Basis of Preparation

**Endeavour Energy
Response to AER – Annual Reporting RIN:2014-15**

Submission date: 31 October 2016

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Purpose

The Annual Reporting Regulatory Information Notice (RIN) requires Endeavour Energy to prepare a Basis of Preparation for all historic information in the Regulatory Templates which are the worksheets contained within the Microsoft Excel workbooks at Appendix A of the RIN. By this, the AER mean that for every historic variable in the Templates, Endeavour Energy must explain the basis upon which we prepared information to populate the input cells. The Basis of Preparation must be a separate document (or documents) that Endeavour Energy submits with its completed Templates. The AER will publish Endeavour Energy's Basis of Preparation along with the Templates.

This document is Endeavour Energy's Basis of Preparation in relation to the historic information contained within the Regulatory Templates required to be submitted to the AER by 31 October 2016.

AER's instructions

The AER requires the Basis of Preparation to follow a logical structure that enables auditors, assurance practitioners and the AER to clearly understand how Endeavour Energy has complied with the requirements of the RIN.

To do this, Endeavour Energy has structured its Basis of Preparation with a separate section to match each of the worksheets tabs where a Basis of Preparation is required.

The AER has set out what the minimum requirements for the Basis of Preparation are. This is detailed in Table 1 below:

1	Endeavour Energy must explain, for all information in the Information Templates, the basis upon which it prepared information. This is the Basis of Preparation.
2	The Basis of Preparation must be a separate document that Endeavour Energy submits with its completed Information Templates.
3	The Basis of Preparation must follow a logical structure that enables auditors, assurance practitioners and the AER to clearly understand how Endeavour Energy has complied with the requirements of the Notice.
4	When carrying out an audit or review as specified in Appendix D, an auditor or assurance practitioner shall have reference to Endeavour Energy's Basis of Preparation.

Structure of this document

The document is structured as follows:

- We outline our general approach to developing our response to the RIN. We identify key systems used to provide data, note issues relating to data quality, and make comments on the reliability of the data for economic benchmarking purposes.

General approach

In this section, we identify our general approach to collecting and preparing information.

Systems used to provide data

Where methodologies or assumptions were required to complete the files other than the mere application of the AER approved CAM to the general purpose financial statements Endeavour Energy has included commentary by way of the "note" function within Microsoft Excel to provide guidance to the AER.

Below is a listing of Endeavour Energy's systems that, to a greater or lesser extent, were directly related to or supported the development of the information contained in the RIN templates:

- Cognos – Business reporting system managing database information such as organisation policies and procedures;

- Ellipse – financial management system including: accounts payable; payroll; asset and equipment registers and financial reporting functions. The Ellipse system also caters for defect management (condition based) and also routine maintenance (planned). The equipment register is also linked to various other supporting systems such as field inspections and the Geographical Information System (GIS);

- TM1 – Endeavour Energy uses this OLAP tool for various purposes including budgeting and forecasting, monthly reporting and regulatory accounts allocations. It is a cube based technology which allows rules to be created between cubes and within cubes;

- eFrams – Endeavour Energy uses this system in relation to IT Allocation Drivers. The system enables access to all telecommunication billing, inventory management/asset register and reporting;

- Remedy - Endeavour Energy uses this system in relation to IT Allocation Drivers. This is a BMC tool used by CGI for asset management, definitive software library, incident management and service request management;

- Autocad - Endeavour Energy uses this system in relation to Property Drivers. This is a program used for computer-aided design and drafting. The program is used to maintain Floor Plans which can be used to summarise occupancy by business unit;

- Banner – Endeavour Energy's customer database and billing system;

- Figtree – Worker's compensation claims management data base. This system is maintained separate (but linked at aggregate levels) to other systems to maintain confidentiality of data as required by legislation;

- Value Development Algorithm (VDA) – Endeavour Energy uses the Value Development Algorithm (VDA) for its high level asset renewal expenditure modelling. The model is populated with specific asset data in order to produce the replacement capital forecast. Data for each asset is allocated into asset categories, which represent major components that make up the network such as poles, transformers, conductor, cable, switchgear etc. Each asset type is assigned an asset life and a replacement cost. The quantity of assets installed on the network each financial year is also entered, thus generating an age profile of the network assets;

- Visual Risk – Endeavour Energy uses this Treasury Management System for improving the productivity of its treasury operations. Visual Risk provides functions such as capturing a facility drawdown; valuing an FX option; and facilitating back office administration and financial reporting. Specifically it was used to prepare the cost of funds schedule;

- System Fault Recording (SFR) – Endeavour Energy used this Oracle database system for all reliability reporting up until 2011-12. The data in this system is accessed using Cognos, with further analysis and processing of data being undertaken using Microsoft Office programs such as Access and Excel;

- SCADA - Endeavour Energy uses this system to monitor and control its network. Information from this system feeds into OMS (see below) to enable the calculation of reliability reporting information;

- Outage Management System - - Endeavour Energy uses this system to log outages and other events on its network. From 2012-13 onwards this system has been used as the source of data for all reliability reporting; and

- Contact Centre 6 – Endeavour Energy's call centre uses this system to run reports on historical call volume according to skill set (Call Type). The system is also used to assign agents to specific call taking groups based on call type.

Data quality issues

In previous consultations on the RIN, we have raised significant concerns with providing data in the form required by the AER.

Approach to our obligations under the NEL

Our view of the NEL is that a DNSP is only obligated to provide information that is available, that is, data which has been historically collected in our systems. In cases, where that information cannot be provided in the form required by the AER from our systems, we would have a reasonable excuse under section 28(5) of the NEL not to comply with that element of the notice. We have strong doubts that a RIN can require a business to prepare information by way of estimate that cannot be reasonably derived from information currently held in its systems.

Our understanding of the term 'prepare' relates to a power the AER has to compel a DNSP to collect information in the form required by the AER for future periods (for example, by developing new systems) rather than to manipulate historical data in potentially inaccurate ways. We suggest that the AER should give more careful consideration to whether it has appropriately informed itself of the distinction under section 28D of the NEL between the ability of a RIN to require existing information to be provided and the ability to require information to be prepared, maintained and kept on a going forward basis.

Recognition by AER that 'best estimates' are not robust

The AER has acknowledged that if we are compelled to provide best estimates then there is potential for the data to lack robustness. Endeavour Energy will address the implications of using best estimates which are not robust in its Basis of Preparation to accompany the final Audited Information.

Endeavour Energy

Worksheet 2.11 – Labour

2.11.3.1 Opex

2.11.3.2 Capex

Compliance with requirements of the notice

The data presented in tables 2.11.3.1 and 2.11.3.2 is consistent with the requirements of the Annual RIN. In particular:

- Only costs allocated to the provision of standard control services are reported in the labour/non labour expenditure split tables.

- Labour costs consist of salaries and wages, overtime, allowances, recruitment costs, redundancy costs, personal protective equipment, oncosts, taxes, superannuation and labour hire costs.

- The allocation of non-labour expenditure into controllable and uncontrollable is line with AER definitions. Uncontrollable non-labour expenditure are costs that Endeavour Energy has no control over e.g. Council Rates, water rates, electricity rates etc.

Source of information

- Labour and non-labour expenditure was extracted from two reporting cubes in TM1 (PNL cube and AER Dollars by Account cube). Endeavour Energy uses TM1 for various purposes including budgeting and forecasting, monthly reporting and regulatory account allocations and it has been used historically to provide data for previous audited Regulatory Accounts/RINs. It is a cube based technology which allows rules to be created between cubes and within cubes.

In addition, information from Work orders and Projects was utilised for table 2.11.3.2 which is extracted directly from a MS Access query against the SQL server database which is extracted nightly from Ellipse. The specific query is run on parameters specified to extract the data.

Methodology and assumptions

The following tables set out the methodology applied to obtain the required data for tables 2.11.3.1 and 2.11.3.2.
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Table	Methodology	Assumptions
2.11.3.1 - Opex	1. Extract standard control opex at the expense element level from the *AER dollars by account* cube in TM1. 2. Classify each expense element into one of the following categories based on the AER definitions provided for each category. • In-house labour expenditure; • Labour expenditure outsourced to related parties; • Labour expenditure outsourced to unrelated parties; • Controllable non-labour expenditure; or	The allocation of expenditure into controllable vs uncontrollable was done based on the descriptions assigned to each expense element considering the defintions provided by the AER in the Annual Regulatory information notice.

Table	Methodology	Assumptions
	• Uncontrollable non-labour expenditure. 3. Summarise the category totals and populate table 2.11.3.1.	
2.11.3.2 - Capex	1. Extract standard control capex at the expense element level from the *PNL* cube in TM1. 2. Classify each expense element into one of the following categories based on the AER definitions provided for each category. • In-house labour expenditure; • Labour expenditure outsourced to related parties; • Labour expenditure outsourced to unrelated parties; • Controllable non-labour expenditure; or • Uncontrollable non-labour expenditure. 3. Extract alternate control services and unregulated services capex transactions from ellipse. Summarise by expense element and subtract from the totals extracted from the TM1 *PNL* cube. 4. Summarise the category totals and populate table 2.11.3.2.	The allocation of expenditure into controllable vs uncontrollable was done based on the descriptions assigned to each expense element considering the defintions provided by the AER in the Annual Regulatory information notice.

Use of estimated information

None.

Reliability of information

Expense element data represents actual Information extracted from Endeavour Energy's reporting systems. Although assumptions were required to classify the data into the controllable and uncontrollable classifications levels required by the AER there were no other alternatives available to present the data in the form required by the AER. Therefore the data provided is considered to be reliable.

Endeavour Energy

Worksheet 3.6 – Quality of Services

3.6.6.1   Technical Quality of Supply

Compliance with requirements of the notice

The data provided is compliant with the definitions and requirements of the notice.

Source of information

Information is sourced from the 'Satisfy Database'. Satisfy is the complaints database used to log all customer complaints and compliments. Complaints are logged under a 'root cause' tree, based on the description of the problem by the customer.

Methodology and assumptions

- All complaints are logged into the 'Satisfy System' database
- Pivot table report of the complaints logged into 'Satisfy' displaying all complaints for the financial year, is searched for complaints regarding 'voltage variation'

Use of estimated information

There is no estimated data in this worksheet.

Reliability of information

The complaints are catergorised based on the description of the issue by the customer, the root cause can be adjusted after the initial logging of the complaint if the investigation determines that the complaint should be looged against a different root cause.

3.6.7.1 Timely Provision Of Services

Compliance with requirements of the notice

The data provided is compliant with the definitions and requirements of the notice.

The number of connections made = 35.

The number of connections not made on or before the agreed date = 0.

Source of information

Authorised Service Providers (ASP) submit NOSW for connections services. These are services defined by the contestable works scheme administered by the Department of Industry.

These connection services are typically the connection of the customers installation to the electricity network . These works are customer funded. The ASP submits on completion of the works the Notification of Service Works (NOSW). We process the submission to register the document and apply regulated fees charged to the ASP. The Banner decomp project moved the processing from CSS Banner to MBS and NAAS (MBS for the metering and NAAS for the service orders and fees. An automated selection criteria is applied in NAAS to determine if an audit is required. Inspection service order are generated in MBS and issued electronically to field staff.

Endeavour Energy ASP SP114800 is not active in the contestable services market hence the limited numbers reported consistant with previous reporting years.

Methodology and assumptions

Number of connections taken directly from service orders generated data.

Use of estimated information

No estimated information used.

Reliability of information

Number of connections taken directly from service orders generated data.

3.6.7.2 Timely repair of faulty street lights

Compliance with requirements of the notice

The data provided for "Street lights - average monthly number out" and "Street lights - average number of days to repair" (Table 3.6.7.2) has been reported for the period 1 July 2014 to 30 June 2015 to represent the current year 2014. The monthly figure is arrived at by dividing the full year data by 12. Street lights – not repaired by "fix by" date is also averaged to the monthly data. The "Total number of street lights" has been reported as of the 30 June 2015 to represent the year 2014.

Source of information

The "Street lights - average monthly number out" and "Street lights - average number of days to repair"   is extracted from predefined query developed for the purpose of extracting this and similar data in a controlled and consistent manner (established by Endeavour Energy's IT department) using the organisation's COGNOS 10 program. COGNOS 10 extracts this data from Ellipse (the organisations asset management database).

Street lights – not repaired by "fix by" date is extracted from the report prepared by Investigation Analyst - Complaints, Endeavour Energy. The data for the year 2014 (1 July 2014 to 30 June 2015) is averaged out to per month. This information is also stored in the Content Server, the Endeavour Energy's secure central location for storing, sharing and distributing information.

"Total number of street lights" is extracted from the financial year end monthly report of Street Light Usage of System (SLUoS) for the month of June 2015 and prepared by Network Revenue Analyst, Commercial & Decision Support, Endeavour Energy. This report relies on the Ellipse data base of Endeavour Energy.

Methodology and assumptions

For the purpose of this submission, the data is extracted for the period 1July 2014 to 30 June 2015 for considering it as the year 2014-15.

Use of estimated information

Estimation was not necessary.

Reliability of information

The data within COGNOS 10/Ellipse is considered reliable and is Endeavour Energy's main source of asset/financial data. Historical data is frequently applied for budgeting and forecasting.

3.6.7.3 Call Centre Performance

Compliance with requirements of the notice

The data provided is compliant with the definitions and requirements of the notice.

Source of information

Information was sourced from the 'Intellemanager' application and 'Contact Centre 6' (CC6) application. These two call centre systems were used to manage and report call centre data until 26 June 2015 when 'CC6' was replaced with a Cisco system to manage call centre telephony and reporting. The Cisco system was used for the call centre reporting from 27 June 2015 to 30 June 2015.

Methodology and assumptions

- Calls to fault line is a sum of monthly report figures of calls to the 131003 number taken from the 'Intellemanager' report.

- Calls answered in 30 seconds applies only to those calls where a customer elected to speak to a consultant after listening to the IVR message (including those instances where the IVR provided detailed information concerning their outage). This data was sourced from the 'CC6' reporting application. As the CC6 report does not specify calls answered in 30 seconds, the reported figure is the 'calls answered' minus 'calls answered after threshold' where the threshold is set at 30 seconds.

- Average wait time before call answered applies only to those calls where a customer elected to speak to a consultant after listening to the IVR message (including those instances where the IVR provided detailed information concerning their outage). This data was sourced from the 'CC6' reporting application.

- Overload events was recorded as zero, as even when in call avalanche our customers have an emergeny option to queue for a consultant.

- Percentage calls abandoned applies only to those calls where a customer elected to speak to a consultant after listening to the IVR message (including those instances where the IVR provided detailed information concerning their outage). This data was sourced from the 'CC6' reporting application. It is assumed that customers that don't elect to queue to speak with a consultant are satisfied with the level of outage information provided by the IVR.

Use of estimated information

There is no estimated data in this worksheet.

Reliability of information

The CC6 call data reported on the Huntingwood and Coniston call centres separately, these have been combined using excel. PDF's of the original reports from CC6 are available. The CC6 system has now been decommissioned.

Endeavour Energy

Worksheet 3.6.8 – Network Feeder Reliability

3.6.8 Network Feeders

Compliance with requirements of the notice

Reported SAIDI/SAIFI complies with the requirements of the RIN. The following aspects are noted:

Excluded incidents detailed in table 6.8 have been determined in accordance with the requirements of the STPIS (3.3a).

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

The determination allows for the alternative Box cox methodology. The process is described in WPB 1012 – Calculation of Major Event Day Threshold.

Outages affecting single premises – Single premise outages that occur as a result of a fault on Endeavour Energy's network are included in the 2014-15 and 2015-16 reliability result.

Subsequent interruptions caused by network switching during fault finding, in general switching operations associated with an unplanned incident may include subsequent interruptions to customers that are associated with fault finding. Current systems do not have any facility to identify these operations and therefore exclude them from reliability calculations. It should be noted that removing these operations from reliability calculations would result in an inaccurate record of actual customer experience.

Unplanned interruptions are sustained interruptions greater than one minute in accordance with the SAIDI definition in appendix A of the STPIS.

Source of information

1.   Base outage data (customers interrupted and CMI)

Data sourced from OMS. All records in this database were validated and checked in accordance with a Work Place Instruction WPB1014.

Reporting tool – Cognos 10

2.   Customer numbers for calculation of SAIDI and SAIFI

Customer numbers used to calculate SAIDI and SAIFI were average customer numbers for the relevant reporting period and were sourced from customer numbers in the OMS Archive database

Methodology and assumptions

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

Excluded interruptions – Reporting tool Cognos 10 identifies excluded interruptions based on a cause that is assigned to each interruption in accordance with STPIS 3.3a.

All the information provided represents actual information extracted from Endeavour Energy's reporting systems and reconciled to reported figures in previous audited RINs. As a result the information contained is considered to be reliable cognisant of the comments made above.

3. **Energy not supplied - Unplanned –** OMS customer minutes off supply used to calculate unplanned SAIDI in sheet 3.6.8

Energy not supplied – Planned for sheet 3.6.8 – Customer minutes off supply used to calculate Planned SAIDI 2013-14 Annual RIN.

This data is supplied by System Control.

Methodology and assumptions

Average annual consumption of **all** customers was divided by the number of customers, average days of supply and minutes per day (1440) to obtain an average kWh per minute consumption per customer, for each reporting period.

Average kWh per minute per customer was then multiplied by the number of customers interrupted and the duration of the interruption to determine kWh energy not supplied (expressed as MWh in the RIN).

Consumption data per customer is based on Domestic Controlled Load, Domestic General Rate, Commercial General Supply non TOU and Commercial General Supply TOU.

Excluding Unmetered (a summated figure) and Industrial load based on the assumption that the majority of industrial load has either a backup supply or is on dedicated feeders that have high reliability. Including this load would over state load lost to other customers.

The method that Endeavour Energy has adopted is a variant of the AER's option 1, using averaged customer consumption data. Use of estimated information

Endeavour Energy has used estimated information for table 3.6.2 - refer aboveAn estimate was required because we were unable to apply current or historical data to get actual information in accordance with the AER prescribed options.

Limitations included:

- Available data in large volumes and separated across different information systems.
- merging data sets unmanageable and requires a large degree of assumptions to be made

Worksheet 3.6.9 - Network Reliability

3.6.9.1 Planned Minutes Off Supply (SAIDI)

3.6.9.2 Planned Interruptions to Supply (SAIFI)

Compliance with requirements of the notice

Reported SAIDI/SAIFI complies with the requirements of the RIN. The following aspects are noted:

Excluded incidents detailed in table 6.8 have been determined in accordance with the requirements of the STPIS (3.3a).

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

The determination allows for the alternative Box cox methodology. The process is described in WPB 1012 – Calculation of Major Event Day Threshold.

Outages affecting single premises – Single premise outages that occur as a result of a fault on Endeavour Energy's network are included in the 2014-15 and 2015-16 reliability result.

Subsequent interruptions caused by network switching during fault finding, in general switching operations associated with an unplanned incident may include subsequent interruptions to customers that are associated with fault finding. Current systems do not have any facility to identify these operations and therefore exclude them from reliability calculations. It should be noted that removing these operations from reliability calculations would result in an inaccurate record of actual customer experience.

Unplanned interruptions are sustained interruptions greater than one minute in accordance with the SAIDI definition in appendix A of the STPIS.

Source of information

1.   Base outage data (customers interrupted and CMI)

Data sourced from OMS. All records in this database were validated and checked in accordance with a Work Place Instruction WPB1014.

Reporting tool – Cognos 10

2.   Customer numbers for calculation of SAIDI and SAIFI

Customer numbers used to calculate SAIDI and SAIFI were average customer numbers for the relevant reporting period and were sourced from customer numbers in the OMS Archive database

Methodology and assumptions

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

Excluded interruptions – Reporting tool Cognos 10 identifies excluded interruptions based on a cause that is assigned to each interruption in accordance with STPIS 3.3a.

All the information provided represents actual information extracted from Endeavour Energy's reporting systems and reconciled to reported figures in previous audited RINs. As a result the information contained is considered to be reliable cognisant of the comments made above.

4. **Energy not supplied - Unplanned –** OMS customer minutes off supply used to calculate unplanned SAIDI in sheet 3.6.8

Energy not supplied – Planned for sheet 3.6.8 – Customer minutes off supply used to calculate Planned SAIDI 2013-14 Annual RIN.

This data is supplied by System Control.

Methodology and assumptions

Average annual consumption of **all** customers was divided by the number of customers, average days of supply and minutes per day (1440) to obtain an average kWh per minute consumption per customer, for each reporting period.

Average kWh per minute per customer was then multiplied by the number of customers interrupted and the duration of the interruption to determine kWh energy not supplied (expressed as MWh in the RIN).

Consumption data per customer is based on Domestic Controlled Load, Domestic General Rate, Commercial General Supply non TOU and Commercial General Supply TOU.

Excluding Unmetered (a summated figure) and Industrial load based on the assumption that the majority of industrial load has either a backup supply or is on dedicated feeders that have high reliability. Including this load would over state load lost to other customers.

The method that Endeavour Energy has adopted is a variant of the AER's option 1, using averaged customer consumption data. Use of estimated information

Endeavour Energy has used estimated information for table 3.6.2 - refer aboveAn estimate was required because we were unable to apply current or historical data to get actual information in accordance with the AER prescribed options.

Limitations included:

- Available data in large volumes and separated across different information systems.
- merging data sets unmanageable and requires a large degree of assumptions to be made

Worksheet 6.2 - Reliability and Customer Service Performance

6.2.1 Unplanned Minutes Off Supply (SAIDI)

6.2.2 Unplanned Interruptions to Supply (SAIFI)

6.2.3 Unplanned Momentary Interruptions to Supply (MAIFI)

N/A. Information not required from Endeavour Energy.

6.2.4 Distribution Customer Numbers

Compliance with requirements of the notice

Reported SAIDI/SAIFI complies with the requirements of the RIN. The following aspects are noted:

Excluded incidents detailed in table 6.8 have been determined in accordance with the requirements of the STPIS (3.3a).

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

The determination allows for the alternative Box cox methodology. The process is described in WPB 1012 – Calculation of Major Event Day Threshold.

Outages affecting single premises – Single premise outages that occur as a result of a fault on Endeavour Energy's network are included in the 2014-15 and 2015-16 reliability result.

Subsequent interruptions caused by network switching during fault finding, in general switching operations associated with an unplanned incident may include subsequent interruptions to customers that are associated with fault finding. Current systems do not have any facility to identify these operations and therefore exclude them from reliability calculations. It should be noted that removing these operations from reliability calculations would result in an inaccurate record of actual customer experience.

Unplanned interruptions are sustained interruptions greater than one minute in accordance with the SAIDI definition in appendix A of the STPIS.

Source of information

1.   Base outage data (customers interrupted and CMI)

Data sourced from OMS. All records in this database were validated and checked in accordance with a Work Place Instruction WPB1014.

Reporting tool – Cognos 10

2.   Customer numbers for calculation of SAIDI and SAIFI

Customer numbers used to calculate SAIDI and SAIFI were average customer numbers for the relevant reporting period and were sourced from customer numbers in the OMS Archive database

Methodology and assumptions

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

Excluded interruptions – Reporting tool Cognos 10 identifies excluded interruptions based on a cause that is assigned to each interruption in accordance with STPIS 3.3a.

All the information provided represents actual information extracted from Endeavour Energy's reporting systems and reconciled to reported figures in previous audited RINs. As a result the information contained is considered to be reliable cognisant of the comments made above.

5. **Energy not supplied - Unplanned –** OMS customer minutes off supply used to calculate unplanned SAIDI in sheet 3.6.8

Energy not supplied – Planned for sheet 3.6.8 – Customer minutes off supply used to calculate Planned SAIDI 2013-14 Annual RIN.

This data is supplied by System Control.

Methodology and assumptions

Average annual consumption of **all** customers was divided by the number of customers, average days of supply and minutes per day (1440) to obtain an average kWh per minute consumption per customer, for each reporting period.

Average kWh per minute per customer was then multiplied by the number of customers interrupted and the duration of the interruption to determine kWh energy not supplied (expressed as MWh in the RIN).

Consumption data per customer is based on Domestic Controlled Load, Domestic General Rate, Commercial General Supply non TOU and Commercial General Supply TOU.

Excluding Unmetered (a summated figure) and Industrial load based on the assumption that the majority of industrial load has either a backup supply or is on dedicated feeders that have high reliability. Including this load would over state load lost to other customers.

The method that Endeavour Energy has adopted is a variant of the AER's option 1, using averaged customer consumption data. Use of estimated information

Endeavour Energy has used estimated information for table 3.6.2 - refer aboveAn estimate was required because we were unable to apply current or historical data to get actual information in accordance with the AER prescribed options.

Limitations included:
- Available data in large volumes and separated across different information systems.
- merging data sets unmanageable and requires a large degree of assumptions to be made

Worksheet 6.6 - STPIS Customer Service

6.6.1 Telephone answering

Compliance with requirements of the notice

The data provided is compliant with the definitions and requirements of the notice.

Source of information

Information was sourced from the 'Intellemanager' application and 'Contact Centre 6' (CC6) application. These two call centre systems were used to manage and report call centre data until 26 June 2015 when 'CC6' was replaced with a Cisco system to manage call centre telephony and reporting. The Cisco system was used for the call centre reporting from 27 June 2015 to 30 June 2015.

Methodology and assumptions

- Calls to fault line is a sum of monthly report figures of calls to the 131003 number taken from the 'Intellemanager' report.

- Calls received after removing excluded events. Excluded calls included calls to the IVR where customer did not elect to speak with a consultant as well as any calls where the customer abandoned the call within so seconds of queueing to speak with a consultant. Daily totals were excluded for the following major even days:14/10/14, 15/10/14, 27/10/14, 1/11/14, 5/11/14, 3/12/14, 8/2/15, 11/3/15, 20/4/15 and 20/4/15.

- Calls answered in 30 seconds applies only to those calls where a customer elected to speak to a consultant after listening to the IVR message (including those instances where the IVR provided detailed information concerning their outage). This data was sourced from the 'CC6' reporting application. As the CC6 report does not specify calls answered in 30 seconds, the reported figure is the 'calls answered' minus 'calls answered after threshold' where the threshold is set at 30 seconds. Daily totals were excluded for the following major even days:14/10/14, 15/10/14, 27/10/14, 1/11/14, 5/11/14, 3/12/14, 8/2/15, 11/3/15, 20/4/15 and 20/4/15.

Use of estimated information

There is no estimated data in this worksheet.

Reliability of information

The CC6 call data reported on the Huntingwood and Coniston call centres separately, these have been combined using excel. PDF's of the original reports from CC6 are available. The CC6 system has now been decommissioned.

Worksheet 6.7 - STPIS Daily Performance Data

6.7.1 Daily Performance Data – Unplanned

Compliance with requirements of the notice

The data provided is compliant with the definitions and requirements of the notice.

Source of information

Information was sourced from the 'Intellemanager' application and 'Contact Centre 6' (CC6) application. These two call centre systems were used to manage and report call centre data until 26 June 2015 when 'CC6' was replaced with a Cisco system to manage call centre telephony and reporting. The Cisco system was used for the call centre reporting from 27 June 2015 to 30 June 2015.

Methodology and assumptions

- Calls received after removing excluded events. Excluded calls included calls to the IVR where customer did not elect to speak with a consultant as well as any calls where the customer abandoned the call within so seconds of queueing to speak with a consultant. Daily totals were excluded for the following major even days:14/10/14, 15/10/14, 27/10/14, 1/11/14, 5/11/14, 3/12/14, 8/2/15, 11/3/15, 20/4/15 and 20/4/15.

- Calls answered in 30 seconds applies only to those calls where a customer elected to speak to a consultant after listening to the IVR message (including those instances where the IVR provided detailed information concerning their outage). This data was sourced from the 'CC6' reporting application. As the CC6 report does not specify calls answered in 30 seconds, the reported figure is the 'calls answered' minus 'calls answered after threshold' where the threshold is set at 30 seconds. Daily totals were excluded for the following major even days:14/10/14, 15/10/14, 27/10/14, 1/11/14, 5/11/14, 3/12/14, 8/2/15, 11/3/15, 20/4/15 and 20/4/15.

Use of estimated information

There is no estimated data in this worksheet.

Reliability of information

The CC6 call data reported on the Huntingwood and Coniston call centres separately, these have been combined using excel. PDF's of the original reports from CC6 are available. The CC6 system has now been decommissioned.

Worksheet 6.8 - STPIS Exclusions

6.8.1 STPIS Exclusions

Compliance with requirements of the notice

Reported SAIDI/SAIFI complies with the requirements of the RIN. The following aspects are noted:

Excluded incidents detailed in table 6.8 have been determined in accordance with the requirements of the STPIS (3.3a).

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

The determination allows for the alternative Box cox methodology. The process is described in WPB 1012 – Calculation of Major Event Day Threshold.

Outages affecting single premises – Single premise outages that occur as a result of a fault on Endeavour Energy's network are included in the 2014-15 and 2015-16 reliability result.

Subsequent interruptions caused by network switching during fault finding, in general switching operations associated with an unplanned incident may include subsequent interruptions to customers that are associated with fault finding. Current systems do not have any facility to identify these operations and therefore exclude them from reliability calculations. It should be noted that removing these operations from reliability calculations would result in an inaccurate record of actual customer experience.

Unplanned interruptions are sustained interruptions greater than one minute in accordance with the SAIDI definition in appendix A of the STPIS.

Source of information

1.   Base outage data (customers interrupted and CMI)

Data sourced from OMS. All records in this database were validated and checked in accordance with a Work Place Instruction WPB1014.

Reporting tool – Cognos 10

2.   Customer numbers for calculation of SAIDI and SAIFI

Customer numbers used to calculate SAIDI and SAIFI were average customer numbers for the relevant reporting period and were sourced from customer numbers in the OMS Archive database

Methodology and assumptions

Major Event Days (MED's) have been determined in accordance with the requirements of the STPIS (3.3b) – and as per Endeavour Energy distribution determination 2015−16 to 2018−19 – Service target performance incentive scheme April 2015.

Excluded interruptions – Reporting tool Cognos 10 identifies excluded interruptions based on a cause that is assigned to each interruption in accordance with STPIS 3.3a.

All the information provided represents actual information extracted from Endeavour Energy's reporting systems and reconciled to reported figures in previous audited RINs. As a result the information contained is considered to be reliable cognisant of the comments made above.

6. **Energy not supplied - Unplanned –** OMS customer minutes off supply used to calculate unplanned SAIDI in sheet 3.6.8

Energy not supplied – Planned for sheet 3.6.8 – Customer minutes off supply used to calculate Planned SAIDI 2013-14 Annual RIN.

This data is supplied by System Control.

Methodology and assumptions

Average annual consumption of **all** customers was divided by the number of customers, average days of supply and minutes per day (1440) to obtain an average kWh per minute consumption per customer, for each reporting period.

Average kWh per minute per customer was then multiplied by the number of customers interrupted and the duration of the interruption to determine kWh energy not supplied (expressed as MWh in the RIN).

Consumption data per customer is based on Domestic Controlled Load, Domestic General Rate, Commercial General Supply non TOU and Commercial General Supply TOU.

Excluding Unmetered (a summated figure) and Industrial load based on the assumption that the majority of industrial load has either a backup supply or is on dedicated feeders that have high reliability. Including this load would over state load lost to other customers.

The method that Endeavour Energy has adopted is a variant of the AER's option 1, using averaged customer consumption data. Use of estimated information

Endeavour Energy has used estimated information for table 3.6.2 - refer aboveAn estimate was required because we were unable to apply current or historical data to get actual information in accordance with the AER prescribed options.

Limitations included:
- Available data in large volumes and separated across different information systems.
- merging data sets unmanageable and requires a large degree of assumptions to be made

Worksheet 6.9 – STPIS Guaranteed Service Level

6.9.1 Guaranteed Service Levels - Jurisdictional GSL Scheme - Street lights

Compliance with requirements of the notice

The data provided is compliant with the definitions and requirements of the notice.

Source of information

Information is sourced from:

- Cognos
- OMS
- Banner
- GNetviewer/GIS (Geographical Information System)

Methodology and assumptions

- The monthly reports are run in accordance with Branch Workplace Instruction WSV 2000.

- The annual figure is a sum of the monthly reports.

- "Street lights" is arrived at in the same manner as in Table 3.6.7.2.

- "Street lights "out" during period" is arrived at in the same manner as in Table 3.6.7.2 above with difference that the figure in 6.9.1 represents the full year data (as requested) while the figure is averaged out to monthly data for the table 3.6.7.2 (as requested).

- "Street lights not repaired by "fix by" date" is arrived at in the same manner as in Table 3.6.7.2 with difference that the figure in 6.9.1 represents the full year data for the same reason mentioned in the paragraph above.

- "Street lights not repaired in **2** business days" is revised to **12** business days to align with the requirement of NSW Public Lighting Code. The information is arrived at as in the Table 6.6.3 above.

- "Street lights – number of business days to repair" is arrived at as in Table 3.6.7.2.

- "Street lights - GSL payments Volume" is arrived at in the same manner as in Table 3.6.7.2. with difference that the figure in 6.9.1 represents the full year data while the figure is averaged out to monthly data for the table 3.6.7.2.

- "Street lights - GSL payments Value of GSL payments" is based on "Volume of GSL Breaches" (in the paragraph above) multiplied by $15.00.

Use of estimated information

There is no estimated data in this worksheet.

Reliability of information

There is a human element to determining elegibility, however this is checked by a second person after the initial report is compiled.

Worksheet 7.8 - Avoided TUOS Payments

7.8.1 Avoided TUOS Payments

Compliance with requirements of the notice

The data presented in table 7.8.1 contained in section 7.8 is consistent with the requirements of the Annual RIN. It represents the Avoided TUoS payments required to be paid by Endeavour Energy to the Embedded Generator(s) in accordance with clause 5.5(h) of the NER, as per below.

"*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').*"

Source of information

The information used to populate table 7.8.1 was extracted directly from TM1. Endeavour Energy uses this OLAP tool for various purposes including budgeting and forecasting, monthly reporting and regulatory account allocations and it has been used historically to provide data for previous audited Regulatory Accounts/RINs. It is a cube based technology which allows rules to be created between cubes and within cubes.

The information for worksheet 7.8 (Avoided TUoS payments) was extracted from the TM1 TUoS Reconciliation Cube. This cube is used by Endeavour Energy to store and report energy and demand import data from various connection points including embedded generators, as well calculate associated TUoS charges (i.e. Demand charges, Exit charges and General & Common Service charges) at the connection point level. It is the primary tool used to calculate the monthly avoided TUoS accrual for embedded generators at month end and is also used extensively for budgeting and forecasting TUoS related charges.

The data from TM1 TUoS Reconciliation Cube is also reconciled with the TM1 PNL cube which represents the values in the General Ledger.

Methodology and assumptions

The following methodology is used to calculate avoided TUoS payment which reflects the requirements of clause 5.5(i) of the NER:

- Extract half hourly generation data for each embedded generator and the associated Bulk Supply Points (BSP), i.e. the BSP which service the same area as the embedded generator, and calculate the peak demand for each BSP for the month.

- The energy generated by each embedded generator is adjusted by the relevant Distribution Loss Factor (DLF) in order to calculate the equivalent amount of energy which would have needed to have been supplied through the BSP.

For each embedded generator, the Distribution Loss Factor (DLF) codes and corresponding values are obtained from the current AEMO Distribution Loss Factor Report.

- The grossed up energy for each embedded generator is added to the associated BSP to calculate the total amount of energy generated for the system area. In addition, the peak demand for the system area is also calculated.

- The peak demand for each system area is isolated (zeroing out all other half hourly intervals) and the peak demand contributed by the embedded generators is calculated as the difference between the peak demand for the system area less the peak demand for the relevant BSP.

- The proportional contribution of each embedded generator to the peak demand for the system area is calculated for the relevant half hourly interval. The proportional contribution of each embedded generator is multiplied by the peak demand contributed by all the embedded generators for the system area in order to calculate the avoided TUoS peak demand for each specific embedded generator and loaded in TM1 TUoS Reconciliation cube.

- The avoided TUoS peak demand amounts for each generator are multiplied by the relevant peak demand rates to calculate avoided TUoS charges in TM1 TUoS Reconciliation cube.

No assumptions are made and calculation is based on actual system import data for each connection points.

Use of estimated information

As per the definition of Actual Information provided in the Regulatory Information Notice issued under section Division 4 of Part 3 of the National Electricity (New South Wales) Law, Accruals & Provisions are considered as Actuals.

Endeavour Energy has not used estimated Information in completing table 7.8.1.

Reliability of information

All the information provided represents Actual Information extracted from Endeavour Energy's reporting systems. As a result, the information contained in the table 7.8.1 is considered to be reliable.

Worksheet 7.10 – Jurisdictional Schemes

7.10.1 Jurisdictional Scheme Payments

Compliance with requirements of the notice

Endeavour Energy is required to list each relevant jurisdictional scheme individually and report information for each scheme separately from other schemes.

Endeavour Energy has provided information in accordance with this requirement. Endeavour Energy is subject to two jurisdictional schemes, in accordance with 6.18.7A(e)(2) and 6.18.7A(e)(3) of the Rules:

1.   The NSW Solar Bonus Scheme (SBS); and
2.   The Climate Change Fund (CCF).

Source of information

Endeavour Energy is not required to make payments to the NSW SBS.

Endeavour Energy's payment to the CCF has been sourced from the notification letter from the NSW Minister for the Environment to the Endeavour Energy Chief Executive Officer dated 22 May 2014.

Information on each schemes purpose and commencement has been sourced from NSW Government websites:

- **SBS**: http://www.resourcesandenergy.nsw.gov.au/energy-consumers/solar/solar-bonus-scheme
- **CCF**: http://www.environment.nsw.gov.au/grants/ccfund.htm

Methodology and assumptions

No assumptions have been made to complete this worksheet.

Use of estimated information

No estimates have been made to complete this worksheet.

Reliability of information

No estimates or assumptions have been made to complete this worksheet.

Worksheet 7.11 – Demand Management Incentive Scheme

7.11.1 DMIA – Projects submitted for approval

Please refer to the Demand Management Innovation Allowance Report 2014-15 detailed in Attachment 6 of Endeavour Energy's Annual Reporting RIN 2014-15 submission.

Worksheet 7.13 – Total Annual Retailer Charges (TARC)

7.13.1 Total Annual Retailers Charges

Compliance with requirements of the notice

The data presented in table 7.13.1 contained in section 7.13 is consistent with the requirements of the Annual RIN. It represents the total annual amount of network charges billed by Endeavour Energy to all retailers as most recently reported by Endeavour Energy to the AER.

Source of information

The information used to populate table 7.13.1 was extracted directly from TM1. Endeavour Energy uses this OLAP tool for various purposes including budgeting and forecasting, monthly reporting and regulatory account allocations and it has been used historically to provide data for previous audited Regulatory Accounts/RINs. It is a cube based technology which allows rules to be created between cubes and within cubes.

The information was extracted from the TM1 PNL cube which represents the values in the General Ledger.

Methodology and assumptions

The TARC amount is the total of NUoS Income and Climate Change Fund (CCF) collected.

The following methodology and assumptions were used to obtain TARC for this reporting period:

- NUoS Income data and Climate Change Fund (CCF) collected for the year were extracted from the TM1 PNL cube and added to give the Gross Total NUoS including CCF.

- The NUoS Revenue data and Climate Change Fund (CCF) above is reconciled to the detailed NUoS Income and CCF data for the year extracted from the TM1 NUoS cube.

- The immaterial variance between the TM1 PNL cube and TM1 NUoS cube is not reallocated to balance the two cubes, rather due to materiality this variance is retained.

- Solar Bonus Rebate income, Solar Bonus Rebate expenses and GST were excluded in calculating TARC.

- TARC includes both billed and accrued charges for NUoS Income and CCF collected.

Use of estimated information

As per the definition of Actual Information provided in the Regulatory Information Notice issued under section Division 4 of Part 3 of the National Electricity (New South Wales) Law, Accruals & Provisions are considered as Actuals.

Endeavour Energy has not used any estimated Information in completing table 7.13.1

Reliability of information

All the information provided represents Actual Information extracted from Endeavour Energy's reporting systems. As a result, the information contained in the table 7.13.1 is considered to be reliable.

Worksheet 8.1 – Income

8.1.1.1 Revenue

8.1.1.2 Expenditure

8.1.1.3 Profit

Compliance with requirements of the notice

The data presented in table 8.1.1 – Income Statement is consistent with requirements of the Annual Reporting RIN. In particular:

- Data presented in table 8.1.1 – Income Statement covers the 2014-15 financial year with respect to financial information on revenue and expenditure relating to Standard Control Services, in accordance with the Cost Allocation Methodology (CAM).

- Financial information provided relates to a breakdown of Revenue (such as Distribution Revenue, Customer contributions, Interest income, Jurisdictional scheme amounts and TUOS revenue), Expenditure (such as TUOS expenditure, Avoided TUOS expenditure, Depreciation, Finance charges, Maintenance and Operating expenses) and Income tax expense/(benefit)in accordance with the elements required in the template.

Source of information

Source information used to populate 8.1.1 Income Statement was extracted from:

a) the Annual Financial Statements to populate the "Audited Statutory Accounts";
b) the TM1 Financial Reporting system for the analysis of the Distribution business between Standard Control Services, Alternative Control Services and Unregulated Services (shown as "Adjustments" in the RIN Template); and
c) Excel work papers for certain adjustments and reconciliations.

Information Systems used include:

- Ellipse: Endeavour Energy's Enterprise Resource Management (ERM) system, with data extracted from the General Ledger module; and

- TM1: an OLAP tool used for various purposes including budgeting and forecasting, monthly reporting and regulatory accounts allocations. It is a cube based technology which allows rules to be created between cubes and within cubes.

The TM1 model splits the Income Statement into line items (i.e. rows) included within the annual AER RIN template, which reflects a different categorisation of revenue and expense items compared to normal internal management and statutory P&L formats.

Operating Expenditure

Operating Expenditure (Opex) was extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions, and the Cost Allocation Methodology (CAM).

Data was reconciled to Opex reported in the Management and Statutory results. Certain additional steps are performed as part of the Annual RIN process in order to calculate the required information:

1. Extract operating expenditure data from the relevant TM1 cube at the account code level. Extract the data as labour and non-labour line items.

2. Reconcile the total derived at the individual account code level to the total from the TM1 cube ("N Level" Org Units in TM1) to ensure no account codes have been excluded.

3. Reconcile the total derived at the individual account code level to the total operating expenditure reported in the management and statutory results.

4. Assign a regulatory accounts classification to the extracted TM1 data. This classification can be a direct network cost, direct network overhead or a corporate overhead cost. A direct network cost is assigned directly to a RIN category (e.g. maintenance & repair, emergency response etc). Direct network overheads are the remaining network operating costs that cannot be allocated directly to a RIN category and are allocated on a pro rata basis based on the proportions of the direct allocation.

5. Populate table 8.1.1.2 Expenditure with the results of the above steps in accordance with the RIN instructions & definitions.

Note: given the relevant TM1 cube data is available and based on actual operating expenditure results for the year and the approved CAM, all information provided for this table consists of actual information (no estimated information required).

Methodology and assumptions

Table	Methodology	Assumptions
8.1.1.1 Distribution Revenue	Distribution ("DUoS") revenue data was extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. DUoS is allocated as 100% Standard Control.	No assumptions required.
8.1.1.1 Cross Boundary Revenue	Endeavour Energy does not have any Cross Boundary Revenue – not applicable.	No assumptions required.
8.1.1.1 Contributions	Contributions - Capital Contributions are sourced from an Excel work paper which is based initially on Fixed Asset Reconciliations of the Ellipse data for Capital Contributions. The capital contributions are mapped in accordance with the Annual RIN Instructions and Definitions, and the results are ultimately uploaded into TM1 (as a % split of the total annual Capital Contributions). Data was reconciled to revenues reported in the Management and Statutory results.	No assumptions required.
8.1.1.1 Interest Income	Interest Income is extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Interest Income is allocated as 100% Standard Control.	No assumptions required.

Table	Methodology	Assumptions
8.1.1.1 Jurisdictional Scheme Amounts	Jurisdictional Scheme Amounts are extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Jurisdictional Scheme Amounts includes Climate Change Fund Recovery and Solar Bonus Scheme Recovery. CCF Recovery and SBS Recovery are both allocated as 100% Standard Control.	No assumptions required.
8.1.1.1 Profit from Sale of Fixed Assets	Profit from Sale of Fixed Assets is sourced from an Excel work paper which is based initially on Fixed Asset Reconciliations of the Ellipse data for Disposals. The profit from sale balances are mapped in accordance with the Annual RIN Instructions and Definitions, and the results are ultimately uploaded into the relevant TM1 cube. Allocation drivers are used to assign amounts to Standard Control Services, Alternative Control Services and Unregulated Services. Data was reconciled to revenues reported in the Management and Statutory results. Note that this line is only populated if there is a net profit from sale (i.e. if a net loss from sale section 8.1.1.2 Loss from sale of fixed assets is populated instead).	No assumptions required.
8.1.1.1 TUOS Revenue	Transmission Use of Service ("TUoS") revenue data was extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. TUoS is allocated as 100% Standard Control.	No assumptions required.
8.1.1.1 Pass through revenue (F-factor)	Endeavour Energy does not have any Pass through revenue (F-factor) – not applicable.	No assumptions required.
8.1.1.1 Other Revenue	Other Revenues – sourced from the relevant TM1 cube, with the exception of an adjustment for Group Management Fee Income recovery revenues. Each account combination is allocated into Standard Control Services, Alternative Control Services and Unregulated Services, and further into RIN categories based on the nature of the revenue. Standard Control Services reconciles to Private power line and customer installation inspections, Monopoly Services, Metering Services Charges, Emergency recoverable works and an allocation of Group Management Fee Income recovery revenues. Alternative Control Services revenue reconciles to Revenue from maintenance of public lighting, Miscellaneous and Monopoly services income and an allocation of Group Management Fee Income recovery revenues. Unregulated Services reconciles to Customer funded connections, Customer specific services, Type 1-4 Metering services, TSA revenues, Other revenues and an allocation of Group Management Fee Income recovery revenues.	No assumptions required.

Table	Methodology	Assumptions
	Group Management Fee Income recovery is allocated based on an Excel work paper, using the Opex for the Group cost centres as the basis for the regulatory split. The resulting adjustments are used to "gross up" revenue since the recoveries are mapped to Opex for management reporting but to Other Revenue in the Annual RIN Income Statement.	
8.1.1.2 TUOS Expenditure	Transmission Use of System ("TUoS") expenditure data was extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. TUoS expenditure is allocated as 100% Standard Control.	No assumptions required.
8.1.1.2 Avoided TUOS Expenditure	Avoided Transmission Use of System ("TUoS") expenditure data was extracted from the TM1 TUoS Reconciliation cube and TM1 P&L cube. The data is prepared in accordance with the Annual RIN Instructions and Definitions. Avoided TUoS is allocated as 100% Standard Control. Data is cross-checked with confirmation from the Network Revenue Manager.	No assumptions required.
8.1.1.2 Cross Boundary Expenditure	Endeavour Energy does not have any Cross Boundary Expenditure – not applicable.	No assumptions required.
8.1.1.2 Depreciation	Depreciation & Amortisation is sourced from an Excel work paper which is based initially on Fixed Asset Reconciliations of the Ellipse data for Depreciation & Amortisation. The depreciation and amortisation balances are mapped in accordance with the Annual RIN Instructions and Definitions. Depreciation & Amortisation relating to system assets is directly allocated to Standard Control Services, and further causally allocated to Standard Control Services, Alternative Control Services and Unregulated Services based on usage, consistent with Property, Plant and Equipment allocations. Depreciation expense relating to non-system assets is causally allocated to services based on usage, consistent with Property, Plant and Equipment allocations. The results are ultimately uploaded into the relevant TM1 cube. Data was reconciled to the depreciation and amortisation expense reported in the Management and Statutory results.	No assumptions required.
8.1.1.2 Finance charges	Finance charges are extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Borrowing costs are directly attributable to Standard Control Services due to their relationship with investments and the underlying network assets that are funded by interest bearing debt facilities.	No assumptions required.

Table	Methodology	Assumptions
	Data was reconciled to Finance charges reported in the Management (Net Finance expense i.e. net of interest income) and Statutory results (Interest Income is classified under revenues).	
8.1.1.2 Impairment Losses	Impairment losses are extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Data was reconciled to impairment losses reported in the Management and Statutory results (where impairment losses are applicable).	No assumptions required.
8.1.1.2 Jurisdictional Scheme Amounts	Jurisdictional Scheme Amounts are extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Jurisdictional Scheme Amounts includes Climate Change Fund expense and Solar Bonus Scheme expense. CCF Expense and SBS Expense are both allocated as 100% Standard Control.	No assumptions required.
8.1.1.2 Loss from Sale of Fixed Assets	Loss from Sale of Fixed Assets is sourced from an Excel work paper which is based initially on Fixed Asset Reconciliations of the Ellipse data for Disposals. The loss from sale balances are mapped in accordance with the Annual RIN Instructions and Definitions, and the results are ultimately uploaded into the relevant TM1 cube. Allocation drivers are used to assign amounts to Standard Control Services, Alternative Control Services and Unregulated Services. Data was reconciled to loss on disposal reported in the Management and Statutory results. Note that this line is only populated if there is a net loss from sale (i.e. if a net profit from sale section 8.1.1.1 Profit from sale of fixed assets is populated instead).	No assumptions required.
8.1.1.2 Maintenance Expenditure	Maintenance Expenditure is extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Maintenance Expenditure was "reconciled in total" to Total Opex reported in the Management and Statutory results.	No assumptions required.
8.1.1.2 Other Operating Expenditure	Other Operating Expenditure excluding Maintenance Expenditure is extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Other Operating Expenditure is adjusted for Group Management Fee Income recovery revenues. Other Operating Expenditure excluding Maintenance Expenditure was "reconciled in total" to Total Opex reported in the Management and Statutory results. Group Management Fee Income recovery is allocated based on an Excel work paper, using the Opex for the Group cost centres as the basis for the regulatory split). The resulting adjustments are used to "gross up" revenue since the recoveries are mapped to Opex for management reporting but to Other Revenue in the	No assumptions required.

Table	Methodology	Assumptions
	Annual RIN Income Statement.	
8.1.1.2 Other	Other Expenditure is extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Other Expenditure was "reconciled in total" to Total Opex reported in the Management and Statutory results.	No assumptions required.
8.1.1.3 Income Tax Expense (/benefit)	Income Tax Expense (/benefit) is extracted from the relevant TM1 cube based on mappings in accordance with the Annual RIN Instructions and Definitions. Income Tax is pro-rated across the various regulatory segments based on their respective proportions of "Profit Before Tax". Income Tax Expense (/benefit) was "reconciled in total" to Income Tax Expense/(Benefit) reported in the Management and Statutory results.	No assumptions required.

Use of estimated information

Endeavour Energy has not used estimated information in determining a profit and loss split of Standard Control Services, Alternate Control Services and Unregulated Services for the period.

Material accounting policy changes

Endeavour Energy has not undertaken any material change in accounting policies which would impact data contained in Table 8.1.1 – Income Statement.

Reliability of information

All information provided is based on actual information extracted from the audited Annual Financial Statements and associated Ellipse general ledger records. As a result the information contained in Table 8.1.1 – Income Statement is considered to be sufficiently reliable.

Worksheet 8.2 – Capex

8.2.1   Capex by purpose standard control services

8.2.2   Capex by purpose – material difference explanation

8.2.3   Capex other

8.2.4   Capex by asset class

Compliance with requirements of the notice

The data presented in tables 8.2.1, 8.2.2, 8.2.3 and 8.2.4 is consistent with the requirements of the Annual RIN. In particular:

- Only costs allocated to the provision of standard control services are reported in tables 8.2.1, 8.2.2 and 8.2.4 and costs allocated to the provision of alternate control services are reported in table 8.2.3.

- The categories listed in table 8.2.1 align to the categories in table 2.1 in the AER's April 2015 2014-19 Distribution Determination.

- The asset classes in table 8.2.4 align with the asset classes set out in Endeavour Energy's PTRM and RFM issued with the AER's April 2015 2014-19 Distribution Determination

Source of information

- CPI adjusted forecasts were sourced from tables 2.1- capex by purpose and table 6.2 – capital expenditure by asset class in Endeavour Energy's 2014-19 final determination folder on the AER website. These dollars are in real $1314 and have been adjusted for actual CPI.

- Actual capital expenditure by purpose was sourced from Category Analysis RIN tables 2.1 – Expenditure Summary, 2.2 – Repex, 2.3 – Augex, 2.5 – Connections, 2.6 – Non-Network and 2.10 – Overheads, adjusted for the following changes due to the timing of the FY15 Annual RIN and Category Analysis RIN were required approximately 12 months apart:

  - **Capital contributions** provided in the Category Analysis RIN included "cash" capital contributed (gifted) assets of $48,431. The value reported in the category analysis RIN was $111,969,471, the actual non cash capital contributions assocaiated with standard control services is $111,921,040, the difference being cash capital contributed (gifted) assets.

- Work order and Project level data extracted directly from a MS Access query against the SQL server database which is extracted nightly from Ellipse. The specific query is run on parameters specified to extract the data.

- Asset classes assigned to work orders were sourced from Cognos Impromptu. Cognos is a reporting tool used to extract data from Ellipse (ERP).

Methodology and assumptions

The following tables set out the methodology applied to obtain the required data for tables 8.2.1, 8.2.2, 8.2.3 and 8.2.4.
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Table	Methodology	Assumptions
8.2.1 – Capex by purpose – Standard Control Services	1/ CPI adjusted forecast was sourced from tables 2.1- capex by purpose and table 6.2 – capital expenditure by asset class in Endeavour Energy's 2014-19 final determination on the AER website. 2/ This forecast was then updated into nominal (14-15 dollars) using updated actual CPI escalation factors. 3/ Actual expenditure was sourced from category RIN tables 2.1 – Expenditure Summary, 2.2 – Repex, 2.3 – Augex, 2.5 – Connections, 2.6 – Non-Network and 2.10 – Overheads. 4/ The split of actual expenditure by voltage level was done with input from the capacity planning manager.	Variances exist between the Annual RIN and Category Analysis RIN due to the passage of time and the order of operations was changed. Variance exist between the Annual RIN and Category Analysis RIN as a consequence.
8.2.2 – Capex by purpose – Material Difference Explanation	1/ System capex commentary was based on a comparion of the final AER determination (1516 RRP) vs actuals by project. 2/ Non system capex commentary was based on a comparion of the final AER determination (1516 RRP version captured in TM1) vs actuals by activity (92) and sub activity (WC, WE, WF, WG and WH).	None.
8.2.3 – Capex Other	1/ CPI adjusted forecast was sourced from the 1516 Revised Regulatory Proposal (RRP) and adjusted for actual CPI. 2/ Actual expenditure was sourced from category RIN table 2.1 – Expenditure Summary.	None.
8.2.4 – Capex By Asset Class	**System Capex** 1/ Extract all system capital work orders (activity 91) that incurred expenditure for the year from Ellipse via a MS access query. 2/ Use cognos impromptu to extract the asset classes assigned to each of these work orders. 3/ Review the list of work orders with asset classes assigned and update any errors with the correct asset classes (e.g. some service wire replacement works were incorectly mapped to public lighting instead of LV lines and cables). 4/ For any work orders missing asset classes discuss with the relevant network staff to determine what asset class should be assigned. 5/ Allocate capitalised overheads and switching on a proportional basis based on the direct costs on a work order over the total. 6/ Map each asset class to a RAB category.	None.

Table	Methodology	Assumptions
	Summarise the totals and populate table 8.2.4. **Non System Capex** 1/ Extract all non system capital transactions (activity 92) from Ellipse via a MS access query. 2/ Assign each non system capex transaction to an asset class on the basis of sub activity 3/ For any work orders missing asset classes discuss with the relevant network staff to determine what asset class should be assigned. 4/ Apply the asset allocation drivers obtained from Financial Control to the transaction listing at the asset class level to determine the standard control component of each transaction 5/ Summarise the standard control components for each RAB category and populate table 8.2.4.	

Use of estimated information

None.

Reliability of information

Information reported in tables 8.2.1, 8.2.2, 8.2.3 and 8.2.4 consists of Actual Information extracted from Endeavour Energy's reporting systems and reconciles to capex figures calculated and reported in the Category RIN. As a result, the information contained in tables 8.2.1, 8.2.2, 8.2.3 and 8.2.4 is considered to be reliable.

8.2.5 Capital contributions by asset class

Compliance with requirements of the notice

The data presented in table 8.2.5 is consistent with the requirements of the Annual RIN. In particular:

- Only capital contributions relating to standard control services are reported in tables 8.2.5.

Source of information

Source information used to populate 8.2.5 Capital Contributions by Asset Class was extracted from:

a) Ellipse Fixed Asset Register (Endeavour Energy's Enterprise Resource Management (ERM) system);
b) Fixed Asset Reconciliation as prepared in Excel; and
c) Audited Annual Financial Statements.

Methodology and assumptions

Table	Methodology	Assumptions
8.1.5 Capital Contributions by Asset Class	Capital Contributions are sourced from an Excel workpaper based on Fixed Asset Reconciliations of the Ellipse data for Capital Contributions, which provides a breakdown of Capital Contributions into Asset Classes. Capital Contributions are mapped in accordance with the Annual RIN Instructions and Definitions. Data was reconciled to capital contribution revenues reported in the Management and Statutory results.	No assumptions required.

Use of estimated information

None.

Reliability of information

Information reported in table 8.2.5 consists of actual Information extracted from Endeavour Energy's reporting systems and reconciles to capital contribution amounts reported in table 8.1 of the Annual Reporting RIN. As a result, the information contained in tables 8.2.5 is considered to be reliable.

8.2.6   Disposals by asset class

Compliance with requirements of the notice

The data presented in table 8.2.6 is consistent with the requirements of the Annual RIN. In particular:

- Only proceeds relating to the disposal of standard control services are reported in tables 8.2.6.

Source of information

Source information used to populate 8.2.6 Disposals by Asset Class was extracted from:

a)   Ellipse Fixed Asset Register (Endeavour Energy's Enterprise Resource Management (ERM) system);
b)   Fixed Asset Reconciliation as prepared in Excel; and
c)   Audited Annual Financial Statements.

Methodology and assumptions

Table	Methodology	Assumptions
8.2.6 Disposals by Asset Class	Proceeds from the disposal of Fixed Assets are sourced from an Excel workpaper based on Fixed Asset Reconciliations of the Ellipse data for Disposals, which provides a breakdown of Disposal into Asset Classes. Proceeds from the disposal of assets are mapped in accordance with the Annual RIN Instructions and Definitions. Allocation drivers are used to assign amounts to Standard Control Services, Alternative Control Services and Unregulated Services. Data was reconciled to workpapers supporting the profit/loss on the sale of fixed assets as reported in the Management and Statutory results.	No assumptions required.

Use of estimated information

None.

Reliability of information

Information reported in table 8.2.6 consists of actual Information extracted from Endeavour Energy's reporting systems and reconciles to supporting workpapers used in determination of the profit from sale of fixed assets and loss from sale of fixed assets as reported in table 8.1 of the Annual Reporting RIN. As a result, the information contained in tables 8.2.6 is considered to be reliable.

Worksheet 8.4 – Opex

8.4.1   Operating and maintenance expenditure by purpose

8.4.2   Operating and maintenance expenditure by purpose – margins only

8.4.3   Operating and maintenance expenditure – explanation of material difference

Compliance with requirements of the notice

The data presented in tables 8.4.1, 8.4.2 and 8.4.3 is consistent with the requirements of the Annual RIN. In particular:

- The categories listed in table 8.4.1 align to the categories identified in Endeavour Energy's regulatory proposal at table 3.2.1.1 current opex categories and cost allocations.

Source of information

- CPI adjusted forecasts were sourced from the final determination on the AERs website. These dollars are in real $1314 and have been adjusted for actual CPI.

- Actual opex for standard and alternative control expenditure by purpose was sourced from the AER dollars by account cube in TM1. Endeavour Energy uses TM1 for various purposes including budgeting and forecasting, monthly reporting and regulatory account allocations and it has been used historically to provide data for previous audited Regulatory Accounts/RINs. It is a cube based technology which allows rules to be created between cubes and within cubes.

Methodology and assumptions

The following tables set out the methodology applied to obtain the required data for tables 8.4.1, 8.4.2 and 8.4.3.

Table	Methodology	Assumptions
8.4.1 – Operating & maintenance expenditure – by purpose	1/ CPI adjusted forecast was sourced from table 8 in the AERs "Final decision Endeavour Energy distribution determination – overview" Table 8 (page 34) on the AERs website. 2/ This forecast was then updated into nominal (14-15 dollars) using updated actual CPI escalation factors. 3/ The forecast was pro rated across the categories on the basis of the actual results as the AER's April 2015 determination did not provide the allowance by category, only as a total opex amount. 4/ Actual expenditure for both standard and alternate control was sourced from AER dollars by account cube in TM1.	None.
8.4.2 – Operating & maintenance expenditure – by	Nil to report.	None.

Table	Methodology	Assumptions
purpose – margins only		
8.4.3 - Operating & maintenance expenditure – explanation of material difference	1/ Operating and maintenance variance commentary was based on a high level analysis of the main factors driving the expenditure within each category.	None.

Use of estimated information

None.

Reliability of information

Information reported in tables 8.4.1 and 8.2.3 consists of Actual Information extracted from Endeavour Energy's reporting systems and reconciles to opex figures calculated and reported in the Category RIN. As a result, the information contained in tables 8.4.1 and 8.4.3 is considered to be reliable.

There is nothing to report for table 8.4.2 for this reporting period.