Attachment 14: Alternative Control Services

Regulatory proposal for the ACT electricity distribution network 2019–24
January 2018

evoenergy

Table of contents

List of tables

List of appendixes

14.1 Introduction

The Australian Energy Regulator (AER) has classified Evoenergy's Type 5 and Type 6 metering services and ancillary services as Alternative Control Services (ACS) for the 2019–24 regulatory period.[1] These services represent a relatively small component of Evoenergy's total revenue: during the 2014–19 regulatory period ACS is estimated to account for around five per cent of Evoenergy's total revenue. Evoenergy's Type 7 metering services were classified as ACS in the 2014–19 period, but from 1 July 2019 will be classified as Standard Control Services (SCS).

The National Electricity Rules (Rules) regarding the control mechanism to apply to ACS are less prescriptive than for SCS. For SCS, the control mechanism must be of the prospective 'CPI minus X' form, or some incentive-based variant, in accordance with Part C of clause 6.26 of the Rules. However, for ACS, the control mechanism must have a basis stated in the distribution determination, and may (but need not) use elements of Part C of clause 6.26 of the Rules (with or without modification).

The different regulatory requirements for ACS and SCS reflect their different characteristics. SCS that include distribution and transmission services are central to electricity supply and are relied on by most, if not all customers. Because of this, costs associated with these services are spread across the customer base. In contrast, ACS are often customer specific or requested, and are billed on a per service basis to individual customers.

Evoenergy considers that its proposals for ACS, as set out in this chapter, will result in benefits for consumers by providing cost-reflective prices, set in a transparent way and subject to a defined price path over the regulatory period. Customers will only bear the costs of providing these specific services if and when they require the services.

14.2 Overview of Evoenergy's proposals for ACS

14.2.1 Classification of ACS

Evoenergy proposes to adapt the AER services classifications as follows.

- The AER's classification of services, as set out in its July 2017 Framework and Approach paper, of Type 5 and Type 6 metering services as ACS.
- The AER's classification of services as set out in its Framework and Approach paper, of the removal of Type 7 metering from ACS and re-assignment to SCS.
- The AER's classification of services, as set out in its Framework and Approach paper, of ancillary services as ACS. The services to be covered are described in section 14.4.

[1] Framework and Approach, ActewAGL, Regulatory control period commencing 1 July 2019.

14.2.2 Control mechanisms for ACS

Evoenergy accepts the AER's determination in its Framework and Approach paper that the form of control mechanism for ACS will be price caps on individual services. While the *form* of the control mechanism for ACS must be price caps, under clause 6.2.6(b), the control mechanism must have a *basis* stated in the distribution determination.

Evoenergy proposes the following basis for the control mechanisms to be the most appropriate when assessed against the criteria set out in clause 6.2.5(d). These are:

- for metering services, a limited building block approach consistent with the approach in the 2014–19 regulatory period; and
- for ancillary services, a cost build-up approach consistent with the approach in the 2014–19 regulatory period.

Evoenergy considers that the proposed basis for the control mechanisms are the most appropriate, when assessed against the criteria set out in clause 6.2.5(d) of the Rules (discussed further below).

14.3 Metering services (Types 5 and 6)

For the 2014–19 regulatory period, the AER classified Evoenergy's Type 5 and Type 6 metering services as ACS and applied individual price caps to each of the metering and ancillary services. For the 2019–24 regulatory period, the AER has retained the ACS classification and the individual price cap form of control.

Evoenergy accepts the AER's classification of metering services and notes that there are no unforeseen circumstances which could justify a departure from the classification[2] of the following services as ACS:

- Types 5 and 6 metering data services, which includes collection, processing, storage and delivery;
- scheduled meter reads;
- maintaining and repairing meters and load-control equipment;
- meter testing during business hours (refunded to customer if meter proves faulty); and
- special meter reading or check (refunded to customer if original reading was incorrect).

For consistency with the Australian Energy Market Commission's (AEMC's) Power of Choice reforms, services relating to meter installation do not form part of Evoenergy's ACS proposal, and are proposed to be removed from its pricing schedule (see section 14.4).

14.3.1 Proposed basis for the metering control mechanism

Evoenergy proposes to apply a building block approach to determine the price caps for all metering services, other than ancillary metering services which are subject to the cost build-up approach, along with other ancillary services. Evoenergy's proposed approach to metering is effectively a continuation of the approach used in the 2014–19 control

[2] As permitted under clause 6.12.3(b) of the Rules.

period, with the same post-tax revenue model (PTRM), roll-forward model (RFM) and tax asset base in place, with some minor changes which reflect Power of Choice, and changes to the names of some cost categories. An assessment of the proposed approach against the factors the AER is required to consider, under clause 6.2.5(d) of the Rules, is provided in Table 14.1.

Table 14.1. Evoenergy's assessment of basis of control

National Electricity Rules factor	Evoenergy's assessment
The potential for the development of competition in the relevant market and how the control mechanism might influence that potential.	The choice of the basis for the control mechanism is unlikely to affect the potential for competition to develop.
The possible effects of the control mechanism on administrative costs of the AER, the Distribution Network Service Provider and users or potential users.	Administrative costs will be minimised by continuing to apply the current building block approach. Moving to an alternative would involve higher administrative costs.
The regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination.	The proposed approach has been used in the ACT in the 2009–14 and 2014–19 regulatory periods, and remains appropriate for the 2019–24 regulatory period.
The desirability of consistency between regulatory arrangements for similar services.	A building block approach to metering and a cost build-up approach to ancillary services has been applied across several jurisdictions of the National Electricity Market.
Any other factor.	A further relevant factor is consistency with the national electricity objective. This requires that the approach adopted allows Evoenergy to recover at least the efficient costs of providing the services, including an allowance for efficient capital costs incurred. The building block analysis is best suited to meeting this objective.

14.3.2 Proposed basis for the metering control mechanism

Under Chapter 7 of the Rules, Evoenergy is the responsible organisation for the installation of Type 5 and Type 6 meter in the ACT connected to Evoenergy's electricity network up to 31 March 2018. As a result of the Power of Choice reforms, Evoenergy ceased receiving orders for the installation of Type 5 meters from 1 December 2017, and has until 31 March 2018 to complete any orders received before 1 December 2017. Service orders for new meters from 1 December 2017 were directed to metering coordinators.

Evoenergy will continue to perform business functions associated with the existing installed Type 5 and Type 6 meters, and these functions will remain subject to price cap regulation. These services include: meter reading, meter testing, data validation and compliance activities. Evoenergy will also continue to provide customers with ancillary services, and these services will remain subject to cost build-up regulation.

In addition to its regulatory obligations, other major drivers of Evoenergy's metering costs include labour costs, occupational health and safety, and other input costs. Information on these costs is provided in the Regulatory Information Notice templates.

14.3.3 Meter population

As of 30 November 2017, Evoenergy has an active meter population of approximately 206,000 of Type 5 and Type 6. Of these, there are 1,558 low voltage current transformer (LV CT) connected metering installations.

A summary of the installed population of meters and LV CT as of 30 November 2017 is provided in Table 14.2.

Evoenergy will not be installing new or replacement meters following the Power of Choice commencement date of 1 December 2017, and the transition period ending on 30 March 2018. New and replacement meters will be Type 4 and the responsibility of retailers.

During the 2014–19 regulatory period, Evoenergy extended its metering supply contract to include next generation variants of existing interval capable meters. These meters can support field replaceable communication modules and meet the minimum functional specification for advanced meters. They were used for all new meter installations and replacements carried out by Evoenergy between June 2016 and March 2018. There was no significant cost increase with the use of these meters compared to superseded versions.

The Power of Choice reforms have resulted in Evoenergy changing the way it forecasts meter numbers. From 1 April 2018 Evoenergy's forecast of the number of regulated meters in the ACT will reflect an assumed churn from Type 5 and Type 6 meters to Type 4 meters. As a result, the number of customers on the metering tariffs depicted in Table 14.4 will decline.

Table 14.2. Evoenergy installed metering assets

Year	Type 5	Type 6	Total	% Type 5	LV CT
2015/16	69,220	133,678	202,898	34.1%	1,369
Installed Base (30/11/2017)	89,043	116,715	205,758	43.2%	1,558

Table 14.3. Number of metering customers, 2014–19 period

Tariff	Description	2014/15	2015/16	2016/17	2017/18	2018/19
MP1	Quarterly metering non-capital rate	163,864	166,978	170,513	172,010	170,574
MP2	Monthly non-interval metering non-capital rate	12,738	13,123	13,114	12,903	12,281
MP3	Monthly interval metering non-capital rate	1,355	1,337	1,748	1,840	1,840

Tariff	Description	2014/15	2015/16	2016/17	2017/18	2018/19
MP4	Monthly manually-read interval metering non-capital rate	1,890	1,917	1,902	1,903	1,902
MP6	Quarterly manually-read interval metering non-capital rate	0	0	0	0	0
MP7	Quarterly basic metering capital rate	163,864	166,602	165,789	163,026	163,026
MP8	Monthly non-interval metering capital rate	12,738	12,975	12,534	12,025	11,403
MP9	Monthly multi-register non-interval metering capital rate	1,355	1,200	1,244	1,536	2,151
MP10	Monthly manually-read interval metering capital rate	1,876	1,237	571	591	590

Note: 2017/18 and 2018/19 figures are estimates.

Table 14.4. Forecast number of metering customers, 2019–24 period

Tariff	Description	2019/20	2020/21	2021/22	2022/23	2023/24
MP1	Quarterly metering non-capital rate	169,139	167,704	166,269	164,834	163,399
MP2	Monthly non-interval metering non-capital rate	11,660	11,038	10,417	9,795	9,174
MP3	Monthly interval metering non-capital rate	1,840	1,840	1,840	1,840	1,840
MP4	Monthly manually-read interval metering non-capital rate	1,902	1,902	1,902	1,902	1,902
MP6	Quarterly manually-read interval metering non-capital rate	0	0	0	0	0
MP7	Quarterly basic metering capital rate	163,026	163,026	163,026	163,026	163,026
MP8	Monthly non-interval metering capital rate	10,782	10,160	9,539	8,917	8,296

Tariff	Description	2019/20	2020/21	2021/22	2022/23	2023/24
MP9	Monthly multi-register non-interval metering capital rate	2,766	3,381	3,996	4,611	5,226
MP10	Monthly manually-read interval metering capital rate	590	590	590	590	590

Note: 2017–18 and 2018–19 figures are estimates.

14.3.4 Installations and replacements

Evoenergy was the sole installer of Type 5 and Type 6 meters in the ACT up to 31 March 2018. From 1 December 2017 to 31 March 2018, Evoenergy will install Type 5 meters if a service order for the meter was received before 1 December 2017. From 1 December 2017, metering coordinators became responsible for processing service orders for new or replacement meters. Evoenergy cannot install any Type 5 or Type 6 meters from 1 April 2018, and from this date the regulated metering asset base will progressively decline as Type 5 and Type 6 meters are removed and replaced with Type 4 meters.

Evoenergy will adopt a run-to-failure strategy to drive meter replacements. Only meters that fail in service or meter families that fail meter testing under the testing plan will be replaced. Meter replacement work orders will be sent to the energy retailer.

Table 14.5. Meter installation, 2014–19 regulatory control period

Number of meters	2014/15	2015/16	2016/17	2017/18	2018/19
Type 5					
- as new meter	10	15	110	37	0
- as replacement meter	40	67	60	47	0
- Total Type 5	50	82	170	84	0
Type 6					
- as new meter	2,300	2,196	4,304	2,000	0
- as replacement meter	2,605	1,813	1,500	651	0
- Total Type 6	4,905	4,009	5,804	2,651	0

Note: 2017–18 figures are estimates.

Evoenergy's Meter Asset Management Plan[3] sets out its strategy for meter replacement, testing and inspection of Type 5 and Type 6 meters, and LV CT where applicable. A copy of the Plan is provided at Appendix 14.1 of this attachment.

There are currently 19,179 active meters over 40 years old in the ACT, which will be replaced with Type 4 interval meters at the energy retailer's discretion or in the event of a meter failure.

These meters are divided into 13 models, shown below in Table 14.6. These models are further divided into 86 families. Additionally, Evoenergy plans to retire several small meter families of any age, due to the high relative cost of testing meter families with small population sizes.

Table 14.6. Summary of meter models installed between 1970 and 1977

Meter model	Number of installations*
BAZ	344
M1	2,022
M2	3,822
SD	1,057
SDM	4,277
SDM-6DIGIT	141
SDML	2
SDP	305
TM2C	88
WF2	263
WF3S	4,013
WF3T	2,741
YL5	401
TOTAL	**19,179**

Source: Meter Asset Management Plan.

[3] Evoenergy, Meter Asset Management Plan, Appendix 14.2.

14.3.5 Meter testing

Evoenergy utilises its own metering staff to carry out testing of all direct connected Type 6 meters. The Works Delivery Branch has eight electrical technicians capable of testing Type 5 and 6 meters. Under usual business operating conditions, Evoenergy has the capability of testing 1,000 meters in the field each year.

The testing methodology used by Evoenergy is outlined in its Meter Asset Management Plan. Evoenergy carries out in-service testing to AS/NZ 1284.13 using calibrated portable test equipment.

All Evoenergy meter tests (Type 5 and 6) and current transformer tests are carried out in situ. This requires the disconnection of the load and electricity supply to the customer for a short time—up to 30 minutes for three phase meters and less time for single phase meters. The test methodology used by Evoenergy is described in document PR1141 In-service Meter Compliance Testing and Bulk Replacement.

If a sample fails for any reason, then the Principal Quality of Supply and Metering Engineer responsible for electricity meter testing shall either:

- re-define the populations and redo the entire compliance verification procedure on the alternate populations (the final analysis is completed using the data from the second sample); or
- deem the population to have failed and instigate the replacement of the entire population with new meters.

Where a meter fails an accuracy test, the retailer will be notified and it will be their responsibility to replace that meter within the timeframes as per Australian Energy Market Operator documentation.

All inspections, testing and auditing of metering installations are carried out as per the guidelines stipulated in section 7.6 of the Rules.

14.3.6 Meter inspection plan

The Rules Table S7.6.1.3 requires Type 5 and 6 metering installations to be inspected when the meter is tested. Rules S7.6.2 (f) states that a typical inspection may include:

- check the seals;
- compare the pulse counts;
- compare the direct readings of meters;
- verify meter parameters and physical connections; and
- check current transformer ratios by comparison.

All Evoenergy est and inspection procedures address these requirements.

As current transformer meter testing is carried out using AS/NZ 1284.13, all current transformer installations that are not inspected as part of routine testing will be inspected as set out in the Tables S7.6.1.1 and S7.6.1.2 of the Rules. Presently this is every five years.

The inspection results will be used to update the CT family Type classifications in the asset management register.

14.3.7 Meter reading

Evoenergy procures meter reading services through competitive tender processes. Evoenergy currently has meter reading contracts with Skilltech Consulting Services Pty Ltd and Ecowise Services (Australia) Pty Ltd. Evoenergy's current contract with Skilltech only applies to basic accumulation meters, which includes Type 5 meters, programmed to be read as Type 6 meters. Evoenergy's current contract with Ecowise only applies to Type 5 interval read meters.

The contract with Skilltech commenced on 1 January 2017 following a tender process managed by Evoenergy's contracts and procurement team. The contract with Ecowise is currently on a month-to-month basis.

14.3.8 Forecast metering capital expenditure

Evoenergy will cease allocating funds to capital expenditure (capex) for its Type 5 and Type 6 metering installation business from 1 April 2018 as a result of the AEMC's Power of Choice reforms. For this reason, there is no forecast capex relating to the installation of metering for the 2019–24 regulatory control period.

A comparison of actual and forecast metering capex for the 2019–24 regulatory control period, and the AER's capex allowance, is provided in Table 14.7. The AER allowance was the subject of an appeal by Evoenergy and is currently subject to review as part of the EN14–19 remittal process.

Table 14.7. Actual metering capex and the AER allowance 2014–19

$ m real 2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Total
AER allowance	2.53	2.53	2.53	2.53	2.53	**12.66**
Total actual cost	4.78	0.66	0.00	0.15	0.00	**5.59**

Note: 2017–18 figure for total actual cost is an estimate.

14.3.9 Forecast metering operating expenditure

Evoenergy's forecast metering operating expenditure (opex) is shown in Table 14.8. Despite not being permitted to install new meters, Evoenergy will continue to maintain and read the installed stock of Type 5 and Type 6 meters in the 2019–24 regulatory period. These opex forecasts have been prepared using Evoenergy's expenditure forecasting methodology, provided in Attachment 6.

Evoenergy's opex for metering is made up of several components, the largest of which is meter reading. Evoenergy contracts out its meter reading services through a competitive tender process. Evoenergy chose 2017–18 as the base year from which to forecast opex over the next regulatory period. Maintenance is the second largest component of metering opex, and consists of meter testing, condition monitoring and visual inspection. These costs are forecast using a bottom-up build, or zero-based methodology. Labour costs are escalated using the escalators from BIS Oxford Economics.

Table 14.8. Forecast metering operating expenditure, 2019–24

$ m real 2017/18	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Condition monitoring	0.96	0.96	0.96	0.96	0.96	4.79
Strategy and planning	0.13	0.13	0.13	0.13	0.13	0.65
Meter reading	1.91	1.91	1.91	1.92	1.92	9.56
Meter data services	1.46	1.46	1.47	1.47	1.47	7.34
Total	**4.45**	**4.46**	**4.47**	**4.48**	**4.49**	**22.35**

A comparison of actual and forecast metering opex for the 2014–19 regulatory period and the AER's opex allowance is shown in Table 14.9. The AER allowance was the subject of an appeal by Evoenergy and is currently subject to review as part of the EN14–19 remittal process.

Table 14.9. Actual and forecast metering operating expenditure, 2014–19

$ m (2013/14)	2014/15	2015/16	2016/17	2017/18	2018/19	Total
AER allowance	2.12	2.14	2.16	2.18	2.20	10.79
Actual/forecast						
Condition monitoring	0.44	0.45	0.33	0.89	0.89	3.00
Strategy and planning	0.14	0.07	0.04	0.12	0.12	0.49
Meter reading	1.75	1.79	1.68	1.78	1.78	8.78
Meter data services	0.92	1.01	1.14	1.37	1.37	5.81
Total (actual/forecast)	**3.26**	**3.32**	**3.19**	**4.17**	**4.16**	**18.08**

Note: 2017–18 figures are estimates.

14.3.10 Building blocks and revenue requirement

Evoenergy's proposed building blocks and revenue requirements for metering are shown in Table 14.10. Evoenergy's metering PTRM and RFM have been used to derive the revenue requirement and the X-factors. The X-factors represent the average annual price adjustment (in addition to the forecast CPI) necessary for Evoenergy to recover the forecast revenue requirement, based on a forecast of the number of meters on the input sheet of the PTRM.

Table 14.10. Proposed metering revenue building blocks

$ m (nominal)	2019/20	2020/21	2021/22	2022/23	2023/24
Return on capital	2.75	2.58	2.40	2.21	2.00
Regulatory depreciation	2.66	2.82	2.99	3.16	3.34
Operating expenditure	4.68	4.80	4.93	5.06	5.20
Tax allowance	-	-	-	-	-
Total revenue building block (unsmoothed)	0.51	0.53	0.54	0.56	0.58
Smoothed revenue requirement	10.60	10.72	10.86	10.99	11.12
X-factor	**-5.25%**	**-5.25%**	**-5.25%**	**-5.25%**	**-5.25%**

Source: Evoenergy metering PTRM.

14.3.11 Proposed price caps and price path for metering services

The proposed metering charges for 2019–20 are provided in Table 14.11. Compared to the 2014–19 regulatory period, Evoenergy has changed some of the names of the charges to provide greater clarification to retailers of the charges customers are incurring. Indicative charges for the remaining years of the 2019–24 regulatory control period are included in Table 14.12.

Evoenergy's pricing schedule for metering services in the 2014–19 regulatory period involves charges in either cents or dollars per day per National Meter Identifier (NMI), by the type of meter. For consistency, Evoenergy proposes to offer all charges in cents per day in the 2019–24 regulatory control period (Table 14.11).

Table 14.11. Proposed 2019–20 price schedule for alternative control metering services (excluding GST)

Code	Description		Unit	Price
MP1	Quarterly metering non-capital rate	This metering non-capital rate applies to all accumulation meters read quarterly.	c/day/NMI	4.18
MP2	Monthly non-interval metering non-capital rate	This metering non-capital rate applies to all accumulation meters read monthly.	c/day/NMI	7.32
MP3	Monthly interval metering non-capital rate	This metering non-capital rate applies to interval meters read monthly.	c/day/NMI	7.32
MP4	Monthly manually-read interval metering non-capital rate	This metering non-capital rate applies to LV/HV interval meters recording at either 15 or 30 minute periods, read manually and processed monthly.	c/day/NMI	59.26
MP6	Quarterly manually-read interval metering non-capital rate	This metering non-capital rate applies to interval meters recording at either 15 or 30 minute periods, read manually and processed quarterly.	c/day/NMI	16.87
MP7	Quarterly manually-read interval metering capital rate	This metering capital rate applies to all accumulation meters read quarterly.	c/day/NMI	8.50
MP8	Monthly non-interval metering capital rate	This metering capital rate applies to non-interval meters read monthly.	c/day/NMI	14.86
MP9	Monthly multi-register non-interval metering capital rate	This metering capital rate applies to interval meters read monthly.	c/day/NMI	14.86
MP10	Monthly manually-read interval metering capital rate	This metering capital rate applies to LV/HV interval meters recording at either 15 or 30 minute periods, read manually and processed monthly.	c/day/NMI	119.92

Table 14.12. Proposed prices for metering for each year of the 2019–24 regulatory control period (cents per day per NMI)

Code	2019/20	2020/21	2021/22	2022/23	2023/24
MP1	4.18	4.52	4.88	5.26	5.66
MP2	7.32	7.92	8.54	9.22	9.91
MP3	7.32	7.92	8.54	9.22	9.91
MP4	59.26	64.10	69.16	74.61	80.27
MP6	16.87	18.25	19.68	21.24	22.85
MP7	8.50	9.19	9.91	10.70	11.51
MP8	14.86	16.07	17.34	18.71	20.13
MP9	14.86	16.07	17.34	18.71	20.13
MP10	119.92	129.73	139.95	150.98	162.44

Ancillary metering services (e.g. special meter reads) are treated the same way as other ancillary services, and are subject to the cost build-up approach instead of the building block approach. Metering ancillary services are included in the fee-based ancillary services in section 14.4.1, and the indicative ancillary services prices shown in the Tariff Structure Statement.

14.3.12 Compliance with the control mechanism

Under clause 6.8.2(c)(3)) of the Rules, Evoenergy is required to include in its regulatory proposal 'for *direct control services* classified under the proposal as *alternative control services* – a demonstration of the application of the control mechanism, as set out in the *framework and approach paper*, and the necessary supporting information.'

The formula for metering services, as set out in the *framework and approach paper* is as follows:

$\overline{p}_t^i \geq p_t^i$ i=1,...,n and t=1, 2, … ,5

$\overline{p}_t^i = \overline{p}_{t-1}^i \times (1 + \Delta CPI_t) \times (1 - X_t^i) + A_t^i$

where:

$\overline{p}_t^i$ is the cap on the price of service i in year t.

p_t^i is the price of service i in year t. The initial value is to be decided in the distribution determination.

$\overline{p}_{t-1}^i$ is the cap on the price of service i in year t–1.

t is the regulatory year.

ΔCPI_t	is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities[4] from the December quarter in year t–2 to the December quarter in year t–1, calculated using the ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–1, divided by the ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in regulatory year t–2, minus one.

For example, for 2020/21:

Year t–2	is the December quarter 2018 and year t–1 is the December quarter 2019.
X_t^i	is the X-factor for service i in year t. The X-factors are to be decided in the distribution determination and will be based on the approach the distributor undertakes to develop its initial prices.
A_t^i	is the sum of any adjustments for service i in year t (likely to include, but not limited to adjustments for any approved cost pass through amounts (positive or negative) with respect to regulatory year t, as determined by the AER).

Evoenergy will demonstrate compliance with the control mechanism by multiplying the price for each service in the previous year by CPI–X (rounded to the same number of decimal places as currently applied) and comparing that to the proposed price. Prices equal to or less than equal to the calculated price are compliant. Evoenergy will demonstrate this compliance in the network pricing proposal to be submitted to the AER in late March 2019.

14.4 Ancillary services

In the Framework and Approach paper, the AER classified Evoenergy's ancillary services as Alternative Control Services for the 2019–24 regulatory period. Evoenergy accepts this classification and requests that additional services be added to the list of ancillary services.

In its Framework and Approach paper, the AER determined that the control mechanism for ancillary services will be price caps on individual services. The AER's main consideration in deciding to apply price caps was cost reflectivity.[5] The AER also argued in its Framework and Approach paper:

> *… that price caps are more suitable than other control mechanisms for delivering cost reflective prices. To apply price caps to the prices, we estimate the cost of providing each service and set the price at that cost.*

[4] If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER considers is the best available alternative index.

[5] Framework and Approach, ActewAGL, Regulatory control period commencing 1 July 2019, p. 36.

This will enhance cost reflectivity on both competitive and non-competitive services.[6]

Evoenergy proposes to adopt a cost build-up approach to determining the price caps for individual ancillary services. The cost of ancillary services is largely made up of labour, with limited use of materials or capital in most cases. Evoenergy's view is the cost build-up approach is most appropriate for ancillary services because it takes account of the time spent physically delivering the service, the required labour types and cost of that labour, as well as other inputs required to complete the job.

In contrast, metering services involve services delivered from a large asset base, and prices must be sufficient to at least recover the efficient capital costs, as well as ongoing maintenance and operating costs. For this reason, the building block approach is the most appropriate in this context.

14.4.1 Fee-based ancillary services

The cost of providing ancillary services is primarily made up of labour. Evoenergy's proposed charge-out rates for labour are shown in Table 14.13. These are base rates and exclude overheads. Evoenergy proposes to increase the labour rates in accordance with the escalation rates sourced from BIS Oxford Economics.[7] The labour rates used in the 2014–19 regulatory period are provided in Table 14.14.

Table 14.13. Proposed base labour rates for fee-based and quoted services for 2019–24 regulatory period

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Office support service delivery	89.42	92.65	96.40	100.25	104.01
Electrical apprentice	87.44	90.60	94.27	98.03	101.71
Electrical worker	109.66	113.62	118.22	122.94	127.55
Electrical worker–labourer	80.41	83.32	86.69	90.15	93.53
Project officer design section	116.70	120.92	125.82	130.84	135.74
Senior technical officer/engineer design section	146.93	152.24	158.41	164.73	170.91

* Rates do not include overheads or margins. Overheads are allocated in accordance with Evoenergy's approved cost allocation methodology.

[6] Framework and Approach, ActewAGL, Regulatory control period commencing 1 July 2019, p. 4.7

[7] BIS Oxford Economics.

Table 14.14. Base labour rates for fee based and quoted services for the 2014–19 regulatory period

Classification	2014/15	2015/16	2016/17	2017/18	2018/19
Office support service delivery	79.54	55.66	59.78	60.75	62.56
Electrical apprentice	67.23	64.51	65.72	82.18	84.63
Electrical worker	94.49	89.25	95.87	97.41	100.31
Electrical worker–labourer	74.03	73.39	71.04	75.57	77.82
Project officer design section	96.93	93.88	101.05	109.68	112.95
Senior technical officer/engineer design section	126.94	120.11	129.00	138.09	142.21

* Rates do not include overheads or margins. Overheads are allocated in accordance with Evoenergy's approved cost allocation methodology.

Compared to the schedule of ancillary services in the 2014–19 regulatory period, some charges have been removed and others added. Most of those services removed from the schedule relate to meter installations which Evoenergy will no longer perform after 31 March 2018 (Table 14.15). This reflects the introduction of the Power of Choice reforms. The charges which have been removed which relate to photovoltaic (PV) installations have been replaced with more cost-reflective charges.

Table 14.15. Deleted ancillary services – standard connection charges

Code	Description of service
507	Install single-phase, single-element, manually-read interval meter
508	Install subsequent single-phase, single-element meter – same location and visit
509	Install single-phase, two-element meter
511	Install subsequent single-phase, two-element meter – same location and visit
512	Install three-phase meter
513	Install subsequent three-phase meter – same location and visit
571	PV Connection Enquiry – LV Class 2 to 5 (> 30kW <= 1500kW Three Phase)
572	PV Connection Enquiry – HV
573	Provision of information for Network technical study for large scale installations

Source: Evoenergy

Evoenergy has implemented some new ancillary charge classes in response to the introduction of the Power of Choice reforms. These are shown as codes 515 to 519 in Table 14.16.

Evoenergy has also changed the structure of embedded generation connection enquiry processing fees and added new fees to the schedule to increase cost reflectivity. In the 2014–19 regulatory period, there are two charge classes: one if a PV installation is Class 1 and another if a PV install is one of a Class 2 to Class 5 installation. This arrangement is not cost reflective because the cost of processing a Class 2 installation is considerably lower than a Class 5 installation. Therefore, Evoenergy proposes separate charges for each Class of embedded generation installation (Table 14.16).

Table 14.16. Proposed new ancillary services for standard connection charges

Proposed code	Description of service
515	Move, remove, inspect or reconfigure an existing Evoenergy meter
516	Establish supply (initial energisation)
517	Faults investigation (meter malfunction)
518	Faults investigation (meter bypassed)
519	Faults investigation (customer side of network boundary)
549	Overhead service temporary disconnect reconnect same day (Business Hours)
596	Embedded Generation Connection Enquiry – Class 2
597	Embedded Generation Connection Enquiry – Class 3
598	Embedded Generation Connection Enquiry – Class 4
599	Embedded Generation Connection Enquiry – Class 5
600	Embedded Generation Connection Enquiry – Class 6
601	Embedded Generation – Connection Contract Establishment – Class 1 (Commercial) to Class 6
602	Embedded Generator Network Technical Study - Embedded Generation over 5MW

Source: Evoenergy

Additional ancillary services added to the schedule are currently performed on a quoted basis with considerable frequency. By introducing these as fee-based miscellaneous connection charges in its schedule, Evoenergy will reduce the requirement to provide quotes on the same type of jobs it performs with considerable frequency. This approach is designed to be more transparent and deliver greater certainty for customers (Table 14.17).

Table 14.17. Proposed new ancillary services for miscellaneous connection charges

Code	Description of service	2019/20 Price ($)
Cable testing		
603	Spiking/cable testing (Business Hours) – Evoenergy network cables only	1007.07
604	Spiking/cable testing (After Hours)	1305.14
Testing of substation HV/LV earthing or soil resistivity		
605	Substation HV/LV earthing/soil resistivity testing (Business Hours)	1193.37
606	Substation HV/LV earthing/soil resistivity testing (After Hours)	1565.95
Termination of consumer mains: up to 50 mm² Al or Cu[1]		
607	1 x 4 core or 4 x 1 core (1 set) consumer mains (Business Hours)	1385.93
608	1 x 4 core or 4 x 1 core (1 set) consumer mains (After Hours)	1758.52
Termination of consumer mains: above 50 mm² Cu or Al[1]		
609	1 x 4 core or 4 x 1 core (1 set) consumer mains (Business Hours)	1758.52
610	1 x 4 core or 4 x 1 core (1 set) consumer mains (After Hours)	2280.14
611	2 x 4 core or 8 x 1 core (2 set) consumer mains (Business Hours)	2131.10
612	2 x 4 core or 8 x 1 core (2 set) consumer mains (After Hours)	2801.76
613	3 x 4 core or 12 x 1 core (3 set) consumer mains (Business Hours)	2503.69
614	3 x 4 core or 12 x 1 core (3 set) consumer mains (After Hours)	3323.39
615	4 x 4 core or 16 x 1 core (4 set) consumer mains (Business Hours)	2689.99
616	4 x 4 core or 16 x 1 core (4 set) consumer mains (After Hours)	3584.20
LV underground network disconnection (permanent disconnection of existing network)		
617	Including capping/abandoning—Underground (Business Hours)	1944.81
618	Including capping/abandoning—Underground (After Hours)	2540.95
Consumer mains disconnection at Evoenergy network asset such as point of entry/substation		

Code	Description of service	2019/20 Price ($)
619	Temporary or permanent consumer mains as a separate request (Business Hours)	1944.81
620	Temporary or permanent consumer mains as a separate request (After Hours)	2540.95
Substation supervised access		
621	1 – 4 (Business Hours)	1228.63
622	1 – 4 (After Hours)	1601.21
623	4 – 8 (Business Hours)	1973.80
624	4 – 8 (After Hours)	2644.46
Temporary de-energisation/isolation of overhead LV network		
625	Business Hours work	1543.29
626	After Hours work	1990.40
Temporary de-energisation/isolation of overhead HV network[2]		
627	Business Hours work	2763.46
628	After Hours work	3508.64
Temporary de-energisation/isolation of underground/overhead SLCC supply[3]		
629	Business Hours work	669.74
630	After Hours work	818.78
Temporary de-energisation/isolation of underground HV or LV network[3]		
631	Business Hours work	1357.00
632	After Hours work	1729.59
Temporary de-energisation/isolation of underground HV network—If HV cable insulation test required (isolation for more than 7 days)[4]		
633	Business Hours work	1915.88
634	After Hours work	2512.02
Temporary pole support work—using lifter/borer[5]		
635	Business Hours work	3846.95
636	After Hours work	4538.27

Code	Description of service	2019/20 Price ($)
Temporary pole support work—using concrete blocks[5]		
637	Business Hours work	2945.02
638	After Hours work	3412.79
Pole stay replacement		
639	With standard stay (Business Hours)	4251.77
640	With standard stay (After Hours)	5273.28
641	With sidewalk stay (Business Hours)	4999.00
642	With side walk stay (After Hours)	6045.84
LVABC replacement		
643	1 Span (Business Hours)	10145.93
644	1 Span (After Hours)	13126.63
645	2 Span (Business Hours)	15048.76
646	2 Span (After Hours)	19296.27
647	3 Span (Business Hours)	19804.89
648	3 Span (After Hours)	25244.67
649	Cut & shackle for LVABC replacement—Per cross-arm one direction (Business Hours)	1310.51
650	Cut & Shackle for LVABC Replacement—Per cross-arm one direction (After Hours)	1662.44
651	Installation of LV fuse switch disconnector for LVABC replacement work (Business Hours)	1497.06
652	Installation of LV fuse switch disconnector for LVABC replacement work (After Hours)	1848.99
653	Installation of LV termination cross-arm for LVABC replacement work (Business Hours)	1565.14
654	Installation of LV termination cross-arm for LVABC replacement work (After Hours)	1974.99
655	Installation of LV double strain cross-arm for LVABC replacement work (Business Hours)	1799.18
656	Installation of LV double strain cross-arm for LVABC replacement work (After Hours)	2411.91

Code	Description of service	2019/20 Price ($)
657	1 Way 630A Weber fuse switch disconnector installation for consumer mains termination work (Business Hours)	785.18
658	1 Way 630A Weber fuse switch disconnector installation for consumer mains termination work (After Hours)	859.70
659	1 Way 1000A Weber fuse switch disconnector installation for consumer mains termination work (Business Hours)	895.24
660	1 Way 1000A Weber fuse switch disconnector installation for consumer mains termination work (After Hours)	969.76
661	1 Way 1250A Jean Muller installation for consumer mains termination work (Business Hours)	4133.24
662	1 Way 1250A Jean Muller installation for consumer mains termination work (After Hours)	4245.02
663	1 Way Weber point of entry (POE) kit installation for consumer mains termination work (Business Hours)	2516.62
664	1 Way Weber POE kit installation for consumer mains termination work (After Hours)	2591.14
665	3 Way Weber POE kit installation for consumer mains termination work (Business Hours)	3277.48
666	3 Way Weber POE kit installation for consumer mains termination work (After Hours)	3352.00
667	Holec fuse kit installation for termination of consumer mains (Business Hours)	311.43
668	Holec fuse kit installation for termination of consumer mains (After Hours)	385.95

Notes

1. Includes termination of temporary supply consumer mains. Crimp lugs to be supplied by customer/applicant. Charges includes disconnection of existing temporary consumer mains if present.
2. Includes establishment of temporary earthing to overhead network and includes plant as required.
3. Excludes the type of work done by supply and installation officer. Excludes streetlight controller isolation work by commercial & industrial officer.
4. Includes insulation testing of isolated HV cable prior to re-energisation.
5. Includes plant operator as required.

* Temporary network isolation charges to apply separately.

These new charges will apply to work on standard residential or multi-units, commercial or industrial and similar installations carried out in normal business hours or after hours. There will at times be some exceptions to the standard Miscellaneous Works. Works that fall into this category will be determined at the time of application and discussed with the customer. Charges for work of greater complexity will be assessed individually.

At times and in consultation with (or requested by) the customer, additional mobilisation of resources maybe required to achieve a fast track timeframe for completion of the Miscellaneous Work requests. Where this is agreed with the Customer additional charges may apply. This includes all Miscellaneous Work Requests after 1400 hours

(2.00 pm) on a business day where the work to be performed prior to normal business hours on the next business day.

The full list of proposed ancillary services, and indicative prices, is provided in the Ancillary Services Cost Build Up Model in the Modelling Appendix. A detailed description of each of these services is provided in this appendix and Table A2 of the Connection Policy. The proposed prices are based on a cost build-up model, which is provided in the modelling appendix to the regulatory submission.

14.4.2 Transition strategy to make existing ancillary charges more cost reflective

Table 14.18 provides a comparison of the price and cost for each service in 2017/18. This shows that for some services the 2017/18 prices are not fully cost reflective: a positive difference indicates that costs exceed prices in 2017/18. Evoenergy proposes to move prices to fully recover costs by the end of the regulatory period. Given the significant gap between prices and costs in 2017/18, for some services, a phased approach to full cost-recovery is proposed to avoid significant price shocks. The proposed new services have not been included in this table because they are priced to be fully cost reflective from implementation.

The phased approach to full cost recovery is depicted in the Ancillary services cost build up model. Evoenergy considers that the application of the proposed rate of change will result in a set of cost-reflective prices. For some services, a significant increase in cost is proposed. However, for these services the increase is from a base that is below efficient cost.

Unlike the charges listed in Table 14.18, Evoenergy's new proposed miscellaneous connection charges are costed to be cost reflective from commencement.

Table 14.18. Fee based ancillary services – comparison of prices and costs 2017–18

Code	Description of service	Unit	17/18 price (excl GST)	17/18 cost (excl GST)	% diff.
Premise re-energisation – Existing network connection (applies also to call-outs where connection is energised)					
501	Re-energise premises – Business Hours	per visit	$69.52	$82.96	19%
502	Re-energise premises – After Hours	per visit	$88.13	$103.58	18%
Premise de-energisation – Existing network connection					
503	De-energise premises – Business Hours	per visit	$69.52	$82.96	19%
505	De-energise premises for debt non-payment	per test	$139.06	$165.93	19%
Meter investigations					
504	Meter Test (Whole Current) – Business Hours	per test	$278.12	$331.86	19%
510	Meter Test (CT/VT) – Business Hours	per test	$322.09	$455.43	41%
Special metering services					
506	Special meter read	per read	$32.16	$41.58	29%
Power of Choice product codes					

Code	Description of service	Unit	17/18 price (excl GST)	17/18 cost (excl GST)	% diff.
515	Move, remove, inspect or reconfigure meter	per movement, inspection or re-configure	na	$165.93	na
516	Establish supply	per establishment	na	$124.45	na
517	Faults investigation (meter malfunction)	per investigation	na	$124.45	na
518	Faults investigation (meter bypassed)	per investigation	na	$165.93	na
519	Faults investigation (customer's side of network boundary)	per investigation	na	$82.96	na
Temporary network connections					
520	Temporary builders supply – Overhead (Business Hours) (excludes meter cost)	per installation	$624.93	$535.17	-14%
522	Temporary builders supply – Underground (Business Hours) (excludes meter costs)	per installation	$1,364.26	$1,032.95	-24%
New network connections					
523	New underground service connection – Greenfield	per installation	$0.00	$690.46	na
526	New overhead service connection – Brownfield (Business Hours)	per installation	$820.78	$701.10	-15%
527	New underground service connection – Brownfield from front	per installation	$1,364.26	$1,281.85	-6%
528	New underground service connection – Brownfield from rear	per installation	$1,364.26	$1,281.85	-6%
Network connection alterations and additions					
541	Overhead service relocation – Single visit (Business Hours)	per installation	$783.39	$663.72	-15%
542	Overhead service relocation – Two visits (Business Hours)	per installation	$1,566.77	$1,327.44	-15%
543	Overhead service upgrade – Service cable replacement not required	per installation	$783.39	$663.72	-15%
544	Overhead service upgrade – Service cable replacement required	per installation	$820.78	$701.10	-15%
545	Underground service upgrade – Service cable replacement not required	per installation	$1,326.88	$497.79	-62%
546	Underground service upgrade – Service cable replacement required	per installation	$1,364.26	$1,281.85	-6%
547	Underground service relocation – Single visit (Business Hours)	per installation	$1,364.26	$1,281.85	-6%
548	Install surface mounted point of entry (POE) box	per installation	$630.93	$597.94	-5%
549	Overhead service temporary disconnect/reconnect same day (Business Hours)	per disconnect /reconnect	na	$995.58	na
Temporary de-energisation					

Code	Description of service	Unit	17/18 price (excl GST)	17/18 cost (excl GST)	% diff.
560	Temporary de-energisation – LV (Business Hours)	per occurrence	$417.17	$663.72	59%
561	Temporary de-energisation – HV (Business Hours)	per occurrence	$417.17	$663.72	59%
Supply abolishment/removal					
562	Supply abolishment/removal – Overhead (Business Hours)	per site visit	$587.55	$497.79	-15%
563	Supply abolishment/removal – Underground (Business Hours)	per site visit	$1,061.51	$1,244.47	17%
Network overhead wire safety services					
564	Install & remove tiger tails – Per installation (Business Hours)	per installation	$1,379.74	$1,218.78	-12%
565	Install & remove tiger tails – Per span (Business Hours)	per installation	$694.57	$1,822.24	162%
566	Install & remove warning flags – Per installation (Business Hours)	per installation	$1,175.08	$1,218.78	4%
567	Install & remove warning flags – Per span (Business Hours)	per installation	$595.34	$1,590.78	167%
Operational & Maintenance Fees - Export Only Embedded Generation Installations up to 5MW					
568	Embedded Generation OPEX Fees - Connection Assets	per annum	2%	na	na
569	Embedded Generation OPEX Fees - Shared Network Asset	per annum	2%	na	na
Connection Enquiry Processing - Embedded Generation Installations					
570	Embedded Generation Connection Enquiry – Class 1 (Commercial)	per installation	$0.00	$444.65	na
596	Embedded Generation Connection Enquiry – Class 2	per installation	$571.20	$555.81	-3%
597	Embedded Generation Connection Enquiry – Class 3	per installation	$571.20	$666.97	17%
598	Embedded Generation Connection Enquiry – Class 4	per installation	$571.20	$778.14	36%
599	Embedded Generation Connection Enquiry – Class 5	per installation	$571.20	$889.30	56%
600	Embedded Generation Connection Enquiry – Class 6	per installation	$1,142.41	$1,000.46	-12%
Network design and investigation / analysis services – Embedded generation installations					
574	Embedded Generation Network Technical Study - Class 1 (Commercial)	per installation	$0.00	$1,778.60	na
575	Embedded Generation Network Technical Study - Class 2	per installation	$3,808.04	$3,557.20	-7%
576	Embedded Generation Network Technical Study - Class 3	per installation	$5,712.05	$7,114.40	25%
577	Embedded Generation Network Technical Study - Class 4	per installation	$7,616.08	$10,671.60	40%
578	Embedded Generation Network Technical Study - Class 5	per installation	$11,424.12	$14,228.79	25%

Code	Description of service	Unit	17/18 price (excl GST)	17/18 cost (excl GST)	% diff.
579	Embedded Generation - Embedded Generator Network Technical Study - Class 6	per installation	$14,280.14	$17,785.99	25%
Contract administration, commissioning and testing – Embedded generation installations up to 5MW					
601	Embedded Generation - Connection Contract Establishment - Class 1 (Commercial) to Class 6	per establishment	na	$3,557.20	na
Provision of data for network technical study – Embedded generation installations over 5MW					
602	Embedded Generator Network Technical Study - Embedded Generation over 5MW	per provision	na	$17,785.99	na
Residential Estate Subdivision Services (per block)					
580	Subdivision Electricity Distribution Network Reticulation - Multi Unit Blocks	per block	$0.00	na	na
581	Subdivision Electricity Distribution Network Reticulation - Blocks <= 650 M2	per block	$1,700.39	na	na
582	Subdivision Electricity Distribution Network Reticulation - Blocks 650 - 1100m2 with average linear frontage of 22-25 metres	per block	$2,227.78	na	na
Upstream augmentation					
585	HV feeder	$/kVa	$36.83	na	na
586	Distribution substation	$/kVa	$21.33	na	na
Rescheduled site visits					
590	Rescheduled site visit – One person	per site visit	$139.06	$165.93	19%
591	Rescheduled site visit – Service team	per site visit	$587.55	$690.46	18%
Trenching charges					
592	Trenching – first 2 metres	per visit	$533.33	$533.20	0%
593	Trenching – subsequent metres	per meter	$124.03	$124.00	0%
Boring charges					
594	Under footpath	per occurrence	$967.44	$967.20	0%
595	Under driveway	per occurrence	$1,153.49	$1,153.20	0%

14.4.3 Quoted ancillary services

Evoenergy proposes to set prices on a quoted basis for those ancillary services where the service is not typical or standard, or the scope of the service is specific to a particular customer's needs.

Evoenergy proposes to set the prices for quoted services using the following formula from the AER's Framework and Approach paper.

Price = Labour + Contractor services + Materials.

where:

- Labour (including on-costs and overheads)—consists of all labour costs directly incurred in the provision of the service which may include but it is not limited to labour on-costs, fleet on-costs and overheads, and other associated delivery costs including overheads. The labour cost for each service is dependent on the skill level and experience of the employees involved, time of day the service is undertaken, travel time, number of site visits, and crew size required to complete the service.
- Contractor services—reflect all costs associated with the use of external labour including overheads and any direct costs incurred. The contracted service charge applies the rates under existing contractual arrangements. Direct costs are passed on to the customer.
- Materials (including overheads)—reflects the cost of materials directly incurred in the provision of the service, material storage and logistics on-costs and overheads.

Price caps will apply to the labour rates used in this formula. Evoenergy proposes to demonstrate compliance with the formula by providing its annual calculation of labour rates to the AER in its annual pricing proposal. The rates are to be be approved by the AER in its annual network pricing approval process.

The application of price caps to labour costs only, rather than to all cost inputs, helps to reduce administrative costs, as Evoenergy will not be required to identify, for AER approval, every input cost that may be required in performing a quoted service. This approach will also result in cost-reflective charges.

Shortened forms

Term	Meaning
ABS	Australian Bureau of Statistics
ACS	Alternative Control Services
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Al	aluminium
capex	capital expenditure
CPI	Consumer Price Index
CT/VT	current transformer / voltage transformer
Cu	copper
GST	goods and services tax
HV	high voltage
kVa	kilovolt-ampere
kW	kilowatt
LV	low voltage
LV CT	low voltage current transformers
LVABC	low voltage aerial bundled cables
mm	millimeter
MW	megawatt
NMI	National Meter Identifier
opex	operating expenditure
POE	point of entry
PTRM	post-tax revenue model
PV	photovoltaic
RFM	roll-forward model
Rules	National Electricity Rules
SCS	Standard Control Services