DRAFT DECISION

Power and Water Corporation Distribution Determination 2019 to 2024

Attachment 15 Alternative control services

September 2018

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on the distribution determination that will apply to Power and Water Corporation for the 2019–2024 regulatory control period. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 11 – Demand management incentive scheme

Attachment 12 – Classification of services

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Shortened forms

Shortened form	Extended form
ACS	alternative control services
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Augex	augmentation expenditure
Capex	capital expenditure
CCP	Consumer Challenge Panel
CCP 13	Consumer Challenge Panel, sub-panel 13
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIAM	demand management innovation allowance (mechanism)
DMIS	demand management incentive scheme
Distributor	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
Expenditure Assessment Guideline	Expenditure Forecast Assessment Guideline for Electricity Distribution
F&A	framework and approach
LED	Light Emitting Diode
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NT NER or the rules	National Electricity Rules As in force in the

Shortened form	Extended form
	Northern Territory
NSP	network service provider
Opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
Repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SCS	standard control services
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

15 Alternative control services

This attachment sets out our draft decision on Power and Water's alternative control services: ancillary network services and metering.

Alternative control services are usually customer specific or customer requested services and so the full cost of the service is attributed to that particular customer. We set service specific prices to provide a reasonable opportunity to enable the distributor to recover the efficient cost of each service from customers using that service. This is in contrast to standard control services where costs are spread across the general network customer base.

Revenue from alternative control services represents around 7.8 per cent of Power and Water's total regulated revenue.[1]

15.1 Draft decision

Our draft decision is to classify ancillary network services and metering as alternative control services, as set out in our final Framework and Approach. Our draft decision also maintains our position, as set out in our final Framework and Approach, to apply caps on the prices of individual services to all alternative control services. We consider capping individual service charges promotes cost reflective pricing which outweighs any detriment from increased administration costs.

Our draft decision is to accept Power and Water's proposed ancillary network services but we do not accept proposed charges for fee based services. In principle we accept Power and Water's proposed labour rates for quoted services, though our draft decision is to substitute our own rates to correct what we consider is a minor calculation error.

Our draft decision charges for ancillary network services are set out in Appendix A.

Our draft decision is to accept Power and Water's proposed rollout of advanced meters with remote communications capability – smart meters. However, we do not fully accept some elements of Power and Water's metering proposal where we consider Power and Water has not yet sufficiently justified that the proposed fees recover the efficient cost of providing the services. Specifically, our draft decision is to reduce metering capex due to substituting our rate of return for Power and Water's, and we do not accept a proposed opex step change for additional technical staff. Our draft decision fees for metering services are set in Appendix B.

The detail of our draft decision is set out in the following:

- Section 15.4 – Ancillary Network Services

[1] Estimate drawn from Power and Water's regulatory proposal.

- Section 15.5 – Metering

15.2 Power and Water Corporation's proposal

We received separate proposals from Power and Water for ancillary network services, and metering.[2]

Power and Water accepted that ancillary network services and Type 1 to 6 metering services and customer requested provision of additional metering and consumption data should be classified as alternative control services, and subject to a price cap control mechanism.[3] This is consistent with our final Framework and Approach. Power and Water proposed specific prices for each of these services.

For ancillary network services Power and Water proposed to base its charges on a bottom-up analysis of the historical cost of the activities involved in providing the services. The cost build up proposed by Power and Water for its ancillary network services is comprised of the:

- labour required for the activity (in hours) multiplied by the labour rate
- incremental cost of materials required for the activity
- incremental cost of contractors required for the activity.

For quoted services Power and Water proposed to charge prices based on labour costs (including on-costs and overheads), materials and any contractor costs required for the service.

Power and Water's proposed prices for fee based and quoted ancillary network services are based on 2017–18 internal labour recovery rates and 2016–17 costs for contractors, overheads and materials.[4]

For metering services Power and Water proposed a building block approach to determine the annual revenue requirement for metering services and to set prices.[5]

Power and Water proposed to install advanced meters with supporting IT communications under a new and replacement smart meter policy. Power and Water submitted that this proposal would allow it to implement its tariff strategy and meet customers' future information needs while encouraging customers to efficiently use energy and the network over the long term.[6]

Power and Water's proposed prices for metering services are set out in Appendix B.

15.3 Assessment approach

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2 Power and Water does not provide public lighting services.

3 Power and Water, *Regulatory Proposal 1 July 2018 to 30 June 2024, 16 March 2018*, p. 130.

4 Power and Water, *Regulatory Proposal 1 July 2018 to 30 June 2024, 16 March 2018*, p. 137.

5 Power and Water, *Regulatory Proposal 1 July 2018 to 30 June 2024, 16 March 2018*, p. 131.

6 Power and Water, *Regulatory Proposal 1 July 2018 to 30 June 2024, 16 March 2018*, p. 130.

The National Electricity Rules (NER) are less prescriptive and afford more discretion for determining the control mechanism for alternative control services than those set out for standard control services. For example, there is no requirement to establish a full building block model to set the revenue to be earned from the services as there is for standard control services. The control mechanism may be either a control on the price of the service, or the revenue to be earned from the service, or both. As a general principle we regulate alternative control services in a lighter handed manner than standard control services.

Our determination must state the basis of the control mechanism to apply to alternative control services.[7] Our decision on the form of control mechanism for alternative control services must be in accordance with our final Framework and Approach.[8] The formulae that give effect to the form of control must be as set out in the Framework and Approach unless we consider that unforeseen circumstances justify a departure.

In deciding on a control mechanism for alternative control services, we must have regard to potential competition in the relevant market, administrative costs, applicable regulatory arrangements, consistency between regulatory arrangements, and any other relevant factor.[9] The control mechanism for alternative control services may use elements of the building block model for standard control services but there is no requirement to apply the building block model exactly as it is set out in Part C of the NER.

The different regulatory requirements for alternative control services compared to standard control services recognise their different characteristics. Standard control services are central to electricity supply and are relied on by all customers. In contrast, alternative control services are customer specific. Accordingly our approach to assessing alternative control services is different to that of standard control services.

For ancillary network services we undertook a bottom up cost assessment. Labour costs are the major input in the cost build-up of prices for ancillary network services. Therefore, our assessment focusses on comparing Power and Water's proposed labour rates against maximum total labour rates which we consider efficient. Where Power and Water's proposed labour rates exceed our maximum reasonable labour rates we apply our maximum reasonable labour rates to determine charges. Section 15.4.1 discusses our maximum total labour rates. We also assess the proposed times taken to perform the service as well as the escalators and allocators applied by Power and Water as these are also cost inputs which determine the final charge for some services. Our assessment of these inputs is informed by benchmarking against inputs applied by other distributors and based on recommendation of our consultant Marsden Jacob Associates (Marsden Jacob).

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7 NER, cl. 6.2.6(b).

8 NER, cl. 6.12.1(12).

9 NER, cl. 6.2.5(d).

For the quoted services component of ancillary network services, we compared Power and Water's proposed labour rates (inclusive of on-costs and overheads) to the corresponding maximum labour rate recommended by Marsden Jacob to determine whether the proposed labour rate is efficient.

For metering we used a limited building block analysis for our cost assessment.

15.4 Ancillary network services

Ancillary network services are provided to individual customers on an 'as needs' basis (e.g. relocating poles or temporary supply at a customer's request.). Ancillary network services involve work on, or in relation to, parts of Power and Water's distribution network. Therefore they are similar to common distribution services in that only Power and Water may perform these services in its distribution area.

For the purposes of this draft decision, we refer to the service groups 'fee based services' and 'quoted services' collectively as a single group called 'ancillary network services'.

Prices for fee based services are predetermined based on the cost of providing the service and the average time taken to perform it. These services tend to be homogenous in nature and scope and can be costed in advance of supply with reasonable certainty.

By comparison, prices for quoted services are based on quantities of labour and materials with the quantities dependent on a particular task. Prices for quoted services are determined at the time of a customer's enquiry and reflect the individual requirements of the customer and service requested.

15.4.1 Ancillary network services—Draft decision

Service classification - Ancillary network services

Our draft decision is to classify ancillary network services as alternative control services. This is consistent with our final Framework and Approach and Power and Water's proposed classification of ancillary network services.

Form of control - Ancillary network services

Our draft decision is to apply a price cap form of control for fee based and quoted services. This is consistent with our final Framework and Approach and Power and Water's proposed form of control for fee based and quoted services. Under a price cap form of control we set a schedule of prices for the first year of the regulatory period, 2019–20. For 2020–21 and subsequent years the prices for fee based services are determined by adjusting the previous year's prices by the formula set out in Attachment 13.

Consistent with decisions for other distributors, we have also applied a labour escalator as the X Factor. Our proposed X Factors in this draft decision are set out in Appendix A.

Fee based services - Ancillary network services

Our draft decision is to accept Power and Water's proposed ancillary network fee based services but to not accept the proposed charges associated with these services because the proposed after hours charge is too high.

While we consider Power and Water's proposed business hours charges, or base charges, to be below reasonable benchmarks and therefore are acceptable, our draft decision is to not accept both Power and Water's base charges and after hours charge. By doing so we allow Power and Water to undertake a holistic review of its fee based charges with a view to potentially rebalancing cost recovery across the two categories of charges in its revised proposal (and correcting potential input errors). Our draft decision ancillary network service fees are set out in Appendix A.

Power and Water proposed several changes to fee based services for the 2019–24 regulatory control period compared to the current period. New ancillary network services proposed by Power and Water include:

- disconnection with comms
- reconnection with comms
- special meter read no appointment
- customer transfer
- network tariff change request
- wasted visit fee
- standard temporary builders connection.

We accept Power and Water's proposed new services. We consider the proposed new services to be consistent with services classified in our final Framework and Approach.

Power and Water proposed to remove reconnection CT, attending loss of supply and additional crew per person per hour from its fee based services for the 2019–24 regulatory period.

Power and Water also proposed to consolidate some meter installation and exchange services which currently differentiate between a smart meter installation, a PV installation and CT meters. Power and Water proposed to consolidate these into two services: *Exchange or Replace meter 3 phase* and *Exchange or Replace meter - standard*.

We accept Power and Water's proposed changes to these services. We consider Power and Water's proposals reduce complexity and provide for a simplified fee structure.

Quoted services - Ancillary network services

Our draft decision is to accept Power and Water's proposed labour rates for quoted services in principle, but we must correct for what we consider was an error in Power and Water's calculations used to derive its proposed charges.

Power and Water's proposed maximum hourly rates (including on costs and overheads) for quoted services fall within those considered efficient by our consultant Marsden Jacob.

We consider that in calculating its proposed labour rates for quoted services Power and Water did not adjust all input costs to $2019–20. Our draft decision incorporates adjustments with the effect that our draft decision labour rates are slightly higher than proposed by Power and Water. The difference is limited to one year's CPI adjustment of 2.45 per cent.

Our draft decision for Power and Water's hourly labour rates for quoted services is set out in Table 15.1. These hourly labour rates are maximum rates (which include on costs and overheads) that Power and Water should apply for the calculation of charges for ancillary network services offered on a quotation basis.

Table 15-1 AER draft decision - quoted service hourly rates (including on costs and overheads), $2019–20

Power and Water labour category	AER labour category[1]	Power and Water's proposed hourly rate (base plus on-costs plus overheads)	AER draft decision - maximum total hourly rate (base plus on-costs plus overheads)[1]
Admin	Admin	$76.72	$78.60
Technical specialist, Trade technical and Operator	Technical specialist	$116.79	$119.65
Engineering	Engineer	$136.95	$140.30

Source: Power and Water - Attachment 12.18 ACS FB and QS Model - public

[1] PWC's proposed $2019–20 prices did not escalate all inputs to the correct year. For this draft decision the AER has escalated PWC's proposed $2019–20 Ancillary Network Services prices by 2.45 per cent.

New ancillary network services

If Power and Water introduces new services during the regulatory period which are classified as Alternative Control Services based on Attachment 12 - Classification of Services, then we consider that these new services should be priced on the same basis as a quoted service until they can be properly assessed as a fee based service for the subsequent regulatory period. The price of any new service introduced within the regulatory period should be disclosed through the Annual Pricing regulatory process.

15.4.2 Ancillary network services—Reasons for draft decision

For ancillary network services we consider it is important to review each of the services with specific focus on the key inputs in determining the price for the service. We consider the key inputs in determining an efficient level of fees for ancillary network services include the underlying labour rates, the time taken to perform the service and any material and vehicle costs associated with providing the service.

In considering these inputs we had regard to maximum efficient benchmarks for these inputs for such services developed by our consultant Marsden Jacob. By inputting the maximum benchmarks for labour rates, vehicle costs and times taken to perform services, as developed by Marsden Jacob, we were able to assess Power and Water's proposed charges for fee based services against a maximum efficient charge.

Figure 15.1 Summary of Marsden Jacob's report to the AER - Review of Alternative Control Services

We engaged Marsden Jacob to provide advice in relation to estimates of reasonable maximum total labour rates for the DNSPs currently undergoing resets as well as benchmarking of certain fee-based services. Marsden Jacob also provided advice on public lighting and metering input costs.

Marsden Jacob found that although each of the distributors reviewed used different category names and descriptions, the types of labour used to deliver ancillary network services broadly fell into the following five categories:

- administration
- technical services
- engineers
- field workers and
- senior engineers.[1]

Using these categories Marsden Jacob developed benchmark labour rates based on *Hays 2017 Energy sector and office support salary data* against which the efficiency of the proposed labour rates could be assessed.

In assessing the reasonableness of proposed labour rates, Marsden Jacob 'normalised' the rates provided by each business and separated them into 'raw' labour rates, on-costs and overheads.[2]

1. Raw labour costs – based on the Hays salary data and the figures used included a 8.5 per cent escalator.[3]
2. On-costs – to cover both basic leave entitlements and standard on-costs[4]
3. Overheads – to cover all additional costs. Overall Marsden Jacob recommended a maximum overhead rate of 61 per cent Marsden Jacob also accepted the inclusion of an explicit profit margin, however where these are identified this allocation had been benchmarked within the overall overhead allowance.[5]

Based on its study, Marsden Jacob recommended the maximum reasonable benchmark labour rates as set out below. Marsden Jacob recommended that we apply these maximum rates to any services it did not benchmark, to arrive at a maximum rate.

Table 15-2 Maximum total hourly rates (base plus on-costs plus overheads), $2018-19

	Ausgrid	Endeavour	Essential	Evoenergy[1]	TasNetworks[2]	Power and Water
Admin	$102.26	$102.26	$102.26	$108.37	$90.36	$89.94
Technical specialist	$153.39	$153.39	$153.39	$153.00	$144.56	$179.87
Engineer	$191.74	$191.74	$191.74	$191.25	$168.65	$167.88
Field Worker[3]	$147.83	$147.83	$147.83	$147.50	$140.45	$169.89
Senior Engineer	$210.91	$210.91	$210.91	$210.37	$198.75	$203.86

Source: Marsden Jacob Associates, Review of Alternative Control Services - Advice to Australian Energy Regulator - PUBLIC version, September 2018, Tables 5 and 7, pp. 8, 10.

Notes: [1] For Evoenergy, Marsden Jacob applied Sydney rates for all labour categories except for Administration as Hays only reports Administration rates for Canberra.

[2] For TasNetworks, Marsden Jacob used the lowest rate for Sydney, Canberra and Darwin for Administration and lower of Sydney and Darwin for other staff as there are no Hays figures for Tasmania. Marsden Jacob has applied the lowest rate as Tasmania has the lowest Average Weekly Earnings rates of any capital city in Australia.

[3] Field worker rate includes an allowance of $20 for a vehicle as an additional overhead.

The maximum hourly rates include the highest of the Hays salary rates for each labour category. Marsden Jacob noted that while these are reasonable maximum rates, more efficient rates may be gained by reference to a different point in the Hays salary bands. For our next distribution determination for these distributors, Marsden Jacob recommended the AER consider whether it is appropriate to reduce the maximum rates to reflect efficiency frontier benchmarks rather than the highest of the Hays rates for each labour category.[6] We note Marsden Jacob's recommendation in the context of future determinations. For the purposes of this draft decision we consider the maximum reasonable rates provided by Marsden Jacob should be considered efficient for our purposes.

References:

1. Marsden Jacob Associates, Review of Alternative Control Services - Advice to Australian Energy Regulator - PUBLIC version, September 2018, p. 3.
2. Ibid., p.3.
3. Ibid., p.4.
4. Ibid., pp.5-6.
5. Ibid., pp.7-8.
6. Ibid., p. 8.

Regulatory treatment of overheads and cost allocation

In its discussion of maximum overhead rates, Marsden Jacob noted that capping the overhead rate may have unintended consequences for the broader cost allocation method.[10]

We reviewed the objectives of our cost allocation guideline. The cost allocation method sets out the principles and policies for attributing costs to, or allocating costs between, the categories of distribution services a distributor provides. Hence, in approving a distributor's cost allocation method, we approve the method it uses to allocate costs. This does not equate to approving the costs.

The approval of actual costs is subject to applicable requirements set out in the NER. Proper application of the cost allocation method does not indicate whether the distributor's expenditure, including overheads, is at efficient levels or otherwise reflects the requirements of the NER, having regard to the revenue and pricing principles and the national electricity objective. By extension, proper application of the cost allocation method does not indicate whether the resulting overhead rates represent efficient levels.

Fee based services

We do not accept Power and Water's proposed charges for fee based ancillary network services. This is because we do not accept Power and Water's proposed after hours charge.

While we would be prepared to accept Power and Water's proposed fees for services provided during normal business hours, or base fees, there is a close relationship between these and the after-hours charge. Amending the after-hours charge may have consequences for base fees. Power and Water may wish to reconsider the balance of its cost recovery between base charges and after hours charges in the context of its revised proposal. Indeed, Power and Water submitted that, as a result of our enquiries on this issue, it will undertake a review of its ancillary network service fees to inform its revised proposal.[11]

Taking into account the relationship between the after-hours charge and base fees, and Power and Water's intention to review its proposed fees for its revised proposal, our draft decision is to not accept ancillary network service fees altogether. This approach allows Power and Water to assess the balance of its cost recovery across its base charges and after hours charge.

If we were to accept Power and Water's proposed base fees, under the NER Power and Water may be precluded from adjusting the base fees in its revised proposal. This is because the NER provides that proposals which we accept with our draft decision

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10 Marsden Jacob Associates, *Review of Alternative Control Services - Advice to Australian Energy Regulator - PUBLIC version*, September 2018, p. 8.

11 Power and Water, response to AER information request #038.

are taken to be finalised. In the circumstances we consider that would be inappropriate.

While our draft decision is formally to not accept Power and Water's fee based service proposed charges, our assessment indicates that its proposed base charges are below efficient benchmark levels and are, by themselves, acceptable. Below, we set out our detailed assessment of Power and Water's proposed base charges and after hours charge.

To calculate charges for fee based services Power and Water used a cost build up approach. The underlying costs included labour, time taken to perform the service, vehicle costs and an allocation of overheads.

For fee based ancillary network services Power and Water used the following types of labour:

- administration
- technical specialists, and
- contractors.

Power and Water calculated charges by multiplying the base labour rate (for the type of labour required to perform the service) including on-costs by the number of crew and the time taken to perform the service. Vehicle costs were also included in the build-up of the charge where a vehicle is required to perform the service.

To this build-up of labour, vehicle and material costs Power and Water added network and corporate overhead costs. The proportion of overhead costs allocated to each service was based on the number of times the service was expected to be performed and revenue derived from the service. This means that, under Power and Water's proposed cost allocation approach, those services that are more frequently requested are allocated more overheads.

To assess Power and Water's proposed fees for ancillary network services we incorporated the Marsden Jacob maximum recommended labour rates including on-costs and overheads into Power and Water's model and removed Power and Waters overhead allocation. This means that under our analysis, using the Marsden Jacob recommended benchmarks, a consistent allocation of 61 per cent overhead was added to each labour category. We used the Marsden Jacob maximum benchmarks for our test because we consider the Marsden Jacob recommended maximum benchmark labour rates and overheads to be well considered and reasoned and can be readily adopted to test the reasonableness of Power and Water's proposed fees.

Based on our analysis, we consider Power and Water's proposed underlying labour rates and overheads fall within the maximum efficient benchmark labour rates (including on-costs and overheads) developed by Marsden Jacob. We also consider the time taken to perform the service and material and vehicle costs to be efficient and fall within the benchmarks recommended by Marsden Jacob.

We note that in undertaking our analysis of Power and Water's proposed fees that these fall well within a maximum efficient charge (with some charges being 30 per cent

below a maximum efficient charge), as based on our analysis using the Marsden Jacob recommended benchmarks.

We have also benchmarked Power and Water's proposed fees for ancillary network services against fees charged for similar services by other distributors and have found that Power and Water proposed fees for similar services benchmark favourably against other distributors.

Power and Water proposed to remove the following current ancillary network services for the 2019–24 regulatory period:

- Reconnection CT
- Attending loss of supply
- Additional crew per person per hour (BH) and (AH).

We accept Power and Water's proposal to remove these services. Power and Water submitted that, in proposing services, it used the guiding principle that the price for each service is calculated based on the most common type of service delivered within that category. It ignored minor variations within that service category. If the variation is significant then that service will have its own price.[12] For example, Power and Water proposed to remove the service Reconnection CT as it represents a small proportion of total reconnections, so has been incorporated under the broader definition of reconnections. Power and Water instead proposed that reconnections will only be differentiated by remote capability.[13]

Power and Water proposed that the Attending loss of supply charge[14] be replaced with the Wasted visit fee.[15] [16]

Power and Water proposed to consolidate the following of their current ancillary network services into two services *Exchange or Replace meter 3 phase* and *Exchange or Replace meter - standard*:

- SMART meter installation - 3 phase
- SMART meter installation - single phase
- Exchange or replace meter - (CT)
- Exchange or replace meter 3 phase and single phase
- Photovoltaic (PV) Installation Charge (3 Phase)
- Photovoltaic (PV) Installation Charge (single phase)

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[13] Power and Water, response to information request #027.

[14] The attending loss of supply charge is currently applied in this period when Power and Water attend a location but conclude it is the customer's installation which is at fault.

[15] The wasted visit charge is applied when additional costs incurred where service provision could not be undertaken and / or completed as planned due to action or inaction of a network user or their agent.

[16] Power and Water, response to information request #027.

- Replacement of meter due to tampering or damage by a customer (prepayment)
- Prepayment meter installation.

We approve the consolidation of these services as it provides for a simplified fee structure and allows for administrative simplicity. Power and Water submitted that the difference in meter costs was not significant enough to warrant multiple charges. Under the new arrangement the only distinction will be between three phase and single (standard) phase.[17]

The proposed fees for the two new services under which the current services have been consolidated result in lower charges than those currently charged, except for the current charge Exchange or Replace meter 3 phase and single phase. Power and Water submitted that the proposed exchange or replace meter charges are applied at the request of a network user, or when a meter needs to be replaced due to tampering / damage by a customer. The main driver of difference in the charges between the current regulatory control period and the forthcoming is the inclusion of materials (meter) cost in the 2019–24 charges.[18]

After hours charge

As noted above, our draft decision is to not accept Power and Water's proposed after hours charge. Our reasons are set out below.

Power and Water proposed to apply an additional fixed fee, on top of its business hours or base fee, for after-hours provision of fee based services. Power and Water proposed to charge customers an additional $563.36 as an after-hours charge and to apply the charge from 3pm weekdays.

We sought clarification from Power and Water on its rationale for the level of its proposed after hours charge and on its application of the charge from 3pm rather than a more typical 5pm.

In response to our queries, Power and Water submitted:

- same day service requests made to Power and Water after 3pm attract the after-hours fee because it must re-schedule staff
- it is undertaking a review of its base fees and the after-hours fee
- the results of its review will inform its revised proposal.

Power and Water also submitted that the after-hours charge was applied on 81 occasions during the 2017–18 regulatory year. All of those related to reconnections. Of the total, 41 related to reconnection after disconnection due to non-payment.

We note Power and Water's proposed fee for reconnection is $70.02.

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17 Power and Water, response to information request #027.

18 Power and Water, response to information request #027.

In principle we accept that after hours fees are appropriate as distributors typically incur additional labour costs when staff are required to work after standard business hours. Workplace agreements may, for example, provide for time-and-a-half hourly rates or double-time for after-hours work. It is appropriate for distributors to recover those costs from customers under certain circumstances. However we would only accept afters hours fees which appear reasonable in terms of their proposed level.

The level of Power and Water's proposed after hours fee is several multiples of its reconnection charge. This contrasts with other distributors which have after hours fees in the order of 40 to 75 per cent higher than base fees. We consider an after-hours mark-up of around 70 to 75 per cent of the base fee to be a reasonable upper limit reflecting typical workplace agreements.

Because Power and Water's proposed after hours fee is larger than other distributors, our draft decision is to not accept it. Our draft decision is to apply an after-hours fee of 70 per cent of the base fee for the relevant service. In the case of reconnections, the after-hours charge would be 70 per cent of $70.02, or $49.01.

We expect Power and Water to address this issue in its revised proposal. It is open to Power and Water to submit additional information in support of a higher after hours charge. In that case we expect Power and Water would seek to explain how its circumstances materially differ from those of other distributors which have established after hours fees at lower rates as explained above.

Quoted services

For quoted services we consider it appropriate to accept the individual business' labour rate if proposed rates fall within Marsden Jacob's maximum efficient rates. If not, we consider it appropriate to use Marsden Jacob’s recommended rates (as applicable) for raw labour rates, on-costs and overheads.

Power and Water's base labour rate for administration was higher than the raw labour rate recommended by Marsden Jacob. However, the total labour rate for administration, which includes on-costs and overheads proposed by Power and Water, was below the maximum benchmark labour rate (including on-costs and overheads) recommended by Marsden Jacob. Power and Water's proposed rates for its other labour categories (technical specialist and engineer) for quoted services were below the maximum labour rates recommended by Marsden Jacob.

We conclude Power and Water's proposed labour rates for quoted services are reasonable.

We found, however, that Power and Water's calculations to derive quoted service labour rates incorporated a minor error. Input prices were not consistently inflated to the correct $year. We have corrected that calculation error using an assumption around CPI.

Therefore, while in principle we accept Power and Water's proposed labour rates for quoted services, our draft decision is to adjust them. The difference between our draft

decision rates and those proposed by Power and Water is limited to one year's CPI adjustment of 2.45 per cent.

15.5 Metering services

Metering assets are used to measure electrical energy flows at a point in the network to record consumption for the purposes of billing.

Power and Water is responsible for supplying metering services in the Northern Territory. This includes the installation of new meters and replacement of existing meters. Unlike in other states and territories, metering contestability does not apply in the Northern Territory.

Power and Water's type 1 to 6 metering services are classified as alternative control services. Power and Water's type 7 metering services, however, are classified as standard control services.[19]

We are responsible for setting prices for type 1 to 6 metering services in the Northern Territory. There are currently no type 5 meters in the Northern Territory.[20]

Charges for metering services are based on the building block model. The total revenue requirement is driven mostly by forecast opex and capex costs. Charges are decided so that, assuming forecast customer numbers and predetermined price movement year on year (X factors and CPI), the required revenue from the building block model will be achieved. As this is a new pricing structure, Power and Water's starting charges were calculated by allocating total capital and operating costs across tariff classes, recognising that some meter types are more expensive than others.[21]

15.5.1 Metering services—Draft decision

Service classification - Metering services

Our draft decision is to classify metering services as alternative control services. This is consistent with our final Framework and Approach and Power and Water's proposed classification of metering services.

Form of control - Metering services

Our draft decision is to apply a price cap form of control for metering services. This is consistent with our Final Framework and Approach and Power and Water's proposed form of control for metering services. Under a price cap form of control, we set a schedule of prices for the first year of the regulatory period, 2019–20. For 2020–21 and

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19 AER, *Framework and approach Power and Water Corporation (NT) Regulatory control period commencing 1 July 2019*, July 2017, p. 12.

20 Power and Water, Attachment 14.13P Asset Management Plan – Metering, 07 February 2018, p. 57.

21 Power and Water, *PWC12.2 – ACS Metering Post-tax Revenue Model – 16 Mar 18*, Tab. Starting Prices

subsequent years the prices for metering services are determined by adjusting the previous year's prices by the formula set out in Attachment 13.

Metering services

Typically under a price cap the starting prices charged for a service will be based around an adjustment to the currently charged prices. Power and Water does not currently charge for metering services as a separate charge. Rather, metering services are currently bundled with standard control services. Therefore, its proposed starting prices are estimates based on capital and operating costs per tariff class.[22]

Our draft decision is to not accept Power and Water's proposed 2019–20 charges but to substitute our own. These charges represent a reduction of 12.2 per cent on Power and Water's calculated 2018–19 rates. This is driven by:

- our lower rate of return and updated inflation adjustments substituted in the metering building block model
- not accepting Power and Water's proposed step change for Southern Region metering technicians.

Power and Water further proposed that its charges would increase by 6.8 per cent per annum (an X factor of –6.8 per cent). Due to a reduced overall revenue requirement, we have set this X factor to 5.8 per cent. Our draft decision prices and X factors are set out in Appendix B.

Table 15.3 sets out our approved building block revenue under this draft decision and how this relates to Power and Water's proposed revenue.

Table 15-3 Metering Building Block Revenue for 2019–24, AER draft decision

($2018–2019)		Total Revenue	Net Present Value of Revenue	Relativity of Net Present Value
Revenue	Power and Water Proposed	39.46	34.85	100.0%
Adjustment	Asset classes	-2.35	-1.91	-5.5%
Adjustment	Opex	-1.09	-0.96	-2.8%
Adjustment	Rate of return, Gamma, Inflation rate	-2.22	-0.75	-2.1%
Revenue	AER Draft Decision	33.81	31.22	89.6%

Our draft decision is to approve the following elements of Power and Water's metering proposal, which we consider are consistent with the pricing principles and promotion of the national pricing objective:

[22] Power and Water, *PWC12.2 - ACS Metering Post-tax Revenue Model - 16 Mar 18 - Public*, Starting Prices Tab

- Smart Meter Rollout

  Our draft decision is to accept Power and Water's proposed advanced metering rollout during the 2019–24 regulatory control period with the necessary IT communications to enable remote reading and remote re-energisation and de-energisation (i.e. the meters will be enabled as smart meters).[23]

Our reasoning is detailed under the Smart Meter Rollout

Smart Meter Rollout

- Smart Meter Rollout

  section below.

- Structure of Metering Charges
- Our draft decision is to accept Power and Water's pricing structure but with modifications to proposed charges. Our draft decision is, with minor modifications, to accept Power and Water's metering models. These modifications result in small changes to charges.
- Depreciation

  Our draft decision is to not accept the proposed remaining lives of the metering asset categories. This is discussed with respect to the change in asset classes below.

  Consistent with our draft decision for standard control services, we specify that actual, as opposed to forecast, depreciation will apply to Power and Water's metering asset base (MAB).

- Rate of return

  Our draft decision is that the same rate of return and imputation credit (gamma) values for standard control services should apply to alternative control metering services. These values have varied from the initial values chosen by Power and Water which results in an overall reduction in revenue.

  See attachments 3 and section 2.2 of the overview for our draft decision on rate of return and gamma values, along with our reasons.

  However, unlike for standard control service, we will not be annually adjusting Power and Water's return on debt.

- Forecast Capex

  Our draft decision is to accept Power and Water's proposed capex forecasting approach, with actual forecast capex adjusted to $22.28 million ($2018–19) due to updates in WACC and inflation.

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[23] Power and Water, *Alternative Control Services Metering Overview Document 2019-20 to 2023-24*, 16 March 2018, p. 16.

However, the following elements of Power and Water's metering proposal require further justification in Power and Water's revised proposal before we would be able to accept them:

- Forecast Opex
- Customer Numbers in the Post-Tax Revenue Model
- Asset Classes in the Roll-Forward Model
-

15.5.2 Metering services—Reasons for draft decision

Smart Meter Rollout

We assessed Power and Water's proposal to install advanced meters with remote communications (smart meters) during the 2019–24 regulatory control period. In doing so we considered both the intent of Power and Water's proposal and the details of its modelling. To fully understand Power and Water's proposal we sought further details from Power and Water and also considered those additional materials.[24] From our assessment we concluded:

- the proposed smart meter rollout will result in lower metering charges and a lower revenue requirement in the 2019–24 regulatory control period compared to the base case—discussed below.
- in the longer term, if we set aside indirect benefits associated with improved metering, the smart meter rollout will be more expensive by $2.95 per customer per year ($2018-19) compared to not having a smart meter rollout. However, once we accounted for the remaining benefits we found this increased cost was more than offset.
- if Power and Water can achieve at least 25 per cent of the estimated tariff benefits related to the smart meter rollout (which we consider is relatively conservative given that Power and Water proposed to mandate cost reflective tariffs as per its tariff structure statement) and have the other network operational benefits at a similar level to those realised in Victoria[25], the smart meter rollout cost benefit analysis will have a positive net present value.

For the above reasons we consider Power and Water's proposed position to be justified as in consumers' best interests.

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[24] Power and Water, Response to AER Information Request 003; 9 April 2018; Power and Water, Follow up to actions from AER Pricing Meeting 13 April 2018; Action Items Received: 15 April 2018, 16 April 2018, 23 April 2018, 10 May 2017.

[25] Victorian small customers have had smart meters for several years under s state wide rollout which differed from Power and Water's proposal in that it incorporated accelerated rollout of smart meters, Power and Water proposes only to install smart meters according to its standard meter replacement schedule and for newly connecting customers.

The base case against which we compared Power and Water's metering proposal is a rollout of meters requiring manual reading. In practice, the actual meters are very similar to smart meters, both meter types being digital and capable of providing a range of services. Power and Water submitted that the older mechanical meters are now difficult to source so no longer represent a practical alternative for comparison purposes.

The difference between a smart meter (Power and Water's proposal) and a manually read meter (the base case) is the inclusion of remote communications capability. While base case manually read meters may be converted to smart meters after installation, this would require an additional visit by a technician to install the remote communications capability. The additional visit and required work would increase overall costs compared to installing remotely read smart meters in the first place.

We considered that there was an inaccuracy in how Power and Water had applied the results of the Victorian Auditor General's report into estimated smart meter benefit. In estimating the likely benefits to accrue from a smart meter rollout, Power and Water adjusted the Victorian estimated benefits to 80 per cent of their true value. [26] We consider that this was likely to overstate these benefits as this 80 per cent assumption assumes a 100 per cent achievement of opex related benefits which are not part of the figures to which Power and Water is applying this adjustment. However, Power and Water had also adjusted the benefits down by a further 50 per cent which we consider conservatively outweighed any overstatement within that 80 per cent figure.

We received two submissions on Power and Water's smart meter rollout:

- Jacana Energy (the primary retailer in the Northern Territory and owned by the Northern Territory government) was supportive of the introduction of smart meters and of Power and Water's rollout policy. [27]
- the AER's Consumer Challenge Panel Sub-Panel 13 (CCP13) submitted that Power and Water's smart meter policy had not yet been justified, but encouraged us to continue with our analysis.[28]

We subsequently progressed our analysis, in spite of challenging some of Power and Water's assumptions, and concluded Power and Water's smart meter rollout is justified, as discussed above. We shared our analysis with the CCP which acknowledged it was reasonable.

Structure of Metering Charges

[26] Victorian Auditors-General's Office, Realising the Benefits of Smart Meters (Presentation), 16 September 2015, pp. 2 and 8.

[27] Jacana Energy, *Submission PWC Regulatory Proposal*, 16 May 2018, p. 2.

[28] Consumer Challenge Panel Sub-Panel 13, Response to proposals from PWC for a revenue reset for the 2019-24 regulatory period, 16 May 2018, pp. 11 and 57.

Power and Water's proposed pricing structure is an annual charge based on allocating meters to one of three meter categories. Assignment to a meter service provision charge is based on whether the customer has a single-phase meter, three-phase meter or dedicated current transformer or voltage transformer with remote reading (CT and VT meters).[29]

This structure does not charge an upfront fee on meter installation, except in cases where the installation is by customer request to replace an existing meter before the end of its useful life. It also does not differentiate between customers with different meter types beyond the above categories; for instance smart meters and accumulation meters.

Our draft decision is to accept this charging structure.

We consider that not differentiating between customers with smart meters and those without is appropriate for the 2019–24 regulatory control period. Given the greater capex expenditure on smart meters is offset by reduced opex expenditure from reduced manual meter reading, the per meter costs of smart meters and accumulation meters will not be significantly different during the 2019–24 regulatory control period.

While a smart meter offers greater functionality, we consider that since customers will not be choosing their meter type (unless they pay a fee to have a smart meter installed earlier than scheduled) it is more equitable that they not be charged differently for that meter type. This is what Power and Water has proposed and it is consistent with the existing metering cost recovery arrangements.

Scope of Services

Our draft decision is to accept a charging structure for type 1-6 metering services. This includes services relating to prepayment meters. We note that Type 5 (interval) meters are currently not used in the Northern Territory.

The majority of Power and Water's current metering assets are type 6. In 2016 Power and Water had:

- 0 type 1 meters
- 11 type 2 meters
- 255 type 3 meters
- 3,924 type 4 meters
- 0 type 5 meters
- 110,631 type 6 meters (manually read accumulation meters).[30]

Forecast Capex

[29] Power and Water, *Regulatory Proposal 1 July 2019 to 30 June 2024*, 16 March 2018, p. 13.

[30] Power and Water, Attachment 14.13P Asset Management Plan – Metering, 07 February 2018, pp. 7–8.

Our assessment approach for Power and Water's proposed capex for metering services involved us assessing the proposed:

- unit costs for metering hardware and labour
- volume of new connections, replacements, and customer driven alterations.

Our draft decision is to accept Power and Water's forecast metering capex methodology but to amend the total amount of capex. We have revised total metering capex from $25.53 million ($2018–19) to $22.28 million. Our revision is the result of updating the rate of return and inflation assumptions in Power and Water's capex cost benefit analysis in line with our assumptions in the Post-tax Revenue Model and Standard Control Services. These capex revisions drive our substitute metering charges set out in appendix B.

Due to the nature of the building block model, where capex costs are depreciated over time, the $3.25 million difference in these numbers will not actually result in a $3.25 million capex reduction in the 2019–24 regulatory control period.

Our draft decision is to accept the hardware and labour unit costs that input into Power and Water's proposal. We reviewed the hardware costs within Power and Water's cost benefit analysis, which drive the capex assumption. The costs of meters were benchmarked by Marsden Jacob who found that they were efficient. There were some communication costs in addition to the base cost of the meter which were not included in the Marsden Jacob analysis. However, these can be verified against publicly available sources.

Marsden Jacob also found that, excluding overheads, some of Power and Water's proposed labour rates were not efficient. However, the rates used in deriving the capex allowance for metering are, inclusive of overheads, within efficient levels. We are satisfied that Power and Water's capex assumptions reflect market prices for hardware and labour.

Our draft decision is to accept Power and Water's forecast volume of new connections, meter replacements and customer driven alterations.

CCP13 raised concerns that Power and Water's demand forecasts may be overstated and encouraged Power and Water to engage AEMO to prepare an updated demand forecast prior to submitting its final proposal.[31]

If these forecasts are overstated, the result will be that Power and Water's capex allowance will be overstated. However, the nature of the price cap control mechanism is such that if actual new connections are lower than forecast then Power and Water's revenue will reduce. As a consequence, as long as the capex per customer is efficient then the total capex collected will also be efficient.

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[31] Consumer Challenge Sub-Panel 13, *Submission to the Australian Energy Regulator (AER) Consumer Challenge Panel Sub-Panel 13 Response to proposals from PWC for a revenue reset for the 2019-24 regulatory period*, 16 May 2018, p. 45.

If we lower Power and Water's connection assumption, the expected number of customers will decrease. By doing so, the variable costs per customer remain the same. However, the fixed costs per customer increase. As a consequence, capex per customer would increase overall with a lower connection assumption. So, if connections are overstated, capex per customer is actually lower than it would be otherwise.

For the above reasons we consider that even if demand is overstated the capex allowance can be accepted.

Customer Numbers in the Post-Tax Revenue Model

Power and Water's cost benefit analysis for metering and regulatory proposal suggested growth in customer numbers during the 2019–24 regulatory control period. In Power and Water's Metering Post-Tax Revenue Model, an assumption of no customer growth was applied. For consistency, we have included Power and Water's customer number forecasts in the Metering Post-Tax Revenue Model. This will result in lower prices, since required revenue must be the sum of prices by customer numbers. If customer numbers increase while required revenue stays constant, prices decrease.

Forecast Opex

We assessed Power and Water's proposed metering opex using a top-down 'base–step–trend' approach. This is our preferred approach to assessing most opex categories.[32] In particular, we:

- used the 'revealed costs' approach as the starting point and removed any non–recurrent expenditure
- adjusted for any step changes if we were satisfied that a prudent and efficient service provider would require them
- trended forward the base opex (plus any step changes).
- We also had regard to benchmarking when considering Power and Water's proposed metering opex.

Base

The initial step in our assessment of Power and Water's proposed operating expenditure was to consider its 'base' level of expenditure.

Power and Water has not proposed an efficiency adjustment to its metering opex and has instead based it on a revealed cost basis.

We looked at what Power and Water's base should be from two different perspectives. These were Power and Water's historical opex and its performance against benchmarking.

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[32] AER, *Better regulation: Expenditure forecast assessment guideline for distribution*, November 2013, p. 32.

In assessing historical expenditure, we considered Power and Water's base should be at least as efficient as its costs in previous years. This exercise is complicated with respect to Power and Water due to metering historically being included within bundled standard control services without the revenue and costs attributable to metering being separately recorded. Power and Water has acknowledged that while its accounts identify total expenditure associated with metering, this was not exhaustive prior to 2013–14.[33]

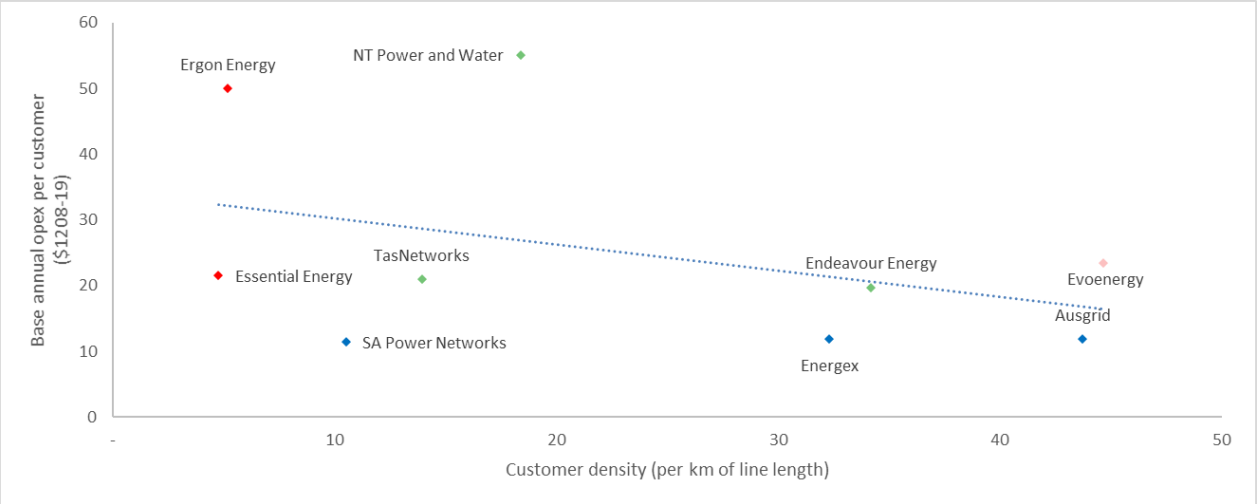
We observed Power and Water's historic opex, adjusted for inflation, since 2013–14. Applying this approach we observed a base expenditure of $60 per customer per year ($2019–20). Power and Water's proposed base is $55 per customer per year.

Power and Water submitted it has unique external cost drivers compared with other DNSPs in the NEM, which increases its comparative opex and that applying our benchmarking model to their opex is likely to result in an opex outcome that is not practicable.[34]

We acknowledge Power and Water operates in a unique environment and that benchmarking alone should not be determinative in assessing Power and Water's costs. We further accept that since the Power of Choice reforms in December 2017, Power and Water's circumstances have become more unique within the NEM due to metering contestability not applying in the Northern Territory.

We have still undertaken an indicative benchmarking exercise. Power and Water's opex per customer is higher than the industry average based on its customer density.

Figure 15.2 Power and Water historical metering opex per customer current regulatory control period compared to customer density

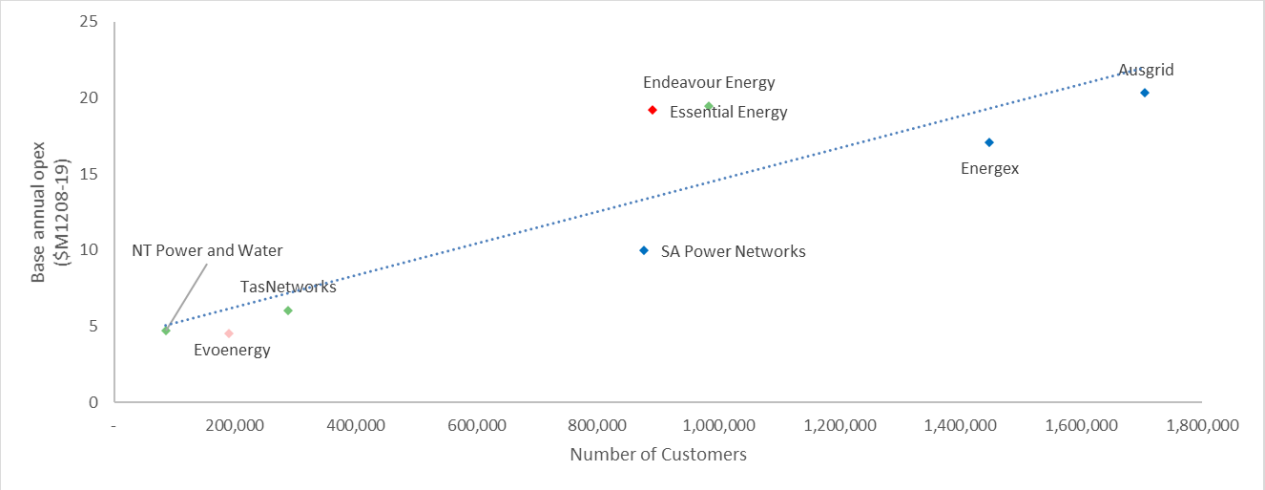


[33] Power and Water, *Response to AER Information Request 003: RIN inconsistencies*, 9 April 2018, p. 3.

[34] Power and Water, *Regulatory Proposal 1 July 2019 to 30 June 2024*, 16 March 2018, p. 82.

We also attempted to fit a line relating the metering opex of other distributors, to customer numbers. We do not consider this a determinative measure of a distributor's expected opex by itself (since customer density is clearly a significant factor) but is an indicator of how opex relates to size and where Power and Water falls on that spectrum.

Figure 15.3 Power and Water historical metering opex current regulatory control period compared to number of customers



While our benchmarking analysis illustrates that Power and Water may have opportunity to improve its opex efficiency, taking into account Power and Water's circumstances we consider Power and Water's proposed metering opex should be accepted. We have formed this conclusion taking into account Power and Water's transition to the national regulatory framework and its unique operating environment in the Northern Territory. We also note that Power and Water is actively seeking to improve its metering opex efficiency through the rollout of smart meters. We expect Power and Water to look at improving its opex efficiency over time.

Our draft decision is to accept Power and Water's base opex for the 2019–24 regulatory control period.

Step changes

Power and Water's proposed opex allowance included a step change for increased staff numbers. These were two full time equivalent for inspection and testing, 0.25 full time equivalent for type 1-6 metering compliance and two full time equivalent for Southern Region metering technicians.

Power and Water separately requested a step change for its type 7 metering compliance. Type 7 metering is a standard control service and so this is addressed in Attachment 6 – Operating Expenditure.

Power and Water stated that its proposed two full time equivalent staff for inspection and testing are required to comply with Schedule 7A.2 'Inspection and testing requirements' (Tables S7A.2.1.2 & S7A.2.1.3) in the NT NER. Power and Water further stated that the 0.25 full time equivalent for new metering compliance obligations include preparing a five-year rolling sampling plan for type 1-6 metering installations. [35]

Our draft decision is to accept these step changes as necessary departures from Power and Water's current process.

However, our draft decision is to not accept Power and Water's step change for Southern Region metering technicians. Power and Water stated that this work is currently undertaken by electrical tradesmen and external contractors.[36] If Power and Water is currently undertaking this work as stated then the cost of the external contractors, who will no longer be required if the new staff are hired, will be included in Power and Water's base year. Therefore, a step change of two full time employees should be accompanied by a reduction for the foregone contractor costs. We do not consider that Power and Water has justified why efficient staff costs should outweigh the reduction in savings on contractor costs and require a step change.

This represents a reduction of $1.53 million ($2018-19) to Power and Water's opex allowance.

There is a further, negative, step change driven by the smart meter rollout and associated reduced meter reading costs. Our draft decision is to accept this step change. The labour rates used in this model are acceptable against the labour rates proposed by Marsden Jacob.

Trend

Our draft decision is to adjust the wage index using DAE's forecast in the opex model. This is consistent with our approach to standard control services opex as discussed in greater detail in Attachment 6 – Operating Expenditure. We expect to update these rates in our final determination.

Asset Classes in the Roll-Forward Model

In the 2014–19 regulatory control period Power and Water had a single metering asset class representing all metering assets. For the 2019–24 regulatory control period Power and Water developed its Post-Tax Revenue Model including the following asset classes:

- Mechanical Meters
- Electronic Meters
- Metering Communications

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35 Power and Water, *PWC0.3.2P – SCS and Opex Step Changes – 31 Jan 18*, pp. 16–18.

36 Power and Water, *PWC0.3.2P – SCS and Opex Step Changes – 31 Jan 18*, p. 20.

- Metering Dedicated CTs and VTs
- Metering Non Network Other
- Metering Non Network IT and Communications.

We accept the use of these asset classes in the Post-Tax Revenue Model. However, it is not our practice to accept new asset classes retrospectively.

For this reason, in our Roll Forward Model, which is used to shift forward the historical asset base in order to get an updated asset base to start the Post-Tax Revenue Model, all metering assets need to be allocated to the mechanical meter/electronic meter classes which will have a standard life of 22.1 years. This changes the regulatory asset base as it appears in the Post-Tax Revenue Model.

Total assets have moved from $16.51 million to $16.70 million at the start of the 2019–24 regulatory control period.

A Ancillary network services prices

Table 15.4 Fee based ancillary network service prices for 2019–20, AER draft decision ($2019–20)

Fee based service	Power and Water proposed price	AER draft decision (indicative)
Connection Services		
Disconnection	$70.02	$71.74
Reconnection	$70.02	$71.74
Disconnection - with comms (remote charge)	$8.72	$8.94
Reconnection - with comms (remote charge)	$8.72	$8.94
Remove and reinstate cable	$584.31	$598.62
Provision of 3 phase service	$1,108.00	$1,135.14
Standard temporary builder's connection	$526.95	$539.86
De-energisation / Re-energisation		
Temporary disconnection and reconnection	$228.19	$233.79
Disconnection - physical disconnection of the service mains at the connection to the network (Pillar Box, Pit or Pole Top) due to action or inaction of the network user or their agent	$249.14	$255.25
Other		
After hours attendance charge	$563.36	170% of normal hours charge
Wasted visit fee	$123.46	$126.48
Meter servicing (fee based)		
Special meter test	$238.67	$244.52
Exchange or replace meter - three phase	$502.01	$514.31
Exchange or replace meter - standard	$411.97	$422.06
Relocation of meter	$249.14	$255.25
Remove meter - permanent removal of connection point (meter)	$249.14	$255.25
General meter inspection	$112.98	$115.75
Special meter read - no appointment	$28.38	$29.08
Special meter read - appointment	$60.77	$62.26
Meter program change - no comms	$133.93	$137.21
Meter program change - with comms	$8.72	$8.94

Non-standard data services		
Historical data requests	$157.11	$160.96
Standing data requests	$34.40	$35.25
Customer transfers	$137.62	$140.99
Network tariff change request	$34.40	$35.25
Miscellaneous services		
Installation of minor apparatus	$76.32	$78.19

Note: Power and Water's proposed $2019–20 charges incorporated input costs which were not escalated to the correct year. For this draft decision the AER has escalated Power and Water's proposed $2019–20 ANS charges by 2.45 per cent.

While Power and Water's proposed charges were ostensibly in $2019–20, our discussions with them revealed that not all of the price inputs to charges were escalated to $2019–20. For this draft decision we have adopted a conservative approach and applied a CPI escalator of 2.45 per cent to Power and Water's proposed ancillary network service charges for fee based services. Power and Water indicated to us it will be reviewing this issue in preparing its revised proposal.

Table 15.5 Quoted service ancillary network services hourly labour rates for 2019–20, draft decision ($2019–20)

Power and Water's labour category	AER labour category[1]	AER draft decision - maximum total hourly rate (base plus on-costs plus overheads)[1]
Admin	Admin	$78.60
Technical specialist, Trade technical and Operator	Technical specialist	$119.65
Engineering	Engineer	$140.30

Note: Whilst we have not accepted base plus on-costs labour rates proposed by Power and Water, as these are higher than the maximum efficient rates recommended by Marsden Jacob we have accepted Power and Water's proposed total hourly labour rates including overheads for each labour category as these are within the Marsden Jacob recommended efficient rates.

[1] Power and Water's proposed $2019–20 prices did not escalate all inputs to the correct year. For this draft decision the AER has escalated Power and Water's proposed $2019–20 Ancillary Network Services prices by 2.45 per cent.

Table 15.6 AER draft decision on X factors for each year of the 2020–24 regulatory control period for Ancillary Network Services (per cent)

	2020–21	2021–22	2022–23	2023–24
X factor	0	-0.28959	-0.53226	-0.58178

Source: AER analysis.

Note: To be clear, labour escalators themselves are positive for each year of the regulatory control period. However, the labour escalators in this table are operating as de facto X factors. Therefore, they are negative.

B Metering Prices

Table 15.7 Metering X factors for 2019–2024, AER draft decision

Period	2020–21	2021–22	2022–23	2023–24
Metering X factor	-5.8049%	-5.8049%	-5.8049%	-5.8049%

Note: We do not apply an X factor for 2019–20 because we set the 2019–20 metering charges in this decision.

Table 15.8 Annual Metering Charges for 2019–2020, AER draft decision

Metering Charges ($2019–20)	Power and Water proposed price[37]	AER draft decision
1 Phase Meters (including Prepayment)	$63.14	$55.42
3 Phase Meters	$69.53	$61.02
Dedicated CT and VT meters	$117.75	$103.34

[37] Prices taken from Metering Post-Tax Revenue Model submitted by Power and Water on 16 March 2018. Base prices were supplied in 2018-19 dollars but have been inflated to 2019-20 using the forecast inflation rate as per our draft decision.