Basis of Preparation

Annual Reporting RIN



November 2021



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Purpose

This document is Essential Energy's Basis of Preparation in relation to the audited Annual Reporting RIN data as required by part 1.1 (d) of Schedule 1 of the AER Regulatory Information Notice.

It explains the basis upon which information was prepared for all information in the Annual Reporting RIN template. As required by the AER, this Basis of Preparation is a separate document that has been submitted with the completed regulatory templates.

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 Essential Energy has complied with the requirements of the Notice. It must be a separate document (or documents) that Essential Energy submits with its completed information templates.

The AER has set out what must be in the Basis of Preparation. This is set out in Table 1 below.

Table 1: Requirements of the Basis of Preparation

Number	Requirement
1	Demonstrate how the information provided is consistent with the requirements of the Notice.
2	Explain the source from which Essential Energy obtained the information provided.
3	Explain the methodology Essential Energy used to provide the required information, including any assumptions Essential Energy made.
4	In circumstances where Essential Energy cannot provide actual information, explain: > Why it was not possible for Essential Energy to provide actual information; > What steps Essential Energy is taking to ensure it can provide the information in the future; > If an estimate has been provided, the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is Essential Energy's best estimate, given the information sought in the Notice.
5	For variables that contain financial information (actual or estimated) the relevant Basis of Preparation must explain if accounting policies adopted by Essential Energy have materially changed during any of the Regulatory Years covered by the Notice: > the nature of the change; and > the impact of the change on the information provided in response to the Notice. Essential Energy may provide additional detail beyond the minimum requirements if Essential Energy considers it may assist a user to gain an understanding of the information presented in the Templates. In relation to providing an audit opinion or making an attestation report on the Templates presented by Essential Energy, an auditor or assurance practitioner shall provide an opinion or attest by reference to Essential Energy's Basis of Preparation.

When carrying out an audit or review, an auditor or assurance practitioner shall have reference to Essential Energy's Basis of Preparation.

Structure of this Document

This document is structured as follows:

- Essential Energy addresses the issue of data reliability and use of estimates in completing the Annual Reporting RIN. A table of estimated data contained in the Annual Reporting RIN templates is included – see Table 2.
- The response to worksheets 3.6 to 9.5, is set out in accordance with the AER's instructions.

General Approach

Data Quality Issues

In previous consultations on the RIN, Essential Energy raised significant concerns with providing some of the data in the form required by the AER. Essential Energy has actual data with which to complete many of the information tables in this RIN, but where such data is not available, information templates will be completed with estimated data.

Whilst the business continues moving toward more accurate reporting for the RINs and is currently looking to update ERP and Asset Management systems which will contribute to further improvement, in the meantime Essential Energy continues to stress concern in relation to the detailed templates submitted and the reliance on some of this information for benchmarking and decision-making purposes.

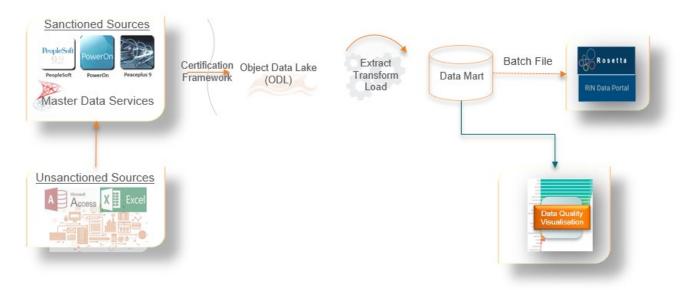
Systems Used to Provide Data

Essential Energy's RIN Optimisation project aims to automate the population of some RIN tables. During this project, the required source data was classified as one of two types, sanctioned and unsanctioned.

Sanctioned data is data available from established databases and source systems such as PeopleSoft, PEACE, WASP, etc. Unsanctioned data is sourced from Excel, Access DB, Text files, etc. Wherever a source was identified as unsanctioned, it was tagged for loading to enable certification of the data load.

This scalable automation framework will feed into a continuous improvement process seeking to build confidence in the quality of the data and minimise the risk of submitting incorrect information.

Where data has been sourced directly from Essential Energy's financial and other information systems, this system has been identified. Similarly, where estimated data is based on data sourced from Essential Energy's systems, those systems are identified.



The transformation logic and business rules used to populate the RINs were captured and documented by the project team. The logic and the rules applied was reviewed and signed-off on by the various data owners across the business. All data is certified during loading and no uncertified raw data inputs are used.

Once transform logic is applied to the loaded data, the results are stored in a RIN Data Mart which also tracks history, so that any updates or amendments are tracked accordingly. There is an adjustment framework to cater for any adjustments to previously loaded data, which ensures full traceability and auditing.

Data is loaded from the RIN Data Mart into Rosetta, an independent application used by Essential Energy to populate RIN tables. Data for non-automated RIN tables is entered directly into Rosetta. Rosetta has review and approval functionality, requiring organisational managers to review and approve assigned completed RIN tables.

Once all approvals have been completed, the data is exported from Rosetta into Excel RIN templates and checked for classification into actual or estimate prior to submission to the AER.

Process Used to Determine if Information is Actual or Estimated

Where actual information is not able to be derived from Essential Energy's financial and information systems, information has been provided using the best available estimate. In circumstances where the AER has recommended an approach for estimating, that approach has been followed as far as practicable and reasons for any variations have been identified and explained.

In compliance with the AER's definitions of actual and estimated information, as listed in the Instructions and Definitions document of the RIN, if submitted information is materially dependent on information from historical records, it is more likely to be treated as actual information. Alternatively, data whose presentation is contingent on judgements and assumptions for which there are valid alternatives and which could lead to a materially different presentation is likely to be classified as estimated information.

Estimated Data

The following table lists the tables containing estimated data in the 2020-21 Annual Reporting RIN.

Table 2: 2020-21 Annual Reporting RIN estimated data

RIN Table	Estimated Data & Method	Future Action to Avoid Estimation
3.6.8	Energy Not Supplied (MWh) – Unplanned and Planned - estimated by calculating an average kWh use per minute by customer type for the financial year. This is based on the total consumption divided by the total number of customers divided by the number of minutes in a year. This average kWh use per minute by feeder was then applied to the recorded Total Planned and Unplanned customer minutes off supply.	By its very nature, this data has to be estimated. It is not possible to predict with accuracy, what amount of energy would have been supplied had there not been an interruption.

Worksheet 2.2 – Repex (Addendum)

Table 2.2.1 – Replacement Expenditure, Volumes and Asset Failures by Asset Category

Compliance with Requirements of the Notice

Asset replacement and failure quantities have been compiled in accordance (or as close as systematically possible) with the definitions and guidance outlined in the Regulatory Information Notice instructions issued to Essential Energy under Division 4 of Part 3 of the NEL.

Source of Information

Several asset management and planning systems and business reports have been used. These systems are listed below along with the asset group to which the data has been applied.

Source System	Asset Groups	Used For		
		Expenditure	Asset Replacements	Asset Failures
PeopleSoft	All	Yes	No	No
WASP	All	No	Yes	No
C55	All	Yes	No	No
Network Asset Failure report (A DB merger of WASP, eMWL & Pole Failure DB)	Staked Poles, Poles, Pole Top Structures, OH Conductors, UG Cables, Service Lines, Transformers, Switchgear	No	No	Yes

Methodology & Assumptions

All Expenditure Categories

The 'Pole Staking' and Staked 'Pole Replaced with New Pole' asset groups in the REPEX Addendum do not specifically exist in Peoplesoft and the C55 project source data, therefore the amounts were apportioned to the correct asset category using a model that:

- Maps the NPBD Prioritised Investment Programme (PIP) amounts to the correct asset groups in Table 2.2.1.
- Apportions the asset group amounts to the respective asset categories based on estimated replacement capital unit rates or the WASP estimating and packaging tool assembly unit rates.

All Asset Replacements

Asset replacement units were sourced from completed Work Task records in the WASP database.

All Asset Failures

Failure numbers were based on data records from the Network Asset Failure Report (NAFR) which is a database merger of WASP, Electronic Maintenance Worklog (eMWL) and Pole Failure DB.

Only Functional¹ failures with Unassisted causes have been included in accordance with the Asset failure (REPEX) definition outlined in pp 84 of the Regulatory Information Notice2 instructions issued under Division 4 of Part 3 of

¹ Functional Failure - Is the term used to describe an asset that is no longer performing its primary purpose and/or role in the network.

² The failure of an asset to perform its intended function safely and in compliance with jurisdictional regulations, not as a result of external impacts such as: • extreme or atypical weather events; or • third party interference, such as traffic accidents and vandalism; or • wildlife interference, but only where the wildlife interference directly, clearly and unambiguously influenced asset performance; or • vegetation interference, but only where the vegetation interference directly, clearly and unambiguously influenced asset performance. Excludes planned interruptions.

the NEL. The Primary Cause recorded against each Functional failure determines whether if it is Unassisted or Assisted

Poles

Staking Wooden Poles (Replacements)

- Replacement data has been based on a count of the following completed WASP work tasks in REPEX projects:
 - "Pole Reinstate"
 - "Pole reinforcement install"
 - "Pole reinforcement replace"

If Pole Voltage = "Unknown", then classify as "< 1kV & <= 11 kV".

Staking Wooden Poles (Failures)

> Due to the introduction of the 2.2 REPEX Addendum in the CA RIN, Essential Energy has chosen not to report poles that failed whilst staked in the Staking Wooden Poles section going forward but instead in the Staked Pole Replaced With New Pole section.

Staked Pole Replaced with New Pole (Replacements)

- > Replacement data has been based on a count of the following completed WASP work tasks in Repex projects and had a pole stake component at the time of the replacement:
 - "Pole Condemned Replace"
 - · "Pole Replace System Alteration"
 - "Pole Install Additional"
 - "Pole Install"
 - "Pole Pole Failure"
 - "Pole replace"
 - · "Pole upgrade"
- Dedicated streetlight poles and columns were excluded from the count and provided to the Essential Energy Streetlight team for classification into Major and Minor Road.
- > Private poles have been excluded except for those managed and maintained by Essential Energy.
- If Pole Material = "Unknown", then classify as "Wood".
- > If Pole Voltage = "Unknown", then classify as "< 1kV & <= 11 kV".

Staked Pole Replaced with New Pole (Failures)

- > Includes any Unassisted pole failure of a pole managed and maintained by Essential Energy which had a pole stake component at the time of failure.
- Data has been sourced from the NAFR. The data is populated from several different sources and audited monthly.
- > Dedicated streetlight poles or columns and private poles have been excluded from the count.

Use of Estimated Information

All information is considered actual.

Reliability of Information

This data is considered to be reliable although Essential Energy acknowledges the data is not wholly accurate and caution should be applied if using it for benchmarking or decision-making purposes.

Worksheet 2.5 – Connections (Addendum)

Table 2.5.2 – Cost metrics by connection classification

Methodology & Assumptions

The information in this table is a summation of table 2.5.1 and therefore uses the same underlying methodology and assumptions.

Major Connections

Source of Information

System	Data
Salesforce	 > Premise's with Commissioning Date in the Financial Year > Premise's Classification (Gen / Load). > Premise's Connection Process

Number of Connections

Total new connections were determined by the number of premises with a commissioning date in the financial period.

Expenditure

All projects are fully customer funded therefore no expenditure incurred.

Use of Estimated Information

Essential Energy has used estimated information for this table.

Reliability of Information

The data used for determining the overall quantities into categories is based on assumptions and estimates. Caution should therefore be used when using this information for benchmarking or decision-making purposes.

Table 2.5.1 - Descriptor Metrics (Methodology attached for reference only)

Compliance with Requirements of the Notice

The Notice requires the number, total MVA, total length of HV and LV augmentation and cost of new Underground and Overhead connections and distribution transformers for Residential, Commercial/Industrial & Subdivision premises for the financial period. It also requires the total number of embedded generation sites supplied by overhead/underground along with the total number of projects undertaken by Essential Energy to augment the network to facilitate the installation of embedded generation sites. These projects are broken down into MVA added, number of substations installed, HV augmentation and LV augmentation.

Source of Information

System	Data
PEACE	 > Premise's with Creation Date in the Financial Year > Premise's Residential/Commercial flag. > All embedded generation sites with Application Date and Installation Date in the financial year
Smallworld	 Premises connection to the Underground or Overhead network. Return premises supplied by substations affected by projects reported from WASP.

WASP	 Substations with Underground/Overhead flag. List of projects where Essential Energy has financially contributed during the reporting period. Extract included kVA, number of transformers, total Essential Energy cost for the project and project completion date. List of projects partially funded by a customer during the reporting period.
Network Planning Database C55	> List of customer initiated projects.
PeopleSoft	 > Financial data is extracted from Peoplesoft financials for the current financial year. > Connection's capex expenditure was derived from the PIP4 - Customer Connections portfolio. > This expenditure falls within the larger Repex/Augex/Connection's finance expenditure data.
Salesforce	 > Premise's with Commissioning Date in the Financial Year > Premise's Classification (Gen / Load). > Premise's Connection Process

Methodology & Assumptions

The main assumptions are:

- > Essential Energy has no Subdivision assets based on the definition "is intended to capture expenditure in connecting un-reticulated lots or areas."
- > The ratio of known projects is the same ratio applied to unknown projects.
- > The ratio of known embedded generation is the same ratio applied to unknown embedded generation.
- > Embedded generation with no installed date were installed in the same financial year as the application date.
- Where practical, the determination of Underground/Overhead was derived from GIS Smallworld, otherwise WASP was used.

Number of Connections

Total new connections were determined by the number of premises with a creation date in the financial period.

Expenditure

This is based on the standard methodology adopted for all finance expenditure data in the Category Analysis RIN. Refer to section *3 Financial Data* for the overall Basis of Preparation on finance data prepared for multiple tables in the RIN. The specific methodology and assumptions made for this table are also outlined below.

Specifically, the connections capex expenditure was derived from the PIP4 - Customer Connections portfolio as opposed to unit rate estimations previously utilised. This expenditure falls within the larger Repex/Augex/Connections finance expenditure data described above.

Expenditure is then proportioned across the six asset categories based on the financial allocation percentage of the previous year.

Overhead/Underground Totals

The Residential/Commercial flag was derived from an attribute against the Premise in Peace.

Distribution Substations Installed - for Residential/Commercial and Subdivision Connections

The list of projects from the planning database combined with the customer funded projects from WASP make up the considered projects for these figures. For these projects, WASP is used to determine if Essential Energy or an external party paid for the transformer.

For each project, a ratio of Residential to Commercial premises affected by the project was assigned. This ratio was then used to determine the portion of the kVA, number of transformers and costs that would be reported as Residential and Commercial. Total cost is an estimate of the cost to install the transformers plus the estimated man hours to install.

For all projects where the Commercial\Residential status could not be determined, these were deemed "Unknown". The Unknowns were distributed across all categories based on the ratio of the known projects.

Augmentation HV/LV

The list of projects from the planning database combined with the customer funded projects from WASP make up the considered projects for these figures.

For each project, GIS Smallworld provided the amount of network added or reconductored as a part of the project. A ratio of Residential to Commercial premises affected by the project was also assigned. This ratio was then used to determine the portion of the line length that would be classified as Residential and Commercial.

For all projects where the Commercial/Residential status could not be determined, these were deemed "Unknown". The Unknowns were distributed across all categories based on the ratio of the known projects.

Embedded Generation

PEACE embedded generation data was used as the basis for this data. Where the installation date was blank, the application date for the site was used.

Mean days to connect residential customer with LV single phase connection (0's)

Not reported as done by Accredited Service Providers under Power of Choice and outside our control.

Use of Estimated Information

Essential Energy has used estimated information for premises where Residential/Customer or Overhead/Underground could not be determined.

An estimate was required in the following cases:

- > Where Residential/Commercial could not be determined. Premise data is historical where status data is current. Premises may have become extinct, but exist historically, therefore no Residential/Commercial value can be determined.
- > Premises have no network connect therefore no Overhead/Underground value can be determined.
- > The project was not found in GIS Smallworld.
- All premises where the Overhead/Underground or Commercial/Residential status could not be determined were deemed "Unknown". The Unknowns were distributed across all categories based on the ratio of the known premises.
- Essential Energy has used estimated information for embedded generation where Residential/Commercial could not be determined.

Reliability of Information

The data used for determining the overall quantities has been provided previously and has been categorised based on assumptions and estimates.

The data used for determining the quantities has come from three major Essential Energy data repositories where the data is considered reasonably reliable. There were a number of projects that did not exist in GIS Smallworld which had to be averaged, based on assumptions and estimates.

This information should be used with caution for benchmarking or decision-making purposes.

The assumptions were made in the best effort to optimise the information at Essential Energy's disposal without compromising the reliability of the figures.

Worksheet 2.6 - Non-network (Addendum)

Table 2.6.4 – Information & Communications technology – capex by purpose

Compliance with Requirements of the Notice

In the following sub-headings, Essential Energy demonstrates how the information provided is consistent with the requirements of this Notice.

Source of Information

Information has come from current year's Table 2.6.1 Non-Network Expenditure, Capex from the category IT and Communication Assets. and sub-category Client Devices.

Methodology & Assumptions

Refer to opening sections of this Basis of Preparation for details on our RIN Optimisation and finance data prepared for multiple tables in the RIN.

The specific methodology and assumptions made for this table are also outlined below.

Data has been categorised by purpose. We have included client devices, recurrent & non-recurrent in this table. It has been assumed that all client devices (including desktop computers, laptops, tablets and thin client interfaces and handheld end user computing devices including smart phones, tablets and laptops) have short useful lives and, as such, will be considered recurrent.

Recurrent and non-recurrent expenditure has been categorised to align with the e-tech portfolio reporting categories, further categorised into transformational and BAU projects.

Use of Estimated Information

The data is considered to be actual.

Reliability of Information

This data is considered to be reliable.

Worksheet 2.11 Labour (Addendum)

Table 2.11.3.1 – Opex and

Table 2.11.3.2 - Capex

Compliance with Requirements of the Notice

The following sections outline how Essential Energy has ensured that the information provided is consistent with the requirements of the Notice.

Source of Information

Labour related data has been sourced from the following files, which are all based on actual data from PeopleSoft general ledger:

- > Labour_totex_by_business_unit.xlsx model
- ARR Calculations V01 2021 07 21.xlsx
- Outsourced Opex PS report 08092021.xlsx
- Outsourced Capex PS report 03092021.xlsx

Methodology & Assumptions

In-house labour expenditure

Comprises direct opex, direct capex and support labour and is sourced from the:

- 'Labour totex by business unit.xlsx' model
- Direct Opex reflects all 'Opex Operational Projects' (Project Level 2) filtered on Standard Control Services (Project Level 3) within Labour accounts (Account Level 7).
- Direct Capex reflects all Capex accounts, filtered on Standard Control Services (Project Level 3) with the following labour resource categories:
 - LORD Labour Ordinary
 - LAPP Labour Apprentices
 - LOVT Labour Overtime
 - LALL Labour Allowances
 - ONCT Ordinary Oncosts
 - ONOT Overtime Oncosts
 - ONNC Non-controllable Oncosts
- Support Opex reflects 'Support Projects' (Project Level 2) and non-project spend within Labour accounts (Account Level 7). Support spend, allocated to CE001, is based on the CAM (Cost Allocation Methodology), which has been applied in the 'Labour totex by business unit.xlsx' model
- > The percentage of support labour allocated to Standard Control was 85.2%.
- > Temp agency costs (GL account 22430) are excluded, as these are captured in labour expenditure outsourced.
- Labour support costs allocations to opex and capex is sourced from:
 - 'Year_end_project_allocations.xls'.
- This model includes the breakdown of support spend allocated to opex and capex ('EndOfYear Rates' tab) and what portion of support spend is allocated to opex only ('Opex Only' tab)
 - For FY21, the mix of support allocated to opex and capex was 56% opex, 44% capex.
 - The total standard control labour costs allocated to opex only was \$21.9M.
- Support Allocations takes total Standard Control support costs, less temps, and support allocated to opex only. The remaining is split between opex and capex based on the 56:44 mix. The opex only is then added back to opex, which results in a 60:40 opex/capex mix.

Outsourced labour expenditure

Comprises direct opex, direct capex and support labour and is sourced from:

- · 'Labour totex by business unit.xlsx' model, and
- Outsourced_Opex_PS report_08092021.xlsx
- Outsourced_Capex_PS report_03092021.xlsx
- > Temp agency costs (GL account 22430 opex or resource category LTMP for capex) are split between direct opex, direct capex and support opex in same method as in-house labour. Standard Control direct spend based on Project Level 3. Support costs allocated to Standard Control based on the CAM. Allocation of the support costs to opex/capex based on the 56:44 mix.
- > Professional Services opex spend reflects spend against employment agencies that provide outsourced labour to EE. These are included in the Outsourced_Capex_PS report_03092021.xlsx and Outsourced_Opex_PS report_08092021.xlsx spreadsheets. The Standard Control portion is broken down using the CAM, whereby the departments determine the % allocation between business units. The opex/capex mix 56:44 was then applied.
- > Professional Services capex spend (resource category CPRO) filtered on the employment agencies that provide outsourced labour to EE.
- > Non-labour opex and capex was derived by deducting labour expenditure in this table from total opex / capex as shown in Table 8.4.1 of the 2020-21 Annual Reporting RIN.

Use of Estimated Information

The information in this table is based on actual data.

Further details regarding estimation are described in the Methodology & Assumptions section above.

Reliability of Information

Given the underlying assumptions, caution should be applied if using the data in the table for benchmarking or decision-making purposes.

Worksheet 3.6 – Quality of services

Table 3.6.5 – Quality of Supply Metrics

This table does not require any inputs.

Table 3.6.6.1 – Technical Quality of Supply

Compliance with Requirements of the Notice

The information provided is based on the total number of network related complaints received from customers during the reporting period 2020-21.

Source of Information

Data has been sourced from the Power Quality database.

Methodology & Assumptions

Data is sourced from a report run within the Power Quality database and is filtered to identify the complaints completed within the reporting period. This is the number of complaints that have been recorded and acted upon.

The categories of complaints are identifiable by "type" and "cause" of complaint. To improve the reliability of the data, checks are performed on a regular basis (quarterly and annually) to identify any records that do not fit in to correct "type" and "cause" categories, selected by the investigating technician.

Use of Estimated Information

Essential Energy has not used estimated information in this section. For purposes of consistency, all data is extracted directly from a predefined report.

Reliability of Information

The data provided for this section is considered reliable as there are a number of checks and technician audits performed during the reporting period. It should also be noted that the Power Quality Data Base reports all network complaints received from customers, which is the figure reported. It is possible to filter the data and identify those complaints that are considered Valid (network related) or Not Valid (customer related).

Table 3.6.6.2 – Percentage of Complaints by Category

This table does not require any inputs.

Table 3.6.6.3 – Percentage of Complaints by Likely Cause

This table does not require any inputs.

Table 3.6.7.1 – Timely Provision of Services

Compliance with Requirements of the Notice

This section contains the total number of new connections (connections where there was no previous physical link between our distribution system and a retail customer's premises), that have been performed during the period 1 July 2020 to 30 June 2021 inclusive.

Essential Energy is unable to provide information relating to the number of new connections not provided on or before the agreed date because this work is undertaken by Meter Provider Contractors external to Essential Energy and relates to agreements between those Meter Providers and their customers.

Source of Information

The source of the information is the Customer Information System, known as Peace CIS.

Methodology & Assumptions

The methodology utilised is to extract NMI details from Peace CIS where the minimum meter installation date exists within the required date range. In effect, this provides us with a listing of where the initial meter installation occurred in the relevant financial year. There are no assumptions made.

Use of Estimated Information

All information for this table was based on actual data extracted from Peace CIS.

Reliability of Information

The data provided in this table is considered to be reliable.

Table 3.6.7.2 – Timely Repair of Faulty Public Lights

Compliance with Requirements of the Notice

This section contains information on various measures relating to public lights and their repair.

Source of Information

The data used to populate this table was extracted from WASP (asset management system) for all streetlight tasks completed between 1 July 2020 and 30 June 2021. The report extracted included the following streetlight task categories: 'LGHT.' 'STLT.' 'SL01' and 'SL02' which is considered to encompass all repairs required on public lighting assets. The report was filtered to remove 'SCL' security lighting and including task codes and causes that represent a public lighting being 'out.' Refer to workpaper for full list of included task codes and causes.

The data used to populate the total number of streetlights was extracted from WASP on 1 July 2021. The 'All Assets' report as at 30 June 2021 excluding; security lighting 'SCL' category, 'out of service assets, private 'Asset Owner' and metered lights represent the total number of public lighting assets owned and maintained or only maintained by Essential Energy for FY21.

Methodology & Assumptions

This year, the methodology for this table has been changed to include a broader range of task codes to ensure all lights 'out' are included. Further, this financial year a large data cleanse occurred which changed the fields that reliance has been placed on in this past to determine which assets Essential Energy own and maintain or just maintain, as such a larger asset set has been used due to the change in filtering applied to the 'All Assets' report which provides greater accuracy.

Assumptions:

- > Where the 'reported date' occurred after the 'completed date' in the data set, the dates have been reversed to ensure a light that was 'out' was reported prior to it being fixed.
- Exclusion days allowable under the Public Lighting Code were not applied to this data set, such as for force majeure events, pole replacements, delays in road authority licences, etc.
- The average monthly number "out" is a manual calculation of the total tasks completed for a streetlight that was recorded as not working for the financial year divided by twelve months.
- For consistency purposes, the "fix by" date is assumed to be 10 business days after the reported date in line with a 'general fault' under the Public Lighting Code. The data will include 'specific faults' under the PLC, however for consistency with last years' reporting, the tasks have all been assumed to be 'general faults.'
- To determine the not repaired by "fix by" date, an additional column was added to the report to calculate the business days between the 'reported date' and 'completed date.' The IPART Quarterly Public Lighting Code excel report was used to determine the business days taken to repair a public light which excludes public holidays and weekends. Any tasks that took greater than 10 business days have been included in this count for the financial year.

- Average number of days to repair is calculated by summing the business days to complete column for all tasks completed in the financial year divided by the total number of streetlight tasks raised relating to a light out in the financial year.
- The total number of streetlights was calculated using the 'All Asset' report with exclusions described above by summing the total of 'Asset IDs.' It is assumed that the 'Asset Owner' delineates the responsibility for maintenance of a public lighting asset regardless of funding arrangement of luminaire or 'lighting category'.

Use of Estimated Information

The data contains no estimates as it has been sourced directly from WASP.

Reliability of Information

This data relies on the manual selection of a cause code and task code and assumes these selections are accurate representation of a public lighting asset requiring repair. The data is considered to be reliable.

Table 3.6.7.3 - Call Centre Performance

Compliance with Requirements of the Notice

The data has been reported in accordance with the definitions provided by the AER unless otherwise specified in the Methodology & Assumptions section below.

Whilst Essential Energy does have other phone lines, data within this section was from the Faults line only.

Source of information

Interactive Intelligence Call Management System and Telstra Analyser were used to collect the required data.

Methodology and Assumptions

Essential Energy has a simple process for extracting the required data from the call management system, by running work group and skillset performance reports from their telephony clients. The reports generated include the total number of calls, number of calls answered after the threshold and the total number of abandoned calls.

This definition requires total calls to include calls abandoned within 30 seconds but excludes missing calls when the fault line is overloaded.

For the number of Overload Events, Telstra Analyser is used to capture data on overload event days. This report lists all calls to Essential Energy's Outages line and the result of the call, including successful (answered), unsuccessful (abandoned) or busy (did not get through to IVR, which are overload events).

Use of estimated information

There was no use of estimated information.

Reliability of information

Interactive Intelligence retains details of each individual call throughout the reporting period with the functionality to also provide statistics about the received calls for a nominated period of time. The information is considered to be reliable.

Table 3.6.7.4 – Number of Customer Complaints

This table does not require any inputs.

Worksheet 3.6.8 – Network-feeders

Table 3.6.8 – Network Feeder Reliability

Compliance with Requirements of the Notice

The data for 2020-21 has been collected and collated in line with the definitions.

All network outages have been listed in accordance with the requirements.

Source of Information

Data is sourced from PowerOn Fusion and calculations managed in an Access database. PowerOn makes up the central modules of Essential Energy's power Distribution Management and Outage Management Systems (DMS/OMS).

The spreadsheet used to collate data is titled "RIN Tables Workpapers 20-21".

The information on the length of feeders comes from Smallworld and is collated into the Access database mentioned above.

Customer numbers are as at 30 June 2021. An average of the start of period and end of period customer numbers is not maintained due to network reconfigurations throughout the year.

The information on "Energy not supplied" for columns I and J are completed by the Energy Forecasting Analyst.

The information on "Maximum demand" is provided by the Network Analytics & Forecast team but entered by the Asset Performance and Reliability (APR) section.

Methodology & Assumptions

In the RIN Access database 2020-21, run the following for the financial year:

- > Run Monthly Feeder Reliability Reports forms the base for this table query.
- > This query collates outages by feeder.
- Use the group of Network Data Feeder & Avg Cust Base RIN queries:
 - Network Data Feeder 1 collates feeder details (Feeder Description, Depot, Category, Cust, OH Length and UG Length).
 - Network Data Feeder 2 uses the base of the Monthly Feeder Reliability Reports to collate outages by feeder.
 - Network Data Feeder Upl 3-6 filters the data from #2 for Unplanned data; Avg Cust Base RIN is used in #5 to calculate SAIDI and SAIFI; rolled up to Feeder, count of outages, SAIDI, and SAIFI.
 - Network Data Feeder Norm 3-6 filters the data from #2 for Unplanned and excluding transmission, directed to de-energise, total fire ban-no fault found, and major event days data; Avg Cust Base RIN is used in #5 to calculate SAIDI and SAIFI; rolled up to Feeder, count of outages, SAIDI, and SAIFI.
 - Network Data Feeder PI 3-6 filters the data from #2 for Planned data; Avg Cust Base RIN is used in #5 to calculate SAIDI and SAIFI; rolled up to Feeder, count of outages, SAIDI, and SAIFI.
 - Network Data Feeder PI Norm 3-6 filters the data from #2 for Planned and excluding transmission, directed to de-energise, total fire ban-no fault found, and major event days data; Avg Cust Base RIN is used in #5 to calculate SAIDI and SAIFI; rolled up to Feeder, count of outages, SAIDI, and SAIFI.
 - Network Data Feeder Final collates #1, Upl #6, Norm #6, Pl #6 and Pl Norm #6.
- > Columns K-N can be cross-referenced against sheet "20-21 Data" and EB Table 3.6.1 and columns P-S can be cross-referenced against sheet "20-21 Data".
- > The Energy not supplied, Planned and Unplanned MWh is estimated by calculating an average kWh use per minute by customer type for the financial year. This is based on the total consumption divided by the total number of customers divided by the number of minutes in a year. This average kWh use per minute by feeder was then applied to the recorded Total Planned and Unplanned customer minutes off supply.

Use of Estimated Information
Some information has been estimated.
Reliability of Information
Information based on assumptions and estimates should be used with caution when using it for benchmarking or decision-making purposes.

Worksheet 3.6.9 – Network-reliability

Table 3.6.9.1 – Planned Minutes Off Supply (SAIDI) and

Table 3.6.9.2 – Planned Interruptions to Supply (SAIFI)

Compliance with Requirements of the Notice

The data for 2020-21 has been collected and collated in line with the definitions.

Customer numbers include active NMIs with an active or inactive account. This is the way data has been collected and stored since PowerOn Fusion went live in November 2012.

Source of Information

Data is sourced from PowerOn Fusion and calculations managed in an Access database. PowerOn makes up the central modules of Essential Energy's power Distribution Management and Outage Management Systems (DMS/OMS).

The spreadsheet used to collate data is titled "RIN Tables Workpapers 20-21".

Methodology & Assumptions

In the RIN Access database 2020-21, run the following for the financial year:

- > Run Monthly Feeder Reliability Reports forms the base for this table guery.
- This query collates outages by feeder.
- Use the group of STPIS Daily Perf 1-2, STPIS Daily Perf PI 3-5 and Avg Cust Base RIN queries:
 - STPIS Daily Perf 1 uses the base of the Monthly Feeder Reliability Reports to collate outages by feeder.
 - STPIS Daily Perf 2 truncates the date value of outages and rolls up customers affected and customer minutes lost.
 - STPIS Daily Perf PI U/SR/LR 3 filters the data from #2 for Planned and excluding transmission and major event days data and by category.
 - STPIS Daily Perf PI U/SR/LR 4 uses Avg Cust Base RIN query to calculate SAIDI and SAIFI by date.
 - STPIS Daily Perf PI 5 rolls up SAIDI and SAIFI by category.
- Can be cross-referenced against sheet "20-21 Data" (Normalised Planned = DNI Planned Planned MED).

Use of Estimated Information

There was no use of estimated information.

Reliability of Information

Information has been sourced from current systems and management is comfortable that the information is reliable.

Worksheet 4.1 – Public Lighting Tariffs

Table 4.1.4 – Public lighting metrics by tariff

Compliance with Requirements of the Notice

This table contains data for public lighting by published tariff in accordance with the definitions and requirement of the Annual Reporting RIN.

Source of Information

Data shown in these tables has been sourced from EDDIS

Methodology & Assumptions

Public lighting volumes have been sourced from EDDIS as a count by tariff type as at 30/06/2021, only the components that are effective at FY end date are included in the count.

Public lighting revenue has also been sourced from EDDIS for the period 1/07/2020 to 30/06/2021. The Tariff IDs (for example FLU0120-ST) that are effective in EDDIS as at FY end are used as the basis for the report. Each Tariff ID is then concatenated with all known funded types, where A is maintenance only charge, C is Customer funded and E is Essential Energy funded. The revenue amount value for each tariff id and funded by combination is summed from the actual invoiced dollar amount between the FY start and FY end dates.

Use of Estimated Information

There is no use of estimates.

Reliability of Information

The data is considered to be reliable.

Worksheet 6.2 - STPIS Reliability

Table 6.2.1 – Unplanned Minutes Off Supply (SAIDI),

Table 6.2.2 – Unplanned Interruptions to Supply (SAIFI) and

Table 6.2.4 – Distribution Customer Numbers

Compliance with Requirements of the Notice

The data for 2020-21 has been collected and collated in line with the definitions.

Customer numbers include active NMIs with an active or inactive account. This is the way data has been collected and stored since PowerOn Fusion went live in November 2012.

The Threshold for Major Event Days (TMED) for 2020-21 was applied as per the definition.

Source of Information

Data is sourced from PowerOn Fusion and calculations managed in an Access database. PowerOn makes up the central modules of Essential Energy's power Distribution Management and Outage Management Systems (DMS/OMS).

The spreadsheet used to collate data is titled "RIN Tables Workpapers 20-21".

Methodology & Assumptions

In the RIN Access Database 2020-21, run the following query for the financial year:

- > Run Monthly Feeder Reliability Reports forms the base for this table query.
 - This query collates outages by feeder.
- > Use the group of STPIS Daily Perf 1-2, STPIS Daily Perf PI 3-5, RIN Cust No, and Avg Cust Base RIN queries:
 - STPIS Daily Perf 1 uses the base of the Monthly Feeder Reliability Reports to collate outages by feeder.
 - STPIS Daily Perf 2 truncates the date value of outages and rolls up customers affected and customer minutes lost.
 - STPIS Daily Perf Upl 3 & U/SR/LR 3 filters the data from #2 for Unplanned for total and by category.
 - STPIS Daily Perf Upl 4, U/SR/LR 4, and Avg Cust Base RIN to calculate SAIDI and SAIFI by date.
 - STPIS Daily Perf Norm 3 & U/SR/LR 3 filters the data from #2 for Unplanned and excluding transmission and major event days data for total and by category.
 - STPIS Daily Perf Norm 4, U/SR/LR 4, and Avg Cust Base RIN to calculate SAIDI and SAIFI by date.
 - STPIS Daily Perf 5 collates by date SAIDI and SAIFI for total and by category.
 - STPIS Daily Perf 6 rolls up SAIDI and SAIFI for total and by category.
 - STPIS Daily Perf 7 calculates total excluded events by subtracting "Total sustained minutes off supply after removing excluded events" from "Total sustained minutes off supply". Shows RIN Cust Nos start and end period, and avg cust base RIN.

This information can be cross-referenced against sheet "20-21 Data" - Total Unplanned SAIDI and SAIFI, Excluded Events SAIDI and SAIFI, and Normalised SAIDI and SAIFI.

Customer numbers at the start of the period are the same as the end of the previous period but with the current feeder categories applied.

Use of Estimated Information

There was no use of estimated information.

Reliability of Information

Information has been sourced from current systems and management is comfortable that the information is reliable.

Table 6.2.3 – Unplanned Momentary Interruptions to Supply (MAIFI)

This table does not require any inputs.

Worksheet 6.6 - STPIS Customer Service

Table 6.6.1 – Telephone Answering

Compliance with Requirements of the Notice

The data has been reported in accordance with the definitions provided by the AER unless otherwise specified in the Methodology & Assumptions section below.

Whilst Essential Energy does have other phone lines, data within this section was from the Fault line only.

Source of Information

Interactive Intelligence Call Management System was used to collect data.

Methodology & Assumptions

Essential Energy has a simple process for extracting the required data from the call management system, by running work group and skillset performance reports from their telephony clients. The reports generated include the total number of calls, number answered after the threshold and the total number of abandoned calls.

The Customer service information must be reported as per the definitions in the STPIS Guidelines, that is excluding:

- > calls to payment lines and automated interactive services
- > 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).
- > calls occurring during a major event day or STPIS excluded event

Use of Estimated Information

There was no use of estimated information.

Reliability of Information

Interactive Intelligence retains details of each individual call throughout the reporting period with the functionality to also provide statistics about the received calls for a nominated period of time. The data is considered to be reliable.

Table 6.6.2 – Inadequately Served Customers

Compliance with Requirements of the Notice

The data for 2020-21 has been collected and collated in line with the definitions.

Customer numbers include active NMIs with an active or inactive account. This is the way data has been collected and stored since PowerOn Fusion went live in November 2012.

Source of Information

Data is sourced from PowerOn Fusion and calculations managed in an Access database. PowerOn makes up the central modules of Essential Energy's power Distribution Management and Outage Management Systems (DMS/OMS).

The spreadsheet used to collate data is named: "RIN Tables Workpapers 20-21".

Methodology & Assumptions

In the RIN Access Database 2020-21 run the following macro for the financial year – update the final query with the threshold filter:

Run Monthly Feeder Segment Reliability Reports RIN – macro that calculates SAIDI/SAIFI at feeder segment level. Finishes with query Monthly Reliability Fdr Seg SAIDI&SAIFI RIN – filters feeder segments with SAIDI > threshold.

Table A - SAIDI values:

- > Threshold SAIDI for inadequately served customers = average 17/18 to 19/20 whole network including excluded events SAIDI * 4. Reported historical actuals from AR 6.2.1
- Average Unplanned SAIDI from the macro output, calculate the average SAIDI
- Highest unplanned SAIDI from the macro output, discern the highest SAIDI

Table B - SAIFI Values:

- Average Unplanned SAIFI from the macro output, calculate the average SAIFI
- Highest unplanned SAIFI from the macro output, discern the highest SAIFI

Table C – Top 5 feeders with most inadequately served customers:

- > Top 5 SAIDI sourced from macro output
- > Top 5 SAIFI sourced from macro output
- > Number of inadequately served customers sourced from macro output

Use of Estimated Information

There was no use of estimated information.

Reliability of Information

Information has been sourced from current systems and management is comfortable that the information is reliable.

This table does not require any inputs.

Worksheet 6.7 - STPIS Daily Performance

Table 6.7.1 – Daily Performance Data - Unplanned

Compliance with Requirements of the Notice

The data has been reported in accordance with the definitions provided by the AER unless otherwise specified in the Methodology & Assumptions section below.

Whilst Essential Energy does have other phone lines, data within this section was from the Fault line only.

Source of Information

The Interactive Intelligence Call Management System was used to collect data.

Methodology & Assumptions

Essential Energy has a simple process for extracting the required data from the call management system, by running work group and skillset performance reports from their telephony clients. The reports generated include the total number of calls, number answered after the threshold and the total number of abandoned calls.

The Customer service information must be reported as per the definitions in the STPIS Guidelines, that is excluding:

- > calls to payment lines and automated interactive services
- > 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).
- > calls occurring during a major event day or STPIS excluded event

Use of Estimated Information

There was no use of estimated information.

Reliability of Information

Interactive Intelligence retains details of each individual call throughout the reporting period with the functionality to also provide statistics about the received calls for a nominated period of time. The data is considered to be reliable.

Worksheet 6.8 - STPIS Exclusions

Tah	1 6	2 1	$I - S^{T}$	TPIS	Evo	lusions

This table does not require any inputs.

Worksheet 6.9 - STPIS - GSL

Table 6.9.1 – Guaranteed Service Levels – Jurisdictional GSL Scheme

Compliance with Requirements of the Notice

Essential Energy is required to report the total number of GSL payments made within the stipulated period, and their associated value.

Source of Information

For the Reliability of Supply section, data is exported directly from the Customer Interaction Management System (CIM), which houses the details of GSL claims.

For the Public Lights section, data is exported directly from the PeacePlus9 system.

Methodology & Assumptions

Data is extracted from the CIM Network databases using the export views called Export GCSS and is exported to an Excel worksheet. The data is then filtered so that it contains CIM documents raised in the financial year that is being reported on. A pivot table is inserted so the data can be viewed by category, and showing the number paid and amount paid for each category. The totals for Network Reliability Duration and Network Reliability Frequency are then obtained and reported accordingly.

Data is extracted from the PeacePlus9 database by Finance in Excel format. The payments of \$25 each are added up to arrive at the totals for repair of faulty public lights.

Use of Estimated Information

No estimations are made. The statistics provided are based on the user's input selections and are presented accordingly. Care is taken to ensure that all GSLs are categorised correctly and are regularly scrutinised for accuracy by the Customer Advocacy team and Customer Contact Centre.

Reliability of Information

The information is considered reliable.

Table 6.9.2 – Guaranteed Service Levels – AER GSL Scheme

This table does not require any inputs.

Worksheet 7.8 – Avoided TUOS Payments

Table 7.8.1 – Avoided TUOS Payments

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's Avoided TUOS payments.

Source of Information

Data has been sourced directly from the Annual Regulatory Accounts.

Methodology & Assumptions

The data comes from the "Avoided TUOS expenditure" row in ARR Table 8.1.1.2.

Please refer to the Methodology and Assumptions for that table.

Use of Estimated Information

There has been no use of estimated information.

Reliability of Information

The data in this table is considered to be reliable.

Worksheet 7.10 - Juris Scheme

Table 7.10.1 – Jurisdictional Scheme Payments

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's jurisdictional scheme payments.

Source of Information

The figures were sourced from the PeopleSoft finance system.

Methodology & Assumptions

Amounts were taken from the general ledger for the relevant account codes relating to Climate Change Levy (01065 and 01205), NSW Solar Bonus Scheme (10020 and 10030) and Queensland Solar Scheme (01061 and 01215). The receipts and payments were netted off against each other for each scheme.

Use of Estimated Information

There has been no use of estimated data.

Reliability of Information

The information provided is considered to be reliable.

Worksheet 7.11 - DMIS-DMIA

Table 7.11.1 – DMIS – Projects Submitted for Approval

There are no DMIS projects for 2020-21.

Table 7.11.2 – DMIA – Projects Submitted for Approval

Compliance with Requirements of the Notice

There were no DMIA projects for the 2020-21 year

Source of Information

n/a.

Methodology & Assumptions

n/a.

Use of Estimated Information

n/a

Reliability of Information

n/a

Worksheet 7.12 – Safety and Bushfire	
This sheet does not require any inputs.	

Worksheet 8.1 - Income

Table 8.1.1.1 – Revenue,

Table 8.1.1.2 – Expenditure and

Table 8.1.1.3 – Profit

Compliance with Requirements of the Notice

These tables contain data on the preparation of the Revenue, Expenditure and Profit sections of the Income worksheet of the Annual Reporting RIN.

Source of Information

Data shown in these tables has been sourced from the general ledger.

Methodology & Assumptions

The methodology applied has not changed from 2019-20. Revenue is separated between Standard Control Services and Alternative Control Services based on the general ledger Business Unit. The general ledger Account was used to map revenue to the AER revenue categories. Cash customer contributions are separated between Standard Control and Alternative Control Services based on the general ledger Business Unit. Gifted Asset customer contributions were reallocatedfrom Standard Control and Alternative Control Services, to the adjustment column.

The process for expenditure is the same as prior years. The first step in the process involves the extraction of an end of financial year trial balance which is broken down according to the latest Peoplesoft tree structure by business unit, department, account, product and project number. The process is automated. The enriched PeopleSoft data exists in the ODL, and logic (described below) and utilising tables within MDS are applied to allocate the line items across RIN Business Units. It is then summarised based on logic and used to update Rosetta. There was no change to the data being used or mapping tables and logic (unless otherwise stated).

A summarised transaction list for the year, which reconciles to the trial balance extracted from PeopleSoft tables into a combined table in the ODL which has only profit and loss and capex transactions. Only the profit and loss accounts are considered for the income and expenditure related tables.

The data is allocated in a five-step process in order:

- 1. Business unit if the business unit is not CE001, then business unit allocation is used.
- 2. Product - if there is a product, then product allocation is used.
- Project if the business unit is CE001 and there is a project, then project allocation is used. 3.
- Account/Department account/department allocation is used as indicated by the allocation basis in Account Tree.
- Override override allocation is used. 5.

Manual adjustments were made to reallocate gifted assets capital contributions (per above). The table "Account Tree" indicates the basis of allocation to be used for each account as shown in the "Allocation Basis" field of the trial balance. This table is only used for data which is assigned to business unit CE001 and contains no product or project information. Within the table, "A" indicates allocation by account, "D" indicates allocation by department, and "P" indicates allocation by product. For each of these there is then a further table indicating the appropriate allocation to be used for each account, department, or product.

There is a facility to override the original allocation basis if it is not appropriate for a particular combination. This is managed in the table "RIN Account Overrides ".

The allocation percentages and the allocation methodologies are derived from company total Direct Spend for the year.

The resultant expenditure information is then reviewed. Other adjustments may also be made, such as entries required to align the regulatory statements with Essential Energy's statutory accounts or incorrectly mapped project types. These adjustments are fed back into the model using the manual journal process.

Use of Estimated Information

There is no use of estimates.

Reliability of Information

The data is considered to be reliable.

Worksheet 8.2 - Capex

Table 8.2.1 – Capex by Purpose – Standard Control Services

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's Standard Control Services capex for the year, categorised by purpose.

Source of Information

The figures in the "Actual" column were sourced from data that has been derived from the PeopleSoft General Ledger and Asset Management modules. Detailed logic for the extraction of the relevant data and the mapping of the data to RIN Purposes and Categories is contained in ETL Documentation. Financial Accounting and Asset Management and Engineering provided input into the mapping.

The Period 12 CAM rates were used to allocate non-system assets across the business units other than for Property and Fleet. The output was adjusted for Property and Fleet capex to account for direct allocations to the Water business.

System asset splits by voltage level were obtained through the mapping of the asset profiles (lowest asset category within the PeopleSoft fixed asset module) to the Regulatory Categories through a manually prepared mapping table. Asset profiles are determined from the project types except where an estimate is used for projects created in WASP and relevant activity types for projects created in the integrated version of Project Online. This information is available within PeopleSoft and is a replication of the PeopleSoft logic for the capitalisation of projects. For non-project capex the profiles were taken from the fixed asset module, i.e. the asset profile applied on capitalisation.

Forecast data has been sourced from the 2019-24 Final Distribution Determination.

Methodology & Assumptions

The "Actuals" data for the system asset split is from the PeopleSoft Finance System. Justify Types, Estimates, Activities, Project Types and Resource Categories are applied to the capex transactional data. The transactional data is consistent with the determination of capital expenditure for statutory reporting. In summary the Justify types and resource categories (for overheads) are used to determine the capex RIN purpose and the asset profile (derived from the project type, estimate (resource sub-category), activity, gift key or asset management transaction) is used to classify the asset by regulatory category and also to distinguish Water and Public Lighting assets. Further details are provided in the ETL documentation. All Work In Progress account transactions, other than asset capitalisations and write offs, all direct capitalisations (non-project), gifted assets capitalised (adjusted for opening and closing accruals) are included. Right of use asset additions were manually added to the data. The opening and closing gifted asset accruals are classified by Gift Keys provided in the Customer Works Management Database which equate to asset profiles and are used to classify these assets through a manual adjustment.

Overhead figures were derived from the PeopleSoft transactional data and collated using the relevant Resource Category codes (OHNW and OHCO).

System asset voltage level splits were obtained by mapping asset classes (derived from Profiles) to voltage levels. The figures were added up to obtain totals for the various voltage levels.

The forecast data, representing, in total, the capex allowance in the 2019-24 Final Distribution Determination, has been split into regulatory categories based on the category splits in Essential Energy's final submission. The impact of the AER forecast inflation from the 2019-24 Final Distribution Determination has been removed and the data has been re-inflated to take into account the impact of actual inflation outcomes.

The outputs derived from the above were reviewed by relevant sections of the business and adjustments were made to correct incorrect or missing data from project set up.

Customer Funded capex was adjusted to reflect only the value of gifted assets or contributions receivable. The portion of customer funded project spend funded by Essential Energy was transferred to internally funded capex. The revenue recognised is used to determine this amount.

Use of Estimated Information

There has been no use of estimated data.

Reliability of Information

The data in this table is considered to be reliable.

Table 8.2.2 – Capex by Purpose – Material Difference Explanation

This table relates to the explanation of material differences between forecast and actual data. The table has been populated with those explanations if required.

Table 8.2.3 – Capex Other

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's alternative control and negotiated services capex for the vear.

Source of Information

The figures in the "Actual" column were sourced from data that has been derived from the PeopleSoft General Ledger and Asset Management modules. Detailed logic for the extraction of the relevant data and the mapping of the data to RIN Purposes and Categories is contained in ETL Documentation. Financial Accounting and Asset Management provided input into the mapping.

Asset Profiles are determined from the project types except where an estimate is used for projects created in WASP and relevant activity types for projects created in the integrated version of Project Online. This information is available within PeopleSoft and is a replication of the PeopleSoft logic for the capitalisation of projects. For nonproject capex the profiles were taken from the fixed asset module, i.e. the asset profile applied on capitalisation.

Forecast data has been sourced from the 2019-24 Final Distribution Determination.

Methodology & Assumptions

- The "Actuals" data for the system asset split is from the PeopleSoft Finance System. Justify Types, Estimates, Activities. Project Types and Resource Categories are applied to the capex transactional data. The transactional data is consistent with the determination of capital expenditure for statutory reporting. In summary the Justify types and resource categories (for overheads) are used to determine the capex RIN purpose and the asset profile (derived from the project type, estimate (resource sub-category), activity, gift key or asset management transaction) is used to classify the asset by regulatory category and also to distinguish Water and Public Lighting assets. Further details are provided in the ETL documentation. All Work in Progress account transactions, other than asset capitalisations and write offs, all direct capitalisations (non-project), gifted assets capitalised (adjusted for opening and closing accruals) are included.
- The opening and closing gifted asset accruals are classified by Gift Keys provided in the Customer Works Management Database which equate to asset profiles.
- System asset voltage level splits were obtained by mapping asset classes (derived from Profiles) to voltage levels
- The forecast data, representing, in total, the capex allowance in the 2019-24 Final Distribution Determination, has been split into regulatory categories based on the category splits in Essential Energy's final submission. The impact of the AER forecast inflation from the 2019-24 Final Distribution Determination has been removed and the data has been re-inflated to take into account the impact of actual inflation outcomes.
- The outputs derived from the above were reviewed by relevant sections of the business and adjustments were made to correct incorrect or missing data from project set up, estimates and obsolete mappings.
- Customer Funded capex was adjusted to reflect only the value of gifted assets or contributions receivable. The portion of customer funded project spend funded by Essential Energy was transferred to internally funded capex. The revenue recognised is used to determine this amount.

Right of use lease asset additions were added through manual adjustment as the ETL logic was not updated to included these assets.

Use of Estimated Information

There has been no use of estimated data.

Reliability of Information

The data in this table is considered to be reliable.

Table 8.2.4 – Capex by Asset Class

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's Standard Control Services capex for the year, categorised by asset class.

Source of Information

Refer to 8.2.1 - The data is sourced from PeopleSoft.

Forecast data has been sourced from the 2019-24 Final Distribution Determination.

Methodology & Assumptions

Refer to the Methodology & Assumptions sections for 8.2.1.

- > The forecast data, representing, in total, the capex allowance in the 2019-24 Final Distribution Determination, has been split into regulatory categories based on the category splits in Essential Energy's final submission. The impact of the AER forecast inflation from the 2019-24 Final Distribution Determination has been removed and the data has been re-inflated to take into account the impact of actual inflation outcomes.
- > Provision movements are based on the EB RIN 3.2.3 Provision Table, with the capex element prorated across the system asset categories.
- > The capex proportion of each provision's total increase was applied to each provision's total movement for the year (closing balance minus opening balance), to arrive at the capitalised movement in the provision. This amount was then pro-rated across the various system asset categories, basing the split on the amount of capex in each of those categories. The amounts arrived at in this fashion for both provisions were added across the two provisions, resulting in a total capitalised movement in provisions.

Use of Estimated Information

There has been no use of estimated data.

Reliability of Information

The data in this table is considered to be reliable.

Table 8.2.5 – Capital Contributions by Asset Class

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's capital contributions received for the year, categorised by asset class.

Source of Information

Amounts were sourced from the PeopleSoft General Ledger and Asset Management Module. An adjustment was made to account for the accrued opening and closing gifted assets balances (due to timing difference in capitalisation) and to account for the internally funded portion of assets with a customer funded asset profile.

Forecast data has been sourced from the 2019-24 Final Distribution Determination.

Methodology & Assumptions

Capital contributions, whilst sourced from the Peoplesoft general ledger and asset management modules, is manually adjusted for the difference between the opening and closing gifted assets accruals for the year, as June accrual values are not captured within Asset Manager. The difference between the opening and closing gifted assets accruals for the year is based on Gift Keys provided within the source database Contestable Works Management System mapped to asset profiles. An adjustment is made to customer funded project totals to agree to the revenue recognised as not all the capex on a customer funded project is recovered from a customer.

The forecast data has been split into regulatory categories based on the category splits in Essential Energy's final submission. The impact of the AER forecast inflations from the 2019-24 Final Distribution Determination has been removed and the data has been re-inflated to take into account the impact of actual inflation outcomes.

Use of Estimated Information

There has been no use of estimated data.

Reliability of Information

The data in this table is considered to be reliable.

Table 8.2.6 – Disposals by Asset Class

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's asset disposals for the year, categorised by asset class.

Source of Information

The figures were sourced from a listing of disposals for the financial year which reconciles to PeopleSoft general ledger.

Forecast data has been sourced from the 2019-24 Final Distribution Determination.

Methodology & Assumptions

The disposals data was taken from the trial balance and is consistent with a summary report of fixed asset movements compiled by the Finance team, which was also used by that department to assist with compiling fixed assets information for the audited statutory accounts.

The forecast data has been split into regulatory categories based on the category splits in Essential Energy's final submission. The impact of the AER forecast inflations from the 2019-24 Final Distribution Determination has been removed and the data has been re-inflated to take into account the impact of actual inflation outcomes.

System Assets, including system land and buildings have been allocated to the relevant business units, with nonsystem assets being allocated based on the CAM allocation rates.

Use of Estimated Information

There has been no use of estimated data.

Reliability of Information

The data in this table is considered to be reliable.

Worksheet 8.2 Capex (Addendum)

Table 8.2.7 – Immediate expensing of capex

Compliance with Requirements of the Notice

The AER defines "immediate expensing of capital expenditure" as "The value of capital expenditure, which would be added to the regulatory or tax asset base, claimed by Essential Energy, that has been or would be treated as immediately deductible for income tax purposes (e.g. refurbishments, overheads).

The following sections outline how Essential Energy has ensured that the information provided is consistent with the requirements of the Notice.

Source of Information

Essential Energy's lodged Income Tax Return, Peoplesoft data

Methodology & Assumptions

Essential Energy currently has one type of expenditure that would be added to the regulatory or tax asset base and treated as immediately deductible for income tax purposes. The type of expenditure is borrowing costs that are capitalised to projects. For income tax purposes, this type of expenditure is considered to be immediately deductible. In order for the borrowing costs to be capitalised, the project must meet the following criteria:

- 1. Must have commenced after 1 July 2009
- 2. Be reasonably expected to take greater than 12 months
- 3. Must have a budgeted spend of greater than \$10M

During the 2020/21 financial year, Essential Energy did not have any projects that met the above criteria.

When projects do meet the criteria, the amount of capitalised interest is identifiable from the general ledger in Peoplesoft.

For low value assets that are immediately expensed for accounting purposes (tools and equipment under \$600), these are not added to the tax Fixed Asset Register within Peoplesoft due to the volume of transactions. These are treated as black hole expenses for income tax purposes and a deduction is claimed over 5 years.

Use of Estimated Information

The information was not estimated.

Reliability of Information

The information is considered to be reliable.

Worksheet 8.4 - Opex

Table 8.4.1 – Operating & Maintenance Expenditure – By Purpose

Compliance with Requirements of the Notice

The following section provides details of Essential Energy's operating and maintenance expenditure, by purpose.

Source of Information

The figures were sourced from the PeopleSoft finance system.

Forecast data has been sourced from the 2019-24 Final Distribution Determination.

Methodology & Assumptions

2020-21 PeopleSoft general ledger transactions were uploaded into a database. There, each transactional combination of department, account, product and project type, and its subtotal, was classified with a standard description and a label, as well as an allocation method (for allocating dollar values into RIN categories). The allocation method and subsequent allocation percentages were assigned to RIN categories as per Essential Energy's Cost Allocation Methodology (CAM).

The process for expenditure is the same as prior years. The first step in the process involves the extraction of an end of financial year trial balance which is broken down by business unit, department, account, product and project number. Data is also extracted on the last tree structure (account, department, product and project) for the year in question, and data on project types. The enriched PeopleSoft data exists in the ODL, and logic (described below) and utilising tables within MDS is applied to allocate the line items across RIN Business Units. It is then summarised and used to update Rosetta. There was no change to the data being used or mapping tables and logic (unless otherwise stated).

The data is allocated in a four-step process in order:

- Business unit if the business unit is not CE001, then business unit allocation is used.
- Project if the business unit is CE001 and there is a project, then project allocation is used.
- Account/Department account/department allocation is used as indicated by the allocation basis in Account Tree.
- Override override allocation is used.

Manual adjustments were made to reallocate incorrect mapping of project types for maintenance.

The table "Account Tree" indicates the basis of allocation to be used for each account as shown in the "Allocation Basis" field of the trial balance. This table is only used for data which is assigned to business unit CE001 and contains no product or project information. Within the table, "A" indicates allocation by account, "D" indicates allocation by department, and "P" indicates allocation by product. For each of these there is then a further table indicating the appropriate allocation to be used for each account, department, or product.

There is a facility to override the original allocation basis if it is not appropriate for a particular combination. This is managed in the table "RIN Account Overrides ".

The allocation percentages and the allocation methodologies are derived from company total Direct Spend for the year.

Adjustments may be made, such as entries required to align the regulatory statements with Essential Energy's statutory accounts or incorrectly mapped project types. These adjustments are fed back into the model using the manual journal process.

The enriched trial balance was saved into an excel workbook. Label and description columns were filtered to show the total transactions falling under each opex category.

The totals are reduced by any amounts relating to each category which exist in the Finance overhead pool that would have been allocated to Capex.

Forecast data is shown only in the "Total" row at the bottom of the table. It is the total opex allowance from the 2019-24 Final Distribution Determination and is shown in this way in Table 8.4.1 as the AER did not provide a

breakup by opex category in its final decision. The impact of the AER forecast inflations from the 2019-24 Final Distribution Determination has been removed and the data has been re-inflated to take into account the impact of actual inflation outcomes.

Use of Estimated Information

The information that has been sourced from the Finance system is considered to be actual data.

Reliability of Information

Whilst the accuracy of the data contained in this table is dependent on the accuracy of the labels and descriptions applied to the transactions described above, the data in this table is considered to be reliable.

Table 8.4.2 – Operating & Maintenance Expenditure – By Purpose – Margins Only

Essential Energy has no related parties and therefore no related party margin expenditure.

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

This table relates to the explanation of material differences between forecast and actual data. The table has been populated with those explanations if required.

Worksheet 9.5 - TUoS		
This sheet does not require any inputs.		

Worksheet P1 - Cost Reflective Tariffs (current and historical years)

Compliance with Requirements of the Notice

The following sections outline how Essential Energy has ensured that the information provided is consistent with the requirements of the Notice.

Source of Information

The figures were sourced from the billing system, Peace.

Methodology & Assumptions

The customer numbers by tariff and meter type have been extracted from the billing system, Peace, as at the 30 June for 2018, 2019, 2020 and 2021 include all active NMIs with a current tariff.

Table 1.1 provides a split of the customer numbers by customer segment according to their assigned tariff and meter type, where Type 4 are Interval/Smart meters and Type 6 are Basic meters.

Table 1.2 provides a split of just the Non cost-reflective tariffs that have an Interval/Smart meter. Non cost reflective tariffs are either flat rate (non time of use) or obsolete tariffs that are no longer available.

Table 1.3 is all customers split by Customer segment and tariff as at 30 June.

Use of Estimated Information

The information that has been sourced from the billing system is considered to be actual data

Reliability of Information

The data in this table is considered to be reliable.