

# Submission to the AER on its Preliminary Determination

**Public Lighting** 



## Summary

This document sets out Ergon Energy's response to the Australian Energy Regulator (AER) on Alternative Control Services (ACS) – Public Lighting.

Ergon Energy accepts the AER's Preliminary Determination in relation to:

- remaining lives and have updated our Regulatory Proposal to reflect this
- the form of price control which is consistent with our October Regulatory Proposal.

However, we reject the AER's decision in relation to the Weighted Average Cost of Capital (WACC) and gamma consistent with our approach to Standard Control Services.

Finally, Ergon Energy has updated its Regulatory Proposal to reflect:

- The 2013-14 base year for operating expenditure (Opex)
- Updated inputs including overhead rates, inflation, escalators, the Weighted Average Cost of Capital and gamma
- Revised prices as a result of Ergon Energy's approach in its revised Regulatory Proposal.

## **Outcomes**

In light of the above, Ergon Energy has proposed charges for public lighting that have been reduced in 2015-16, as per the AER's Preliminary Determination, then adjusted in 2016-17 in line with our actual costs and maintained for the final three years of the period on a price path linked to the Consumer Price Index (CPI).

## Contents

1.	. Introduction				
2. AER's Preliminary Determination					
	2.1.	Preliminary decision			
	2.2.	Control mechanism			
	2.3.	Preliminary decision revenue requirement5			
	2.4.	Preliminary determination prices5			
3.	Stake	Pholder comments7			
4. Ergon Energy's Response					
	4.1.	Control mechanism			
	4.2.	Response to adjustment of rate of return parameters			
	4.3.	Remaining lives			
5.	Key F	Revisions10			
	5.1.	Changes to base year			
	5.2.	Updated inputs10			
	5.3.	Customer numbers			
	5.4.	Correction of misstatement			
	5.5.	Rate of return			
	5.6.	New revenue requirement10			
	5.7.	New proposed prices			
Sι	ipport	ing documents12			
De	efinitio	ns, acronyms, and abbreviations13			

## 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 on 1 July 2015 and ending on 30 June 2020.

This document details our response to the AER's Preliminary Determination on Public Lighting<sup>1</sup>. We have made revisions to our Regulatory Proposal and its supporting documents to reflect these positions, where necessary. In particular we have updated the overview document titled 05.01.01 - Public Lighting Services Summary. We have also updated the models used to derive the prices and provided these to the AER.

Ergon Energy has structured this document in the following manner:

- Chapter 2 summarises the AER's Preliminary Determination in relation to Public Lighting.
- Chapter 3 outlines issues raised by stakeholders since the lodgement of our initial Regulatory Proposal, both through our own consultation process and the AER's.
- Chapter 4 provides our response to the positions adopted by the AER.
- Chapter 5 sets out areas of our initial Regulatory Proposal which have been revised due to new or updated information, or changes in methodology.

<sup>&</sup>lt;sup>1</sup> Ergon Energy uses the term Street Lighting internally for this asset category. For the purposes of this document the terms Public Lighting and Street Lighting are used interchangeably.

### 2. AER's Preliminary Determination

Attachment 16 of the AER's Preliminary Determination details its positions on Public Lighting. The following sections summarise these positions and the AER's rationale.

#### 2.1. Preliminary decision

The AER did not accept Ergon Energy's proposed Public Lighting charges because it determined:

- a nominal post-tax WACC of 5.85 per cent instead of the proposed 8.02 per cent
- imputation credit assumption of 40 per cent instead of the proposed 25 per cent

In all other respects the AER approved Ergon Energy's Proposal – including the Light Emitting Diode (LED) Transition Plan and the associated exit fees.

#### 2.2. Control mechanism

Consistent with the Framework and Approach Paper and our October Regulatory Proposal, the AER has applied caps on the prices of individual services. For the first year, the AER has determined a schedule of prices. For the following years, the previous year's prices are adjusted by CPI and an X factor.

The control mechanism is as follows:

$$p_{i}^{t} = p_{i}^{t-1}(1 + \Delta CPI_{t})(1 - X_{i}^{t}) + A_{i}^{t}$$

Where:

 $p_i^{t-1}$  is the cap on the price of service i in year t-1

 $p_i^t$  is the cap on the price of service i in year t

 $\Delta CPI_t$  is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from December in year t-2 to December in year t-1. For example, for the 2015-16 year, t-2 is December 2013 and t-1 is December 2014 and in the 2016-17 year, t-2 is December 2014 and t-1 is December 2015 and so on.

 $X_i^t$  is the value of X for the year t in the regulatory control period. There are no X-factors for public lighting

 $A_i^t$  is zero.

Compliance with the control mechanism must be demonstrated in the annual Pricing Proposal.

#### 2.3. Preliminary decision revenue requirement

Table 16.18 of the Preliminary Determination<sup>2</sup> set out the total revenue the AER determined to be appropriate.

#### Table 16.18 Total revenue, millions

	2015—16	2016—17	2017—18	2018—19	2019—20
Proposed	32.9	34.2	35.9	37.5	38.8
Preliminary decision	29.7	30.9	32.5	34.0	35.3
change from previous year (percentage)	-6	4	5	4	4

Source: AER analysis.

#### 2.4. Preliminary determination prices

Table 16.19 of the Preliminary Determination set out the prices the AER determined to be appropriate.

These prices were calculated by the AER using the pricing methodology proposed by Ergon Energy and described in section 8.2 of 05.01.01 – Public Lighting Services Summary. The resulting prices were approximately 10% below those proposed in our Regulatory Proposal.

The exit fees proposed by Ergon Energy were accepted as shown in an extract from the Preliminary Determination below.

#### Table 16.19 Preliminary decision prices for public lights, \$ day

	2015—16	2016—17	2017—18	2018—19	2019—20
EO&O - Major	1.0252	1.0621	1.1062	1.1446	1.774
EO&O - Minor	0.6108	0.6320	0.6581	0.6804	0.6990
GO&O - Major	0.4140	0.4217	0.4376	0.4479	0.4528
GO&O - Minor	0.2712	0.2762	0.2867	0.2933	0.2964

Source: AER Analysis

Note: The above table has been taken directly from the Preliminary Determination<sup>3</sup>. The EO&O - Major price for 2019-20 is clearly a typographical error and should read 1.1774 and not 1.774. Also the AER shows GO&O which should show as G&EO (for Gifted and Ergon Energy operated).

 <sup>&</sup>lt;sup>2</sup> AER (2015), Preliminary Decision, Ergon Energy determination 2015-16 to 2019-20, Attachment 16 – Alternative Control Services, p16-57
<sup>3</sup> AER (2015), Preliminary Decision, Ergon Energy determination 2015-16 to 2019-20, Attachment 16 – Alternative Control Services, p16-

<sup>&</sup>lt;sup>3</sup> AER (2015), Preliminary Decision, Ergon Energy determination 2015-16 to 2019-20, Attachment 16 – Alternative Control Services, p16-58

#### Preliminary Determination Exit Fees<sup>4,5</sup>

- \$1,390 for Ergon owned and operated major road lights
- \$840 for Ergon owned and operated minor road lights
- \$230 for council owned major road lights<sup>101</sup>
- \$195 for council owned minor road lights<sup>102</sup>
- <sup>101</sup> Exit fee proposed for council owned because Ergon Energy incurs refurbishment capital expenditure in respect of these assets.
- <sup>102</sup> Exit fee proposed for council owned because Ergon Energy incurs refurbishment capital expenditure in respect of these assets.

<sup>&</sup>lt;sup>4</sup> AER (2015), Preliminary Decision, Ergon Energy determination 2015-16 to 2019-20, Attachment 16 – Alternative Control Services, p16-56

<sup>&</sup>lt;sup>5</sup> Note the reference to 'council owned street lights' should be Gifted and Ergon Energy operated lights

## 3. Stakeholder comments

Ergon Energy has an active program of engagement with its Street Lighting Customers which has continued through the regulatory decision making process.

Street Lighting customers are substantially shielded from the impact of price changes by Queensland Government policy whereby ACS charges in respect of street lighting have, in the past, been borne by the Queensland Government under the Community Service Obligation. Customers will bear 10% of these costs in 2015-16 and Government has indicated its intention to transition to user pays over some as yet unspecified period.

Street Lighting customers are more directly and immediately affected by the LED Transition Plan and Exit Fee provisions of the Preliminary Determination. In general, the feedback on these initiatives has been constructive and positive.

In response to our October Regulatory Proposal, the following feedback was provided by stakeholders.

The Local Government Association of Queensland appreciated our work to improve the accuracy of public lighting inventories and the future development of LightMap, as well as progress made to date on the Service Level Agreement. However, it raised concerns with the end of life treatment of contributed public lights; given distributors do not make an allowance for the replacement of these assets in their forecasts and the costs are borne by the public lighting customer.<sup>6</sup>

The Far North Queensland Regional Organisation of Councils in principle supported the LED transition program and the sunk costs of assets being spread across all public lighting customers. However, it queried whether:

- LEDs have been factored into the depreciation allowance
- maintenance costs have been lowered to take into account the introduction of LEDs.

Further, it did not support customers having to pay an exit fee outside of the LED program. With respect to exit fees, it:

- suggested the exit fees should be dependent on the age of the asset
- queried whether an exit fee should be paid for gifted public lights.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> LGAQ, Op. cit, p3.

<sup>&</sup>lt;sup>7</sup> Far North Queensland Regional Organisation of Councils, Op. cit, pp5-6.

## 4. Ergon Energy's Response

Ergon Energy largely accepts the AER's Preliminary Determination in relation to Public Lighting except for the rate of return parameters. The following sections detail our response to the AER's Preliminary Determination.

#### 4.1. Control mechanism

Ergon Energy accepts the AER's decision to apply a price cap form of control.

We have used the January 2015 version of the Post Tax Revenue Model (PTRM) for Public Lighting, which allows for a time-varying return on debt. Therefore, we question whether the AER intends to annually adjust for the return on debt as per the approach adopted for Standard Control Services (SCS). If it does, this will need to be incorporated into the X factors for Public Lighting.

Ergon Energy proposes that the AER account for differences between the 2015-16 prices approved in the Preliminary Determination and those approved in the Substitute Determination via a 'true-up' mechanism which would adjust the prices in the remaining years of the regulatory control period. For this to occur it may be necessary for X factors to be applied.

#### 4.2. Response to adjustment of rate of return parameters

Ergon Energy does not accept the substitute cost of capital and gamma values that the AER has used in its Preliminary Determination to determine the annual revenue requirements for its public lighting for the 2015-20 regulatory control period.

The reasons for not accepting these values are the same as those that it has given in this revised Regulatory Proposal for not accepting the AER's substitute cost of capital and gamma values for SCS.

Ergon Energy proposes the same cost of capital and gamma values be applied to its public lighting services, as it proposes for its SCS.

As noted above, we have used the January 2015 version of the PTRM for Public Lighting, which allows for a time-varying return on debt. Therefore, we question whether the AER intends to annually adjust for the return on debt as per the approach adopted for SCS.

Ergon Energy also notes that it identified an error in the AER's published PTRM. Specifically it appears that the AER has used an incorrect figure for the inflation rate on the Input tab of the model in the Cost of Capital section (rows 188 to 194). The AER has applied an inflation rate of 2.38 per cent instead of 2.55 per cent.

#### 4.3. Remaining lives

We have adopted the AER's weighted average remaining life approach for calculating the remaining lives for public lighting assets without modification and have not modified the existing public lighting asset classes in any way.

Ergon Energy has adopted this approach, but notes its concerns that it results in effects on the Regulatory Asset Base (RAB) that are inconsistent with the underlying realities of the public lighting sector.

As part of the Exit Fee setting process Ergon Energy calculates the estimated average value of each type of street light for each year of the regulatory control period. These results are set out below:

#### Table 1 Average street light RAB by type

	2015-16	2016-17	2017-18	2018-19	2019-20
EO&O					
Major	\$1,281	\$1,358	\$1,422	\$1,492	\$1,565
Minor	\$714	\$759	\$797	\$839	\$883
G&EO					
Major	\$85	\$89	\$93	\$97	\$101
Minor	\$47	\$50	\$52	\$54	\$56

Note: The exit fees also include a \$150 administrative cost.

Ergon Energy is concerned that the rise in RAB value per light mandated by the AER approach materially increases the risk that it will eventually be unable to recover its prudently incurred capital costs.

Please note that the exit fees proposed have been held at a single value for the regulatory control period. This value was selected based on the set of average values based on our October Regulatory Proposal, which did not rise over the period. Despite the increase in the RAB, Ergon Energy does not propose to alter the exit fees as these have already been communicated to customers.

## 5. Key Revisions

While Ergon Energy has largely accepted the AER's Preliminary Determination, it has been necessary to update our Regulatory Proposal to reflect updated information. This is explained in the following sections.

#### 5.1. Changes to base year

Ergon Energy has updated its base year for Opex to 2013-14 as this reflects the latest year of audited accounts. This is consistent with our approach to SCS.

#### 5.2. Updated inputs

Ergon Energy has updated several inputs underlying the calculation of revenue for Public Lighting. In particular, we have revised:

- Our forecast overhead rates, in line with our Cost Allocation Method
- Our forecast inflation consistent with our approach to SCS
- Our forecast real cost escalators. Ergon Energy has applied the escalators provided by Jacobs<sup>8</sup> in our pricing models.<sup>9</sup>

#### 5.3. Customer numbers

Ergon Energy has also been able to resolve the ownership of a number of disputed lights arising from completion of the Street Light audit. This has resulted in an update to the opening inventory of Street Lights.

#### 5.4. Correction of misstatement

Ergon Energy has become aware of an incorrect statement in our 05.01.01 – Public Lighting Services Summary document. Specifically, the document references "the reversal of the tax shelter related to tax deprecation rates on assets" on page 26. This explanation does not clearly articulate the impacts of capital contributions on the income tax calculation. We have therefore amended this statement in our revised Regulatory Proposal.

#### 5.5. Rate of return

Ergon Energy has updated its cost of capital and gamma forecasts consistent with its approach to SCS.

#### 5.6. New revenue requirement

As a result of the changes noted above, it has been necessary to calculate a new revenue requirement. The new revenue requirement is set out in 05.01.01 – (Revised) Public Lighting Services Summary.

<sup>&</sup>lt;sup>8</sup> Refer to 06.02.07 – Jacobs: Addendum Cost Escalation Factors 2015-20.

<sup>&</sup>lt;sup>9</sup> It is important to note Ergon Energy has not updated the nominal escalators applying in 2015-16. These escalators were approved by the AER in the Preliminary Determination and the 2015-16 Pricing Proposal.

While there is variation in individual elements the overall level of the revenue requirement is materially identical to that approved in the Preliminary Determination. The most substantial changes are an increase in the forecast operating costs and an offsetting decrease in regulatory depreciation.

#### 5.7. New proposed prices

Generally, prices do not take effect until after the AER's Final Determination. However, due to transitional arrangements following the introduction of changes to the National Electricity Rules, the AER's Preliminary Determination on pricing is binding for 2015-16. As a result, Ergon Energy has implemented the 2015-16 prices as set out in the AER's Preliminary Determination. These prices have been loaded into the relevant billing systems and will be charged from 1 July 2015.

Therefore, Ergon Energy proposes that the AER account for differences between the 2015-16 prices approved in the Preliminary Determination and those approved in the Substitute Determination via a 'true-up' mechanism which would adjust the prices in the remaining years of the regulatory control period. To assist the AER in this regard, Ergon Energy has calculated prices based on the PTRM as if prices were not already set for 2015-16, as well as applying a true-up mechanism to reflect the fixed prices in 2015-16.

Application of the pricing methodology approved by the AER (together with the true-up mechanism) using the revised inputs produces materially similar prices to those in the Preliminary Decision for EO&O street lights. As shown in Table 2a of 05.01.01 - (Revised) Public Lighting Services Summary. ACS prices decrease in year 1 by around 17%. In year 2 they increase by slightly less than inflation and thereafter by CPI. The change in the makeup of the revenue requirement produces more material changes in the prices proposed for G&EO street lights. After the already adopted 17% decrease in year 1, a year 2 increase of 16% is required – followed by changes in line with inflation.

The approach used for the true-up mechanism is largely consistent with the approach used in Standard Control Services through the use of X-factors. That is, X-factors are applied in order to smooth the Annual Revenue Requirement over the regulatory control period. This is normally achieved by making a Year 1 adjustment, and holding the smoothing adjustments in Years 2 to 5 at a constant rate (i.e. a constant 'X'). In Ergon Energy's case, the X-factors can only be adjusted for the remaining four years of the regulatory control period (2016-17 to 2019-20). This is because the prices for 2015-16 have already been established through the annual Pricing Proposal process based on the AER's Preliminary Determination. Therefore, Ergon Energy has made an adjustment in Year 2 and applied a constant X-factor over the remaining years of the regulatory control period.

Although changes in the depreciation methodology would, on the numbers, justify an increase in the Exit Fee rates, Ergon Energy does not propose to vary these. This is because we are already applying the rates in 2015-16 and they have already been discussed with customers contemplating an LED transition.

In summary, adoption of the revised prices will result in Ergon Energy recovering an amount of revenue for street lighting services materially identical to that approved in the Preliminary Determination.

## **Supporting documents**

The following documents support our response to the AER on public lighting:

Name	Ref
(Revised) Public Lighting Services Summary	05.01.01

## Definitions, acronyms, and abbreviations

This section contains definitions for all acronyms, technical terms, and abbreviations used in the document.

ACS	Alternative Control Services
AER	Australian Energy Regulator
CPI	Consumer Price Index
EO&O	Ergon Energy Owned and Operated
Ergon Energy	Ergon Energy Corporation Limited
G&EO	Gifted and Ergon Energy Operated
LED	Light Emitting Diode
Opex	Operating expenditure
PTRM	Post Tax Revenue Model
RAB	Regulatory Asset Base
SCS	Standard Control Services
WACC	Weighted Average Cost of Capital