2 Approach

For the AR RIN, the Forecast amounts include an adjustment for the actual Consumer Price Index (CPI). In accordance with the Final Decision, the CPI applied is for the December to December Weighted Average of Eight Capital Cities as per the Australian Bureau of Statistics.

Energex has reported the Opex values for table 8.4.1 in accordance with its current Cost Allocation Approach.

Variable	Approach
Inspection	Specific account code from Energex's Ellipse General Ledger
Planned maintenance	Specific account code from Energex's Ellipse General Ledger
Corrective repair	Specific account code from Energex's Ellipse General Ledger
Vegetation	Specific account code from Energex's Ellipse General Ledger
Emergency response/storms	Specific account code from Energex's Ellipse General Ledger
Other network maintenance costs	Specific account code from Energex's Ellipse General Ledger
Network operating costs	Specific account code from Energex's Ellipse General Ledger
Network billing and other energy market services (inc Meter Reading)	Specific account code from Energex's Ellipse General Ledger. Other Support Costs are allocated to service classifications (i.e. SCS and ACS) based on the budgeted

Variable	Approach
	total direct spend for each service.
Customer services (inc call centre)	Specific account code from Energex's Ellipse General Ledger. Other Support Costs are allocated to service classifications (i.e. SCS and ACS) based on the budgeted total direct spend for each service.
DSM initiatives	Specific account code from Energex's Ellipse General Ledger.
Levies	Specific account code from Energex's Ellipse General Ledger. The adjustment between audited statutory accounts and distribution business relates to the Australian Energy Market Commission Levy as jurisdictional scheme payment is separately reported in Template 7.10.
Debt raising costs	<p>Following the transfer of ownership of Ergon and Energex from the state to Energy Queensland Limited (EQL) on the 30 June 2016, transfers of debt for both DNSPs were made in order to comply with the Government Owned Corporations Regulation 2016 (Regulation).</p> <p>The share of the State Government debt pool held by the DNSPs prior to the formation of the group was a liability held by each DNSP. In accordance with the Regulation, all DNSP debt (Queensland Treasury Corporation Loans) was transferred back to the Government debt pool. It was then transferred to the parent entity (EQL) at the carrying amount, such that: A share of Queensland debt is held in the EQL parent entity. Importantly, no debt raising costs were incurred by the DNSPs during 2017/18 as no debt was raised or refinanced.</p> <p>In accordance with Appendix A, Principles and Requirements in the AR RIN at par 1.1 (e) and (f) the Financial Templates are presented on a fair and consistent basis, from accounting records that underlie the costs and liabilities (amongst others) and be prepared in accordance with the general rules and format, and use the accounting principles and policies applicable to the Audited Statutory Accounts except as otherwise required by the Notice.</p>
Other operating costs (inc self-insurance)	Separately identified in the Ellipse General Ledger. Other Support Costs are allocated to service classifications (i.e. SCS and ACS) based on the budgeted total direct spend for each service. The adjustment between audited statutory accounts and distribution business relates to unregulated expenditure.
Related Party Margins	Ergon provided margin information based on invoice numbers issued to Energex that fall within Energex's AP data. The transactions with related party margins were

Variable	Approach
	mapped into the AR OPEX RIN categories.

## 16.4 Estimated Information

There is no estimated information for this template.

### 16.4.1 Justification for Estimated Information

Not applicable.

### 16.4.2 Steps to ensure Energex can provide Actual Information

Not applicable.

### 16.4.3 Basis for Estimated Information

Not applicable.