



Submission to the AER on its  
Preliminary Determination  
Ergon Energy Reset RIN  
Response to Material Issues



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## 1. Introduction

On 30 April 2015, the Australian Energy Regulator (AER) released its Preliminary Determination on Ergon Energy's Regulatory Proposal for the regulatory control period commencing 1 July 2015 and ending 30 June 2020.

This document details Ergon Energy's response to the AER's Preliminary Determination and stakeholder comments on material issues relating to the data and information provided in Ergon Energy's Reset Regulatory Information Notice (RIN) and supporting documentation. Ergon Energy offers the following detailed explanations and where appropriate, updated data.

Ergon Energy has structured this document in the following manner:

- Chapter 2 – Background on AER's preliminary determination process
- Chapter 3 – Address issues relating to \$33.1 million in unexplained Augmentation expenditure
- Chapter 4 – Address issues relating to Metering expenditure
- Chapter 5 – Address issues relating to the re-casting of historical connections expenditure
- Chapter 6 – Address issues relating to AER preliminary decision on Asset Renewal expenditure

It should be noted that all amendments and clarifications provided in this paper relate to material issues raised by the AER in its preliminary determination that is associated with financial and non-financial data provided in Ergon Energy's Reset RIN.

As such forecast expenditure for Ergon Energy's Revised Proposal can be different to that reported in this paper and should be sought from Ergon Energy's the relevant revised proposal documentation.

## 2. AER's application of Reset RIN data

Attachment 6 of the AER's Preliminary Determination details its positions on Capital expenditure, including the issues and findings relating to the AER's application of Economic Benchmarking, Trend analysis, Category analysis and Predictive modelling techniques which are all dependent on the accuracy, reliability, completeness and usefulness of the data and information provided in Ergon Energy's Reset RIN.

The AER's assessment approach utilised historical and forecast standardised category level data from Ergon Energy's Reset RIN. When compared to other DNSPs the AER assessed the efficiency and prudence of Ergon Energy's proposed expenditure and used the results to make reductions to our system capital expenditure forecasts.

The approach mentioned above was applied during the assessment of each system capex category with the exception of forecast Connections expenditure (Customer Initiated Capital Works) which was accepted by the AER using a combination of other assessment techniques.

### 2.1. Material issues identified

The AER identified some inconsistencies between forecast expenditure in the Reset RIN and Ergon Energy's proposal documentation. After consideration of the AER's preliminary determination Ergon Energy wishes to provide further clarity to specific issues and where appropriate amendments to specific sections of the Reset RIN data provided. Such issues include:

1. The exclusion of \$33.1 million of unexplained augmentation expenditure;
2. Forecast Metering expenditure of \$39.7 million; and
3. Reductions to Asset Renewal expenditure forecast resulting from incorrectly reported expenditure and volume data provided in Reset RIN Template 2.2 Repex.

Additionally Ergon Energy provides an explanation concerning a matter raised in the AER Issues Paper dated December 2014 correcting information regarding a significant increase in connection expenditure in the next regulatory period.

### 2.2. Addressing material issues

In addressing the AER's targeted reductions Ergon Energy re-examined both financial and non-financial data reported in the Reset RIN in order to ensure alignment to our original forecasts at the individual investment level.

The result of this exercise enabled Ergon Energy to provide:

1. A response to the AER's purported RIN data anomalies; and
2. Provide further clarification, including amended RIN data, to assist the AER in its final determination process.

### 2.3. Development of Ergon Energy's system capital forecasts

The development of Ergon Energy's proposed system capital forecast expenditure (2015-20) was prepared on a direct cost basis in \$2012-13 real dollars.

During this forecast development period all \$2012-13 real dollar expenditure related information in the draft Reset RIN and Forecast Expenditure Summary documentation aligned. This allowed for

critical executive reviews to be conducted where investments were challenged and modified before the final Reset RIN templates were populated and reconciled prior to submission.

Owing to time constraints, beginning with the AER issuing the final Reset RIN to Ergon Energy on 25 August 2014, coupled with the annual updates to Economic Benchmarking, Category Analysis and Performance RINs, Ergon Energy recognised the need to modify our internal expenditure modelling and historical RIN data to meet the Reset RIN instructions and requirements.

These changes were required to:

1. Align forecast expenditure (represented in the Reset RIN) to initial modelling; and
2. Allow for the re-casting of historical data to allow for the reclassification of services from Standard Control Services (SCS) to Alternative Control Services (ACS) between regulatory control periods.

Consequently changes to Reset RIN historical financial and non-financial data were made and submitted to the auditor in the week starting 15 September 2014. This additional work was required to be completed in advance of submitting the final Reset RIN data and Auditor Reports to Ergon Energy's Board for sign-off on 24 October 2014.

Thus the final adjustments to the Reset RIN were in turn not reflected in the Forecast Expenditure Summary documentation.

The following sections summarise these positions and the AER's rationale at the expenditure category level and asset class, where necessary. This has led to some of the material issues discussed in this paper.

### 3. Augmentation expenditure

#### 3.1. AER position

Ergon Energy acknowledges the AER statements below in relation to an amount of expenditure under Ergon Energy’s proposed augmentation expenditure being identified as unexplained:

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“As noted, Ergon Energy's total proposed augex forecast is \$660 million (\$2014–15). Based on our review of Ergon Energy's supporting documentation, we can account for \$627 million through the individual forecasts for sub-transmission, distribution, reliability, power quality, and other system-enabling capex (as set out in Table B.3).”

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Additionally;

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“In Ergon Energy's submission on the revocation and substitution of our preliminary decision, we encourage Ergon Energy to provide further information to account for this additional capex and why it is prudent and efficient. We will have regard to this information in our final decision.”

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In summary Ergon Energy understand the AER sourced the direct cost forecasts, provided in the AER’s preliminary Determination Table B.1 from the following Ergon Energy Forecast Expenditure Summary documents.

**Table 1 – AER direct costs sourced from Ergon Energy submission documentation**

Source	Category	Document Name	Ref	Page
07.00.02	Sub-transmission	Forecast Expenditure Summary - Corporation Initiated Augmentation	Table 11	57
07.00.02	Distribution	Forecast Expenditure Summary - Corporation Initiated Augmentation	Table 11	57
07.00.05	Quality of supply	Forecast Expenditure Summary - Reliability & Quality of supply	Table 7	24
07.00.05	Reliability	Forecast Expenditure Summary - Reliability & Quality of supply	Table 10	25
07.00.04	Other system enabling capex	Forecast Expenditure Summary - Other System Enabling Technologies	Table 1	8

The AER points out that in “Table B.1 Ergon Energy’s proposed augex (\$2014-15, million, excluding overheads),” the sum of the expenditure for each of the above expenditure categories totals \$627M. However Ergon Energy’s total augmentation expenditure proposal as reported in the Reset RIN Template 2.1 totals \$660.1 million.

Table B.1 from the “AER – Preliminary decision Ergon Energy – Attachment 6 – Capex April 2015\_0” document is shown below.

**Table 2 - AER Table B.1, Ergon Energy's proposed augex (\$2014–15, million, excluding overheads)**

Category	2015–16	2016–17	2017–18	2018–19	2019–20	Total
Sub-transmission	49	53	51	20	21	193
Distribution	69	64	64	63	63	323
Quality of supply	1.3	1.3	1.3	1.3	1.3	6.5
Reliability	1.1	1.1	1.1	1.1	1.1	5.5
Other system enabling capex	29	21	13	19	16	99
Sub-total	143	134.8	124.2	100	97.7	627
Unexplained capex	11.3	12.3	13.5	10.9	12.5	33.1
Total augex proposal	154.3	147.1	137.7	110.9	110.2	660.1

Source: Ergon Energy reset RIN; Ergon Energy regulatory proposal, Attachments 07.00.02, 07.00.04 and 07.00.05

Note: Ergon Energy's total augex forecast is derived from its reset RIN. The direct costs of the individual programs within this forecast are derived from the supporting attachments to Ergon Energy's regulatory proposal. There is a remaining component of the total forecast that is unexplained based on our review of Ergon Energy's regulatory proposal, supporting documentation and its response to our information requests. Ergon Energy explained the reconciliation between the total forecast in its reset RIN and the regulatory proposal in its response to our information request AER Ergon Energy 004.

### 3.2. Ergon Energy response

The “unexplained” capex being \$33.1 million, highlighted in blue above, is driven by the application of different escalation methodologies in the Forecast Expenditure Summary documentation and the Reset RIN, to re-state forecast expenditure in \$2014-15.

The difference is owing to the Reset RIN forecasts including full labour, materials and CPI cost escalation while the expenditure stated in the Forecast Expenditure Summary documentation only includes escalation for CPI.

#### Reference

In section “1.1 Purpose” of each Forecast Expenditure Summary document (Attachments 07.00.02, 07.00.04 and 07.00.05), Ergon Energy offered the following caution.

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“Readers should take care in examining the (un-escalated) direct costs in this summary document to ensure that they do not confuse them with either Ergon Energy’s:

- Direct costs, inclusive of real cost escalations”
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Additionally section “2.1 Direct costs”, specifically Table 1, and the linked footnotes for the total direct cost for Ergon Energy’s proposal, offered an explanation of the source and escalation applied.

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“Network Capital Expenditure Forecast Model (for Ergon Energy 2015-20 regulatory proposal), escalated for CPI only to 2014-15 dollars and excludes non-CPI input price escalations and overhead as per the Cost Allocation Method (CAM).”

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### Further Clarification

Ergon Energy offers the following as further clarification of the different methodologies and how they were applied.

#### 3.2.1 Ergon Energy Expenditure Summary documentation – Methodology 1

- Step 1** Take source data from the “Ergon Energy Network Capital Expenditure Forecast Model” where the Capex forecasts for each investment for each year of the 2015-20 regulatory control period are estimated in 2012-13 real direct cost dollars.
- Step 2** Escalate the total capex forecast (per expenditure category) for each year to 2014-15 real direct cost dollars by multiplying base expenditure by 2.5% per year (assumed increase in CPI each year).

This approach results in the escalation of expenditure documented in the Forecast Expenditure Summary documentation for CPI only to \$2014-15 direct costs, and excludes non-CPI related price escalations (material and labour cost escalation).

#### 3.2.2 Submission RIN - Methodology 2

- Step 1** Take source data from the “Ergon Energy Network Capital Expenditure Forecast Model” where the Capex forecasts for each investment for each year of the 2015-20 regulatory control period are estimated in 2012-13 real direct cost dollars.
- Step 2** Convert this to capex forecasts at a System Asset Class level for each year of the 2015-20 regulatory control period. Note: This expenditure is maintained in 2012-13 real direct cost dollars.
- Step 3** Take the forecasts at the System Asset Class level and apply CPI, labour and materials cost escalation by asset class for each year of the 2015-20 regulatory period where appropriate. Note: This results in a forecast of expenditure in nominal dollars across each year of the 2015-20 regulatory period.
- Step 4** The nominal dollar forecasts calculated in Step 3 above are then de-escalated by the appropriate years’ CPI to re-state the forecasts in 2014-15 real dollars.

This approach results in the expenditure listed in the reset RIN being escalated for CPI and non-CPI input price escalations (material and labour cost escalation) to \$2014-15 direct cost.

In summary, expenditure totals in the Reset RIN correctly include the non-CPI input escalations and are the reason for the \$33.1 million variance.



## Related Issue

Related to the above escalation issue, the AER was dissatisfied with Ergon Energy's forecast real cost escalation and has substituted an alternative estimate across all capital expenditure categories. This reduction proposed by the AER includes the identified \$33.1 million of "unexplained" capital expenditure from Augmentation.

While the justification of the non-CPI (material and labour) real cost escalation will be discussed in other parts of Ergon Energy's Revised Submission, the removal of the \$33.1 million from the Augmentation Expenditure Forecast, in isolation of the substitution determined for escalations, effectively results in this being deducted twice from Ergon Energy's total submission.

### 3.3. Proposed amendments

The 'Unexplained capex' identified by the AER in their decision document, 'Attachment 6 Capex, Section B.2 AER findings and estimates of augmentation expenditure' is simply the difference between the partially-escalated direct costs (\$627 million) reported in the Augmentation related Forecast Expenditure Summary documents (07.00.02 CIA, 07.00.04 Other System and 07.00.05 Reliability and Quality of supply), and the equivalent (correct) fully escalated direct costs in Ergon's PTRM Model (\$660.1 million).

Ergon Energy offers the following update of the AER's Table B.1 Ergon Energy's proposed augex (\$2014-15, million, excluding overheads) to reflect the correct values.

**Table 3 - Amended Table B.1 Ergon Energy's Proposed augex (\$2014-15, million, excluding overheads)**

Category	2015-16	2016-17	2017-18	2018-19	2019-20	Total
<b>Sub-transmission</b>	50.5	55.3	53.7	20.9	22.4	202.8
<b>Distribution</b>	71.4	67.5	67.5	67.8	68.2	342.4
<b>Quality of supply</b>	1.3	1.3	1.3	1.3	1.3	6.5
<b>Reliability</b>	1.1	1.1	1.1	1.1	1.1	5.5
<b>Other system enabling capex</b>	29.9	21.9	14.1	19.7	17.2	102.9
<b>Sub-total</b>	154.3	147.1	137.7	110.9	110.2	660.1
<b>Unexplained capex</b>	0.0	0.0	0.0	0.0	0.0	0
<b>Total augex proposed</b>	154.3	147.1	137.7	110.9	110.2	660.1

In amending Table B.1 Ergon Energy have applied the following methodology per category:

**Table 4 - Amendment methodology per augex category**

Category	Methodology
<b>Sub-transmission</b>	Provided fully escalated total sub-transmission substation and lines expenditure as reported in Template 2.3, Table 2.3.4
<b>Distribution</b>	Annual totals equals the remaining Distribution augmentation expenditure not associated with Reliability, QOS or Other System capex
<b>Quality of supply</b>	No change - fully escalated Quality of supply expenditure presented
<b>Reliability</b>	No change - fully escalated Reliability expenditure presented
<b>Other system enabling capex</b>	Provided fully escalated Other System and Enabling technologies expenditure (change from \$99 million to \$102.9 million)

Any adjustments made by the AER should be made to Ergon Energy's fully escalated direct costs and therefore the "unexplained" capex should not be deducted.

## 4. Metering asset class expenditure

The AER have not accepted Ergon Energy’s proposed metering standard control service (SCS) capex of \$39.7 million (\$2014-15) and have instead included an alternative amount of \$7.0 million.

### 4.4. AER position

The AER state in their summary of AER reasons and findings (Attachment 6, Table 6.2):

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“Our substitute estimate is lower because we did not consider Ergon Energy had substantiated that its circumstances in the 2015–20 regulatory control period had changed so as to cause a 78 per cent increase in real expenditure when compared to the 2010-15 regulatory control period. Our alternative estimate provides an allowance consistent with the actual expenditure Ergon Energy incurred in the 2010-15 regulatory control period.”<sup>1</sup>

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### 4.5. Ergon Energy response

Ergon Energy acknowledges the AER’s position that an increase in real expenditure has not been clearly substantiated. In response to the AER’s preliminary decision, Ergon Energy re-examined both financial and non-financial data in both the forecast and historic RIN information provided. In doing so a material error was found that affects multiple line items in Ergon Energy’s Reset RIN Table 2.1.1. The following sections clarify Ergon Energy’s position and substantiate corrections to information provided in the Reset RIN that reflect the original proposed forecast expenditure.

**Table 5 - Extract of Submitted Reset RIN Table 2.1.1 Ergon Energy Proposed SCS Capex**

<b>Table 2.1.1 - Ergon Energy - Proposal – SCS Capex (\$'000s \$2014-15)</b>						
	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Replacement expenditure	174,118.541	193,600.239	166,191.377	181,717.919	178,698.908	894,326.984
Connections	85,165.152	86,276.859	87,584.972	88,776.251	89,951.560	437,754.794
Augmentation expenditure	154,295.809	147,081.576	137,701.129	110,903.008	110,166.713	660,148.235
<b>Metering</b>	7,799.476	8,473.524	8,367.869	7,602.333	7,438.045	<b>39,681.247</b>
Balancing item	0.00	0.00	0.00	0.00	0.00	0.00

Ergon Energy’s proposed Metering (SCS) expenditure of \$39.681 million reported in the Reset RIN table 2.1.1 relates to forecast metering costs embedded in investments proposed under the Connections and Augmentation Expenditure categories. As required by the AER’s regulatory models<sup>2</sup>, all proposed capex investments in Ergon Energy’s submission are allocated across nineteen (19) different system asset classes. The expenditure forecast for the Metering line item in

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<sup>1</sup> AER Preliminary Decision Ergon Energy determination 2015-16 to 2019-20, Attachment 6 – Capital expenditure, Table 6.2 Summary of AER reasons and findings, page 6-10

<sup>2</sup> The AER’s Post Tax Revenue Model (PTRM) and Roll Forward Model (RFM)

Reset RIN Table 2.1.1 is the total expenditure allocated to the “Metering” (SCS) asset class. When reconciled back, the specific investments that make up the \$39.681 million are:

1. Customer Connections investment (\$30.319 million) primarily relating to “Domestic and Rural” customers
2. Meter Configuration Management investment (SCS component, \$2.901 million) in the Other Systems and Enabling Technology expenditure category
3. Power Quality Monitoring investment (\$6.462 million) in the Reliability and Quality expenditure category.

Note that Ergon Energy’s proposed Connections and Reliability and Quality expenditure was accepted by the AER in its preliminary determination.

However the reconciliation process revealed an error was made by Ergon Energy when applying an assumption that all SCS Metering expenditure was related to Replacement expenditure. Consequently the \$39.681 million (for Metering SCS expenditure) was deducted incorrectly from Ergon Energy’s total forecast *Replacement expenditure* category and re-assigned to the Metering line item in Table 2.1.1.

The purpose of deducting expenditure for metering from the relevant high level expenditure categories was to avoid a double count of expenditure and maintain the total system capital expenditure proposed by Ergon Energy<sup>3</sup>.

To assist the AER with correctly making its Final Determination, the AER should note that its Replacement expenditure reductions in its preliminary determination applied to the incorrect total Replacement Expenditure of \$894 million and not the correct amount of \$934 million.

#### 4.6. Proposed amendments

Ergon Energy offers the following amendments to its original reset RIN to accurately represent the corrected allocations to each expenditure categories as per Table 2.1.1 below.

Step1 – Reverse the deduction made to the Replacement expenditure line item

Step2 – Deduct the identified Metering class expenditure from the total capital expenditure via the balancing line item offered by the RIN template

**Table 6 - Revised Reset RIN Table 2.1.1 Ergon Energy Proposed SCS Capex**

<b>Table 2.1.1 - Ergon Energy - Proposal – SCS Capex (\$'000s \$2014-15)</b>						
	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Replacement expenditure	181,918.017	202,073.763	174,599.246	189,320.252	186,136.953	934,008.231
Connections	85,165.152	86,276.859	87,584.972	88,776.251	89,951.560	437,754.794
Augmentation Expenditure	154,295.809	147,081.576	137,701.129	110,903.008	110,166.713	660,148.235
<b>Metering</b>	7,799.476	8,473.524	8,367.869	7,602.333	7,438.045	39,681.247
Balancing item	-7,799.476	-8,473.524	-8,367.869	-7,602.333	-7,438.045	-39,681.247

<sup>3</sup> Reset RIN Instructions for Schedule 1, 1. Provide Information, 1.5 Capital and operating expenditure forecasts provided in the regulatory templates must be reconciled to the ex-ante capital and operating allowances in Post-Tax Revenue Model for the forthcoming regulatory control period.

Ergon Energy’s reasoning behind the above approach to deduct the metering class expenditure as a balancing item is based on:

- This aligns with the Reset RIN Instructions whereby Ergon Energy must provide “capital and operating expenditure that reconciles to the ex-ante capital and operating allowances in Post-Tax Revenue Model for the forthcoming regulatory control period”;
- The identified metering expenditure being an asset class forecast which is already a component of various expenditure categories. As such the justification of the metering expenditure can be found under that expenditure category’s supporting documentation;
- Any reductions the AER may see fit to apply to the total expenditure categories in the final determination will be applied to the correct amount. (i.e. Augmentation Expenditure {with sub-categories}, Connections and Replacement Expenditure); and
- This aligns with the approach taken with the historical information for SCS Metering forecasts.

### Additional revision to Connections SCS metering re-allocation

As an additional outcome of this review Ergon Energy wishes to correct some of the allocation of the expenditure forecast for customer Connections to the Metering asset class.

Specifically, the allocation of the Domestic and Rural customer forecast to the 19 system asset classes was incorrectly based on historical financial information which also included costs for Metering and Services. However, for the 2015-20 forecast, Ergon Energy split the Domestic and Rural customer forecasts into three separate forecasts, being:

- Domestic and Rural customers;
- CICW Metering; and
- CICW Services.

However Ergon Energy did not then adjust the allocation methodology to the 19 system asset classes for Domestic and Rural customers forecasts to correctly compensate for the two new separate ‘CICW Metering’ and ‘CICW Services’ forecasts.

The incorrect application of the historical asset class allocation to the 2015-20 forecast also meant that the transfer of metering class expenditure to ACS for the next regulatory period was not taken into account.

Ergon Energy has corrected this allocation in its revised proposal and this has resulted in the expenditure forecast for the Metering asset class being reduced significantly compared to Ergon Energy’s Draft Proposal.

The outcome of this correction in the metering class expenditure forecast under Connections expenditure is a reduction from \$30.319 million to \$6.880 million. The changes are noted in Table 7 below.

**Table 7 - Change in Ergon Energy forecast Metering expenditure allocations for 2015-20**

Expenditure Category	Ergon Energy Draft Proposal Forecast (Oct 2014)	Ergon Energy Corrected Draft Proposal Forecast
Replacement - Metering	0	0
Connections - Metering	30,319	6,880

Reliability / Power Quality	6,462	6,462
Other System - Metering	2,901	2,901
Total	39,681	16,242

Ergon Energy offers this second amendment to its previously stated reset RIN Table 2.1.1 above to accurately represent the corrected SCS metering forecast expenditure in Table 8 below.

**Table 8 - Amended Reset RIN Table 2.1.1 – Ergon Energy Proposal SCS System Capex**

<b>Table 2.1.1 - Ergon Energy - Proposal – SCS Capex (\$'000s \$2014-15)</b>						
	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Replacement expenditure	181,918.017	202,073.763	174,599.246	189,320.252	186,136.953	934,008.231
Connections	85,165.152	86,276.859	87,584.972	88,776.251	89,951.560	437,754.794
Augmentation expenditure	154,295.809	147,081.576	137,701.129	110,903.008	110,166.713	660,148.235
Metering	<b>3,157.234</b>	<b>3,805.125</b>	<b>3,673.629</b>	<b>2,892.748</b>	<b>2,713.395</b>	<b>16,242.131</b>
Balancing item	<b>-3,157.234</b>	<b>-3,805.125</b>	<b>-3,673.629</b>	<b>-2,892.748</b>	<b>-2,713.395</b>	<b>-16,242.131</b>

Ergon Energy notes that this will result in other changes to RIN Template 4.2 for Metering.

Additionally Ergon Energy notes that the \$16.242 million is still an increase compared to historical expenditure however the justification for this is contained in the following Expenditure Forecast summary documents:

1. *07.00.03 Forecast Expenditure Summary Customer Initiated Capital Works* for Customer Metering SCS and works expenditure (\$6.880 million) – Investment justification is based on a top-down estimate of costs based on historical expenditure and quantities<sup>4</sup>.
2. *07.00.04 Forecast Expenditure Summary Document for Other Systems and Enabling Technologies* for Meter Configuration Management investment (\$2.901 million) – This cost represents the SCS component. Investment justification is provided in detail in section 4.2.8.<sup>5</sup>
3. *07.00.05 Forecast Expenditure Summary Document for Reliability and Quality of Supply* for Installation of power quality monitors (\$6.462 million) - Investment justification is provided in section 5.2 Quality of Supply<sup>6</sup>

In summary Ergon Energy wishes to acknowledge that the increase in expenditure is owing to planned investments for the Meter Configuration Management investment and the installation of the power quality meters being coded to the metering class.

<sup>4</sup> 07.00.03 Forecast Expenditure Summary Customer Initiated Capital Works 2015 to 2020, Appendix B. CICW unit cost estimates for its SCS, Table 23: Customer Initiated Capital works cost estimation, page 56

<sup>5</sup> 07.00.04 Forecast Expenditure Summary Other System and Enabling Technologies 2015 to 2020

<sup>6</sup> 07.00.05 Forecast Expenditure Summary Reliability and Quality of Supply 2015 to 2020

## 5. Connections expenditure

Ergon Energy's forecast of \$279.5 million (\$2014–15) to fund SCS customer connection works for the 2015–20 regulatory control period (net of customer contributions) is based upon forecast employment, housing and residential building approvals.

### 5.1. AER position

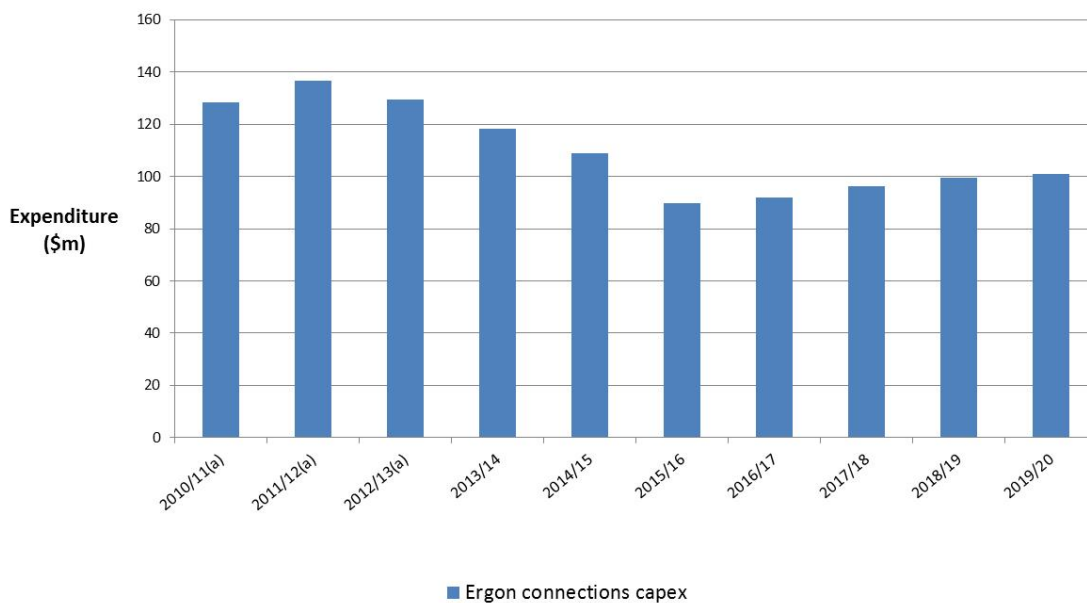
The AER state in their Preliminary Decisions under the summary of AER reasons and findings (Attachment 6, Table 6.2):

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“We accept Ergon Energy’s proposed customer connections capex and capital contributions as they are consistent with forecast construction activity in QLD.”<sup>7</sup>

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Ergon Energy notes that the AER’s assessment of the proposed connections forecast is informed by the following trend of actual and forecasted connections expenditure (net of customer capital contributions) in comparison to in construction activity in Queensland.



Source: Ergon Energy Regulatory Proposal, October 2014 (Connection capex is shown net of customer contributions)

**Figure 1 - Ergon Energy Connection capex historic actual and proposed for 2010–20 period (\$2014–15, million, including overheads)**

While the AER assessment has utilised the correct historical expenditure in its preliminary decision Ergon Energy also acknowledges statements made in the AER’s Issues Paper (December 2014).

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<sup>7</sup> AER Preliminary Decision Ergon Energy determination 2015-16 to 2019-20, Attachment 6 – Capital expenditure, Table 6.2 Summary of AER reasons and findings, page 6-9

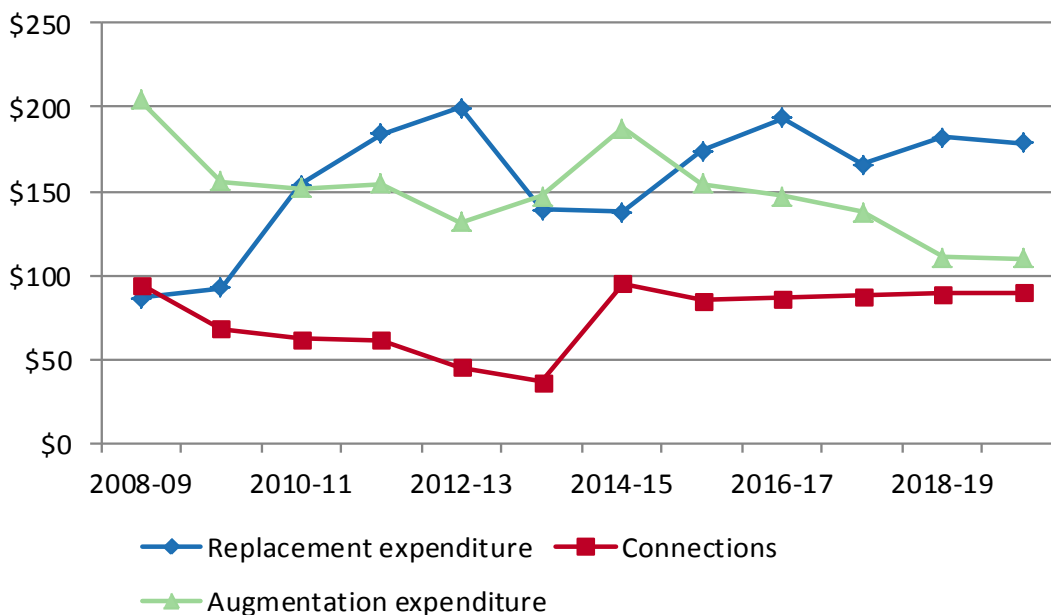
“We will investigate why Ergon Energy's proposed connections expenditure rises sharply in 2014–15 and remains at a relatively high level compared to the earlier five years.”<sup>8</sup>

Based on the AER’s comments in the Issues Paper, Ergon Energy re-examined both financial and non-financial data in both the forecast and historic RIN information provided. In doing so a material error has been revealed in the historic information provided for both the Reset RIN Table 2.1.1 for SCS Capex and Table 2.5.2 Cost Metrics by Connections Classification. The following sections attempts to clarify Ergon Energy’s position to assist the AER with its determination process.

## 5.2. Ergon Energy response

Ergon Energy offers that the data provided in both the RIN Table 2.1.1 for SCS Capex and Table 2.5.2 Cost Metrics by Connections Classification aligns with the forecast connection expenditure for the next regulatory period (2015-2020).

Ergon Energy has made errors however in submitting historical information in both the Reset RIN Table 2.1.1 for SCS Capex and Table 2.5.2 Cost Metrics by Connections Classification. Incorrect assumptions were made in regard to definitions of contestable work and attempts to back cast the change of classification of SCS and ACS services. This is evident in Figure 6 of the AER’s Issues Paper copied below (Figure 2).



Source: Ergon Energy’s submitted Reset RIN, table 2.1.1.

**Figure 2 - AER Issues Paper (December 2014), Ergon Energy – capital expenditure components (\$million, 2014–15)**

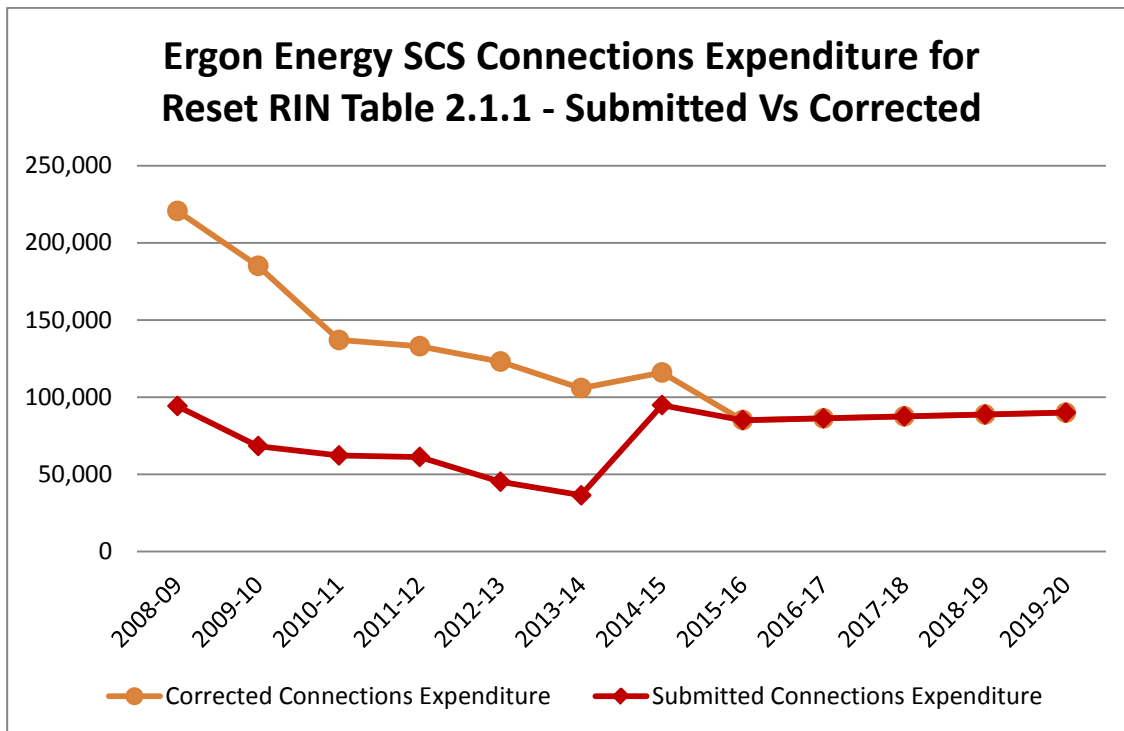
<sup>8</sup> AER Issues paper Qld electricity distribution regulatory proposals 2015-16 to 2019-20, page 16



### 5.3. Proposed amendments

Correcting the incorrect assumptions mentioned above has resulted in the following restated historical SCS connections expenditure required for Reset RIN Table 2.1.1.

We have provided a comparison of the submitted and restated expenditure data in Figure 3 below.



**Figure 3 - Ergon Energy SCS connections expenditure for Reset RIN Expenditure Summary Table 2.1.1 (\$'000's, 2014-15)**

## 6. Replacement expenditure

The AER have not accepted Ergon Energy's proposed repex forecast of \$894 million (\$2014-15) and have instead included an alternative amount of \$675 million.

### 6.1. AER position

The AER state in their summary of AER reasons and findings, Attachment 6 – Capex (April 2015), Table 6.2:

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“We do not accept Ergon Energy's proposed repex forecast of \$894 million (\$2014–15), excluding overheads. We have instead included in our substitute estimate an amount of \$675 million (\$2014–15), excluding overheads. Our estimate is 24 per cent lower than Ergon Energy's revised proposal. This reduction reflects the outcomes of our predictive modelling and evidence that Ergon Energy has a bias towards conservative risk assessment and has programs of expenditure which are not adequately justified.

We are satisfied our alternative estimate reasonably reflects the capex criteria. It includes:

1. \$271 million for pole and overhead conductor replacement, which is consistent with Ergon Energy's proposal.
2. \$178 million of expenditure for the four remaining modelled asset categories.
3. \$225 million for assets we consider that are not suitable for predictive modelling. This consists of \$126 million for the SCADA, \$61 million for pole top structures and \$38 million for assets classified by Ergon Energy as 'other'..”<sup>9</sup>

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### 6.2. Ergon Energy response

Ergon Energy does not accept the AER's position that an increase in real expenditure has not been clearly substantiated. In response to the AER's preliminary decision, Ergon Energy re-examined both financial and non-financial data in both the forecast and historic RIN information provided in Table 2.2.1 of Template 2.2. In doing so, a handful of material errors have been identified which require a correction to the Table 2.2.1 forecast data only.

1. The material error described in Section 4 of this document whereby an “error was made by Ergon Energy when applying an assumption that all SCS Metering expenditure was related to Replacement expenditure. Consequently the \$39.681 million (for Metering SCS expenditure) was deducted incorrectly from Ergon Energy's total forecast *Replacement expenditure* category”.
2. A material error in the budget for protection relay replacement forecast expenditure and volume. This data forms part of the data for the category “Field Devices” in the group

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<sup>9</sup> AER Preliminary Decision Ergon Energy determination 2015-16 to 2019-20, Attachment 6 – Capital expenditure, Table 6.2 Summary of AER reasons and findings, page 6-10

“SCADA, NETWORK CONTROL AND PROTECTION SYSTEMS BY: Function” in Template 2.2. The budget included was \$79.540 million (\$2012-13) to replace 1,001 protection relays when that amount should have been \$24.633 million (\$2012-13) to replace 310 protection relays. (refer engineering report provided as part of submission)

3. A material error in the unit cost used for the two categories “< = 11 kV; Residential ; Simple Type” and “< = 11 kV ; Commercial & Industrial ; Simple Type” in the group “SERVICE LINES BY: Connection voltage; Customer type; Connection complexity” in Table 2.2.1. An incorrect unit cost rate which was approximately 35% of the value in the business case budget preparation was used. This only affected the volumes in these two rows and as a result incorrectly showed the replacement of 103,131 services. The expenditure was correct in Ergon Energy’s workings being \$56.894 million (\$2012-13) but when the correct unit cost rate is used, the forecast replacement volume becomes a total of 38,768 services, which consists of 28,991 BAU services and 9,777 problematic services which are the subject of three separate engineering reports.
4. As a first step Ergon Energy prepared its replacement capital expenditure forecast based on 26 business cases in 2012-13 real dollars. After applying cost escalations to convert the forecast to 2014-15 real dollars this amounted to \$934 million, direct cost. However, owing to the error in issue 1 above, the incorrect direct total cost that was reported in the RIN was \$894 million. The subsequent error in Issue 2 above, resulted in the SCADA asset category expenditure being overstated and all other asset categories being adjusted down to compensate and ensure that the total expenditure reconciled to the (incorrect) RIN total of \$894 million. Table 9 below provides a summary of the data that was provided in October 2014 against how it should have been provided for a total expenditure of \$934 million.

**Table 9 – Summary of revision to Reset RIN Table 2.2.1 Ergon Energy Proposed SCS Capex**

<b>Table 2.2.1 Summary Revisions - Ergon Energy - Proposal - SCS Capex (\$'000s \$2014-15)</b>					
	Template 2.2 Forecast 2015 to 2020 submitted October 2014		Template 2.2 Forecast 2015 to 2020 amended submission		Variation %
	Expenditure	Replacements	Expenditure	Replacements	
Poles	\$76,201	23,393	\$84,691	23,393	11.1%
Pole Tops	\$103,009	76,439	\$114,504	76,439	11.2%
Conductor	\$194,712	2,104	\$216,394	2,104	11.1%
Underground	\$15,299	146	\$17,017	146	11.2%
Services	\$56,140	103,181	\$62,389	38,768	11.1%
Transformers	\$177,231	6,017	\$196,887	6,017	11.1%
Switchgear	\$70,287	60,910	\$78,125	60,910	11.2%
SCADA	\$163,237	3,159	\$121,454	2,468	-25.6%
Other	\$38,211	338	\$42,546	338	11.3%
<b>Total</b>	<b>\$894,327</b>		<b>\$934,008</b>		<b>4.4%</b>

5. The addition of the program “Conductor Clearance to Ground Backlog Remediation” increases Ergon Energy’s original program by \$33.512 million (2012-13) or \$36.400 million (\$2014-15).

Table 10 below shows the addition of this new program in columns D and E.

**Table 10 – Summary of revision to Reset RIN Table 2.2.1 Ergon Energy Proposed SCS Capex**

<b>Table 2.2.1 All Revisions - Ergon Energy - Proposal - SCS Capex (\$'000s \$2012-13 &amp; \$2014-15)</b>					
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	<b>Original Forecast</b>	<b>Original Forecast from Template 2.2*</b>	<b>Corrected Original Forecast</b>	<b>Revised Forecast</b>	<b>Revised Forecast</b>
<b>Program Business Case</b>	<b>(\$2012-13)</b>	<b>(\$2014-15)</b>	<b>(\$2014-15)</b>	<b>(\$2012-13)</b>	<b>(\$2014-15)</b>
Active Equipment Replacement	\$17,456,401	\$17,796,751	\$18,786,286	\$17,456,401	\$18,733,056
NRP EW Replace, Corenet Site Infrastructure Replacement	\$7,916,968	\$8,071,326	\$8,535,536	\$7,916,968	\$8,506,438
End of life Radio refurbishment Mackay to Maryborough	\$15,486,076	\$15,788,011	\$16,542,788	\$15,486,076	\$16,534,955
End of life Radio refurbishment Western Queensland	\$12,411,738	\$12,653,732	\$13,244,130	\$12,411,738	\$13,242,442
RTU Replacement Program	\$7,577,089	\$8,811,494	\$8,152,692	\$7,577,089	\$8,130,089
AFLC Equipment Asset Replacement Plan	\$9,330,458	\$9,144,339	\$10,162,148	\$9,330,458	\$9,530,665
OT03B Parent BC - Protection Relay Replacement	\$24,622,589	\$77,953,137	\$27,162,731	\$24,622,589	\$23,820,144
Distribution Feeder Reconductoring Program	\$150,221,903	\$145,357,040	\$169,281,939	\$150,221,903	\$167,173,497
Instrument Transformer Replacement Program	\$21,444,344	\$21,102,726	\$23,652,304	\$21,444,344	\$20,761,958
Sub Transmission Line Refurbishment Program	\$46,986,070	\$45,425,863	\$53,201,285	\$46,986,070	\$50,109,972
Substation Capacitor Bank Replacement Program	\$8,438,900	\$8,304,464	\$9,304,240	\$8,438,900	\$8,171,601
Substation DC System Upgrade Program	\$12,527,437	\$13,148,147	\$14,495,235	\$12,527,437	\$10,735,872
Substation High Voltage Circuit Breaker and Switchboard Replacement Program	\$28,091,832	\$27,744,438	\$31,007,860	\$28,091,832	\$27,179,716
Substation Isolators Replacement Program	\$12,201,088	\$12,006,719	\$13,452,210	\$12,201,088	\$11,814,624
Substation Power Transformer Replacement and Refurbishment Program	\$73,479,640	\$72,309,076	\$79,634,761	\$73,479,640	\$81,689,896
Substation SVC Replacement Program	\$9,532,996	\$9,412,057	\$10,544,861	\$9,532,996	\$9,183,306
BC 558 Defective Connector Splice Replacement Program	\$3,627,965	\$3,776,818	\$4,113,850	\$3,627,965	\$4,058,476
BC1 503 NDR EECL Replace Laminated Crossarms	\$2,125,849	\$2,233,872	\$2,346,089	\$2,125,849	\$2,327,260
BC1 506 NDR EECL Non-Ceramic Customer End Service Fuse Replacement	\$730,761	\$768,099	\$817,355	\$730,761	\$808,835
BC1 533 NDR EECL EDO Fuse Replacement in High Risk Fire Areas	\$972,509	\$1,022,469	\$1,087,756	\$972,509	\$1,076,417
BC1 570 NDR EECL Inspect and Replace Brand X Service Cable Replacement	\$2,146,512	\$2,243,498	\$2,391,458	\$2,146,512	\$2,387,590
BC1 608 NDR EECL Cast Iron Cable Pot Head Replacement	\$2,316,357	\$2,411,032	\$2,556,267	\$2,316,357	\$2,517,320
BC1 615 NDR EECL Replace Figure 8 Colour Coded Service Cables	\$9,117,945	\$9,582,531	\$10,313,885	\$9,117,945	\$10,249,373
BC1 619 NDR EECL Replace Defect Management	\$314,296,033	\$319,628,174	\$351,820,017	\$314,296,033	\$345,111,629
BC1 621 NDR EECL Replace Neutral Screened Service Cables	\$4,113,533	\$4,319,232	\$4,699,610	\$4,113,533	\$4,655,540
BC1 754 NDR EECL Distribution Earthing Remediation	\$41,478,196	\$43,311,939	\$46,722,643	\$41,478,196	\$46,145,662
<b>Original Total</b>	<b>\$838,651,186</b>	<b>\$894,326,984</b>	<b>\$934,029,936</b>	<b>\$838,651,186</b>	<b>\$904,656,334</b>
Conductor Clearance to Ground Backlog Remediation				\$33,512,132	\$36,400,957
<b>REVISED TOTAL</b>				<b>\$872,163,318</b>	<b>\$941,057,291</b>

6. In addition, Ergon Energy has completely revised the escalation of all programs, the effect of which is shown in column E of Table 10. This has required the further revision of Table 2.2.1 of Template 2.2 which is now reconciled with the totals in column E.

Ergon Energy has therefore prepared two new versions of Template 2.2, Table 2.2.1 to:

1. Reflect the **Table 9** amendments on the original Reset RIN template submission (October 2014) after these material issues have been addressed; and
2. To reflect Ergon Energy's revised Asset Renewal expenditure forecast as presented in column E of Table 10 above.

This spreadsheet (**Attachment A**) has expenditure presented in \$2014-15 and contains three sheets:

- Sheet a - Template 2.2 Repex Original October 2014 data - as submitted with Regulatory Proposal in October 2014
- Sheet b - Template 2.2 Repex Original October 2014 data - amended to correct material errors relating to
  - removal of Metering capex expenditure,
  - forecast protection relay volume and expenditure in 'Field Devices' and
  - forecast replacement volume for services
- Sheet c - Template 2.2 Repex New July 2015 data - revised to include
  - new 'Conductor Clearance to Ground Backlog Remediation' program and
  - completely revised escalation of all programs

## 7. Supporting documents

The following documents support our response to the AER on Ergon Energy Reset RIN responding to material issues:

Name
07.00.01 Forecast Expenditure Summary Asset Renewal 2015 to 2020
07.00.02 Forecast Expenditure Summary Corporation Initiated Augmentation 2015 to 2020
07.00.03 Forecast Expenditure Summary Customer Initiated Capital Works 2015 to 2020
07.00.04 Forecast Expenditure Summary Other System and Enabling Technology 2015 to 2020
07.00.05 Forecast Expenditure Summary Reliability and Quality of Supply 2015 to 2020
Submission to the AER on its Preliminary Determination – Asset Renewal
Attachment A - EECL RESET RIN_Revisions to Template 2_2 Repex

## Definitions, acronyms, and abbreviations

ACS	Alternative Control Services
AER	Australian Energy Regulator
Augex	Augmentation expenditure
CAM	Cost Allocation Method
Capex	Capital expenditure
CPI	Consumer Price Index
Ergon Energy	Ergon Energy Corporation Limited
Repex	Replacement expenditure
RIN	Regulatory Information Notice
SCS	Standard Control Services