

#### Version Control

Version	Date	Description
1.0	31/10/16	Final as submitted to AER on 31 October 2016

# 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 2015-16 Economic Benchmarking RIN templates (2015-16 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.

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 2015-16 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 12 August 2016. The reissued (protected) templates allow for submission of the 2015-16 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 3.1 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.

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 guestion).
DREV0101- DREV0109 DREV0112 - (SCS)		<ul> <li>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</li> <li>SCS: Network Services, DUOS (including cross boundary duos); Capital Contributions; and</li> <li>ACS: Public Lighting, Connection services, Metering services, and</li> </ul>
		Ancillary services. Public lighting for the recovery of construction and maintenance costs for the 2015-16 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 Distribution use of System

#### Table 1: Revenue Grouping by Chargeable Quantity

Variable		Addressing Basis of Preparation Requirements		
		•	butions for SCS and Other Revenue and isplayed in the regulatory accounting statements.	
		Direct Control Service char profit or gross proceeds on revenue and Transmission	regulatory accounting statements which is not a rged by Ergon Energy to Customers include: sale of assets, interest received, shared assets use of System charges, Sales. Rather, they uirements of prior regulatory instruments.	
		(DREV0107) as for templat been reported in variable (I 'revenue from unmetered s interpretation of the definiti numbers. The latter states	Supplies' is the same for template 3, table 3.1.1 te 3, table 3.1.2 (DREV0205). Public lighting has DREV0112) and has been excluded from supplies' (DREV0107). This is based on the ons for unmetered supplies and customer public lighting connections are not to be counted er of unmetered customers.	
		Ergon Energy introduced T first time has populated	ime of Use Network Tariffs in 2015-16and for the	
		DREV0103: Revenue	from On-Peak Energy Delivery charges,	
		<ul> <li>DREV0104: Revenue and</li> </ul>	from Shoulder period Energy Delivery Charges;	
		DREV0105: Revenue	from Off–Peak Energy Delivery charges	
		The total of revenues by ch to the total revenues by cu	nargeable quantity for these variables reconciles stomer class (DREV02).	
Act Info ten inc	pulation of tual ormation in nplates, luding urce.	1/7/2015 to 10/3/2016 Nett a new system called PEAC by running database querie balanced to Monthly Networ Energy's Service Transacti Network Billing and the rec Systems (NUOS) and serv manage the revenue recov received from a group Join for Network Billing and reco	nergy has had two data sources: for period bill files, and from 10/3/2016 to 30/6/2016, under E, For the initial period, data has been sourced es on billings to retailers each month and brk Billing (Netbill) files provided by Ergon fon Centre (STC). The STC is responsible for sovery from Retailers of the Network Use of ice related charges. A priority of the STC is to rery process. For the second period, reports were t Market Transaction Centre, who are responsible overy from Retailers of Ergon's Network Use of nd other service related charges.	
and ass app rela Act	sumption's blied in ation to tual	term) in relation to all varia Energy's methodology app data in Netbill files which a Retailers. This revenue wa	d 'Actual Information' (as per the AER's defined bles contained in template 3, table 3.1.1. Ergon lied to provide information for 2015-16 actual re the monthly billing files issued by STC to as able to be mapped directly to the variables gy's (network) charge categories.	
Info	ormation	The table below sets out th variables.	e mapping of DCOS model charges to RIN	
		DCOS model	Benchmarking RIN Variable	

Variable		Addressing Basis of Pre	paration Requirements
		Fixed Charges	Revenue from Fixed Customer Charges
		Actual Demand Charges	Revenue from Measured Maximum Demand Charges
		Capacity Charge Minimum Chargeable Demand	Revenue from Contracted Maximum Demand Charges
		Volume Charges Peak	Revenue from On–Peak Energy Delivery charges
		Volume Charges Shoulder	Revenue from Shoulder period Energy Delivery Charges
		Volume Charges Off- Peak	Revenue from Off–Peak Energy Delivery charges
		Volume Charge	Revenue from Energy delivery charges where time of use is not a determinant
		from unmetered supplies (	bad customer charges (DREV0106) and Revenue DREV0107) are inclusive of Fixed Charges i.e.: In separately reported in Revenue from Fixed 10101).
		Revenue from Measured M Energy has allocated the 'f SAC – Large tariff to Contr approach as it is consisten Operational data, 'Demand Energy cannot distinguish	eted Maximum Demand charges (DREV0108) and Maximum Demand charges (DREV0109), Ergon full recovery of revenue from customers on the facted Demand. Ergon Energy has adopted this at with the approach used for Template 3.4 d supplied' where instructions state, 'where Ergon between contracted and measured Maximum d must be allocated to contracted Maximum
		-	ing (DREV0112) has been reported as <u>either</u> service classification for the regulatory control
		from the billed amounts (w adjustment is an alignmen Annual Reporting RIN. Th basis) is lower than the su	REV0109, and DREV0112) have been adjusted ith the basis above) to an unbilled basis. The t with the reporting in Ergon Energy's 2015-16 e total at DREV01 using AR RIN (on an unbilled m of the variables using the billed basis. The ta'd over the variables listed above.
		the AER has requested that	porting RIN requires reporting in \$000's whereas at from 2015-16 onwards, all EB and CA RIN s (not \$000's). Caution should be taken in
	Population of Estimated		d 'Actual Information' (as per the AER's defined ariables contained in template 3, table 3.1.1.

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.	
	Changes in	Ergon Energy commenced accrual accounting for Network charges in 2013-
	Accounting	14, and continued in 2015-16. The impact of the change is a 3.6%
	Policies	decrease to DREV01.
	(Financial	
	information -	
	Actual or	
	Estimated)	

Variable		Addressing Basis of Preparation Requirements
	Consistency with	All mandatory data entry fields shaded yellow, have been populated.
	Notice requirements	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).
		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
		<ul> <li>SCS: Network Services, Connection Services, Capital Contributions; and</li> <li>ACS: Public Lighting, Connection services, Metering services, and Ancillary services.</li> </ul>
		Public lighting for the recovery of construction and maintenance costs for 2015-16 has been reported as an ACS (refer to the source and methodology below at DREV0112: Public Lighting).
DREV0110- DREV0112 - (ACS) DREV0113		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.
DREV01		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.
		'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.
		DREV01: Total revenue by chargeable quantity for 2015-16 is the Total SCS Revenue reported in Ergon Energy's 2015-16 Annual Reporting RIN less Jurisdictional scheme amounts and TUOS revenue.
	Population of Actual Information in templates, including	Ergon Energy has sourced the data from the Ergon Energy's Annual Reporting RIN's for 2015-16.

Variable		Addressing Basis of Preparation Requirements
	Source.	
	Methodology and assumption's applied in relation to Actual	DREV0110: Metering Charges:
		<ul> <li>SCS is zero for 2015-16. All Metering is ACS in 2015-16.</li> </ul>
	Information	<ul> <li>ACS for 2015-16. The revenue is taken directly from the Income Statement in Ergon Energy's 2015-16 Annual Reporting RIN.</li> </ul>
		DREV0111: Connection Charges:
		<ul> <li>SCS for 2015-16. This revenue is taken directly from the Income Statement in Ergon Energy's 2015-16 Annual Reporting RIN. It is the Contributions in SCS.</li> </ul>
		<ul> <li>ACS for 2015-16. This revenue is taken directly from the Income Statement in Ergon Energy's 2015-16 Annual Reporting RIN. It is the total of the Connection services column.</li> </ul>
		DREV0112: Public Lighting:
		<ul> <li>SCS for years 2015-16. Ergon Energy has sourced information from Monthly Network Billing (Netbill) files provided by the STC, and from PEACE reports.</li> </ul>
		<ul> <li>ACS for 2015-16. The revenue has been taken directly from the Income Statement in Ergon Energy's 2015-16 Annual Reporting RIN. It is the total of the Public Lighting column.</li> </ul>
		DREV0113: Revenue from Other Sources:
		<ul> <li>SCS, nothing to report.</li> </ul>
		<ul> <li>ACS for 2015-16. The revenue has been taken directly from the Income Statement in Ergon Energy's 2015-16 Annual Reporting RIN. It is the total of the Ancillary network services column.Annual Reporting</li> </ul>
		Variables DREV0110, DREV0111, DREV0112 (ACS), DREV0113, and DREV01, are derived from Ergon Energy's 2015-16 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.
	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	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
	including reasons why Estimates are Ergon Energy's best estimates.	
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Ergon Energy commenced accrual accounting for Network charges in 2013-14, and continued in 2015-16. The impact of the change is a 3.6% decrease to DREV02.

### 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	All mandatory data entry fields shaded yellow, have been populated.
	Notice requirements	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.
		'Revenue from Unmetered Supplies' is the same for template 3, table 3.1.1 ('DREV0107) as for template 3, table 3.1.2 (DREV0205).
DREV0201-	Population of Actual	For year 2015-16, Ergon has had two data sources: for period
DREV0206	Information in	1/7/2015 to 10/3/2016 for previous Netbill files, and from 10/3/2016
DREV02	templates, including Source.	to 30/6/2016, under a new system called PEACE, For the initial period, data has been sourced by running database queries on billings to retailers each month and balanced to Monthly Network Billing (Netbill) files provided by the STC. The STC is responsible for Network Billing and the recovery from Retailers of the Network Use of Systems (NUOS) and service related charges. A priority of the STC is to manage the revenue recovery process. For the second period, reports were received from Joint Market Transaction Centre, who are responsible for Network Billing and recovery from Retailers of Network Use of System (NUOS) charges and other service related charges. Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to variables

Variable		Addressing Basis of Preparation Requirements
		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 the total unbilled amount for DREV0201 – DREV0204 is equal to the total of DREV01 less DREV0205 and DREV0206 on an unbilled basis.
		DREV0205 equals DREV0107, and DREV0206 equals the sum of DREV0111 and DREV0112.
		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.
	logy and	Ergon Energy can identify revenue to the disaggregation required.
assumpt relation t Informati		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:
		<ul> <li>Revenues that Ergon Energy cannot allocate to the customer types DREV0201–DREV0205 must be reported against 'Revenue from other Customers' (DREV0206).</li> </ul>
in Templ why Esti required not poss Actual In template Estimate has beer including	ed Information ates, including mates are and why it is ible to provide formation in s. How ed Information n produced, g reasons why es are Ergon best	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.
-	s in Accounting (Financial	As per AASB 118 Revenue Ergon Energy has commenced accrual accounting for unbilled network charges. Template 3.1, Table 3.1.2

Variable		Addressing Basis of Preparation Requirements
	information - Actual or Estimated)	has been prepared on an unbilled basis for 2015-16. The impact of the change is a 3.6% decrease to DREV02.

# Table 3.1.3 Revenue (Penalties) Allowed (Deducted) ThroughIncentive 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.

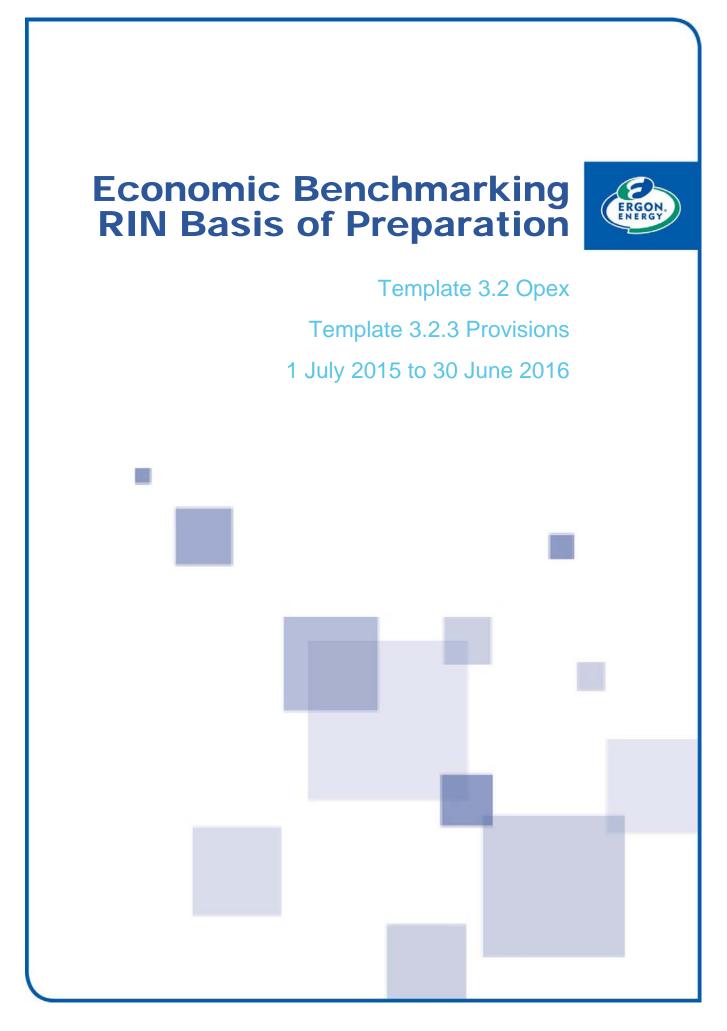
In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for 'Revenue (penalties) allowed (deducted) through incentive schemes'. Of note, DREV03 'Total revenue of incentive schemes' represents the sum variables DREV0301-DREV0305 and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

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	All mandatory data entry fields shaded yellow, have been populated.
		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).
DREV0301 -		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 DREV03		As confirmed by the AER on 1 October 2014, the following variables are not applicable to Ergon Energy and accordingly have not been populated:
		<ul> <li>DREV0303 F-Factor [Victorian specific factor];</li> </ul>
		<ul> <li>DREV0304 S-Factor True up [Victorian specific factor capturing the close out of the old ESCV s-factor scheme];</li> </ul>
		DREV0305 Other.
		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 (consistent with 2015-16). Therefore, care should be taken when reviewing variable data for 2015-16 against submissions prior to 2013-14.
	Population of Actual	Incentive schemes applicable to Ergon Energy relate to the EBSS

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

Variable		Addressing Basis of Preparation Requirements
	Information in templates,	and STPIS schemes – commencing from 1 July 2010.
	including Source.	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 2015-16 has been sourced from the AER's SCS PTRM handed down as part of the preliminary determination.
		STPIS reward / penalty payments are added to revenues during the annual Pricing Proposal approval process. The reward / penalty under the STPIS scheme has been sourced from the Total Annual Revenue (TAR) formula in the 2015-16 Pricing Proposal
	Methodology and assumption's applied in	The STPIS reward has been calculated based on data in the TAR formula in the 2015-16 Pricing Proposal.
	relation to Actual Information	The EBSS payment has been calculated based on data in the AER's Preliminary Determination SCS PTRM. This was the PTRM used to set prices for 2015-16.
		The EBSS payment has been reconciled against data included in Attachment 1 of the AER's preliminary determination.
	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 3.1, table 3.1.3.
	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.





#### Version Control

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1.0	31/10/16	Final as submitted to AER on 31 October 2016

## 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 2015-16 Economic Benchmarking RIN templates (2015-16 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.

As relevant, Ergon Energy has provided additional detail beyond the minimum requirements if it was considered it may assist a user to gain an understanding of the information presented in the regulatory templates.

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 2015-16 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 12 August 2016. The reissued (protected) templates allow for submission of the 2015-16 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 maintain 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 in 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.

Due to a change in Ergon Energy's Cost Allocation Approach arising from 'Classification of Service' changes in the AER Final Distribution Determination (Attachment 13), Opex has been historically recast for regulatory years 2006-2015. As required by the AER, the historical recast is provided via three Attachments **EE0613EB OPX RCST 7, EE1314EB OPX RCST 4, and EE1415EB OPX RCST 2**, being the historical consolidated files as submitted (or resubmitted) to the AER, updated for revisions. The data has been reviewed by independent auditors as estimated information.

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 variablesDOPEX0101-DOPEX0116, and is therefore implicitly addressed in the table below.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	Variables DOPEX0101 – DOPEX0116 (and subsequently, total DOPEX01) are considered mandatory and have been populated by Ergon Energy.
		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.
		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.
DOPEX0101-		Opex has been reported in accordance with the categories required by the AER's Notice.
DOPEX0116 DOPEX01		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.
		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.
	Population of Actual Information in templates, including Source.	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.
	Methodology and assumption's applied in relation to Actual Information	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.

Variable		Addressing Basis of Preparation Requirements
	Population of Estimated Information in	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) for 2015-16 in relation to all variables contained in template 3.2, table 3.2.1
	Templates, including why Estimates are required and why it	Ergon Energy has also provided a re-cast Template for years 2006 - 2015 inclusive, for Table 3.1.1 (Current Opex categories) due to changes in its CAM and COS effective at the commencement of the 2015-20 regulatory control period (refer below).
	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.	Although the changes are not considered material to Opex when assessed against accounting standard AASB 1031 or, upon the withdrawal of AASB 1031, paragraph 5 of the accounting standard AASB 108, the recast is to provide a consistent time series of opex for benchmarking purposes. The Economic Benchmarking RIN Notice Section 1.1.3 (Information for future Regulatory years) requires Ergon Energy to re-cast the relevant opex data in accordance with the new CAM/COS, and have it independently audited . Furthermore, the RIN Explanatory Statement Section 4.1 denotes that an Opex recast is relevant when a change in opex occurs resulting in movement of half a percent of total SCS opex in the year the change occurred.
		As such, Ergon Energy has recast Opex costs using estimates given historical data capture in the Ellipse ERP system does not reflect the current CAM allocations by which recast amounts are to be presented.
		Note: To recast variables Ergon Energy started with it (unaudited) revised submission lodged with the AER as part of response to Question AER Ergon 072 (24 July 2015), which updates Ergon's metering and network services opex reported for the 2006 to 2014 financial years such that no metering costs were included in network services and the metering costs include all costs that are attributable to metering. This data was adopted by the AER and is utilised in current benchmarking analysis, but remains Ergon Energy's best estimate at the time.
		In recasting, if 'ACS' services didn't exist prior to 1 July 2015, we were unable to source the data direct from our Ellipse general ledger. It was assumed that all metering (apart from Activity 56010 Network Metering) was related to Customer meters and therefore moved from SCS to ACS. The total of activity 56010 became the new total of DOPEX0202 Opex for metering SCS. Ergon Energy also removed DOPEX0113 Under/(Over) absorbed Overheads and added DOPEX0116 corporate Restructuring (which we used Element 3980 from Ellipse GL reports). For 2013-14, an error identified in the original DOPEX0202 reported has been corrected (there had been a double up). Estimated Information has been reviewed by independent auditors.

Variable		Addressing Basis of Preparation Requirements
Accou Polici	unting es (Financial	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:
	nation - Actual timated)	<ul> <li>Reclassification of services (AER FDD Attachment 13) from SCS to ACS, predominately for Real Estate Developments and Type 5 &amp; 6 Metering;</li> </ul>
		<ul> <li>Any immaterial unallocated overhead balances remain unallocated to the Distribution Business at year end, as opposed to recognising as Regulated Opex; and</li> </ul>
		<ul> <li>Redundancies are recognised as Regulated Opex costs.</li> </ul>

### 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
	Consistency with Notice requirements	Variables DOPEX0201 – DOPEX0206 are considered mandatory, and have been populated by Ergon Energy.
		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 2015-16 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
DOPEX0201-		Opex has been reported in accordance with the categories required by the AER's Notice.
DOPEX0206		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.
		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.
		Ergon Energy has prepared the Opex line items in a consistent

Variable		Addressing Basis of Preparation Requirements
		manner to that of Opex reported in response to the AER's 2015- 2016 Annual Reporting Requirements.
	Population of Actual Information in templates, including Source.	Ergon Energy has sourced the data used to populate template 3.2, table 3.2.2 from the Ellipse General Ledger.
	Methodology and assumption's applied in relation to Actual Information	Ergon Energy extracted the Ellipse Trial Balance into an Access Database, 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.
		Transmission Point Planning contained in template 3.2, table 3.2.2.
		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 year.
		Ergon Energy is anticipating capturing these costs directly in the ERP Ellipse system using work orders commencing from 2015-16. Although, some estimation has been applied to arrive at 2015-16 values, it is considered the result would not provide a materially different position had the values been directly costed to work orders.
	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 2015/16 (as per the AER's defined term) in relation to all variables.
		Ergon Energy has also provided a re-cast Template for years 2006 - 2015 inclusive, for Table 3.2.2 (Opex consistency) due to changes in the CAM and COS at the commencement of the 2015-20 regulatory control period (Refer below).
		Although the changes are not considered material to Opex when assessed against accounting standard AASB 1031 or, upon the withdrawal of AASB 1031, paragraph 5 of the accounting standard AASB 108, the recast is to provide a consistent time series of opex for benchmarking purposes. The Economic Benchmarking RIN Notice Section 1.1.3 (Information for future Regulatory years) requires Ergon Energy to re-cast the relevant opex data in accordance with the new CAM/COS, and have it independently audited . Furthermore, the RIN Explanatory Statement Section 4.1 denotes that an Opex recast is relevant when a change in opex occurs resulting in movement of half a percent of total SCS opex in the year the change occurred.
		As such, Ergon Energy has recast Opex costs using estimates given historical data capture in the Ellipse ERP system does not reflect the current CAM allocations by which recast amounts are

Variable	Addressing Basis of Preparation Requirements
	to be presented.
	Note: To recast variables Ergon Energy started with it (unaudited) revised submission lodged with the AER as part of response to Question AER Ergon 072 (24 July 2015), which updates Ergon's metering and network services opex reported for the 2006 to 2014 financial years such that no metering costs were included in network services and the metering costs include all costs that are attributable to metering. This data was adopted by the AER and is utilised in current benchmarking analysis, but remains Ergon Energy's best estimate at the time.
	In recasting, if 'ACS' services didn't exist prior to 1 July 2015, we were unable to source the data direct from our Ellipse general ledger. It was assumed that all metering (apart from Activity 56010 Network Metering) was related to Customer meters and therefore moved from SCS to ACS. The total of activity 56010 became the new total of DOPEX0202 Opex for metering SCS. Ergon Energy also removed DOPEX0113 Under/(Over) absorbed Overheads and added DOPEX0116 corporate Restructuring (which we used Element 3980 from Ellipse GL reports). For 2013-14, an error identified in the original DOPEX0202 reported has been corrected (there had been a double up).
	Estimated Information has been reviewed by independent auditors.
Changes in Accounting Policies (Financial information - Actual or	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:
Estimated)	<ul> <li>Reclassification of services (AER FDD Attachment 13) from SCS to ACS, predominately for Real Estate Developments and Type 5 &amp; 6 Metering;</li> </ul>
	<ul> <li>Any immaterial unallocated overhead balances remain unallocated to the Distribution Business at year end, as opposed to recognising as Regulated Opex; and</li> </ul>
	<ul> <li>Redundancies are recognised as Regulated Opex costs.</li> </ul>

### 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

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	DOPEX0401 is considered a mandatory variable and has been populated by Ergon Energy.
		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, including Source.	Ergon Energy has sourced the data from Ellipse using Artemis 7 (SPARQs and Ergon Energy's Programme Management Tool) for actual costs for distribution maintenance.
		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).
	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.
DOPEX0401	Population of Estimated Information in Templates, including why Estimates are required and why it is not	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.
	possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	On page 22 of the Instructions and Definitions document issued by the AER in November 2013, it 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 3.4 [renamed table 3.2.4] it must do so; otherwise Ergon Energy must provide Estimated Information."</i>
		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.
		The total annual cost of maintenance for distribution transformers (owned by Ergon Energy) was obtained for 2015- 16 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.
		There are no customers below 500kVA and connection

Variable	Addressing Basis of Preparation Requirements
	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 maintaining the distribution transformers owned by customers. Base year for Distribution Transformer numbers is 2015-16.
Changes in Accounting Policies (Financial information - Actual or Estimated)	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).
	Costs have been presented on a current cost approach basis in that it is consistent with the most recent Annual Reporting Requirements and the 2015-16 allocation of costs in the CAM.

# **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
	Consistency with Notice requirements	Variables considered mandatory have been populated by Ergon Energy, relative to each Provision.
		Ergon Energy confirms, as required by the AER in Box 6, <i>Reporting Framework for Provisions</i> in its RIN 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	(1) The Restructure Provision has been calculated on the following basis
DOPEX0301(A-H); DOPEX0302(A-H); DOPEX0305(A-H);	relation to Actual Information	A working paper (EIT Redundancy Provisions) is prepared to calculate this provision which lists the employee detail.
		Increases to the Restructure Provision are deemed to be the redundancy provision of employees who have joined the EIT program due to their position being made redundant.
DOPEX0308(A-H); DOPEX03011(A-H); DOPEX0314(A-H)		Used is deemed to be the redundancy provision for those employees whose employment with the organisation has been terminated
		Unused amounts reversed are deemed to be the redundancy provision for those employees who have exited the EIT program due to attaining a position within the organisation.
		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 the AER Approved CAM for 2015-16.
		<ul> <li>(2) The Employee Benefit Provision and the Annual Leave Provision and the Super on Employee</li> <li>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</li> </ul>
		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 2015-16.

Variable	Addressing Resis of Properation Requirements
Variable	Addressing Basis of Preparation Requirements (3) The Rehabilitation Provision has been split as per
	<ul> <li>(3) The Rehabilitation Provision has been spit as per classification of individual sites, i.e. regulated sites and non-regulated sites. If the movement in the Rehabilitation provision was due to Revalued assets,</li> <li>(i.e. posted to Asset Revaluation Reserve) this is classified as Other, i.e. neither Opex nor Capex.</li> </ul>
	Values are then split between Opex and Capex using the Opex/Capex overhead split using AER Approved CAM for 2015-16.
	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
	(4) Vested Sick Leave is for control room employees only, therefore classified as SCS Opex.
	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.
	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.
	The SCS portion is calculated at 100% rather than the SCS/ACS split as all VSL is deemed to be SCS.
	(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
	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.
Informat including are requ not poss	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables ontained in template 3, table 3.2.3 – Opex components ible to provide formation in

Variable		Addressing Basis of Preparation Requirements	
	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)	There were no changes in accounting policies impacting Provisions during the 2015-16 year.	

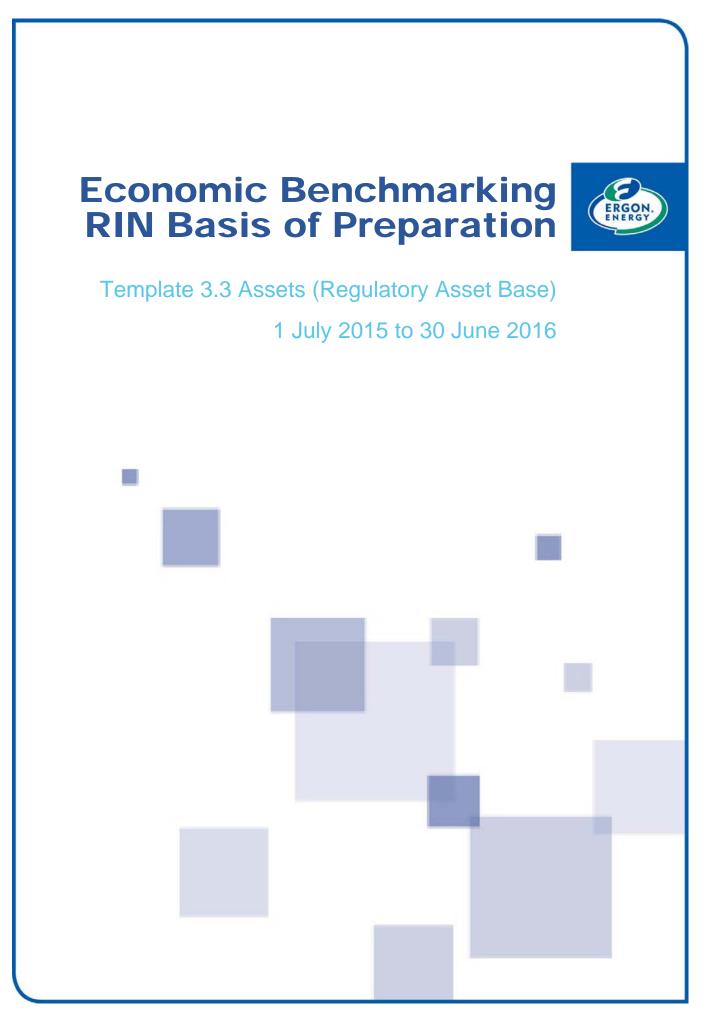
#### Capex Component

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	Variables are considered mandatory and have been populated by Ergon Energy relative to each provision. Additional rows for Provisions have been inserted as required.
DOPEX0301(A-H); DOPEX0303(A-H);		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.
DOPEX0306(A-H); DOPEX0309(A-H); DOPEX03012(A-H); DOPEX0314(A-H)		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.
		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 2015-16 against prior submissions.
	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

Variable		Addressing Basis of Preparation Requirements
		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 has 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 using and 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.



#### Version Control

Version	Date	Description
1.0	31/10/16	Final as submitted to AER on 31 October 2016

# 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 2015-16 Economic Benchmarking RIN templates (2015-16 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.

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 2015-16 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 12 August 2016. The reissued (protected) templates allow for submission of the 2015-16 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 3.3 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 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 2015-16, 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 (in section 4.2.5.2 below), 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	Ergon Energy confirms, as required by the AER in Box 7, <i>Assets (RAB)</i> <i>Financial Reporting Framework</i> in Appendix B, Instructions and Definitions, that:
		<ul> <li>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> </ul>
		<ul> <li>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.</li> </ul>
DRAB0101-		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:
DRAB0107		<ul> <li>The SCS and ACS capex approved by the AER in the 2015-20 Final Distribution Determination;</li> </ul>
DRAB201- DRAB1107		<ul> <li>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> </ul>
DRAB1201- DRAB1210		<ul> <li>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.</li> </ul>
		For the purposes of reporting regulatory depreciation (which for 2015-16 is the sum of straight line depreciation and inflation of the 2015-16 opening RAB), Ergon Energy has reported:
		<ul> <li>Actual inflation on the opening RAB for 2015-16 (using the actual inflation values for 2015-16)</li> </ul>
		<ul> <li>Straight line deprecation for 2015-16, escalated by actual inflation in 2015-16 to bring the depreciation into nominal terms</li> </ul>
		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 2015- 16, and the forecast straight line depreciation for 2015-16.
		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 additional Ellipse source system extracts (additions report). This is discussed further in the table, in section C below.

Variable		Addressing Basis of Preparation Requirements
		<ul> <li>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</li> </ul>
		<ul> <li>Ergon Energy currently does not own, control or operate any Dual Function Assets</li> </ul>
		<ul> <li>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.</li> </ul>
		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 2010-15 Distribution Determination. No RABs have been approved for any of Ergon Energy's other categories of ACS (Quoted and Fee Based Services).
	Population of Actual Information in templates,	For 2015-16, annual SCS and ACS (street lighting and Type 5-6 metering) financial information (additions, disposals and capital contributions) are sourced from the 2015-16 AER Annual Reporting RIN provided by Ergon Energy to the AER.
	including Source.	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.
		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.
		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 Distribution Determination.
		Similarly, the 2009-10 estimated financial information contained within the AER's 2010-15 final Distribution Determination has been replaced with

Variable       Addressing Basis of Preparation Requirements         actual financial information for 2009-10 as reported in the 2009-10         The closing RAB values for each year from 1 July 2010 onwards in not align with the closing RAB values calculated each year in the 2010-15 RFM. This is because the AER's 2010-15 RFM recognise actual 2009-10 additions and disposals for the first time at the end 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 forward through to 1 July 2015.         Methodology and assumption's       As noted above, Ergon Energy has with the exception of opening closing RAB values;	will also AER's ses d of dditions I rolled
The closing RAB values for each year from 1 July 2010 onwards not align with the closing RAB values calculated each year in the 2010-15 RFM. This is because the AER's 2010-15 RFM recognis actual 2009-10 additions and disposals for the first time at the end 2014-15, whereas in the T3.3 RIN template the actual 2009-10 ad and disposals is recognised in the year in which it is incurred, and forward through to 1 July 2015. Methodology and As noted above, Ergon Energy has with the exception of opening	will also AER's ses d of dditions I rolled
	and
applied in relation to Actual Information	
<ul> <li>Replaced all estimated financial information previously report Template 3.3 and in the AER's 2015-20 Final Distribution Determination for Ergon Energy with actual values;</li> </ul>	əd in
<ul> <li>Reported actual additions, disposals and capital contributions 2015-16 regulatory year consistent with that in the 2015-16 A Reporting RIN, with additions adjusted for movements in prov and unregulated shared asset usage.</li> </ul>	nnual
In doing so, the opening and closing RAB values for SCS will not with the corresponding RAB values in the AER's Final Determinat RFMs.	-
The methodology Ergon Energy applied for each of these steps line above is set out below:	sted
<ul> <li>Roll forward mechanism – Consistent with the roll forward me approved by the AER in the 2015-20 Final Distribution Determ Ergon Energy has rolled forward the 1 July 2010 SCS RAB in separate RFMs:</li> </ul>	nination,
<ul> <li>A "legacy" SCS RFM which rolled forward those assets in prior to 1 July 2010</li> </ul>	stalled
<ul> <li>A "capex" SCS RFM which rolled forward those assets in on or after 1 July 2010</li> </ul>	stalled
<ul> <li>Ergon Energy has used the AER's RFM workbooks to perform RAB roll forward. To perform the RAB roll forward across muregulatory control periods, separate RFMs have been used for regulatory control period and for each form of control. The conset of RFMs for SCS are listed below:</li> </ul>	ltiple r each
<ul> <li>2005-10 RFM for SCS</li> </ul>	
<ul> <li>2010-15 RFM Legacy for SCS</li> </ul>	
<ul> <li>2010-15 RFM Capex for SCS</li> </ul>	
<ul> <li>2015-20 RFM Legacy for SCS</li> </ul>	
<ul> <li>2015-20 RFM Capex for SCS</li> </ul>	

Variable	Addressing Basis of Preparation Requirements
	<ul> <li>2005-10 RFM for ACS</li> </ul>
	<ul> <li>2010-15 RFM for ACS</li> </ul>
	<ul> <li>2015-20 RFM for ACS</li> </ul>
	<ul> <li>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:</li> </ul>
	Additions, Disposals and Capital Contributions
	<ul> <li>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</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>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 period approach using depreciated value.</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>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</li> </ul>

ariable	Addressing Basis of Preparation Requirements
	RFM for SCS
	<ul> <li>Actual 2015-16 additions and capital contributions for SCS and ACS (as well as ACS 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 unregulated shared asset usage. ACS actuals for 2015-16 include Public Lightin 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, disposals or capital contributions are entered into the 2015-20 Legac RFM for SCS</li> </ul>
	<ul> <li>Actual 2015-16 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.</li> </ul>
	Opening RAB Values
	<ul> <li>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 Forwar tab. Similarly, the opening ACS RAB as at 1 July 2010 in the 2010-1 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 Forwar tab.</li> </ul>
	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 RF is to remove the need for the RFM to adjust for the difference betwee 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 recognition of 2009-10 actuals in the opening 1 July 2010 RAB mear 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
	<ul> <li>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</li> </ul>
	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 Row 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

Variable	Addressing Basis of Preparation Requirements
	services (for those services reclassified in the 2015-20 Final Distribution Determination from SCS to ACS)
	<ul> <li>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 SCS RAB values for 1 July 2015 do not align with those in the AER's 2015-20 Final Distribution Determination RFM for SCS</li> </ul>
	<ul> <li>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)</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>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.</li> </ul>
	<b>Straight Line Depreciation</b> Ergon Energy has reported straight line (and implicitly, regulatory depreciation) for 2015-16 as 'Actual Information'. This is because:
	<ul> <li>The inflation of the opening RAB, which comprises part of the regulatory depreciation amount, is an actual value based on the escalation of the 2015-16 opening RAB by the actual 2015-16 inflation</li> </ul>
	<ul> <li>The forecast 2015-16 straight line depreciation, which comprises the remainder of the regulatory depreciation amount, is also considered to be 'Actual Information', because:</li> </ul>
	<ul> <li>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 2015-16 in its 2015-20 Final</li> </ul>

## Variable

#### Addressing Basis of Preparation Requirements

#### 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.

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 opening and closing values as a result.

#### Asset Lives

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.

# **Other Matters**

The above updates replace 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.

Ergon Energy asset categories (as reported in the SCS and ACS RFMs and Annual Reporting RIN's) have been directly mapped to the required economic benchmarking RAB asset categories, with the exception of some non-network asset categories (see below).

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

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

Variable	Addressing Basis of Preparation Requirements
	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.
Population of Estimated	Page 26 of the Instructions and Definitions document issued by the AER in November 2013 states:
Information in Templates, including why Estimates are required and why	"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."
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 2015-16. That is, the 2015-16 opening and closing RAB values, additions, disposals, capital contributions, forecast straight line depreciation and inflation of the 2015-16 opening RAB values are reported as actuals. As such, Ergon Energy has not reported any estimated values for SCS or ACS in 2015-16.
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 2: Annual Value Roll Forward – Network Services

Variable		Addressing Basis of Preparation Requirements
DRAB0101- DRAB0107 DRAB201-	Consistency with Notice requirements	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.
DRAB1107	Population of Actual Information	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
DRAB1201- DRAB1210	in templates, including Source.	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

Variable	Addressing Basis of Preparation Requirements
	included in the Network Services category that are not funded by Ergon Energy i.e. Network Services funded via capital contributions.
	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 and 2015-16 SCS actual additions and disposals are sourced from the 2014-15 and 2015-16 AER Annual Reporting RINs respectively, provided by Ergon Energy to the AER.
	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 2015-16 regulatory year are consistent with the SCS values in the 2015-16 Annual Reporting RIN, adjusted for movements in provisions and unregulated shared asset usage.
	Connection Services data is captured within the Ergon Energy "Connections" expenditure category. For 2015-16, the annual Connections expenditure values are sourced from the 2015-16 AER Annual Reporting RIN provided by Ergon Energy to the AER. Specifically, Connections expenditure includes:
	<ul> <li>New shared network assets for Standard Asset Customers (i.e. small domestic, rural and customer customers).</li> </ul>
	<ul> <li>New dedicated connection assets for Standard Asset Customers, and</li> </ul>
	<ul> <li>Testing and commissioning of all new shared network assets and connection assets for Standard Asset Customers only.</li> </ul>
	It explicitly excludes metering expenditure, connection expenditure for real estate developers and design, construction, test and commission costs for large commercial and industrial customers.
	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:
	<ul> <li>Identify the total amount of Connections expenditure related to the shared network and to dedicated connection assets</li> </ul>
	<ul> <li>Identify that portion of the Connections expenditure that is not funded by Ergon Energy (i.e. capital contributions)</li> </ul>
	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.
	Actual additions, disposals and capital contributions for 2015-16 associated

Variable	Addressing	Basis of Preparation Requirements
	from SCS d	Lighting Services and Type 5-6 Metering Services (to be removed ata and hence Network Services data) are sourced from Ergon 15-16 AP RIN templates.
	since this ex	ent is necessary in relation to Fee Based and Quoted Services spenditure is already excluded from the SCS data (and hence rvices data).
	contribution	6, the value of capital contributions (gifted assets and cash s) is sourced from the Ellipse General Ledger, and the 2015-16 I Reporting RIN.
	related to C Services an	stent with the AER's definition of Network Services, expenditure onnection services (and Capital Contributions), Type 5-7 Metering d Street Lighting Services were either removed or already om the SCS data.
and	network ser	gy provides the following explanation of how actual RAB values for vices are reported in Table T3.3 of the EB RIN:
assumption's applied in relation to Actual Information	ed in approve on to Ergon E	ward mechanism – Consistent with the roll forward mechanism of by the AER in the 2015-20 Final Distribution Determination, Energy has rolled forward the 1 July 2010 Network Services RAB in arate RFMs:
	- A "le	egacy" Network Services RFM which rolled forward those assets alled prior to 1 July 2010
		apex" Network Services RFM which rolled forward those assets alled on or after 1 July 2010
	roll forw control control	energy has used the AER's RFM workbooks to perform the RAB ard. To perform the RAB roll forward across multiple regulatory periods, separate RFMs have been used for each regulatory period and for each form of control. The complete set of RFMs for a Services are listed below:
	- 200	5-10 RFM for Network Services
	- 201	0-15 RFM Legacy for Network Services
	- 201	0-15 RFM Capex for Network Services
	<b>2</b> 01	5-20 RFM Legacy for Network Services
	- 201	5-20 RFM Capex for Network Services
	AER's F been m	nergy has largely retained the structure and calculations within the RFMs without modification, however the following changes have ade to enable the roll forward across multiple regulatory control for the purposes of populating the T3.3 template:
	Additions, D	bisposals and Capital Contributions
	calculat Prepara	c services additions for 2009-10 to 2014-15 inclusive are ed using the same approach as documented in the Basis of ution for the 2014-15 EB RIN. However, the SCS additions for 0 and 2014-15, which form part of calculation of the Network

Variable	Addressing Basis of Preparation Requirements
	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
	<ul> <li>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</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>Actual 2015-16 additions and capital contributions are entered into the 2015-20 RFM Capex for Network Services and are calculated as follows:</li> </ul>
	SCS Total Capital Expenditure, <i>less</i>
	SCS Total Disposals, <i>less</i>
	SCS Total Capital Contributions, <i>less</i>
	SCS LV services and meters, <i>less</i>
	Connections Capital Expenditure (net of meters and LV Services) that is <u>not</u> attributable to the shared network, <i>equals</i>
	Network Services Net Capital Expenditure
	<ul> <li>The SCS Total Capital Expenditure, Total Disposals, Total Capital Contributions and LV services and meters is sourced from Ergon Energy's 2015-16 AP RIN Capex templates</li> </ul>
	<ul> <li>Connections Capital Expenditure is sourced from the general ledger, by asset class, from codes C2060 (domestic and rural connections), C2070 (small commercial and industrial connections) and C2080<sup>1</sup> (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.</li> </ul>
	<ul> <li>To identify the upstream shared network expenditure component, the following approach is taken.</li> </ul>
	<ul> <li>The LV Services and Meters asset classes are removed from both the C2060 and C2070 capital expenditures. This is because</li> </ul>

<sup>&</sup>lt;sup>1</sup> 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

/ariable	Addressing Basis of Preparation Requirements
	these asset classes are always 100% dedicated connection assets.
	<ul> <li>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.</li> </ul>
	<ul> <li>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.</li> </ul>
	<ul> <li>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 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 take 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 exclusiv 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.</li> <li>Consistent with the Actual 2015-16 SCS disposals, actual Network Services disposals are set equal to the actual 2015-16 SCS disposals an 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</li> </ul>
	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 2015-20 Capex RFM for Network Services. Capital Contributions are no entered into the 2015-20 RFM Capex for Network Services or the 2015-2 RFM Legacy for Network Services, because Capital Contributions are removed from the SCS additions as described above.
	Opening RAB Values
	<ul> <li>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.</li> </ul>
	<ul> <li>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</li> </ul>

/ariable	Addressing Basis of Preparation Requirements
	need for the RFM to adjust for the difference between forecast and actua 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.
	<ul> <li>Consistent with the 2010-15 RFM Capex for SCS, the opening RAB in th 2010-15 RFM Capex for Network Services is set equal to zero.</li> </ul>
	<ul> <li>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 asset shared in the provision of ACS services (for those services reclassified in the 2015-20 Final Distribution Determination from SCS to ACS)</li> </ul>
	<ul> <li>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 actua 2014-15 additions and disposals values are now available to be rolled int the RAB</li> </ul>
	<ul> <li>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 t 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)</li> </ul>
	Asset Lives
	<ul> <li>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</li> </ul>
	Other Matters
	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-networ asset categories (see below).
	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

## Variable

### Addressing Basis of Preparation Requirements

### the required short and long-life categories

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.

### Network Services RAB roll-forward

Ergon Energy has adopted the AER's RFM to determine the Network Services RAB for 2015-16. However, consistent with the approach for SCS, forecast straight line depreciation for Network Services replaces the actual straight line depreciation for Network Services in 2015-16 onwards.

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.

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 differences arises between the closing and opening values as a result.

The calculation of forecast Network Services net capex follows the same approach as that for 2015-16 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.

Consistent with the SCS and ACS RIN values described earlier in this document, 2010-11 to 2015-16 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 2015-16 (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 period approach using depreciated value.

2010-11 to 2015-16 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.

Population of Page 26 of the Instructions and Definitions document issued by the AER in Estimated November 2013 states: "When completing the templates for Regulatory Years Information 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; in otherwise Ergon Energy must provide Estimated Information." Templates, including Reason for reporting of Actuals (not estimates) why Ergon Energy has not reported any Network Services values as estimates in Estimates 2015-16, as all information relating to Network Services is now reported as are required 'Actual Information'. This is because: and why it is not possible All Network Service values (i.e. the opening and closing RAB values, to provide inflation of opening RAB, forecast straight line depreciation, inflation, Actual additions, disposals and capital contributions) are derived based on actual Information SCS values. in templates. Some estimates used prior to 2015-16 are no longer required in 2015-16 How and beyond. These relate to: Estimated Information Estimates of shared and dedicated costs for contributed assets (all has been contributed assets are now removed from the Network Services RAB, produced, regardless of whether they are shared assets or dedicated connection including assets) reasons why Estimates of shared and dedicated costs for subdivisions (since the Estimates change in service classification of subdivision connections to ACS are Ergon from 1 July 2015 means that Network Services must be exclusive of Energy's all subdivision connections capex) best estimates. Actual capex for domestic/rural and commercial/industrial is now available (previously this breakdown was estimated) Whilst the use of sampled data to allocation 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 2015-16, the use of these values will not result in an impact of more than 1% on the closing 2015-16 Network Services RAB, which in accordance with AASB1031 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 2015-16 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

Basis of Preparation: Template 3.3 Asset (Regulatory Asset Base)

Variable		Addressing Basis of Preparation Requirements
		values.
		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 endeavours to improve the reporting of Connection Asset Capital expenditure allocations between dedicated connection assets and shared network assets.
	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:

Variable		Addressing Basis of Preparation Requirements
DRAB13	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 2015- 16 AER Annual Reporting RIN lodged by Ergon Energy to the AER.
	Methodology and assumption's applied in	For 2015-16 the Ergon Energy 2015-16 AER Annual Reporting RIN and general ledger separately reported/recorded the

### Table 3: Total disaggregated RAB asset values – Capital contributions

Variable		Addressing Basis of Preparation Requirements
	relation to Actual Information	capital contribution revenue earned for SCS. Ergon Energy has not separately reported the value of contributions for ACS and Network Services as the associated RAB is exclusive of contributions.
	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

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.
DRAB1401-		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).
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.

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

# 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.

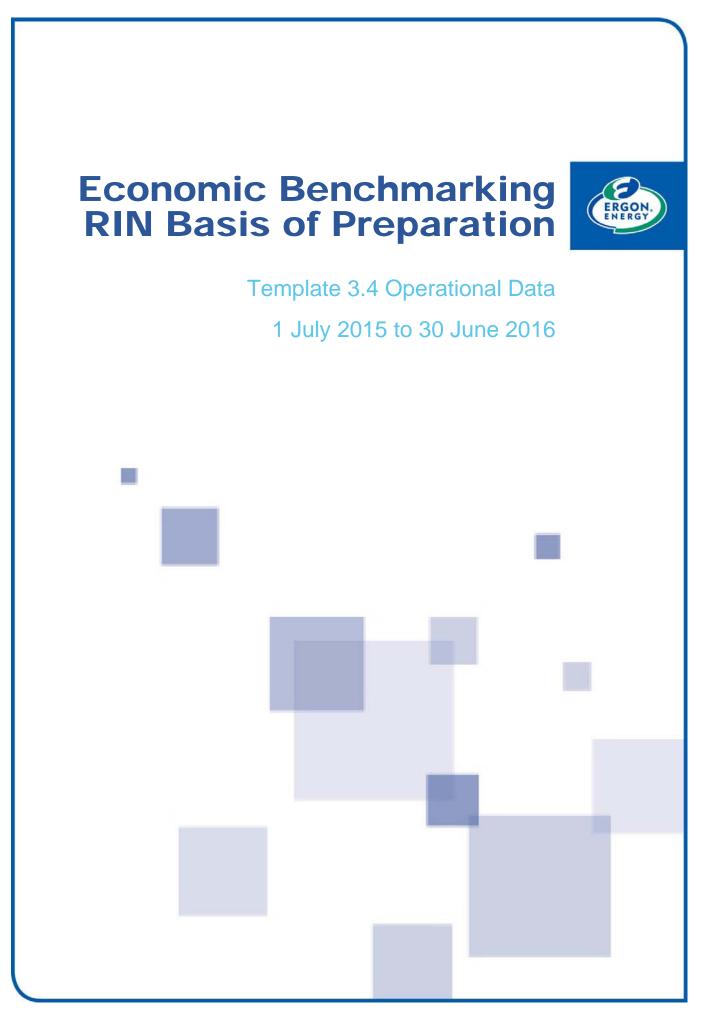
In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for Estimated Residual Service Lives.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	All data entry fields are shaded yellow, indicating mandatory data input fields and accordingly, 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 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.
		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).
		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.
DRAB1501- DRAB1509		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. The residual service lives for the purposes of reporting Table
		3.3.4 have been populated in accordance with Template 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.
	Population of Estimated Information in Templates, including why Estimates	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).

### Table 5: Asset Lives – Estimated Residual Service Life

Variable		Addressing Basis of Preparation Requirements
	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.	
	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.





## Version Control

Version	Date	Description
1.0	31/10/16	Final as submitted to AER on 31 October 2016

# 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 2015-16 Economic Benchmarking RIN templates (2015-16 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.

As relevant, Ergon Energy has provided additional detail beyond the minimum requirements if it was considered it may assist a user to gain an understanding of the information presented in the regulatory templates.

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 2015-16 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 12 August 2016. The reissued (protected) templates allow for submission of the 2015-16 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).

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).
DOPED01	Population of Actual Information in templates, including Source.	For year 2015-16, Ergon has had two data sources: for period 1/7/2015 to 10/3/2016 Netbill files, and from 10/3/2016 to 30/6/2016, under a new system called PEACE, For the initial period, data has been sourced by running database queries on kWh billing to retailers each month and balanced to Monthly Network Billing (Netbill) files provided by Ergon Energy's Service Transaction Centre (STC). The STC is responsible for Network Billing and the recovery from Retailers of the Network Use of Systems (NUOS) and service related charges. A priority of the STC is to manage the revenue recovery process. For the second period, reports were received from a group Joint Market Transaction Centre who are responsible for Network Billing and recovery from Retailers of Ergon's Network Use of System (NUOS) charges and other service related charges
	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.
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual	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.

# Table 1: Energy Delivery

Variable		Addressing Basis of Preparation Requirements
	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 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.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	Entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for the regulatory year.
		<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.
		Ergon Energy has introduced network tariffs reflecting shoulder, on-peak, and off-peak time charging periods and results are shown under appropriate headings
DOPED0201-		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.
DOPED0206	Population of Actual Information in templates, including Source.	For year 2015-16, Ergon has had two data sources: for period 1/7/2015 to 10/3/2016 Netbill files, and from 10/3/2016 to 30/6/2016, under a new system called PEACE, For the initial period, data has been sourced by running database queries on kWh billing to retailers each month and balanced to Monthly Network Billing (Netbill) files provided by Ergon Energy's STC. The STC is responsible for Network Billing and the recovery from Retailers of the Network Use of Systems (NUOS) and service related charges. A priority of the STC is to manage the revenue recovery process. For the second period, reports were received from a group Joint Market Transaction Centre who are responsible for Network Billing and recovery from Retailers

Table 2: Energy Grouping – Delivery by Chargeable Quantity

Variable		Addressing Basis of Preparation Requirements
		of Ergon's Network Use of System (NUOS) charges and other service related charges
	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 and disaggregated into various categories. As the source file captured data in kWhs the results were converted to GWhs.
	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 3.4.1.1.
	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 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.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	All entry fields are shaded yellow indicating mandatory data fields and accordingly have been populated for the regulatory year
DOPED0301-		<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.
DOPED0304	J304	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).
		This is consistent with the AER's clarification received on 28 April

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

Variable		Addressing Basis of Preparation Requirements
		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.
	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 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 3.4.1.2.
	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
DOPED0401-	Consistency with Notice	'Energy Received from embedded generation not included

Variable		Addressing Basis of Preparation Requirements
DOPED0408	requirements	<i>in above categories from non-residential embedded generation</i> (DOPED0404) relates only to energy received that was unable to be allocated to peak, shoulder or off-peak periods.
		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.
		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'.
		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.
		All other entry fields shaded yellow indicating mandatory data fields, have been populated.
		Energy received from embedded generation not included in above categories from residential embedded generation (DOPED0408) has been populated for 2014-15 regulatory period.
	Population of Actual Information in templates, including Source.	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.
		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.
		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.
		DOPED0408 (residential) data was sourced from the two network billing systems (Netbill & PEACE) used during period, using a Network Tariff Code specific to residential Embedded Generation. Data is inclusive of Tier 1 (EEQ) and Tier 2 (market customer) premises.

Variable		Addressing Basis of Preparation Requirements
	Methodology and assumption's applied in relation to Actual Information	Energy received in to the network from larger installations of embedded generation is recorded on a half hour basis.
		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 Netbill & PEACE data sources
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 3.4.1.3.	
	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 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	<sup>r</sup> Class
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Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	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).
DOPED0501- DOPED0505		All entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for the regulatory year
	Population of Actual Information in templates, including Source.	For year 2015-16, Ergon has had two data sources: for period 1/7/2015 to 10/3/2016 Netbill files, and from 10/3/2016 to 30/6/2016, under a new system called PEACE, For the initial period, data has been sourced by running database queries on kWh billing to retailers each month and balanced to Monthly Network Billing (Netbill)

Variable		Addressing Basis of Preparation Requirements
		files provided by Ergon Energy's STC. The STC is responsible for Network Billing and the recovery from Retailers of the Network Use of Systems (NUOS) and service related charges. A priority of the STC is to manage the revenue recovery process. For the second period, reports were received from a group Joint Market Transaction Centre who are responsible for Network Billing and recovery from Retailers of Ergon's Network Use of System (NUOS) charges and other service related charges. Note: these sources were adopted also for Template 3.1, table 2.2 Revenue Grouping by customer class or type
	Methodology and assumption's applied in relation to Actual Information	Ergon Energy can now identify customers by Residential and Non-Residential classifications. The disaggregation for all other variables is based on actual
	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.	data. 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.
	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.

# 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	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.
DOPCN0101- DOPCN0106 DOCPN01	Population of Actual Information in templates, including Source.	Ergon Energy has sourced customer numbers data for the start of the period from the Market Transaction system (ESATS) 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:
		<ul> <li>Each NMI has been counted as a separate customer;</li> <li>Both energized and de-energised NMIs are counted; and</li> <li>Extinct and Greenfield site NMIS are excluded.</li> </ul>
		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.
		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.
		Ergon Energy underwent a system migration from ESATS to Peace

Variable		Addressing Basis of Preparation Requirements
		on 13 March 2016. As part of this migration, data cleansing was completed. A notable effect of this cleanse is evident in the count of Unmetered customers. It was identified that a lot of unmetered NMIs actually represented multiple premises. The cleanse created NMIs for each premises thus a large increase in numbers. This increase however cannot be solely attributed to the cleanse as the National Broadband Network rollout has added a large amount of Unmetered Supplies to our network also.
	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 3.4.2.1.
	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.

### **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.

<b>Table 7: Distribution</b>	<b>Customer Numbers b</b>	y Network Location
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Variable		Addressing Basis of Preparation Requirements
DOPCN0201- DOPCN0204	Consistency with Notice requirements	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 -
DOPCN02		Ergon Energy does not have any feeders classified as CBD.

Variable		Addrossing Basis of Proparation Poquiroments
Variable		Addressing Basis of Preparation Requirements
		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.
	Population of Actual Information in templates, including Source.	Ergon Energy has sourced customer numbers data from the Market Transaction system (ESATS). 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	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:
		<ul> <li>Each NMI has been counted as a separate customer;</li> <li>Both energized and de-energised NMIs are counted; and</li> <li>Extinct and Greenfield site NMIS are excluded.</li> </ul>
		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.
		Ergon Energy underwent a system migration from ESATS to Peace on 13 March 2016. As part of this migration, data cleansing was completed. A notable effect of this cleanse is evident in the counts of Urban & Short Rural customers. The cleanse has meant some premises previously identified as Urban had been reassigned as Short Rural, thus a decrease in the Urban count & an increase in Short Rural numbers.
	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 3.4.2.2.
	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.

Variable		Addressing Basis of Preparation Requirements				
	Consistency with Notice requirements	Variables DOPSD0102, DOPSD0103, DOPSD0105 and DOPSD0106 have been populated by Ergon Energy.				
		All entry fields which are shaded yellow indicating mandatory data fields have been populated.				
	Population of Actual Information in templates, including Source.	Data has been sourced from Substation Investment Forecasting Tool (SIFT).				
DOPSD0101-		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.				
		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:				
DOPSD0106		<ul> <li>AEMO accredited Meter Data Agents (MDA) for:</li> </ul>				
						<ul> <li>All NEM meter data file formatted (MDFF) data for Transmission Connection Points (and hence Ergon Energy System Total Demand) and market customer meter data;</li> </ul>
		<ul> <li>Dedicated type 4 metering on distribution feeders/power transformers;</li> </ul>				
		<ul> <li>Type 4 meter data of non-market customer as interrogated by the Ergon Energy's accredited MDA;</li> <li>Supervisory Control and Data Acquisition (SCADA) at the Bulk Supply Points and Zone-Substations (ZSS);</li> <li>Other sources of metered data used by Ergon Energy were:</li> </ul>				
		<ul> <li>NULEC recloser downloads;</li> </ul>				
		<ul> <li>Maximum Demand Indicator (MDI) readings, and</li> </ul>				

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

Variable		Addressing Basis of Preparation Requirements
		<ul> <li>Simulations of maximum demand based on premises consumption records (billing) and network topology when the above sources are unavailable.</li> </ul>
	Methodology and assumption's applied in relation to Actual Information	<ul> <li>In order to obtain Weather-adjusted variables, Ergon Energy has employed the following methodology:</li> <li>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.</li> <li>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.</li> <li>50 POE and 10 POE measured from histogram of annual peak demands.</li> </ul>
	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.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	The orange cells associated with Variable Codes DOPSD0108, DOPSD0109 and DOPSD0111 and DOPSD0112 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 the Substation Investment Forecasting Tool (SIFT). Refer to Table 8 above.
	Methodology and assumption's applied	In order to obtain Weather adjusted variables, Ergon Energy has employed a methodology involving:
DOPSD0107- DOPSD0112	in relation to Actual Information	<ul> <li>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.</li> <li>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.</li> <li>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.</li> <li>50 POE and 10 POE measured from histogram of annual peak demands.</li> </ul>
	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 3.4.3.2.

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

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 (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 Substati	on) (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.
	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.
DOPSD0201- DOPSD0206	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.
	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

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.
DOPSD0207- DOPSD0212	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.
	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.

Table 11: Annual Sy	/stem Maximum Demand (	(Transmission	Connection	Point) (MVA)
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## 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.

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 2014-15 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.
DOPSD0301	Methodology and assumption's applied in relation to Actual Information	DOPSD0301 'average overall power factor conversion' 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 kVAr 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.
	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 12: Power Factor Conversions (Overall Network)

# Table 13: Power Factor Conversions (Remaining Voltage Levels)

Variable		Addressing Basis of Preparation Requirements
DOPSD0302- DOPSD0314	Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2014-15 regulatory year.
		With the reissuance of templates by the AER for the 2014-15

Variable		Addressing Basis of Preparation Requirements
	_	year, where variables are not relevant to Ergon Energy, these have not been populated.
	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
	Methodology and assumption's applied in relation to Actual Information	Ergon Energy developed a software system to calculate the average peak power factor (the power factor at peak demand for all of the aforementioned metering points with data stored in the SMDB at the different voltage levels required by the Notice. Basic data cleansing was performed by eliminating all feeders with peak power factors less than 0.4 and greater than 0.99.
		Some volatility exists in the metering sources for the 6.6kV power factor calculation, hence significant change in power factor from 13-14. However, because of the very small amount of network supplied at 6.6kV, it is considered that such volatility is immaterial and therefore this data has still been considered as Actual Information.
	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 3.4.3.5.
	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)

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.
		Ergon Energy commenced charging customers on a kVA (MVA) basis as of 1 July 2015. This included a migration for a large amount of customers being moved from the MVA tariffs to these new 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 (Netbill) up to 13 March 2016 & from Peace for the remainder of the financial year.
DOPSD0401	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) type connections.
DOPSD0402		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.
		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.
		ICC, CAC and EG type connections are charged (and hence accounted for) on a monthly basis. The summated values entered in these RIN variables are the summation of the monthly chargeable quantities.
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual	Demand Supplied (contracted and measured) (MW) is supplied as Actual Information (defined term).

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

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

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

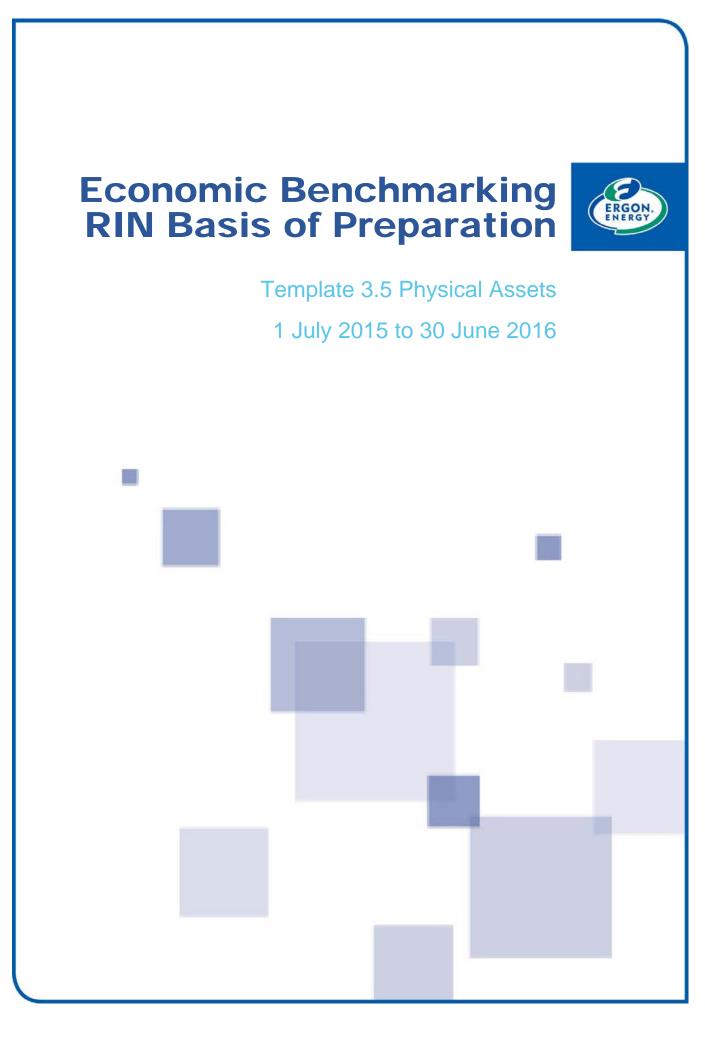
Template 3.4, table 3.4.3.7 is required to be completed, where Ergon Energy charges customers for demand supplied. Ergon Energy is required to report Maximum Demand amounts for customers that are charged based upon their Maximum Demand as measured in MVA – split between Contracted and Measured.

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. This was also confirmed 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.
DOPSD0403 DOPSD0404		Ergon Energy commenced charging customers on a kVA (MVA) basis as of 1 July 2014. 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
	Population of Actual Information in templates, including Source.	MWs then 0s should be input into table 3.4.3.7." Ergon Energy has sourced data from the Network Billing system (Netbill) up to 13 March 2016 & from Peace for the remainder of the financial year.
	Methodology and assumption's applied in relation to Actual Information	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.
		NUOS charges classed as Network DUOS KVA Actual Demand Charge (NDKVAADC) was used to identify the

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

Variable		Addressing Basis of Preparation Requirements
		Measured demand proportions for ICC, CAC and EG type connections.
		ICC, CAC and EG type connections are charged (and hence accounted for) on a monthly basis. The summated values entered in these RIN variables are the summation of the monthly chargeable quantities.
	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 information - Actual or Estimated)	Data in relation to Demand Supplied is a non-financial data set, and accordingly this requirement is not applicable.





### Version Control

Version	Date	Description
1.0	31/10/16	Final as submitted to AER on 31 October 2016

# 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 2015-16 Economic Benchmarking RIN templates (2015-16 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.

As relevant, Ergon Energy has provided additional detail beyond the minimum requirements if it was considered it may assist a user to gain an understanding of the information presented in the regulatory templates

Of note, the AER reissued EB RIN templates (but not a revised Notice) to Ergon Energy multiple times, the latest reissue occurring on 26 May 2016. The reissued (protected) templates allow for submission of the 2015-16 Regulatory Year data only.

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 2015-16 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 12 August 2016. The reissued (protected) templates

allow for submission of the 2015-16 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.

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 2015-16 regulatory year.
DPA0101- DPA0114		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.
DPA01		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 2015-16. Therefore, care should be taken when

#### Table 1: Overhead Network Length of Circuit at each Voltage

Variable		Addressing Basis of Preparation Requirements
		reviewing variable data against submissions prior to 2013-14.
		In comparing the 2015-16 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.
		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]
	Population of Actual Information in templates, including Source.	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.
	Methodology and assumption's applied in relation to Actual Information	Scripts were run against the 2015-16 RIN snapshot of Smallworld data, to extract the number and length of conductors, broken down by operating voltage.
		Conductors with operating voltages which didn't align with any prescribed categories were placed in the "Other Overhead Voltages" group.
		Conductors with an operating voltage of 12.7kV and 19.1kV were placed in the SWER category.
		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.
	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 3.5.1.1.
	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.

## 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	k Circuit Length at each Voltage
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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 2015-16 regulatory year.
		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.
		A double circuit line has been counted as two lines.
		Circuit length does take into account vertical components such as end lengths.
		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 to 2015-16. Therefore, care should be taken when reviewing variable data against submissions prior to 2013-14.
DPA0201- DPA0212		In comparing the 2015-16 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.
DPA02		Care should be taken when comparing any RIN time series data to ensure the correct data set is used.
		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].
	Population of Actual Information in templates, including Source.	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.
	Methodology and assumption's applied in relation to Actual Information	Scripts were run against the 2015-16 RIN snapshot of Smallworld data, to extract the number and length of conductors, broken down by operating voltage.
		Conductors with operating voltages which didn't align with any prescribed categories were placed in the "Other Underground Voltages" group.
	Population of Estimated	Ergon Energy has provided 'Actual Information' (as per the

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 2015-16 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).

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 2015-16 regulatory year.
		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.
		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 to 2015-16. Therefore, care should be taken when reviewing variable data against submissions prior to 2013-14.
		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].
	Population of Actual Information in templates, including Source.	Ergon Energy has provided Actual data for all overhead network circuits with the exception of variable [DPA0301] Overhead low voltage distribution lines.
DPA0301-		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):
DPA0313		<ul> <li>SOREP Oracle Spatial database (replicated SmallWorld GIS electrical datastore);</li> <li>Australian Standards;</li> <li>IEC Standards;</li> <li>ESAA D(b)5; and</li> <li>Ergon Energy Plant Rating Guidelines.</li> </ul>
	Methodology and assumption's applied in relation to Actual Information	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.
		Voltage drop and thermal limits of circuit components other than overhead lines and cables have not been considered when establishing the capacities of lines.
	Population of Estimated Information in Templates, including why Estimates are required and why it is not	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.
	possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are	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.

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

Variable		Addressing Basis of Preparation Requirements
	Ergon Energy's best estimates.	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.
		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.
		On this basis Ergon Energy considers that the best estimate has been provided.
	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).

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 2015-16 regulatory year.
DPA0401- DPA0413		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14 to 2015-16. Therefore, care should be taken when reviewing variable data against submissions prior to 2013-14.
		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].
	Population of Actual Information in templates, including Source.	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) :
		<ul> <li>SOREP Oracle Spatial database (replicated SmallWorld GIS electrical datastore);</li> </ul>

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

Variable	Addressing Basis of Preparation Requirements
	<ul> <li>Olex cable manufacturer catalogue calculations;</li> <li>Australian Standards;</li> <li>IEC Standards; and</li> <li>Ergon Energy Plant Rating Guidelines</li> </ul>
Methodology and assumption's applied relation to Actual Info	
	<ul> <li>Cables with similar characteristics given the same rating;</li> <li>Cables ambient air temperature calculated from spatial analysis with Ergon Energy Climate Zones;</li> <li>Cables ground temperature calculated from spatial analysis with 9 BOM Weather stations (nearest);</li> <li>Unknown Voltage &amp; Phase attributes calculated from cable characteristics;</li> <li>Cables ratings assumed 2 adjacent cables, 900mm depth, Cyclic Rating Factor =1, Solid Bonded &amp; TR=2.0;</li> <li>Summer &amp; Winter Ratings were calculated.</li> </ul>
	Voltage drop and thermal limits of circuit components other than overhead lines and cables have not been considered when establishing the capacities of cables.
Population of Estimat Information in Templa including why Estimat required and why it is possible to provide Ad Information in templat Estimated Information been produced, includ reasons why Estimate Ergon Energy's best estimates.	AER's defined term) in relation to all variables contained in Template 3.5 Table 3.5.1.4. not ctual tes. How has ding
Changes in Accountir Policies (Financial inf - Actual or Estimated)	ormation reported is a non-financial data set, and accordingly this

# 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.

<b>Table 5: Distribution</b>	Transformer	Total	Installed	Capacity
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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 2015-16 regulatory year.
		Distribution transformer capacity owned by Ergon Energy (DPA0501) - the reported data is the nameplate continuous rating including forced cooling.
		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
DPA0501-		"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."
DPA0503		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).
	Population of Actual Information in templates, including Source.	The source data for Distribution transformer capacity owned by High Voltage was obtained from the DCOS and billed summary file (Netbill & FACOM).
		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.
		The source of the distribution transformer cold capacity is detailed in the table below
	Methodology and assumption's applied in relation to Actual Information	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

Variable	Addressing Basis of Preparation Requirements
	capacity of at least the authorised demand). The DCOS totals were then added to the of SAC High Voltage connections.
	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.
	The data is obtained from monthly billing files received from Service Transaction Centre using Netbill, and other files produced for Pricing purposes.
	A conversion factor was used to present the figures in MVA.
	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.
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	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
reasons why Estimates are Ergon Energy's best estimates.	"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."
Changes in Accounting Policies (Financial information - Actual or Estimated)	Capacity of installed distribution transformers is a non-financial data set, and accordingly this requirement is not applicable.

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
	Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2015-16 regulatory period
DPA0503 DPA0605		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 total zone substation transformer capacity (DPA0604).

Variable		Addressing Basis of Preparation Requirements
	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 1/7/2016.
	Methodology and assumption's applied in relation to Actual Information	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 2015-16 financial year.
		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.
		NOTE:
		The DPA0605 Cold Spare Capacity has increased in comparison to the 2014/15 financial year results. This is due to the inclusion of new stock items that had been purchased for work which has not eventuated and therefore transferred into inventory holdings.
	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

Variable		Addressing Basis of Preparation Requirements
DPA0605	requirements	data fields have been populated for the 2015-16 regulatory year.
		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.
		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 reported instead of transformer capacity.
		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).
	Population of Actual Information in templates, including Source.	2015-16 totals are based on current corporate data extracted from Ellipse as a snapshot of the system at the end of the 2015-16 regulatory year.
	Methodology and assumption's applied in relation to Actual Information	Transformer asset data was extracted from the corporate database, categorised according to Table 3.5.2.2, and summated to obtain totals.
		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.
		Refer to Table 6 above, for source and methodology employed for Cold Spare Capacity variables.
	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)	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	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2015-16 regulatory year.
		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.
		Consistent with clarification received from the AER following reissuance of templates for the 2015-16 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].
	Population of Actual Information in templates, including Source.	Public Lighting data has been sourced from the PLUMS database and Smallworld GIS.
DPA0701-	Methodology and assumption's applied in relation to Actual Information	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).
DPA0703		Only Ergon Owned and Operated and Gifted and Ergon Operated lights have been included (previously known as Rate 1 & 2).
		For Public Lighting Poles a methodology was employed whereby a query was run through Smallworld to identify 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).
		The Public Lighting Poles figure has slightly decreased from last year due to a correction interpretation of only Ergon Owned and Operated and Gifted and Ergon Operated lights to be included.
		It is assumed that the Smallworld data is an accurate record of actual assets.
	Population of Estimated Information in Templates, including why Estimates are	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
	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 in Table 3.5.3 (Public Lighting).
	Changes in Accounting Policies (Financial information	Public lighting data reported is a non-financial data set, and accordingly this requirement is not applicable.
	- Actual or Estimated)	Introduction of a new database (PLUMS) and processes for cross-referencing between internal systems has seen an increase in the number of Streetlight Only poles identified.

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#### **Version Control**

Version	Date	Description
1.0	31/10/16	Final as submitted to AER on 31 October 2016

# 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 2015-16 Economic Benchmarking RIN templates (2015-16 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.

As relevant, Ergon Energy has provided additional detail beyond the minimum requirements if it was considered it may assist a user to gain an understanding of the information presented in the regulatory templates.

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 2015-16 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 12 August 2016. The reissued (protected) templates allow for submission of the 2015-16 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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Preparation: Template 3.6 Quality of Service

# **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)<sup>1</sup> 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).

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 2015-16 regulatory year.
		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.
DQS0101- DQS0104		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 <u>Table 2: Reliability Performance (Inclusive of</u> <u>MEDs) – Specific Variable ResponsesTable 2: Reliability</u> Performance (Inclusive of MEDs) – Specific Variable Responses below for methodologies specific to each

#### Table 1: Reliability Performance (Inclusive of MEDs)

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<sup>1</sup>AER, Electricity distribution network service providers Service target performance incentive scheme, November 2009

Preparation: Template 3.6 Quality of Service

Variable	Addressing Basis of Preparation Requirements
	variable. The following comments are made across all variables.
	The regulatory (financial) year 2015-16 Major Event Day Threshold (tMed 8.13) was calculated utilising 5 years of Daily SAIDI data using the required STPIS methodology.
	The distribution customer numbers utilised, Ergon Energy notes that:
	<ul> <li>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 used as the denominator for the calculation as per the formula outlined in Appendix A of the AER's STPIS scheme.</li> <li>Only completed unplanned sustained (interruptions greater than one minute) interruptions are included.</li> <li>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.</li> </ul>
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 Reliability statistics.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Reliability information reported is a non-financial data set, and accordingly this requirement is not applicable

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

Variable	Definition
Whole of network unplanned SAIDI (DQS0101)	Completed Sustained Unplanned Interruptions
	Feeder Categories: Whole of Network
	Financial Years 2015-16 (Between 1 July and 30 June)
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers
	Inclusive of the following exclusions:
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> <li>Generation (Exemption clause: 3.3 (a) (2 or 3))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> <li>Customer installation faults/failures which reside beyond the electricity supply network</li> </ul>
Whole of network unplanned	Completed Sustained Unplanned Interruptions
SAIDI - excluding excluded	Feeder Categories: Whole of Network
outages (DQS0102)	Financial Year 2015-16 (between 1 July and 30 June)
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers.
	Inclusive of the following exclusions:
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> </ul>
	Exclusive of the following exclusions:
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2 or 3))</li> </ul>
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>
	<ul> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> </ul>
	<ul> <li>Customer installation faults/failures which reside beyond the electricity supply network</li> </ul>
Whole of network unplanned	Completed Sustained Unplanned Interruptions
SAIFI (DQS0103)	Feeder Categories: Whole of Network
	Financial Year 2015-16 (Between 1 July and 30 June)
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers
	Inclusive of the following exclusions:
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> </ul>
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2 or 3))</li> </ul>
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>
	<ul> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> </ul>
	<ul> <li>Customer installation faults/failures which reside beyond the electricity supply network</li> </ul>

Variable	Definition
Whole of network unplanned	Completed Sustained Unplanned Interruptions
SAIFI - excluding excluded	Feeder Categories: Whole of Network
outages (DQS0104)	Financial Years 2015-16 (between 1 July and 30 June)
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers
	Inclusive of the following exclusions:
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> </ul>
	Exclusive of the following exclusions:
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2 or 3))</li> </ul>
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>
	<ul> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> </ul>
	<ul> <li>Customer installation faults/failures which reside beyond the electricity supply network</li> </ul>

#### **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	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2015-16 regulatory years.
		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.
DQS0105-		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).
DQS0108	Population of Actual Information in templates, including Source.	Ergon Energy has sourced data from its internal outage management (FeederStat) and asset management systems.
	Methodology and assumption's applied in relation to Actual Information	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.
		The regulatory (financial) year 2015-16 Major Event Day Threshold (tMed 8.13) was calculated utilising 5 years of Daily SAIDI data using the required STPIS methodology.
		The distribution customer numbers utilised, Ergon Energy notes

Variable	Addressing Basis of Preparation Requirements
	that
	<ul> <li>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 used as the denominator for the calculation as per the formula outlined in Appendix A of the AER's STPIS scheme.</li> </ul>
	<ul> <li>Only completed unplanned sustained (interruptions greater than one minute) interruptions are included.</li> </ul>
	<ul> <li>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.</li> </ul>
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 Reliability statistics
Changes in Accounting Policies (Financial information - Actual or Estimated)	Reliability information reported is a non-financial data set, and accordingly this requirement is not applicable.

The following comments are made in relation to specific Reliability variables, provided in Template 3.6 Table 3.6.1.2 (Reliability performance <u>exclusive</u> 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
Whole of network	Completed Sustained Unplanned Interruptions
unplanned SAIDI (DQS0105)	Feeder Categories: Whole of Network

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Variable	Definition	
	Financial Year 2015-16 (Between 1 July and 30 June)	
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers:	
	Inclusive of the following exclusions:	
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2 or 3))</li> </ul>	
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>	
	<ul> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> </ul>	
	Customer installation faults/failures which reside beyond the electricity supply network Exclusive of the following exclusions:	
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> </ul>	
Whole of network	Completed Sustained Unplanned Interruptions	
unplanned SAIDI - excluding excluded	Feeder Categories: Whole of Network	
outages (DQS0106)	Financial Year 2015-16 (between 1 July and 30 June)	
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers	
	Exclusive of the following exclusions:	
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> </ul>	
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2 or 3))</li> </ul>	
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>	
	<ul> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> </ul>	
	<ul> <li>Customer installation faults/failures which reside beyond the electricity supply network</li> </ul>	
Whole of network	Completed Sustained Unplanned Interruptions	
unplanned SAIFI (DQS0107)	Feeder Categories: Whole of Network	
	Financial Year 2015-16 (Between 1 July and 30 June)	
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers	
	Inclusive of the following exclusions:	
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2 or 3))</li> </ul>	
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>	
	<ul> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> </ul>	
	Customer installation faults/failures which reside beyond the electricity supply network Exclusive of the following exclusions:	
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> </ul>	
Whole of network	Completed Sustained Unplanned Interruptions	
unplanned SAIFI - excluding excluded outages (DQS0108)	Feeder Categories: Whole of Network	
	Financial Year 2015-16 (between 1 July and 30 June)	
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers	
	Exclusive of the following exclusions:	
	<ul> <li>STPIS MED's (Exemption clause: 3.3 (b))</li> </ul>	

Variable	Definition	
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>	
	<ul> <li>Jurisdictional obligation or right (Exemption clause: 3.3 (a) (7))</li> </ul>	
	<ul> <li>Customer installation faults/failures which reside beyond the electricity supply network</li> </ul>	

## 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	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2015-16 regulatory year.
DQS0201		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.
DQS0202 DQS02		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.
		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
	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 Netbill billing (prior to 13 March 2016) and the Peace systems.

Variable	Addressing Basis of Preparation Requirements
	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:
	<ul> <li>Sustained Interruption Events as defined in the National STPIS 2009</li> </ul>
	- Normal
	<ul> <li>Service Fuse or Beyond</li> </ul>
	and to EXCLUDE
	<ul> <li>STPIS MED day exclusions</li> </ul>
	<ul> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7))</li> </ul>
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2))</li> </ul>
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5)).</li> </ul>
	The aggregated regulatory year feeder interruption data provided:
	<ul> <li>Network type as defined in the National STPIS 2009</li> </ul>
	<ul> <li>Customers interrupted resulting from Planned events</li> </ul>
	<ul> <li>Duration of Interruption resulting from Planned events</li> </ul>
	<ul> <li>Customers interrupted resulting from Unplanned events</li> </ul>
	<ul> <li>Duration of Interruption resulting from Unplanned events</li> </ul>
Methodology and assumption's applied in relation to Actual Information	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 customers minutes off supply.
	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).
	Customer minutes off supply are then multiplied by the average consumption per affected feeder, to determine an estimate of Energy Not Supplied.
	This calculation was performed for both Planned and Unplanned interruptions, with Total Energy Not supplied being the sum of DQS0201 and DQS0202.
Population of Estimated Information in Templates,	By definition, Ergon Energy has provided 'Estimated Information' in relation to all variables contained in Template 3.6 Table 3.6.2.
including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated	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

Variable		Addressing Basis of Preparation Requirements
	Information has been	consumption across all feeders was used.
	produced, including reasons why Estimates are Ergon Energy's best	This is consistent with the Instructions and Definition document issued by the AER in November 2013, which states
estimates. Changes in Accoun Policies (Financial	0 0,	"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"
	information - Actual or	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	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2015- 16 regulatory year.
		System losses are calculated in accordance with Equation 2 in the Instructions and Definitions at Appendix B to the Notice.
	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.
DQS03	Methodology and assumption's applied in relation to Actual Information	All data provided in relation to System Losses is Actual information which is calculated using the following formula:
		[Energy Received – Energy Delivery] <i>divide</i> Energy 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	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.

Variable		Addressing Basis of Preparation Requirements
	why Estimates are Ergon Energy's best estimates.	
	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.

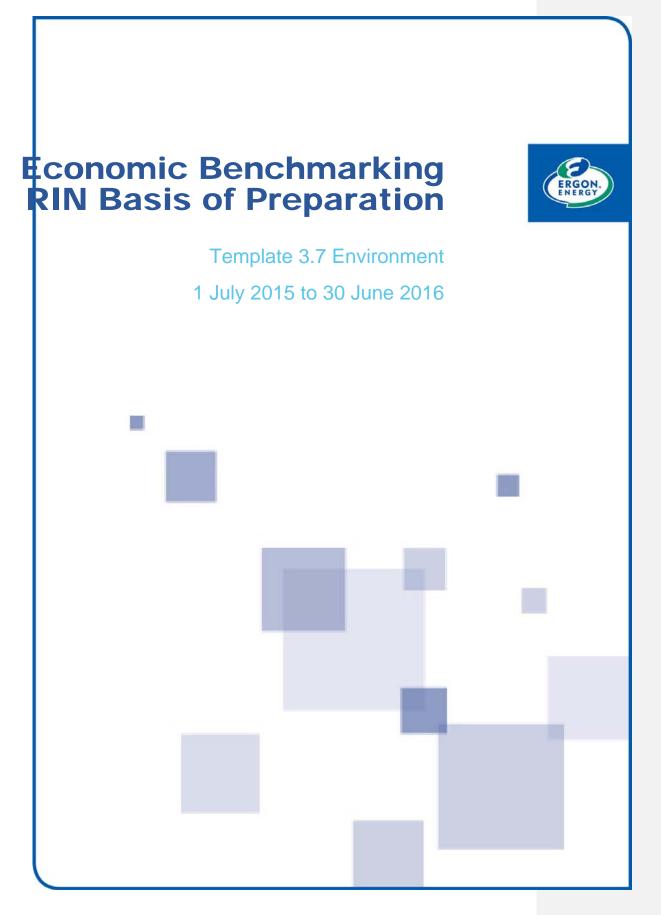
#### **Table 7: Capacity Utilisation**

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.
		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.
50004		For zone substations where the thermal capacity of exit feeders is a constraint, thermal capacity of exit feeders is used instead of transformer capacity.
DQS04	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 Information	This data was determined by dividing the Non–coincident Summated Raw System Annual Maximum Demand provided as per DOPSD0201 by the Total zone substation 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	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.

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Variable		Addressing Basis of Preparation Requirements
	been produced, including reasons why Estimates are Ergon Energy's best estimates.	
	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

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#### **Version Control**

Version	Date	Description
1.0	31/10/16	Final as submitted to AER on 31 October 2016

# 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 2015-16 Economic Benchmarking RIN templates (2015-16 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.

As relevant, Ergon Energy has provided additional detail beyond the minimum requirements if it was considered it may assist a user to gain an understanding of the information presented in the regulatory templates.

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 2015-16 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 12 August 2016. The reissued (protected) templates allow for submission of the 2015-16 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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Preparation: Template 3.7 Environment

# **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 Population of Actual Information in templates, including Source.	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2015-16 regulatory year.	
	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	Values were obtained by calculation as required in Instructions and Definitions for variables:
	Information	<ul> <li>Customer Density (DOEF0101) = Total Number of Customers (DOPCN01) / Route Line Length of the Network (DOEF0301)</li> </ul>
DOEF0101-		<ul> <li>Energy Density (DOEF0102) = Total MWh (DOPED01)/ Total number of customers of the network (DOPCN01)</li> </ul>
DOEF0103		<ul> <li>Demand Density (DOEF0103) = kVA non- coincident Maximum Demand (Zone Substation) (DOPSD0201)/ Total number of Customers of the Network (DOPCN01)</li> </ul>
		Further information on the methodology employed to determine each numerator or denominator input is available in <u>Table 4: Routine Line Length</u> , 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	Ergon Energy has provided 'Actual Information' (as per the AER's defined terms) in relation to all 2015- 16 variables contained in Template 3.7 Table 3.7.1.

Variable		Addressing Basis of Preparation Requirements
	why Estimates are Ergon Energy's best estimates.	
	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.

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 2015-16 regulatory year.
		Similarly, vegetation maintenance span cycles variables (DOEF0206-DOEF0207) have been provided as Actual Information for the 2015-16 regulatory year.
DOEF0201-	Population of Actual Information in templates, including Source.	Refer responses in Table 3: Terrain Factors –Specific Variable Responses, for more information on sources of data.
DOEF0214	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	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables in table 3.7.2

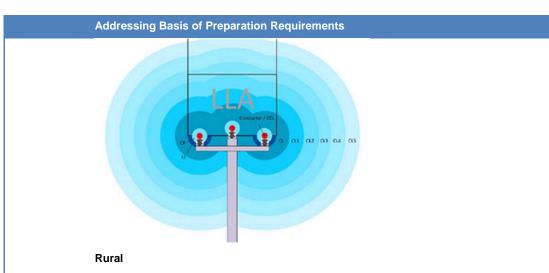
#### **Table 2: Terrain Factors**

Variable		Addressing Basis of Preparation Requirements
	best estimates.	
	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).

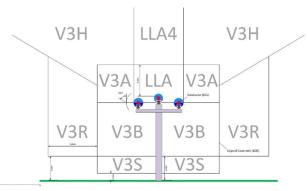
### Table 3: Terrain Factors – Specific Variable Responses

	Addressing Basis of Preparation Requirements
Rural proportion (DOEF0201)	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.
	Information provided is Actual for the 2015-16 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):
	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).
Urban and CBD and Rural	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.
vegetation maintenance spans	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).
(DOEF0202- DOEF0203)	Total vegetation maintenance spans (DOEF0204) are the sum of DOEF0202 and DOEF0203. Information provided is Actual Information for the 2015-16 year on the basis of:
Total vegetation maintenance spans (DOEF0204)	ROAMES inspection data from Cycle 2 & 3 network capture between July 2015 and June 2016 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:
	<ul> <li>CL1 is the nominated minimum clearance space (voltage dependant) plus 1 metre</li> <li>CL2 is the nominated minimum clearance space (voltage dependent) plus 2 metres</li> </ul>



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.



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.

Total numberTotal number of spans for 2015-16 in respect of Ergon Energy's network has been sourcedof spansfrom Smallworld. Information provided for 2015-16 is considered Actual Information (as per(DOEF0205)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

	Addressing Basis of Preparation Requirements		
Average urban and	the total number of spans, excluding service line spans. 2015-16 average maintenance span cycle data was calculated based on data sourced from the June monthly report for the Annual Vegetation Management Program (June 2016) taken from the Ellipse database (i.e. 2015-16 data was found in the June 2016 report).		
CBD vegetation maintenance span cycle (DOEF0206) Average rural vegetation maintenance span cycle (DOEF0207)	<ul> <li>A methodology was employed whereby:</li> <li>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);</li> <li>Average rural vegetation maintenance span cycle = (Sum of treated rural vegetation zones cycle duration [Maintenance Schedule Task] / total number of rural vegetation zones cycle duration [Maintenance Schedule Task] / total number of rural vegetation zones cycle duration [Maintenance Schedule Task] / total number of rural vegetation Zones treated during regulatory (financial) year)</li> <li>(Ergon Energy has no CBD feeder categories).</li> <li>Notwithstanding that the number of maintenance spans is estimated data in 2015-16, the maintenance span cycle data provided for 2015-16 is considered Actual Information in accordance with AER requirements.</li> </ul>		
Average number of trees per urban and CBD vegetation maintenance span (DOEF0208) Average number of trees per rural vegetation maintenance span (DOEF0209)	<ul> <li>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:</li> <li>a perennial plant (of any species including shrubs) that is:</li> <li>equal to or greater in height than 3 metres (measured from the ground) in the relevant reporting period; and</li> <li>of a species which could grow to a height such that it may impinge on the vegetation clearance space of power lines.</li> <li>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.</li> <li>Information provided for 2015-16 is considered Actual in accordance with AER requirements.</li> <li>For 2015-16 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.</li> <li>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 2015-16, such that:</li> <li>Average number of trees per urban vegetation maintenance span= (Total number of intrusions reported at time of analysis] / Total number of ROAMES - reported spans [as reported at time of analysis])</li> </ul>		

	Addressing Basis of Preparation Requirements		
	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).		
	<ul> <li>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])</li> </ul>		
	Information provided for 2015-16 is considered Actual in accordance with AER requirements.		
Average number of	ROAMES inspection data using the latest reported data for each Vegetation Zone across Cycles 2 and 3.		
defects per urban and CBD vegetation maintenance	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: <b>Defect</b>		
span (DOEF0210) Average	<ul> <li>Close Proximity (CP) vegetation intrusions as defined by clearance band specification in relation to proximity to overhead conductor</li> </ul>		
number of defects per rural vegetation maintenance span	<ul> <li>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</li> <li>Clearance Band (CL) vegetation intrusions as defined by clearance band specification in relation to the minimum accepted clearance space (voltage dependant) for maintenance purposes</li> </ul>		
(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 2015-16 vegetation program. Information provided for 2015-16 is considered Actual in accordance with AER requirements.		
Tropical	For 2015-16, the tropical proportion of Ergon Energy's network was based on network data		
proportion	sourced from the Smallworld GIS. The number of spans occurring within hot humid summer		

	Addressing Basis of Preparation Requirements	
(DOEF0212)	and warm humid summer regions (as defined by the BOM Climatic Zones map) was assessed using .shp files sourced from the BOM website.	
	Information provided for 2015-16 is considered Actual in accordance with the AER's requirements.	
Standard vehicle access (DOEF0213)	For 2015-16, an assessment of data sourced from Smallworld was required. A query was undertaken to return 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.	
	Information provided for 2015-16 is considered Actual in accordance with the AER's requirements.	
Bushfire risk (DOEF0214)	For 2015-16 the number of spans found occurring within High Bushfire Risk Areas, as defined by spatial data previously obtained from the Queensland Rural Fire Service was ascertained through an assessment an assessment of data sourced from the Smallworld GIS.	
	Significant variation in number of spans within high bushfire risk areas from the previous 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).	
	Information provided for 2015-16 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
DOEF0301	Consistency with Notice requirements	All mandatory data entry fields shaded yellow, and have been populated for each of the 2015-16 regulatory year.
		Route Line length of lines is based on the distance between line segments. It does not include vertical components such as line sag.
		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.
		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:
		<ul> <li>two sets of lines that run on different sets of poles (or towers) share the same easement the lines are counted separately;</li> </ul>
		<ul> <li>there are multiple circuits on a span, the length of each span is considered only once; and</li> </ul>
		<ul> <li>a span shares multiple voltages, the length of the span is also considered only once; and</li> </ul>
		<ul> <li>captures the length of both underground cables and overhead lines</li> </ul>
	Population of Actual Information in templates, including Source.	Ergon Energy has sourced data from its SOREP Oracle Spatial database. This database is replicated from the Smallworld GIS electrical data store.
	Methodology and assumption's applied in relation to Actual Information	For 2015-16 a methodology was employed whereby data was obtained for the current regulatory year (2015-16) 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).
		Variances noted were the results of a number of data cleansing and improvement exercises and a change in methodology to better exclude service line lengths.

Preparation: Template 3.7 Environment

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) in relation to all variables contained in Template 3.7 Table 3.7.3.
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Route Line Length reported is a non-financial data set, and accordingly this requirement is not applicable.