FINAL DECISION

Power and Water Corporation Distribution Determination 2019 to 2024

Attachment 18 Tariff structure statement

April 2019

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's final 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 final decision.

The final decision includes the following attachments:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Return on debt transition

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

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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
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 Northern Territory

Shortened form	Extended form
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
Pricing Order	electricity pricing order
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
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

Glossary of terms

Term	Interpretation
Apparent power	See kVA
Anytime demand tariff	A tariff incorporating a demand charge where the demand charge measures the customer's maximum demand at anytime (i.e. not limited to within a peak charging window).
CoAG Energy Council	The Council of Australian Governments Energy Council, the policymaking council for the electricity industry, comprised of federal and state (jurisdictional) governments.
Consumption tariff	A tariff that incorporates only a fixed charge and usage charge and where the usage charge is based on energy consumed (measured in kWh) during a billing cycle, and where the usage charge does not change based on when consumption occurs. Examples of consumption tariffs are flat tariffs, inclining block tariffs and declining block tariffs.
Cost reflective tariff	Consistent with the distribution pricing principles in the NER, a cost reflective distribution network tariff is a tariff that a distributor charges in respect of its provision of direct control services to a retail customer that reflects the distributor's efficient costs of providing those services to the retail customer. These efficient costs reflect the long run marginal cost of providing the service and contribute to the efficient recovery of residual costs.
Declining block tariff	A tariff in which the per unit price of energy decreases in steps as energy consumption increases past set thresholds.
Demand charge	A tariff component based on the maximum amount of electricity consumed by the customer (measured in kW, kVA or kVAr) which is reset after a specific period (e.g. at the end of a month or billing cycle). A demand charge could be incorporated into either an anytime demand tariff or a time-of-use demand tariff.
Demand tariff	A tariff that incorporates a demand charge component.
Fixed charge	A tariff component based on a fixed dollar amount per day that customers must pay to be connected to the network.
Flat tariff	A tariff based on a per unit usage charge (measured in kWh) that does not change regardless of how much electricity is consumed or when consumption occurs.
Flat usage charge	A per unit usage charge that does not change regardless of how much electricity is consumed or when consumption occurs.
Inclining block tariff	A tariff in which the per unit price of energy increases in steps as energy consumption increases past set thresholds.
Interval, smart and advanced meters	Used to refer to meters capable of measuring electricity usage in specific time intervals and enabling tariffs that can vary by time of day.
kW	Also called real power. A kilowatt (kW) is 1000 watts. Electrical power is measured in watts (W). In a unity power system the wattage is equal to the voltage times the current.
kWh	A kilowatt hour is a unit of energy equivalent to one kilowatt (1 kW) of power used for one hour.
kVA	Also called apparent power. A kilovolt-ampere (kVA) is 1000 volt-amperes. Apparent power is a measure of the current and voltage and will differ from real power when the current and voltage are not in phase.

Term	Interpretation
kVAr	Also called reactive power and is power used to maintain the electromagnetic fields of equipment. Low power factors are associated with higher levels of reactive power.
LRMC	Long Run Marginal Cost. Defined in the National Electricity Rules as follows: *"the cost of an incremental change in demand for direct control services provided by a Distribution Network Service Provider over a period of time in which all factors of production required to provide those direct control services can be varied".*
Minimum demand charge	Where a customer is charged for a minimum level of demand during the billing period, irrespective of whether their actual demand reaches that level.
NEO	The National Electricity Objective, defined in the National Electricity Law as follows: *"to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—* *(a) price, quality, safety, reliability and security of supply of electricity; and* *(b) the reliability, safety and security of the national electricity system".*
NER	National Electricity Rules
Power factor	The power factor is the ratio of real power to apparent power (kW divided by kVA).
Tariff	The network tariff that is charged to the customer's retailer (or in limited circumstances, charged directly to large customers) for use of an electricity network. A single tariff may comprise one or more separate charges, or components.
Tariff structure	Tariff structure is the shape, form or design of a tariff, including its different components (charges) and how they may interact.
Tariff charging parameter	The manner in which a tariff component, or charge, is determined (e.g. a fixed charge is a fixed dollar amount per day).
Tariff class	A class of retail customers for one or more direct control services who are subject to a particular tariff or particular tariffs.
Time-of-use demand tariff (ToU demand tariff)	A tariff incorporating a demand charge where the demand charge measures the customer's maximum demand during a peak charging window. A ToU demand charge might also include an off-peak demand change or minimum demand charge, and may include flat, block or time-of-use energy usage charges.
Time-of-use energy tariff (ToU energy tariff)	A tariff incorporating usage charges with varying levels applicable at different times of the day or week. A ToU energy tariff will have defined charging windows in which these different usage charges apply. These charging windows might be labelled the 'peak' window, 'shoulder' window, and 'off-peak' window.
Usage charge	A tariff component based on energy consumed (measured in kWh). Usage charges may be flat, inclining with consumption, declining with consumption, variable depending on the time at which consumption occurs, or some combination of these.

18 Tariff structure statement

This attachment sets out our final decision on Power and Water's tariff structure statement to apply for the 2019–24 regulatory control period.

A tariff structure statement applies to a distributor's tariffs for the duration of the regulatory control period. It describes a distributor's tariff classes and structures, the distributor's policies and procedures for assigning customers to tariffs, the charging parameters for each tariff, and a description of the approach the distributor to setting tariffs in pricing proposals. It is accompanied by an indicative pricing schedule.[1] A tariff structure statement provides consumers and retailers with certainty and transparency in relation to how and when network prices will change.

Our final decision deals only with issues unresolved after our draft decision and Power and Water's revised proposal. For details of our consideration of previously settled issues please see attachment 18 of our draft decision.

18.1 Final decision

Our final decision is to accept Power and Water's revised proposal tariff structure statement (revised proposal) following the removal of the proposed excess kVAr charge.

We consider the revised proposal, with the above amendment, contributes to the achievement of compliance with the distribution pricing principles, including transition towards achievement of the network pricing objective.

We also accept Power and Water's proposal to make some editorial amendments to the revised proposal to improve clarity.

18.2 Power and Water Corporation's revised proposal

The revised proposal is largely consistent with the initial tariff structure statement (initial proposal), which we accepted except for a small number of issues.[2] The revised proposal includes Power and Water's responses to suggestions from our draft decision to achieve compliance with the distribution pricing principles and other applicable rules.

Table 18.1 summarises Power and Water's tariffs and tariff classes in the 2014–19 regulatory control period and those it proposes for the 2019–24 regulatory control period. For both regulatory control periods, Power and Water categorised tariffs and tariff classes according to:

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1 NT NER, cl. 6.18.1A(a).

2 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 10–11.

- the part of the network a customer is connected to (either the high voltage, HV, or the low voltage, LV, network)
- the customer's annual consumption—broadly, those who consumed:
    - more than 750 MWh per annum (large customers)
    - less than 750 MWh per annum (small customers).

Power and Water's classification of customers by this annual consumption follows the thresholds set by the Electricity Pricing Order (the Order). The Order sets caps on the prices electricity retailers can set for small customers in the Northern Territory.[3]

Table 18.1 Power and Water's tariffs across the 2014–19 and 2019–24 regulatory control periods

2014-19 period		Revised proposal for 2019-24 period		
Tariff class	**Tariff**	**Tariff**	**Tariff code**	**Tariff class**
Commercial HV	Commercial HV >750 MWh pa	HV > 750 MWh pa	Tariff 7	HV
		HV Individually calculated tariff > 750MWh pa	NA	
		HV < 750 MWh pa	Tariff 6	
Commercial	Commercial LV >750 MWh pa	LV >750 MWh pa	Tariff 5	LV >750 MWh pa
		LV Individually calculated tariff >750 MWh pa	NA	
	Commercial LV <750 MWh pa	Non-residential - Accumulation meter	Tariff 2	LV <750 MWh pa
	Unmetered - Street lighting	Unmetered	Tariff 4	
	Unmetered - Traffic lights			
Domestic	Domestic	Residential - Accumulation meter	Tariff 1	
		Smart meter LV 40 < MWh pa < 750	Tariff 3	
		Smart meter LV <40 MWh pa	Tariff 3	

Note: Power and Water considers the Smart Meter LV tariff as a single tariff (tariff 3). However, the excess kVAr charge only applies to customers consuming more than 40 MWh per annum.

Note: Tariffs in red font are proposed tariffs that do not have an equivalent in the 2014–19 regulatory control period.

Source: Power and Water, *1.8 - Tariff structure statement*, 29 November 2018.

Power and Water's revised tariff structure statement included several amendments in response to our draft decision, including:

- amendments to unmetered tariffs:[4]
    - adoption of an energy-based charging parameter (the initial proposal included a demand-based charging parameter)
    - consolidation into a single unmetered tariff (there were previously two tariffs)

[3] We discussed the Order in more detail in appendix A of our draft decision.

[4] Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, pp. 5–6, 12, and 16–17; Power and Water, *4.03P - SCS Pricing Model*, 29 November 2018.

- further information regarding individually calculated tariffs for large customers such as criteria for assigning customers to such tariffs and the method for determining the structures and levels of prices[5]
- the approach it will use to set prices in each pricing proposal over the 2019–24 regulatory control period.[6]

18.3 Assessment approach

We assessed the proposed tariff structure statement against two sets of requirements under the NT NER.

First, the NT NER sets out a number of elements that an approved tariff structure statement must contain.[7] These include the structure of the proposed tariffs, and the policies and procedures the distributor will use to assign customers to those tariffs.

Second, a tariff structure statement must comply with the distribution pricing principles.[8] Broadly, the pricing principles require tariffs to reflect a distributor's efficient costs. An approved tariff structure statement must have regard to the impact on customers in the transition to cost reflective tariffs.

Please refer to our draft decision for more details.[9]

18.4 Reasons for final decision

We consider the revised proposal, with the removal of the excess kVAr charge, contributes to the achievement of compliance with the distribution pricing principles, including to the achievement of the network pricing objective.

We discuss the reasons behind the removal of the excess kVAr charge in section 18.4.6.1 of this final decision.

More generally, section 18.4.6 looks at how the revised proposal addressed the issues we raised in our draft decision (regarding the initial proposal).

Sections 18.4.1 to 18.4.5 looks at the aspects of the revised proposal that were consistent with our draft decision. In many cases, these assess the implications of stakeholder submissions to the revised proposal.

18.4.1 Tariff assignment policy

5 Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, pp. 7 and 13.
6 Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, pp. 14–18.
7 NT NER, cl. 6.18.1A(a).
8 NT NER, cl. 6.18.1A(b).
9 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 11–14.

We consider Power and Water's proposed tariff assignment policy contributes to the achievement of compliance with the distribution pricing principles, including to the achievement of the network pricing objective.

Power and Water proposed a prescribed assignment policy for all of its tariffs.[10] This is consistent with the initial proposal, which we accepted in our draft decision.[11] Further, Power and Water's revised proposal offered the same suite of tariffs, including structures and eligibility criteria, as the initial proposal.[12]

We therefore consider the reasons we set out in our draft decision to accept Power and Water's prescribed assignment policy apply equally for this final decision.[13]

The exception to Power and Water's prescribed tariff assignment policy are large customers who are eligible for an individually calculated tariff. Section 18.4.6.3 sets out our assessment of individually calculated tariffs.

Jacana Energy considered assignment based on annual consumption is problematic as it increases Jacana's administrative burden and provides opportunity for gaming. Jacana Energy considered a better approach is to assign customers to a tariff class based on connection voltage and connection capacity.[14]

We note consumption level is one criteria among others that Power and Water uses to assign customers to tariffs. Several distributors in the NEM also use consumption levels as a criteria in their tariff assignment policies.[15] Further, Power and Water already uses voltage levels as one of the other criteria to assign customers to tariff classes (high voltage and low voltage).

Regarding the opportunity for gaming, it is not clear how strong the incentives are for a large customer to reduce consumption to fall below the 750 MWh per annum threshold (and face retail prices under the Order).

Jacana Energy acknowledged this is a legislative issue because the Order has been in place for some years, so the incentive to move below the threshold has existed for some time.[16] However, we understand Power and Water reassigns only a small number of customers above or below the threshold year-on-year.[17]

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10 Depending on customers' characteristics, Power and Water would assign them to one tariff only. Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, pp. 5–10.

11 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, p. 15.

12 The only change is the consolidation of the two unmetered tariffs (with demand-based charging parameters) into a single unmetered tariff (with a consumption-based charging parameter). Section 18.4.6.2 sets out our assessment of Power and Water's consolidated unmetered tariff.

13 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 15–17.

14 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, p. 1.

15 Some examples include Ausgrid, Jemena and AusNet Services.

16 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, p. 1.

17 AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019.

Customers would consider the annual movement of their current electricity bills as the starting point. As we discuss in section 18.4.6.4, the majority of Power and Water's large customers are expected to have lower network charges under the revised proposal. Further, network tariffs have less impact when considered in the context of a large customers' total (retail) bill. Power and Water stated the generation component of the retail bill is particularly significant in the Northern Territory.[18]

18.4.2 Tariff structures—small customers

This section sets out our assessment of the tariff structures of Power and Water's proposed tariffs for metered small customers (residential and non-residential).[19] Section 18.4.6.2 sets out our assessment of tariffs for unmetered customers.

Power and Water proposed two types of tariffs for its metered residential and non-residential customers—flat tariffs and demand tariffs. We discuss our assessment of these tariffs in the following sub-sections.

18.4.2.1 Flat tariffs (Tariffs 1 and 2)[20]

We consider Power and Water's proposed flat, anytime tariffs contribute to the achievement of compliance with the distribution pricing principles, including to the transition towards achievement of the network pricing objective.

Tariffs for small customers with an accumulation meter include a fixed charge and a flat usage charge. This structure is consistent with the initial proposal, which we accepted in our draft decision.[21] We consider the reasons set out in our draft decision to accept these proposed tariffs apply equally in this final decision.[22] In summary, Power and Water's small customers previously faced declining block tariffs. We consider moving to flat tariffs would better enable customers to mitigate the impact of tariff changes through their usage decisions than a declining block tariff structure.[23] Our draft decision contains further details on our assessment of tariffs 1 and 2.

18.4.2.2 Smart meter tariffs (Demand tariffs) (Tariffs 3 and 6)

We consider Power and Water's proposed Smart Meter tariffs—which are demand tariffs—for small customers with a smart meter contribute to the achievement of compliance with the distribution pricing principles, including to the transition towards

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18 AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019.

19 NT NER, cl. 6.18.1A(a)(3) and (4).

20 Power and Water proposed to retain its legacy flat tariffs for small customers with an accumulation meter connected to the LV network. There are two such legacy tariffs—for residential customers (tariff 1) and for non-residential customers (tariff 2)—which include a fixed charge and a flat anytime usage charge.

21 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, p. 17.

22 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 17–18.

23 NT NER, cll. 6.18.5(a) and 6.18.5(h)(3).

achievement of the network pricing objective.[24] However, we removed the excess kVAr charge from the revised proposal, due to remaining uncertainty regarding the levels of the charge (see section 18.4.6.1).

Power and Water proposed two tariffs for small customers with a smart meter—those on the LV network (tariff 3) and those on the HV network (tariff 6). Table 18.2 sets out the structures for these tariffs.

These tariffs and tariff structures are consistent with the initial proposal, which we accepted in our draft decision.[25] We consider the reasons we set out in our draft decision to accept these proposed tariffs apply equally for the purpose of this final decision.[26] In summary, we consider the proposed Smart Meter tariffs represent a move toward greater cost reflectivity as it reinforces that demand is an important driver of network costs.[27] The exception is the excess kVAr charge as noted above.

Table 18.2 Proposed smart meter tariffs for small customers

Tariff	Charging parameters	Charge	Final decision notes
LV Smart Meter (Tariff 3)	Fixed charge	c/day	
	Flat energy charge	c/kWh	
	Seasonal demand charge (peak / off peak) (1)	$/kVA	
	Excess kVAr charge	$/kVAr	To be removed. (2)
HV Smart Meter <750 MWh pa (Tariff 6)	Fixed charge	c/day	
	Flat energy charge	c/kWh	
	Year-round demand charge (peak / off peak) (1)	$/kVA	
	Excess kVAr charge	$/kVAr	To be removed.(2)

Source: Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, pp. 11–13.

(1) The 'seasonal demand charge' applies peak charges only during the summer months (October to March). The 'year round demand charge' applies the peak charges year round (see section 18.4.5 for our discussion on charging windows).

(2) Power and Water proposed to apply the excess kVAr charge to small customers consuming more than 40MWh per annum from 1 July 2021. We removed this charge from the tariff structure statement (see section 18.4.6.1).

[24] NT NER, cll. 6.18.5(a), 6.18.5 (g) and 6.18.5 (h).

[25] AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, p. 18.

[26] AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 18–21.

[27] NT NER, cll. 6.18.5(a) and 6.18.5(g).

The Consumer Challenge Panel, sub-panel 13 (CCP13) supported the cost reflective tariffs Power and Water included in the revised proposal for small customers. CCP13 noted small customers would not see these tariffs because of the Order and it will be up to the Northern Territory Government to decide on the transition for cost reflective pricing at the retail level.[28]

Jacana Energy submitted that the application of a seasonal demand charge to small customers with smart meters increases the financial risks for retailers. There is an increased likelihood of a 'disconnect' between network tariffs and retail tariffs, which the retailer will have to absorb.[29]

We note there is already a 'disconnect' between tariff structures at the network and retail levels in the Northern Territory.[30] Further, retailers receive a subsidy from the Northern Territory Government to implement the Order so retailers do not absorb the full impact of these network tariff changes.

We also note that as the dominant incumbent retailer for small customers in the Northern Territory, Jacana is able to manage its exposure to network pricing variability across its full retail footprint. In aggregate, Jacana is charged the relevant level of DUoS (network charges) to Power and Water for distribution services. The size of that payment will not, in the short term, be affected by the transition of some customers to cost reflective network tariffs. The effect of tariff reform for Jacana in total will be revenue neutral.

Over the longer term, as the benefits of network tariff reform are realised, Jacana will benefit from lower DUOS charges, as customers better manage their energy use, and will have greater opportunity to leverage distributed energy resource (DER) solutions to manage network price risk. This is because cost reflective tariffs more accurately reflect the way networks incur costs to provide distribution services, including signalling periods of network congestion. During those periods we expect DER opportunities to arise in more significant ways than in the absence of cost reflective tariffs.

18.4.3 Tariff structures—General large customer tariffs (tariffs 5 and 7)

We consider Power and Water's proposed general tariffs for large customers on its LV and HV networks (tariffs 5 and 7, respectively) contributes to the achievement of compliance with the distribution pricing principles, including transition towards

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28 CCP13, *Submission: Power and Water Corporation electricity network revised revenue proposal 2019-24*, 11 January 2019, p. 16.

29 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, pp. 2–3.

30 Power and Water's network tariffs for small customers were declining block tariffs at the start of the 2014–19 regulatory control period, then transitioned to flat tariffs towards the latter years of the period. On the other hand, retail prices under the Order were either flat tariffs or time-of-use energy tariffs.

achievement of the network pricing objective.[31] However, we removed the excess kVAr charge from the revised proposal, due to remaining uncertainty regarding the levels of the charge (see section 18.4.6.1).

Power and Water proposed the structures set out in Table 18.3 for large customers on its LV and HV networks (tariffs 5 and 7, respectively). These tariffs and tariff structures are consistent with the initial proposal, which we accepted in our draft decision.[32] We consider the reasons we set out in our draft decision to accept these proposed tariffs apply equally for the purpose of this final decision.[33] In summary, we consider tariffs 5 and 7 continue to reinforce that demand is an important driver of network costs.[34] We also consider the removal of the declining block charging parameters better increases understandability of such tariffs.[35] The exception is the excess kVAr charge as noted above.

The CCP13 supported the cost reflective tariffs Power and Water included in the revised proposal for large customers.[36]

Table 18.3 Charging parameters for HV and LV large customer tariffs

Charging parameters	Charge	Final decision notes
Fixed charge	c/day	
Flat energy charge	c/kWh	
Year-round demand charge (peak / off peak) (1)	$/kVA	
Excess kVAr charge	$/kVAr	To be removed.(2)

Source: Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, pp. 11–13.

(1) The 'year round demand charge' applies the peak charges year round (see section 18.4.5 for our discussion on charging windows).

(2) Power and Water proposed to apply the excess kVAr charge applies from 1 July 2021. As discussed in section 18.4.6.1, we removed this charge from the tariff structure statement.

18.4.4 Estimating long run marginal cost

We consider Power and Water's proposed method to estimate long run marginal costs (LRMC) contributes to the achievement of compliance with the distribution pricing principles, including transition towards achievement of the network pricing objective.

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31 Section 18.4.6.3 sets out our assessment of individually calculated tariffs.

32 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, p. 24.

33 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 24–27.

34 NT NER, cll. 6.18.5(a) and 6.18.5(g).

35 NT NER, cl. 6.18.5(i).

36 CCP13, *Submission: Power and Water Corporation electricity network revised revenue proposal 2019-24*, 11 January 2019, p. 16.

Power and Water did not change the estimation method from its initial proposal, which we accepted in our draft decision.[37] Power and Water updated some inputs into its calculations, but this did not change the LRMC estimates significantly.[38]

We expect Power and Water to continue investigating and refining the methods for estimating LRMC for the next regulatory control period.[39] As in the first round of tariff structure statement for distributors in the NEM, we encourage Power and Water to explore improvements to its LRMC estimation method including:[40]

- greater consideration to the way replacement expenditure is incorporated into its LRMC calculations[41]
- investigation of more sophisticated estimation methods, such as the Turvey approach (having regard to the costs and benefits of adopting such methods).[42]

18.4.5 Charging windows

We are satisfied Power and Water's proposed charging windows contribute to the achievement of compliance with the distribution pricing principles, including transition towards achievement of the network pricing objective.

Power and Water's proposed charging windows in the revised proposal are identical to the charging windows in the initial proposal, which we accepted in our draft decision.[43] We consider our draft decision's analysis of Power and Water's charging windows applies equally for this final decision.[44]

Jacana Energy submitted stakeholders were not provided adequate time to assess the impact of Power and Water's proposed changes to the peak charging window.[45]

We do not agree with this assertion as we understand Jacana Energy has been involved with Power and Water's various consultations on its tariff structure statement since February 2017.[46] Further, Jacana Energy provided a submission to us on 16 May

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37 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, p. 29.

38 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 10.

39 For a more detailed discussion see, for example, AER, *Final decision: TasNetworks distribution determination 2017−18 to 2018−19, Attachment 19 – Tariff structure statement*, April 2017, pp. 55–58 and 65–66.

40 For a more detailed discussion see, for example, AER, *Final decision: TasNetworks distribution determination 2017−18 to 2018−19, Attachment 19 – Tariff structure statement*, April 2017, pp. 57–58.

41 For more details, see AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 32–33.

42 NT NER, cl. 6.18.5(f)(1).

43 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, p. 37.

44 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 37–40.

45 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, p. 3.

46 Power and Water, *Email: PWC - RRP submissions*, 19 February 2019.

2018 supporting Power and Water's initial proposal, including the shortened peak window.[47]

Jacana Energy also stated the proposed peak charging period does not match the generation peak period.[48] We were not provided with any information regarding the timing of the generation peak. Nevertheless, we consider the principal consideration for determining Power and Water's charging windows is the timing of congestion in its distribution network.[49] As we discussed in our draft decision, Power and Water's proposed peak window reasonably reflects the potential timing of congestion on its network. It is also a considerable improvement on the peak window applied during the 2014–19 regulatory control period.[50] We are therefore satisfied Power and Water's proposed peak window is a positive step towards more cost reflective tariffs.[51]

As in the first round of tariff structure statement for distributors in the NEM, however, we encourage Power and Water to continue investigating and refining the methods for determining its charging windows, including the charging windows themselves, for the next regulatory control period. Some of the improvements Power and Water can investigate include:[52]

- considering network capacity and utilisation, rather than just network peaks, to more accurately reflect network congestion[53]
- developing a more robust approach to determining the border between peak and off-peak windows
- considering different times for the peak window for different locations or regions in the network, if appropriate.

18.4.6 Revised proposal responses to the draft decision

18.4.6.1 Excess kVAr charge

Due to remaining uncertainty regarding the levels of the excess kVAr charge, we do not consider the inclusion of this charge in the revised proposal contributes to the achievement of compliance with the distribution pricing principles, including transition towards achievement of the network pricing objective.[54] We therefore removed the excess kVAr charge from the revised proposal.[55]

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47 Jacana Energy, *Submission: Power and Water distribution determination*, 16 May 2018, pp. 1–2.

48 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, p. 3.

49 NT NER, cll. 6.18.5(a) and 6.18.5(f)(2).

50 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 37–40.

51 NT NER, cll. 6.18.5(a) and (f)(2).

52 For a more detailed discussion see, for example, AER, *Final decision: TasNetworks distribution determination 2017−18 to 2018−19, Attachment 19 – Tariff structure statement*, April 2017, pp. 73–79.

53 NT NER, cl. 6.18.5(f)(2).

54 NT NER, cl. 6.18.1A(a)(5).

55 NT NER, cl. 6.12.3(l)

Power and Water agreed with removing the excess kVAr charge from its tariff structure statement for the 2019–24 regulatory control period.[56]

In our draft decision, we considered introducing an excess kVAr charge was a positive move towards more cost reflective tariffs, but had questions regarding the approach to setting the levels for this charging parameter.[57]

Jacana Energy noted the proposed level of the excess kVAr charge appeared to be based on Ergon Energy's current rate. Jacana Energy suggested Power and Water should base tariff levels on the Northern Territory's requirement and costs.[58]

Jacana Energy further questioned whether the excess kVAr charge is required at all. Jacana Energy understood there are relatively few customers who have issues with excess kVAr. They consider it would be more prudent for Power and Water to consult with such customers individually rather than applying a broad-based tariff.[59]

Our assessment of Power and Water's revised proposal suggests there is still considerable uncertainty regarding the appropriate level of the excess kVAr charge. The revised proposal stated:[60]

> Prior to its actual introduction in 2021-22 this value will be further assessed, taking into account customer reactions to the proposed charge, over the next few years. We will also consult with our Customer Advisory Council (CAC) on the proposed level of this charge prior to making that annual application.

We do not consider this is consistent with the rules as it does not provide certainty and transparency regarding the levels of the excess kVAr charge during the 2019–24 regulatory control period.[61] This could have flow on effects on the levels of other tariffs.

We suggested that Power and Water consider trialling the excess kVAr charge under clause 6.18.1C rather than including it as a broad-based tariff in the tariff structure statement to apply for 2019–24.

Power and Water agreed that trialling the excess kVAr charge is the most appropriate method for introducing the charge during the 2019–24 regulatory control period. If the trial is successful, Power and Water will propose to implement it through an approved tariff structure statement in the following regulatory control period.[62]

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56 Power and Water, *Response to AER information request #054 - Further questions on excess kVAr charge - 20190305 - PUBLIC*, 13 March 2019.

57 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 20–21 and 36.

58 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, p. 2.

59 AER, *File note - Teleconference with Jacana Energy on submission to Power and Water revised TSS*, 25 February 2019.

60 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 18.

61 NT NER, cl. 6.18.1A(a)(5).

62 Power and Water, *Response to AER information request #054 - Further questions on excess kVAr charge - 20190305 - PUBLIC*, 13 March 2019.

18.4.6.2 Unmetered tariffs (Tariff 4)

We consider Power and Water's proposed tariff for unmetered supply (tariff 4) contributes to the achievement of compliance with the distribution pricing principles, including transition towards achievement of the network pricing objective.

Power and Water's revised proposal included a single tariff for unmetered supplies with a consumption-based (c/kWh) charging parameter.[63]

This differed from the initial proposal, which:

- included two tariffs: the '12 hr tariff' for unmetered infrastructure with a 12 hour or less cycle such as street lighting; and the 12–24 hr tariff for unmetered infrastructure which operates for more than a 12 hour cycle or with a continuous 24 hour operation such as traffic lights and telecommunications infrastructure
- proposed demand-based charging parameters ($/MW) for both tariffs.

We did not form a view on these proposals in our draft decision because Power and Water informed us of developments in the Northern Territory during our consultation for the draft decision.[64] We understand the amendments to Power and Water's unmetered tariffs are a response to these developments (which we discuss further below).

We agree with Power and Water that consolidating its 12 hr tariff and 12–24 hr tariff simplifies administration of these tariffs.[65] We also consider consolidating the unmetered tariffs better increases understandability of such tariffs.[66]

Unmetered load do not drive network costs—due to the constant nature of such load, they do not drive the network congestion that trigger additional investment.[67] They are also a very minor component of its annual revenues (approximately $1 million per annum).[68] Power and Water further forecast overall consumption levels of (and therefore revenues from) unmetered load to remain largely unchanged from the 2014–19 regulatory control period.

Figure 18.1 shows the indicative levels for the lone unmetered tariff are below the levels for the 2014–19 regulatory control period, particularly for traffic lights and similar 24 hour supplies.[69] This results in lower unit costs for such load while maintaining

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63 Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, pp. 5, 6 and 12.

64 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 22–24.

65 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 14.

66 NT NER, cl. 6.18.5(i).

67 NT NER, cl. 6.18.5(f)(2).

68 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 14.

69 Power and Water offered two tariffs during the 2014–19 regulatory control period: one for street lighting and similar profile unmetered load; and another for traffic lights and similar profile unmetered loads.

revenue recovery at approximately $1 million per annum over the 2019–24 regulatory control period.[70]

We therefore consider consolidating the tariffs for unmetered load is appropriate, particularly given the deemed nature of the loads. This is consistent with some other distributors in the NEM who also offer a single tariff for unmetered load.[71]

Figure 18.1 Tariffs levels for unmetered supplies (c/kWh, excluding GST)

Source: Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, p. 28; Power and Water approved pricing proposals for 2015–16 to 2018–19.

Power and Water noted the requirements for calculating unmetered consumption are still unclear and will continue engaging with the Northern Territory Government to determine an appropriate calculation methodology.[72]

The Local Government Association of the Northern Territory (the Association) expressed concern there has been no firm commitment to consult with councils

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70 There is a slight increase in forecast unmetered load from the 2019–20 regulatory year due to the inclusion of NBN and CCTV, which Power and Water inadvertently had not billed in the 2014–19 regulatory control period. (Power and Water, *Response to information request #044: TSS - Unmetered tariffs*, 17 January 2019, p. 2).

71 These include Jemena, Ergon Energy and AusNet Services.

72 Power and Water, *Revised regulatory proposal 1 July 2019 to 30 June 2024*, 29 November 2018, p. 79. We understand the classification of load as 'type 7' and therefore subject to calculation under the metrology procedures depends on jurisdictional requirements in the Northern Territory (see NT NER, schedules 7A.1.2 Item 5(b)). Chapter 7A of the NT NER will commence 1 July 2019). We understand this process was ongoing when we were completing this final decision.

regarding the calculation methodology.[73] In response, Power and Water noted it met with the Association and local councils on this matter. They were further encouraged to continue engaging directly with the Northern Territory Government to ensure their views are captured in the final decision on the calculation requirements for unmetered load by the NT Government.[74]

The method for calculating the deemed usage of unmetered loads is outside the scope of our final decision on Power and Water's revised tariff structure statement. However, we encourage stakeholders to continue open engagement in this process.[75]

The Association also considers the adoption of smart controls on public lighting assets will allow actual meter reads on these assets. The Association considers charging such assets based on calculated usage is not appropriate and considered there should be an option for charging based on actual meter reads.[76]

Deeming particular street lighting assets as metered or unmetered load is outside the scope of our final decision on Power and Water's revised tariff structure statement. Nevertheless, we would consider the implications to tariff structures if there is evidence such technologies would proliferate significantly in the 2019–24 regulatory control period. As we discuss below, we do not consider there is evidence this would occur. As such, we do not consider it is necessary to assess whether Power and Water should consider separate tariff arrangements for 'metered' public lighting assets for the 2019–24 regulatory control period.[77]

We understand there are various evolving smart control technologies at the nascent stage of development, each with differing benefits and costs.[78] Hence, there is some uncertainty regarding the extent councils will adopt smart devices with meter reading capabilities over the 2019–24 regulatory control period.

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73 Local Government Association of the Northern Territory, *Submission: Power And Water Corporation's 2019.2024 Revised Proposal For Electricity Network Distribution Pricing (29 November 2018)*, 11 January 2019, p. 3.

74 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 11.

75 Power and Water informed us current arrangements for unmetered supplies will continue to apply until the Northern Territory Government decides upon and enacts the Chapter 7A provisions for unmetered supplies. Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 11.

76 Local Government Association of the Northern Territory, *Submission: Power And Water Corporation's 2019.2024 Revised Proposal For Electricity Network Distribution Pricing (29 November 2018)*, 11 January 2019, p. 4.

77 Power and Water stated to the Association that 'metering' public lighting assets would mean implementing a similar structure to other tariffs for standard control services with a fixed charge, consumption and demand charge (Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 11). We did not request Power and Water to propose such a charge for our assessment given the lack of evidence for the proliferation of such metered public lighting assets.

78 Street Lighting Smart Controls, *Roadmap: Street lighting and smart controls programme*, 2016–17, pp. 39–40. We also discussed the state of such technologies with staff from various market organisations.

Different councils may forego smart control technologies, including meter reading capabilities, if they consider the costs outweigh the benefits.[79] We understand the public lighting industry itself acknowledges there are circumstances in which a switch to more efficient luminaires (LEDs) is the optimal next step—without the need for smart control technologies.[80]

Further, it is unclear whether such devices are compliant with the NER's metering/metrology arrangements given their nascent stage of development. Power and Water stated AEMO has not certified such devices for billing purposes in the National Electricity Market.[81] This was confirmed by AEMO staff,[82] who also understand no such device has been submitted for pattern approval.[83] It is also unclear whether such devices will be compliant with metering arrangements in the Northern Territory.

18.4.6.3 Individually calculated tariffs

We consider the information Power and Water included in its revised proposal regarding individually calculated tariffs contributes to the achievement of compliance with the distribution pricing principles, including transition towards achievement of the network pricing objective. Specifically, we consider this additional information:

- clarifies who will be eligible for individually calculated tariffs[84]
- provides greater certainty regarding the likely tariff structures and charging parameters[85]
- describes Power and Water's approach to setting tariff levels, including consideration of long run marginal costs.[86]

In our draft decision, we noted the proposal to introduce individually calculated tariffs is reasonable of itself. However, we required greater detail regarding these tariffs—such as eligibility criteria, tariff structures and principles for setting tariff levels—to enable proper assessment against the requirements of the rules.[87]

We consider the revised proposal addressed these concerns.

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79 We are not aware of councils in other jurisdictions installing smart devices with meter reading capabilities at rates significant enough to trigger a move of street lights from unmetered to metered status. For example, see Evoenergy, *Attachment 1: Revised proposed tariff structure statement*, November 2018, p. 8.

80 Phone conversation between AER and AEMO staff, 18 March 2019.

81 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 12.

82 Phone conversations between AER and AEMO staff, 7 February 2019 and 18 March 2019.

83 Meters must have a pattern approval from the National Measurement Institute, or, until relevant pattern approvals exist, a valid type test certificate (NER, s. 7.4.6.1(f)(2)). For more information regarding the metrology framework, see AEMO, *Guideline for clarification of the National Measurement Act*, June 2012.

84 NT NER, cl. 6.18.1A(a)(2).

85 NT NER, cll. 6.18.1A(a)(3) and (4).

86 NT NER, cll. 6.18.1A(a)(5) and 6.18.5(e)–(g).

87 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 27–28.

The revised proposal clarified that Power and Water may offer individually calculated tariffs to:[88]

- new >750 MWh HV or LV connection points
- material alterations to existing >750 MWh HV or LV connection points.

Power and Water may offer individually calculated tariffs in exceptional circumstances. Further, it would offer such tariffs if the eligible customer's apparent power requirement is greater than 2MVA and one or more of the following applies:[89]

- the impact of connection charges should be reflected in a dedicated tariff
- material network support benefits can be captured and shared
- material uneconomic bypass risk exists.

Large customers offered an individually calculated tariff can still opt to stay on a general tariff (tariff 5 or 7, as appropriate).[90] Whether a customer can opt out of an individually calculated tariff will depend on the terms of the contract agreed to between Power and Water and the large customer.[91]

The revised proposal also sets out the principles Power and Water will use to set the levels of individually calculated tariffs.[92] In addition to its general tariff strategy (see our discussion in section 18.4.6.4), we consider these principles provide greater certainty and transparency regarding such tariffs. For example, these principles provide greater assurance that customers on individually calculated tariffs face efficient pricing signals and contribute their share to Power and Water's revenue recovery.

Jacana Energy submitted Power and Water should offer individually calculated tariffs only in a small number of exceptional cases as they increase administrative and system costs. Jacana Energy further submitted Power and Water should set criteria on the circumstances in which it would offer such tariffs.[93]

We consider Power and Water's revised proposal addressed these concerns.

18.4.6.4 Tariff levels

Approach to setting tariffs and residual cost recovery

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88 Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, p. 7.

89 Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, p. 7; Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 16.

90 Section 18.4.6.3 sets out our assessment of Power and Water's individually calculated tariffs.

91 Power and Water, Response to information request #056 - Individually calculated tariffs - PUBLIC, 19 March 2019, pp. 1–2.

92 Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, p. 13; Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 16–17.

93 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, p. 2.

We consider the approach to setting tariffs set out in the revised proposal contributes to the achievement of compliance with the distribution pricing principles, including transition towards achievement of the network pricing objective.

In our draft decision, we considered the initial proposal did not adequately describe the approach Power and Water will use to set prices in each pricing proposal over the 2019–24 regulatory control period. In particular, we required Power and Water to describe in greater detail its proposed approach to allocating residual costs between customers and within the different charging parameters of each tariff.[94]

Power and Water's broad objective in the revised proposal is to re-balance its tariffs such that they better reflect the cost share of different customer types.[95] Large customers historically contributed a lower revenue share compared to their contribution to Power and Water's costs.[96]

Power and Water noted its forecast revenues for the 2019–24 regulatory control period is falling compared to the 2014–19 regulatory control period. Power and Water used this opportunity to begin this re-balancing, while minimising the impact on customers.[97] Specifically, Power and Water proposed to pass on any decreases in revenues in the 2019–24 regulatory control period to small customers while recovering approximately the same level of revenues from large customers (the revenue neutrality objective).[98]

This strategy of reducing the revenue share from small customers is evident in lower price levels across all charging parameters for Power and Water's small customer tariffs in the revised proposal compared to the initial proposal.[99] On the other hand, the fixed and demand charges for large customers have increased compared to the initial proposal, with a reduction to the energy charge.

We consider this broad strategy contributes to ensuring the revenue Power and Water recovers from its tariffs reflect the costs of serving its customers, while minimising bill impacts.[100]

On specific aspects of Power and Water's tariff setting approach, Power and Water clarified that it sought to have demand tariffs at least as high as the LRMC estimates,

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94 AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 33–36.

95 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 27.

96 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, pp. 25–28.

97 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 27.

98 Power and Water stated large customers supported the revenue neutrality objective as the best way to manage bill impacts of both tariff restructuring and rebalancing the relative revenue shares recovered from large users versus other customers. AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019; Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 7.

99 The LV Smart Meter tariff's demand charge is 3 per cent higher in the revised proposal than the initial proposal for the 2019–20 regulatory year. However, this charge becomes 3 per cent lower in the revised proposal than the initial proposal by the end of the 2019–24 regulatory control period.

100 NT NER, cll. 6.18.5(a), 6.18.5(g)(1) and 6.18.5(h).

taking account of customer impacts. Power and Water then allocated residual costs more towards fixed charges and demand charges rather than energy charges.[101]

The revised proposal provided further clarity on the approach to setting tariffs during the 2019–24 regulatory control period. In particular, the revised proposal set out Power and Water's strategy for setting tariffs where revenue movements may occur that are not contemplated in the revised proposal.[102] Power and Water stated it would focus its rebalancing on:[103]

- continuing to progress demand tariffs closer to the LRMC estimates for HV customers and LV customers with annual consumption greater than 750MWh while managing bill impacts[104]
- examining the role of demand charges in recovering residual costs—that is, as Power and Water have more customers on demand charges, and have better data about the demand patterns of these customers, they may need to include some residual cost recoveries on demand charges)
- directing any required revenue reductions to lower energy consumption tariffs for small customers.

We agree with Power and Water that this approach minimises distortions to the LRMC signal, while providing customers the opportunity to mitigate the impact of tariff changes through their usage decisions.[105]

As in the first round of tariff structure statement for distributors in the NEM, we consider a re-balancing of residual costs towards fixed charges would reduce any distortion to the price signal of a tariff's usage and/or demand charge.

A significant proportion of a distributor's revenue requirement is made up of the fixed capital costs of previous investments in network assets. These fixed costs are not affected by current and future consumption decisions. Therefore, from an economic perspective, fixed costs do not provide a basis for signalling the costs of network use.

The relevant costs to signal the costs of network use are marginal (forward looking) costs. However, in the case of natural monopolies, pricing based on marginal cost alone does not provide sufficient revenue to recover a distributor's total efficient costs. There are fixed (or "residual") costs which must be recovered by other means, and the key economic consideration in the rules is reflected in the distribution pricing principle that these residual costs are recovered in a manner which minimises distortions to

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101 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, pp. 27–28.

102 Such as the operation of the unders and overs mechanism of the revenue cap (see attachment 13 of this final decision).

103 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 22.

104 The demand tariff for large customers on the LV network will remain lower than the LRMC estimate ($13.12/kVA/month compared to$20/kVA/month). This is due to the historical level of this charging parameter.

105 NT NER, cll 6.18.5(g)(3) and 6.18.5(h)(3).

efficient price signals.[106] That is, minimises distortions compared with the situation where network prices are based on marginal cost alone. Setting usage charges significantly higher than marginal cost to recover all or most residual costs would be expected to distort consumption decisions because consumers are facing usage charges which are too high. In contrast, recovering a greater proportion of residual costs through fixed charges is expected to lead to smaller distortions, because by their nature, the level of fixed charges has less impact on consumption decisions.

At the same time, we must take into account the impact on customers of tariff changes from year to year including the desirability for a reasonable transition period towards more cost reflective tariffs.[107] We consider it is appropriate to assess changes to fixed charges in the overall context of a distributor's tariff strategy and operating environment (rather than assessing individual charging parameters in isolation).

Power and Water proposed significant increases to its fixed charges. For example, fixed charges for residential and small business customers moving to the LV Smart Meter tariff will increase by 154 per cent and 48 per cent, respectively, between 2018–19 and 2019–20. We consider these are consistent with the principle of minimising distortions to the price signal by re-balancing toward fixed charges.

In isolation, these increases to the fixed charges would indicate significant adverse impacts on customers. However, Power and Water proposed to reduce energy charges by 88 per cent. We consider this provides such customers scope to mitigate the impact of these changes through their usage decisions.[108] Indeed, Power and Water's customer impact analysis indicates the majority of small customers would see reductions to their network bills between the 2018–19 and 2019–20 regulatory years even without behavioural change.[109] The Order further mitigates the impact of these tariff changes on these customers.

We initially had more significant concerns regarding the significant increase in fixed charges for large customers, which do not fall under the protection of the Order. However, we consider these increases are reasonable when considered in the context of Power and Water's overall tariff strategy and the revenue neutrality objective.

The revised proposal includes significant increases to the fixed charges for large customers compared to the initial proposal. Figure 18.2 shows the fixed charge for large HV customers (tariff 7) is on average 86% higher in the revised proposal than in the initial proposal. Similarly, the fixed charge for large LV customers (tariff 5) is on average 60% higher in the revised proposal than in the initial proposal.

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106 NT NER, cl. 6.18.5 (g).

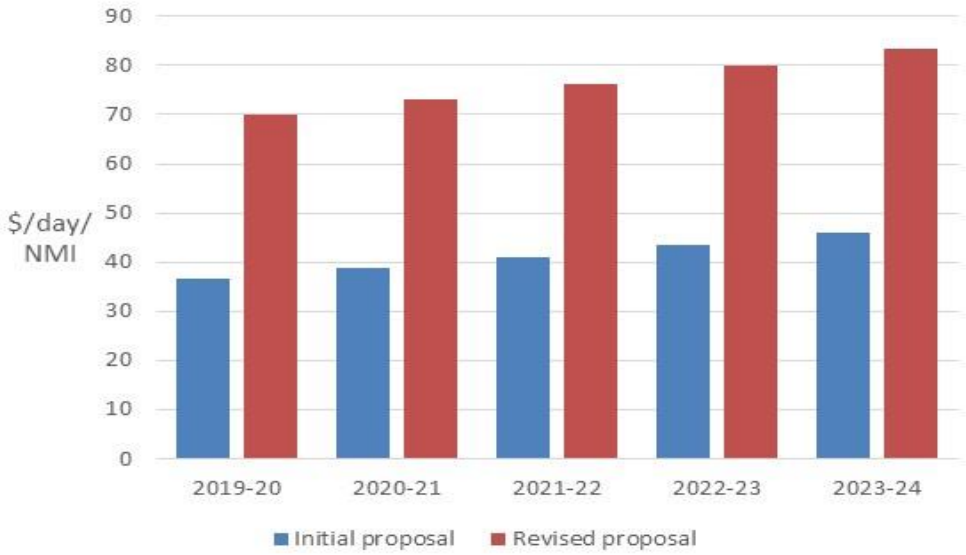
107 NT NER, cl. 6.18.5(h)(1).

108 NT NER, cl. 6.18.5(h)(3).

109 Power and Water, *1.9 - Tariff structure statement: Explanatory statement*, 29 November 2018, p. 30; Power and Water, *4.03P - SCS Pricing Model*, 29 November 2018.

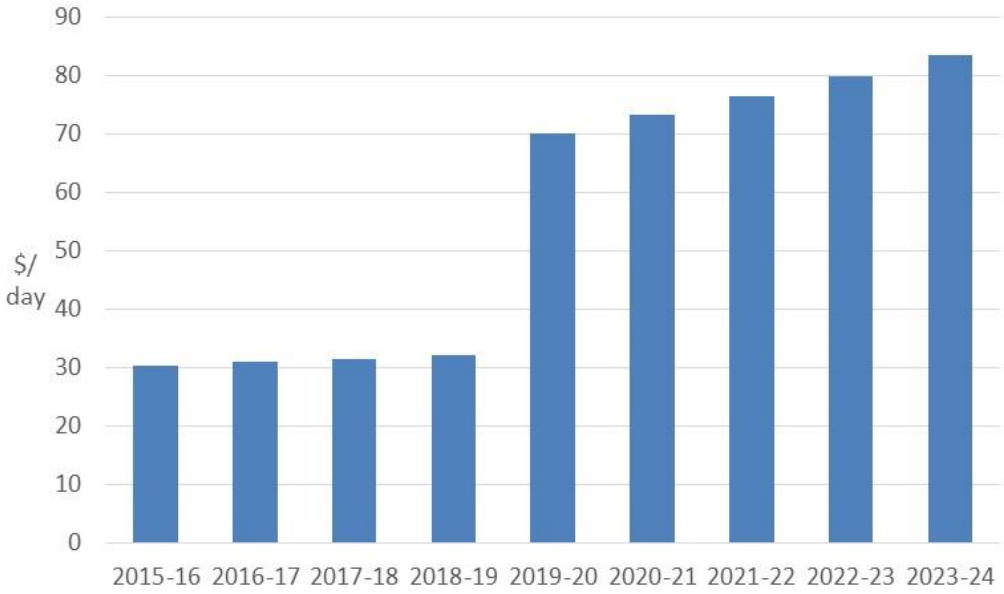
This would result in a 118% increase in the fixed charge of tariff 7 from 2018–19 to 2019–20 (see Figure 2). The increase in the fixed charge for tariff 5 is even higher at 142%.

Figure 18.2 Indicative system availability charge for large HV customers



Source: Power and Water, *2.1 - Tariff structure statement*, 16 March 2018, p. 42; Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, p. 29.

Figure 18.3 System availability charge for tariff 7[110]



Source: Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, p. 29; Power and Water annual pricing proposals.

Again, these increases to the fixed charges would indicate significant adverse impacts on customers when considered in isolation. However, we agree with Power and Water that their large customer tariffs should be assessed in the context of the overall tariff reform strategy, rather than as isolated components.

Power and Water consulted with stakeholders, including large customers prior to submitting the initial proposal to the AER. In the Large Users Energy Forum of October 2017, Power and Water stated large customers supported the decision to apply any decreases in prices in the 2019–24 regulatory control period to small customers.[111]

Further, Power and Water set out its strategy of setting tariffs for large customers to achieve the revenue neutrality objective. Power and Water stated large customers supported the revenue neutrality objective as the best way to manage bill impacts of both tariff restructuring and rebalancing the relative revenue shares recovered from large users versus other customers.[112]

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110 Fixed charges are in $/month/meter for the 2014–19 regulatory control period and $/month/NMI for the 2019–24 regulatory control period. These charges are equivalent for 68 per cent of large customers who have one meter (and one NMI). Other customers—who have 2 or more meters (and one NMI)—will face a lower increase in the fixed charge due to the change in the charging parameter (or even a decrease to the fixed charge). Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 3.

111 AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019.

112 AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019; Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 7.

In line with this objective, Power and Water estimates it will recover 2.4 per cent less revenue from large customers in total in 2019–20 compared to 2018–19 under the revised proposal.[113]

Power and Water stated that, based on its stakeholder consultation, large customers support a faster transition toward cost reflective tariffs. Power and Water considered re-balancing towards fixed and demand charges, and away from energy charges is consistent with this transition.[114] As discussed above, we consider a re-balancing of residual costs towards fixed charges would reduce any distortion to the price signal of a tariff's usage and/or demand charge. However, a distributor should consider the impact of such a re-balancing.[115] We consider Power and Water's revised proposal achieves a reasonable balance between these objectives.

Regarding the changes to tariff levels in the revised proposal, Power and Water obtained updated customer information after the initial proposal.[116] Power and Water stated that applying indicative prices from the initial proposal to the updated information violated the revenue neutrality objective.[117] Power and Water therefore amended the indicative tariff levels for large customers to achieve the revenue neutrality objective.

Besides the increases to fixed charges, Power and Water also increased the demand charge ($/kVA) relative to the initial proposal by, on average, 13% and 30% for large HV and LV customers, respectively. On the other hand, Power and Water reduced the consumption charge (c/kWh) relative to the initial proposal by 24% on average.[118]

In setting these tariffs, Power and Water sought to minimise the number of large customers who are worse off under its revised proposal. At the same time, Power and Water considered this should not be at the expense of a few customers with very big impacts.[119] Figure 18.4 shows the impact of the tariff levels under the initial proposal and revised proposal.

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113 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 7.

114 AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019.

115 NT NER, cll. 6.18.5(g) and 6.18.5(h)(1). For a more detailed discussion, see for example AER, *Final decision: Tariff structure statements: Ausgrid, Endeavour and Essential Energy*, February 2017, pp. 100–101.

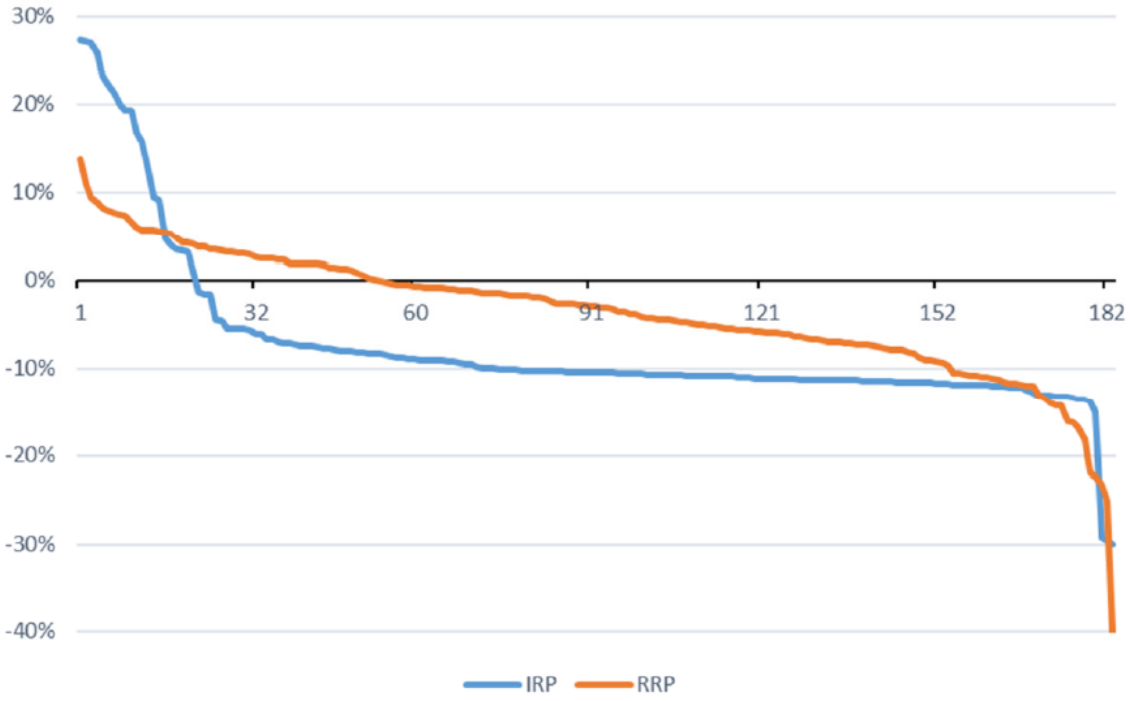
116 For the revised proposal, Power and Water used actual data from the 2017–18 regulatory year. For the initial proposal, they used actual data from the 2016–17 regulatory year. AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019.

117 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 8.

118 Power and Water, *2.1 - Tariff structure statement*, 16 March 2018, p. 42; Power and Water, *1.8 - Tariff structure statement*, 29 November 2018, p. 29.

119 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 8.

Figure 18.4 Large customer impact (2018–19 to 2019–20)



Note: IRP is the large customer impact using indicative prices from the initial regulatory proposal. RRP is the large customer impact using indicative prices from the revised regulatory proposal.

Source: Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 8.

Power and Water noted, while the revised proposal results in more large customers having a price rise (28%), the price rises are now much smaller. Of approximately 50 large customers forecast to experience a price rise between 2018–19 and 2019–20:[120]

- no single customer is worse off by 15 per cent or more (the highest is 14%)[121]
- only 2 customers are forecast to have increases greater than 10 per cent[122]
- around half have increases of 3 per cent or less.

For completeness, we applied the indicative prices in the initial proposal and revised proposal to the customer dataset that Power and Water used in its initial proposal. We found a similar pattern emerged as in Figure 18.4. More customers would experience price rises under the revised proposal's indicative prices, but there would be more severely impacted customers under the initial proposal's prices.[123]

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120 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, p. 8.

121 Four customers would be worse off by 15–20 per cent under the initial proposal prices (AER analysis).

122 Eight customers would have increases greater than 10 per cent under the initial proposal prices (AER analysis).

123 AER analysis; Power and Water, *2.1 - Tariff structure statement*, 16 March 2018, p. 32.

The bill impacts in Figure 18.4 also assume no change in consumption patterns for large customers. From its engagement, Power and Water expected many large customers to respond to its reforms—such as the shorter peak windows (see section 18.4.5) and simpler demand charging structure (see section 18.4.3)—to reduce network bills.[124]

Our analysis suggests the demand and consumption charges would comprise approximately 80–85 per cent of large customers' annual network tariffs on average. We consider this could still provide large customers some scope to mitigate the impact of tariff changes through their usage decisions.[125]

In addition, the bill impact in Figure 18.4 shows only the impact on network charges. Power and Water considers the impact of the revised proposal's indicative tariffs will be less when considering large customers' end (retail) bill. Power and Water stated the generation component of the retail bill is particularly significant in the Northern Territory.[126]

Jacana Energy submitted that Power and Water's bill impact analysis shows some large customers will experience bill increases of about 20 per cent. Jacana Energy considered customers should be transitioned to cost reflective pricing over five years, with increases capped at 5 per cent per annum.[127]

We agree with Jacana Energy that the transition to cost reflective tariffs should be gradual, taking into account customer impacts. As we noted above, we consider the large customer tariffs in Power and Water's revised proposal achieves this. Power and Water's bill impact analysis indicates the highest a customer would be worse off is 14 per cent under its revised proposal (with only one other customer having an impact above 10 per cent). Such impacts would be lessened when taking into account the end retail bill.

Regarding the suggestion to cap bill increases at 5 per cent, we note the analysis in Figure 18.4 denotes the bill impacts in moving from 2018–19 to 2019–20. Power and Water's indicative tariff schedule shows each component of its large customer tariffs will increase by 6 per cent per annum during the 2019–24 regulatory control period.[128] We will assess Power and Water's price levels for large (and small) customers as part of our annual pricing proposal process.

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124 Power and Water, *Response to information request #047 - TSS various issues - PUBLIC*, 5 February 2019, pp. 8–9.

125 NT NER, cl. 6.18.5(h)(3). We understand many large commercial and industrial customers have relatively flat usage profiles and may not have as much scope to shift usage to other times as other customer types. However, large customers may still have scope to manage bill impacts through energy efficiency or demand management initiatives, for example.

126 AER, *File note - Teleconference with Power and Water on large customer impact analysis*, 12 February 2019.

127 Jacana Energy, *Submission: Power and Water Corporation's revised regulatory proposal*, 18 January 2019, p. 3.

128 Power and Water, *2.1 - Tariff structure statement*, 16 March 2018, p. 29.

In any case, the ultimate impact on a customer's bill depends not just on the (network and retail) tariff, but also on the customer's behaviour. We consider the changes Power and Water has made to its tariffs, including the indicative levels, provides at least some scope for large customers to mitigate the impact of tariff changes through their usage decisions.[129]

18.4.6.5 Tariff structure statement form

While not a strict requirement, we note the revised proposal adopted our draft decision's suggestion of a “two document” approach to structuring the tariff structure statement.[130]

[129] NT NER, cl. 6.18.5(h)(3).

[130] AER, *Draft decision: Power and Water Corporation Distribution determination 2019 to 2024: Attachment 18: Tariff structure statement*, September 2018, pp. 41–42.

A Assigning retail customers to tariff classes

This appendix sets out our draft determination on the principles governing assignment or reassignment of Power and Water's retail customers for direct control services.[131]

Procedures for assigning and reassigning retail customers to tariff classes

The procedure outlined in this section applies to direct control services.

Assignment of existing retail customer to tariff classes at the commencement of the 2019–24 regulatory control period

1. Power and Water's customers will be taken to be "assigned" to the tariff class which Power and Water was charging that customer immediately prior to 1 July 2019 if:
   (a) they were a Power and Water customer prior to 1 July 2019, and
   (b) they continue to be a customer of Power and Water as at 1 July 2019.

Assignment of new retail customers to a tariff class during the 2019–24 regulatory control period

2. If, from 1 July 2019, Power and Water becomes aware that a person will become a customer of Power and Water, then Power and Water will determine the tariff class to which the new customer will be assigned.
3. In determining the tariff class to which a customer or potential customer will be assigned, or reassigned, in accordance with paragraphs 2 or 5, Power and Water will take into account one or more of the following factors:
   (a) the nature and extent of the customer's usage
   (b) the nature of the customer's connection to the network
   (c) whether remotely–read interval metering or other similar metering technology has been installed at the customer's premises as a result of a regulatory obligation or requirement.
4. In addition to the requirements under paragraph 3, Power and Water, when assigning or reassigning a customer to a tariff class, will ensure the following:
   (a) that customers with similar connection and usage profiles are treated on an equal basis
   (b) those customers who have micro–generation facilities are treated no less favourably than customers with similar load profiles but without such facilities.

Reassignment of existing retail customers to another existing or a new tariff class during the 2019–24 regulatory control period

[131] NT NER, cl. 6.12.1(17).

5. Power and Water may reassign an existing customer to another tariff class in the following situations:

   (a) Power and Water receives a request from the customer or customer's retailer to review the tariff to which the existing retail customer is assigned; or

   (b) Power and Water believes that:

      i. an existing customer's load characteristics or connection characteristics (or both) have changed such that it is no longer appropriate for that customer to be assigned to the tariff class to which the customer is currently assigned, or

      ii. a customer no longer has the same or materially similar load or connection characteristics as other customers on the customer's existing tariff, then Power and Water may reassign that customer to another tariff class.

Notification of proposed assignments and reassignments and rights of objection for standard control services

6. Power and Water must notify the customer's retailer in writing of the tariff class to which the customer has been assigned or reassigned, prior to the assignment or reassignment occurring.

7. A notice under paragraph 6 above must include advice informing the customer's retailer that they may request further information from Power and Water and that the customer or customer's retailer may object to the proposed reassignment. This notice must specifically include:

   (a) a written document describing Power and Water's internal procedures for reviewing objections, if the customer's retailer provides express consent, a soft copy of such information may be provided via email

   (b) that if the objection is not resolved to the satisfaction of the customer or customer's retailer under Power and Water's internal review system within a reasonable timeframe, then, to the extent resolution of such disputes are with the jurisdiction of an ombudsman or like officer, the customer or customer's retailer is entitled to escalate the matter to such a body

   (c) that if the objection is not resolved to the satisfaction of the customer or customer's retailer under Power and Water's internal review system and the body noted in paragraph 7(b) above, then the customer or customer's retailer is entitled to seek a decision of the AER via the dispute resolution process available under Part 10 of the NEL.

8. If, in response to a notice issued in accordance with paragraph 6 above, Power and Water receives a request for further information from a customer or customer's retailer, then it must provide such information within a reasonable timeframe. If Power and Water reasonably claims confidentiality over any of the information requested by the customer or customer's retailer, then it is not required to provide that information to the customer or customer's retailer. If the customer or customer's retailer disagrees with such confidentiality claims, he or she may have

resort to the complaints and dispute resolution procedure, referred to in paragraph 7 above (as modified for a confidentiality dispute).

9. If, in response to a notice issued in accordance with paragraph 6 above, a customer or customer's retailer makes an objection to Power and Water about the proposed assignment or reassignment, Power and Water must reconsider the proposed assignment or reassignment. In doing so Power and Water must take into consideration the factors in paragraphs 3 and 4 above, and notify the customer or customer's retailer in writing of its decision and the reasons for that decision.
10. If an objection to a tariff class assignment or reassignment is upheld by the relevant body noted in paragraph 7 above, then any adjustment which needs to be made to tariffs will be done by Power and Water as part of the next network bill.
11. If a customer or customer's retailer objects to Power and Water's tariff class assignment Power and Water must provide the information set out in paragraph 7 above and adopt and comply with the arrangements set out in paragraphs 8, 9 and 10 above in respect of requests for further information by the customer or customer's retailer and resolution of the objection.

Notification of proposed assignments and reassignments and rights of objection for alternative control services

12. Power and Water must make available information on tariff classes and dispute resolution procedures referred to in paragraph 7 above to retailers operating in Power and Water's distribution area.
13. If Power and Water receives a request for further information from a customer or customer's retailer in relation to a tariff class assignment or reassignment, then it must provide such information within a reasonable timeframe. If Power and Water reasonably claims confidentiality over any of the information requested, then it is not required to provide that information. If the customer or customer's retailer disagrees with such confidentiality claims, he or she may have resort to the dispute resolution procedures referred to in paragraph 7 above, (as modified for a confidentiality dispute).
14. If a customer or customer's retailer makes an objection to Power and Water about the proposed assignment or reassignment, Power and Water must reconsider the proposed assignment or reassignment. In doing so Power and Water must take into consideration the factors in paragraphs 3 and 4 above, and notify the customer or customer's retailer in writing of its decision and the reasons for that decision.
15. If an objection to a tariff class assignment or reassignment is upheld by the relevant body noted in paragraph 7 above, then any adjustment which needs to be made to tariffs will be done by Power and Water as part of the next network bill.

System of assessment and review of the basis on which a retail customer is charged

16. Where the charging parameters for a particular tariff result in a basis charge that varies according to the customer's usage or load profile, Power and Water will set out in its pricing proposal a method of how it will review and assess the basis on which a customer is charged.