

Economic Benchmarking Regulatory Information Notice Basis of Preparation



Template 3.1 Revenue

1 July 2017 to 30 June 2018



Version Control

Version	Date	Description
1.0	31/10/18	Final as submitted to AER on 31 October 2018

Foreword

In response to requirements of the Australian Energy Regulator's (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.1 Revenue of Ergon Energy's completed 2017-18 Economic Benchmarking RIN templates (2017-18 EB RIN Templates), Schedule 1 paragraph 1.2 of the Notice requires Ergon Energy to provide a Basis of Preparation demonstrating how Ergon Energy has complied with the Notice, in respect of:

- each variable in each of the worksheets in the Economic Benchmarking Data Templates; and
- other information prepared in accordance with the requirements of the Notice and the RIN Instructions and Definitions at Appendix B to the Notice.

Schedule 2 paragraph 2.2 of the Notice requires the Basis of Preparation to provide, at a minimum, for each variable and any other information, commentary that:

- demonstrates how the information provided is consistent with the requirements of the Notice;
- explains the source from which Ergon Energy obtained the information provided; and
- explains the methodology Ergon Energy applied to provide the required information, including any assumptions Ergon Energy made.

In circumstances where Ergon Energy cannot provide input for a Variable using Actual Information and therefore must provide input using Estimated Information, Ergon Energy must also comment as to:

- why an estimate was required, including why it was not possible to use Actual Information; and
- the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is a best estimate, given the information sought in this Notice.

Over and above this, Appendix B, Instructions and Definitions section 1.1.2 note (5) requires an additional minimum requirement for the Basis of Preparation for variables that contain Financial Information (Actual and Estimated) where accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice. In such instances, the relevant Basis of Preparation must include an explanation as to the:

- nature of the change; and
- impact of the change on the information provided in response to the notice.

Section 1.1.1 of the Appendix B, Instructions and Definitions also indicates which variables may not be applicable to Ergon Energy as displayed by yellow, orange, or blue shading in the Economic Benchmarking data Templates.

No additional requirements were identified as requiring provision of additional information or attachment/s over and above completed templates or Basis of Preparation.

This Basis of Preparation document should be read in conjunction with the information presented in Template 3.1 Revenue (Actual, Estimated or Consolidated) in Ergon Energy's completed 2017-18 EBRIN Templates.

Of note, the AER reissued Economic Benchmarking RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 31 May 2018. The reissued (protected) templates allow for submission of the 2017-18 Regulatory Year data only. Regard has also been given to the clarification provided by the AER (24 October 2016) relative to ongoing compliance matters including auditing requirements, and specifically the provision of 'actuals' and 'estimates' (and exemptions therein).

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Template 3.1 Revenue

The AER requires revenue data to be provided, disaggregated in accordance with the main outputs for which Ergon Energy bills its customers.

The Appendix B, Instructions and Definitions require Ergon Energy to report revenues split in accordance with the categories in the template tables, as discussed individually below.

Separately, Ergon Energy is required to report revenues received/deducted as a result of incentive schemes.

Revenues must be split in accordance with the definitions of Standard Control Services (SCS) and Alternative Control Services (ACS), which also recognise periods where different service classifications applied. Furthermore, zeroes ('0') are permissible only when no effect on Revenues is applicable to Ergon Energy.

Table 3.1.1 – Revenue Grouping by Chargeable Quantity

Template 3.1, table 3.1.1 requires Ergon Energy to allocate revenues to the chargeable quantity that most closely reflects the basis upon which the revenue was charged by Ergon Energy to customers (the chargeable quantities are the variables DREV0101-DREV0112).

Revenues that cannot be allocated to the specific chargeable quantities in variables DREV0101 to DREV0112 must be reported against 'Revenue from other sources' (DREV0113).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for 'Revenue Grouping by Chargeable Quantity'. Of note, DREV01 'Total Revenue by Chargeable Quantity' represents the sum variables DREV0101-DREV0113, and is therefore implicitly addressed in the responses below.

Table 1: Revenue Grouping by Chargeable Quantity

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All mandatory data entry fields shaded yellow, have been populated. Ergon Energy confirms, as required by the AER in Box 1, Revenue Financial Reporting Framework of Appendix B, Instructions and Definitions that Revenues reconcile to the Direct Control Services revenues in Regulatory Accounting Statements as per the Annual Reporting Requirements (AER defined term) as submitted to the relevant regulator, for the year in question).
DREV0101	Direct Control Services, which were charged by Ergon Energy to customers (in accordance with the EB RIN instructions at Section 2: Revenue) have been reported as
-	
DREV0109	
DREV0112	<ul style="list-style-type: none"> ▪ SCS: Network Services, DUOS (including cross boundary duos); Capital Contributions; and ▪ ACS: Public Lighting, Connection services, Metering services, and Ancillary services.
- (SCS)	Public lighting for the recovery of construction and maintenance costs for the 2017-18 regulatory year has been reported as an ACS (refer to the source and methodology for Revenue Grouping by Chargeable Quantity under heading DREV0112: Public Lighting). Ergon Energy's approved services are as per Attachment 13 (Classification of Services) of the AER FDD. This correlates to

Variable	Addressing Basis of Preparation Requirements												
	<p>Distribution use of System charges and Capital Contributions for SCS and Other Revenue and Contributions for ACS as displayed in the regulatory accounting statements.</p> <p>Revenue reported in prior regulatory accounting statements which is not a Direct Control Service charged by Ergon Energy to Customers include: profit or gross proceeds on sale of assets, interest received, shared assets revenue and Transmission use of System charges, Sales. Rather, they were specific reporting requirements of prior regulatory instruments.</p> <p>'Revenue from Unmetered Supplies' is the same for template 3, table 3.1.1 (DREV0107) as for template 3, table 3.1.2 (DREV0205). Public lighting has been reported in variable (DREV0112) and has been excluded from 'revenue from unmetered supplies' (DREV0107). This is based on the interpretation of the definitions for unmetered supplies and customer numbers. The latter states public lighting connections are not to be counted when calculating the number of unmetered customers.</p> <p>The total of revenues by chargeable quantity for these variables reconciles to the total revenues by customer class (DREV02).</p>												
Population of Actual Information in templates, including Source.	For year 2017-18, data has been sourced from Ergons' billing system PEACE. Monthly billing reports DMK540, based on Statement of Charges monthly periods, are collated to provide actual data required. This data is then adjusted for Accrual data.												
Methodology and assumption's applied in relation to Actual Information	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3, table 3.1.1</p> <p>The table below sets out the mapping of Distribution Cost of Supply (DCOS) model charges to RIN variables.</p> <table border="1" data-bbox="564 1256 1453 1957"> <thead> <tr> <th data-bbox="564 1256 986 1294">DCOS model or Billing reference</th> <th data-bbox="986 1256 1453 1294">Benchmarking RIN Variable</th> </tr> </thead> <tbody> <tr> <td data-bbox="564 1294 986 1368">NDFC Network DUoS Fixed Charge\$</td> <td data-bbox="986 1294 1453 1563" rowspan="3">Revenue from Fixed Customer Charge</td> </tr> <tr> <td data-bbox="564 1368 986 1464">NDFCG Network DuoS Fixed Charge Generation\$</td> </tr> <tr> <td data-bbox="564 1464 986 1563">NDCUC Network DUoS Connection Unit Charge\$</td> </tr> <tr> <td data-bbox="564 1563 986 1659">NDKVACC Network DUoS kVA Capacity Charge\$</td> <td data-bbox="986 1563 1453 1957" rowspan="4">Revenue from Contracted Maximum Demand Charges</td> </tr> <tr> <td data-bbox="564 1659 986 1756">NDTDC Network DUOS Threshold Demand Charge\$</td> </tr> <tr> <td data-bbox="564 1756 986 1852">NDDCOP Network DUoS Demand Charge - Off Peak\$</td> </tr> <tr> <td data-bbox="564 1852 986 1957">NDDCP Network DUoS Demand Charge - Peak\$</td> </tr> </tbody> </table>		DCOS model or Billing reference	Benchmarking RIN Variable	NDFC Network DUoS Fixed Charge\$	Revenue from Fixed Customer Charge	NDFCG Network DuoS Fixed Charge Generation\$	NDCUC Network DUoS Connection Unit Charge\$	NDKVACC Network DUoS kVA Capacity Charge\$	Revenue from Contracted Maximum Demand Charges	NDTDC Network DUOS Threshold Demand Charge\$	NDDCOP Network DUoS Demand Charge - Off Peak\$	NDDCP Network DUoS Demand Charge - Peak\$
DCOS model or Billing reference	Benchmarking RIN Variable												
NDFC Network DUoS Fixed Charge\$	Revenue from Fixed Customer Charge												
NDFCG Network DuoS Fixed Charge Generation\$													
NDCUC Network DUoS Connection Unit Charge\$													
NDKVACC Network DUoS kVA Capacity Charge\$	Revenue from Contracted Maximum Demand Charges												
NDTDC Network DUOS Threshold Demand Charge\$													
NDDCOP Network DUoS Demand Charge - Off Peak\$													
NDDCP Network DUoS Demand Charge - Peak\$													

Variable	Addressing Basis of Preparation Requirements	
	NDKVAADC Network DUoS kVA Actual Demand Charge\$	Revenue from Measured Maximum Demand Charges
	NDERPC Network DUoS Excess Reactive Power Charge\$	
	NDVC Network DUoS Volume Charge\$	Revenue from Energy delivery charges where time of use is not a determinant
	Residential and Business Inclining Block Tariff Band1\$	
	Residential and Business Inclining Block Tariff Band2\$	
	Residential and Business Inclining Block Tariff Band3\$	
	NDVCOP Network DUoS Volume Charge - Off Peak\$	Revenue from Off–Peak Energy Delivery charges
	NDVCP Network DUoS Volume Charge - Peak\$	Revenue from On–Peak Energy Delivery charges
	NDVCS Network DUoS Volume Charge - Shoulder\$	Revenue from Shoulder period Energy Delivery Charges

Revenue from controlled load customer charges (DREV0106), DREV0112 and Revenue from unmetered supplies (DREV0107) are inclusive of Fixed Charges and Volume charges i.e.: these charges haven't been separately reported in Revenue from Fixed Customer Charges (DREV0101) or Revenue from Energy Delivery charges where time of use is not a determinant.

For Revenue from Contracted Maximum Demand charges (DREV0108) and Revenue from Measured Maximum Demand charges (DREV0109), Ergon Energy has allocated the 'full recovery of revenue from customers on the SAC – Large tariff to Contracted Demand. Revenue from Demand component of Seasonal Time of Use Demand tariffs has also been allocated to Contracted Demand. Ergon Energy has adopted this approach as it is consistent with the approach used for Template 3.4 Operational data, 'Demand supplied' where instructions state, 'where Ergon Energy cannot distinguish between contracted and measured Maximum Demand, demand supplied must be allocated to contracted Maximum Demand.

Revenue from Public Lighting (DREV0112) has been reported as either ACS or SCS based on its service classification for the regulatory control period.

Variables (DREV0101 - DREV0109, and DREV0112) have been adjusted from the billed amounts (with the basis above) to an unbilled basis. The adjustment is an alignment with the reporting in Ergon Energy's 2017-18 Annual Reporting RIN. The total at DREV01 using AR RIN (on an unbilled basis) is lower than the sum of the variables using the billed basis. The difference has been allocated on a pro rata basis over the

Variable	Addressing Basis of Preparation Requirements
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>variables listed above.</p> <p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to these variables contained in template 3, table 3.1.1.</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Ergon Energy commenced accrual accounting for Network charges in 2013-14, and continued in 2017-18. The impact of the change is a 1.4% decrease to DREV01 in 2017-18.</p>

Table 2: Revenue Grouping by Chargeable Quantity

Variable	Addressing Basis of Preparation Requirements
<p>Consistency with Notice requirements</p> <p>DREV0110- DREV0112 - (ACS) DREV0113 DREV01</p>	<p>All mandatory data entry fields shaded yellow, have been populated.</p> <p>Ergon Energy confirms, as required by the AER in Box 1, Revenue Financial Reporting Framework of Appendix B, Instructions and Definitions that Revenues reconcile to the Direct Control Services revenues in Regulatory Accounting Statements as per the Annual Reporting Requirements as submitted to the relevant regulator, for the year in question).</p> <p>Direct Control Services, which were charged by Ergon Energy to customers (in accordance with the EB RIN instructions at Section 2: Revenue) have been reported as</p> <ul style="list-style-type: none"> ▪ SCS: Network Services, Connection Services, Capital Contributions; and ▪ ACS: Public Lighting, Connection services, Metering services, and Ancillary services. <p>Public lighting for the recovery of construction and maintenance costs for 2017-18 has been reported as an ACS (refer to the source and methodology below at DREV0112: Public Lighting).</p> <p>Ergon Energy's approved services are as per Attachment 13 (Classification of Services) of the AER FDD. This correlates to Distribution use of System charges and Capital Contributions for SCS and Other Revenue and Contributions for ACS as displayed in the regulatory accounting statements.</p> <p>Revenue reported in prior regulatory accounting statements which is not a Direct Control Service charged by Ergon Energy to Customers include: profit or gross proceeds on sale of assets, interest received, shared assets revenue and Transmission use of System charges, Sales. Rather, they are specific reporting requirements of prior regulatory instruments.</p> <p>'Revenue from Unmetered Supplies' is the same for template 3, table 3.1.1 ('DREV0107) as for template 3, table 3.1.2 (DREV0205). Public lighting has been reported in variable (DREV0112) and has been excluded from 'revenue from unmetered supplies' (DREV0107). This is based on the interpretation of the definitions for unmetered supplies and customer numbers. DREV0107 states public lighting connections are not to be counted when calculating the number of unmetered customers.</p> <p>DREV01: Total revenue by chargeable quantity for 2017-18 is the Total SCS Revenue reported in Ergon Energy's 2017-18 Annual Reporting RIN less Jurisdictional scheme amounts and TUOS revenue.</p>
<p>Population of Actual Information in templates, including Source.</p>	<p>Ergon Energy has sourced the data from the Ergon Energy's Annual Reporting RIN's for 2017-18.</p>

Variable	Addressing Basis of Preparation Requirements
Methodology and assumption's applied in relation to Actual Information	<p>DREV0110: Metering Charges:</p> <ul style="list-style-type: none"> ▪ SCS is zero for 2017-18. All Metering is ACS in 2017-18. ▪ ACS for 2017-18. The revenue is taken directly from the Income Statement in Ergon Energy's 2017-18 Annual Reporting RIN. <p>DREV0111: Connection Charges:</p> <ul style="list-style-type: none"> ▪ SCS for 2017-18. This revenue is taken directly from the Income Statement in Ergon Energy's 2017-18 Annual Reporting RIN. It is the Contributions in SCS. ▪ ACS for 2017-18. This revenue is taken directly from the Income Statement in Ergon Energy's 2017-18 Annual Reporting RIN. It is the total of the Connection services column. <p>DREV0112: Public Lighting:</p> <ul style="list-style-type: none"> ▪ SCS for years 2017-18. Ergon Energy has sourced information from PEACE monthly billing reports. ▪ ACS for 2017-18. The revenue has been taken directly from the Income Statement in Ergon Energy's 2017-18 Annual Reporting RIN. It is the total of the Public Lighting column. <p>DREV0113: Revenue from Other Sources:</p> <ul style="list-style-type: none"> ▪ SCS, nothing to report. ▪ ACS for 2017-18. The revenue has been taken directly from the Income Statement in Ergon Energy's 2017-18 Annual Reporting RIN. It is the total of the Ancillary network services column. <p>Variables DREV0110, DREV0111, DREV0112 (ACS), DREV0113, and DREV01, are derived from Ergon Energy's 2017-18 Annual Reporting RIN. No adjustment is required for an unbilled basis, as the AR RIN has been prepared on an unbilled basis. Variable DREV0112 (SCS) has been adjusted from a billed basis to an unbilled basis.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to these variables contained in template 3, table 3.1.2.

Variable	Addressing Basis of Preparation Requirements
estimates.	
Changes in Accounting Policies (Financial information - Actual or Estimated)	Ergon Energy commenced accrual accounting for Network charges in 2013-14, and continued in 2017-18. The impact of the change is a 1.4% decrease to DREV01.

Table 3.1.2 – Revenue Grouping by Customer Type or Class

Template 3, table 3.1.2 requires Ergon Energy to allocate revenues to the customer type or class that most closely reflects the customers from which revenues are received. Revenues that Ergon Energy cannot allocate to the customer types DREV0201-DREV0205 must be reported against 'Revenue from other Customers' (DREV0206).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for 'Revenue Grouping by Customer Type or Class'. Of note, DREV02 'Total Revenue by Customer Class' represents the sum variables DREV0201-DREV0206, and is therefore implicitly addressed in the comments below.

Table 3: Revenue Grouping by Customer Type or Class

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All mandatory data entry fields shaded yellow, have been populated. Ergon Energy confirms, as required by the AER in Box 1, Revenue Financial Reporting Framework of its Instructions and Definitions, that Revenues reconcile to the Direct Control Services revenues in Regulatory Accounting Statements as per the Annual Reporting Requirements (AER defined term) as submitted to the relevant regulator, for the year in question.
DREV0201-	'Revenue from Unmetered Supplies' is the same for template 3, table 3.1.1 ('DREV0107') as for template 3, table 3.1.2 (DREV0205).
DREV0206 DREV02	Population of Actual Information in templates, including Source. For year 2017-18, data has been sourced from Ergons' billing system PEACE. Monthly billing reports DMK540, based on Statement of Charges monthly periods, are collated to provide actual data required. This data is then adjusted for Accrual data. Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to variables contained in Template 3, table 3.1.2. The disaggregation for all other variables is also based on Actual data. In addition to the calculations above DREV0201 – DREV0204 have been adjusted from a billed basis to an unbilled basis on a pro-rata basis. The total at DREV02 must align with the total at DREV01. Therefore

Variable	Addressing Basis of Preparation Requirements
	<p>the total unbilled amount for DREV0201 – DREV0204 is equal to the total of DREV01 less DREV0205 and DREV0206 on an unbilled basis.</p> <p>DREV0205 equals DREV0107, and DREV0206 equals the sum of DREV0111 and DREV0112.</p> <p>The total unbilled amount for DREV0201 – DREV0204 is calculated and the difference between that and the billed amount for those variables is added as an adjustment amount to present those variables on an unbilled basis.</p>
<p>Methodology and assumption's applied in relation to Actual Information</p>	<p>Ergon Energy can identify revenue to the disaggregation required except for Line items DREV0203 and DREV0204 - spilt up of demand customers into High Voltage and Low Voltage connections where an estimated calculation of s small propotion of data is required. – see Population of Esitimated information section below.</p> <p>Capital Contributions have been recorded as 'Revenue from Other Customers' in Table 3.1.2 'Revenue grouping by customer type or class' as opposed to the customer type variables set by the AER. Unlike DUOS revenue which can be allocated to customer type variables based on network tariff codes (refer above); Contributions don't have a secondary system to verify the customer classes to allow mapping to these categories. Therefore, Ergon Energy has adopted the approach in the Instructions and Definitions document which states:</p> <ul style="list-style-type: none"> ▪ Revenues that Ergon Energy cannot allocate to the customer types DREV0201–DREV0205 must be reported against 'Revenue from other Customers' (DREV0206).
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.1, table 3.1.2. except for Line items DREV0202 and DREV0203.</p> <p>Ergon Energy can identify revenue to the disaggregation required except for the spilt of SAC demand customers into High Voltage and Low Voltage connections resulting in an estimated calculation. In 2017-18 Ergon dis-continued the SAC Demand High Voltage Network Tariff Code, and various high voltage connections were allocated to other SAC Demand and Energy Network Tariffs. At present, we have no method of identifying if SAC Demand network connections are at High or Low voltage.</p> <p>For 2017-18, to obtain an estimated value, standing data from all high voltage connections in the previous year was used to identify which current year values to report for SAC Demand High Voltage connections. As this does not take into account new SAC high voltage connections, or prior year connections at high voltage that may have changed to low voltage connections, reporting of values have moved to Estimates.</p>

Variable	Addressing Basis of Preparation Requirements
Changes in Accounting Policies (Financial information - Actual or Estimated)	As per AASB 118 Revenue; Ergon Energy commenced accrual accounting for unbilled network charges in 2013-14 and continued in 2017-18. Template 3.1, Table 3.1.2 has been prepared on an unbilled basis for 2017-18. The impact of the change is a 1.4% decrease to DREV02.

Table 3.1.3 Revenue (Penalties) Allowed (Deducted) Through Incentive Schemes

Template 3.1, table 3.1.3 requires Ergon Energy to report the penalties or rewards of incentive schemes. The penalties or rewards from the schemes applied by previous jurisdictional regulators that are equivalent to the Service Target Performance Incentive Scheme (STPIS) or Efficiency Benefit Sharing Scheme (EBSS) must be reported against the line items for those schemes.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for 'Revenue (penalties) allowed (deducted) through incentive schemes'. Of note, DREV03 'Total revenue of incentive schemes' represents the sum variables DREV0301-DREV0305 and is therefore implicitly addressed in the table below.

Table 4: Revenue (Penalties) Allowed (Deducted) through Incentives Schemes

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All mandatory data entry fields shaded yellow, have been populated.
DREV0301	Ergon Energy confirms that revenues reported in template 3.1, table 3.1.3 reflect the effect on revenues of incentive schemes in the year that the penalty or reward is applied (as opposed to when it was earned which depending on the scheme may be in earlier years).
-	Ergon Energy confirms, as required by the AER in Box 1, Revenue Financial Reporting Framework of Appendix B, Instructions and Definitions that Revenues reconcile to the Direct Control Services revenues in Regulatory Accounting Statements as per the Annual Reporting Requirements (AER defined term) as submitted to the relevant regulator, for the year in question.
DREV0305	As confirmed by the AER on 1 October 2014, the following variables are not applicable to Ergon Energy and accordingly have not been populated:
DREV03	<ul style="list-style-type: none"> • DREV0303 F-Factor [Victorian specific factor]; • DREV0304 S-Factor True up [Victorian specific factor capturing the close out of the old ESCV s-factor scheme]. •

Variable	Addressing Basis of Preparation Requirements
Population of Actual Information in templates, including Source.	<p>Consistent with prior submissions and advice received by the AER on 22 September 2017, Ergon Energy has also not populated the variable 'DREV0305 Other' for 2017-18.</p> <p>Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 (consistent with 2017-18). Therefore, care should be taken when reviewing variable data for 2017-18 against submissions prior to 2013-14.</p>
Methodology and assumption's applied in relation to Actual Information	<p>Incentive schemes applicable to Ergon Energy relate to the EBSS and STPIS schemes – commencing from 1 July 2010.</p> <p>EBSS payments for performance during 2010-15 are a component of the building blocks set in the relevant AER distribution determination. The EBSS payment for 2017-18 has been sourced from the AER's SCS PTRM handed down as part of the final determination.</p> <p>STPIS reward / penalty payments are added to revenues during the annual Pricing Proposal approval process. The reward / penalty under the STPIS scheme has been based on the STPIS revenue adjustment included in the TAR formula in the 2017-18 Pricing Proposal</p> <p>The STPIS reward (DREV0302) has been calculated based on data in the TAR formula in the 2017-18 Pricing Proposal. Consistent with advice received from the AER on 14 September 2017, to reflect Ergon Energy's underlying performance results data has been based on STPIS reward implicitly included in revenues for pricing (i.e. s factor prior to removing prior year s factor impact).</p> <p>The EBSS payment (DREV0301) has been calculated based on data in the AER's Final Determination SCS PTRM. This was the PTRM used to set prices from 2017-18.</p> <p>The EBSS payment has been reconciled against data included in Attachment 1 of the AER's final determination.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.1, table 3.1.3.</p>

Variable	Addressing Basis of Preparation Requirements
Changes in Accounting Policies (Financial information - Actual or Estimated)	No accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice, in relation to variables contained in template 3.1, table 3.1.3.

Economic Benchmarking RIN Basis of Preparation



Template 3.2 Opex

Template 3.2.3 Provisions

1 July 2017 to 30 June 2018



Version Control

Version	Date	Description
1.0	31/10/18	Final as submitted to AER on 31 October 2018

Foreword

In response to requirements of the Australian Energy Regulator's (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.2 Opex and Template 3.2.3 Provisions of Ergon Energy's completed 2017-18 Economic Benchmarking RIN templates (2017-18 EB RIN Templates), this Basis of Preparation document has been prepared by Ergon Energy with a view to demonstrate compliance with the Notice, in respect of:

- demonstrate how the information provided in relation to in Template 3.2 Opex and Template 3.2.3 Provisions (and associated Tables and/or variables) is consistent with the requirements of the Notice;
- explain the source from which Ergon Energy obtained the information provided in the template; and
- explain the methodology Ergon Energy applied to provide the required information, including any assumptions Ergon Energy made.

In circumstances where Ergon Energy has provided input using Estimated Information in relation to Template 3.2 Opex and Template 3.2.3 Provisions, Ergon Energy has made comment herein as to:

- why an estimate was required, including why it was not possible to use Actual Information; and
- the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is a best estimate, given the information sought in this Notice.

Over and above this, Appendix B, Instructions and Definitions section 1.1.2 note (5) requires an additional minimum requirement for the Basis of Preparation for variables that contain Financial Information (Actual and Estimated) where accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice. In such instances, the relevant Basis of Preparation must include an explanation as to the:

- nature of the change; and
- impact of the change on the information provided in response to the notice.

Section 1.1.1 of the Appendix B, Instructions and Definitions also indicates which variables may not be applicable to Ergon Energy as displayed by yellow, orange, or blue shading in the Economic Benchmarking data Templates.

No additional requirements were identified as requiring provision of additional information or attachment/s over and above completed templates or Basis of Preparation.

This Basis of Preparation document should be read in conjunction with the information presented in Template 3.2 Opex and and Template 3.2.3 Provisions (Actual, Estimated or Consolidated) in Ergon Energy's completed 2017-18 EB RIN Templates.

Of note, the AER reissued Economic Benchmarking RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 31 May 2018. The reissued (protected) templates allow for submission of the 2017-18 Regulatory Year data only. Regard has also been given to the clarification provided by the AER (24 October 2016) relative to ongoing compliance matters including auditing requirements, and specifically the provision of 'actuals' and 'estimates' (and exemptions therein).

Enquiries or further communications should be directed to:

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Template 3.2 Opex

The AER requires Ergon Energy to provide Operating Expenditure (Opex) by category to identify the drivers of change in the partial productivity of Opex. Ergon Energy understands that the AER are requesting Opex data for economic benchmarking purposes, as the key input required for Distribution Network Service Providers (DNSP) to deliver their services. It is further understood that the AER believe collecting this information will also allow for the costs of providing these services to be taken into account when conducting sensitivity analysis.

The AER also requires Opex to be reported for Network Services as these are the services that the AER intends to analyse in their economic benchmarking.

Further, Opex is required in accordance with both historical and current reporting arrangements such that the effect of any Material changes in reporting approach on efficiency measurement can be taken into account. The AER suggests that a *Material* change would include a change in capitalisation policy that significantly shifts costs from Opex to capital expenditure (Capex) or a change in the categories of Opex reported. Importantly, the Economic Benchmarking RIN Explanatory Statement Section 4.1 requires an Opex recast when changes occur that result in a 'material' movement in opex of just half a percent of total SCS-opex (in the year the change occurred).

Where Opex is not incurred for a particular variable, zeroes ('0') are permitted, including where Ergon Energy does not provide a service as part of (for example) Standard Control Services (SCS) or Alternative Control Services (ACS).

Finally, Opex for high voltage customers must be reported in terms of end user costs (not SCS). This is to represent the cost Ergon Energy would have incurred had it been responsible for operating and maintaining the electricity Distribution Transformers that are owned by its high voltage customers.

Table 3.2.1 – Opex Categories

Template 3.2, table 3.2.1 requires Ergon Energy to report Opex in accordance with the categories reported in response to Annual Reporting Requirements (AER defined term).

Current Opex Categories and Cost Allocations

Of note, the blue shaded cells of template 3.2, table 3.2.1 become compulsory only where there has been a Material change (over the course of the back cast time series) in Ergon Energy's:

- Cost Allocation Approach;
- Basis of preparation for its Regulatory Accounting Statements; or
- Annual Reporting Requirements.

Although not specifically referencing Table 3.2.2, in the context of Table 3.2.2 a material change is denoted by the AER to be a change in Opex of greater than half of a per cent of total SCS (Opex) in the year that the change occurred.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for 'Current Opex categories and Cost Allocations'. Of note, DOPEX01 'Total Opex' represents the sum of all variables DOPEX0101-DOPEX0116, and is therefore implicitly addressed in the table below.

Table 1: Current Opex Categories and Cost Allocations

Variable	Addressing Basis of Preparation Requirements
<p>Consistency with Notice requirements</p> <p>DOPEX0101-DOPEX0116</p> <p>DOPEX01</p>	<p>Variables DOPEX0101 – DOPEX0116 (and subsequently, total DOPEX01) are considered mandatory and have been populated by Ergon Energy.</p> <p>Variables DOPEX0101 – DOPEX0103 have been assigned a category name. Variable DOPEX0104—DOPEX0116 represent additional variables (rows) inserted for other Opex categories as required by Ergon Energy and allowed for under the Notice Instructions and Definitions.</p> <p>Ergon Energy confirms, as required by AER in Box 2, Reporting Framework – Table 3.1.1 Current Opex categories and allocations in its Instructions and Definitions that Opex has been prepared in accordance with Ergon Energy current approved AER Cost Allocation Method (CAM). Directions within the Annual Reporting Requirements for the most recently completed RIN as submitted to the AER have been applied.</p> <p>Opex has been reported in accordance with the categories required by the AER’s Notice.</p> <p>Ergon Energy does not currently own, control or operate any dual-function assets for inclusion in Opex. Ergon Energy does not have any subsidiaries which provide operating and maintenance services to the DNSP therefore reporting of margins are not applicable.</p> <p>Where relevant (namely, during the current regulatory control period), total Opex equals that reported against the Annual Reporting Requirements (AER defined term) provided to the AER or Queensland Competition Authority (QCA) respectively.</p>
<p>Population of Actual Information in templates, including Source.</p>	<p>Ergon Energy has sourced the data used to populate template 3.2, table 3.2.1 from the audited Ellipse general ledger for the current year.</p>
<p>Methodology and assumption’s applied in relation to Actual Information</p>	<p>Using codes contained within the Ellipse General Ledger mapped to AER reporting categories, for example: Activity 52130 (Preventative Meters) is mapped to variable Preventive Maintenance. This is the same mapping process adopted for reporting the Annual Reporting RINs.</p>

Variable	Addressing Basis of Preparation Requirements
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) for 2017-18 in relation to all variables contained in template 3.2, table 3.2.1
Changes in Accounting Policies (Financial information - Actual or Estimated)	<p>The AER approved Ergon Energy's CAM in July 2014, effective from the 1 July 2015, introducing changes compared to the prior CAM primarily for the following:</p> <ul style="list-style-type: none"> ▪ Reclassification of services (AER FDD Attachment 13) from SCS to ACS, predominately for Real Estate Developments and Type 5 & 6 Metering; ▪ Any immaterial unallocated overhead balances remain unallocated to the Distribution Business at year end, as opposed to recognising as Regulated Opex; and ▪ Redundancies are recognised as Regulated Opex costs.

Table 3.2.2 – Opex Consistency

The AER requires data in relation to consistent Opex line items for economic benchmarking. Network Services Opex is requested as this the core service which the AER intends to benchmark. Other services are collected so that their impact on productivity can be assessed and they can be incorporated or excluded from the services being benchmarked if necessary.

Opex Consistency – Current Cost Allocation Approach

Template 3.2, table 3.2.2 requires Ergon Energy to report Opex Variables in accordance with its current reporting arrangements (such as its Cost Allocation Approach). These variables are only required to be completed if there has been a Material change (over the course of the back cast time series) in Ergon Energy's:

- Cost Allocation Approach, or
- Basis of Preparation for its Regulatory Accounting Statements, or
- Annual Reporting Requirements (AER defined term).

A material change in this context is defined by the AER to be a change in Opex of greater than half of a per cent of total SCS (Opex) in the year that the change occurred.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for 'Opex Consistency – Current Cost Allocation Approach'.

Table 2: Opex Consistency – Current Cost Allocation Approach

Variable	Addressing Basis of Preparation Requirements
<p>Consistency with Notice requirements</p> <p>DOPEX0201-DOPEX0206</p>	<p>Variables DOPEX0201 – DOPEX0206 are considered mandatory, and have been populated by Ergon Energy.</p> <p>Ergon Energy confirms, as required by the AER in Box 4, Reporting Framework – Table 3.2.1 Opex Consistency - Current Cost Allocation Approaches in its Instructions and Definitions that Opex has been prepared for the 2017-18 financial year in accordance with Ergon Energy's current AER CAM. For clarity, the AER Classification of Services per the current regulatory control period (2015-20) as referenced in that CAM have been applied for Opex tables 3.2.2</p> <p>Opex has been reported in accordance with the categories required by the AER's Notice.</p> <p>Opex for transmission connection point planning is considered a Network Service as it is an activity involved in planning the network. In accordance with the RIN Instructions and Definitions, this amount has been included under both variables DOPEX0201: Opex for network services and DOPEX0206: Opex for transmission connection point planning, resulting in a double count of this amount in Table 3.2.2.</p> <p>As Ergon Energy does not currently own, control or operate any dual-function assets, there is no associated Opex to report. Ergon Energy does not have any subsidiaries which provide operating and maintenance services to the DNSP therefore reporting of margins are not applicable.</p> <p>Ergon Energy has prepared the Opex line items in a consistent manner to that of Opex reported in response to the AER's 2015-2016 Annual Reporting Requirements.</p>
<p>Population of Actual Information in templates, including Source.</p>	<p>Ergon Energy has sourced the data used to populate template 3.2, table 3.2.2 from the Ellipse General Ledger.</p>
<p>Methodology and assumption's applied in relation to Actual Information</p>	<p>Ergon Energy extracted the Ellipse Trial Balance, created a Table containing mappings between the Ellipse Activities and product codes to the EB RIN Variables (DOPEX0201 - DOPEX0206) and a query was run to extract costs against relevant variables.</p> <p>Transmission Point Planning contained in template 3.2, table 3.2.2.</p> <p>Actual Information for DOPEX0206 Opex for transmission connection point planning has been prepared using actual hours worked and the number of staff involved in meetings to arrive at on costs, and travel and accommodation costs for the current</p>

Variable	Addressing Basis of Preparation Requirements
	year.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' for 2017/18 (as per the AER's defined term) in relation to all variables.
Changes in Accounting Policies (Financial information - Actual or Estimated)	<p>The AER approved Ergon Energy's CAM in July 2014, effective from the 1 July 2015, introducing changes compared to the prior CAM primarily for the following:</p> <ul style="list-style-type: none"> Reclassification of services (AER FDD Attachment 13) from SCS to ACS, predominately for Real Estate Developments and Type 5 & 6 Metering; Any immaterial unallocated overhead balances remain unallocated to the Distribution Business at year end, as opposed to recognising as Regulated Opex; and Redundancies are recognised as Regulated Opex costs.

Table 3.2.4– Opex for High Voltage Customers

AER requires Ergon Energy to report the amount of Opex that it would have incurred had it been responsible for operating and maintaining the electricity Distribution Transformers that are owned by its high voltage customers.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Template 3, 'Opex for High Voltage Customers'.

Table 3: Opex for High Voltage Customers

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	DOPEX0401 is considered a mandatory variable and has been populated by Ergon Energy.
DOPEX0401	It is noted that data in this table will not reconcile to information reported in response to Annual Reporting RINs provided by Ergon Energy, as we do not capture costs in relation to distribution transformers owned by HV customers.
Population of Actual Information in templates,	Ergon Energy has sourced the data from Ellipse using Artemis 7 (SPARQs and Ergon Energy's Programme Management

Variable	Addressing Basis of Preparation Requirements
including Source.	<p>Tool) for actual costs for distribution maintenance.</p> <p>Variable DPA0502: Distribution transformer capacity owned by High Voltage Customers (MVA) was also used in arriving at an estimate (refer to Table 3.5.2 Transformer Capacities Variables for a detailed explanation of the source for the data).</p>
Methodology and assumption's applied in relation to Actual Information	Refer response to minimum requirement below, which details the methodologies applied to provide Estimated Information including assumptions made.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	<p>Actual Information for DOPEX0401 is unavailable. Accordingly, Ergon Energy has provided 'Estimated Information' (as per the AER's defined term) in relation to DOPEX0401 - Opex for High Voltage Customers.</p> <p>On page 22 of the Instructions and Definitions document issued by the AER in November 2013, it states</p> <p><i>"When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Ergon Energy can provide Actual Information for the Variables in Table 3.4 [renamed table 3.2.4] it must do so; otherwise Ergon Energy must provide Estimated Information."</i></p> <p>As required by the AER's instructions and definitions, DOPEX0401 was estimated based on the Opex Ergon Energy incurs for operating similar Megavolts-ampere (MVA) capacity Distribution Transformers within its own network.</p> <p>The total annual cost of maintenance for distribution transformers (owned by Ergon Energy) was obtained for 2017-18 from Artemis 7. The total annual maintenance cost for distribution transformers owned by Ergon Energy was then multiplied by the percentage of Ergon Energy's distribution transformers greater than 500kVA capacity to obtain the annual maintenance cost of >500kVA transformers owned by Ergon Energy. The annual maintenance cost of the >500kVA transformers owned by Ergon Energy was then divided by the total MVA of the >500kVA transformers owned by Ergon Energy to give the per-MVA cost of maintaining Ergon Energy owned transformers >500kVA.</p> <p>There are no customers below 500kVA and connection policies have freed up conditions regarding HV customers such that some are now connected with as low as 500kVA capacity requirements, versus a previous minimum of 1,000kVA, making 500kVA a suitable delineating point. Therefore, the cost of maintenance for Ergon Energy's transformers above 500kVA was calculated. HV Transformer capacity owned by Customers (MVA) was multiplied by the per-MVA cost (\$/MVA) of maintaining Ergon Energy owned transformers > 500kVA to provide an estimate of the cost of</p>

Variable	Addressing Basis of Preparation Requirements
	maintaining the distribution transformers owned by customers. Base year for Distribution Transformer numbers is 2017-18.
Changes in Accounting Policies (Financial information - Actual or Estimated)	<p>Changes in accounting policies adopted by Ergon Energy are not relevant to costs incurred in relation to external customers, other than in relation to components of data being utilised for the estimate provided (that is, Opex).</p> <p>Costs have been presented on a current cost approach basis in that it is consistent with the most recent Annual Reporting Requirements and the 2017-18 allocation of costs in the CAM.</p>

Template 3.2.3 – Provisions

The AER requires Ergon Energy to provide information in relation to each of Ergon Energy's individual Provisions, namely, the Opex and Capex components of Provisions in relation to SCS only.

Table 3.2.3 – Provisions

The AER requires Ergon Energy to report financial information on provisions for SCS in accordance with the requirements of the Cost Allocation Approach and the Regulatory Accounting Statements that were in effect for the relevant Regulatory Year.

Ergon Energy is required to report financial information for each of its individual provisions. That is, each account which records a specific present liability of an entity to another entity.

The Opex and Capex components of each provision are required to be separately reported in tables provided in Template 3.2.3.

Ergon Energy Provisions

Ergon Energy notes the following provisions have been reported (additional rows inserted as required):

- **Restructure:** The restructure provisions are an estimate of the amounts required to provide redundancy payments for employees.
- **Employee benefit on-cost provisions:** The employee benefit on-cost provisions consist of provisions for workers compensation and payroll tax on employee benefits.
- **Employee Entitlement Provisions** consist of Annual Leave, Long Service Leave, Vested Sick Leave, and Superannuation on employee entitlements.
- **Rehabilitation:** The rehabilitation provisions are an estimate of the amounts required to rehabilitate specifically identified sites occupied by Ergon Energy offices, substations, power stations and workshops.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Template 3, 'Provisions' – Opex component

Table 4: Provisions - Opex Component

Variable	Addressing Basis of Preparation Requirements
DOPEX0301(A-H); DOPEX0302(A-H); DOPEX0305(A-H);	<p>Consistency with Notice requirements</p> <p>Variables considered mandatory have been populated by Ergon Energy, relative to each Provision.</p> <p>Ergon Energy confirms, as required by the AER in Box 6, <i>Reporting Framework for Provisions</i> in its RIN</p>

Variable	Addressing Basis of Preparation Requirements
DOPEX0308(A-H); DOPEX03011(A-H); DOPEX0314(A-H)	Instructions and Definitions, that provisions are reported in accordance with the principles and policies within the Annual Reporting Requirements (AER defined term) for the Regulatory Year.
Population of Actual Information in templates, including Source.	Data has been sourced from the Ergon Energy general ledger.
Methodology and assumption's applied in relation to Actual Information	<p data-bbox="772 479 927 506">Assumptions</p> <p data-bbox="772 546 1437 647">The difference in PP&E allocation percentages between the current regulatory year and prior regulatory year is treated as follows:</p> <ul data-bbox="772 674 1410 831" style="list-style-type: none"> <li data-bbox="772 674 1410 741">▪ adjustments that resulted in increased provisions are assumed to be additions to provisions; and <li data-bbox="772 763 1410 831">▪ adjustments that resulted in decreased provisions are assumed to be unused amounts reversed. <p data-bbox="772 857 927 884">Methodology</p> <p data-bbox="772 911 1406 978">(1) The Restructure Provision has been calculated on the following basis:</p> <p data-bbox="772 1005 1437 1140">Increases to the Restructure Provision are deemed to be the redundancy provision of employees who are expected to leave the company on a voluntary redundancy basis</p> <p data-bbox="772 1167 1394 1301">Used is deemed to be the redundancy provision for those employees whose employment with the organisation has been terminated and a redundancy payment has been made to the employee</p> <p data-bbox="772 1328 1378 1395">Redundancy provision calculations are provided by Human Resources</p> <p data-bbox="772 1422 1426 1489">The SCS portion is based on the service classifications split of the asset base.</p> <p data-bbox="772 1516 1437 1718">(2) The Employee Benefit Provision and the Annual Leave Provision and the Super on Employee Entitlements Provision have been calculated using the credit values appearing on the Ellipse transaction listing as increases to the provision and using the debits on the Ellipse transaction listing as used.</p> <p data-bbox="772 1744 1426 1901">The SCS portion is based on the service classifications split of the asset base, then split between Opex and Capex using the Opex/Capex overhead split using AER Approved CAM for 2017-18.</p> <p data-bbox="772 1906 1426 2013">(3) The Rehabilitation Provision has been split as per classification of individual sites, i.e. regulated sites and non-regulated sites. The value of the movement has</p>

Variable	Addressing Basis of Preparation Requirements
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>been allocated 100% to OPEX and nil to CAPEX to correctly reflect the activities used in the journal entries. If the movement in the Rehabilitation provision was due to Revalued assets, (i.e. posted to Asset Revaluation Reserve) this is classified as Other.</p> <p>Unused amounts reversed during the period is calculated by taking the write back provisions (to opex) figure from the Rehabilitation TAB within the provisions workings workbook.</p> <p>(4) Vested Sick Leave is for control room employees only, therefore classified as SCS Opex.</p> <p>The Vested Sick leave Provision has been calculated using the credit values appearing on the Ellipse transaction listing as increases to the provision and using the debits on the Ellipse transaction listing as used. .</p> <p>Adjustments are then applied to these values based on the increase during the period in the discount amount arising from the passage of time and the effect of any change in the discount rate.</p> <p>(5) The Long Service Leave Provision has been calculated using the payroll entries which represent leave taken by employees- these appear as debits on the Ellipse transaction listing as 'OR' in reference 4. These transactions are deemed to be used</p> <p>The balance is then split between the time value of money and the increases derived from the Ellipse transaction listing. The time value of money is derived from the Long Service Leave calculation model using the corporate bond rates and then the corporate bond rates are removed to derive the undiscounted value. The time value is then the movement from 30 June last year to 30 June this year.</p>
<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3, table 3.2.3 – Opex components</p>	

Variable	Addressing Basis of Preparation Requirements
Changes in Accounting Policies (Financial information - Actual or Estimated)	There were no changes in accounting policies impacting Provisions during the 2017-18 year.

Capex Component

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Template 3.2.3, 'Provisions' – Capex components.

Table 5: Provisions - Capex Component

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>Variables are considered mandatory and have been populated by Ergon Energy relative to each provision. Additional rows for Provisions have been inserted as required.</p> <p>Ergon Energy confirms, as required by the AER in Box 6, <i>Reporting Framework for Provisions</i> in its Instructions and Definitions, that provisions are reported in accordance with the principles and policies within the Annual Reporting Requirements for the Regulatory Year.</p> <p>Furthermore, financial information on provisions reconciles to the reported amounts for provisions in the annual RIN or Regulatory Accounts information provided to the AER or QCA respectively.</p> <p>Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates in the past. While this is the same format as 2013-14, care should be taken when reviewing variable data for 2017-18 against prior submissions.</p>
DOPEX0301(A-H); DOPEX0303(A-H); DOPEX0306(A-H); DOPEX0309(A-H); DOPEX03012(A-H); DOPEX0314(A-H)	
Population of Actual Information in templates, including Source.	Data has been sourced from the Ergon Energy general ledger.
Methodology and assumption's applied in relation to Actual Information	Employee Benefits on-costs Provision and Other Provisions have been apportioned to regulated / non-regulated, and between service classifications based on asset base, then split between Opex and Capex using the Opex/Capex overhead split based on the AER Approved CAM. Provision for Annual Leave, Long Service Leave, & Super on Employee Entitlements have been apportioned to regulated/non-regulated, and between service

Variable	Addressing Basis of Preparation Requirements
	classifications based on asset base, then split between Opex and Capex using the Opex/Capex overhead split based on the AER Approved CAM.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.2.3 – Capex components.
Changes in Accounting Policies (Financial information - Actual or Estimated)	There were no changes in accounting policies which impacted Provisions.

Economic Benchmarking RIN Basis of Preparation



Template 3.3 Assets (Regulatory Asset Base)

1 July 2017 to 30 June 2018



Version Control

Version	Date	Description
1.0	31/10/18	Final as submitted to AER on 31 October 2018

Foreword

In response to requirements of the Australian Energy Regulator's (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.3 Assets (Regulatory Asset Base) of Ergon Energy's completed 2017-18 Economic Benchmarking RIN templates (2017-18 EB RIN Templates), Schedule 1 paragraph 1.2 of the Notice requires Ergon Energy to provide a Basis of Preparation demonstrating how Ergon Energy has complied with the Notice, in respect of:

- each variable in each of the worksheets in the Economic Benchmarking Data Templates; and
- other information prepared in accordance with the requirements of the Notice and the RIN Instructions and Definitions at Appendix B to the Notice.

Schedule 2 paragraph 2.2 of the Notice requires the Basis of Preparation to provide, at a minimum, for each variable and any other information, commentary that:

- demonstrates how the information provided is consistent with the requirements of the Notice;
- explains the source from which Ergon Energy obtained the information provided; and
- explains the methodology Ergon Energy applied to provide the required information, including any assumptions Ergon Energy made.

In circumstances where Ergon Energy cannot provide input for a Variable using Actual Information and therefore must provide input using Estimated Information, Ergon Energy must also comment as to:

- why an estimate was required, including why it was not possible to use Actual Information; and
- the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is a best estimate, given the information sought in this Notice.

Over and above this, Appendix B, Instructions and Definitions section 1.1.2 note (5) requires an additional minimum requirement for the Basis of Preparation for variables that contain Financial Information (Actual and Estimated) where accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice. In such instances, the relevant Basis of Preparation must include an explanation as to the:

- nature of the change; and
- impact of the change on the information provided in response to the notice.

Section 1.1.1 of the Appendix B, Instructions and Definitions also indicates which variables may not be applicable to Ergon Energy as displayed by yellow, orange, or blue shading in the Economic Benchmarking data Templates.

No additional requirements were identified as requiring provision of additional information or attachment/s over and above completed templates or Basis of Preparation.

This Basis of Preparation document should be read in conjunction with the information presented in Template 3.3 Assets (Regulatory Asset Base) (Actual, Estimated or Consolidated) in Ergon Energy's completed 2017-18 EBRIN Templates.

Of note, the AER reissued Economic Benchmarking RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 31 May 2018. The reissued (protected) templates allow for submission of the 2017-18 Regulatory Year data only. Regard has also been given to the clarification provided by the AER (24 October 2016) relative to ongoing compliance matters including auditing requirements, and specifically the provision of 'actuals' and 'estimates' (and exemptions therein).

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Template 3.3 Asset (Regulatory Asset Base)

The AER requires data in relation to the opening value of assets, depreciation, the opportunity cost of funds used to purchase assets and capital gains to calculate an 'Annual User Cost of Capital' (AUCC) for each capital input category employed in the economic benchmarking model. This in turn requires Ergon Energy to allocate Regulatory Asset Base (RAB) assets that provide Standard Control Services (SCS) and Alternative Control Services (ACS) into the specified capital input categories.

Further, the AER is requesting RAB assets that provide SCS to be further disaggregated into a Network Services RAB. This is to align with the AER's definition of Network Services set out in Appendix B, Instructions and Definitions, and the categories of services (and assets) that will be used to benchmark Distribution Network Service Providers (DNSPs).

A 'Standard Approach' as described in section 4.1.1 of Appendix B must be followed. However an Optional Additional Approach may also be allowed (and provided as a separate excel sheet) where Ergon Energy believes it has sufficient information to provide a consistent RAB disaggregation that better reflects the values of its assets.

Ergon Energy must report RAB values in accordance with Box 7 - *Assets (RAB) Financial Reporting Framework* in Appendix B, Instructions and Definitions.

Where a RAB or RAB equivalent has been approved by the AER for ACS, Ergon Energy must report RAB values, or alternatively, report '0' in the cells.

Table 3.3.1 – Regulatory Asset Base Values

Template 3.3, table 3.3.1 (Regulatory Asset Base Values) requires Ergon Energy to report totals for RAB Financial Information for 2017-18, across Network Services, SCS and ACS.

Ergon Energy notes that variables DRAB0101 through DRAB0107 in table 3.3.1 represent RAB Financial Information for the total asset base. The RAB Financial Information for the total asset base is then further disaggregated into the lower level RAB Asset Categories for each category of service (SCS, ACS and Network Services) in table 3.3.2.

As Ergon Energy has addressed the minimum Basis of Preparation requirements at the lower level RAB Asset Categories, it is implicit that Ergon Energy has also addressed the minimum requirements for template 3.3, table 3.3.1. This is because all of the RAB values set out in template 3.3 have been calculated using a common Roll Forward Model (RFM) for each category of service (SCS, ACS and Network Services). As a result, the RAB values reported for the total asset base in table 3.3.1 will be consistent with the RAB values reported at the lower level RAB Asset Categories in table 3.3.2 for each category of service.

Table 3.3.2 – Asset Value Roll forward

Template 3.3, table 3.3.2 requires Ergon Energy to report RAB Financial Information by RAB Asset categories as per the definitions provided in Chapter 9 of the RIN Information and Definitions.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for the RAB 'Annual Value Roll Forward'.

Table 1: Asset Value Roll Forward – SCS and ACS

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p data-bbox="564 232 1410 338">Ergon Energy confirms, as required by the AER in Box 7, <i>Assets (RAB) Financial Reporting Framework</i> in Appendix B, Instructions and Definitions, that:</p> <ul data-bbox="564 360 1442 815" style="list-style-type: none"> <li data-bbox="564 360 1442 539">▪ Wherever possible, RAB financial information (capex, disposals and inflation) for SCS and ACS reconciles to decisions the AER has made in relation to RAB values for these services through the 2010-15 Ergon Energy Distribution Determination and in the 2015-20 Ergon Energy Final Determination; and <li data-bbox="564 562 1442 815">▪ Where forecast values (additions and disposals) were used in relation to a decision on RAB values (in the 2005-10 Distribution Determination and the 2010-15 Distribution Determination), these amounts have been replaced with actual values which reconcile to amounts reported in Regulatory Reporting Statements (RRS) for 2009-10 (i.e. additions for the last year of the previous regulatory period) and the Annual Performance RIN for 2014-15. <p data-bbox="564 837 1426 943">In accordance with the AER's email of 7 September 2016, Ergon Energy has deviated from the notice requirements by reporting forecast straight line depreciation, based on:</p> <ul data-bbox="564 965 1442 1285" style="list-style-type: none"> <li data-bbox="564 965 1426 1032">▪ The SCS and ACS capex approved by the AER in the 2015-20 Final Distribution Determination; <li data-bbox="564 1055 1442 1167">▪ The opening RAB for SCS and ACS approved by the AER in the 2015-20 Final Distribution Determination, adjusted to recognise 2014-15 actual capex and disposals; <li data-bbox="564 1189 1410 1285">▪ The remaining lives for SCS and ACS approved by the AER in the 2015-20 Final Distribution Determination, adjusted to recognise the 2014-15 actual capex and disposals. <p data-bbox="564 1308 1426 1413">For the purposes of reporting regulatory depreciation (which for 2017-18 is the sum of straight line depreciation and inflation of the 2017-18 opening RAB), Ergon Energy has reported:</p> <ul data-bbox="564 1435 1426 1666" style="list-style-type: none"> <li data-bbox="564 1435 1410 1576">▪ Actual inflation on the opening RAB for 2017-18 (using the actual inflation values for 2017-18 based on the Dec - Dec Weighted Average of 8 capital cities as published on the Australian Bureau of Statistics Website) <li data-bbox="564 1599 1426 1666">▪ Straight line depreciation for 2017-18, escalated by actual inflation in 2017-18 to bring the depreciation into nominal terms <p data-bbox="564 1688 1410 1794">As such, the reported regulatory depreciation value in the T3.3 EB RIN Template is the sum of the actual inflation of the opening RAB for 2017-18, and the forecast straight line depreciation for 2017-18.</p> <p data-bbox="564 1816 1442 1998">Ergon Energy has adopted the <i>Standard Approach</i>, with <i>Direct Attribution to the AER's economic benchmarking RAB Asset Classes</i>, as described in section 4.1.1 of Appendix B, Instructions and Definitions. For some non-system assets to the AER's 'other long life assets' and 'other short life asset categories' their categorisation has been ascertained by using</p>
DRAB0101-DRAB0107	
DRAB201-DRAB1107	
DRAB1201-DRAB1210	

Variable	Addressing Basis of Preparation Requirements
	<p>additional Ellipse source system extracts (additions report). This is discussed further in the table, in section C below.</p> <ul style="list-style-type: none"> ▪ RAB Asset Financial Information for remaining asset classes has been directly allocated into RAB Asset categories in accordance with definitions provided in chapter 9 of the Appendix B, Instructions and Definitions (Refer to Section C below). RAB values for each of the RAB Asset categories are exclusive of Capital Contributions. Total capital contributions for each relevant regulatory year are provided at DRAB13 ▪ Ergon Energy currently does not own, control or operate any Dual Function Assets ▪ Although Variable Codes DRAB0801 – DRAB0807 in relation to RAB Asset ‘Easements’ are shaded orange, to allow for blacked out data input, these cells have been populated. Ergon Energy has the ability to report Easements, and necessarily they are not included in the remaining categories. <p>In accordance with the instructions and definitions, Ergon Energy has only included RAB values for those services where the AER has approved a RAB or RAB equivalent. Therefore, for ACS, Ergon Energy has only reported RAB assets that provide ACS Street lighting Services and Type 5-6 Metering Services, consistent with the classification of service, and the RAB that was approved for these categories of service in Ergon Energy’s 2015-20 Distribution Determination. No RABs have been approved for any of Ergon Energy’s other categories of ACS (Quoted and Fee Based Services).</p>
<p>Population of Actual Information in templates, including Source.</p>	<p>For 2017-18, annual SCS and ACS (street lighting and Type 5-6 metering) financial information (additions, disposals and capital contributions) are sourced from the 2017-18 AER Annual Reporting RIN provided by Ergon Energy to the AER.</p> <p>Consistent with the AER’s Final Distribution Determination, from 2015-16 onwards capex recognised in the SCS RAB and therefore reported in the T3.3 RIN Template is exclusive of capital contributions.</p> <p>For each year from 2010-11 to 2013-14, the RAB financial information for SCS and ACS reconciles to decisions the AER has made in relation to RAB values for these services through the 2010-15 Ergon Energy Distribution Determination and in the 2015-20 Ergon Energy Final Determination.</p> <p>In accordance with the guidance provided by the AER in its email of 7 September 2016 to Ergon Energy, the 2014-15 estimated financial information contained within the AER’s 2015-20 final Distribution Determination has been replaced with actual financial information for 2014-15 as reported in the 2014-15 Annual Performance RIN. This means that closing RAB as at 30 June 2015, as reported in Template 3.3 of the Economic Benchmarking RIN, will not align with the opening RAB value for 1 July 2015 as approved by the AER in its 2015-20 final</p>

Variable	Addressing Basis of Preparation Requirements
	<p>Distribution Determination.</p> <p>Similarly, the 2009-10 estimated financial information contained within the AER's 2010-15 final Distribution Determination has been replaced with actual financial information for 2009-10 as reported in the 2009-10 RRS. The closing RAB values for each year from 1 July 2010 onwards will also not align with the closing RAB values calculated each year in the AER's 2010-15 RFM. This is because the AER's 2010-15 RFM recognises actual 2009-10 additions and disposals for the first time at the end of 2014-15, whereas in the T3.3 RIN template the actual 2009-10 additions and disposals is recognised in the year in which it is incurred, and rolled forward through to 1 July 2015.</p>
Methodology and assumption's applied in relation to Actual Information	<p>As noted above, Ergon Energy has with the exception of opening and closing RAB values;</p> <ul style="list-style-type: none"> ▪ Aligned actual financial information in the T3.3 template with that in the AER's 2015-20 Final Distribution Determination for Ergon Energy; ▪ Replaced all estimated financial information previously reported in Template 3.3 and in the AER's 2015-20 Final Distribution Determination for Ergon Energy with actual values; ▪ Reported actual additions, disposals and capital contributions for the 2017-18 regulatory year consistent with that in the 2017-18 Annual Reporting RIN, with additions adjusted for movements in provisions and shared asset usage. There were Nil ACS disposals in 2017/18. <p>In doing so, the opening and closing RAB values for SCS will not align with the corresponding RAB values in the AER's Final Determination RFMs.</p> <p>The methodology Ergon Energy applied for each of these steps listed above is set out below:</p> <ul style="list-style-type: none"> ▪ Roll forward mechanism – Consistent with the roll forward mechanism approved by the AER in the 2015-20 Final Distribution Determination, Ergon Energy has rolled forward the 1 July 2010 SCS RAB in two separate RFMs: <ul style="list-style-type: none"> ▪ A “legacy” SCS RFM which rolled forward those assets installed prior to 1 July 2010 ▪ A “capex” SCS RFM which rolled forward those assets installed on or after 1 July 2010 ▪ Ergon Energy has used the AER's RFM workbooks to perform the RAB roll forward to perform the RAB roll forward across multiple regulatory control periods, separate RFMs have been used for each regulatory control period and for each form of control. The complete set of RFMs for SCS are listed below: <ul style="list-style-type: none"> ▪ 2005-10 RFM for SCS ▪ 2010-15 RFM Legacy for SCS ▪ 2010-15 RFM Capex for SCS

Variable	Addressing Basis of Preparation Requirements
	<ul style="list-style-type: none"> ▪ 2015-20 RFM Legacy for SCS ▪ 2015-20 RFM Capex for SCS ▪ 2005-10 RFM for ACS ▪ 2010-15 RFM for ACS ▪ 2015-20 RFM for ACS <p>▪ Ergon Energy has largely retained the structure and calculations within the AER's RFMs without modification yet allowing for an annual change in WACC for the trailing cost of debt, and the use of forecast regulatory depreciation as reflected in the functionality of the AER's roll forward model version 2 published on the 15 December 2016. Ergon Energy has maintained its suite of models established in 2015-16 for reporting 2017-18 RAB values due to this alignment. Additionally, it was found in performing modelling using RFM version 2 resulted in some asset categories over depreciating at the end of their useful life when the forecast depreciation switch was applied. This is exacerbated for Ergon Energy as legacy models were established that contain asset categories with remaining lives < 5years. Until the error in functionality in the version 2 model is corrected, Ergon Energy will maintain its current suite of models. Additionally, the following changes have been made to enable the roll forward across multiple regulatory control periods for the purposes of populating the T3.3 template.</p> <p>Additions, Disposals and Capital Contributions</p> <ul style="list-style-type: none"> ▪ 2009-10 actual additions and disposals for SCS and ACS are entered in the 2005-10 RFM for SCS and 2005-10 RFM for ACS respectively. These replace the estimates for 2009-10 which were included in the AER's approved SCS RFM and Public Lighting RFM for the 2010-15 Final Distribution Determination. Consistent with the transitional arrangements at the time, capital contributions are not entered in the 2005-10 RFM for SCS ▪ Actual SCS additions and disposals (with disposals reported on a NBV basis) for 2010-11 to 2013-14 inclusive are entered in the 2010-15 Capex RFM for SCS. These values are consistent with those in the AER's SCS Capex RFM model approved for the 2015-20 Final Distribution Determination for Ergon Energy. Consistent with the transitional arrangements at the time, capital contributions are not entered in the 2010-15 RFM for SCS. No additions, disposals or capital contributions for 2010-11 to 2013-14 inclusive are entered into the 2010-15 Legacy RFM for SCS ▪ The term disposal value is not defined in the NER, however the AER considered that using the sale or depreciated value as the disposal value was acceptable in the AER's RFM Final Decision for Electricity Distribution Network Service Providers (June 2008). Ergon Energy adopted the sale value in its Regulatory Proposal to the AER for the 2015-20 regulatory control period, accepted by the AER. This is a

Variable	Addressing Basis of Preparation Requirements
	<p>change to the previous Regulatory Control periods approach using depreciated value.</p> <ul style="list-style-type: none"> ▪ Actual Public Lighting ACS additions, disposals and capital contributions for 2010-11 to 2013-14 inclusive have been included in the 2010-15 RFM for ACS. These values are consistent with those in the AER's Public Lighting RFM model approved for the 2015-20 Final Distribution Determination for Ergon Energy ▪ 2014-15 actual additions and disposals for SCS and ACS (as well as ACS Public Lighting capital contributions) are entered into the 2010-15 Capex RFM for SCS and the 2010-15 RFM for ACS respectively. These replace the estimates for 2014-15 which were included in the AER's approved SCS Capex RFM and Public Lighting RFM for the 2015-20 Final Distribution Determination. No additions, disposals or capital contributions for 2014-15 are entered into the 2010-15 Legacy RFM for SCS ▪ Actual 2017-18 additions and capital contributions for SCS and ACS (as well as SCS disposals) are included in the 2015-20 Capex RFM for SCS and 2015-20 RFM for ACS respectively. SCS additions have been adjusted to remove movements in provisions and shared asset usage. ACS actuals for 2017-18 include Public Lighting and Type 5-6 Metering additions, disposals and capital contributions, which reflects the change of service classification for Type 5-6 Metering from SCS to ACS as of 1 July 2015. No SCS additions, or capital contributions are entered into the 2015-20 Legacy RFM for SCS ▪ Actual 2017-18 disposals for SCS are split between the 2015-20 Capex RFM for SCS and 2015-20 Legacy RFM for SCS, depending on when the disposed assets were originally purchased. Disposed assets purchased prior to 1 July 2010 are included in the 2015-20 Legacy RFM for SCS, and those purchased on or after 1 July 2010 are included in the 2015-20 Capex RFM for SCS. <p>Opening RAB Values</p> <ul style="list-style-type: none"> ▪ The opening SCS RAB as at 1 July 2010 in the 2010-15 Legacy RFM for SCS is set equal to the closing RAB in the 2005-10 RFM for SCS as calculated in cells L359:L388 of the Total Actual RAB Roll Forward tab. Similarly, the opening ACS RAB as at 1 July 2010 in the 2010-15 RFM for ACS is set equal to the closing RAB in the 2005-10 RFM for ACS as calculated in cells L373 of the Total Actual RAB Roll Forward tab. ▪ This approach outlined in the previous bullet point differs from AER's RFM, which requires that the opening RAB, rather than the closing RAB, of the final year of the previous regulatory control period be entered. The reason Ergon Energy has deviated from the AER's RFM is to remove the need for the RFM to adjust for the difference between forecast and actual net capex in 2009-10. No adjustment is necessary as the actual 2009-10 additions and disposals are now available to be rolled into the RAB. However, this deviation and

Variable	Addressing Basis of Preparation Requirements
	<p>recognition of 2009-10 actuals in the opening 1 July 2010 RAB means that the opening and closing RAB values for SCS and ACS for 2010-11 onwards will not align with those in the AER's 2010-15 Final Distribution Determination RFMs.</p> <ul style="list-style-type: none"> ▪ Consistent with the AER's 2015-20 Final Distribution Determination, the opening RAB in the 2010-15 RFM Capex for SCS is set equal to zero. ▪ The opening SCS RAB as at 1 July 2015 in the 2015-20 Legacy RFM for SCS is set equal to the closing RAB in the 2010-15 Legacy RFM for SCS as calculated in cells R359:R388 of the Total Actual RAB Roll Forward tab. These cells in the 2010-15 Legacy RFM for SCS apply the same adjustments to the 30 June 2015 RAB as the AER to remove the value of those assets shared in the provision of ACS services (for those services reclassified in the 2015-20 Final Distribution Determination from SCS to ACS). ▪ As noted above, the approach outlined in the previous bullet point differs from AER's RFM. There is no need for the RFM to adjust for the difference between forecast and actual net capex in 2014-15 as the actual 2014-15 additions and disposals are now available to be rolled into the RAB. However, this deviation and recognition of 2014-15 actuals in the opening 1 July 2015 RAB means that the opening SCS RAB values for 1 July 2015 do not align with those in the AER's 2015-20 Final Distribution Determination RFM for SCS. ▪ The opening SCS RAB as at 1 July 2015 in the 2015-20 Capex RFM for SCS is set equal to the closing RAB in the 2010-15 Capex RFM for SCS as calculated in cells R359:R388 of the Total Actual RAB Roll Forward tab. These cells in the 2010-15 RFM Capex for SCS apply the same adjustments to the 30 June 2015 RAB as the AER to remove the value of those assets shared in the provision of ACS services (for those services reclassified in the 2015-20 Final Distribution Determination from SCS to ACS). ▪ The opening ACS RAB as at 1 July 2015 in the 2015-20 RFM for ACS is set equal to the sum of the Type 5-6 Metering opening RAB value on 1 July 2015 as approved by the AER in the 2015-20 Final Distribution Determination, and the Public Lighting closing RAB in the 2010-15 RFM for ACS as calculated in cells L373 of the Total Actual RAB Roll Forward tab. ▪ As noted above, this approach outlined in the previous bullet point differs from AER's RFM. There is no need for the RFM to adjust for the difference between forecast and actual net capex in 2014-15 as the actual 2014-15 additions and disposals are now available to be rolled into the RAB. However, this deviation and recognition of 2014-15 actuals in the opening 1 July 2015 RAB means that the opening Public Lighting RAB values for 1 July 2015 do not align with those in the AER's 2015-20 Final Distribution Determination RFM for Public Lighting.

Variable	Addressing Basis of Preparation Requirements
	<p>Straight Line Depreciation</p> <p>Ergon Energy has reported straight line (and implicitly, regulatory depreciation) for 2017-18 as 'Actual Information'. This is because:</p> <ul style="list-style-type: none"> ▪ The inflation of the opening RAB, which comprises part of the regulatory depreciation amount, is an actual value based on the escalation of the 2017-18 opening RAB by the actual 2017-18 inflation ▪ The forecast 2017-18 straight line depreciation, which comprises the remainder of the regulatory depreciation amount, is also considered to be 'Actual Information', because: <ul style="list-style-type: none"> ○ The AER's email of 7 September 2016 requires that Ergon Energy report straight line depreciation in accordance with that forecast by the AER for 2017-18 in its 2015-20 Final Distribution Determination. ○ Ergon Energy has been directed by the AER to use forecast depreciation therefore there is no other valid alternative by which to report this information. Forecast depreciation is obtainable from the 2015-20 Final Distribution Determination, and the AER's FDD RFM. It is a record used in Ergon's normal course of business for the purposes of reporting the RFM RAB that is not estimated or calculated by Ergon Energy as part of the EB RIN reporting process. <p>Of note, the 1 July 2015 Opening Asset Value included \$8.09M in equity raising costs which is used to calculate the inflation addition and forecast depreciation amounts included in Table 3.3.1. In Table 3.3.2 the inflation addition and forecast depreciation amount for equity raising costs has been excluded as the nature of the cost doesn't meet with asset class definitions for reporting this table. A difference arises between the opening and closing values as a result.</p> <p>Asset Lives</p> <ul style="list-style-type: none"> ▪ Asset lives – Ergon Energy has adopted the standard and remaining lives for SCS and ACS (Public Lighting) as approved by the AER in the 2015-20 Final Distribution Determination as at 1 July 2010 in the respective 2010-15 RFMs. Similarly, Ergon Energy has also adopted the standard and remaining lives for SCS and ACS (public Lighting and Type 5-6 Metering) as approved by the AER in the 2015-20 Final Distribution Determination as at 1 July 2015 in the respective 2015-20 RFMs. <p>Other Matters</p> <p>The above approach replaced previously reported RAB figures for SCS and ACS from 2009-10 to 2014-15 inclusive and by default has an impact on the Network Services RAB calculations. These updated values can be provided to the AER in a restated historical RIN submission, if required.</p> <p>Ergon Energy asset categories (as reported in the SCS and ACS RFMs and Annual Reporting RIN's) have been directly mapped to the required</p>

Variable	Addressing Basis of Preparation Requirements
	<p>economic benchmarking RAB asset categories, with the exception of some non-network asset categories (see below).</p> <p>For some non-network asset categories (buildings, motor vehicles and plant and equipment), the AER definitions require Ergon Energy to split assets between short and long-life assets categories. Ergon Energy does not report data on this disaggregated basis. However, asset additions are readily determined from the asset register along with their lives. This information was used to apportion the relevant opening balances, additions and disposals to the required short and long-life categories</p> <p>Ergon Energy has apportioned total buildings, motor vehicles and plant & equipment attributable to short and long life categories on the basis of asset addition for each asset. Asset additions are readily determined from the asset register along with the associated asset lives. With motor vehicles (as an example) heavy vehicles and a % of total vehicle additions was determined. This was then used to split total vehicle Capex between short and long lives. The same process was used for buildings and for plant & equipment. RAB disposals are allocated between short and long lived assets based on asset additions to these categories.</p>
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Page 26 of the Instructions and Definitions document issued by the AER in November 2013 states:</p> <p>“When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Ergon Energy can provide Actual Information for the Variables in Table 4.2 [renamed table 3.3.2] it must do so; otherwise Ergon Energy must provide Estimated Information.”</p> <p>Ergon Energy has provided ‘Actual Information’ (as per the AER’s defined term) for 2017-18. That is, the 2017-18 opening and closing RAB values, additions, disposals, capital contributions, forecast straight line depreciation and inflation of the 2017-18 opening RAB values are reported as actuals. As such, Ergon Energy has not reported any estimated values for SCS or ACS in 2017-18.</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Refer to Basis of Preparation for Template 3. Opex, which will discuss any changes in accounting policies impacting capex or opex (if at all) for the regulatory year.</p>

Table 2: Annual Value Roll Forward – Network Services

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>Ergon Energy has prepared the information for the Network Services RAB in accordance with the definition of Network Services set out in Appendix B, Instructions and Definitions. Further detail on how the information provided by Ergon Energy is consistent with the requirements and definitions of Network Services is discussed below.</p>
Population of Actual Information in templates, including Source.	<p>As defined by the AER for the purposes of the Economic Benchmarking RIN, Network Services are a subset of SCS excluding Connection Services, Type 5-7 Metering Services, Fee Based and Quoted Services and Street Lighting Services. In the case of Ergon Energy, consistent with the AER's definition of Network Services, we assume it is also necessary to exclude gifted assets (since these are all related to connection services) and also any assets included in the Network Services category that are not funded by Ergon Energy i.e. Network Services funded via capital contributions.</p> <p>Network Services data is derived from SCS data, which for 2010-11 to 2013-14 is aligned with the financial information (additions and disposals) used in the AER's Final Distribution Determination RFM (as discussed in the previous section above). 2014-15 to 2017-18 SCS actual additions and disposals are sourced from the 2014-15 to 2017-18 AER Annual Reporting RINs respectively, provided by Ergon Energy to the AER.</p> <p>Consistent with the SCS RAB values reported in the T3.3. RIN Template, the reported actual SCS additions used in calculating the Network Services net capex for the 2017-18 regulatory year are consistent with the SCS values in the 2017-18 Annual Reporting RIN, adjusted for movements in provisions and shared asset usage.</p> <p>Connection Services data is captured within the Ergon Energy "Connections" expenditure category. For 2017-18, the annual Connections expenditure values are sourced from the 2017-18 AER Annual Reporting RIN provided by Ergon Energy to the AER. Specifically, Connections expenditure includes:</p> <ul style="list-style-type: none"> ▪ New shared network assets for Standard Asset Customers (i.e. small domestic, rural and customer customers); ▪ New dedicated connection assets for Standard Asset Customers; and ▪ Testing and commissioning of all new shared network assets and connection assets for Standard Asset Customers only. <p>It explicitly excludes metering expenditure, connection expenditure for real estate developers and design, construction, test and commission costs for large commercial and industrial customers.</p> <p>As indicated above, Connections expenditure incorporates a portion of shared network expenditure (either funded by Ergon Energy or funded via capital contributions). To be consistent with the AER's definition of Network Services, we assume it is necessary for any Ergon Energy-funded shared network to be reported in the Network Services category, but any gifted assets and shared network not funded by Ergon Energy to be excluded. In order to derive the net value of shared network expenditure to be included in Network Services (and hence, the value of Connections expenditure to be removed from the SCS asset additions), it is necessary to:</p>
DRAB0101-DRAB0107	
DRAB201-DRAB1107	
DRAB1201-DRAB1210	

Variable	Addressing Basis of Preparation Requirements
	<ul style="list-style-type: none"> ▪ Identify the total amount of Connections expenditure related to the shared network and to dedicated connection assets; ▪ Identify that portion of the Connections expenditure that is not funded by Ergon Energy (i.e. capital contributions). <p>The net result of the above (i.e. total Connections expenditure related to connection assets (i.e. not shared and not contributed by customers) represents that portion of Connections expenditure that is required to be removed from SCS asset additions in order to determine the amount attributable to Network Services.</p> <p>Actual additions, disposals and capital contributions for 2017-18 associated with Street Lighting Services and Type 5-6 Metering Services (to be removed from SCS data and hence Network Services data) are sourced from Ergon Energy's 2017-18 Annual Reporting RIN templates.</p> <p>No adjustment is necessary in relation to Fee Based and Quoted Services since this expenditure is already excluded from the SCS data (and hence Network Services data).</p> <p>For 2017-18, the value of capital contributions (gifted assets and cash contributions) is sourced from the Ellipse General Ledger, and the 2017-18 Annual Reporting RIN.</p> <p>To be consistent with the AER's definition of Network Services, expenditure related to Connection services (and Capital Contributions), Type 5-7 Metering Services and Street Lighting Services were either removed or already excluded from the SCS data.</p>
<p>Methodology and assumption's applied in relation to Actual Information</p>	<p>Ergon Energy provides the following explanation of how actual RAB values for network services are reported in Table T3.3 of the EB RIN:</p> <ul style="list-style-type: none"> ▪ Roll forward mechanism – Consistent with the roll forward mechanism approved by the AER in the 2015-20 Final Distribution Determination, Ergon Energy has rolled forward the 1 July 2010 Network Services RAB in two separate RFMs: <ul style="list-style-type: none"> ▪ A “legacy” Network Services RFM which rolled forward those assets installed prior to 1 July 2010 ▪ A “capex” Network Services RFM which rolled forward those assets installed on or after 1 July 2010 ▪ Ergon Energy has used the AER's RFM workbooks to perform the RAB roll forward. To perform the RAB roll forward across multiple regulatory control periods, separate RFMs have been used for each regulatory control period and for each form of control. The complete set of RFMs for Network Services are listed below: <ul style="list-style-type: none"> ▪ 2005-10 RFM for Network Services ▪ 2010-15 RFM Legacy for Network Services ▪ 2010-15 RFM Capex for Network Services ▪ 2015-20 RFM Legacy for Network Services

Variable	Addressing Basis of Preparation Requirements
	<ul style="list-style-type: none"> ▪ 2015-20 RFM Capex for Network Services ▪ Ergon Energy has largely retained the structure and calculations within the AER's RFMs without modification, however the following changes have been made to enable the roll forward across multiple regulatory control periods for the purposes of populating the T3.3 template: <ul style="list-style-type: none"> ▪ <u>Additions, Disposals and Capital Contributions</u> ▪ Network services additions for 2009-10 to 2014-15 inclusive are calculated using the same approach as documented in the Basis of Preparation for the 2014-15 EB RIN. However, the SCS additions for 2009-10 and 2014-15, which form part of calculation of the Network Services additions, are now recognised as actuals. For this reason, the opening and closing Network Services RAB values for each year from 1 July 2010 onwards will not align with the values reported in the 2014-15 EB RIN table T3.3 ▪ Additions for Network Services for 2009-10 are entered into the 2005-10 RFM for Network Services. Actual disposals for 2009-10 are entered into the 2005-10 RFM for Network Services and are consistent with the SCS disposals values entered into the 2010-15 RFM Capex for SCS ▪ Additions for Network Services for 2010-11 to 2014-15 inclusive are entered into the 2010-15 RFM Capex for Network Services. Actual disposals for Network Services in 2010-11 to 2014-15 inclusive are entered into the 2010-15 RFM Capex for Network Services. The disposals values are consistent with the SCS disposals values entered into the 2010-15 RFM Capex for SCS. No additions or disposals are entered into the 2010-15 RFM Legacy for Network Services. Capital Contributions are not entered into the 2010-15 RFM Capex for Network Services or the 2010-15 RFM Legacy for Network Services ▪ Actual 2016-17 to 2017-18 additions and capital contributions are entered into the 2015-20 RFM Capex for Network Services and are calculated as follows: <ul style="list-style-type: none"> SCS Total Capital Expenditure, less SCS Total Disposals, less SCS Total Capital Contributions, less SCS LV services and meters, less Connections Capital Expenditure (net of meters and LV Services) that is <u>not</u> attributable to the shared network, equals Network Services Net Capital Expenditure ▪ The SCS Total Capital Expenditure, Total Disposals, Total Capital Contributions and LV services and meters is sourced from Ergon Energy's 2017-18 AP RIN Capex templates ▪ Connections Capital Expenditure is sourced from the general ledger, by

Variable	Addressing Basis of Preparation Requirements
	<p>asset class, from codes C2060 (domestic and rural connections), C2070 (small commercial and industrial connections) and C2080¹ (other) is pro-rated across both C2060 and C2070. Whilst these expenditures are exclusive of gifted assets and cash contributions, they are inclusive of both upstream shared network expenditure and dedicated connection asset expenditure.</p> <ul style="list-style-type: none"> ▪ To identify the upstream shared network expenditure component, the following approach is taken. <ul style="list-style-type: none"> ○ The LV Services and Meters asset classes are removed from both the C2060 and C2070 capital expenditures. This is because these asset classes are always 100% dedicated connection assets. ○ Then, the percentage of dedicated connection assets obtained from a sample of domestic and rural and small commercial and industrial connection projects is applied to the C2060 and C2070 capital expenditures respectively. This gives an indication of the upstream shared network component of the Connection Capital Expenditure that must be included in the total Network Services Capital Expenditure. ○ The remainder of the Connection Capital Expenditure, together with the LV Services and Meters capital expenditure, is the dedicated connection asset capital expenditure that must be removed from the SCS Capital Expenditure. ▪ There is currently a known limitation to the percentage of dedicated connection assets for domestic and rural and small commercial and industrial connection projects. The calculations were derived using prior year samples which represented five percent of all connection works for domestic and rural and small commercial and industrial connection projects. These included projects which were entirely Ergon Energy funded, and those which involved capital contributions. Ergon Energy recognises that the samples should be taken only from projects that were entirely funded by Ergon Energy, as these percentages are applied to Connection Capital Expenditure from the general ledger that are exclusive of capital contributions. Given data limitations this is currently not possible, however Ergon Energy will endeavour to improve the sampling process in future regulatory years to address this limitation. ▪ Consistent with the Actual 2017-18 SCS disposals, actual Network Services disposals are set equal to the actual 2017-18 SCS disposals and are split between the 2015-20 Capex RFM for Network Services and 2015-20 Legacy RFM for Network Services, depending on when the disposed assets were originally purchased. Disposed assets purchased prior to 1 July 2010 are included in the 2015-20 Legacy RFM for Network Services, and those purchased on or after 1 July 2010 are included in the

¹ C2080 (other) represents a combination of domestic/rural and commercial/industrial subdivision connection capex, where the subdivision connection projects commenced **prior** to the reclassification of subdivision connection services as ACS on 1 July 2015

Variable	Addressing Basis of Preparation Requirements
	<p>2015-20 Capex RFM for Network Services. Disposals in 2017-18 are split between the categories Additions and Disposals depending on the source Roll Forward Model being the Network Services Capex Model, or the Network Services Legacy Model respectively. Network Service additions are net of \$3.83M (\$nominal) disposals.</p> <ul style="list-style-type: none"> ▪ Capital Contributions are not entered into the 2015-20 RFM Capex for Network Services or the 2015-20 RFM Legacy for Network Services, because Capital Contributions are removed from the SCS additions as described above. <p><u>Opening RAB Values</u></p> <ul style="list-style-type: none"> ▪ The opening Network Services RAB as at 1 July 2010 in the 2010-15 Legacy RFM for Network Services is set equal to the closing RAB in the 2005-10 RFM for Network Services as calculated in cells L359:L388 of the Total Actual RAB Roll Forward tab. ▪ This approach outlined in the previous bullet point differs from AER's RFM, which requires that the opening RAB, rather than the closing RAB, of the final year of the previous regulatory control period be entered. The reason Ergon Energy has deviated from the AER's RFM is to remove the need for the RFM to adjust for the difference between forecast and actual net capex in 2009-10. No adjustment is necessary as the actual 2009-10 additions and disposals are now available to be rolled into the RAB. ▪ Consistent with the 2010-15 RFM Capex for SCS, the opening RAB in the 2010-15 RFM Capex for Network Services is set equal to zero. ▪ The opening Network Services RAB as at 1 July 2015 in the 2015-20 Legacy RFM for Network Services is set equal to the closing RAB in the 2010-15 Legacy RFM for Network Services as calculated in cells R359:R388 of the Total Actual RAB Roll Forward tab. These cells in the 2010-15 Legacy RFM for Network Services apply the same adjustments to the 30 June 2015 RAB as the AER to remove the value of those assets shared in the provision of ACS services (for those services reclassified in the 2015-20 Final Distribution Determination from SCS to ACS) ▪ As noted above, this approach outlined in the previous bullet point differs from AER's RFM. There is no need for the RFM to adjust for the difference between forecast and actual net capex in 2014-15 as the actual 2014-15 additions and disposals values are now available to be rolled into the RAB ▪ The opening Network Services RAB as at 1 July 2015 in the 2015-20 Capex RFM for Network Services is set equal to the closing RAB in the 2010-15 Capex RFM for Network Services as calculated in cells R359:R388 of the Total Actual RAB Roll Forward tab. These cells in the 2010-15 RFM Capex for Network Services apply the same adjustments to the 30 June 2015 RAB as the AER to remove the value of those assets shared in the provision of ACS services (for those services reclassified in the 2015-20 Final Distribution Determination from SCS to ACS) <p><u>Asset Lives</u></p>

Variable	Addressing Basis of Preparation Requirements
	<ul style="list-style-type: none"> ▪ Asset lives – For Network Services, Ergon Energy has adopted the standard and remaining lives for SCS as approved by the AER in the 2015-20 Final Distribution Determination as at 1 July 2010 in the respective 2010-15 RFMs. Similarly, Ergon Energy has also adopted the standard and remaining lives for SCS as approved by the AER in the 2015-20 Final Distribution Determination as at 1 July 2015 in the respective 2015-20 Network Services RFMs <p><u>Other Matters</u></p> <p>Ergon Energy asset categories (as reported in the SCS and ACS RFMs and Annual Reporting RINs) have been directly mapped to the required economic benchmarking RAB asset categories, with the exception of some non-network asset categories (see below).</p> <p>For some non-network asset categories (buildings, motor vehicles and plant and equipment), the AER definitions require Ergon Energy to split assets between short and long-life assets categories. Ergon Energy does not report data on this disaggregated basis. However, asset additions are readily determined from the asset register along with their lives. This information was used to apportion the relevant opening balances, additions and disposals to the required short and long-life categories</p> <p>Ergon Energy has apportioned total buildings, motor vehicles and plant & equipment attributable to short and long life categories on the basis of asset addition for each asset. Asset additions are readily determined from the asset register along with the associated asset lives. With motor vehicles (as an example) heavy vehicles and a % of total vehicle additions was determined. This was then used to split total vehicle Capex between short and long lives. The same process was used for buildings and for plant & equipment. RAB disposals are allocated between short and long lived assets based on asset additions to these categories. The apportionment for Network Services is the same as that for SCS, and the apportionment of the ACS shared asset adjustment to the 2014-15 closing RAB values for buildings, motor vehicles and plant & equipment is also performed using the same method.</p> <p><u>Network Services RAB roll-forward</u></p> <p>Ergon Energy has adopted the AER's RFM to determine the Network Services RAB for 2017-18. However, consistent with the approach for SCS, forecast straight line depreciation for Network Services replaces the actual straight line depreciation for Network Services in 2017-18 onwards.</p> <p>Network Services straight line depreciation is calculated using the AER's RFM. The Network Services opening RAB (which recognises 2014-15 actual capex and disposals), forecast Network Services capex and the SCS remaining lives are used in the Network Services depreciation calculation.</p> <p>Of note, the 1 July 2015 Opening Asset Value included \$8.09M in equity raising costs which is used to calculate the inflation addition and forecast depreciation amounts included in Table 3.3.1. In Table 3.3.2 the inflation addition and forecast deprecation amount for equity raising costs has been excluded as the nature of the cost doesn't meet with asset class definitions for reporting this table. A difference arises between the closing and opening</p>

Variable	Addressing Basis of Preparation Requirements
	<p>values as a result.</p> <p>The calculation of forecast Network Services net capex follows the same approach as that for 2017-18 actual net Network Services capex as outlined earlier in this Basis of Preparation document, with the difference being that forecast SCS net capex as per the 2015-20 Final Distribution Determination is used instead of actual net capex.</p> <p>Consistent with the SCS and ACS RIN values described earlier in this document, 2010-11 to 2017-18 inclusive network services additions and disposals are calculated (using the approach outlined above) based on actual SCS capex and disposal values. The value of disposals reflects gross proceeds of sales basis for 2016-17 to 2017-18 (NBV for all years prior). The term disposal value is not defined in the NER, however the AER considered that using the sale or depreciated value as the disposal value was acceptable in the AER's RFM Final Decision for Electricity Distribution Network Service Providers (June 2008). Ergon Energy adopted the sale value in its Regulatory Proposal to the AER for the 2015-20 regulatory control period, accepted by the AER. This is a change to the prior regulatory control periods approach using depreciated value.</p> <p>2010-11 to 2017-18 opening RAB, closing RAB, Inflation addition for network services are calculated based on the network services additions and disposal values in accordance with calculations within the RFM adopted by the AER in its Final Distribution Determination.</p>
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's</p>	<p>Page 26 of the Instructions and Definitions document issued by the AER in November 2013 states: <i>"When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Ergon Energy can provide Actual Information for the Variables in Table 4.2 [renamed table 3.3.2] it must do so; otherwise Ergon Energy must provide Estimated Information."</i></p> <p>Reason for reporting of Actuals (not estimates)</p> <p>Ergon Energy has not reported any Network Services values as estimates in 2017-18, as all information relating to Network Services is now reported as 'Actual Information'. This is because:</p> <ul style="list-style-type: none"> ▪ All Network Service values (i.e. the opening and closing RAB values, inflation of opening RAB, forecast straight line depreciation, inflation, additions, disposals and capital contributions) are derived based on actual SCS values. ▪ Some estimates used prior to 2015-16 are no longer required in 2015-16 and beyond. These relate to: <ul style="list-style-type: none"> ▪ Estimates of shared and dedicated costs for contributed assets (all contributed assets are now removed from the Network Services RAB, regardless of whether they are shared assets or dedicated connection assets) ▪ Estimates of shared and dedicated costs for subdivisions (since the change in service classification of subdivision connections to ACS from 1 July 2015 means that Network Services must be exclusive of

Variable	Addressing Basis of Preparation Requirements
best estimates.	<p>all subdivision connections capex)</p> <ul style="list-style-type: none"> ▪ Actual capex for domestic/rural and commercial/industrial is now available (previously this breakdown was estimated) ▪ Whilst the use of sampled data to allocate Connections capex between dedicated connection assets and shared network assets (as described earlier in this document) does not strictly represent actual values observed by Ergon Energy in 2017-18, the use of these values will not result in an impact of more than 2% on the closing 2017-18 Network Services RAB, which in accordance with AASB108 is considered immaterial. Ergon Energy has confirmed this by performing sensitivity analysis using highly implausible scenarios (i.e. setting the proportion of dedicated connection assets and upstream shared assets to the two logical extreme values of 0% and 99%, with the remaining 1% representing testing and commissioning costs). The fact that the extreme values of 0% and 99% do not result in a material impact on the 2017-18 closing network services RAB means that there is no evidence that any valid alternatives exist that would clearly arrive at a materially different position from the estimated values. <p>Ergon Energy therefore considers that this calculation will result in values that are actuals for the purposes of the RIN template. Nevertheless, Ergon Energy will continue to use its best endeavors to improve the reporting of Connection Asset Capital expenditure allocations between dedicated connection assets and shared network assets.</p>
Changes in Accounting Policies (Financial information - Actual or Estimated)	Refer to Basis of Preparation for Template 3. Opex, which will discuss any changes in accounting policies impacting capex or opex (if at all) for the regulatory year.

Table 3.3.3 – Total Disaggregated RAB Asset Values

Template 3.3, table 3.3.3 requires Ergon Energy to report Average RAB Asset values that have been disaggregated into the asset categories identified. The values must be calculated as the average of the opening and closing RAB values for the relevant Regulatory Year for each of the RAB Assets and should be directly reconcilable to the opening and closing values in template 3.3, table 3.3.2 for the relevant categories.

In addressing the minimum Basis of Preparation requirements for variables for 'Total Disaggregated RAB Asset Values', Ergon Energy notes that for the relevant Regulatory Year, variables DRAB01201 through DRAB01210 represent the average of the opening and closing RAB values for each of the Asset Category values reported in template 3.3 table 3.3.2, and are therefore implicitly addressed in responses contained in comments made in section 3.3.2 above in relation to Asset Value Roll Forward (by service).

Capital Contributions

Capital Contributions are required to be reported in template 3.3 Assets (RAB), including as a separate entry at DRAB13. In addressing the minimum Basis of Preparation requirements in relation to DRAB13 Capital Contributions, Ergon Energy makes the following comments:

Table 3: Total disaggregated RAB asset values – Capital contributions

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	As all data entry fields are shaded yellow, indicating mandatory data input fields, all cells have been populated. RAB values for each of the SCS RAB Asset categories in the worksheet are exclusive of Capital Contributions. Ergon Energy notes the value provided at DRAB13 is the total value, for “estimated value of capital contributions or contributed assets” for each relevant regulatory year.
Population of Actual Information in templates, including Source.	Data used to populate this table was extracted from the 2017-18 AER Annual Reporting RIN lodged by Ergon Energy to the AER.
Methodology and assumption’s applied in relation to Actual Information	For 2017-18 the Ergon Energy 2017-18 AER Annual Reporting RIN and general ledger separately reported/recorded the capital contribution revenue earned for SCS.
DRAB13 Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided ‘Actual Information’ (as per the AER’s defined term).
Changes in Accounting Policies (Financial information - Actual or Estimated)	No accounting policies adopted by Ergon Energy have impacted on capital contributions received.

Table 3.3.4 – Asset Lives

The AER also requires Ergon Energy to report asset lives in relation to all RAB Assets, including estimated service live of new assets, and estimated residual service lives.

Where RAB Assets categories comprise of a number of assets, asset lives for the whole category must be calculated by weighting the lives of individual assets within that category, using weightings in order of preference stipulated in the AER’s Instructions and Definitions). The RAB is the AER’s preferred asset value measure for weighting lives, but replacement costs is considered an acceptable proxy if disaggregation of the RAB to the relevant level is not possible (and capacity shares are then a further proxy to replacement cost shares).

Asset Lives – Estimated Service Life of New Assets

Template 3.3, table 3.3.4 (estimated service life of new assets) requires Ergon Energy to report the current expected service life of new assets, where:

- new assets are assets installed in the most recent regulatory reporting year; and
- the expected service life of new assets is the estimated period after installation of a new asset during which the asset will be capable of delivering the same effective service as it could at its installation date, which may not align with the asset's financial or tax life.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Estimated Service Lives of New Assets

Table 4: Asset Lives – Estimated Service Life of New Assets

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	As all data entry fields are considered mandatory data input fields and have been populated. Asset lives reported, are estimated service lives of new assets installed in the relevant regulatory reporting year
Population of Actual Information in templates, including Source.	Data was sourced from Ergon Energy's fixed asset register. Asset lives in the fixed asset register are based upon engineering expectations and are reviewed on a regular basis.
Methodology and assumption's applied in relation to Actual Information	A mapping exercise was applied to data obtained from the fixed asset register whereby data was grouped into the RAB Asset categories required by the AER, in accordance with category definitions provided in Chapter 9. Where RAB Asset categories contained assets of differing lives, a weighted average estimated life was calculated based on replacement cost using the formulae prescribed by the AER (equation 1, weighted average asset life calculation).
DRAB1401- DRAB1409	
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 4, table 3.3.4 (Asset Lives).
Changes in Accounting Policies (Financial information - Actual or Estimated)	Asset lives reported are a non-financial data set, and accordingly this requirement is not applicable.

Asset Lives – Estimated Residual Service Life

Template 3.3, table 3.3.4 (estimated residual service life) requires Ergon Energy to report estimated residual service lives of assets. A current estimation is required, of the weighted average remaining time expected that a RAB Asset category will deliver the same effective service as that asset class did at its installation date.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Estimated Residual Service Lives.

Table 5: Asset Lives – Estimated Residual Service Life

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All data entry fields are shaded yellow, indicating mandatory data input fields and accordingly, have been populated.</p> <p>Asset lives reported, are estimated service lives of new assets installed in the relevant regulatory reporting year</p>
Population of Actual Information in templates, including Source.	Data was sourced from Ergon Energy's fixed asset register. Asset lives in the fixed asset register are based upon engineering expectations and are reviewed on a regular basis.
Methodology and assumption's applied in relation to Actual Information	<p>A mapping exercise was employed on data obtained from the fixed asset register whereby data was grouped into the RAB Asset categories required by the AER, in accordance with category definitions provided in Chapter 9.</p> <p>Where RAB Asset categories contained assets of differing lives, a weighted average estimated life based on replacement cost was calculated using the formulae prescribed by the AER (equation 1, weighted average asset life calculation).</p>
DRAB1501- DRAB1509	<p>When assessing straight line depreciation for the RAB in Template 3.3 (Assets), the depreciation is based on remaining asset lives from the AER's 2015-20 Final Determination for Ergon Energy.</p> <p>Ergon Energy submitted two separate RFMs (a "Legacy" RFM and a "Capex" RFM). The Legacy RFM relates to assets existing before 1 July 2010, while the Capex RFM relates to assets acquired over the 2010-15 regulatory control period. The closing RAB values as at 30 June 2015 from each RFM were then combined to give the opening RAB values as at 1 July 2015, as used in the PTRM for the 2015-20 regulatory control period. Rolling forward the 1 July 2010 RAB in the Legacy and Capex RFMs was done to more accurately calculate the weighted average remaining life as at 1 July 2015 and in turn produce a more accurate depreciation calculation for the purposes of calculating SCS revenues in the 2015-20 regulatory control period. This approach was approved by the AER in its 2015-16 Final Distribution Determination for Ergon Energy.</p> <p>The residual service lives for the purposes of reporting Table 3.3.4 have been populated in accordance with Template</p>

Variable	Addressing Basis of Preparation Requirements
	<p>requirements using lives from Ergon Energy's fixed asset register. The table does not reflect the more refined asset life segregation between pre 1 July 2010 and post 30 June 2010 purchases as recently approved by the AER. Therefore, caution should be taken when assessing depreciation expense in relation to remaining asset lives reported in Table 3.3.4.</p>
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.3, table 3.3.4 (Estimated Residual Service Life).</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Asset lives reported are a non-financial data set, and accordingly this requirement is not applicable.</p>

Economic Benchmarking RIN Basis of Preparation



Template 3.4 Operational Data
1 July 2017 to 30 June 2018



Version Control

Version	Date	Description
1.0	31/10/18	Final as submitted to AER on 31 October 2018

Foreword

In response to requirements of the Australian Energy Regulators (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.4 Operational Data of Ergon Energy's completed 2017-18 Economic Benchmarking RIN templates (2017-18 EB RIN Templates), this Basis of Preparation document has been prepared by Ergon Energy with a view to demonstrate compliance with the Notice, in respect of:

- demonstrate how the information provided in relation to in Template 3.4 Operational Data (and associated Tables and/or variables) is consistent with the requirements of the Notice;
- explain the source from which Ergon Energy obtained the information provided in the template; and
- explain the methodology Ergon Energy applied to provide the required information, including any assumptions Ergon Energy made.

In circumstances where Ergon Energy has provided input using Estimated Information in relation to Template 3.4 Operational Data, Ergon Energy has made comment herein as to:

- why an estimate was required, including why it was not possible to use Actual Information; and
- the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is a best estimate, given the information sought in this Notice.

Over and above this, Appendix B, Instructions and Definitions section 1.1.2 note (5) requires an additional minimum requirement for the Basis of Preparation for variables that contain Financial Information (Actual and Estimated) where accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice. In such instances, the relevant Basis of Preparation must include an explanation as to the:

- nature of the change; and
- impact of the change on the information provided in response to the notice.

Section 1.1.1 of the Appendix B, Instructions and Definitions also indicates which variables may not be applicable to Ergon Energy as displayed by yellow, orange, or blue shading in the Economic Benchmarking data Templates.

No additional requirements were identified as requiring provision of additional information or attachment/s over and above completed templates or Basis of Preparation.

This Basis of Preparation document should be read in conjunction with the information presented in Template 3.4 Operational Data (Actual, Estimated or Consolidated) in Ergon Energy's completed 2017-18 EB RIN Templates.

Of note, the AER reissued Economic Benchmarking RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 31 May 2018. The reissued (protected) templates allow for submission of the 2017-18 Regulatory Year data only. Regard has also been given to the clarification provided by the AER (24 October 2016) relative to ongoing compliance matters including auditing requirements, and specifically the provision of 'actuals' and 'estimates' (and exemptions therein).

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Template 3.4 Operational Data

The AER requires operational data to form the output measures for examining the efficiency with which Distribution Network Service Providers (DNSPs) transform inputs into outputs. The data being collected is required to form 'output' measures, and includes energy delivery, customer numbers and maximum demand.

Table 3.4.1 – Energy Delivery

Specially, in template 3.4, table 3.4.1 the AER requires Ergon Energy to report Energy Delivered, being the amount of electricity transported out of its network in the relevant regulatory year (GWh). It is required to be energy delivered as metered or estimated at the customer charging locations rather than the import location from the Transmission Network Service Provider (TNSP).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Total Energy Delivery (DOPED01). Of note, DOPED01 represents the sum of energy delivered disaggregated by chargeable quantity (template table 5.1.1), by customer type or class (template table 5.1.4).

Table 1: Energy Delivery

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	DOPED01 entry fields are shaded yellow, indicating mandatory data fields, and accordingly have been populated for the regulatory year. Total Energy Delivered reported is the total metered or estimated energy delivered at the customer charging locations (rather than the import location from the TNSP).
Population of Actual Information in templates, including Source.	For year 2017-18, data has been sourced from Ergons' billing system PEACE. Monthly billing reports DMK540, based on Statement of Charges monthly periods, are collated to provide actual data required.
Methodology and assumption's applied in relation to Actual Information	Ergon Energy employed a methodology whereby kWhs for energy delivery were summated from monthly billing data files into annual totals. As the source file captured data in kWhs the results were converted to GWhs.
DOPED01 Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 5, table 5.1.1.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Energy Delivered data is a non-financial data set, and accordingly this requirement is not applicable.

Energy Grouping – Delivery by Chargeable Quantity

Template 3.4, table 3.4.1.1 requires Ergon Energy to report energy delivered by chargeable quantity in accordance with the AER category breakdowns, as defined in Chapter 9 of Instructions and Definitions (Appendix B).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables in relation to Energy delivered, grouped by chargeable quantity.

Table 2: Energy Grouping – Delivery by Chargeable Quantity

Variable	Addressing Basis of Preparation Requirements
	<p>Consistency with Notice requirements</p> <p>Entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for the regulatory year.</p> <p><i>'Energy Delivered where time of use is not a determinant'</i> (DOPED0201) relates only to energy delivered that was not charged for peak, shoulder or off-peak periods. This heading includes the Bands from Inclining Block tariffs.</p> <p>Ergon Energy has introduced network tariffs reflecting shoulder, on-peak, and off-peak time charging periods and results are shown under appropriate headings</p> <p>This is consistent with the AER's clarification received on 28 April 2015 which stated that where Ergon Energy does not charge for energy delivery on a peak, off peak or shoulder basis then zeros should be entered against these variables in table 3.4.1.1.</p>
<p>DOPED0201- DOPED0206</p>	<p>Population of Actual Information in templates, including Source.</p> <p>For year 2017-18, data has been sourced from Ergons' billing system PEACE. Monthly billing reports DMK540, based on Statement of Charges monthly periods, are collated to provide actual data required</p>
	<p>Methodology and assumption's applied in relation to Actual Information</p> <p>Ergon Energy employed a methodology whereby kWhs for energy delivery were summated from monthly billing data files into annual totals and disaggregated into various categories. As the source file captured data in kWhs the results were converted to GWhs.</p>
	<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p> <p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.1.1.</p>

Variable	Addressing Basis of Preparation Requirements
Changes in Accounting Policies (Financial information - Actual or Estimated)	Energy delivered data is a non-financial data set, and accordingly this requirement is not applicable.

Energy Received from TNSP and other DNSPs by Time of Receipt

Template 3.4, table 3.4.1.2 requires Ergon Energy to report energy input (received) into its network as measured at supply points from the TNSP and other DNSPs, by time of receipt as defined in Chapter 9 of Instructions and Definitions (Appendix B).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Energy Received.

Table 3: Energy Received from TNSP and Other DNSPs by time of Receipt

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields are shaded yellow indicating mandatory data fields and accordingly have been populated for the regulatory year..</p> <p><i>'Energy Received from TNSP and other DNSPs not included in the above categories'</i> (DOPED0304) relates only to energy received that was unable to be allocated to peak, shoulder or off-peak periods.</p> <p>In this regard, a wholesale time of use schedule does not exist as relevant to Energy Received. Accordingly, no disaggregation has been provided for time of use variables (DOPED0301-DOPED0303).</p> <p>This is consistent with the AER's clarification received on 28 April 2015 which stated that if Ergon is not billed for energy it receives on a peak, off peak or shoulder basis then zeros should also be entered against these variables in table 3.4.1.2.</p>
DOPED0301-DOPED0304 Population of Actual Information in templates, including Source.	Source is TNSP (PLQ) monthly billing files which are checked to metering data from Meter Data Agents (MDAs) and DNSP (Energex) monthly billing files. These billing files are checked to data from MDA.
Methodology and assumption's applied in relation to Actual Information	Energy delivered to the Mount Isa distribution network (which includes Cloncurry but not the 220kV connected Carpentaria Mineral Province mines) is included in this aggregation given derogations which include this as part of the AER-regulated Ergon Energy regulated network. There is no TNI in any Australian Energy Market Operator (AEMO) documentation servicing this area of the network.
Population of Estimated Information in Templates, including why Estimates are required and why it is	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 5, table 3.4.1.2.

Variable	Addressing Basis of Preparation Requirements
not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	
Changes in Accounting Policies (Financial information - Actual or Estimated)	Energy Received data is a non-financial data set, and accordingly this requirement is not applicable.

Energy Received from Embedded Generation by Time of Receipt

Template 3.4, table 3.4.1.3 requires Ergon Energy to report energy delivered into its network from (residential and non-residential) Embedded Generation by time of receipt, in accordance with the AER category breakdowns defined in Chapter 9 of Instructions and Definitions (Appendix B).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables in Energy Received from Embedded Generation

Table 4: Energy Received into DNSP system from Embedded Generation by Time of Receipt

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p><i>'Energy Received from embedded generation not included in above categories from non-residential embedded generation (DOPED0404) relates only to energy received that was unable to be allocated to peak, shoulder or off-peak periods.</i></p> <p>In this regard, a wholesale time of use schedule does not exist in relation to Energy Received. Accordingly, no disaggregation has been provided for time of use variables DOPED0401- DOPED0403.</p> <p>Similarly, data for variables DOPED0405 – DOPED0407 in relation to energy received from Embedded Generation (residential) has not been recorded by Ergon Energy and accordingly, has been entered as '0'.</p> <p>This is consistent with the AER's clarification received on 28 April 2015. In this clarification, the AER stated if Ergon Energy is not billed for energy it receives on a peak, off peak or shoulder basis then zeros should also be entered against these variables in table 3.4.1.3.</p> <p>All other entry fields shaded yellow indicating mandatory data fields, have been populated.</p> <p>Energy received from embedded generation not included in</p>
DOPED0401- DOPED0408	

Variable	Addressing Basis of Preparation Requirements
Population of Actual Information in templates, including Source.	<p>above categories from residential embedded generation (DOPED0408) has been populated for 2017-18 regulatory period.</p> <p>Energy data for non-residential generators was sourced by Ergon Energy from National Electricity Market (NEM) settlements metering. All meters are interrogated by AEMO accredited MDAs and passed to Ergon Energy LNSP in accordance with Chapter 7 of the NER.</p> <p>This data is automatically stored in the Ergon Energy DNSP central data repository (SMDB) for analysis by the various Ergon Energy Asset Development planning groups.</p> <p>An aggregate load measurement point (LMP) was setup to cater for requirements. Only the energy received channel (B) is used in the aggregation. This aggregate LMP is up dated when new and replacement measured data has been received from the MDAs. The aggregate definition is maintained, as is all Ergon Energy aggregate LMPs, in line with new installations of embedded generation impacting on the Ergon Energy network.</p> <p>DOPED0408 (residential) data was sourced from the network billing system (PEACE), using a Network Tariff Code specific to residential Embedded Generation. Data is inclusive of all market customer premises supplied by Ergon Energy. (ISO areas not including Mt Isa were not included in these figures)</p>
Methodology and assumption's applied in relation to Actual Information	<p>Energy received in to the network from larger installations of embedded generation is recorded on a half hour basis.</p> <p>DOPED0408 (residential) data represents the sum of all KWh recorded with a Network Tariff Code specific to Embedded Generation with a Residential Customer Classification Code, from the PEACE data source.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.1.3.</p>
Changes in Accounting Policies (Financial information - Actual or Estimated)	<p>Energy Received data is a non-financial data set, and accordingly this requirement is not applicable.</p>

Energy Grouping – Customer Type or Class

Template 3.4, table 3.4.1.4 requires Ergon Energy to report energy delivered in accordance with customer type or class categories as defined in the Information and Definitions at Appendix B.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables in Energy delivered by customer type or class.

Table 5: Energy Grouping – Customer Type or Class

Variable	Addressing Basis of Preparation Requirements
	<p>Consistency with Notice requirements</p> <p>Ergon Energy confirms the category breakdown is consistent with the customer types reported in Table 3.4.2.1 Customer numbers, with the exception that Other Customer Class Energy Deliveries includes Unmetered energy delivered (which in table 3.4.1.4 is separately reported for customer numbers).</p> <p>All entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for the regulatory year</p>
	<p>Population of Actual Information in templates, including Source.</p> <p>For year 2017-18, data has been sourced from Ergons' billing system PEACE. Monthly billing reports DMK540, based on Statement of Charges monthly periods, are collated to provide actual data required.</p> <p>Note: these sources were adopted also for Template 3.1, table 2.2 Revenue Grouping by customer class or type</p>
<p>DOPED0501- DOPED0505</p>	<p>Methodology and assumption's applied in relation to Actual Information</p> <p>The disaggregation for all variables is based on actual data.</p>
	<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p> <p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.1.4.</p>
	<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p> <p>Energy delivered data is a non-financial data set, and accordingly this requirement is not applicable.</p>

Table 3.4.2 – Customer Numbers

The AER requires information to be reported on Ergon Energy’s distribution customers in its network during a year. In addition to Notice requirements, on 4 February 2015 the AER provided the following clarification in relation to Customer Numbers:

The definition (in Chapter 9 of the Instructions and Definitions) and the corresponding explanation in section 6.2.1 of the explanatory statement exclude ‘deactivated’ NMIs. A ‘deactivated’ NMI is equivalent to a NMI that is ‘extinct’. This is a NMI with a status code of ‘X’ in accordance with AEMO’s MSATS CATS procedure.

The definition includes (as explained in the explanatory statement) de-energised NMIs (status code ‘D’). For the avoidance of doubt, our definition of customer numbers includes NMIs with status codes ‘A’ (Active) and ‘D’ (Not energised). Our definition does not include NMIs with status codes ‘X’ (Extinct) or ‘G’ (Greenfield site).

Distribution Customer Numbers By Customer Type or Class

Template 3.4, table 3.4.2.1 requires Ergon Energy to report Customer Numbers in accordance with the customer type or class categorisations as defined in the Instructions and Definitions at Appendix B of the RIN.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Distribution Customer numbers by customer type or class. Of note, DOCPN01 *total customer numbers* represents the sum of variables DOPCN0101 to DOPCN0106, and is therefore implicitly addressed in the responses below

Table 6: Distribution Customer Numbers by Customer Type or Class

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements DOPCN0101- DOPCN0106 DOCPN01	All entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for the regulatory year. Ergon Energy confirms the category breakdown is consistent with the customer types reported in Table 3.4.1.4 Energy grouping - customer type or class (refer section above), with the exception that Unmetered customer numbers are reported separate to “Other Customer” class (in table 3.4.1.4 they are combined as ‘other’). ‘Other Customer Numbers’ (DOPCN0106) was utilised only where customers were unable to be allocated to the other customer classes. Ergon Energy notes that DOCPN01 does NOT reconcile to DOPCN02 in Distribution Customer Numbers by Network Location, given DOCPN01 includes transmission or unknown (unclassified) feeder classes.
Population of Actual Information in templates, including Source.	Ergon Energy has sourced customer numbers data for the start of the period and for the end of the period from the Peace system. Counts are of unique National Metering Identifiers (NMIs) that are identified as having Ergon Energy as their DNSP.
Methodology and assumption’s applied in relation to Actual Information	Distribution Customers represent the average number of active NMIs in the network the relevant regulatory, calculated as the average number of NMIs on the first day of the regulatory year and on the last day of the regulatory year. Of note:

Variable	Addressing Basis of Preparation Requirements
	<ul style="list-style-type: none"> ▪ Each NMI has been counted as a separate customer; ▪ Both energized and de-energised NMIs are counted; and ▪ Extinct and Greenfield site NMIs are excluded. <p>Residential data is identified by the NMI Customer Classification Code (CCC). Voltage & Demand splits were identified by the Network Tariff Types, whilst the Unmetered premises were identified by the NMI numbering range.</p> <p>For Unmetered customers, excludes public lighting connections (also identified by the NMI numbering range). Unmetered energy usage for billing purposes is calculated using an assumed load profile.</p> <p>Ergon Energy is still recording a sizeable increase in the Unmetered customers as the National Broadband Network rollout continues to added a large amount of Unmetered Supplies to our network also.</p>
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.2.1.</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Customer numbers data is a non-financial data set, and accordingly this requirement is not applicable.</p>

Distribution Customer Numbers by Network Location

Template 3.4, table 3.4.2.2 requires Ergon Energy to report Customer Numbers in accordance with the customer locations on the network, as defined in the Instructions and Definitions at Appendix B of the RIN. The locations are: Urban, Short Rural Long Rural.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for customer numbers by network location. Of note, DOCPN02 *total customer numbers* represents the sum of variables DOPCN0202 to DOPCN0204, and is therefore implicitly addressed in the responses below.

Table 7: Distribution Customer Numbers by Network Location

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for the regulatory year, with the exception of 'DOOPCN0201' for CBD Network - Ergon Energy does not have any feeders classified as CBD.</p> <p>Ergon Energy notes that DOPCN02 does NOT reconcile to DOPCN01 in Distribution Customer Numbers by Network Location, given DOCPN01 includes transmission or unknown (unclassified) feeder classes. No category was provided for these customers in DOPCN0201-DOPCN0204.</p>
Population of Actual Information in templates, including Source.	Ergon Energy has sourced customer numbers data from the Market Transaction system (Peace). Counts are of unique NMIs that are identified as having Ergon Energy as their LNSP.
Methodology and assumption's applied in relation to Actual Information	<p>Distribution Customers represents the average number of active NMIs in the network, calculated as the average number of NMIs on the first day of the regulatory year and on the last day of the regulatory year. Of note:</p> <ul style="list-style-type: none"> ▪ Each NMI has been counted as a separate customer; ▪ Both energized and de-energised NMIs are counted; and ▪ Extinct and Greenfield site NMIS are excluded. <p>In order to disaggregate data by feeder types (Urban, Short Rural and Long Rural), a NMI was identified as being attached to a feeder which in turn enabled the identification of the required feeder classes.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.2.2.

Variable	Addressing Basis of Preparation Requirements
Energy's best estimates.	
Changes in Accounting Policies (Financial information - Actual or Estimated)	Customer numbers data is a non-financial data set, and accordingly this requirement is not applicable.

Table 3.4.3 – System Demand

The AER requires Ergon Energy to provide back cast System Demand data where it has calculated historical Weather Adjustment Maximum Demand statistics. Where specified by orange shading, if Ergon Energy does not have historical data, it may be estimated or cells blacked out (not provided) rather than produce unnecessarily burdensome estimates, and where it is illogical to enter '0'.

Annual System Maximum Demand (Zone Substation) (MW)

Specifically, template 3.4 table 3.4.3.1 requires Ergon Energy to report coincident and non-coincident Maximum Demand at the Zone Substation level, as raw (or unadjusted) and Weather Adjusted at the 10% and 50% Probability of Exceedance (POE) levels.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to annual system maximum demand (zone substation) MW variables.

Table 8: Annual System Maximum Demand (Zone Substation) (MW)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>Variables DOPSD0102, DOPSD0103, DOPSD0105 and DOPSD0106 have been populated by Ergon Energy.</p> <p>All entry fields which are shaded yellow indicating mandatory data fields have been populated.</p>
<p>Population of Actual Information in templates, including Source.</p> <p>DOPSD0101- DOPSD0106</p>	<p>Data has been sourced from Substation Investment Forecasting Tool (SIFT).</p> <p>The SIFT database is maintained for the purpose of producing network demand forecasts of zone and bulk supply substations as well as Transmission Connection Points (TCPs). Access to the environment is secure and provided only to those persons who require access in order to conduct and manage the load forecasting process, and planning studies, with any changes to the datasets tracked and recorded.</p> <p>The database is updated annually with substation demand data from the Statistical Metering Database (SMDB) which acquires its demand data from a variety of sources including:</p> <ul style="list-style-type: none"> ▪ AEMO accredited Meter Data Agents (MDA) for: <ul style="list-style-type: none"> ○ All NEM meter data file formatted (MDFF) data for Transmission Connection Points (and hence Ergon Energy System Total Demand) and market customer meter data;

Variable	Addressing Basis of Preparation Requirements
	<ul style="list-style-type: none"> ○ Dedicated type 4 metering on distribution feeders/power transformers; ▪ Type 4 meter data of non-market customer as interrogated by the Ergon Energy's accredited MDA; ▪ Supervisory Control and Data Acquisition (SCADA) at the Bulk Supply Points and Zone-Substations (ZSS); ▪ Other sources of metered data used by Ergon Energy were: <ul style="list-style-type: none"> ○ NULEC recloser downloads; ○ Maximum Demand Indicator (MDI) readings, and ○ Simulations of maximum demand based on premises consumption records (billing) and network topology when the above sources are unavailable.
Methodology and assumption's applied in relation to Actual Information	<p>In order to obtain Weather-adjusted variables, Ergon Energy has employed the following methodology:</p> <ul style="list-style-type: none"> ▪ Constructing a multivariate maximum demand equation for each season of Summer or Winter. Variables in the equation include maximum temperature, minimum temperature and variables for Saturday, Sunday and public holidays. ▪ Daily historical BOM temperatures are passed through each equation and maximum annual demand is obtained. The listing of annual peak demand is made for all set of consistent temperature records from each associated weather station. ▪ 50 POE and 10 POE measured from histogram of annual peak demands.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.3.1.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Data in relation to Maximum Demand is a non-financial data set, and accordingly this requirement is not applicable.

Annual System Maximum Demand (Transmission Connection Point) (MW)

Template 3.4, table 3.4.3.2 requires Ergon Energy to report coincident and non-coincident Maximum Demands at the Zone Substation level, as raw (or unadjusted) and Weather Adjusted at the 10% and 50% POE levels.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to annual system maximum demand (transmission connection point) MW variables.

Table 9: Annual System Maximum Demand (Transmission Connection Point) (MW)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>The orange cells associated with Variable Codes DOPSD0108, DOPSD0109 and DOPSD0111 and DOPSD0112 have been populated.</p> <p>All other entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2014-15 regulatory year.</p>
Population of Actual Information in templates, including Source.	Data has been sourced from the Substation Investment Forecasting Tool (SIFT). Refer to Table 8 above.
Methodology and assumption's applied in relation to Actual Information	<p>In order to obtain Weather adjusted variables, Ergon Energy has employed a methodology involving:</p> <ul style="list-style-type: none"> ▪ Constructing a multivariate maximum demand equation for each season of Summer or Winter. Variables in the equation include maximum temperature, minimum temperature and variables for Saturday, Sunday and public holidays. ▪ Daily historical BOM temperatures are passed through each equation and maximum annual demand is obtained. The listing of annual peak demand is made for all set of consistent temperature records from each associated weather station. ▪ Weather station selected by referral to associated Zone Substation weather station. Where a transmission connection point has multiple Zone Substations attached, the most common weather station is selected for the transmission connection point weather correction. ▪ 50 POE and 10 POE measured from histogram of annual peak demands.
DOPSD0107- DOPSD0112	
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.3.2.

Variable	Addressing Basis of Preparation Requirements
has been produced, including reasons why Estimates are Ergon Energy's best estimates.	
Changes in Accounting Policies (Financial information - Actual or Estimated)	Data in relation to Maximum Demand is a non-financial data set, and accordingly this requirement is not applicable.

Annual System Maximum Demand (Zone Substation) (MVA)

Template 3.4, table 3.4.3.3 requires Ergon Energy to report coincident and non-coincident Maximum Demands as raw (or unadjusted) and Weather Adjusted at the 10% and 50% POE levels.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to annual system maximum demand (zone substation) MVA variables.

Table 10: Annual System Maximum Demand (Zone Substation) (MVA)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	The orange cells associated with Variable Codes DOPSD0202, DOPSD0203 and DOPSD0205 and DOPSD0206 have been populated. All other entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2014-15 regulatory year.
Population of Actual Information in templates, including Source.	Data has been sourced from Substation Investment Forecasting Tool (SIFT). Refer to Table 8 above.
DOPSD0201- DOPSD0206 Methodology and assumption's applied in relation to Actual Information	Weather adjustment MVA data have been obtained by multiplying raw MVA by the ratio of (MW temperature adjusted value to raw MW value) for the same regulatory year.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.3.3.

Variable	Addressing Basis of Preparation Requirements
Changes in Accounting Policies (Financial information - Actual or Estimated)	Data in relation to Maximum Demand is a non-financial data set, and accordingly this requirement is not applicable.

Annual System Maximum Demand (Transmission Connection Point) (MVA)

Template 3.4, table 3.4.3.4 requires Ergon Energy to report coincident and non-coincident Maximum Demands as raw (or unadjusted) and Weather Adjusted at the 10% and 50% POE levels.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to annual system maximum demand (transmission connection point) MVA variables

Table 11: Annual System Maximum Demand (Transmission Connection Point) (MVA)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	The orange cells associated with variable DOPSD0208, DOPSD0209 and DOPSD0211 and DOPSD0212 have been populated. All other entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2014-15 regulatory year.
Population of Actual Information in templates, including Source.	Data has been sourced from Substation Investment Forecasting Tool (SIFT). Refer to Table 8 above.
Methodology and assumption's applied in relation to Actual Information	Weather adjustment MVA data has been obtained by multiplying raw MVA by the ratio of (MW temperature adjusted value to raw MW value) for the same regulatory year.
DOPSD0207- DOPSD0212 Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.3.4.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Data in relation to Maximum Demand is a non-financial data set, and accordingly this requirement is not applicable.

Power Factor Conversion between MVA and MW

Template 3.4, table 3.4.3.5 requires Ergon Energy to report the power factor to allow for conversion between MVA and MW measures for each voltage. Ergon Energy is required to provide a power factor for each voltage level and for the network as a whole.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Power Factor Conversion variables.

Table 12: Power Factor Conversions (Overall Network)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	DOPSD0301 is shaded yellow indicating a mandatory data field, and has been populated for the 2017-18 regulatory year. Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates from 2013/14. Therefore, care should be taken when reviewing variable data against submissions prior to 2013/14.
Population of Actual Information in templates, including Source.	Ergon Energy extracted power factor data from kW and kVA information stored in the Ergon Energy DNSP central data repository (SMDB), which extracts this information from metering units across a significant proportion of Zone Substations over half hourly intervals.
Methodology and assumption's applied in relation to Actual Information	DOPSD0301 ' <i>average overall power factor conversion</i> ' is required to represent the total MW divided by the total MVA. The overall network power factor was derived from a coincident summation of kW and kVA at all the transmission network connections points (native) in the Ergon Energy network, with the peak demand power factor calculated from this data set at the time of the native system maximum demand.
DOPSD0301	
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to DOPSD0301 contained in template 3.4, table 3.4.3.5.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Data in relation to Maximum Demand is a non-financial data set, and accordingly this requirement is not applicable.

Table 13: Power Factor Conversions (Remaining Voltage Levels)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>With the reissuance of templates by the AER for the 2014-15 year, where variables are not relevant to Ergon Energy, these have not been populated.</p>
Population of Actual Information in templates, including Source.	Ergon Energy extracted power factor data from kW and kVA information stored in the SMDB, which extracts this information from metering units across a significant proportion of feeders and averages the data over half hourly intervals
<p>Methodology and assumption's applied in relation to Actual Information</p> <p>DOPSD0302- DOPSD0314</p>	<p>The data was extracted from SMDB, categorised according to Table 3.4.3.5, and calculated to obtain totals. Basic data cleansing was performed by eliminating all feeders with peak power factors less than 0.4 and greater than 0.999 after extraction from SMDB.</p> <p>Additional records for the calculations were available this year and this improvement can be attributed to the higher than normal change in power factor from 17-18 for the 132kV and 220kV records. The 2018 132kV values are based off 87 samples, where only 63 were available in 2017. The 2018 220kV values are based off 4 samples, where only 2 were available in 2017.</p> <p>Some volatility exists in the metering sources for the 6.6kV power factor calculation, hence significant change in power factor from 17-18. However, because of the very small amount of network supplied at 6.6kV, it is considered that such volatility is within normal tolerances.</p> <p>FME (Feature Manipulation Engine - www.safe.com) has been used to obtain the data for DOPSD302-DOPSD0314 from the standard specified resources and complete calculations in an identical method to previous years using a C++ coded program that extracted and compiled the data list (this program is no longer in use). FME is data translation software that connects to the required data sources and completes required analysis in a method able to be replicated in a consistent manner.</p>
Population of Estimated Information in Templates,	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in

Variable	Addressing Basis of Preparation Requirements
including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	template 3.4, table 3.4.3.5.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Data in relation to Maximum Demand is a non-financial data set, and accordingly this requirement is not applicable.

Demand Supplied (for Customers Charged on this Basis) (MW)

Template 3.4, table 3.4.3.6 is required to be completed, where Ergon Energy charges customers for Maximum Demand supplied. Ergon Energy is required to report Maximum Demand amounts for customers that are charged based upon their Maximum Demand as measured in MW – split between Contracted and Measured.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Maximum Demand Supplied (MW)

Table 14: Demand Supplied (for Customers Charged on this Basis) (MW)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All entry fields are shaded yellow indicating mandatory data fields however it is noted in the Notice that population is only required where Ergon Energy charges customers for Maximum Demand supplied. In instances where Ergon Energy cannot distinguish between contracted and measured Maximum Demand, demand supplied was allocated to contracted Maximum Demand. This includes a large amount of customers on the Threshold Demand tariff.
DOPSD0401 DOPSD0402	Ergon Energy commenced charging customers on a kVA (MVA) basis as of 1 July 2015. Customers are still being migrated from the MVA tariffs to these newer kVA tariffs as is evident in the numbers reported.
Population of Actual Information in templates, including Source.	Ergon Energy has sourced data from the Network Billing system (PEACE).
Methodology and assumption's applied in relation to Actual Information	Network Use of System (NUOS) charges classed as Network DUOS Capacity Charge (NDCC) were used to identify the Contracted demand proportions for Individually Calculated Customer (ICC), Connection Asset Customer (CAC) and Embedded Generator (EG)

Variable	Addressing Basis of Preparation Requirements
	<p>type connections.</p> <p>NUOS charges classed as Network DUOS Actual Demand Charge (NDADC) were used to identify the Measured demand proportions for ICC, CAC and EG type connections.</p> <p>All Standard Asset Customer (SAC) - Large connections are noted to only have either an Actual Demand charge or a Threshold Demand charge and therefore were reported under the Contracted Demand split. In the case of the Threshold Demand we have used the actual read maximum demand as we have deemed that the demand below the applicable threshold is charged at a zero amount it and as such should still be counted as charged.</p> <p>ICC, CAC and EG type connections are charged (and hence accounted for) on a monthly basis. For 2017-18 the maximum monthly usage per customer is summated to provide the relevant figure, whereas previously, summated values were the summation of the monthly chargeable quantities.</p>
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Demand Supplied (contracted and measured) (MW) is supplied as Actual Information (defined term).</p>
<p>Changes in Accounting Policies (Financial - Actual or Estimated)</p>	<p>Data in relation to Demand Supplied is a non-financial data set, and accordingly this requirement is not applicable.</p>

Demand Supplied (for Customers Charged on this Basis) (MVA)

Template 3.4, table 3.4.3.7 is required to be completed, where Ergon Energy charges customers for demand supplied. Ergon Energy is required to report Maximum Demand amounts for customers that are charged based upon their Maximum Demand as measured in MVA – split between Contracted and Measured.

Table 15: Demand Supplied (for Customers Charged on this Basis) (MVA)

Variable	Addressing Basis of Preparation Requirements
<p>DOPSD0403 Consistency with Notice requirements</p> <p>DOPSD0404</p>	<p>All entry fields are shaded yellow indicating mandatory data fields however it is noted in the Notice that population is only required where Ergon Energy charges customers for Maximum Demand supplied. This was also confirmed</p>

Variable	Addressing Basis of Preparation Requirements
	<p>following AER review of Ergon Energy’s initial submission of the previous Benchmarking RIN, in which Ergon Energy had calculated (using a conversion factor) data on an ‘MVA measure’ basis.</p> <p>Ergon Energy commenced charging customers on a kVA (MVA) basis as of 1 July 2015. Where previous years information was not available in regards to MVA measures of Demand Supplied for contracted and Measured demand and “zeroes” were entered. This is consistent with the clarification received from the AER on 8 April 2014, which stated “zeros should be entered into table 3.4.3.7. The correct response to table 3.4.3.7 is to input the demand for which customers are charged. This should be on the basis of the units of measurement upon which the customers were charged. If Ergon only charges customers for demand on the basis of MWs then 0s should be input into table 3.4.3.7.”</p>
Population of Actual Information in templates, including Source.	Ergon Energy has sourced data from the Network Billing system (PEACE).
Methodology and assumption’s applied in relation to Actual Information	<p>Network Use of System (NUOS) charges classed as Network DUOS KVA Capacity Charge (NDKVACC) were used to identify the Contracted demand proportions for ICC, CAC and EG type connections.</p> <p>NUOS charges classed as Network DUOS KVA Actual Demand Charge (NDKVAADC) was used to identify the Measured demand proportions for ICC, CAC and EG type connections.</p> <p>ICC, CAC and EG type connections are charged (and hence accounted for) on a monthly basis. For 2017-18 the maximum monthly usage per customer is summated to provide the relevant figure, whereas previously, summated values were the summation of the monthly chargeable quantities.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided ‘Actual Information’ (as per the AER’s defined term) in relation to Demand Supplied (contracted and measured) (MVA).
Changes in Accounting Policies (Financial	Data in relation to Demand Supplied is a non-financial data set, and accordingly this requirement is not applicable.

Variable	Addressing Basis of Preparation Requirements
information - Actual or Estimated)	

Economic Benchmarking RIN Basis of Preparation



Template 3.5 Physical Assets

1 July 2017 to 30 June 2018



Version Control

Version	Date	Description
1.0	31/10/18	Final as submitted to AER on 31 October 2018

Foreword

In response to requirements of the Australian Energy Regulator's (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.5 Physical Assets of Ergon Energy's completed 2017-18 Economic Benchmarking RIN templates (2017-18 EB RIN Templates), this Basis of Preparation document has been prepared by Ergon Energy with a view to demonstrate compliance with the Notice, in respect of:

- demonstrate how the information provided in relation to in Template 3.5 Physical Assets (and associated Tables and/or variables) is consistent with the requirements of the Notice;
- explain the source from which Ergon Energy obtained the information provided in the template; and
- explain the methodology Ergon Energy applied to provide the required information, including any assumptions Ergon Energy made.

In circumstances where Ergon Energy has provided input using Estimated Information in relation to Template 3.5 Physical Assets, Ergon Energy has made comment herein as to:

- why an estimate was required, including why it was not possible to use Actual Information; and
- the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is a best estimate, given the information sought in this Notice.

Over and above this, Appendix B, Instructions and Definitions section 1.1.2 note (5) requires an additional minimum requirement for the Basis of Preparation for variables that contain Financial Information (Actual and Estimated) where accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice. In such instances, the relevant Basis of Preparation must include an explanation as to the:

- nature of the change; and
- impact of the change on the information provided in response to the notice.

Section 1.1.1 of the Appendix B, Instructions and Definitions also indicates which variables may not be applicable to Ergon Energy as displayed by yellow, orange, or blue shading in the Economic Benchmarking data Templates.

No additional requirements were identified as requiring provision of additional information or attachment/s over and above completed templates or Basis of Preparation.

This Basis of Preparation document should be read in conjunction with the information presented in Template 3.5 Physical Assets (Actual, Estimated or Consolidated) in Ergon Energy's completed 2017-18 EB RIN Templates.

Of note, the AER reissued Economic Benchmarking RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 31 May 2018. The reissued (protected) templates allow for submission of the 2017-18 Regulatory Year data only. Regard has also been given to the clarification provided by the AER (24 October 2016) relative to ongoing compliance matters including auditing requirements, and specifically the provision of 'actuals' and 'estimates' (and exemptions therein).

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Template 3.5 Physical Assets

The AER requires a quantity measure of the capital service flow used by the Distribution Network Service Provider (DNSP) into the production process for economic benchmarking. However, this cannot be directly observed. Only the quantity of the stock of capital can be observed at any point in time. Therefore, it is necessary to use proxy measures of capital service flow.

The AER requires data on the quantities and capacities of physical assets. Capacities are required to be reported in MVA-kms for lines and cables and in MVA for transformers, to be used as a measure of the capital service flow.

Table 3.5.1 - Network Capacities Variables

Specifically, Template 3.5 Table 3.5.1 requires Ergon Energy to report capacity variables for its whole network. In this context, the network is to include overhead power lines and towers, underground cables and pilot cables that transfer electricity from the regional bulk supply points supplying areas of consumption to individual zone substations, to distribution substations and to customers. Network is also to include distribution feeders and the low voltage distribution system, but exclude the final connection from the mains to the customer and also wires or cables for public lighting, communication, protection or control and for connection to unmetered loads.

Overhead Network Length of Circuit at each Voltage

Template 3.5 Table 3.5.1.1 requires the Length of Circuit at each voltage to be reported for overhead portion of the network. Of note, on 3 December 2013 the AER provided clarification to NSPs in regard to completion of variables in Table 3.5.1.1:

....variables contained within Tables 6.1.1 [and 6.1.3] do not include the length or capacity of service lines. The correct, compliant completion of Tables 6.1.1 and 6.1.3 is to report the circuit length and circuit capacity excluding the circuit length and circuit capacity of service lines.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to overhead network circuit lengths, for each voltage level. Of note, DPA01 – ‘Total overhead circuit km’ represents the sum variables DPA0101 to DPA0108, and is therefore implicitly addressed in the table below.

Table 1: Overhead Network Length of Circuit at each Voltage

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.
DPA0101- DPA0114 DPA01	Circuit length has been calculated from the line length (measured in kilometers) of lines in service (the total length of feeders including all spurs), where each Single Wire Earth Return (SWER) line, single-phase line, and three phase line counts as one line.
	A double circuit line has been counted as two lines.
	Circuit length does not take into account vertical components such as sag or customer side elements such as service lines.
	Ergon Energy notes that the AER has used different variable numbers associated with this table in its revised templates for 2013-14 to 2017-18. Therefore, care should be taken when

Variable	Addressing Basis of Preparation Requirements
Population of Actual Information in templates, including Source.	<p>reviewing variable data against submissions prior to 2013-14.</p> <p>In comparing the 2017-18 data to prior years, it should be noted that Ergon Energy resubmitted data on 1 August 2016 for prior years to reflect a revised calculation methodology. Care should be taken when comparing any RIN time series data to ensure the correct data set is used.</p> <p>Consistent with the clarification received from the AER, Ergon Energy has reported against those asset categories previously reported against and have left blank any categories that are not relevant to its business. [DPA0102, DPA0104, DPA0109, DPA0113]</p>
Methodology and assumption's applied in relation to Actual Information	<p>Overhead Network length data of circuits at each voltage level was sourced by Ergon Energy from its Smallworld Oracle Replicated (SOREP) Spatial database. This database is replicated from the Smallworld geographic information system (GIS) electrical data store.</p> <p>Scripts were run against the 2017-18 RIN snapshot of Smallworld data, to extract the number and length of conductors, broken down by operating voltage.</p> <p>Conductors with operating voltages which didn't align with any prescribed categories were placed in the "Other Overhead Voltages" group.</p> <p>Conductors with an operating voltage of 12.7kV and 19.1kV were placed in the SWER category.</p> <p>Service line is not specifically identified within the database but is represented as standard LV. The following method was used to remove service line from the calculations. LV with a connection point at one end and a length of less than 50M. Where the length is greater than 50M then the total length is reduced by 50M and the remainder included in the total calculations.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in Template 3.5, Table 3.5.1.1.</p>
Changes in Accounting Policies (Financial information - Actual or Estimated)	<p>Physical Assets data is a non-financial data set, and accordingly this requirement is not applicable.</p>

Underground Network Circuit Length at Each Voltage

Template 3.5 Table 3.5.1.2 requires the Length of Circuit at each voltage to be reported for Underground portion of Ergon Energy's network.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Underground network circuit lengths, for each voltage level. Of note, DPA02 – 'Total underground circuit km' represents the sum variables DPA0201 to DPA0207, and is therefore implicitly addressed in the table below.

Table 2: Underground Network Circuit Length at each Voltage

Variable	Addressing Basis of Preparation Requirements
<p>Consistency with Notice requirements</p> <p>DPA0201-</p> <p>DPA0212</p> <p>DPA02</p>	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>Circuit length has been calculated from the cable length (measured in kilometers) of cables in service (the total length of feeders including all spurs), where each single-phase line, and three phase line counts as one cable.</p> <p>A double circuit line has been counted as two lines.</p> <p>Circuit length does take into account vertical components such as end lengths.</p> <p>Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 to 2017-18. Therefore, care should be taken when reviewing variable data against submissions prior to 2013-14.</p> <p>In comparing the 2017-18 data to prior years, it should be noted that Ergon Energy resubmitted data on 1 August 2016 for prior years to reflect a revised calculation methodology. Care should be taken when comparing any RIN time series data to ensure the correct data set is used.</p> <p>Consistent with the clarification received from the AER, Ergon Energy has reported against those asset categories previously reported against and have left blank any categories that are not relevant to its business. [DPA0202, DPA0204, DPA0210].</p>
<p>Population of Actual Information in templates, including Source.</p>	<p>Underground Network length data of circuits at each voltage level was sourced by Ergon Energy from its SOREP Oracle Spatial database. This database is replicated from the Smallworld GIS electrical data store.</p>
<p>Methodology and assumption's applied in relation to Actual Information</p>	<p>Scripts were run against the 2017-18 RIN snapshot of Smallworld data, to extract the number and length of conductors, broken down by operating voltage.</p> <p>Conductors with operating voltages which didn't align with any prescribed categories were placed in the "Other Underground Voltages" group.</p>
<p>Population of Estimated</p>	<p>Ergon Energy has provided 'Actual Information' (as per the</p>

Variable	Addressing Basis of Preparation Requirements
Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	AER's defined term) in relation to all variables contained in Template 3.5, Table 3.5.1.2.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Physical Assets data is a non-financial data set, and accordingly this requirement is not applicable.

Estimated Overhead Network Weighted Average Capacity by Voltage Class (MVA)

Template 3.5, Table 3.5.1.3 requires Ergon Energy to provide estimated typical or weighted average capacities for each of the listed overhead voltage classes prescribed by the AER, under normal circumstances taking account of limits imposed by thermal or by voltage drop considerations as relevant. Capacity is to be provided in an MVA measure.

The AER requires this information to calculate an overall MVA x km 'carrying capacity' for each overhead voltage class under normal circumstances.

On 4 February 2015, the AER also provided (at Ergon Energy's request) the following clarification with regards to requirements in respect of reporting requirements for Tables 6.1.3:

We are not requesting separate weighted average capacities for summer and winter. We are requesting the weighted average capacity for the whole network in summer if the majority of that network experiences maximum demand in summer. Conversely, we are requesting the weighted average capacity for the whole network in winter if the majority of that network experiences maximum demand in winter.

That is, we are requesting the weighted average MVA capacity circuit capacity calculated using the capacities (under system normal conditions) at the time of overall system Maximum Demand.

Further to this, on 3 December 2013, the AER provided the following clarification to NSPs:

....variables contained within [Tables 6.1.1 and] 6.1.3 do not include the length or capacity of service lines. The correct, compliant completion of Tables 6.1.1 and 6.1.3 is to report the circuit length and circuit capacity excluding the circuit length and circuit capacity of service lines.

A stakeholder has asked whether two sets of lines that run on different sets of poles (or towers) but share the same easement should count as one route or two for the variable DOEF0301. We confirm that in this instance the lines are to be counted separately. The correct, compliant response to the variable DOEF0301 where two sets of lines share the same easement but run on separate sets of poles (or towers) is to count these lines as separate routes when reporting total route line length.

Note in reissuing templates to Ergon Energy for use in 2013-14 to 2017-18 AER renamed tables 6.1.1 and 6.1.3 as table 3.5.1.1 and 3.5.1.3 respectively.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables relating to estimated Overhead network weighted average capacities (MVA).

Table 3: Estimated Overhead Network Weighted Average Capacity by Voltage Class (MVA)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>Where two sets of lines run on different sets of poles (or towers) but share the same easement these are counted as separate routes for the variable DOEF0301.</p> <p>Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 to 2017-18. Therefore, care should be taken when reviewing variable data against submissions prior to 2013-14.</p> <p>Consistent with the clarification received from the AER, Ergon Energy has reported against those asset categories previously reported against and have left blank any categories that are not relevant to its business. [DPA0303, DPA0308, DPA0312].</p>
<p>Population of Actual Information in templates, including Source.</p> <p>DPA0301-</p> <p>DPA0313</p>	<p>Ergon Energy has provided Actual data for all overhead network circuits with the exception of variable [DPA0301] Overhead low voltage distribution lines.</p> <p>Ergon Energy has sourced data from, and made reference to the following standards or guidelines, in order to complete variables for Estimated Overhead Network Weighted Average Capacity, by Voltage Class (MVA):</p> <ul style="list-style-type: none"> ▪ SOREP Oracle Spatial database (replicated SmallWorld GIS electrical datastore); ▪ Australian Standards; ▪ IEC Standards; ▪ ESAA D(b)5; and ▪ Ergon Energy Plant Rating Guidelines.
Methodology and assumption's applied in relation to Actual Information	<p>Data in relation to Table 3.5.1.1 'Overhead network length of circuit at each voltage' was used. A methodology was employed whereby for lines interacting with more than one climate zones, the lowest rating was applied. Summer ratings were calculated.</p> <p>Voltage drop and thermal limits of circuit components other than overhead lines and cables have not been considered when establishing the capacities of lines.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are	<p>Ergon Energy has provided 'Estimated Information' (as per the AER's defined term) in relation to variable [DPA0301] Overhead low voltage distribution lines contained in Template 3.5, Table 3.5.1.3.</p> <p>When sourcing data in relation to overhead low voltage distribution line was discovered that that 57.6% of LV lines were not included in the assessment of the weighted average MVA capacity, as these have unknown characteristics.</p>

Variable	Addressing Basis of Preparation Requirements
Ergon Energy's best estimates.	<p>Further, it was noted that these lines are most probably older LV lines (eg. Imported from legacy systems at the time of SmallWorld implementation) that is likely to have smaller capacities thus potentially over reporting this data.</p> <p>Discussions with the auditors, we came to a conservative assumption to use a small copper conductor (0.080") as the construction of the 57.6% LV lines that were not included.</p> <p>On this basis Ergon Energy considers that the best estimate has been provided.</p>
Changes in Accounting Policies (Financial information - Actual or Estimated)	Overhead network weighted average capacities reported are a non-financial data set, and accordingly this requirement is not applicable.

Estimated Underground Network Weighted Average Capacity by Voltage Class (MVA)

Template 3.5, Table 3.5.1.4 requires Ergon Energy to provide estimated typical or weighted average capacities for each of the listed underground voltage classes prescribed by the AER, under normal circumstances taking account of limits imposed by thermal or by voltage drop considerations as relevant. Capacity is to be provided in an MVA measure.

The AER requires this information to calculate an overall MVA x km 'carrying capacity' for each voltage class under normal circumstances. Refer also to abovementioned additional guidance received from AER (4 February 2015) in regard to Table 3.5.1.4.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables in relation to estimated Underground network weighted average capacities (MVA).

Table 4: Estimated Underground Network Weighted Average Capacity by Voltage Class (MVA)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 to 2017-18. Therefore, care should be taken when reviewing variable data against submissions prior to 2013-14.</p> <p>Consistent with the clarification received from the AER, Ergon Energy has reported against those asset categories previously reported against and have left blank any categories that are not relevant to its business. [DPA0402, DPA0404, DPA0407, DPA0411].</p>
DPA0401- DPA0413	
Population of Actual Information in templates, including Source.	<p>Ergon Energy has sourced data from, and made reference to the following standards or guidelines, in order to complete variables for Estimated Underground Network Weighted Average Capacity, by Voltage Class (MVA) :</p> <ul style="list-style-type: none"> SOREP Oracle Spatial database (replicated SmallWorld GIS electrical datastore);

Variable	Addressing Basis of Preparation Requirements
Methodology and assumption's applied in relation to Actual Information	<ul style="list-style-type: none"> ▪ Olex cable manufacturer catalogue calculations; ▪ Australian Standards; ▪ IEC Standards; and ▪ Ergon Energy Plant Rating Guidelines <p>Data in relation to Table 3.5.1.2 'Underground circuit length each voltage' was used. Of note, the following assumptions were applied.</p> <ul style="list-style-type: none"> ▪ Cables with similar characteristics given the same rating; ▪ Cables ambient air temperature calculated from spatial analysis with Ergon Energy Climate Zones; ▪ Cables ground temperature calculated from spatial analysis with 9 BOM Weather stations (nearest); ▪ Unknown Voltage & Phase attributes calculated from cable characteristics; ▪ Cables ratings assumed 2 adjacent cables, 900mm depth, Cyclic Rating Factor =1, Solid Bonded & TR=2.0; ▪ Summer & Winter Ratings were calculated. <p>Voltage drop and thermal limits of circuit components other than overhead lines and cables have not been considered when establishing the capacities of cables.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in Template 3.5 Table 3.5.1.4.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Underground network weighted average MVA capacity reported is a non-financial data set, and accordingly this requirement is not applicable.

Table 3.5.2 – Transformer Capacities Variables

The AER requires information pertaining to the capacity of Ergon Energy's installed Distribution and Zone Substation transformers. Information is required in relation to distribution transformer capacity both owned by Ergon Energy, and owned by its high voltage customers. Cold spare capacity (included in total capacity) is also required to be separately reported for both Distribution and Zone Substation transformers.

Distribution Transformer Total Installed Capacity

Specifically, Template 3.5 Table 3.5.2.1 requires Ergon Energy to report total installed Distribution Transformer capacity both owned by Ergon Energy and by high voltage customers. Cold spare capacity included in Ergon Energy's total capacity is to also be separately identified.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Distribution transformer total installed capacity.

Table 5: Distribution Transformer Total Installed Capacity

Variable	Addressing Basis of Preparation Requirements
<p>Consistency with Notice requirements</p> <p>DPA0501-</p> <p>DPA0503</p>	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>Distribution transformer capacity owned by Ergon Energy (DPA0501) - the reported data is the nameplate continuous rating including forced cooling.</p> <p>Where the transformer capacity owned by the customers connected at high voltage (DPA0502) was not available, Ergon Energy reported the summation of individual Maximum Demands of high voltage customers whenever they occur (i.e. the summation of single annual Maximum Demand for each customer) as a proxy for delivery capacity within the high voltage customers. This is consistent with the Instructions and Definition document issued by the AER in November 2013, which states</p> <p style="text-align: center;"><i>“When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Ergon Energy can provide Actual Information for Distribution Transformer capacity owned by High Voltage Customers it must do so; otherwise Ergon Energy must provide Estimated Information.”</i></p> <p>DPA0503 Cold Spare Capacity represents the total capacity of spare transformers owned by Ergon Energy but not currently in use. Cold Spare Capacity is included in Distribution transformer capacity owned by Ergon Energy (DPA0501).</p>
<p>Population of Actual Information in templates, including Source.</p>	<p>The source data for Distribution transformer capacity owned by High Voltage was obtained from the DCOS and PEACE billing reports</p> <p>The total capacity of installed distribution transformers was sourced from a Current State Assessment database which each year stores the amount of distribution transformer capacity connected to each distribution feeder. The installed distribution transformer capacity is stored in Ergon Energy's corporate database.</p> <p>The source of the distribution transformer cold capacity is detailed in the table below</p>
<p>Methodology and assumption's applied in relation to Actual Information</p>	<p>For Distribution transformer capacity owned by, ICC & CAC customers were taken from the annual DCOS file after removing those metered at low voltage (415 line etc.). Following, the maximum of actual charged maximum demand for each year or authorised demand was taken for each connection point. (Note: a connection point must have</p>

Variable	Addressing Basis of Preparation Requirements
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	<p>capacity of at least the authorised demand). The DCOS totals were then added to the of SAC High Voltage connections.</p> <p>DCOS numbers were used for SAC High Voltage as no reliable, consistent, like for like, data for SAC High voltage connections is available over the required period. However, given that SAC High Voltage is less than 2% of totals, this was considered an acceptable estimation.</p> <p>The data is obtained from monthly billing files received from Service Transaction Centre using Netbill, and other files produced for Pricing purposes.</p> <p>ICC and CAC maximum demand is available in KVA ;a conversion factor was used to convert SAC High Voltage Demand to KVA.The distribution transformer cold capacity was added to the installed capacity values. Refer to Table 6 below, for source and methodology employed for Cold Spare Capacity variables.</p>
Changes in Accounting Policies (Financial information - Actual or Estimated)	<p>Ergon Energy is unable to provide Actual Information for Distribution transformer capacity owned by High Voltage Customers therefore Estimated Information has been presented in accordance with the Instruction at Table 3.5.2 Transformer Capacities Variables. This is consistent with the Instructions and Definition document issued by the AER in November 2013, which states</p> <p style="text-align: center;"><i>“When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Ergon Energy can provide Actual Information for Distribution Transformer capacity owned by High Voltage Customers it must do so; otherwise Ergon Energy must provide Estimated Information.”</i></p> <p>Capacity of installed distribution transformers is a non-financial data set, and accordingly this requirement is not applicable.</p>

The following comments relate to cold spare capacity reporting as relevant to both variables DPA0503 (distribution transformer cold spare capacity) and DPA0605 (zone substation transformer cold spare capacity).

Table 6: Cold Spare Capacity (Distribution Transformer and Zone Substation)

Variable	Addressing Basis of Preparation Requirements
<p>Consistency with Notice requirements</p> <p>DPA0503</p> <p>DPA0605</p>	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory period</p> <p>Cold Spare Capacity represents the total capacity of spare transformers owned by Ergon Energy but not currently in use. Cold Spare capacity is included in the total Distribution transformer capacity owned by Ergon Energy (DPA0501), and</p>

Variable	Addressing Basis of Preparation Requirements
	total zone substation transformer capacity (DPA0604).
Population of Actual Information in templates, including Source.	Relevant to DPA0503 and DPA0605, Cold Spare capacity data was sourced from the Ellipse Production table files using a Mincom Ellipse Reporting (MERS). A snap shot report has been designed to run on early the first day of each month. The report used for the data in this regulatory period was taken on the 1/7/2018.
Methodology and assumption's applied in relation to Actual Information	<p>In order to obtain the Cold Spare Capacity values required for this report the Stock On Hand (SOH) value for each identified stock code was required early on the first day of the new regulatory period. This data was obtained from a snapshot report that was run on at the end of the 2017-18 financial year.</p> <p>To calculate the Cold Spare Capacity value in MVA stock on hand value for the regulatory year was multiplied by the Capacity of the item which could be obtained from the Stock Code's description.</p> <p>The value for DPA0503 includes a Cold Spare Capacity value of 15.018 Mva for Refurbished Distribution Transformers</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' in accordance with the AER's defined term.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Cold spare capacity is a non-financial data set, and accordingly this requirement is not applicable.

Zone substation Transformer Capacity

Template 3.5, Table 3.5.2.2 requires Ergon Energy to report transformer capacity for intermediate level transformation capacity in either one or two steps. For example, high voltages such as 132 kV, 66 kV or 33kV at the Zone Substation level to the distribution level of 22 kV, 11 kV or 6kV.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Zone Substation transformer capacity variables.

Table 7: Zone Substation Transformer Capacity

Variable	Addressing Basis of Preparation Requirements
DPA0601- Consistency with Notice	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory

Variable	Addressing Basis of Preparation Requirements
DPA0605 requirements	<p>year.</p> <p>Measures are the summation of normal assigned continuous capacity/rating (with forced cooling or other capacity improving factors included). They include both energised transformers and cold spare capacity.</p> <p>The assigned rating must be (if available) the rating determined from results of temperature rise calculations from testing, else the nameplate rating is reported.</p> <p>For zone substations where the thermal capacity of exit feeders is a constraint, thermal capacity of exit feeders is reported instead of transformer capacity.</p> <p>Cold Spare Capacity represents the total capacity of spare transformers owned by Ergon energy but not currently in use. Cold spare capacity is included in the total zone substation transformer capacity (DPA0604).</p>
Population of Actual Information in templates, including Source.	2017-18 totals are based on current corporate data extracted from Ellipse as a snapshot of the system at the end of the 2017-18 regulatory year.
Methodology and assumption's applied in relation to Actual Information	<p>Transformer asset data was extracted from the corporate database, categorised according to Table 3.5.2.2, and summated to obtain totals.</p> <p>FME (Feature Manipulation Engine - www.safe.com) has been used to obtain the data for DPA0601-DPA0603 from the standard specified resources and compare data in an identical method to previous years. FME is data translation software that connects to the required data sources and completes required analysis in a method able to be replicated in a consistent manner.</p> <p>Note that the small decline in DPA0603 as compared to 2013-14 is due to some transformers being taken out of service or re-classified as Powerlink owned.</p> <p>Refer to Table 6 above, for source and methodology employed for Cold Spare Capacity variables.</p>
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' in accordance with the AER's defined term.

Variable	Addressing Basis of Preparation Requirements
Changes in Accounting Policies (Financial information - Actual or Estimated)	Capacity of zone substation transformers is a non-financial data set, and accordingly this requirement is not applicable.

Table 3.5.3 – Public Lighting

The AER requires Ergon Energy to report the number of public lighting luminaires and public lighting poles in its network. For both variables, Ergon Energy is required to report numbers that include both assets owned by Ergon Energy and assets operated and maintained, but not owned by Ergon Energy. Only poles that are used exclusively for public lighting are to be included.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Public Lighting.

Table 8: Public Lighting

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>Only lamps and poles that are used exclusively for public lighting and are owned or gifted and operated by Ergon Energy are to be included.</p> <p>Consistent with clarification received from the AER following reissuance of templates for the 2017-18 regulatory year, Ergon Energy has reported against those asset categories previously reported against and have left blank any categories that are not relevant to its business. [DPA0703].</p>
DPA0701- Population of Actual Information in templates, including Source.	Public Lighting data has been sourced from the PLUMS database and Smallworld GIS.
DPA0703 Methodology and assumption's applied in relation to Actual Information	<p>For Public Lighting Luminaries a methodology was employed whereby Pivot tables were developed from PLUMS database to identify Public Lighting assets that were established in the database at the end of each regulatory year (financial year). Only Ergon Owned and Operated and Gifted and Ergon Operated lights have been included (previously known as Rate 1 & 2).</p> <p>For Public Lighting Poles a methodology was employed whereby a query was run through Smallworld to identify Public Lighting assets that did not have Network Wires attached and as such were Street Light Only Poles. Customer Owned and Operated poles were excluded (previously known as Rate 3).</p> <p>The Public Lighting luminaires and poles figure has slightly decreased from last year due to reclassification of lighting in isolated communities as Customer Owned and Operated and</p>

Variable	Addressing Basis of Preparation Requirements
	<p>continued data matching between systems.</p> <p>It is assumed that the Smallworld data is an accurate record of actual assets.</p>
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template in Table 3.5.3 (Public Lighting).</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Public lighting data reported is a non-financial data set, and accordingly this requirement is not applicable.</p>

Economic Benchmarking RIN Basis of Preparation



Template 3.6 Quality of Service

1 July 2017 to 30 June 2018



Version Control

Version	Date	Description
1.0	31/10/18	Final as submitted to AER on 31 October 2018

Foreword

In response to requirements of the Australian Energy Regulator's (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.6 Quality of Service of Ergon Energy's completed 2017-18 Economic Benchmarking RIN templates (2017-18 EB RIN Templates), this Basis of Preparation document has been prepared by Ergon Energy with a view to demonstrate compliance with the Notice, in respect of:

- demonstrate how the information provided in relation to in Template 3.6 Quality of Service (and associated Tables and/or variables) is consistent with the requirements of the Notice;
- explain the source from which Ergon Energy obtained the information provided in the template; and
- explain the methodology Ergon Energy applied to provide the required information, including any assumptions Ergon Energy made.

In circumstances where Ergon Energy has provided input using Estimated Information in relation to Template 3.6 Quality of Service, Ergon Energy has made comment herein as to:

- why an estimate was required, including why it was not possible to use Actual Information; and
- the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is a best estimate, given the information sought in this Notice.

Over and above this, Appendix B, Instructions and Definitions section 1.1.2 note (5) requires an additional minimum requirement for the Basis of Preparation for variables that contain Financial Information (Actual and Estimated) where accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice. In such instances, the relevant Basis of Preparation must include an explanation as to the:

- nature of the change; and
- impact of the change on the information provided in response to the notice.

Section 1.1.1 of the Appendix B, Instructions and Definitions also indicates which variables may not be applicable to Ergon Energy as displayed by yellow, orange, or blue shading in the Economic Benchmarking data Templates.

No additional requirements were identified as requiring provision of additional information or attachment/s over and above completed templates or Basis of Preparation.

This Basis of Preparation document should be read in conjunction with the information presented in Template 3.6 Quality of Service (Actual, Estimated or Consolidated) in Ergon Energy's completed 2017-18 EB RIN Templates.

Of note, the AER reissued Economic Benchmarking RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 31 May 2018. The reissued (protected) templates allow for submission of the 2017-18 Regulatory Year data only. Regard has also been given to the clarification provided by the AER (24 October 2016) relative to ongoing compliance matters including auditing requirements, and specifically the provision of 'actuals' and 'estimates' (and exemptions therein).

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Template 3.6 Quality of Service

The AER requires data on service quality for economic benchmarking, particularly because increases in measured efficiency may otherwise be achieved at the expense of service quality in either the short-term or the longer term. Accordingly, the AER are collecting data in relation to the Reliability of Ergon Energy's network (both inclusive and exclusive of Major Event Days (MEDs)), estimates of Energy Not Supplied, as well as System Losses and Capacity Utilisation.

The AER notes Whole of Network System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) are to be the system wide SAIDI and SAIFI, and that they don't require information by individual feeder categories within Ergon Energy's network.

Table 3.6.1 - Reliability

Specifically, in Template 3.6 Table 3.6.1 Ergon Energy is required to report reliability data in relation to the SAIDI and SAIFI for unplanned outages on a Whole of Network basis. Data is required to be reported in accordance with the definitions provided in the AER's Service Target Performance Incentive Scheme (STPIS)¹ unless otherwise specified. Performance is required to be reported both inclusive and exclusive of excluded outages as per STPIS, and also then inclusive or exclusive of MEDs allowable under the Scheme.

Reliability - Inclusive of Major Event Days (MED)

Template 3.6 Table 3.6.1.1 requires Ergon Energy to report SAIDI and SAIFI in accordance with the definitions provided in Chapter 9 of the RIN Information and Definitions.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Reliability statistics (inclusive of MEDs).

Table 1: Reliability Performance (Inclusive of MEDs)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.
DQS0101- DQS0104	Data is reported in accordance with the definitions provided in the AER's <i>STPIS</i> unless otherwise noted. Data represents Actual performance only in relation to unplanned interruptions, as defined in the AER's STPIS scheme. In the absence of specification, Whole of Network statistics were assumed to encompass the Summation of Urban, Short Rural & Long Rural (Customer Minutes, Customer Interruptions and Customer Numbers).
Population of Actual Information in templates, including Source.	Ergon Energy has sourced data from its internal outage management and asset management systems.
Methodology and assumption's applied in relation to Actual Information	Refer to Table 2: Reliability Performance (Inclusive of MEDs) – Specific Variable Responses below for methodologies specific to each variable. The following

¹ AER, *Electricity distribution network service providers Service target performance incentive scheme*, November 2009

Variable	Addressing Basis of Preparation Requirements
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all Reliability statistics.</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Reliability information reported is a non-financial data set, and accordingly this requirement is not applicable</p>

The following comments are made in relation to specific Reliability variables, provided in Template 3.6 Table 3.6.1.1 (Reliability performance inclusive of MEDs). Comments detail the specific scripting utilised to extract data used by Ergon Energy in providing Actual Information.

Table 2: Reliability Performance (Inclusive of MEDs) – Specific Variable Responses

Variable	Definition
Whole of network unplanned SAIDI (DQS0101)	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Years 2017-18 (Between 1 July and 30 June)</p> <p>SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers</p> <p>Inclusive of the following exclusions:</p> <ul style="list-style-type: none"> ▪ STPIS MED's (Exemption clause: 3.3 (b)) ▪ Generation (Exemption clause: 3.3 (a) (2 or 3)) ▪ Shared Transmission (Exemption clause: 3.3 (a) (5)) ▪ Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) ▪ Customer installation faults/failures which reside beyond the electricity supply network
Whole of network unplanned SAIDI - excluding excluded outages (DQS0102)	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Year 2017-18 (between 1 July and 30 June)</p> <p>SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers.</p> <p>Inclusive of the following exclusions:</p> <ul style="list-style-type: none"> ▪ STPIS MED's (Exemption clause: 3.3 (b)) <p>The following exclusions are removed:</p> <ul style="list-style-type: none"> ▪ Generation (Exemption clause: 3.3 (a) (2 or 3)) ▪ Shared Transmission (Exemption clause: 3.3 (a) (5)) ▪ Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) ▪ Customer installation faults/failures which reside beyond the electricity supply network
Whole of network unplanned SAIFI (DQS0103)	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Year 2017-18 (Between 1 July and 30 June)</p> <p>SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers</p> <p>Inclusive of the following exclusions:</p> <ul style="list-style-type: none"> ▪ STPIS MED's (Exemption clause: 3.3 (b)) ▪ Generation (Exemption clause: 3.3 (a) (2 or 3)) ▪ Shared Transmission (Exemption clause: 3.3 (a) (5)) ▪ Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) ▪ Customer installation faults/failures which reside beyond the electricity supply network
Whole of network unplanned SAIFI - excluding excluded outages (DQS0104)	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Years 2017-18 (between 1 July and 30 June)</p> <p>SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of</p>

Variable	Definition
	<p>Customers</p> <p>Inclusive of the following exclusions:</p> <ul style="list-style-type: none"> STPIS MED's (Exemption clause: 3.3 (b)) <p>The following exclusions are removed:</p> <ul style="list-style-type: none"> Generation (Exemption clause: 3.3 (a) (2 or 3)) Shared Transmission (Exemption clause: 3.3 (a) (5)) Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) Customer installation faults/failures which reside beyond the electricity supply network

Reliability - Exclusive of MEDs

Table 3.6.1.2 requires Ergon Energy to report SAIDI and SAIFI in accordance with the definitions provided in Chapter 9 of the information and definitions document in Appendix B to the Notice.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Reliability statistics (exclusive of MEDs).

Table 3: Reliability Performance (Exclusive of MEDs)

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory years.</p> <p>Data is reported in accordance with the definitions provided in the AER's <i>STPIS</i> unless otherwise noted.</p> <p>Data represents actual performance only in relation to unplanned interruptions, as defined in the AER's <i>STPIS</i> scheme.</p> <p>In the absence of specification, Whole of Network statistics were assumed to encompass the Summation of Urban, Short Rural & Long Rural (Customer Minutes, Customer Interruptions and Customer Numbers).</p>
DQS0105- DQS0108 Population of Actual Information in templates, including Source.	<p>Ergon Energy has sourced data from its internal outage management (FeederStat) and asset management systems.</p>
Methodology and assumption's applied in relation to Actual Information	<p>Refer to Table 4: Reliability Performance (Exclusive of MEDs) – Specific Variable Responses below for methodologies specific to each variable. The following comments are made across all variables.</p> <p>The regulatory (financial) year 2017-18 Major Event Day Threshold (tMed 7.37) was calculated utilising 5 years of Daily SAIDI data using the required <i>STPIS</i> methodology.</p> <p>The distribution customer numbers utilised, Ergon Energy notes that</p> <ul style="list-style-type: none"> Average number of customers (the number of distribution customers is calculated as the average of the number of customers at the beginning of the reporting period and the number of customers at the end of the reporting period) was

Variable	Addressing Basis of Preparation Requirements
	<p>used as the denominator for the calculation as per the formula outlined in Appendix A of the AER's STPIS scheme.</p> <ul style="list-style-type: none"> ▪ Only completed unplanned sustained (interruptions greater than one minute) interruptions are included. ▪ An event caused by a customer's electrical installation or failure of that electrical installation which only affects supply to that customer is not deemed an interruption as defined, "A sustained interruption is any loss of electricity supply to a customer associated with an outage of any part of the electricity supply network" STPIS 2009 and CA RIN Appendix E 18.2]. These events have been confirmed through site inspection to have resulted from faults and failures within the customer's installation and as such are considered to be an event beyond the boundary of the electricity supply network and therefore excluded from Ergon Energy reported reliability performance under the STPIS.
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all Reliability statistics</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Reliability information reported is a non-financial data set, and accordingly this requirement is not applicable.</p>

The following comments are made in relation to specific Reliability variables, provided in Template 3.6 Table 3.6.1.2 (Reliability performance exclusive of MEDs). Comments detail the specific scripting utilised to extract data used by Ergon Energy in providing Actual Information

Table 4: Reliability Performance (Exclusive of MEDs) – Specific Variable Responses

Variable	Definition
<p>Whole of network unplanned SAIDI (DQS0105)</p>	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Year 2017-18 (Between 1 July and 30 June)</p> <p>SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers:</p> <p>The following exclusions are removed:</p>

Variable	Definition
	<ul style="list-style-type: none"> ▪ STPIS MED's (Exemption clause: 3.3 (b)) <p>Inclusive of the following exclusions:</p> <ul style="list-style-type: none"> ▪ Generation (Exemption clause: 3.3 (a) (2 or 3)) ▪ Shared Transmission (Exemption clause: 3.3 (a) (5)) ▪ Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) ▪ Customer installation faults/failures which reside beyond the electricity supply network
Whole of network unplanned SAIDI - excluding excluded outages (DQS0106)	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Year 2017-18 (between 1 July and 30 June)</p> <p>SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers</p> <p>The following exclusions are removed:</p> <ul style="list-style-type: none"> ▪ STPIS MED's (Exemption clause: 3.3 (b)) ▪ Generation (Exemption clause: 3.3 (a) (2 or 3)) ▪ Shared Transmission (Exemption clause: 3.3 (a) (5)) ▪ Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) ▪ Customer installation faults/failures which reside beyond the electricity supply network
Whole of network unplanned SAIFI (DQS0107)	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Year 2017-18 (Between 1 July and 30 June)</p> <p>SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers</p> <p>The following exclusions are removed:</p> <ul style="list-style-type: none"> ▪ STPIS MED's (Exemption clause: 3.3 (b)) <p>Inclusive of the following exclusions:</p> <ul style="list-style-type: none"> ▪ Generation (Exemption clause: 3.3 (a) (2 or 3)) ▪ Shared Transmission (Exemption clause: 3.3 (a) (5)) ▪ Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) ▪ Customer installation faults/failures which reside beyond the electricity supply network
Whole of network unplanned SAIFI - excluding excluded outages (DQS0108)	<p>Completed Sustained Unplanned Interruptions</p> <p>Feeder Categories: Whole of Network</p> <p>Financial Year 2017-18 (between 1 July and 30 June)</p> <p>SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers</p> <p>The following exclusions are removed:</p> <ul style="list-style-type: none"> ▪ STPIS MED's (Exemption clause: 3.3 (b)) ▪ Generation (Exemption clause: 3.3 (a) (2 or 3))

Variable	Definition
	<ul style="list-style-type: none"> Shared Transmission (Exemption clause: 3.3 (a) (5)) Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7)) Customer installation faults/failures which reside beyond the electricity supply network

Table 3.6.2 – Energy Not Supplied

Template 3.6 able 7.2 requires Ergon Energy to estimate the raw (not normalized) energy not supplied due to unplanned customer interruptions based on average customer demand (multiplied by the number of customers interrupted and the duration of the interruption).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Energy Not Supplied. Of note, Total Energy not Supplied (variable DQS02) represents the total of Planned and Unplanned Energy Not Supplied respectively, and is therefore implicitly addressed in the responses below.

Table 5: Energy Not Supplied

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>Although not specified, Planned and Unplanned outage data has been utilised on a Whole of Network basis (Urban, Short Rural and Long Rural). The outage data represents the normalised interruption data resulting from the exclusion of excluded events listed in Chapter 9 of the Economic Benchmark RIN Instructions and Definitions. Additionally Ergon Energy has excluded the influences of MEDs from the outage data from which the energy not supplied is derived. The exclusion of MEDs is not specifically listed in the excluded events in Chapter 9 and is not specifically considered in Chapter 7 Quality of Service. Ergon Energy has however interpreted the removal of the influences of MEDs is part of the general excluded events that are normally considered.</p>
DQS0201	
DQS0202	
DQS02	<p>This approach is consistent with the AER clarification received on 9 September 2015, which stated by ‘normalized’ energy not supplied the AER meant energy not supplied adjusted to reflect normal operating circumstances. The AER does not mean energy not supplied inclusive of Excluded Outages.</p> <p>Approach 3 in Chapter 7 section 7.1 of the Instructions and Definitions has been applied to estimate the energy not supplied as a result of a customer interruption. Approach 3 states “average consumption of customers on the feeder based on their billing history” has been applied</p>
Population of Actual Information in templates, including Source.	Ergon Energy utilised a combination of customer outage data sourced from the Ergon Energy Outage Management System (FdrSTAT) and customer consumption data from the Peace system.

Variable	Addressing Basis of Preparation Requirements
Methodology and assumption's applied in relation to Actual Information	<p>The Outage Management System data provided by Ergon Energy's Performance Reporting group represented both Unplanned and Planned interruption data grouped by distribution feeder. The interruption data used as the basis for the derivation of the Energy Not Supplied is noted to INCLUDE:</p> <ul style="list-style-type: none"> ▪ Sustained Interruption Events as defined in the National STPIS 2009 ▪ Normal ▪ Service Fuse or Beyond <p>and to EXCLUDE</p> <ul style="list-style-type: none"> ▪ STPIS MED day exclusions ▪ Public Safety Isolation (Exemption clause: 3.3 (a) (7)) ▪ Generation (Exemption clause: 3.3 (a) (2)) ▪ Shared Transmission (Exemption clause: 3.3 (a) (5)). <p>The aggregated regulatory year feeder interruption data provided:</p> <ul style="list-style-type: none"> ▪ Network type as defined in the National STPIS 2009 ▪ Customers interrupted resulting from Planned events ▪ Duration of Interruption resulting from Planned events ▪ Customers interrupted resulting from Unplanned events ▪ Duration of Interruption resulting from Unplanned events <p>All export and import meter data from Peace for the regulatory reporting year for each NMI was extracted and loaded into a table. The standing data from PEACE for each NMI linking to the relevant Feeder was placed in this table. A query was then run to consolidate all NMIs' consumption data relating to each feeder to give their annual consumption. This total is then used to calculate the average customer consumption per minute per feeder.</p> <p>Ergon Energy has estimated the energy not supplied due to unplanned and planned customer interruptions based on average customer consumption per minute per feeder, multiplied by the customer minutes off supply.</p> <p>Customer minutes off supply are calculated by multiplying the duration of the interruption by the number of customers interrupted. This information is sourced from the Outage Management System (FdrSTAT).</p> <p>Customer minutes off supply are then multiplied by the average consumption per affected feeder, to determine an estimate of Energy Not Supplied.</p> <p>This calculation was performed for both Planned and Unplanned interruptions, with Total Energy Not supplied being the sum of DQS0201 and DQS0202.</p>

Variable	Addressing Basis of Preparation Requirements
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	<p>By definition, Ergon Energy has provided 'Estimated Information' in relation to all variables contained in Template 3.6 Table 3.6.2.</p> <p>Historical feeder connectivity is not captured by Ergon Energy, and therefore current connectivity is assumed. Consumption is identified for all feeders and was multiplied by the customer minutes. Where there is no current connectivity an average consumption across all feeders was used.</p> <p>This is consistent with the Instructions and Definition document issued by the AER in November 2013, which states</p> <p><i>"When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Ergon Energy can provide Actual Information for energy not supplied it must do so; otherwise Ergon Energy must provide Estimated Information."</i></p>
Changes in Accounting Policies (Financial information - Actual or Estimated)	Energy Not Supplied is a non-financial data set, and accordingly this requirement is not applicable.

Table 3.6.3 – System Losses

The AER requires Ergon Energy to report system losses, being the proportion of energy lost in distribution of electricity from the transmission network to Ergon Energy customers. The AER provides equation 2 for the purpose of calculating distribution losses.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments relative to Template 3.6 Table 3.6.3 – System Losses

Table 6: System Losses

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<p>All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.</p> <p>System losses are calculated in accordance with Equation 2 in the Instructions and Definitions at Appendix B to the Notice.</p>
DQS03 Population of Actual Information in templates, including Source.	In order to calculate System Losses, data has been sourced from corporate sources, as detailed in the BOPs for Template 3.4 Operational data – see Energy Received and Energy Delivery.
Methodology and assumption's applied in relation to Actual Information	<p>All data provided in relation to System Losses is Actual information which is calculated using the following formula:</p> <p>$[\text{Energy Received} - \text{Energy Delivery}] \text{ divide Energy}$</p>

Variable	Addressing Basis of Preparation Requirements
	Received.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to variable DQS03 contained in Template 3.6, Table 3.6.3.
Changes in Accounting Policies (Financial information - Actual or Estimated)	System Losses reported are a non-financial data set, and accordingly this requirement is not applicable.

Table 3.6.4 – Capacity Utilisation

The AER requires information in relation to Capacity utilisation, as a measure of the capacity of zone substation transformers that is utilised each year.

Specifically, Template 3.6 Table 3.6.4 requires Ergon Energy to report the sum of non-coincident Maximum Demand at the zone substation level divided by summation of zone substation thermal capacity.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to capacity utilisation.

Table 7: Capacity Utilisation

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for all regulatory years.
DQS04	For the purpose of this measure, capacities used are the summation of normal assigned continuous capacity/rating (with forced cooling or other capacity improving factors included).
	The assigned rating must be (if available) the rating determined from results of temperature rise calculations from testing, else the nameplate rating is reported.
	For zone substations where the thermal capacity of exit feeders is a constraint, thermal capacity of exit feeders is used instead of transformer capacity.
Population of Actual Information in templates, including Source.	Ergon Energy has sourced data in order to report capacity utilisation from the same sources as those reported for DOPSD0201 and DPA0604.
Methodology and assumption's applied in relation to Actual	This data was determined by dividing the Non-coincident Summated Raw System Annual Maximum Demand provided as per DOPSD0201 by the Total zone substation

Variable	Addressing Basis of Preparation Requirements
Information	transformer capacity as per DPA0604, not including the Cold Spare Capacity.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in Template 3.6 Table 3.6.4.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Capacity utilisation data is a non-financial data set, and accordingly this requirement is not applicable

Economic Benchmarking RIN Basis of Preparation



Template 3.7 Environment
1 July 2017 to 30 June 2018



Version Control

Version	Date	Description
1.0	31/10/18	Final as submitted to AER on 31 October 2018

Foreword

In response to requirements of the Australian Energy Regulator's (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.7 Environment of Ergon Energy's completed 2017-18 Economic Benchmarking RIN templates (2017-18 EB RIN Templates), this Basis of Preparation document has been prepared by Ergon Energy with a view to demonstrate compliance with the Notice, in respect of:

- demonstrate how the information provided in relation to in Template 3.7 Environment (and associated Tables and/or variables) is consistent with the requirements of the Notice;
- explain the source from which Ergon Energy obtained the information provided in the template; and
- explain the methodology Ergon Energy applied to provide the required information, including any assumptions Ergon Energy made.

In circumstances where Ergon Energy has provided input using Estimated Information in relation to Template 3.7 Environment, Ergon Energy has made comment herein as to:

- why an estimate was required, including why it was not possible to use Actual Information; and
- the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is a best estimate, given the information sought in this Notice.

Over and above this, Appendix B, Instructions and Definitions section 1.1.2 note (5) requires an additional minimum requirement for the Basis of Preparation for variables that contain Financial Information (Actual and Estimated) where accounting policies adopted by Ergon Energy have materially changed during any of the Regulatory Years covered by the Notice. In such instances, the relevant Basis of Preparation must include an explanation as to the:

- nature of the change; and
- impact of the change on the information provided in response to the notice.

Section 1.1.1 of the Appendix B, Instructions and Definitions also indicates which variables may not be applicable to Ergon Energy as displayed by yellow, orange, or blue shading in the Economic Benchmarking data Templates.

No additional requirements were identified as requiring provision of additional information or attachment/s over and above completed templates or Basis of Preparation.

This Basis of Preparation document should be read in conjunction with the information presented in Template 3.7 Environment (Actual, Estimated or Consolidated) in Ergon Energy's completed 2017-18 EB RIN Templates.

Of note, the AER reissued Economic Benchmarking RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 31 May 2018. The reissued (protected) templates allow for submission of the 2017-18 Regulatory Year data only. Regard has also been given to the clarification provided by the AER (24 October 2016) relative to ongoing compliance matters including auditing requirements, and specifically the provision of 'actuals' and 'estimates' (and exemptions therein).

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Template 3.7 Operating Environment

The AER requires information on operating environment factors to account for exogenous circumstances that may cause differences in productivity across networks. These include variables relating to Density, and Terrains affecting Ergon Energy's network.

Table 3.7.1 – Density Factors

Specifically for Template 3.7 Table 3.7.1 the AER requires Ergon Energy to provide information in relation to density factors affecting its operating environment. Data is required in relation to Customer Density, Energy Density and Demand Density of Ergon Energy's network (all defined terms in Appendix B, Instructions and Definitions).

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to Density factors variables.

Table 1: Density Factors

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2017-18 regulatory year.
Population of Actual Information in templates, including Source.	Refer to responses provided in relation to the source for each numerator/denominator input as noted below.
Methodology and assumption's applied in relation to Actual Information DOEF0101- DOEF0103	Values were obtained by calculation as required in Instructions and Definitions for variables: <ul style="list-style-type: none"> ▪ "DOEF0101 – Customer density" was calculated by dividing the total number of customers (DOPCN01 from RIN Table 3.4.2.1) divided by the route Line Length (DOEF0301 from RIN Table 3.7). No conversions is required. ▪ "DOEF0102 – Energy density" was calculated by dividing the total energy delivered to customers (DOPED01) by the total number of customers (DOPCN01) from RIN Table 3.4.2. The energy delivered was multiplied by 1000 to convert the figures to MWh. ▪ "DOEF0103 – Demand density" was calculated by dividing the total non-coincident system annual maximum demand (DOPSD0201 from RIN Table 3.4.3.3) by the total number of customers (DOPCN01 from RIN Table 3.4.2.1) from RIN Table 3.4.2. The total non-coincident system annual maximum demand was multiplied by 1000 to

Variable	Addressing Basis of Preparation Requirements
	convert the figures to KVA. Further information on the methodology employed to determine each numerator or denominator input is available in Table 4: Routine Line Length, as well as in the relevant sections of the BOP for Operational data for DOPCN01, DOPED01, DOPSD0201.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined terms) in relation to all 2017-18 variables contained in Template 3.7 Table 3.7.1.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Density factor data is non-financial data, and accordingly this requirement is not applicable.

Table 3.7.2 – Terrain Factors

In Table 3.7.2, the AER requires information in relation to terrain factors affecting Ergon Energy's network operating environment. Specifically, the AER seeks to understand the Rural and Tropical proportions of the network, splits of vegetation maintenance spans by feeder category, average maintenance span cycles for those feeder categories, and number of trees and defects per span. The AER are also seeking information pertaining to the kilometers of standard vehicle accessible network and spans in bushfire risk.

The AER notes that for certain variables (DOEF0202-204 and DOEF0208-0214), where Ergon Energy has Actual Information, it is required to report available data. However, where Actual Information is not available, Estimate Information is required for the Regulatory Year.

For Average Vegetation maintenance Span Cycles (DOEF0206-DOEF0207) information (Actual or Estimate) is required.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following general comments in relation to Terrain Factors variables.

Table 2: Terrain Factors

Variable	Addressing Basis of Preparation Requirements
Consistency with Notice requirements	DOEF0201 (rural proportion) and DOEF0205 (total spans) are shaded yellow indicating they are mandatory data fields, and accordingly have been populated for the 2017-18 regulatory year.
DOEF0201- DOEF0214	Similarly, vegetation maintenance span cycles variables (DOEF0206-DOEF0207) have been provided as Actual Information for the 2017-18 regulatory year.
Population of Actual Information in templates, including Source.	Refer responses in Table 3: Terrain Factors –Specific Variable Responses, for more information on sources of

Variable	Addressing Basis of Preparation Requirements
	data.
Methodology and assumption's applied in relation to Actual Information	Refer responses in Table 3: Terrain Factors –Specific Variable Responses, for more information on methodologies used.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables in table 3.7.2
Changes in Accounting Policies (Financial information - Actual or Estimated)	Data reported in relation to Terrain Factors is non-financial and therefore this requirement is not applicable.

The following comments are made in relation to specific Terrain Factors variables, provided in Template 3.7 Table 3.7.2. These include comments in relation to the source, and methodologies and assumptions used by Ergon Energy in providing Actual or Estimated Information (as relevant).

Table 3: Terrain Factors – Specific Variable Responses

	Addressing Basis of Preparation Requirements
Rural proportion (DOEF0201)	<p>Data in relation to the Rural Proportion (rural short and rural long) of Ergon Energy's network (kms) has been sourced from Smallworld. Of note, Ergon Energy's rural vegetation zones – and therefore the rural vegetation management program costs – include some isolated systems and sub-transmission networks which has been excluded from the rural proportion.</p> <p>Information provided is Actual for the 2017-18 reporting year. With regards to the rural proportion variable DOEF0201, Ergon Energy notes the AER guidance provided on 7 February 2015, which clarified the classification of sub-transmission and low voltage lines into short or long rural (since feeder classifications are only applied to high voltage lines):</p> <p><i>The intention of this variable is to measure the rural proportion of a DNSP's network and our definition for a rural customer is a customer with dependent feeder classifications. For consistency the correct compliant response to DOEF0201 is to report the route line length of feeders classified as either short rural or long rural divided by the total route feeder line length (this is the total feeder route line length for all CBD, urban, short rural and long rural feeders).</i></p>
Urban and CBD and Rural vegetation maintenance spans (DOEF0202-)	<p>Urban and Rural vegetation maintenance spans data has been derived on the basis described below using Remote Observation Advanced Modelling Economic Simulation (ROAMES) data relating to vegetation intrusions into nominated clearance bands.</p> <p>Total completed spans figures for Urban Vegetation Zones and Total completed spans and for Rural Vegetation Zones where reported (Ergon Energy has no CBD feeder categories).</p> <p>Total vegetation maintenance spans (DOEF0204) are the sum of DOEF0202 and</p>

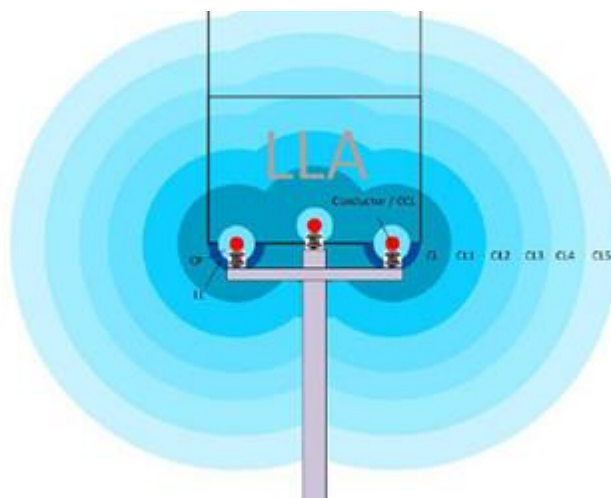
Addressing Basis of Preparation Requirements

DOEF0203) DOEF0203. Information provided is Actual Information for the 2017-18 year on the basis of:
Total vegetation maintenance spans (DOEF0204) ROAMES inspection data from Cycle 4 & 5 network capture between July 2016 and June 2017 has been used to determine value
 The calculation of Maintenance Spans from the total spans is the basis of the number of spans in which ROAMES recorded intrusions into clearance spaces that would normally be targeted for Urban and Rural treatment as detailed below:

Urban

Maintenance spans are spans with intrusions into the CL1 and CL2 clearance space where:

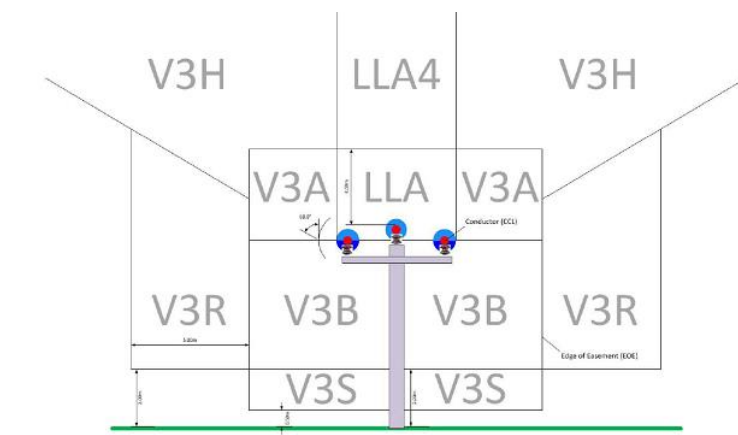
- CL1 is the nominated minimum clearance space (voltage dependant) plus 1 metre
- CL2 is the nominated minimum clearance space (voltage dependent) plus 2 metres



Rural

Maintenance spans are spans with intrusions into the V3B and V3A clearance space where:

- V3B is the nominated area from 2 metres above ground to conductor height which accounts for the maintenance space for chemical and mechanical treatment in rural areas
- V3A is the nominated area from conductor height to clearance space for the maintenance space for mechanical treatment in rural areas.



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Ergon Energy considers this is the best estimate using the available data.

As per AER clarifications provided on 3 December 2013, Ergon Energy confirms that for vegetation maintenance span variables DOEF0202 to DOEF0205, data does not include spans in the network service area where a DNSP is not responsible for the vegetation management associated with the span.

Of note is the effect of climatic and major weather event occurrences impacting the data collected during the 2015/16 year pertaining to the "Maintenance Spans" variable. Data collected during the 2016/17 year for this variable is substantially different in the Urban environment. The difference in Rural is cyclic and reflects the impacts of longer cycle zones. This balances out across the 5 year total program cycle. Other variances are reflective of seasonal change and our focus on a sustainable program with a general reduction in vegetation density.

Total number of spans (DOEF0205) Total number of spans for 2017-18 in respect of Ergon Energy's network has been sourced from Smallworld. Information provided for 2017-18 is considered Actual Information (as per the AER defined term).

On 3 December 2013, the AER clarified that DOEF0205 requests the number of spans within a DNSP's network irrespective of whether they are vegetation management spans. Accordingly, Ergon Energy confirms DOEF0205 does not include service line spans. It is the total number of spans, excluding service line spans.

Spans on multiple circuits are only counted once.

Average urban and CBD vegetation maintenance span cycle (DOEF0206) 2017-18 average maintenance span cycle data was calculated based on data sourced from the June monthly report for the Annual Vegetation Management Program (June 2017) taken from the Ellipse database (i.e. 2017-18 data was found in the June 2017 report).

A methodology was employed whereby:

- Average urban vegetation maintenance span cycle = (Sum of treated Urban vegetation zones cycle duration [Maintenance Schedule Task] / total number of Urban Vegetation Zones treated during regulatory (financial) year);
- Average rural vegetation maintenance span cycle = (Sum of treated rural vegetation zones cycle duration [Maintenance Schedule Task] / total number of rural Vegetation Zones treated during regulatory (financial) year)

Average rural vegetation maintenance span cycle (DOEF0207)

(Ergon Energy has no CBD feeder categories).

Notwithstanding that the number of maintenance spans is estimated data in 2017-18, the maintenance span cycle data provided for 2017-18 is considered Actual Information in accordance with AER requirements.

Average number of trees per urban and CBD vegetation maintenance span (DOEF0208) On 7 February 2015 the AER provided additional guidance to NSPs regarding the definition of a 'Tree' for the purposes of measuring the average number of trees per vegetation maintenance span for variables DOEF0208 and DOEF0209. The AER noted it considered a tree to be:

a perennial plant (of any species including shrubs) that is:

- *equal to or greater in height than 3 metres (measured from the ground) in the relevant reporting period; and*
- *of a species which could grow to a height such that it may impinge on the vegetation*

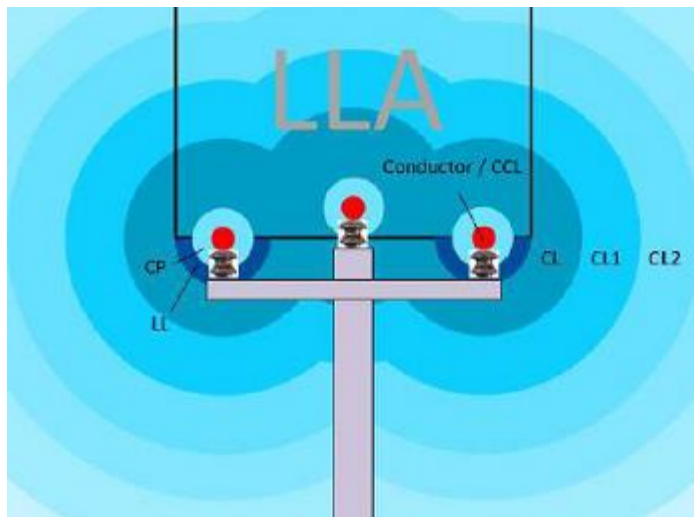
Average

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<p>number of trees per rural vegetation maintenance span (DOEF0209)</p>	<p><i>clearance space of power lines.</i></p> <p>In providing this clarification the AER noted this definition was not provided as part of the economic benchmarking RIN and that DNSPs may have applied a different, compliant definition in collecting data.</p> <p>Information provided for 2017-18 is considered Actual in accordance with AER requirements.</p> <p>For 2017-18 information Ergon Energy has sourced data from its ROAMES LiDAR program. ROAMES seeks to enable Ergon Energy with remote observation capability initially by flying over the network assets in an aerial vehicle equipped with sensor system, processing the resulting data and providing reporting and visualisation back to the business.</p> <p>For Urban vegetation areas, the number of trees was interpreted as number of “intrusions” found within 2.0 metres of the Clearance Zone. From field assessments, this proximity is found to contain almost all trees inspected and treated by vegetation contractors. A methodology was then employed for 2017-18, such that:</p> <ul style="list-style-type: none"> ▪ Average number of trees per urban vegetation maintenance span= (Total number of intrusions recorded as occurring within 2.0m from the captured conductor location [as reported at time of analysis] / Total number of ROAMES - reported spans [as reported at time of analysis]) <p>For Rural vegetation zones, the number of trees was interpreted as number of “intrusions” found within the treatment corridor as well as those found outside the corridor which could potentially impact on the network upon failure (i.e. potential “hazard” or “danger” trees).</p> <ul style="list-style-type: none"> ▪ Average number of trees per rural vegetation maintenance span= (Total number of intrusions recorded as occurring within 2.0m from the captured conductor location [as reported at time of analysis] / Total number of ROAMES - reported spans [as reported at time of analysis]) <p>Information provided for 2017-18 is considered Actual in accordance with AER requirements.</p>
<p>Average number of defects per urban and CBD vegetation maintenance span (DOEF0210)</p> <p>Average number of defects per rural vegetation maintenance span</p>	<p>ROAMES inspection data using the latest reported data for each Vegetation Zone across Cycles 4 and 5.</p> <p>The assessment of the number of maintenance spans is described above. The assessment of defects is on the basis of ROAMES information regarding vegetation intrusions into clearance space that Ergon Energy considers a vegetation defect to exist when referenced to clearance band specification and described below:</p> <p>Defect</p> <ul style="list-style-type: none"> • Close Proximity (CP) vegetation intrusions as defined by clearance band specification in relation to proximity to overhead conductor • Live Line (LL) vegetation intrusions as defined by clearance band specification in relation to proximity to overhead conductor and which require treatment using live line working techniques • Clearance Band (CL) vegetation intrusions as defined by clearance band specification in relation to the minimum accepted clearance space (voltage dependant) for maintenance purposes

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(DOEF0211) The diagram below displays the representation of What Ergon Energy classifies as defects.



The ratio of vegetation across all latest data for each Vegetation Zone as described above has been applied for the total number of maintenance spans completed in the 2017-18 vegetation program.

Information provided for 2017-18 is considered Actual in accordance with AER requirements.

Tropical proportion (DOEF0212) For 2017-18, the tropical proportion of Ergon Energy's network was based on network data sourced from the Smallworld GIS. The number of spans occurring within hot humid summer and warm humid summer regions sourced from Queensland Globe data which collates information from a number of sources eg BOM Climatic Zones map-using .shp files.

BOM data was downloaded in January 2014. This data is based on a standard 30 year climatology (1961-1990). There has been no change to this dataset since 2014.

Spans on multiple circuits are only counted once.

Information provided for 2017-18 is considered Actual in accordance with the AER's requirements.

Standard vehicle access (DOEF0213) For 2017-18, an assessment of data sourced from Smallworld was required. A query was undertaken to return overhead line length within 50m of the centreline of selected road reserves which were deemed to be suitable for two wheel drive vehicles. The reserves selected were: Highway; Local Connector Road; Main Road; Roundabout, intersection; Sealed Road; Unsealed Road.

Spans on multiple circuits are only counted once.

Information provided for 2017-18 is considered Actual in accordance with the AER's requirements.

Bushfire risk (DOEF0214) For 2017-18 the number of spans found occurring within High Bushfire Risk Areas, as defined by spatial data sourced from Queensland Globe data which collates information from a number of sources eg Queensland Rural Fire Service and aligned with data sourced from the Smallworld GIS.

A new dataset was downloaded from the QFRS dated July 2015.

Spans on multiple circuits are only counted once.

Significant variation in number of spans within high bushfire risk areas from the previous

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year is due to utilisation of a new and improved bushfire risk spatial data source provided by the Queensland Government as part of the State Planning Policy (2013).

Of note is the effect of climatic and major weather event occurrence in the previous year increasing fuel loads and expanding the bushfire risk area. This year's latest data reflects a reduction in fuel load lowering the risk area.

Information provided for 2017-18 is considered Actual in accordance with the AER's requirements.

Table 3.7.3 – Service Area Factors

The AER requires information in Template 3.7, Table 3.7.3 in relation to Ergon Energy's route Line Length of lines in its network. This is required to be based on the distance between line segments and to not include vertical components such as line sag. The route Line Length does not necessarily equate to the circuit length as the circuit length may include multiple circuits.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to route line length.

Table 4: Routine Line Length

Variable	Addressing Basis of Preparation Requirements
<p>Consistency with Notice requirements</p> <p>DOEF0301</p>	<p>All mandatory data entry fields shaded yellow, and have been populated for each of the 2017-18 regulatory year.</p> <p>Route Line length of lines is based on the distance between line segments. It does not include vertical components such as line sag.</p> <p>The route Line Length does not equate to the circuit length as the circuit length includes multiple circuits. The circuit length is reported excluding the circuit length of service lines.</p> <p>Following AER clarifications provided in relation to variable DOEF0301 which noted the intent of this variable is to measure the aggregate distance between poles and/or towers, Ergon Energy confirms that where:</p> <ul style="list-style-type: none"> ▪ two sets of lines that run on different sets of poles (or towers) share the same easement the lines are counted separately; ▪ there are multiple circuits on a span, the length of each span is considered only once; and ▪ a span shares multiple voltages, the length of the span is also considered only once; and ▪ captures the length of both underground cables and overhead lines
<p>Population of Actual Information in templates, including Source.</p>	<p>Ergon Energy has sourced data from its SOREP Oracle Spatial database. This database is replicated from the Smallworld GIS electrical data store.</p>
<p>Methodology and assumption's applied in relation to Actual Information</p>	<p>For 2017-18 a methodology was employed whereby data was obtained for the current regulatory year (2017-18) by overlaying all conductors and cables in the system and then dissolving all the conductors and cables which overlapped, into one line segment. The route length of the conductors was then calculated using Feature Manipulation Engine (FME).</p> <p>Variations noted were the results of a number of data cleansing and improvement exercises and a change in methodology to better exclude service line lengths.</p>

Variable	Addressing Basis of Preparation Requirements
<p>Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.</p>	<p>Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in Template 3.7 Table 3.7.3.</p>
<p>Changes in Accounting Policies (Financial information - Actual or Estimated)</p>	<p>Route Line Length reported is a non-financial data set, and accordingly this requirement is not applicable.</p>