EECL 1314 BMRIN\_T3.1 REV



# **Economic Benchmarking Regulatory Information Notice Basis of Preparation**

Template 3.1 Revenue

1 July 2013 to 20 June 2014









## Forward

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 2013-14 Economic Benchmarking RIN templates (2013-14 BMRIN 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 13-14 BMRIN Templates.

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Email: jenny.doyle@ergon.com.au Phone: (07) 3851 6416 Mobile: 0427 156 897

# **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 definitions of SCS and 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
with Notic	with Notice requirements	All mandatory data entry fields shaded yellow, have been populated. Ergon Energy confirms, as required by the AER in Box 1, Revenue Financial Reporting Framework of Appendix B, Instructions and Definitions that Revenues reconcile to the Direct Control Services revenues in Regulatory Accounting Statements as per the Annual Reporting Requirements (AER defined term) as submitted to the relevant regulator, for the year in question).
		Direct Control Services, which were charged by Ergon Energy to customers (in accordance with the BM RIN instructions at Section 2: Revenue) have been reported as Standard Control Services (SCS): Network Services, Connection
		Services, Metering Services, Capital Contributions; and
		For 2013-14 Street Lighting Services were classified as an ACS as noted in Appendix A: Distribution Service Classification of the AER's Final Distribution Determination for 2010-2015. Therefore, public lighting for the recovery of construction and maintenance costs for the 2013-14 regulatory

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

Variable	Addressing Basis of Preparation Requirements
	year has been reported as an ACS (refer to the source and methodology in Table 4-3: Revenue Grouping by Chargeable Quantity under heading DREV0112: Public Lighting). Note: the recovery of the Distribution use of System's charge in respect of Public Lighting has been reported as a SCS for all years.
	Ergon Energy's approved services are as per the Framework and Approach as displayed in Chapter 2 of the AER Final Distribution Determination, and Chapter 3.5 of the QCA Final Determination. 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.
	Revenue reported in prior regulatory accounting statements which is not a Direct Control Service charged by Ergon Energy to Customers include: profit or gross proceeds on sale of assets, interest received, shared assets revenue and Transmission use of System charges, Sales. Rather, they were specific reporting requirements of prior regulatory instruments.
	'Revenue from Unmetered Supplies' is the same for template 3, table 3.1.1 (DREV0107) as for template 3, table 3.1.2 (DREV0205). Public lighting has been reported in variable (DREV0112) and has been excluded from 'revenue from unmetered supplies' (DREV0107). This is based on the interpretation of the definitions for unmetered supplies and customer numbers. The latter states public lighting connections are not to be counted when calculating the number of unmetered customers.
	Ergon Energy does not currently have Time of Use Network Tariffs and accordingly, yellow cells have been populated with '0', as per instructions in the Notice:
	<ul> <li>DREV0103: Revenue from On–Peak Energy Delivery charges,</li> </ul>
	<ul> <li>DREV0104: Revenue from Shoulder period Energy Delivery Charges; and</li> </ul>
	<ul> <li>DREV0105: Revenue from Off–Peak Energy Delivery charges.</li> </ul>
	The total of revenues by chargeable quantity for these variables reconciles to the total revenues by customer class (DREV02).
Population of Actual Information in templates, including Source.	Data has been sourced from 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.
Methodology and assumption's applied in relation to Actual	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3, table 3.1.1. Ergon Energy's methodology applied to provide information for 2013-14 actual data in Netbill files which are the monthly billing files issued by STC to Retailers. This revenue was able to be mapped directly to the variables required using Ergon Energy's (network) charge categories.

Variable		Addressing Basis of Pre	paration Requirements		
	Information	The table below sets out th variables.	ne mapping of DCOS model charges to RIN		
		DCOS model	Benchmarking RIN Variable		
		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 Charge	Revenue from Energy delivery charges where time of use is not a determinant		
		Revenue from controlled load customer charges (DREV0106) and Revenue from unmetered supplies (DREV0107) are inclusive of Fixed Charges i.e.: these charges haven't been separately reported in Revenue from Fixed Customer Charges (DREV0101).			
		For Revenue from Contracted Maximum Demand charges (DREV0108) and Revenue from Measured Maximum Demand charges (DREV0109), Ergon Energy has allocated the 'full recovery of revenue from customers on the SAC – Large tariff' to Contracted Demand. Ergon Energy has adopted this approach as it is consistent with the approach used for Template 3.4 Operational data, 'Demand supplied' where instructions state, 'where Ergon Energy cannot distinguish between contracted and measured Maximum Demand, demand supplied must be allocated to contracted Maximum Demand. These customers have a minimum demand charge which is unable to be easily spilt between contracted and measured demand without extensive work to investigate each single monthly billing for each connection on this tariff.			
		Revenue from Public Lighting (DREV0112) has been reported as ACS based on its service classification for the regulatory control period.			
		DREV0112) have been ad above) to an unbilled basis reporting in Ergon Energy' DREV01 using AP RIN (or	EV0102, DREV0106 - DREV0109, and justed from the billed amounts (with the basis a. The adjustment is an alignment with the s 2013-14 Annual Performance RIN. The total at an unbilled basis) is higher than the sum of the pasis. The difference has been apportioned over		
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual		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. 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)	As per AASB 118 Revenue, Ergon Entity has commenced accrual accounting for unbilled network charges. Template 3, table 3.1 has been prepared on an unbilled basis for the first time in FY1314. The impact of the change is a less than one percent increase to DREV01.

#### Table 2: Revenue Grouping by Chargeable Quantity

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 BM RIN instructions at Section 2: Revenue) have been reported as
		<ul> <li>Standard Control Services (SCS): Network Services, Connection Services, Metering Services, Capital Contributions; and</li> <li>Alternative Control Services (ACS): Street lighting, Quoted services, Fee based services, Contributions.</li> </ul>
DREV0110- DREV0112 - (ACS)		For 2013-14, Street Lighting Services were classified as an ACS as noted in Appendix A: Distribution Service Classification of the AER's Final Distribution Determination for 2010-2015. Therefore, public lighting for the recovery of construction and maintenance costs for 2013-14 has been reported as an ACS (refer to the source and methodology below at DREV0112: Public Lighting). Note: the recovery of the Distribution use of System's charge in respect of Public Lighting has been reported as a SCS for all years.
DREV0113 DREV01		Ergon Energy's approved services are as per the Framework and Approach as displayed in Chapter 2 of the AER Final Distribution Determination, and Chapter 3.5 of the QCA Final Determination. 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.
		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 2013-14is the Total

Variable		Addressing Basis of Preparation Requirements
		Revenue reported in Ergon Energy's 2013-14 Annual Performance RIN less Use of Gross proceeds from sale of assets, Interest income, and Revenue Cap Reg Assets by Non-SCS Users and TUOS revenue.
	Population of Actual Information in templates, including Source.	Ergon Energy has sourced the data from the Ergon Energy's Annual Performance RIN's for 2013-14.
	Methodology and assumption's applied in relation to Actual Information	DREV0110: Metering codes:
		<ul> <li>SCS is zero for 2013-14. The revenue is reported as part of DUOS. There is no meaningful way to separate the metering code revenue from DUOS.</li> </ul>
		<ul> <li>ACS for 2013-14. The revenue is taken directly from Template 17: Alternative Control Services &amp; Other, Table 1. Alternative Control &amp; Other Services in Ergon Energy's 2013-14Annual Performance RIN.</li> </ul>
		DREV0111: Connection Charges:
		<ul> <li>SCS for 2013-14. This revenue is taken directly from the Income Statement in Ergon Energy's 2013-14 Annual Performance RIN. It is the Contributions in Standard Control Services.</li> </ul>
		<ul> <li>ACS for 2013-14. This revenue is taken directly from the Income Statement in Ergon Energy's 2013-14 Annual Performance RIN. It is the contributions in the ACS Streetlighting and Quoted Services, i.e. large customer connections.</li> </ul>
		DREV0112: Public Lighting:
		<ul> <li>SCS for years 2013-14. Ergon Energy has sourced information from Monthly Network Billing (Netbill) files provided by the STC</li> </ul>
		<ul> <li>ACS for 2013-14. The revenue has been taken directly from the Income Statement (Distribution Revenue) in Ergon Energy's 2013- 14Annual Performance RIN.</li> </ul>
		DREV0113: Revenue from Other Sources:
		<ul> <li>SCS, nothing to report.</li> </ul>
		<ul> <li>ACS for 2013-14. The revenue is taken directly from Table 1. Alternative Control &amp; Other Services in Ergon Energy's 2013- 14Annual Performance RIN. The revenue is the total less the metering revenue.</li> </ul>
		Variables DREV0110, DREV0111, DREV0112 (ACS), DREV0113, and DREV01, are derived from Ergon Energy's 2013-14 Annual Performance RIN. No adjustment is required for an unbilled basis, as the AP RIN has been prepared on an unbilled basis.
	Population of Estimated Information in	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to these variables contained in template 3, table 3.1.1.
L	Templates, including	

Variable		Addressing Basis of Preparation Requirements
	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 Accounting Policies (Financial information - Actual or Estimated)	As per AASB 118 Revenue, Ergon Energy has commenced accrual accounting for unbilled network charges. Template 2, table 2.1 has been prepared on an unbilled basis for the first time in FY1314.

## 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.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	All mandatory data entry fields shaded yellow, have been populated.
DREV0201- DREV0206		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.
DREV02	02	'Revenue from Unmetered Supplies' is the same for template 3, table 3.1.1 ('DREV0107) as for template 3, table 3.1.2 (DREV0205).
	Population of Actual Information in templates, including Source.	Ergon Energy has sourced information from Monthly Network Billing (Netbill) files provided by the STC.

#### Table 3: Revenue Grouping by Customer Type or Class

Variable		Addressing	Basis of Prepara	tion Requirement	S
	Methodology and assumption's applied in relation to Actual Information	Historically, Ergon Energy's Network Tariffs have not been aligned to a specific customer class and we therefore do not have Revenue data based on the disaggregation required, with a few exceptions.			
		Customers' i class' as opp Unlike DUOS variables usi secondary sy to these cate	in Table 3.1.2 'Rev posed to the custo S revenue which c ing the DCOS mod ystem to verify the egories. Therefore	en recorded as 'Rev venue grouping by o mer type variables an be allocated to o del, Contributions d customer classes e, EECL has adopte s document which s	customer type of set by the AER. customer type on't have a to allow mapping ed the approach in
		types DF	REV0201-DREV0	gy cannot allocate 205 must be report omers' (DREV0206	ed against
		Ergon Energ	y has employed th	ne following mappir	ng in this regard.
			BENCHMARING RIN VARIABLES	ERGON NETWORK TARIFF	ERGON TARIFF DESCRIPTION
		Table 2.2 Revenue grouping by Customer type or class			Typical Consumption Levels
		DREV0201	Revenue from residential Customers	Volume Small, Night Controlled and Controlled	Energy Consumption below 26MWh p.a. No demand component
		DREV0202	Revenue from non-residential customers not on demand tariffs	Volume Large	Energy Consumption between 26MWhs and 100MWhs No demand component
		DREV0203	Revenue from non-residential low voltage demand tariff customers	Demand High Voltage, Demand Large, Demand Medium and Demand Small	Energy Consumption between 100MWhs and 4,000MWhs. Demand charge based on minimum chargeable demand

Variable	Addressing	Basis of Prepara	ntion Requirement	:S	
	DREV0204	Revenue from non-residential high voltage demand tariff customers	ICC, CAC and EMG	Energy Consumption greater than 4,000MWhs Demand based on Authorised or Capacity component and an Actual Demand component	
	DREV0205	Revenue from unmetered supplies	Unmetered Supply - Minor and Major Streetlights;	Unmetered Supply connections other than Streetlights No demand component	
	DREV0206	Revenue from Other Customers	Unmetered Supply - Minor and Major Streetlights (SCS only), Contributions	Unmetered Supply - Minor and Major Streetlights No demand component	
	DREV02	Total revenue by customer class	Total Revenue	Total Revenue	
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to variables DREV0205, DREV0206 and DREV02 contained in template 3, table 3.1.2. The disaggregation for all other variables has been estimated using the above mapping table as this is Ergon Energy's best estimate.				
Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon	been adjusted from a billed basis to an unbilled basis. The total at DREV02 must align with the total at DREV01. The the total unbilled amount for DREV0201 – DREV0204 is equal total of DREV01 less DREV0205 and DREV0206 on an unbille basis.				
Energy's best estimates.	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.				
Changes in Accounting Policies (Financial information - Actual or	-	3 118 Revenue Er or unbilled networl	gon Energy has col < charges.	mmenced accrual	

Estimated)

# 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 for 2013-14 and accordingly have not been populated:
DICEVUS		<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 201314. Therefore, care should be taken when reviewing variable data for 2013-14against prior submissions.
	Population of Actual Information in templates, including Source.	Incentive schemes applicable to Ergon Energy relate to the EBSS and STPIS schemes – commencing from 1 July 2010. The only impact during the initial regulatory years on revenues for the 2013-

Variable		Addressing Basis of Preparation Requirements
		14year relates to the STPIS. The reward under this scheme has been sourced from the revenue adjustment applied for STPIS in the Maximum Allowable Revenue (MAR) formula in the 2013-14 Pricing Proposal.
	Methodology and assumption's applied in relation to Actual Information	The STPIS reward has been taken from the revenue adjustment applied for STPIS in the Maximum Allowable Revenue (MAR) formula in the 2013-14 Pricing Proposal.
	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.

EECL 1314 BMRIN\_T3.2 OPEX

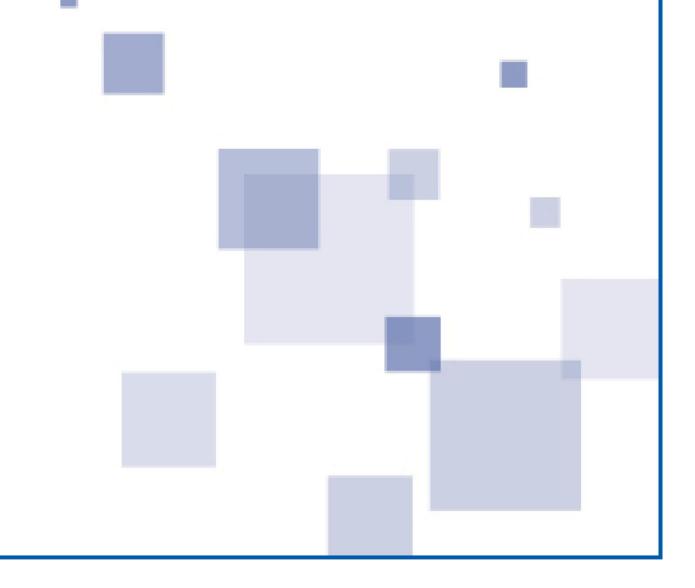


# Economic Benchmarking Regulatory Information Notice Basis of Preparation

Template 3.2 Opex

**Template 3.2.3 Provisions** 

1 July 2013 to 30 June 2014



## Forward

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 2013-14 Economic Benchmarking RIN templates (2013-14 BMRIN 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 3.2 Opex and and Template 3.2.3 Provisions (Actual, Estimated or Consolidated) in Ergon Energy's completed 13-14 BMRIN Templates.

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Email: jenny.doyle@ergon.com.au Phone: (07) 3851 6416 Mobile: 0427 156 897

# **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 Capex or a change in the categories of Opex reported.

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 (comprising tables 3.2.1.1 and 3.2.1.2A-C) 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 3.2.1.1 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.

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 'Current Opex categories and Cost Allocations'. Of note, DOPEX01 'Total Opex' represents the sum variables DOPEX0101-DOPEX0114, and is therefore implicitly addressed in the table below.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	Variables DOPEX0101 – DOPEX0113 (and subsequently, total DOPEX01) are considered mandatory and have been populated by Ergon Energy, despite being shaded blue to allow for blacked out data input.
		Variables DOPEX0101 – DOPEX0103 have been assigned a category name. Variable DOPEX0104—DOPEX0113 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). For clarity, the AER's Classification of Services per the current regulatory control period (2010-15) as referenced in that CAM have been applied for Opex tables 3.2.1.1 and 3.2.2.1.
		Directions within the Annual Reporting Requirements for the most recently completed Regulatory Information Notice as submitted to the AER have been applied.
DOPEX0101-		Opex has been reported in accordance with the categories required by the AER's Notice.
DOPEX0113 DOPEX01		Opex has been reported in accordance with the categories as disclosed in the 2012/13 Regulatory Information Notice as submitted to the AER.
		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 3.2.1.1 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 Performance RINs.
	Population of Estimated	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.2,

Table 1: Current Opex Categories and Cost Allocations

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.	table 3.2.1.1.
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Ergon Energy notes that a material change has occurred in its cost allocation approach (affecting Capex and Opex) between the current (2010-15) and prior (2005-10) regulatory control periods. A new (still current) CAM was approved by the AER on 5 March 2009 replacing the prior approved Cost Allocation Method and Principles (CAMP) approved by the Jurisdictional regulator, the QCA on 2 May 2006 (1 July 2005 – 30 June 2010). Changes to the CAM (versus CAMP) include:
		In the years 2005-06 to 2009-10 overheads were allocated on the basis of labour dollars only. In the subsequent years overheads have been allocated in accordance with the AER approved CAM on a full-cost basis;
		Training costs for the years 2005-06 to 2009-10 were split between operating and capital in accordance with accounting standards. In the subsequent years training costs have been treated as an operating cost only;
		Street Lighting Services were reclassified as an Alternative Control Service under the CAM (previously a Prescribed Distribution Service).
		The impact of the above changes can be seen by comparing template 3.2, tables 3.2.2.1 and 3.2.2.2 over time.
		Ergon Energy made a change to accounting policy for Revenue, which also impacted the Feed in Tariff. Feed in Tariff is now accounted for on an unbilled energy basis

#### Historical Opex Categories and Cost Allocations

Template 3.2, tables 3.2.1.2(A-C) requires Ergon Energy to report its historical Opex categories in accordance with the Opex activities (e.g. vegetation management, emergency response Opex, etc.) within the Annual Reporting Requirements (AER defined term) that applied in the relevant Regulatory Year. These

categories must align with the activities reported in response to the Annual Reporting Requirements for each Regulatory Year.

In addressing the minimum Basis of Preparation requirements, Ergon Energy makes the following comments in relation to variables for 'Historical Opex categories and cost allocations'. Of note, DOPEX01A 'Total Opex', DOPEX01B 'Total Opex' and DOPEX01C 'Total Opex' represents the sum of variables DOPEX0101A - DOPEX0116A, DOPEX0101B - DOPEX0113B and DOPEX0101C - DOPEX0113C 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.
		Variable DOPEX0101A - DOPEX0114A and DOPEX0101B - DOPEX0116B 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 the AER in Box 3, <i>Reporting Framework – Table 3.1.2 Historical Opex</i> <i>categories and allocations</i> in its Instructions and Definitions, that Opex has been prepared in accordance with Ergon Energy approved CAM (AER) as in effect for the individual regulatory year.
DOPEX0101A-		Similarly, the principles and approach or requirements pertaining to the prevailing Annual Reporting Requirements
DOPEX0116A		relevant were applied in reporting Opex for the Regulatory
DOPEX01A DOPEX0101B		Year. Although TUOS expenditure was reported as an Operating cost under the QCA Regulatory Reporting Statements (RRS) it has been excluded from this table as it does not fit the definition of Opex in the Instructions and Definitions document. TUOS is considered to be a pass through of costs to the retailer for reimbursement to the transmission provider and not of cost of operating and
DOPEX0114B		
DOPEX01B		
DOPEX0101C-		
DOPEX0113C		maintaining the distribution network.
DOPEX01C		Opex has been reported in accordance with the categories as disclosed in Annual Reporting Requirements in effect for that year. Of note, Fee Based and Quoted Services classified as an Excluded Distribution Service for the years 2005-06 – 2009-10 have been reported as 'Other Services' and those services classified as Alternative Control Services for the years 2010/11 – 2013-14 have been reported as 'Customer Services' based on the Annual Reporting Requirements for the respective instruments.
		Opex for Standard Control Services and Alternative Control Services reconciles to historical Opex as disclosed in Annual Reporting requirements, with the exception of TUOS expenditure (2005-06 to 2009-10) as mentioned above.
		As Ergon Energy does not currently own, control or operate

#### **Table 2: Historical Opex Categories and Cost Allocations**

Variable		Addressing Basis of Preparation Requirements
		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 is not applicable.
	Population of Actual Information in templates, including Source.	Ergon Energy has sourced the data used to populate template 3.2, table 3.2.1.2 from the audited Ellipse General Ledger.
	Methodology and assumption's applied in relation to Actual Information	Each variable in the Table has been populated by extracting the relevant totals from the Ellipse General Ledger and mapped to the appropriate reporting category.
	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, table 3.2.1.2.
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Refer response to minimum requirement for Current Opex Categories and Cost Allocations above, which noted changes in historical cost allocation approaches impacting both Capex and Opex.
		Ergon Energy made a change to accounting policy for Revenue, which also impacted the Feed in Tariff. Feed in Tariff is now accounted for on an unbilled energy basis.

## 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 3.2.2.1 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'.

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	Variables DOPEX0201 – DOPEX0206 are considered mandatory, and have been populated by Ergon Energy, despite being shaded blue to allow for blacked out data input.
		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 2013-14 financial year in accordance with Ergon Energy's current AER CAM. For clarity, the AER Classification of Services per the current regulatory control period (2010-15) as referenced in that CAM have been applied for Opex tables 3.2.1.1 and 3.2.2.1.
		Opex has been reported in accordance with the categories required by the AER's Notice.
		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.
DOPEX0201- DOPEX0206		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 is not applicable.
		Ergon Energy has prepared the Opex line items in a consistent manner to that of Opex reported in response to the AER's 2012-2015 Annual Reporting Requirements.
	Population of Actual Information in templates, including Source.	Ergon Energy has sourced the data used to populate template 3.2, table 3.2.2.1 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 BM RIN Variables (DOPEX0201 - DOPEX0206) and a query was run to extract costs against relevant variables.

#### Table 3: Opex Consistency – Current Cost Allocation Approach

Variable	Addressing Basis of Preparation Requirements
Population of Estimated Information	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables, except Transmission Point Planning contained in template 3.2, table 3.2.2.1.
in Templates, including why	Actual Information for DOPEX0206 Opex for transmission connection point planning is unavailable as costs are not captured at this level of disaggregation in the Ellipse General Ledger. Accordingly, Ergon Energy has provided 'Estimated Information' (as per the AER's defined term).
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	An estimate of hours worked including on costs, and travel and accommodation costs was made for the current year.
Energy's best estimates.	
Changes in Accounting Policies (Financial information - Actual or Estimated)	Ergon Energy made a change to accounting policy for Revenue, which also impacted the Feed in Tariff. Feed in Tariff is now accounted for on an unbilled energy basis

#### **Opex Consistency – Historical Cost Allocation**

Template 3, table 3.2.2 requires Ergon Energy to report Opex in accordance with the AER's variables (as defined in Chapter 9 of the RIN Instructions and Definitions) and the Cost Allocation Approaches and reporting framework applied in the relevant Regulatory Years.

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

#### Table 4: Opex Consistency – Historical Cost Allocation

Variable		Addressing Basis of Preparation Requirements
DOPEX0201A-	Consistency	AER variables DOPEX0201A – DOPEX0206A are considered mandatory

Variable		Addressing Basis of Preparation Requirements
DOPEX0206A	with Notice requirements	and have been populated by Ergon Energy.
		Opex has been reported in accordance with the Benchmarking RIN variables.
		Ergon Energy confirms, as required by the AER in Box 5, Reporting Framework – Table 3.2.2 Opex Consistency - Historical Cost Allocation Approaches in its RIN Instructions and Definitions that Opex has been prepared in accordance with Ergon Energy approved CAM (AER) in effect for the regulatory year.
		Similarly, the principles and approach or requirements pertaining to the prevailing Annual Reporting Requirements (AER defined term) relevant to the 13/14 year were applied in reporting Opex.
		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 is inapplicable
	Population of Actual Information	Ergon Energy has sourced the majority of the data used to populate template 3.2, table 3.2.2.2 from the previously audited Ellipse trial balances which reconciles the Annual Reporting RIN.
	in templates, including Source.	The exception to this was estimated cost of transmission connection point planning. This was estimated based upon the number of hours spent on this task plus travel and other incidental costs.
	Methodology and assumption's applied in relation to Actual Information	Each variable in the Table has been populated by extracting data from the previously audited Ellipse trial balance which have been mapped to the relevant BM RIN categories or the Annual Reporting RINS.
		The exception to this was estimated cost of transmission connection point planning. This was estimated based upon the number of hours spent on this task plus travel and other incidental costs. The reported values for public lighting were extracted from the relevant audited Performance RINs which were also based upon the audited Ellipse General Ledger.
	Population of Estimated Information	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.2, table 3.2.2.2 (with the exception of DOPEX0206A).
	in Templates, including why Estimates	Actual Information for DOPEX0206A Opex for transmission connection point planning is unavailable as costs are not captured at this level of disaggregation in the Ellipse General Ledger. Accordingly, Ergon Energy has provided 'Estimated Information' (as per the AER's defined term).
	are required and why it is not possible to provide Actual Information in templates. How	An estimate of hours worked including on costs, and travel and accommodation costs was made for the current year.

Variable		Addressing Basis of Preparation Requirements
	Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Ergon Energy made a change to accounting policy for Revenue, which also impacted the Feed in Tariff. Feed in Tariff is now accounted for on an unbilled energy basis

## **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 5: Opex for High Voltage Customers

Variable		Addressing Basis of Preparation Requirements
DOPEX0401	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 RIN's 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).

Variable		Addressing Basis of Preparation Requirements
	Methodology and assumption's applied in relation to Actual Information	Refer response to minimum requirement below, which details the methodologies applied to provide Estimated Information including assumptions made
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual	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. 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
	Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	within its own network The total annual cost of maintenance for distribution transformers (owned by Ergon Energy) was obtained for 2013-14from 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 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 2013/14.
	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 2013-14allocation of costs in the CAM.

# Table 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

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	Variables considered mandatory have been populated by Ergon Energy, relative to each Provision.
re DOPEX0301(A-H); DOPEX0302(A-H); DOPEX0305(A-H);		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.
DOPEX0308(A-H); DOPEX03011(A-H); DOPEX0314(A-H)		Furthermore, financial information on provisions reconciles to the reported amounts for provisions in the annual Regulatory Information Notice or Regulatory Accounts information provided to the AER or QCA respectively.
	Population of Actual Information in templates, including	Data has been sourced from the Ergon Energy general ledger.

#### **Table 6: Provisions - Opex Component**

Variable		Addressing Basis of Preparation Requirements
	Source.	
	Methodology and assumption's applied in relation to Actual Information	Restructure provision has been apportioned to regulated / non- regulated, and between service classifications based on asset base.
		Employee Benefits on-costs Provisions have been apportioned to regulated / non-regulated, and between service classifications based on asset base, then split between Opex and Capex using the Opex/Capex overhead split using AER Approved CAM for 2013-14.
		Rehabilitation Provision has been split 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, (i.e. posted to Asset Revaluation Reserve) this is classified as Other, i.e. neither Opex nor Capex.
		Vested Sick Leave is for control room employees only, therefore classified as SCS Opex.
		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 AER Approved CAM for 2013-14.
	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, table 3.2.3 – Opex components
	Changes in Accounting Policies (Financial information -	There were no changes in accounting policies impacting Provisions during the 2013-14 year.

Variable	Addressing Basis of Preparation Requirements	
	Actual or Estimated)	

#### **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 7: Provisions - Capex Component**

Variable		Addressing Basis of Preparation Requirements
DOPEX0301(A-H);	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.
		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.
		Furthermore, financial information on provisions reconciles to the reported amounts for provisions in the annual Regulatory Information Notice or Regulatory Accounts information provided to the AER or QCA respectively.
DOPEX0303(A-H); DOPEX0306(A-H);		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for
DOPEX0306(A-H); DOPEX03012(A-H); DOPEX0314(A-H)		2013-14. Therefore, care should be taken when reviewing variable data for 2013-14against 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 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	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.

Variable		Addressing Basis of Preparation Requirements
	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 Accounting Policies (Financial information - Actual or Estimated)	There were no changes in accounting policies which impacted Provisions.



# Economic Benchmarking Regulatory Information Notice Basis of Preparation

Template 3.3 Assets (Regulatory Asset Base)

1 July 2013 to 30 June 2014



## Forward

In response to requirements of the AER's Economic Benchmarking RIN, and specific to the information presented in Template 3.3 Assets (Regulatory Asset Base) of Ergon Energy's completed 2013/14 Economic Benchmarking RIN templates (2013/14 BMRIN 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 13/14 BMRIN Templates.

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Email: jenny.doyle@ergon.com.au Phone: (07) 3851 6416 Mobile: 0427 156 897

# **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 and Alternative Control Services into the specified capital input categories.

Further, the AER is requesting RAB assets that provide Standard Control Services 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 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 2013/14, across Network Services, Standard Control Services and Alternative Control Services.

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 (Standard Control Services, Alternative Control Services 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 for each category of service (Standard Control Services, Alternative Control Services 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'.

		ard - Standard Control and Alternative Control Services
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 in Appendix B, Instructions and Definitions, that:
		<ul> <li>RAB financial information for Standard Control and Alternative Control Services reconciles to decisions the AER has made in relation to RAB values for these services through the 2010-15 Ergon Energy Distribution Determination; and</li> </ul>
		<ul> <li>Where forecast values were used in relation to a decision on RAB values (in the 2010-15 Distribution Determination), these amounts have been replaced with actual values which reconcile to amounts reported in Annual Financial Statements (i.e. additions for the last year of the previous regulatory period.</li> </ul>
DRAB0101- DRAB0107		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.
DRAB201- DRAB1107 DRAB1201-		<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 inclusive of Capital Contributions. Total capital contributions for each relevant regulatory year are provided at DRAB13.</li> </ul>
DRAB1210		<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 Alternative Control Services, Ergon Energy has only reported RAB assets that provide Alternative Control Street lighting Services, consistent with the classification of service, and RAB that was approved for this category of service in Ergon Energy's 2010-15 Distribution Determination. No RABs have been approved for any of Ergon Energy's other categories of Alternative Control Services).
	Population of Actual Information in templates,	For 2013/14, annual Standard Control Services values and Alternative Control Services values (street lighting) are sourced from the associated 2013/14 AER Annual Performance RIN provided by Ergon Energy to the AER. Where information is not available in the 2013/14 Annual Performance RIN,

#### Table 1: Asset Value Roll Forward - Standard Control and Alternative Control Services

Variable		Addressing Basis of Preparation Requirements
	including Source.	information has been sourced from the Ellipse General Ledger.
	Methodology and assumption's applied in relation to Actual Information	Ergon Energy has updated its methodology and assumptions applied in calculating actual RAB information from the 2013/14 regulatory year. These changes have been made to more accurately reflect RAB calculations that will be submitted to the AER as part of 2015 Distribution Determination process. In particular, Ergon Energy has updated its approach for:
		<ul> <li>Disposals – actual information has been updated to reflect a gross proceeds of sales basis (instead of written down values)</li> </ul>
		<ul> <li>Asset lives – remaining lives used to roll forward the RAB during the 2010/11 to 2013/14 years has been updated to reflect the remaining lives calculated for and used in the roll forward of the asset base to 1 July 2015 for the 2015-20 regulatory control period.</li> </ul>
		<ul> <li>2009-10 actuals – true-up for 2009-10 actual Capex has been updated to ensure the adjustment is recognised as part of the roll forward of the asset base to 1 July 2015 for the 2015-20 regulatory control period (i.e. in the 2014/15 regulatory year, consistent with the operation of the AER's RFM).</li> </ul>
		<ul> <li>Street light contributions – corrections have been made to appropriately net out contributions from the Alternative Control Services (street lighting) RAB</li> </ul>
		The above updates and correction impact previously reported RAB figures for Standard Control Services and Alternative Control Services and by default has an impact on the Network Services RAB calculations.
		Asset information (other than disposal information) reflects actual data sourced from either the AER approved RAB roll-forward model or the 2013/14 AER Annual Performance RIN. Disposal information reflects actual gross proceeds of sale information from the Ellipse General Ledger.
		Ergon Energy asset categories (as reported in the roll forward model and Annual Performance 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
		<ul> <li>Ergon Energy has apportioned total buildings, motor vehicles and plant &amp; 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</li> </ul>

Variable		Addressing Basis of Preparation Requirements
		plant & equipment. RAB disposals are allocated between short and long lived assets based on asset additions to these categories.
		<ul> <li>Roll-forward RAB values for 2013/14 are determined using the AER- approved RAB roll-forward model used in the AER's 2010-15 Final Distribution Determination for Ergon Energy.</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).
	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
	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.
	Population of Actual Information in templates, including Source.	As defined by the AER for the purposes of the Economic Benchmarking RIN, Network Services are a subset of Standard Control Services excluding Connection Services, Type 5-7 Metering Services, Fee Based and Quoted Services and Street Lighting Services. In the case of Ergon Energy, consistent with the AER's definition of Network Services, we assume it is also necessary to exclude gifted assets (since these are all related to connection services) and also any assets included in the Network Services category that are not funded by Ergon Energy i.e. Network Services funded via capital contributions.
DRAB0101-		Standard Control Services data is sourced from actual data (as discussed in the previous section above). Connection Services data is captured within the Ergon Energy "Customer Initiated Capital Works" (CICW) expenditure category. Specifically, CICW expenditure includes:
DRAB0107		<ul> <li>All new shared network assets associated with new small and large customer connections, including new subdivisions;</li> </ul>
DRAB201-		<ul> <li>New connections for Standard Asset Customers; and</li> </ul>
DRAB1107		<ul> <li>Testing and commissioning of all new shared network assets and connection assets.</li> </ul>
DRAB1201- DRAB1210		For 2013/14, the annual CICW values are sourced from the 2013/14 AER Annual Performance RIN provided by Ergon Energy and to the AER.
		As indicated above, CICW 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 CICW expenditure to be removed from the Standard Control Services asset additions), it is necessary to:
		<ul> <li>identify the total amount of CICW expenditure related to the shared network;</li> </ul>
		<ul> <li>identify that portion of the CICW shared network expenditure that is not funded by Ergon Energy (i.e. capital contributions associated with the shared network) so that only this portion is removed from Network Services; and</li> </ul>
		<ul> <li>identify the amount of gifted assets (i.e. which relate to connection assets)</li> </ul>

Variable		Addressing Basis of Preparation Requirements	
		The net result of the above (i.e. total CICW expenditure related to connection assets (i.e. not shared) plus customer capital contributions to the shared network, plus gifted assets) represents that portion of CICW expenditure that is required to be removed from Standard Control Services asset additions in order to determine the amount attributable to Network Services.	
		Actual data associated Street Lighting Services (to be removed from Standard Control Services data) is available from the AER-approved RAB roll-forward model used in the 2010-15 Ergon Energy Distribution Determination, the QCA 2009/10 Regulatory Reporting Statements and the 2013/14 AER Annual Performance RIN lodged by Ergon Energy to the AER.	
		Data associated with Type 5-7 Metering Services (to be removed from Standard Control Services data) is required to be estimated.	
		No adjustment is necessary in relation to Fee Based and Quoted Services since this expenditure is already excluded from the Standard Control Services data.	
		For 2013/14, the value of gifted assets is sourced from the Ellipse General Ledger, and the 2013/14 AER Annual Performance RIN lodged by Ergon Energy to the AER reported the aggregated amounts for cash and gifted contributions.	
		Capital contributions data is available from the the 2013/14 AER Annual Performance RIN lodged by Ergon Energy to the AER.	
		Network Services funded via capital contributions are required to be estimated.	
	Methodology and assumption's	To be consistent with the AER's definition of Network Services, expenditure related to Type 5-7 Metering Services and Street Lighting Services was removed from the Standard Control Services data.	
applied in relation to Actual Information	relation to	Adjustments to annual CICW expenditure were made to determine the net amount of shared network expenditure to remain in the Network Services data (and hence, the amount of expenditure required to be removed from Standard Control Services asset additions for Type 5-7 metering, connection assets, gifted assets and shared network assets funded via capital contributions)	
		The resultant CICW expenditure to be excluded from the Standard Control Services asset additions category was attributed to the AER individual asset categories and removed from the Network Services RAB calculations	
		The remaining expenditure represents the annual additions to the Network Services category by asset type.	
		The opening Network Services RAB was rolled-forward (by the annual additions to Network Services) consistent with the AER's roll-forward process to derive the Network Services RAB for the 2013/14 year.	
	Population of Estimated	Ergon Energy does not separately identify expenditure or assets related to Network Services. While it is possible to make some adjustments to the	

Variable		Addressing Basis of Preparation Requirements
	Information in Templates, including why Estimates are required	Standard Control Services data to identify a partial measure of the Network Services component (e.g. remove gifted assets), some estimation is required to derive the complete Network Services data. In particular, it is necessary to identify the portion of CICW that relates to connection services and is therefore required to be excluded from the Standard Control Services data in order to derive an estimate of Network Services additions. In order to do so, it is necessary to estimate the:
	and why it is not possible to provide	<ul> <li>portion of annual CICW expenditure that relates to the shared network; and</li> </ul>
	Actual Information	<ul> <li>portion of the CICW shared network expenditure that is not funded by Ergon Energy i.e. shared network provided via capital contributions.</li> </ul>
	in templates. How Estimated Information	In developing estimates for 2013/14 Ergon Energy has made a number of minor corrections and updates to inputs used to derive the Network Services RAB. These include:
	has been produced, including	<ul> <li>re-instatement of a portion of metering related expenditure attributable to network metering (which does not meet the AER's definition of 'Metering Services')</li> </ul>
	reasons why	<ul> <li>corrections to 2009/10 cash and gifted contribution values</li> </ul>
	Estimates are Ergon Energy's best	<ul> <li>corrections to the calculation for estimating capex to be removed from the RAB for connection services work carried out by Ergon Energy (which erroneously included gifted assets)</li> </ul>
	2 2 c: T tř b <i>E</i>	<ul> <li>updates to assumptions used to estimate the portion of CICW expenditure related to network services</li> </ul>
		<ul> <li>updates to assumptions used to estimate portion of shared network funded via capital contributions</li> </ul>
		Changes made to the baseline Standard Control Services RAB data in 2013/14 have also been reflected in the Network Services RAB data for 2013/14 (e.g. updates to disposals, asset lives and recognition of 2009-10 capex actuals true-up)
		This estimation process, including how the resultant values are attributed to the AER's asset categories and the RAB roll-forward process is outlined below.
		Estimating the portion of CICW that relates to Network Services (i.e. the shared network).
		<ul> <li>Ergon Energy does not separately identify the proportion of CICW expenditure attributable to Network Services. As a consequence, it is necessary to develop an estimate.</li> </ul>
		<ul> <li>For the 2013/14 Economic Benchmarking RIN, Ergon Energy has relied on analysis (including sampling a range of CICW projects) in order to estimate the portion of expenditure attributable to shared network by customer category.</li> </ul>
		<ul> <li>For 2005/06 to 2009/10 years- estimates are based on analysis conducted in 2007/08 for the 2010-15 regulatory determination process (contained in</li> </ul>

/ariable	Addressing Basis of Preparation Requirements
	Ergon Energy (2009), "Forecasts – Customer Initiated Capital Works – Standard Control Services", June document).
	<ul> <li>For 2010/11 to 2013/14 years – estimates are based on analysis conducted in August 2014 based on a representative sample of completed CICW projects during 2010/11 to 2013/14 years.</li> </ul>
	<ul> <li>Ergon Energy has used its best endeavours to provide Estimated Information in this regard, on the basis that:</li> </ul>
	<ul> <li>Actual data relating to the contribution to shared network costs is not reported in the Ergon Energy systems.</li> </ul>
	<ul> <li>The sample years are within the historic data series required to be reported in the Benchmarking RIN.</li> </ul>
	<ul> <li>The methodology is consistent with the approach used to support expenditure forecasts and previous Economic Benchmarking RINs.</li> </ul>
	Estimating the portion of shared network CICW expenditure that was funded via capital contributions
	Ergon Energy's capital contribution policy is set out in the AER approved, Ergon Energy Capital Contributions Policy (2005). The policy sets out circumstances in which a capital contribution may be required and details how the capital contribution to be charged to a customer is calculated. In particular
	<ul> <li>Contributions may be required from developers of subdivisions and other small CICW customers (Standard Asset Customers).</li> </ul>
	<ul> <li>Ergon Energy allows for contributions to be provided via cash contributions i.e. Ergon Energy undertakes the required work, or gifted i.e. the works are undertaken by the customer and the assets that are built gifted to Ergon Energy.</li> </ul>
	Note: all gifted assets are assumed to relate to specific connection assets (rather than any shared network), since only Ergon Energy can undertake work on the shared network. Therefore, all gifted assets are excluded from the Network Services category.
	It is necessary to determine the value of developer and other customer cash capital contributions attributable to the shared network.
	Developer capital contributions attributable to the shared network
	<ul> <li>For developer cash contributions, Ergon Energy's Capital Contribution Policy requires developers to fully fund any required shared network works. Ergon Energy has not previously captured the breakdown of costs to identify the shared network components of developer contributions, and accurate data is not available.</li> </ul>
	<ul> <li>As a result, Ergon Energy has approximated the proportion of developer contributions attributable to shared network works based on:</li> </ul>
	<ul> <li>an estimate of total cash contributions from developers</li> </ul>
	<ul> <li>the same percentages used to estimate the portion of CICW</li> </ul>

ariable	Addressing Basis of Preparation Requirements
	expenditure that relates to network services (i.e. for the develope customer category)
	<ul> <li>As actual data on cash contributions separated between subdivision and other customer contributions is not available in Ergon Energy systems, Ergon Energy has estimated the split of total cash contributions attributable to developers. For 2013/14 this has been based on expenditure forecasts prepared for the 2015-20 regulatory determination process.</li> </ul>
	<ul> <li>As discussed previously, Ergon Energy sampled a range of subdivision projects during 2007/08 and in August 2014 in order to estimate the associated shared network component. The latest analysis concluded that approximately 10% of subdivision expenditure during the year could be attributed to the shared network.</li> </ul>
	<ul> <li>Ergon Energy considers that in employing the above approach it has use its best endeavours to provide Estimated Information, on the basis that:</li> </ul>
	<ul> <li>Actual data relating to the composition of developer cash contributions is not reported in the Ergon Energy systems</li> </ul>
	<ul> <li>Actual data relating to developer contribution to shared network costs is not reported in the Ergon Energy systems.</li> </ul>
	<ul> <li>The sample years are within the historic data series required to be reported in the Benchmarking RIN.</li> </ul>
	<ul> <li>The methodology is consistent with the approach used to support expenditure forecasts and previous Economic Benchmarking RINs.</li> </ul>
	Other customer capital contributions attributable to the shared network
	<ul> <li>For other customer cash contributions, Ergon Energy's Capital Contribution Policy requires customers to make a contribution to shared network costs. The contribution differs depending on the customer's location (East, West or Mount Isa). Ergon Energy has not previously captured the breakdown of costs to identify the shared network components of other customer cash contributions, and accurate data is not available.</li> </ul>
	<ul> <li>As a result, Ergon Energy has approximated the proportion of other customer cash contributions attributable to shared network works based on a sample of data.</li> </ul>
	<ul> <li>A sample of individual customer price book applications provided during 2012/13 was examined to determine the value of any capital contribution attributable to the shared network.</li> </ul>
	<ul> <li>The shared network values were derived on the basis of the capital contribution formula and associated shared network proportions containe in Ergon Energy's Capital Contributions Policy.</li> </ul>
	<ul> <li>The sample outcomes were weighted by the number of customers in eac of the three regions (East, West and Mount Isa) in 2012/13 to derive the</li> </ul>

Variable	Addressing Basis of Preparation Requirements
	shared network.
	<ul> <li>Ergon Energy applied this percentage (9.1%) to an estimate of other customer cash contributions to derive the associated annual other customer contribution to the shared network.</li> </ul>
	<ul> <li>Ergon Energy consider that the above approach represents its best endeavours to provide Estimated Information for other customer cash contributions attributable to shared network on the basis that:</li> </ul>
	<ul> <li>Actual data relating to the contribution to shared network costs was not previously reported in the Ergon Energy systems;</li> </ul>
	<ul> <li>The 2012/13 sample provides a randomly selected range of projects covering each of the three Ergon Energy regions; and</li> </ul>
	<ul> <li>There is no reason to suspect that the 2012/13 sample year is not a representative year.</li> </ul>
	Assigning the value of the connection services portion of CICW expenditure to asset categories
	Once the connection services portion of annual CICW expenditure is determined (i.e. the outcome of the above estimates), it is necessary to attribute these annual values to the AER asset categories.
	<ul> <li>Ergon Energy has assigned the connection services portion of annual CICW expenditure to asset classes based on an apportionment process. This is based on the percentage split of asset categories for CICW expenditure from the Ellipse Project Accounting module.</li> </ul>
	<ul> <li>The Project Accounting module provides a detailed breakdown of annual capital expenditure by type of expenditure. It is then possible to map this expenditure to Ergon Energy's asset register and to the AER asset categories. Using this process, Ergon Energy has attributed annual CICW expenditure to the AER asset categories for each of the four years 2010/11 to 2013/14. The average of these four years for each of the asset categories has then been used to attribute the connection services portion of CICW expenditure to the AER categories for the 2013/14 reporting period.</li> </ul>
	<ul> <li>Ergon Energy has adopted this allocation process in its AER Annual Performance RIN's provided by Ergon Energy and accepted by the AER for the past three years (2010/11 to 2012/13). Ergon Energy considers that this represents the best approach available on the basis that:</li> </ul>
	<ul> <li>No actual information is available in relation to the CICW connection services by asset type;</li> </ul>
	<ul> <li>The breakdown of CICW capital expenditure by asset type is expected to provide a reasonable proxy of the distribution of connection services expenditure; and</li> </ul>
	<ul> <li>The attribution process has been used by Ergon Energy in developing AER Annual Performance RIN's provided by Ergon</li> </ul>

Variable	Addressing Basis of Preparation Requirements	
	Energy and accepted by the AER.	
	The remaining value of Standard Control Services additions by asset class effectively represents the annual Network Services additions.	
	Network Services RAB roll-forward	
	Ergon Energy has adopted the AER's roll-forward model to determine the Network Services RAB for 2013/14.	
Change Account Policies (Financi informat Actual o Estimate	ing changes in accounting policies impacting capex or opex (if at all) for the regulatory year. al ion - r	

## 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).

In completing table 3.3.3 for 2013/14, Ergon Energy identified an error in the previously submitted (and audited) data for the 2005/06 to 2012/13 period. Specifically, the previously submitted data represented the closing rather than average asset value for each of the required variables in table 3.3.3. Ergon Energy notes that data from table 3.3.3 is not accessed elsewhere in Template 3.3 and therefore any amendment to table 3.3.3 historic data does not impact the RAB roll-forward values. The values in table 3.3.3 have been corrected to reflect average RAB values for the period 2005/06 to 2013/14.

#### **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 Standard Control Services RAB Asset categories in the worksheet are inclusive of Capital Contributions. Ergon Energy notes the value provided at

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

Variable	Addressing Basis of Preparation Requirements
	DRAB13 is the total value, for "estimated value of capital contributions or contributed assets" for each relevant regulatory year.
	Refer to the comments in section 4.2 above in relation to Asset Value Roll Forward (by service) with regards to splitting between Network Services, Standard Control Services and Alternative Control Services.
Population of Actual Information in templates, including Source.	Data used to populate this table was extracted from the 2013/14 AER Annual Performance RIN lodged by Ergon Energy to the AER.
Methodology and assumption's applied in relation to Actual Information	For 2013/14 the Ergon Energy 2013/14 AER Annual Performance RIN and general ledger separately reported/recorded the capital contribution revenue earned for Standard Control Services. Ergon Energy has not separately reported the value of contributions for Alternative Control 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 3.3.4.1 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 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.
DRAB1401- DRAB1409		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).
	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 3.3.4.1.
	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 3.3.4.2 requires Ergon Energy to report estimated residual service lives of assets. A current estimation is required, of the weighted average remaining time expected that a RAB Asset category will deliver the same effective service as that asset class did at its installation date.

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

Table 5: Asset Lives -	<ul> <li>Estimated Res</li> </ul>	idual Service Life
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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.
DRAB1501-		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).
DRAB1509	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 3.3, table 3.3.4.2.
	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.



# Economic Benchmarking Regulatory Information Notice Basis of Preparation

**Template 3.4 Operational Data** 

1 July 2013 to 30 June 2014



# Forward

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 2013-14 Economic Benchmarking RIN templates (2013-14 BMRIN 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 3.4 Operational Data (Actual, Estimated or Consolidated) in Ergon Energy's completed 13-14 BMRIN Templates.

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Email: jenny.doyle@ergon.com.au Phone: (07) 3851 6416 Mobile: 0427 156 897

# **Template 3.4 Operational Data**

The AER requires operational data to form the output measures for examining the efficiency with which 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 data for the 2013-14 regulatory year has been populated.
		Total Energy Delivered reported is the total metered or estimated energy delivered at the customer charging locations (rather than the import location from the TNSP).
	Population of Actual Information in templates, including Source.	All data was sourced from a summary of monthly billing data files sourced from Netbill / FACOM via the STC and other Pricing files
DOPED01	Methodology and assumption's applied in relation to Actual Information	Ergon Energy employed a methodology whereby kWh's for energy delivery were summated from monthly billing data files into annual totals. As the source file captured data in kWh's the results were converted to GWh's.
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 5, table 5.1.1.
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Energy Delivered data is a non-financial data set, and accordingly this requirement is not applicable.

#### Table 1: Energy Delivery

#### 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 data for the 2013-14 regulatory year has been populated.
		<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 does not currently have network tariffs reflecting shoulder, on-peak, and off-peak time charging periods. Therefore, no disaggregation has been provided for time of use variables (DOPED0202 – DOPED0204)
		This is consistent with the AER's clarification received on 28 April 2014. In this clarification, the AER stated 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.
DOPED0201- DOPED0206	Population of Actual Information in templates, including Source.	All data was sourced from a summary of monthly billing data files sourced from Netbill / FACOM via the STC and other Pricing files
	Methodology and assumption's applied in relation to Actual Information	Ergon Energy employed a methodology whereby kWh's 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 kWh's the results were converted to GWh's.
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.1.1.

#### Table 2: Energy Grouping – Delivery by Chargeable Quantity

Variable		Addressing Basis of Preparation Requirements
	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 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 have been populated for all regulatory years.
		<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.
		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).
DOPED0301- DOPED0304		This is consistent with the AER's clarification received on 28 April 2014. In this clarification, the AER stated 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 AEMO documentation servicing this area of the network.
	Population of Estimated Information in Templates, including why	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.

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

Variable		Addressing Basis of Preparation Requirements
	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 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 Embeddee	d Generation by Time of Receipt
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Variable		Addressing Basis of Preparation Requirements
Consistency with Notice requirements	<sup>6</sup> Energy Received from embedded generation not included in above categories from non-residential embedded generation (DOPED0404) relates only to energy received that was unable to be allocated to peak, shoulder or off-peak periods.	
		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.
DOPED0401-		Similarly, data for variables DOPED0405 – DOPED0407 in
DOPED0408		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 2014. 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

Variable		Addressing Basis of Preparation Requirements
		fields, have been populated.
		Energy received from embedded generation not included in above categories from residential embedded generation (DOPED0408) has been populated for 2013-14 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 Australian Energy Market Operator (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 Network Billing system (Netbill) using a Network Tariff Code specific to residential Embedded Generation. Data is inclusive of Tier 1 (EEQ) and Tier 2 (market customer) premises.
	Methodology and assumption's applied in	Energy received in to the network from larger installations of embedded generation is recorded on a half hour basis.
	relation to Actual Information	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 data source, and includes kWh recorded for Ergon Energy owned solar PV on residential customer (host roof) in relation to the Magnetic Island Solar Cities project
	Population of Estimated Information in Templates, including why Estimates are required and why it is	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in template 3.4, table 3.4.1.3.
	not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best	

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

#### Energy Grouping – Customer Type or Class

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

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

#### Table 5: Energy Grouping – Customer Type or Class

Variable		Addressing E	Basis of Preparation	on Requirements	5
	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).			
		All entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for all regulatory years			
	Population of Actual Information in templates, including Source.	<ul> <li>Monthly Network Billing (Netbill) files provided by</li> </ul>			emplate 3.1, table
DOPED0501- DOPED0505	Methodology and assumption's applied in relation to Actual Information	n's to a specific customer class and therefore it was neces relation to a mapping table to obtain the disaggregation required (		ecessary to apply ired (refer to ed for Template	
			BENCHMARKING RIN VARIABLES	ERGON NETWORK TARIFF	ERGON TARIFF DESCRIPTION
		Table 3.4.1.4 customer type	Energy grouping - e or class		Typical Consumption Levels
		DOPED0501	Residential Customers Energy Deliveries	Volume Small, Night Controlled and Controlled	Energy Consumption below 26MWh p.a. No demand component

Variable	Addressing E	Basis of Preparation	on Requirement	5
	DOPED0502	Non-residential customers not on demand tariffs energy deliveries	Volume Large	Energy Consumption between 26MWhs and 100MWhs No demand component
	DOPED0503	Non-residential low voltage demand tariff customers energy deliveries	Demand High Voltage, Demand Large, Demand Medium and Demand Small	Energy Consumption between 100MWhs and 4,000MWhs. Demand charge based on minimum chargeable demand
	DOPED0504	Non-residential high voltage demand tariff customers energy deliveries	ICC, CAC and EMG	Energy Consumption greater than 4,000MWhs Demand based on Authorised or Capacity component and an Actual Demand component
	DOPED0505	Other Customer Class Energy Deliveries	Unmetered Supply - Minor and Major Streetlights;	Unmetered Supply connections other than Streetlights No demand component Unmetered Supply - Minor and Major Streetlights No demand component
Population of Estimated Information in Templates, including why Estimates are required and why it	AER's defined	has provided 'Estin I term) in relation to 1.4 using the above estimate.	all variables con	tained in template

Variable		Addressing Basis of Preparation Requirements
	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)	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 2014 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

Variable		Addressing Basis of Preparation Requirements
DOPCN0101- DOPCN0106	Consistency with Notice requirements	All entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for the 2013-14 regulatory
DOCPN01		year. Ergon Energy confirms the category breakdown is consistent with

#### **Table 6: Distribution Customer Numbers by Customer Type or Class**

Variable	Addressing Basis of Preparation Requirements
	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 isolated, transmission or unknown (unclassified) feeder classes.
Population of Information templates, in Source.	in Transaction system (NEMLink). Counts are of unique National
Methodology assumption' applied in re Actual Inforr	s represent the average number of active NMIs in the network the lation to relevant regulatory, calculated as the average number of NMIs on
	<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), whilst Voltage, Demand & Unmetered splits were identified by the Network Tariff Types.
	For Unmetered customers, data presents the sum of unmetered connections (excluding public lighting connections) in the network and the energy usage for billing purposes is calculated using an assumed load profile. Specifically, public lighting customers were not counted as unmetered customers
Population of Estimated Information if Templates, if why Estimate required and is not possib provide Actu Information if templates. H Estimated Information been product including real why Estimate	defined term) in relation to all variables contained in template 3.4, in table 3.4.2.1. including es are d why it ble to ial in tow has ced, asons

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

#### **Distribution Customer Numbers by Network Location**

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

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

#### Table 7: Distribution Customer Numbers by Network Location

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	All entry fields are shaded yellow indicating mandatory data fields, and accordingly have been populated for all regulatory years, with the exception of 'DOOPCN0201' for CBD Network - Ergon Energy does not have any feeders classified as CBD.
		Ergon Energy notes that DOPCN02 does NOT reconcile to DOPCN01 in Distribution Customer Numbers by Network Location, given DOCPN01 includes isolated, transmission or unknown (unclassified) feeder classes. No category was provided for these customers in DOPCN0201-DOPCN0204.
DOPCN0201- DOPCN0204	Population of Actual Information in templates, including Source.	Ergon Energy has sourced customer numbers data from the Market Transaction system (NEMLink). Counts are of unique NMIs that are identified as having Ergon Energy as their LNSP.
DOPCN02	Methodology and assumption's applied in relation to Actual Information	Distribution Customers represents 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>
		In order to disaggregate data by feeder types (Urban, Short Rural and Long Rural), Ergon Energy, a NMI was identified as being attached to a feeder which in turn enabled the identification of the required feeder classes.
	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 3.4, 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.
DOPSD0101-	Population of Actual	Data has been sourced from Statistical Metering Database (SMDB).
DOPSD0106	Information in templates, including Source.	Ergon Energy maintains a series of secure, managed databases known as the Statistical Metering Database (SMDB) that contain historic demand and weather (sourced from the Bureau of Meteorology data). For the purpose of data auditing, a full version control of the metered data is maintained within SMDB and the database is regularly backed-up. Access to the environment is secure and provided only to those persons who require access in

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

Variable	Addressing Basis of Preparation Requirements
	order to conduct and manage the load forecasting process, and planning studies, with any changes to the datasets tracked and recorded.
	The database is constantly being fed new demand data from a variety of sources including:
	<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>
	<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	In order to obtain Weather adjusted variables, Ergon Energy has employed the following methodology:
applied 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>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	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.

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

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

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

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

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

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	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 all regulatory years.
	Population of Actual Information in templates, including Source.	Data has been sourced from Statistical Metering Database (SMDB). Refer to Table 8 above
DOPSD0107- DOPSD0112	Methodology and assumption's applied	In order to obtain Weather adjusted variables, Ergon Energy has employed a methodology involving:
	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</li> </ul>

Variable		Addressing Basis of Preparation Requirements
		<ul> <li>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.
	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.

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.
DOPSD0201- DOPSD0206		All other entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2013-14 regulatory year.
	Population of Actual Information in templates, including Source.	Data has been sourced from Statistical Metering Database (SMDB). Refer to Table 8 above.

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

Variable		Addressing Basis of Preparation Requirements
	Methodology and assumption's applied in relation to Actual Information	Weather adjustment MVA data has obtained by multiplying MVA by the ratio of (MW temperature adjusted value by MW value).
	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

Table 11: Annual System Maximum Demand	(Transmission Connection Point) (MVA)
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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.
DOPSD0207-		All other entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2013-14regulatory year.
DOPSD0212	Population of Actual Information in templates, including Source.	Data has been sourced from Statistical Metering Database (SMDB). Refer to Table 8 above.
	Methodology and assumption's applied in relation to Actual Information	Weather adjustment MVA data has obtained by multiplying MVA by the ratio of (MW temperature adjusted value by MW value) for the same regulatory year.

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 3.4, table 3.4.3.4.
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Data in relation to Maximum Demand is a non-financial data set, and accordingly this requirement is not applicable.

#### Power Factor Conversion between MVA and MW

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

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

Table 12:	Power Fa	actor Conv	ersions (O	verall Netv	vork)
				vorun noti	

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 2013-14regulatory year.
		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013/14. Therefore, care should be taken when reviewing variable data for 2013-14 against prior submissions.
DOPSD0301	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 (Statistical Metering Database (SMDB)), which extracts this information from metering units across a significant proportion of Zone Substations over half hourly intervals.
	Methodology and assumption's applied in relation to Actual Information	DOPSD0301 '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

Variable		Addressing Basis of Preparation Requirements
		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 13: Power Factor Conversions (Remaining Voltage Levels)

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 2013-14 regulatory year.
		With the reissuance of templates by the AER for the 2013-14 year, where variables are not relevant to Ergon Energy, these have not been populated.
DOPSD0302-	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
DOPSD0314	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.
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in	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.

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)	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.
DOPSD0401	Population of Actual Information in templates, including Source.	Ergon Energy has sourced data from the Network Billing system (Netbill).
DOPSD0402	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.
		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 an Actual demand charge and therefore were reported under the Contracted Demand split.
		ICC, CAC and EG type connections are charged (and hence

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

Variable		Addressing Basis of Preparation Requirements
		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.	Demand Supplied (contracted and measured) (MW) is supplied as Actual Information (defined term).
	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.

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

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

Table 15: Demand Supplied (for Customers Charged on this Basis) (MVA)	Table 15: Demand	Supplied (for	<b>Customers</b>	Charged on	this Basis) (MVA)
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Variable		Addressing Basis of Preparation Requirements
DOPSD0403 DOPSD0404	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.
		Ergon Energy does not currently charge customers on a kVA (MVA) basis. Accordingly, information was not available in regards to MVA measures of Demand Supplied for contracted and Measured demand and "zeroes" were entered.

Variable		Addressing Basis of Preparation Requirements
		This is consistent with the clarification received from the AER on 8 April 2014, which stated "zeros should be entered into table 3.4.3.7. The correct response to table 3.4.3.7 is to input the demand for which customers are charged. This should be on the basis of the units of measurement upon which the customers were charged. If Ergon only charges customers for demand on the basis of MWs then 0s should be input into table 3.4.3.7."
Inform	ation of Actual ation in templates, ing Source.	Not applicable
assum	dology and nption's applied in n to Actual nation	Not applicable
Inform includi require possib Inform How E has be includi Estima	ation of Estimated ation in Templates, ing why Estimates are ed and why it is not ble to provide Actual ation in templates. Estimated Information een produced, ing reasons why ates are Ergon y's best estimates.	Not applicable
Policie	ges in Accounting es (Financial ation - Actual or ated)	Not applicable.



# Economic Benchmarking Regulatory Information Notice Basis of Preparation

**Template 3.5 Physical Assets** 

1 July 2013 to 30 June 2014



# Forward

In response to requirements of the Australian Energy Regulators (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.5 Physical Assets of Ergon Energy's completed 2013-14 Economic Benchmarking RIN templates (2013-14 BMRIN 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 3.5 Physical Assets (Actual, Estimated or Consolidated) in Ergon Energy's completed 13/14 BMRIN Templates.

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Email: jenny.doyle@ergon.com.au Phone: (07) 3851 6416 Mobile: 0427 156 897

# **Template 3.5 Physical Assets**

The AER requires a quantity measure of the capital service flow used by the 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.

Note: in reissuing 2013-14 templates to Ergon Energy, the 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 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 2013-14 regulatory year.
DPA0101- DPA0114 DPA01		Circuit length has been calculated from the line length (measured in kilometers) of lines in service (the total length of feeders including all spurs), where each Single Wire Earth Return (SWER) line, single-phase line, and three phase line counts as one line.
		A double circuit line has been counted as two lines.

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

Variable		Addressing Basis of Preparation Requirements
		Circuit length does take into account vertical components such as sag
		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14. Therefore, care should be taken when reviewing variable data for 2013-14 against prior submissions.
		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 2013-14 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.
	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 Cir	rcuit Length at	each Voltage
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Variable		Addressing Basis of Preparation Requirements
DPA0201- DPA0212 DPA02	Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2013-14 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. Therefore, care should be taken when reviewing variable data for 2013-14 against prior submissions.
		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 2013-14 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 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 3.5.1.2.

Variable		Addressing Basis of Preparation Requirements
	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 2014, 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, AER has 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
DPA0301- DPA0313	Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2013-14 regulatory year.
		Where two sets of lines run on different sets of poles (or towers) but share the same easement these are counted as

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

Variable	Addressing Basis of Preparation Requirements
	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. Therefore, care should be taken when reviewing variable data for 2013-14 against prior submissions.
	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 Actua Information in temp including Source.	Ergon Energy has sourced data from, and made reference to tes, the following standards or guidelines, in order to complete variables for Estimated Overhead Network Weighted Average Capacity, by Voltage Class (MVA):
	<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 appli relation to Actual Ir	
	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 Estim Information in Tem including why Estim required and why it possible to provide Information in temp Estimated Informat been produced, inc reasons why Estim Ergon Energy's bes estimates.	AER's defined term) in relation to all variables contained in Template 3.5, Table 3.5.1.3. Total tes. How n has ding
Changes in Accour Policies (Financial - Actual or Estimate	formation non-financial data set, and accordingly this requirement is not

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 2014) 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 2013-14 regulatory year.
		Ergon Energy notes that the AER has changed the variable numbers associated with this table in its revised templates for 2013-14. Therefore, care should be taken when reviewing variable data for 2013-14 against prior submissions.
		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].
DPA0401-	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) :
DPA0413		<ul> <li>SOREP Oracle Spatial database (replicated SmallWorld GIS electrical datastore);</li> <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 in relation to Actual Information	Data in relation to Table 3.5.1.2 'Underground circuit length each voltage' was used. Of note, the following assumptions were applied.
		<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 air 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,</li> </ul>

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

Variable	Addressing Basis of Preparation Requirements
	Cyclic Rating Factor =1, Solid Bonded & TR=2.0; • Summer & Winter 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 cables.
Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in Template 3.5 Table 3.5.1.4.
Changes in Accounting Policies (Financial information - Actual or Estimated)	Underground network weighted average MVA capacity reported is a non-financial data set, and accordingly this requirement is not applicable.

### **Table 3.5.2 – Transformer Capacities Variables**

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

### **Distribution Transformer Total Installed Capacity**

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

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

### **Table 5: Distribution Transformer Total Installed Capacity**

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2013-14 regulatory year.
DPA0501- DPA0503		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

Variable		Addressing Basis of Preparation Requirements
		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.
		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 capacity of at least the authorised demand). The DCOS totals were then added to the of SACHV connections.
		DCOS numbers were used for SAC HV as no reliable, consistent, like for like, data for SAC High voltage connections is available over the required period. However, given that SACHV 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	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.

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

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 2013-14 regulatory period
		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).
	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 1/7/2014.
DPA0503 DPA0605	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 2013-14 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.
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How	Ergon Energy has provided 'Actual Information' in accordance with the AER's defined term.

Variable		Addressing Basis of Preparation Requirements
	Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	
	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
	Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2013-14 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.
DPA0601-		For zone substations where the thermal capacity of exit feeders is a constraint, thermal capacity of exit feeders is reported instead of transformer capacity.
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 zone substation transformer capacity (DPA0604).
	Population of Actual Information in templates, including Source.	2013-14 totals are based on current corporate data extracted from Ellipse as a snapshot of the system at the end of the 2013-14 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.
		Refer to Table 6 above, for source and methodology employed for Cold Spare Capacity variables.
	Population of Estimated	Ergon Energy has provided 'Actual Information' in accordance

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.	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.

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 2013-14 regulatory year.
		Only poles that are used exclusively for public lighting are to be included.
DPA0701-		Consistent with clarification received from the AER following reissuance of templates for the 2013-14 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].
DPA0703	Population of Actual Information in templates, including Source.	Public Lighting data has been sourced from the Corporate GIS software, SmallWorld.
	Methodology and assumption's applied in relation to Actual Information	A methodology was employed whereby queries were developed to identify Public Lighting assets that were established in the database at the end of each regulatory year (financial year). It is assumed that the GIS data is an accurate record of actual assets.
	Population of Estimated Information in Templates,	Ergon Energy has provided 'Actual Information' (as per the AER's defined term) in relation to all variables contained in

### Table 8: Public Lighting

Variable		Addressing Basis of Preparation Requirements
	including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	template in Table 3.5.3 (Public Lighting).
	Changes in Accounting Policies (Financial information - Actual or Estimated)	<ul> <li>Public lighting data reported is a non-financial data set, and accordingly this requirement is not applicable.</li> <li>In the 2013-14 financial year Ergon Energy completed an external audit on all Streetlights which is in the process of being compiled and validated. The new software program Lightmap by Geomatic Technologies will be introduced in 2014-15 and will be the future source of all Public Lighting asset counts. The outcomes of the audit could result in a notable change in quantities reported in future RIN responses.</li> </ul>



# Economic Benchmarking Regulatory Information Notice Basis of Preparation

Template 3.6 Quality of Service

1 July 2013 to 30 June 2014



## Forward

In response to requirements of the Australian Energy Regulators (AER) Economic Benchmarking Regulatory Information Notice (RIN), and specific to the information presented in Template 3.6 Quality of Service of Ergon Energy's completed 2013-14 Economic Benchmarking RIN templates (2013-14 BMRIN 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 3.6 Quality of Service (Actual, Estimated or Consolidated) in Ergon Energy's completed 13-14 BMRIN Templates.

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Email: jenny.doyle@ergon.com.au Phone: (07) 3851 6416 Mobile: 0427 156 897

## **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 SAIDI and 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 System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (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 Major Event Days (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 System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (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 2013-14 regulatory year.
		Data is reported in accordance with the definitions provided in the AER's <i>STPIS</i> unless otherwise noted.
DQS0101-		Data represents Actual performance only in relation to unplanned interruptions, as defined in the AER's STPIS scheme.
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	Ergon Energy has sourced data from its internal outage management and asset management systems.

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

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

Variable		Addressing Basis of Preparation Requirements
	Source.	
	Methodology and assumption's applied in relation to Actual Information	Refer to Table 2: Reliability Performance (Inclusive of MEDs) – Specific Variable Responses below for methodologies specific to each variable. The following comments are made across all variables.
		The regulatory (financial) year 2013-14 Major Event Day Threshold (tMed 8.33) 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> </ul>
		Only Completed Unplanned Sustained Interruptions (Interruptions greater that one minute) are included.
	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.

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

Variable	Definition
Whole of network unplanned	Completed Sustained Unplanned Interruptions
SAIDI (DQS0101)	Feeder Categories: Whole of Network (Summation of Urban, Short Rural & Long Rural)
	Financial Years 2013-14 (Between 1 July and 30 June)
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers INCLUDE:
	<ul> <li>Normal</li> <li>Service Fuse or Beyond</li> <li>STPIS MED day Exclusions</li> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)) Exclusions</li> </ul>
Whole of network unplanned	Completed Sustained Unplanned Interruptions
SAIDI - excluding excluded outages (DQS0102)	Feeder Categories: Whole of Network (Summation of Urban, Short Rural & Long Rural)
	Financial Year 2013-14 (between 1 July and 30 June)
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers INCLUDE:
	<ul> <li>Normal</li> <li>Service Fuse or Beyond</li> <li>STPIS MED day Exclusions</li> </ul>
	EXCLUDE:
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)).</li> </ul>
Whole of network unplanned	Completed Sustained Unplanned Interruptions
SAIFI (DQS0103)	Feeder Categories: Whole of Network (Summation of Urban, Short Rural & Long Rural)
	Financial Year 2013-14 (Between 1 July and 30 June)
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers
	INCLUDE:
	<ul> <li>Normal</li> <li>Service Fuse or Beyond</li> <li>STPIS MED day Exclusions</li> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)) Exclusions</li> </ul>
Whole of network unplanned SAIFI - excluding excluded	Completed Sustained Unplanned Interruptions

Variable	Definition
outages (DQS0104 <b>)</b>	Feeder Categories: Whole of Network (Summation of Urban, Short Rural & Long Rural)
	Financial Years 2013-14 (between 1 July and 30 June)
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers
	INCLUDE:
	<ul> <li>Normal</li> <li>Service Fuse or Beyond</li> <li>STPIS MED day Exclusions</li> </ul>
	EXCLUDE:
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> </ul>
	<ul> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)).</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: Reliabilit	y Performance	(Exclusive of MEDs)
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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 all 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 2013-14 Major Event Day Threshold (tMed 8.33) was calculated utilising 5 years of Daily SAIDI data

Variable	Addressing Basis of Preparation Requirements
	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 that one minute) Interruptions are included.</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 (Summation of Urban, Short Rural & Long Rural)
	Financial Year 2013-14 (Between 1 July and 30 June)
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers INCLUDE:
	<ul><li>Normal</li><li>Service Fuse or Beyond</li></ul>

Variable	Definition
	<ul> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)) Exclusions</li> </ul>
	EXCLUDE:
	<ul> <li>STPIS MED day Exclusions</li> </ul>
Whole of network	Completed Sustained Unplanned Interruptions
unplanned SAIDI - excluding excluded outages (DQS0106)	Feeder Categories: Whole of Network (Summation of Urban, Short Rural & Long Rural)
	Financial Year 2013-14 (between 1 July and 30 June)
	SAIDI calculation - Customer Minutes DIVIDED BY Average Number of Customers
	INCLUDE:
	<ul><li>Normal</li><li>Service Fuse or Beyond</li></ul>
	EXCLUDE:
	<ul> <li>STPIS MED day Exclusions</li> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)) Exclusions</li> </ul>
Whole of network	Completed Sustained Unplanned Interruptions
unplanned SAIFI (DQS0107)	Feeder Categories: Whole of Network (Summation of Urban, Short Rural & Long Rural)
	Financial Year 2013-14 (Between 1 July and 30 June)
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers
	INCLUDE:
	<ul> <li>Normal</li> <li>Service Fuse or Beyond</li> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)) Exclusions</li> </ul>
	EXCLUDE:
	<ul> <li>STPIS MED day Exclusions</li> </ul>
Whole of network	Completed Sustained Unplanned Interruptions
unplanned SAIFI - excluding excluded outages (DQS0108)	Feeder Categories: Whole of Network (Summation of Urban, Short Rural & Long Rural)
	Financial Year 2013-14 (between 1 July and 30 June)
	SAIFI calculation - Customers Interrupted DIVIDED BY Average Number of Customers
	INCLUDE:

Variable	Definition
	<ul><li>Normal</li><li>Service Fuse or Beyond</li></ul>
	EXCLUDE:
	<ul> <li>STPIS MED day Exclusions</li> <li>Generation (Exemption clause: 3.3 (a) (2))</li> </ul>
	<ul> <li>Shared Transmission (Exemption clause: 3.3 (a) (5))</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7)) Exclusions</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 2013-14 regulatory year.
DQS0201 DQS0202 DQS02		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.
		This approach is consistent with the AER clarification received on 9 September 2014, 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

Variable		Addressing Basis of Preparation Requirements
		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 Netbill billing customer consumption data.
		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> <li>Normal</li> <li>Service Fuse or Beyond</li> </ul>
		and to EXCLUDE
		<ul> <li>STPIS MED day exclusions</li> <li>Public Safety Isolation (Exemption clause: 3.3 (a) (7))</li> <li>Generation (Exemption clause: 3.3 (a) (2))</li> <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> <li>Customers interrupted resulting from Planned events</li> <li>Duration of Interruption resulting from Planned events</li> <li>Customers interrupted resulting from Unplanned events</li> <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 interrupted and the duration of the interruption for each customer.
		Customer minutes off supply is 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, including why Estimates	By definition, Ergon Energy has provided 'Estimated Information' in relation to all variables contained in Template 3.6 Table 3.6.2.
	are required and why it is not possible to provide	Historical feeder connectivity is not captured by Ergon Energy, and therefore current connectivity is assumed. Consumption is

Variable		Addressing Basis of Preparation Requirements
	Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are Ergon Energy's best estimates.	identified for all feeders and was multiplied by the customer minutes. Where there is no current connectivity an average consumption across all feeders was used.
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Energy Not Supplied is a non-financial data set, and accordingly this requirement is not applicable.

### Table 3.6.3 – System Losses

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

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

Variable		Addressing Basis of Preparation Requirements
DQS03	Consistency with Notice requirements	All entry fields which are shaded yellow indicating mandatory data fields have been populated for the 2013-14 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.
	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 why Estimates are Ergon	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.

#### Table 6: System Losses

Variable	Addressing Basis of Preparation Requirements
Energy's best estimation	ies.
Changes in Accountin Policies (Financial information - Actual o Estimated)	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.

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.
		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	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.

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

Variable		Addressing Basis of Preparation Requirements
	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)	Capacity utilisation data is a non-financial data set, and accordingly this requirement is not applicable



# Economic Benchmarking Regulatory Information Notice Basis of Preparation

Template 3.7 Environment Template 3.7.4 Weather Stations

1 July 2013 to 30 June 2014



## Forward

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 and Template 3.7.4 Weather Stations of Ergon Energy's completed 2013-14 Economic Benchmarking RIN templates (13-14 BMRIN 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 3.7 Environment and Template 3.7.4 Weather Stations (Actual, Estimated or Consolidated) in Ergon Energy's completed 13-14 BMRIN Templates.

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Email: jenny.doyle@ergon.com.au Phone: (07) 3851 6416 Mobile: 0427 156 897

## **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.

<b>Table 1: Density Factors</b>	Tab	le 1:	Density	<b>Factors</b>
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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 2013-14 regulatory year.	
	Population of Actual Information in templates, including Source.	Refer to responses provided in relation to the source for each numerator/denominator input as noted below.	
	Methodology and assumption's applied in	Values were obtained by calculation as required in Instructions and Definitions for variables:	
	relation to Actual Information	<ul> <li>Customer Density (DOEF0101) = Total Number of Customers (DOPCN01) / Route Line Length of the Network (DOEF0301)</li> </ul>	
		<ul> <li>Energy Density (DOEF0102) = Total MWh (DOPED01)/ Total number of customers of the network (DOPCN01)</li> </ul>	
DOEF0101- 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 Table 4: Routine Line Length, as well as in the relevant sections of the BOP for Operational data for DOPCN01, DOPED01, DOPSD0201.	
	Population of Estimated Information in Templates, including why Estimates are required and why it is not possible to provide Actual Information in templates. How Estimated Information has been produced, including reasons why Estimates are	Ergon Energy has provided 'Actual Information' (as per the AER's defined terms) in relation to all 2013-14 variables contained in Template 3.7 Table 3.7.1.	

Variable		Addressing Basis of Preparation Requirements
	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 2013-14 regulatory year.
		Similarly, vegetation maintenance span cycles variables (DOEF0206-DOEF0207) have been provided as Actual Information for the 2013-14 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,	Ergon Energy has provided 'Estimated Information' (as per the AER's defined term) in relation to the following variables:
	including why Estimates are required and why it is not possible to provide Actual Information in templates.	<ul> <li>DOEF0202 - Urban and CBD vegetation maintenance spans</li> </ul>
		<ul> <li>DOEF0203 - Rural vegetation maintenance spans</li> </ul>
	How Estimated Information has been produced,	<ul> <li>DOEF0204 - Total vegetation maintenance spans</li> </ul>

#### Table 2: Terrain Factors

Variable		Addressing Basis of Preparation Requirements
	including reasons why	<ul> <li>DOEF0205 - Total number of spans</li> </ul>
Estimates are Ergon Energy's best estimates.	Estimates are Ergon Energy's best estimates.	<ul> <li>DOEF0210 - Average number of defects per urban and CBD vegetation maintenance span</li> </ul>
	<ul> <li>DOEF0211 - Average number of defects per rural vegetation maintenance span.</li> </ul>	
		Refer to Table 3: Terrain Factors –Specific Variable Responses, for more information on methodology used to prepare the 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).

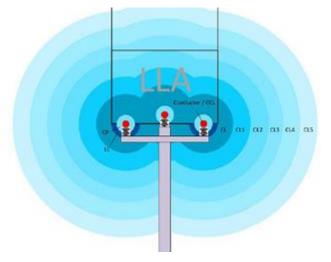
### Table 3: Terrain Factors – Specific Variable Responses

	Addressing Basis of Preparation Requirements
Rural proportion (DOEF020 1)	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 2013-14 reporting year. With regards to the rural proportion variable DOEF0201, Ergon Energy notes the AER guidance provided on 7 February 2014, 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).
	We note the unit of measurement for the rural proportion variable in the template is expressed in km rather than as a percentage. The correct unit for this variable is a percentage rather than the actual rural line lengths in km.
	Accordingly, data has been prepared as per the formula suggested, and is expressed as a percentage (%) (rather than kms). This is confirmed in the formatting of the AER's reissued templates.
Urban and CBD and	Urban and Rural vegetation maintenance spans data has been derived on the basis described below using ROAMES data relating to vegetation intrusions into nominated clearance bands.
Rural vegetation	Total completed spans figures for Urban Vegetation Zones and Total completed spans and for

	Addressing Basis of Preparation Requirements
maintenan	Rural Vegetation Zones where reported (Ergon Energy has no CBD feeder categories).
ce spans (DOEF020 2-	Total vegetation maintenance spans (DOEF0204) is the sum of DOEF0202 and DOEF0203. Information provided is Estimated Information for the 2013-14 year on the basis of:
DOEF0203 ) Total vegetation maintenan	ROAMES inspection data using a sample of ROAMES Cycle 2 network capture between March 2014 and September 2014. A sample size of 71,000 spans has been selected to include Urban and Rural areas and a variety of network and vegetation densities. The ratio of spans requiring treatment (maintenance spans) to total spans in sample has been extrapolated to the total number of spans contained within the 2013/14 vegetation program.
ce spans (DOEF020 4)	The calculation of Maintenance Spans from the total spans in the sample extract is on the basis of the number of spans in which ROAMES recorded intrusions into clearance spaces that would normally be targeted for Urban and Rural treatment as detailed below:
	Urban

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

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

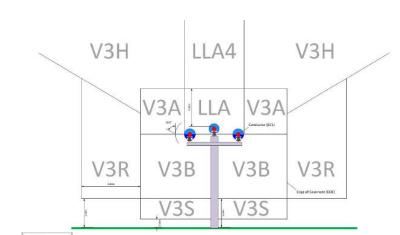


### Rural

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

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

### Addressing Basis of Preparation Requirements



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 number of spansTotal number of spans for 2013-14 in respect of Ergon Energy's network has been sourced from Smallworld. Information provided for 2013-14 is considered Estimated Information (as per the AER defined term).(DOEF020 5)On 3 December 2013, the AER clarified that DOEF0205 requests the number of spans within a DNSP's network irrespective of whether they are vegetation management spans. Accordingly, Ergon Energy confirms DOEF0205 does not include service line spans. It is the total number of spans, excluding service line spans.Average urban and CBD regetation maintenance ce span c span cycle (DOEF020 6)2013-14 average maintenance span cycle data was calculated based on data sourced from the June monthly report for the Annual Vegetation Management Program (June 2013) taken from the Ellipse database (i.e. 2013-14 data was found in the June 2014 report). A methodology was employed whereby: • Average urban vegetation maintenance span cycle = (Sum of treated Urban vegetation zones cycle duration [Maintenance Schedule Task] / total number of rural Vegetation zones treated during regulatory (financial) year); • Average rural vegetation maintenance span cycle = (Sum of treated rural vegetation zones treated during regulatory (financial) year)Vegetation rural vegetation rural vegetation provide treated during regulatory (financial) year)(Ergon Energy has no CBD feeder categories). Notwithstanding that the number of maintenance spans is estimated data in 2013-14, the maintenance span cycle data provided for 2013-14 is considered Actual in accordance with AER requirements. r)Average rural vegetation rural vegetation cons treated during regulatory (financial) wear)Average rural vegetation rura		
<ul> <li>b) a DNSP's network irrespective of whether they are vegetation management spans. Accordingly, Ergon Energy confirms DOEF0205 does not include service line spans. It is the total number of spans, excluding service line spans.</li> <li>Average 2013-14 average maintenance span cycle data was calculated based on data sourced from the June monthly report for the Annual Vegetation Management Program (June 2013) taken from the Ellipse database (i.e. 2013-14 data was found in the June 2014 report).</li> <li>A methodology was employed whereby:         <ul> <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 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 treated during regulatory (financial) year);</li> <li>Average rural vegetation maintenance span cycle = (Sum of treated 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 2013-14, the maintenance span cycle data provided for 2013-14 is considered Actual in accordance with AER requirements.</li> <li>7)</li> </ul> </li> <li>Average On 7 February 2014 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 considere</li></ul>	number of	from Smallworld. Information provided for 2013-14 is considered Estimated Information (as
urban and CBDthe June monthly report for the Annual Vegetation Management Program (June 2013) taken from the Ellipse database (i.e. 2013-14 data was found in the June 2014 report).Vegetation maintenand ce span cycle (DOEF020A methodology was employed whereby: • Average urban vegetation maintenance span cycle = (Sum of treated Urban vegetation Zones treated during regulatory (financial) year);6)• Average rural vegetation maintenance span cycle = (Sum of treated rural vegetation Zones treated during regulatory (financial) year);6)• Average rural vegetation maintenance span cycle = (Sum of treated rural vegetation Zones treated during regulatory (financial) year);7)• Average rural vegetation maintenance span cycle = (Sum of treated rural vegetation Zones treated during regulatory (financial) year)Vegetation maintenan ce span cycle (DOEF020• Average number of maintenance spans is estimated data in 2013-14, the maintenance span cycle data provided for 2013-14 is considered Actual in accordance with AER requirements.Average ruralOn 7 February 2014 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		a DNSP's network irrespective of whether they are vegetation management spans. Accordingly, Ergon Energy confirms DOEF0205 does not include service line spans. It is the
maintenan ce span cycleA vierage urban vegetation maintenance span cycle = (Sum of treated Urban vegetation zones cycle duration [Maintenance Schedule Task] / total number of Urban Vegetation 	urban and	the June monthly report for the Annual Vegetation Management Program (June 2013) taken
<ul> <li>Average rural vegetation maintenance span cycle = (Sum of treated rural vegetation zones cycle duration [Maintenance Schedule Task] / total number of rural Vegetation Zones treated during regulatory (financial) year)</li> <li>(Ergon Energy has no CBD feeder categories). Notwithstanding that the number of maintenance spans is estimated data in 2013-14, the maintenance span cycle data provided for 2013-14 is considered Actual in accordance with AER requirements.</li> <li>Average On 7 February 2014 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</li> </ul>	maintenan ce span cycle	<ul> <li>Average urban vegetation maintenance span cycle = (Sum of treated Urban vegetation zones cycle duration [Maintenance Schedule Task] / total number of Urban Vegetation</li> </ul>
maintenan ce span cycle (DOEF020 7)Notwithstanding that the number of maintenance spans is estimated data in 2013-14, the maintenance span cycle data provided for 2013-14 is considered Actual in accordance with AER requirements.Average number of trees perOn 7 February 2014 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 	Average	zones cycle duration [Maintenance Schedule Task] / total number of rural Vegetation
ce span cycle (DOEF020 7)Notwithstanding that the number of maintenance spans is estimated data in 2013-14, the maintenance span cycle data provided for 2013-14 is considered Actual in accordance with AER requirements.Average number of trees perOn 7 February 2014 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	-	(Ergon Energy has no CBD feeder categories).
AverageOn 7 February 2014 the AER provided additional guidance to NSPs regarding the definition ofnumber ofa 'Tree' for the purposes of measuring the average number of trees per vegetationtrees permaintenance span for variables DOEF0208 and DOEF0209. The AER noted it considered a	ce span cycle (DOEF020	maintenance span cycle data provided for 2013-14 is considered Actual in accordance with
trees per maintenance span for variables DOEF0208 and DOEF0209. The AER noted it considered a		On 7 February 2014 the AER provided additional guidance to NSPs regarding the definition of
	number of trees per	a 'Tree' for the purposes of measuring the average number of trees per vegetation

	Addressing Basis of Preparation Requirements
CBD	tree to be:
vegetation maintenan	a perennial plant (of any species including shrubs) that is:
ce span (DOEF020	<ul> <li>equal to or greater in height than 3 metres (measured from the ground) in the relevant reporting period; and</li> </ul>
8) Average	<ul> <li>of a species which could grow to a height such that it may impinge on the vegetation clearance space of power lines.</li> </ul>
number of trees per rural vegetation	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.
maintenan	Information provided for 2013-14 is considered Actual in accordance with AER requirements.
ce span (DOEF020 9)	For 2013-14 information Ergon Energy has sourced data from its Remote Observation Automated Modelling Economic Simulation (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.
	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 2013-14, such that:
	<ul> <li>Average number of trees per urban and CBD 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>
	<ul> <li>Note: Some error exists in reported data, as an "intrusion" may not be truly representative of a single tree.</li> </ul>
	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>
	<ul> <li>Note: Some error exists reported data as an "intrusion" may not be truly representative of a single tree.</li> </ul>
	Information provided for 2013-14 is considered Actual in accordance with AER requirements.
Average number of defects	ROAMES inspection data using a sample of ROAMES Cycle 2 network capture between March 2014 and September 2014. A sample size of 71,000 spans has been selected to include Urban and Rural areas and a variety of network and vegetation densities.
per urban and CBD vegetation maintenan ce span	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:

	Addressing Basis of Preparation Requirements	
(DOEF021 0) Average number of defects per rural vegetation maintenan ce span (DOEF021 1)	<ul> <li>Defect         <ul> <li>Close Proximity (CP) vegetation intrusions as defined by clearance band specification in relation to proximity to overhead conductor</li> <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> </li> <li>The diagram below displays the representation of What Ergon Energy classifies as defects.</li> <li>Image: Conductor (C) (C) (C) (C) (C) (C) (C) (C) (C) (C)</li></ul>	
Tropical proportion (DOEF021 2)	For 2013-14, the tropical proportion of Ergon Energy's network was based on network data sourced from the Smallworld GIS. The number of spans occurring within hot humid summer and warm humid summer regions (as defined by the BOM Climatic Zones map) was assessed using .shp files sourced from the BOM website. Information provided for 2013-14 is considered Actual in accordance with the AER's requirements.	
Standard vehicle access (DOEF021 3)	For 2013-14, 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 2013-14 is considered Actual in accordance with the AER's requirements.	
Bushfire risk (DOEF021	For 2013-14 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.	

	Addressing Basis of Preparation Requirements
4)	Information provided for 2013-14 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
	Consistency with Notice requirements	All mandatory data entry fields shaded yellow, and have been populated for each of the 2013-14 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>
D.0.550004		<ul> <li>there are multiple circuits on a span, the length of each span is considered only once; and</li> </ul>
DOEF0301		<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 2013-14 a methodology was employed whereby data was obtained for the current regulatory year (2013-14) 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).
	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 3.7 Table 3.7.3.

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)	Route Line Length reported is a non-financial data set, and accordingly this requirement is not applicable.

## **Template 3.7.4 Weather Stations**

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 Weather Stations affecting Ergon Energy's network.

### Table 3.7.4 – Weather Stations

The AER requires Ergon Energy to provide details relating to the Weather Station in its service area. Specifically Template 3.7, Table 3.7.4 requires weather station numbers, post codes, suburb/localities, based on details available from the Australian Governments, Bureau of Meteorology (BOM).

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

#### **Table 5: Weather Stations**

Variable		Addressing Basis of Preparation Requirements
	Consistency with Notice requirements	All mandatory data entry fields shaded yellow, have been populated for each of the weather stations in Ergon Energy's service area.
		Ergon Energy has input a variable code for each weather station in its service area recorded in the BOM database as of (2013) with 30 minutes minimum readings, inserting rows as relevant.
		Where deemed to not be relevant to the management of its network, Ergon Energy has input a 'no' in the 'materiality' column of the table and provided supporting evidence as to why the weather station is not relevant. For all other stations, a 'yes' was entered in the materiality column.
n/a		Ergon Energy notes that the AER has removed the variable numbers associated with each weather station contained in this table in its revised templates for 2013-14. Therefore, care should be taken when reviewing weather station data for 2013- 14 against prior submissions.
	Population of Actual Information in templates, including Source.	Data has been sourced from the BOM website ( <u>www.bom.gov.au</u> ) and imported into Ergon Energy's Network Analytics Oracle Spatial database with LANDBASE Oracle Spatial database.
	Methodology and assumption's applied in relation to Actual Information	Each Automatic Weather Station (AWS) was analysed based on frequency of readings and only AWS with 30 minutes minimum readings were used.
		AWS readings are not currently used for Network Operations but there are projects underway to utilise this information.
		AWS locations were determined by spatial analysis relating to Queensland suburb locality boundaries.
		Data from AWS locations with Materiality of 'No' are not relevant for Ergon Energy network planning purposes as the

Variable		Addressing Basis of Preparation Requirements
		data quality and frequency are considered not viable
	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 3.7.4.
	Changes in Accounting Policies (Financial information - Actual or Estimated)	Weather station data is non-financial, and accordingly this requirement is not applicable.