

# POWER AND WATER CORPORATION POWER SERVICES

**Network Pricing Proposal** 

2020-21

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# **SUMMARY**

Power and Water Corporation (Power and Water) is pleased to submit our 2020-21 Network Pricing Proposal to the Australian Energy Regulator (AER) and our stakeholders. This document sets out Power and Water's proposed network tariffs for our regulated customers. This includes tariffs for standard control services and for alternative control services.

Power and Water's total allowable revenue in 2020-21 is 7.5 per cent less (about \$12 million) than 2019-20. This has two implications for our network tariffs:

- In 2020-21, on average our customers will save on their network bill compared to 2019-20, as we pass through the reduced revenue requirement.
- Providing opportunities to pursue the tariff re-balancing strategy in our AER approved Tariff Structure Statement (TSS) while minimising bill impacts. Our re-balancing strategy will collect a greater proportion of revenue through efficient charges such as daily system access control and peak demand charges. In contrast, we have reduced the revenue we collect from inefficient energy charges. This will benefit all customers in the long term by reducing our capital expenditure on new investment, and improving utilisation of the network.

# Bill impacts

Table 1 below sets out the proposed change in the network bill between 2019-20 and 2020-21 for typical customers connected to Power and Water's regulated network. The table shows that there will be a saving in the network bill in 2020-21. These impacts do not take into account changes in generation, retail, system control, and market operator charges.

Table 1: Change in a typical customer's network bill between 2019-20 and 2020-21

Customer Type	Network Bill* (\$, nominal)		Bill Change	
Customer Type	2019-20	2020-21	\$	%
Small Residential - Accumulation Meter (8500 kWh pa)**	\$1,165	\$1,122	-\$44	-4%
Small Residential - Smart Meter (8500 kWh pa)**	\$1,147	\$1,096	-\$51	-4%
Large Residential - Accumulation Meter (15,000 kWh pa)**	\$1,831	\$1,674	-\$157	-9%
Large Residential - Smart Meter (15,000 kWh pa)**	\$1,600	\$1,465	-\$134	-8%
Non-Residential -Accumulation Meter (30,000 kWh pa)**	\$3,689	\$3,319	-\$371	-10%
Smart Meter (30,000 kWh pa)**	\$2,645	\$2,320	-\$326	-12%
Industrial (1,000,000 kWh pa - LV)	\$93,671	\$92,737	-\$935	-1%
Large Industrial (6,000,000 kWh pa - HV)	\$276,677	\$266,489	-\$10,188	-4%

<sup>\*</sup>Includes ACS metering charge

<sup>\*\*</sup> Currently the customer has retail price protection under the Northern Territory Government's Electricity Pricing Order

Currently, customers who consume less than 750MWh are subject to retail price protection under the Northern Territory Government Electricity Pricing Order (NT Pricing Order). This includes households and small to medium sized businesses. We anticipate that the Pricing Order will continue into 2020-21, and that current retail prices for electricity will be frozen<sup>1</sup>. This means that the changes in Power and Water's network tariffs in 2020-21 will not impact their retail electricity bills.

Our major energy customers (consuming above 750MWh per annum) are not currently protected by the Pricing Order. Their retailers directly pass through network charges as a separate line item in the retail bill. The changes in Power and Water's 2020-21 tariff rates would directly impact these customers unless the Government extends the electricity prize freeze to major customers. For this reason, we have been mindful of the need to minimise bill impacts for these customers, while still pursuing significant tariff reform.

Figure 1 shows the percentage change in network prices for each of our major customers in 2020-21 compared to 2019-20, assuming no change in consumption, demand or metering installations. On average, major customers will have a 3 per cent reduction in the network bill. More than 80 per cent of our large customers will have decreases to their bills with about 20 per cent receiving reductions of 5 per cent or more. About 20 per cent of customers will experience a price increase, with a maximum 4 per cent price increase for the worst affected customer (including inflation of 1.84 per cent).

We will work with affected customers and their retailer on finding opportunities to reduce network bills, for example by helping customers shift energy usage to off-peak periods.

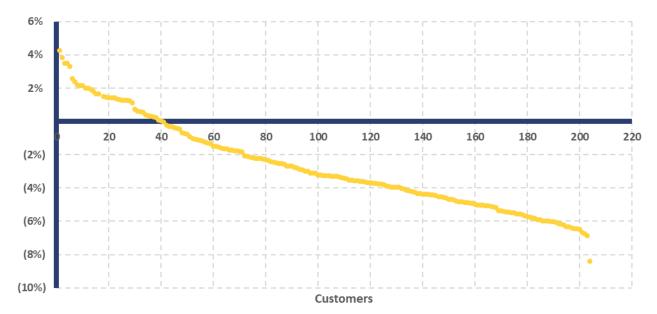


Figure 1: Percentage change in network bill of major customers between 2019-20 and 2020-21

<sup>1</sup> In March 2020, the Northern Territory Government announced a freeze on electricity charges. The Government noted that "all regular increases to government fees and charges, including electricity costs, will be put on hold. This means that fees and charges which are normally increased annually or regularly will not be"

<a href="https://business.nt.gov.au/recovery">https://business.nt.gov.au/recovery</a>

# Impact of COVID-19

Our proposal is being submitted at a difficult time. The emergence of the COVID-19 pandemic in Australia will likely inflict economic and social hardship on our customers. Power and Water remains committed to providing our customers with essential gas, electricity and water services during this time of crisis, and assisting our customers to the full extent possible.

The COVID-19 pandemic has been unfolding at great speed, and at this time we are uncertain of its economic impact in the Northern Territory. We expect lower tourism and global demand will materially reduce energy consumption and demand volumes of our non-residential sector. However due to the inherent uncertainty of the impact of the pandemic, we have been unable to incorporate the expected reduction in volumes into our forecasts. We note that this gives rise to a price volatility risk in subsequent regulatory years. This is because if Power and Water is unable to recover the target revenue due to lower volumes than forecast, we would need to recover the revenue shortfall by increasing network bills in 2020-21.

We would like to discuss this issue further with the AER and our stakeholders to find a pragmatic way forward in finalising our network tariffs for 2020-21.

# 1. BACKGROUND

# 1.1. Purpose

Under the Northern Territory National Electricity Rules (NT NER)<sup>2</sup>, we are required to submit a pricing proposal to the Australian Energy Regulator (AER) for approval each year. In May 2019, we published our initial pricing proposal immediately after the AER published the Distribution Determination for 2019 to 2024 (AER determination) for Power and Water.<sup>3</sup> The initial pricing proposal implemented the proposed changes in our tariff design as set out in the Tariff Structure Statement (TSS) approved in the AER's determination.<sup>4</sup>

This document is Power and Water's 2020-21 pricing proposal. It sets out our proposed standard control services (SCS) and alternative control services (ACS) tariffs for 2020-21 and indicative tariffs for the remainder of the 2019-24 period. A key purpose of this document is to set out the basis of our proposed tariffs and to demonstrate that we have complied with the relevant provisions of the NT NER and the AER's 2019-24 Distribution Determination. This includes complying with our AER approved TSS.

# 1.2. Network services and pricing regulations

Power and Water delivers energy from power generators to homes and businesses in a safe and reliable way. Our network distribution services comprising our regulated network are classified by the AER as direct control services, meaning they are subject to price or revenue controls. The AER further classify these services as SCS or ACS.

Our SCS tariffs recover the cost of planning, design, construction, operation and maintenance of the electricity distribution network. This includes restoring power when faults and emergencies occur (as a result of severe weather) as well as other causes beyond our control. Our ACS services cover both our metering and ancillary ("one-off") services provided to specific customers.

We charge retailers for the network services we provide to regulated customers including the tariffs for SCS and ACS. Retailers charge customers for their energy usage and metering. For customers consuming less than 750MWh annually, retailers cannot charge more than the Northern Territory Government Electricity Pricing Order (Pricing Order). We currently expect that the Pricing Order will continue into 2020-21, given the Northern Territory Government's announcement of a price freeze for electricity costs. This means that the change in our network tariffs will not impact these customers.

About 200 of our major customers use more than 750MWh annually. These customers are currently not subject to the Pricing Order. Our network charges are directly passed through by retailers to these major customers, unless the Government extends the electricity prize freeze to major customers

<sup>&</sup>lt;sup>2</sup> Clause 6.18.2(a) of the NT NER.

<sup>&</sup>lt;sup>3</sup> Australian Energy Regulator, Final Decision: Power and Water Corporation Distribution Determination for 2019 to 2024, April 2019.

<sup>&</sup>lt;sup>4</sup> Power and Water, Tariff Structure Statement, April 2019 (as approved in the AER's final determination)

# 1.3. Control mechanisms

A control mechanism imposes limits over the prices or revenues that we can recover from customers. The AER's final decision applied a revenue cap on SCS. Under a revenue cap, the AER sets maximum revenue that we can recover from customers in a year. Any variation in actual revenue compared to forecast can be recovered or paid back to customers in the following years. Power and Water's pricing proposal must demonstrate compliance with the SCS revenue cap, including accounting for adjustments from under or over recovery in prior years in accordance with the AER's Determination.

The AER applied a price cap on ACS. Under a price cap the AER sets a maximum price for each service. A price cap makes no adjustments for variations in forecast revenue outcomes, which means that we face the risk of lower service requests than we had forecast. The AER set an initial price for ACS services which we adjust on an annual basis in our network pricing proposal.

# 1.4. Structure of the document

We have structured the remainder of the document as follows:

- Chapter 2 sets out the network tariff classes, tariffs and charging parameters we propose to apply in 2020-21, and also describes our process to assign customers to tariff classes.
- Chapter 3 identifies the key inputs, forecasts and strategies that were used to develop SCS tariffs, and identifies our proposed tariff rates for 2020-21.
- Chapter 4 identifies the key inputs to derive ACS prices for 2020-21, and identifies our price list for metering, quoted services and fee based services.
- Chapter 5 seeks to demonstrate our compliance with the NT NER.

All values shown in the proposal are in nominal dollars and exclude goods and services tax (GST), unless otherwise stated. We note that our SCS Pricing Model (Appendix 7) and ACS Pricing Model (Appendix 8) provide the underlying calculations to derive values. It also provides information on the GST inclusive price.

# 2. TARIFF STRUCTURES AND ASSIGNMENT

In this section, we describe the tariff structures we propose to apply in 2020-21. A 'tariff' is how a customer is charged. A "tariff class" is a grouping of one or more tariffs. The tariff can be made up of different component charges (and associated charging parameters) such as one or more fixed charges, usage charges or demand charges.

This chapter explains the eligibility criteria for each of our network tariff classes and tariffs (section 2.1) the components and charging parameters we apply (Section 2.2), and the assessment process for tariff assignment (section 2.3).

# 2.1. Tariff classes and tariffs

Our tariff classes and tariffs are the same as 2019-20 and align with our AER approved TSS. This is set out in Table 2. In exceptional circumstances, Power and Water may offer an individually calculated tariff. However we do not anticipate applying individually calculated tariffs to customers in 2020-21 at this point in time. Customers on Tariff 1,2,3,4 and 6 are subject to retail price protection under the NT Electricity Pricing Order.

**Table 2: Network tariff classes and tariffs** 

Tariff class	Tariff	Description of tariffs	
	Tariff 1: Residential Tariff	Residential customers consuming less than 750MWh p.a. per National Meter Identifier with standard accumulation meters	
11/ c7FON41M/b	Tariff 2: Non-residential Tariff	Non-residential customers consuming less than 750MWh p.a. per NMI with standard accumulation meters	
LV <750MWh	Tariff 3: LV Smart Meter Tariff	Customers consuming less than 750MWh p.a. per NMI with smart meters	
	Tariff 4: Unmetered Tariff	Unmetered supply (for street lighting, traffic lights and other unmetered devices)	
LV >750MWh	Tariff 5: LV Majors Tariff	Customers connected to the LV network consuming greater than 750MWh p.a. per NMI	
107	Tariff 6: HV Minors Tariff	Customers connected to the HV network consuming less than 750MWh p.a. per NMI	
HV	Tariff 7: HV Majors Tariff	Customers connected to the HV network consuming greater than 750MWh p.a. per NMI	

# 2.1.1. Low Voltage less than 750MWh Tariff Class

This tariff class comprises four customer tariffs.

The Residential Tariff (Tariff 1) applies to residential customers supplied at a connection point where:

- Total electricity consumption is less than 750MWh per annum per NMI.
- Electricity is supplied at a voltage level defined as LV nominally 230/400V.
- The customer is connected to the LV network via an accumulation meter.

- The premises is intended to be used primarily for residential purposes, excluding serviced apartments, but including:
  - electricity used on vacant land zoned for residential (domestic) purposes; and
  - Living premises in retirement villages, which must be separately metered.

The Non-residential Tariff (Tariff 2) is applied to non-residential customers where:

- Total electricity consumption is less than 750MWh per annum per NMI
- Electricity is supplied at a voltage level defined as LV nominally 230/400V
- The customer is connected to the LV network via an accumulation meter
- The premises is intended to be used for non-residential purposes, including:
  - o electricity used on vacant land zoned for commercial purposes;
  - temporary supply (i.e. for construction purposes);
  - o motels, hotels, serviced apartments and any form of temporary accommodation;
  - o shops, offices, warehouses and industrial/manufacturing plants; and
  - o mining enterprises and farms.

The LV Smart Meter Tariff (Tariff 3) is applied to customers where:

- Total electricity consumption is less than 750MWh per annum per NMI
- Electricity is supplied at a voltage level defined as LV nominally 230/400V
- The customer is connected to the LV network via a smart meter. Residential and non-residential are treated equally under this tariff.

The Unmetered Tariff (Tariff 4) applies to connection points that with the agreement of Power and Water are unmetered (type 7 metering). In these circumstances, the demand at the connection point is estimated based on the type of device. These SCS tariffs cover the cost of the SCS for common distribution costs (energy delivery) and type 7 metering services (energy estimation and administration).

# 2.1.2. Low Voltage greater than 750MWh

This tariff class (Tariff 5) solely consists of the LV Majors Tariff, which applies to customers supplied at a connection point where total electricity consumption is greater than 750MWh per annum per NMI, and electricity is supplied at a voltage level defined as LV – nominally 230 to 400V.

# 2.1.3. High Voltage

The High Voltage tariff class comprises two categories of customers where electricity is supplied at a voltage level of 11 kilovolts (kV) or higher.

The HV Minors Tariff (Tariff 6) applies to customers supplied at a connection point where:

- Total electricity consumption is less than 750MWh per annum per NMI
- Electricity is supplied at a voltage level of 11 kilovolts (kV) or higher.

The HV Majors Tariff (Tariff 7) applies to customers supplied at a connection point where:

• Total electricity consumption is greater than 750MWh per annum per NMI

• Electricity is supplied at a voltage level of 11 kilovolts (kV) or higher.

# 2.2. Tariff components and charging parameters

Under our AER approved TSS, customers in each tariff are subject to a range of different components to which a charge is applied. This includes a daily system access charge (SAC), an energy charge, and a demand charge for customers with smart meters.

SACs are fixed daily charges per NMI for connection to Power and Water's electricity network. This is separate to the ACS metering charge, which is also a daily charge but applied based on the number of meters installed at the NMI.

All our tariffs include an anytime energy charge charged on a \$/ kWh basis, as measured by the customer's meter, with the exception of customers on the Unmetered Tariff. Customers on the Unmetered Tariff are charged an anytime energy charge on a \$/kWh basis, using the device's assumed consumption profile.

Demand charges encourage reduction in peak consumption. Peak consumption is a major driver of network expenditure and we have based these charges on our estimated Long Run Marginal Cost (LRMC). Demand charges can only be applied to customers with smart meters. Accumulation meters do not collect the required information.

The demand charge is applied to the peak demand within a month, within the peak period. While the peak period is 12pm to 9pm weekdays, which includes public holidays<sup>5</sup> for all customers with a smart meter, there are some differences across tariffs, regarding which season we apply demand charges. Specifically:

- For customers assigned to the LV Smart Meter (Tariff 3), the demand charge applies between 1
   October and 31 March with the rest of the year being off-peak (i.e. 6 months)
- For customers assigned to the LV Majors (Tariff 5), HV Majors Tariffs (Tariff 7) or HV Minors Tariffs (Tariff 6), the demand charge applies across the year (i.e. 12 months).

# 2.3. Tariff assignment process

Power and Water has a two-step process to assign or reassign customers to an appropriate tariff class and tariff. Initially, a customer is assigned a tariff class according to whether they are connected to the LV or HV network. We then consider the customer's historical or expected consumption level and meter type. The customer is then assigned a tariff according to their characteristics and end use as specified against the matching tariff class and tariff eligibility criteria.

A tariff assignment will occur when:

- Power and Water undertakes an annual customer review.
- A smart meter is installed.
- A new customer connects to the network and is allocated a NMI.
- When requested by a retailer, the customer or their representative.

<sup>5</sup> All other times are off-peak.

The tariff assignment will continue to apply until a reassignment is triggered because of a change in the customers load, connection or metering characteristics.

In February 2020, we undertook an annual review of our customers to review whether customers had been assigned to the appropriate tariff. On 28 February 2020, we wrote to each retailer notifying them of proposed changes to apply from 1 July 2020.

# 3. STANDARD CONTROL SERVICES (SCS)

The purpose of this chapter is to identify our process for deriving SCS tariffs in 2020-21. To calculate tariffs, we calculated the total allowed revenue for 2020-21, developed forecasts of energy consumption, demand and customer numbers for 2020-21, and set tariffs based on our AER approved TSS.

This chapter is structured as follows:

- Section 3.1 sets out the inputs to calculate the total allowable revenue for 2020-21.
- Section 3.2 outlines the 2020-21 forecast for customer numbers, energy consumption and demand for each of our 7 tariff groups.
- Section 3.3 sets out our tariff re-balancing strategy for 2020-21.
- Section 3.4 identifies our proposed tariffs for 2020-21.

#### 3.1. Total allowable revenue

The first step in our process has been to calculate the "total allowed revenue" (TAR) 2020-21. The TAR we calculated for 2020-21 is \$145.9 million (nominal), which is 7.5 per cent less than the 2019-20 TAR of \$157.8 million (nominal). In 2019-20, the TAR included \$16.1 million (nominal) of under-recovered revenue from previous years. In contrast, the 2020-21 TAR contains unrecovered revenues of only \$0.3 million (nominal), largely because revenue in 2019-20 is expected to recoup under-recovery from prior years.

The implication of the fall in TAR is that network charges will be lower in 2020-21 compared to 2019-20. A second implication is that we have significant headroom to progress the tariff strategy contained in our AER approved TSS, while managing bill impacts.

# 3.1.1. Calculation of total allowable revenue

The AER prescribes the method and formula that we must use to derive the TAR.<sup>6</sup> The TAR formula is:

$$TAR_t = AAR_t + I_t + B_t + C_t$$

The elements are:

- AARt is the adjusted annual smooth revenue requirement for year t (ie: 2020-21)
- It which is the sum of incentive scheme adjustment in year t relating to approved demand management incentive scheme (DMIS) amounts from t-2 (ie: 2018-19)
- B<sub>t</sub> which is the sum of annual adjustment factors for year t (ie: 2020-21)
- C<sub>t</sub> which is the sum of approved cost pass through amounts with respect to regulatory year t (ie: (2020-21)

Table 3 applies the TAR formula and sets out where the inputs are sourced from. The SCS Pricing Model (0) provides the underlying calculations.

 $<sup>6\,</sup> This is identified in section \, 13.4.6 \, of \, AER's \, draft \, decision \, (which \, was \, retained \, in \, the \, final \, decision).$ 

Table 3: 2019-20 SCS Total Allowed Revenue (\$m, nominal)

Input	Value*	Source
Adjusted annual smoothed revenue (AAR <sub>t</sub> )	145.6	The AER's smoothed nominal revenue requirement in 2019-20 was \$141.7 million. Consistent with AER prescribed method we have updated inflation to reflect the December 2019 ABS updates. The inflation rate value is 1.84%. The updated X-factor is -0.88% sourced from the updated Post Tax Revenue Model (PTRM) provided by the AER to Power and Water on 16 March 2020. <sup>7</sup>
DMIS adjustments (I <sub>t</sub> )	0.0	The DMIS reward relates to payments for 2018-19 (ie: t-2). Power and Water were not subject to the DMIS in the last regulatory period, which included 2018-19 and therefore are not entitled to claim a reward.
Annual adjustments (B <sub>t</sub> )	0.3	We have applied the unders and overs account using the AER's required approach – see section 3.1.2 below. No adjustments have been applied for designated pricing proposal charges or jurisdictional scheme payments. <sup>8</sup>
Cost pass through amounts (Ct)	0.0	There are no pass through amounts for 2020-21. We have not applied for a cost pass through amount at the time of submitting this pricing proposal.
Total Allowable Revenue (TARt)	145.9	Sum of the above values

<sup>\*</sup> Numbers have been rounded for presentational purposes. Exact values are included in the SCS Pricing Model (0).

#### 3.1.2. Unders and overs

The only annual adjustments applicable to Power and Water in 2020-21 are those relating to reconciling revenue for the revenue cap outcomes in the 2018-19 and 2019-20 regulatory years. We have calculated a revenue under-recovery of \$0.3 million. The calculation of this is shown in Table 4 using the AER's preferred format.

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<sup>7</sup> The PTRM provided by the AER is the same as that included with its final determination for the 2019–24 period, updated for the 2020-21 cost of debt observation.

<sup>8</sup> Designated pricing proposal charges are charges related to: designated pricing proposal services (prescribed exit fees, prescribed common transmission services and prescribed transmission use of system services); avoided customer transmission use of system charges; charges provided by another distributor (but only to the extent they comprise of designated pricing proposal services or standard control services); and charges or payments specified in the National Electricity Rules (NER) clause 11.39. Power and Water is unique in Australia because we have no network tariff component relating to the annual recovery of transmission costs. While the AER's TAR formula provides for these in the NT, the values are zero for 2020-21. This means PWC's network charges only comprise a SCS component.

Jurisdictional scheme amounts arise where a distributor is required to incur costs under a jurisdictional scheme imposed by a state or territory government. Clause 6.18.7A of the NT NER requires this initial pricing proposal to set out any jurisdictional scheme values. We are currently not subjected to any eligible jurisdictional schemes. While we have

Table 4: 2020-21 unders and overs account outcome (\$m, nominal)

	2018-19	2019-20	2020-21
Pricing year	t-2*	t-1**	t
Revenue from SCS	170.8	157.8	145.9
+ Adjusted annual smoothed revenue (AARt)	211.1	141.7	145.6
+ DMIS adjustments (It)	0	0	0
+ Annual adjustments (Bt)	0	0	0
+ Cost pass through amounts (Ct)	0	0	0
less allowable revenue for regulatory year	211.1	141.7	145.6
- Revenue deliberately under-recovered in year	34.0	0.000	0.000
Under/over recovery	-6.3	16.1	0.3
SCS unders and overs account			
Nominal WACC	7.28%	4.22%	4.28%
Opening balance	-8.9	-16.0	-0.3
Interest on opening balance	-0.6	-0.7	0.0
Under/over recovery of revenue for regulatory year	-6.3	16.1	0.3
Interest on under/over recovery for regulatory year	-0.2	0.3	0.0
Closing Balance	-16.0	-0.3	0.0

<sup>\*</sup>actual outcome.

Under the AER's revenue cap, revenues in year t are adjusted to true-up any under or over recovery of actual revenue collected through SCS charges in year t-2 and any estimated under or over recovery of revenues in year t-1.

The AER's 2019-24 Distribution Determination recognises that the Ministerial Direction, which constrained Power and Water's revenues in the current regulatory control period below the UC determination, has resulted in revenue deliberately under-recovered. For such intentional under-recovery, the AER has stated that this loss in revenue will not be counted as an under recovery for the purpose of the under and overs account. We have recognised this in our proposed unders and overs calculation. The values reported as deliberate under-recoveries are the difference between the adjusted annual smoothed revenue for 2018-19 taken from the UC determination and the Ministerial Direction values.

<sup>\*\*</sup>estimate.

<sup>9</sup> AER, Draft Determination, Appendix 13 p 13-11, September 2018.

<sup>10</sup> AER, Draft Determination, Appendix 13 p 13-12, September 2018.

The AER's 2019-24 Distribution Determination also requires that actual revenue relating to t-2 (ie: 2018-19) be audited for inclusion in the unders and overs account. 0 provides Power and Water's revenue audit report.

The AER's 2019-24 Distribution Determination allows for interest to be earnt or paid back on the unders and overs account variance using the nominal Weighted Average Cost of Capital (WACC). The final decision nominal WACC has been adjusted to reflect actual inflation and updated cost of debt, which reduces the nominal WACC for 2020-21 from 4.88% in the determination to 4.28% with the updates.

# 3.2. Forecast customer numbers, consumption and demand for 2020-21

The second step in our process was to forecast customer numbers (NMIs), energy consumption (kWh), and demand (kVA) for 2020-21 and subsequent years. We are forecasting about a 2 per cent reduction in consumption and demand compared to the forecasts we submitted in the 2019-20 pricing proposal. Section 3.2.1 sets out our forecast method, and section 3.2.2 identifies that our forecast has not incorporated the impact of COVID-19 which we expect would materially reduce consumption and demand further.

#### 3.2.1. Forecast method and values

Our forecast method has relied on actual data of our major customers for the first six months of the 2019-20 year. From here, we have estimated the forecast percentage change from 2019-20 to 2020-21 taking into account the downward trend we have evidence in consumption and demand for major customers. Table 5 summarises our methods.

Table 5: Method to forecast customer, energy and demand volumes in 2020-21

Steps	Approach
Step 1 -Estimate 2019-20 data based on 1 July to 31 December 2019 actual data	For customers with consumption above 750MWh, we used monthly data from smart meters from 1 July 2019 to 31 December 2019 to calculate actual consumption, demand and NMIs at 31 December 2019. We then used this as the basis of NMIs, and doubled the energy and demand to derive full year estimates.  For small customers, we assumed the same NMIs in our 2019-20 pricing proposal, but made some small adjustments to reflect that a marginally smaller number of customers have moved from accumulation to smart meters. We have used large customer actual energy and demand as a proxy to calculate the forecast difference for small customers.
Step 2 -Forecast percentage change between 2019-20 and 2020-21	We have used the estimate in 2019-20 to re-base our forecasts. For NMIs we applied the rate of growth in AEMO's forecasts for our 2019-24 regulatory determination (AEMO forecast). We considered this still provided the best outlook of customer growth, and the impact is immaterial. For consumption and demand, we applied the forecast growth in AEMO's forecast, but then applied an additional reduction based on the difference between forecast and estimates for 2019-20.

Table 6 compares the forecasts contained in the 2019-20 proposal with the estimate for 2019-20, and our forecast for 2020-21. This shows a decline in aggregate consumption of 2.01 per cent and demand of 1.98% in 2019-20 compared to our forecasts. We consider this reflects flatter economic growth in the

Northern Territory than projected by AEMO at the time of its forecasts, together with customers consuming more energy from their own solar installations.

Our forecast consumption for 2020-21 is lower than the 2019-20 estimates reflecting the downward trend in 2019-20. However our demand will be higher due to more customers moving onto smart meters.

Because we operate under a revenue cap, updating these forecasts will support smoother year-onyear price movements for our customers but will not change the total revenue we earn.

Table 6: Key NMI, energy & demand forecasts

Year	2019-20		2020/21	
Parameter	Forecast in 2019-20 pricing proposal	Estimate in 2020-21 pricing proposal	Forecast in 2019-20 pricing proposal	Forecast in 2020- 21 proposal
Energy (GWh)	1,670	1,639	1,670	1,607
Peak demand (MVA)*	2,668	2,628	2,740	2,658
NMIs	86,730	86,734	87,506	87,749

<sup>\*</sup>This is the aggregation of the monthly maximum demand recorded during the peak window.

#### 3.2.2. COVID-19

We have not had sufficient data or time to incorporate the impact of COVID-19 into our customer number, consumption and demand forecasts.

We would expect that our non-residential sector will be impacted by loss of tourism, and reduced global demand. In turn, this would significantly reduce energy consumption and demand volumes. However, we have not been able to adequately model the impact of COVID-19 in time to meet the deadline for this proposal.

We would like to discuss this issue further with the AER and our stakeholders to discuss how best to finalise our tariffs for 2020-21.

# 3.3. Tariff re-balancing strategy

The third step in our process was to develop tariff rates that allowed us to earn no more than the total allowed revenue for 2020-21, using an approach that aligned with the tariff re-balancing strategy in our AER approved TSS. In our TSS, we proposed to improve the efficiency of our tariff structures. Our strategy was to align our demand tariffs with LRMC estimates, recover more residual costs through the daily SAC charge, and reduce reliance on energy consumption charges. We also sought to better align revenue recovery with our costs to serve, in particular by slightly increasing the proportion of revenue collected from customers consuming over 750MWh. 22

<sup>11</sup> Power and Water, AER approved Tariff Structure Statement, April 2019, p16-17. Page 19 of the document also sets out our strategy if a revenue reduction were to occur in the 2019-24 period including: Direct any required revenue reductions to lower energy consumption tariffs for customers under 750MWh; progress our demand tariffs closer to long run marginal cost estimates while managing bill impacts; and examine the role of demand charges in recovering residual costs.

 $<sup>12\</sup> Power\ and\ Water, AER\ Approved\ Tariff\ Structure\ Statement-Explanatory\ Statement, April\ 2020,\ p25.$ 

In setting our proposed 2020-21 tariffs we have applied this strategy by collecting significantly more revenue through fixed SAC and demand charges (kVA). The revenue reduction is largely being achieved by reducing energy charges across our tariff groupings. At the same time, we are proposing to collect proportionally more revenue from larger customers, while managing bill impacts. Table 7 below sets out how this strategy has been applied to the individual tariff charges.

Table 7: Tariff strategy applied to charging parameters in 2020-21

Steps	Approach
Daily SAC charge	For each tariff grouping we are proposing to increase SAC significantly, as per our strategy in the AER approved TSS. The most material change is for residential customers on accumulation meters who we expect will remain under the retail price protections in the NT Pricing Order. This is to slowly align the SAC with non-residential and smart meter customers.
Energy charges	We are proposing to reduce the energy charge for each tariff as per our approved TSS. The reduction is similar across tariffs but the largest reductions are for customers on smart meters, to ensure that customers on all tariffs on average receive a price reduction. For accumulation meter customers this also moves us closer to the diversified LRMC estimates.
Demand charges	Overall, we expect to collect a greater proportion of revenue from demand charges compared to 2019-20. Our demand charges vary by tariff grouping and are aimed at gradually aligning our charges with LRMC consistent with our AER approved TSS.
	We will significantly increase the demand charge for low voltage large customers, where we are significantly below the diversified LRMC.
	We are reducing the demand charge for low voltage smart customers, where we are close to the LRMC estimate but noticeably above the diversified LRMC. This also helps ensure that there is not a disincentive to be on a smart meter tariff compared to an accumulation tariff, consistent with our approach in the TSS.
	We are also marginally increasing the demand charge for high voltage large and reducing the demand charge for high voltage small customers so that they align and are consistent with the diversified LRMC calculation for HV customers.

# 3.4. SCS Tariffs

Table 8 sets out the proposed price list for SCS tariffs in 2020-21 by charging parameter. The charges are based on the key inputs, forecast volumes and tariff strategies identified above. We note that the inputs and outputs are contained in the 2020-21 SCS Pricing Model at appendix 7. Importantly this model has been designed to demonstrate that the tariffs are consistent with our AER approved TSS, and meet the Rule requirements in respect of under-over recovery calculation and side constraints.

Table 8: 2020-21 Price list for SCS - tariffs by charging parameter (\$, nominal)

Tariff	SAC \$/NMI/day	Anytime Energy Charge \$/kWh	Demand \$/kVA/month
Tariff 1: Residential Tariff	0.917	0.08500	-
Tariff 2: Non-residential Tariff	1.500	0.09000	-
Tariff 3: LV Smart Meter Tariff	1.500	0.02300	17.500
Tariff 4: Unmetered Tariff	-	0.05300	-
Tariff 5: LV Majors Tariff	71.200	0.02000	12.298
Tariff 6: HV Minors Tariff	1.500	0.02300	8.370
Tariff 7: HV Majors Tariff	85.000	0.02350	8.370

Appendix 2 compares our proposed 2020-21 charges to 2019-20. It also sets out the revised indicative pricing schedule including for the remaining regulatory years of the regulatory control period. The revised schedule aligns with our tariff strategy in our AER approved TSS and has been updated to take into account that pricing proposal.

# 4. ALTERNATIVE CONTROL SERVICES (ACS)

This chapter explains our 2020-21 ACS charges and the inputs we used to calculate them in accordance with the AER's determination. Alternative control services (ACS) are regulated distribution services we provide specifically to a customer. They include metering and ancillary (one-off) services. The services are provided on a user pays basis and the costs are recovered from individual customers through charges.

# 4.1. Key inputs to calculating ACS prices

ACS are subject to a price cap, which is updated on an annual basis. There is no under-over recovery in the price cap formula.

In 2019-20, we had to apply the charge published in the AER's determination. From 2020-21 we have to apply a formula to update the previous year's price taking into account inflation and the relevant X-factor for each service in the AER's determination. Table 9 identifies the key inputs to calculate the 2020-21 charges for ACS. Appendix 8 is our ACS pricing model which demonstrates our compliance with the AER's control mechanism in deriving the 2020-21 prices.

**Table 9: ACS metering pricing parameters** 

Terms	Input	Source
Inflation update	1.84%	Consistent with AER prescribed method we have updated inflation forecasts for 2020-21 to reflect the December 2019 ABS updates. Note this inflation update is consistent with that used to determine SCS prices.
X-factor for metering services (Type 1 to 6)	-3.27%	Consistent with AER final decision on page 21 of Attachment 15 (Table 15.7)
X-factor re-connection, disconnection and final read	4.20%	Consistent with AER final decision on page 20 of Attachment 15 (Table 15.6)
X-factor for all other services to apply to 2020-21	-0.57%	Consistent with AER final decision on page on page 20 of Attachment 15 (Table 15.6)

# 4.2. ACS metering tariffs

Our metering service provision includes us performing the following activities:

- Metering coordinator
- Metering provider including providing, installing, maintaining, inspecting, replacing and testing meters
- Meter reading, including scheduled and special meter reads (e.g. move in and move out meter reading, final read on removed meter)
- Data services including collection, processing, management, delivery and storage of metering data.

Table sets out the proposed price list for single phase meters, three phase meters and dedicated current transformer or voltage transformer with remote reading meters (i.e. CT and VT meters). Similar to the

SAC charge, the metering charges will be applied on a daily basis. Table 10 converts the daily charge to an annual charge by multiplying by the number of days in 2019-20. The daily charge is set out in the ACS Pricing Model at Appendix 8.

Table 10: ACS metering service provision for Type 1 to 6 meters - 2020-21 Price List (Nominal \$, excluding GST)

Meter type	Basis of charging	Annual Charge 2021-22
1 Phase Meters (including Prepayment)	\$/year/meter	\$64.66
3 Phase Meters	\$/year/meter	\$71.19
Dedicated CT and VT meters	\$/year/meter	\$120.58

# 4.3. Ancillary – Quoted services

Quoted services are provided for one-off specific tasks at a customer or retailer's request. The cost of quoted services will vary on the time taken and any other costs incurred to complete the task. The charges included for quoted services relate to the cost of labour (and overheads) that will be used to provide a quote for the service. Additional to the labour costs, we also include material and travel costs. Table 11 sets out the proposed price list for 2020-21 for quoted services.

Table 11: ACS quoted services - Price list in 2020-21 - labour only (Nominal \$, excluding GST)

Quoted Service	Basis of charging	Price
Design related services	\$/Hour	\$159.39
Connection applications	\$/Hour	\$159.39
Access permits, oversights and facilitation	\$/Hour	\$159.39
Notices of arrangement and completion notices	\$/Hour	\$89.30
Network related property services	\$/Hour	\$89.30
Site establishment services	\$/Hour	\$89.30
Network safety services	\$/Hour	\$135.92
Network tariff change request	\$/Hour	\$89.30
Planned interruption - customer request	\$/Hour	\$135.92
Performance of a statutory right (access prevented)	\$/Hour	\$135.92
Provision of network related training to third parties	\$/Hour	\$89.30
Non-standard reporting services	\$/Hour	\$89.30
Services provided for retailer of last resort event	\$/Hour	\$89.30
Rectification of illegal connections service	\$/Hour	\$135.92
Network changes at customer or retailer's request	\$/Hour	\$135.92
Annual prepayment meter licensing fee	\$/Hour	\$89.30

# 4.4. Ancillary – Fee based services

Fee based charges form part of ancillary services. These fees are routinely performed and are based on a set rate that includes a labour rate, materials, other and overheads with a set time to perform the task. Table 12 sets out the proposed price list for 2020-21 for fee based services.

Table 12: ACS fee based services - 2020-21 Price List (nominal \$, excluding GST)

Fee based Service	Basis of charging	Charge (2021-22)
Disconnection (and final read)	\$/Request	\$65.35
Reconnection	\$/Request	\$65.35
Reconnection - after hours	\$/Request	\$121.39
Temporary disconnection and reconnection - physical dismantling	\$/Request	\$755.16
Provision of 3 phase service	\$/Request	\$1,434.81
Standard temporary builder's connection	\$/Request	\$673.61
Temporary disconnection and reconnection - no dismantling	\$/Request	\$293.00
Complex disconnection	\$/Request	\$320.19
Wasted visit fee	\$/Request	\$157.07
Special meter test	\$/Request	\$306.60
Exchange or replace meter – three phase	\$/Request	\$676.38
Exchange or replace meter - single phase	\$/Request	\$566.26
Relocation of meter	\$/Request	\$320.19
Remove meter	\$/Request	\$320.19
General meter inspection	\$/Request	\$143.48
Special meter read - no appointment	\$/Request	\$36.46
Special meter read – appointment	\$/Request	\$78.86
Class 3 PV Assessment	\$/Request	\$1,216.59
Meter program change	\$/Request	\$165.52
Historical data requests	\$/Request	\$201.91
Standing data requests	\$/Request	\$44.65
Customer transfers	\$/Request	\$178.59
Network tariff change request	\$/Request	\$44.65
Prepayment Vending Charge	\$/Request	\$0.49
Prepayment Meter Support Charge	\$/Request	\$67.97
Installation of Minor Apparatus	\$/Request	\$639.62
Class 1 & 2 PV service	\$/Request	\$89.30

# 5. PRICING COMPLIANCE

This chapter explains how we have demonstrated compliance with the pricing principles, and other requirements in the NT NER. Appendix 1 is our checklist of how we have complied with each relevant provision in the NT NER.

# 5.1. Pricing principles

The NT NER requires that tariffs comply with pricing principles. In the sections below we identify how we have met each of the pricing principles.

# 5.1.1. Network Pricing Objective

Our tariff structures must support the network pricing objective in the pricing principles. Under the objective, the tariffs we charge for direct control services to a retail customer should reflect our efficient costs of providing those services to that retail customer.<sup>13</sup>

Consistent with this objective, we have sought to support the long term interests of our customers when designing our tariffs. In our TSS Explanatory Statement<sup>14</sup> we noted that our tariff strategy seeks to develop tariff structures that reflect the efficient cost of providing these services to each retail customer. At the same time we sought to minimise adverse bill impacts. In 2019-20, we made significant inroads into tariff reform by simplifying our tariff structures, and by moving to more efficient charging parameters.

Our tariff strategy for the 2020-21 pricing proposal has made further inroads into meeting the objective by increasing the daily SAC charge, reducing energy charges, and moving our demand charge closer to the LRMC. Our tariff strategy is explained in section 3.4.

# 5.1.2. Pricing within stand-alone and avoidable cost

To comply with the NT NER, Power and Water must demonstrate that expected revenues from customers for a given tariff class are less than the stand alone cost of serving those customers and more than the avoidable cost of not serving those customers – commonly referred to as the 'efficient pricing bounds'.<sup>15</sup>

Our 2019-24 TSS provided the efficient pricing bounds for each tariff class. We consider no material change has occurred to alter these values. We have updated the TSS values to reflect CPI as part of this pricing proposal. Table 13 demonstrates that the revenues we expect to recover from each tariff class (in bold) are within the CPI adjusted efficient pricing bounds approved in our 2019-24 TSS.

<sup>13</sup> NT NER 6.18.5(a).

<sup>14</sup> Power and Water, Revised Tariff Structure Statement – Explanatory Statement, November 2018.

<sup>15</sup> NT NER 6.18.5(e).

Table 13: Stand-alone and avoidable cost (\$M per year)

Davis and and many	Tariff class			
Revenue and cost measures	LV <750MWh	LV >750MWh  124  17  10	HV	
Stand-alone cost	136	124	46	
Forecast 2019-20 tariff revenues	114	17	15	
Avoidable cost	18	10	5	
Compliant	Yes	Yes	Yes	

#### 5.1.3. Long run marginal costs (LRMC)

Under the NT NER, each tariff must be based on the long run marginal cost of serving those customers, with the method of calculation and its application determined with regard to the costs and benefits of that method, the costs of meeting demand from those customers at peak network utilisation times, and customer location.<sup>16</sup>

The AER's 2019-24 Distribution Determination approved our LRMC estimates. These estimates were based on the average incremental cost approach, as estimated for the HV system and the LV system. Our LRMC estimation was a two-step process where we first estimated LRMC for the whole of our three regulated networks by voltage level using current available inputs; and then compared these LRMC estimates against other National Electricity Market (NEM) distribution network's estimates and against previous estimates used for our 2014-19 network pricing determination.

Table 14 sets out our LRMC values, which were approved in our TSS. We consider no material change has occurred to alter these values.

Table 14: Long-run marginal cost estimates (real \$2018-19)

Tariff class	TSS LRMC estimate \$/kVA per month
LV <750MWh	20.0
LV >750MWh	20.0
HV	9.5

Ideally, demand charges should be set to match the LRMC estimates. However, this is not always possible given the customers impacts of moving from legacy tariffs and LRMC. To assist with moving towards the ideal outcome we calculated a diversified LRMC by tariff in our TSS, which provides a minimum target for each tariff.<sup>17</sup> This involved assessing a customers' coincident demand for demand tariffs and power factor for consumption tariffs. For the 2020-21 pricing proposal we have adjusted the TSS values for inflation to convert them to 2020-21 nominal values. The inputs, methodology and outcomes are consistent with Power and Water's TSS.

<sup>16</sup> NT NER 6.18.5(f).

<sup>17</sup> Power and Water, Tariff Structure Statement, 01 April 2019, pg 16.

Table 15 shows the diversified LRMC by tariff, compared to the relevant tariffs for 2019-20 and 2020-21. It shows:

- The anytime energy charge for customers not on smart meters has been reduced significantly and is now closer to the LRMC estimates.
- The LV Smart Meter Tariff demand charge has marginally moved below the LRMC but remains well above the diversified LRMC by tariff. The purpose of reducing the demand charge is to limit the differential between customers on smart meters and accumulation meters. We also note given the reduction in revenue, keeping demand charges at their current levels would have meant an even greater proportion of residual costs were to be collected from demand charges in 2020-21 compared to 2019-20.
- We have increased the LV Majors Tariff demand charge closer to the diversified LRMC over time.
- We have aligned the HV demand charges for minor and major customers, such that both charges equal the diversified LRMC.

Table 15: Diversified LRMC by Tariff (\$Nominal 2020-21)

	Anytim	e Energy Cha	rge		Demand	
Tariff	Diversified LRMC by Tariff	2019-20	2020-21	Diversified* LRMC by Tariff	2019-20	2020-21
	¢/kWh			S/kVA		
Tariff 1: Residential Tariff	3.05	10.24	8.50			
Tariff 2: Non-residential Tariff	3.12	10.43	9.00			
Tariff 3: LV Smart Meter Tariff				9.33	20.51	17.50
Tariff 4: Unmetered Tariff	3.16	5.51	5.30			
Tariff 5: LV Majors Tariff				17.62	11.00	12.30
Tariff 6: HV Minors Tariff				8.37	9.50	8.37
Tariff 7: HV Majors Tariff				8.37	8.27	8.37

# 5.1.4. Reflect total efficient costs and seek to minimise distortion

The NT NER requires that the expected revenue from each tariff must reflect our efficient costs, permit us to recover revenue consistent with the applicable distribution determination, and minimise distortions to efficient price signals. <sup>18</sup>

Our tariffs as a whole are set to recover the total allowed revenue consistent with the AER's determination. This is set out in section 3.1 of this document. The revenue reflects the AER's assessment of our efficient costs, updated for inflation and cost of debt.

The pricing principles require us to minimise distortions, which includes considering aligning revenue shares with the cost to serve, and revenue recovery through non-distortionary charging parameters.

<sup>18</sup> NT NER 6.18.5(g).

In our TSS we noted that our strategy was to better align revenue recovery with our costs to serve, in particular by increasing the proportion of revenue collected from customers consuming over 750MWh. Our proposed prices for 2019-20 increased that share from 21.0% to 21.6%.

Figure 2 shows that residual cost shares between major and smaller customers has not changed significantly from 2019-20 to 2020-21. A key reason is that our strategy to increase efficient price signals such as SAC and demand charges had already resulted in a price increase to about 20 per cent of our major customers in 2019-20. Any further increase in charging parameters would lead to unacceptable price outcomes for these customers.

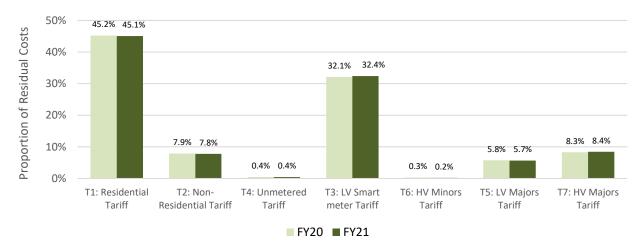


Figure 2: Residual cost recovery share by tariff (2019-20 and 2020-21)

In addition to assessing residual costs at the tariff level, we have also assessed residual values for each parameter. Where this can be achieved, we preference the recovery of residual costs from SAC charges and demand charges rather than anytime energy charges, whilst managing bill impacts. Figure 3 below shows the outcome of this analysis for 2019-20 and 2020-21. The analysis shows that in most cases, we are collecting more of the residual costs through the SAC and demand charges, with significantly less from energy charges.

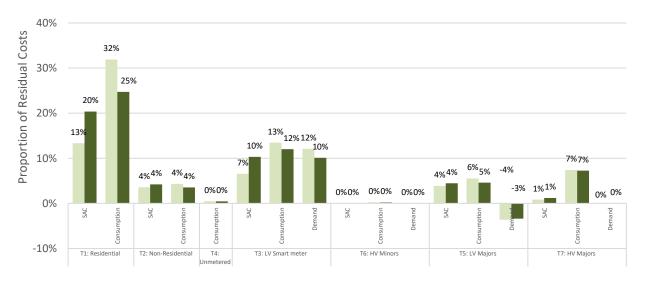


Figure 3: Residual cost recovery share by tariff parameter (2019-20 and 2020-21)

# 5.1.5. Customer transition and ability to respond

While the NT NER requires us to adopt efficient cost reflective tariffs, it recognises that this may need to occur over a period of transition. Under the pricing principles, the design of any transition can have regard to the level of bill impact faced by our customers, the desirability for efficient tariffs, customers' ability to choose tariffs and their ability to respond to pricing changes by modifying their behaviour. <sup>19</sup>

In 2019-20 we made significant headway into developing efficient tariffs, while having regard to potential bill impacts. This pricing proposal for 2020-21 builds on the structural changes we introduced in 2019-20 by moving more of our revenue recovery to more efficient tariffs such as SAC and demand charges, with the significant reduction in revenue being passed through lower energy charges.

We have also actively sought to increase demand charges for LV Majors where the current charge is below the LRMC estimate. At the same time, we have been able to pass through lower prices on average for these customers by significantly reducing the energy charge. This provides for both a more efficient price signal and minimises the adverse bill impacts.

As noted in section 5.1.4, we have not made significant progress in increasing revenue for major customers to reflect the underlying cost to serve. This is due to the potential high bill impacts on a subset of major customers, particularly given these customers are not subject to retail price protections. At the same time, we consider that the increase in demand charges for lower voltage major customers will provide proportionate incentives to shift some demand to off-peak periods. Faced with potential economic consequences from the COVID-19 pandemic, we also consider it appropriate to minimise potential bill shocks to all customers, including large customers who are major employers in the territory and who are not subject to the Pricing Order retail pricing protections.

# 5.1.6. Simple to understand

The pricing principles also require that tariff structures be reasonably capable of being understood by retail customers assigned to that tariff.<sup>20</sup>

PWC's tariffs are, compared to other utilities, simple and easy to understand. Notably we have simple tariff structures with a flat rate anytime energy and single peak demand charge for each tariff (with no off-peak demand charging). Most other networks have significantly more tariffs. We have also retained simplicity in our tariffs by not having a menu of opt in tariffs, which helps reduce transaction costs and is unnecessary amid the Pricing Order retail pricing protections.

# 5.2. Other requirements in the NER

This section addresses other relevant NT NER provisions including:

#### 5.2.1. Side constraints

The NER requires that we apply side constraints, which restricts movements of revenues within each tariff class from one year to the next. <sup>21</sup> Specifically, for each regulatory year after the first year of a regulatory control period, side constraints apply to the weighted average revenue raised from each tariff class. In accordance with the NT NER, the permissible percentage increase is the greater of CPI–X plus 2 per cent or CPI plus 2 per cent<sup>22</sup> after accounting for other adjustments allowed in the annual TAR formula set out in section **Error! Reference source not found.**.

Appendix 7 demonstrates our compliance with the side constraint for each tariff class. We have calculated the relevant side constraint to apply in 2020-21 as set out in Table 16 below.

Table 16: Calculation of side constraint for 2020-21

Component	Values
Inflation	1.84%
X-Factor	-0.88%
Constraint Factor	2.00%
Incentive Scheme Adjustments	0%
Annual Adjustment Factors	0.20%
Approved Pass Through Amounts	0%
Constraint	4.99%

We note the reduction in the weighted average revenue raised from each tariff class is significantly less than the constraint on revenue increases, as set out in Table 17 below.

Table 17: Weighted expected revenue in 2019-20 and 2020-21 and % change

Tariff class	Expected Revenue 2019-20	Expected Revenue 2020-21	% change in revenue
LV <750MWh	\$124,100	\$113,804	-8.30%
LV >750MWh	\$17,613	\$16,931	-3.87%
HV	\$16,098	\$15,195	-5.61%

#### 5.2.2. Variation during the year

The NT NER requires that a pricing proposal set out the nature of any variation or adjustment to the tariff that could occur during the course of the regulatory year and the basis on which it could occur.<sup>23</sup>

<sup>21</sup> While the side constraint forms part of the control mechanism it is discussed here as it impacts on the level of pricing parameters rather than the total revenue requirement.

<sup>22</sup> NT NER, 6.18.6(c).

<sup>23</sup> NT NER 6.18.2(b)(5)

We note that the NT government's policy response to the COVID-19 pandemic could potentially involve Power and Water and our pricing. We are not aware of any such plans presently and would engage with our customer advisory council and the AER were these to transpire.

#### Variation compared to indicative price schedule in TSS

Our TSS set out indicative prices based on the revenues and demand forecasts contained in our revised regulatory proposal (RRP) including for 2020-21.<sup>24</sup>

The tariffs in this initial pricing proposal reflect the same tariff structures as set out in our approved TSS. However, some of the individual charging parameters have had to vary due to:

- The forecast volumes in our 2019-20 Pricing Proposal were updated with new data and source information. The TSS had used AEMO forecasts of energy 'sent out' when the relevant forecast was 'energy delivered". This accounted for a material over-statement of consumption in our TSS, and provided less headroom to deliver reductions in energy charges.
- Our TSS values were based on assumed values from a complicated tariff structure that applied in 2018-19. When we reviewed some of these assumptions in our 2019-20 pricing proposal, we considered amendments were required to meet the pricing principles and minimise adverse price outcomes for customers.
- The revenue parameters are changed from forecast in the AER's determination including lower inflation and a lower X-factor.
- Subsequently, we have updated our customer number (NMI), consumption and peak demand data for the latest available information.

Our demand charges are very similar to our indicative tariffs in the TSS for 2020-21. However our energy charges higher for Residential, LV Smart Meter and LV Majors tariffs than the indicative tariffs in the TSS. Further our SAC charges are higher. This was required to ensure the tariffs as a whole were sufficient to collect the allowed revenue for 2020-21 based on our updated NMI consumption and demand forecasts by tariff.

Updated indicative price levels for the remaining years of the regulatory period are set out in Appendix 2 of this determination for SCS, with the underlying calculations contained in the SCS Pricing model at 0.

# 5.2.3. Tariff variation from 2019-20 to 2020-21

The NT NER requires us to describe the nature and extent of change from the previous regulatory year and demonstrate that the changes comply with the NT NER and any applicable distribution determination.

In this respect we note that our tariff classes and structures remain the same as the previous year. The updated tariff charges are a result of the decrease in the total allowed revenue for 2020-21 compared to 2019-20.

The relative changes reflect our TSS approved by the AER. In our TSS we noted that we would recover residual costs by aiming to keep demand tariffs in line with our LRMC estimates; preferencing residual

 $<sup>{\</sup>bf 24\,Power\,and\,Water,\,Tariff\,Structure\,Statement,\,April\,\,2019,\,page\,\,28.}$ 

cost recovery through the fixed daily system access charge, and reducing reliance on energy consumption charges. Our 2020-21 tariffs reflect these principles as demonstrated in section 3.3 of this document.

We also note that the tariff changes are compliant with the NT NER and the control mechanism formula in the AER's 2019-24 regulatory determination.

# 5.2.4. Rounding

When reporting on compliance as part of the annual pricing proposal process each year of the 2019–24 regulatory control period, the AER requires that certain calculation inputs be used on an unrounded basis while others may be used on a rounded basis. The process for rounding and the specific inputs to be rounded are detailed in Draft Determination Attachment 13: Appendix D<sup>25</sup>.

We have complied with these requirements.

The final decision confirmed this aspect of the Draft Decision. Australian Energy Regulator, Final Decision: Power and Water Corporation Distribution Determination for 2019 to 2024, April 2019, page 13-5.

# **GLOSSARY**

AARt Adjusted annual smoothed revenue

ACS (charges) Alternative Control Services

AER Australian Energy Regulator

AEMO Australian Energy Market Operator

CPI Consumer Price Index

DMIS Demand Management Incentive Scheme

DNSP Distribution Network Service Provider

GST Goods and Services Tax

GW Gigawatt

GWh Gigawatt hour

HV High Voltage

kV Kilovolt

kVA Kilovolt amperes

kVAr Kilovolt amperes reactive

kW Kilowatt

kWh Kilowatt hour

LRMC Long Run Marginal Cost

LV Low Voltage

MVA Megavolt ampere

MW Megawatt

MWh Megawatt hour

NEM National Electricity Market

NER National Electricity Rules

NMI National Metering Identifier

NT NER Northern Territory National Electricity Rules

PTRM Post Tax Revenue Model

PV Photovoltaic

Power and Water Power and Water Corporation

SAC System Access Charge

SCS Standard Control Services

TAR Total allowable revenue

TSS Tariff Structure Statement

UC Utilities Commission of the Northern Territory

WACC Weighted Average Cost of Capital

# **APPENDIX 1 - COMPLIANCE CHECKLIST**

The purpose of this appendix is to identify how we have met each relevant provision of the NT NER as it relates to this pricing proposal. Table 18 below sets out the clause, requirement and relevant section of this document or the appendices that satisfies the requirement.

**Table 18: Compliance checklist** 

Rule	Requirement Relevant	Relevant Section
6.7.5	Negotiating Framework	AER Final Decision: Negotiating Framework
6.7.5(a)	A Distribution Network Service Provider must prepare a negotiating framework document setting out the procedure to be followed during negotiations	AER Final Decision: Negotiating Framework
6.7.5 (b) and (c)	The negotiating framework must comply with and be consistent with: (1) the applicable requirements of the relevant distribution determination; and Note: See clause 6.7.3. (2) paragraph (c), which sets out the minimum requirements for a negotiating framework.	AER Final Decision: Negotiating Framework
6.18.2 (a)	Distribution Network Service Provider must:	
6.18.2 (a)(2)	submit to the AER, at least 3 months before the commencement of the second and each subsequent regulatory year of the regulatory control period, a further pricing proposal (an annual pricing proposal) for the relevant regulatory year.	This report and accompanying attachments constitutes our pricing proposal for 2020-21. It has been provided to the AER 3 months before the commencement of the second regulatory year of the relevant regulatory control period.
6.18.2(b)	A Pricing Proposal must:	
6.18.2(b)(2)	set out the proposed tariffs for each tariff class that is specified in the Distribution Network Service Provider's tariff structure statement for the relevant regulatory control period;	For SCS services see section 3.4 For ACS Metering services see section 4.2 For ACS Quoted services see section 4.3 For ACS Fee based services see section 4.4
6.18.2(b)(3)	set out, for each proposed tariff, the charging parameters and the elements of service to which each charging parameter relates;	See section 2.2 for description of charging parameters and elements of service that the charge relates to. See section 3.4 for the tariff rate that applies to each charging parameter.
6.18.2(b)(4)	set out, for each tariff class related to standard control services, the expected weighted average revenue for the relevant regulatory year and also for the current regulatory year;	See section 5.2.1 and Appendix 7 (SCS Pricing Model)
6.18.2(b)(5)	set out the nature of any variation or adjustment to the tariff that could occur during the course of the regulatory year and the basis on which it could occur;	See section 5.2.2

Rule	Requirement Relevant	Relevant Section
6.18.2(b)(6)	set out how designated pricing proposal charges are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous regulatory year;	Not applicable as Power and Water has no designated pricing proposal charges. This is confirmed in calculation of TAR in section 3.1
6.18.2(b)(6A)	set out how jurisdictional scheme amounts for each approved jurisdictional scheme are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those amounts;	Not applicable as Power and Water has no jurisdiction scheme amounts. This is confirmed in calculation of TAR in section 3.1.
6.18.2(b)(6B)	describe how each approved jurisdictional scheme that has been amended since the last jurisdictional scheme approval date meets the jurisdictional scheme eligibility criteria;	Not applicable as Power and Water has no jurisdiction scheme amounts. This is confirmed in calculation of TAR in section 3.1.
6.18.2(b)(7)	demonstrate compliance with the Rules and any applicable distribution determination, including the Distribution Network Service Provider's tariff structure statement for the relevant regulatory control period;	This is set out in this compliance register, with key elements such as Pricing Principles discussed in chapter 5 of this document. Quantitative compliance is demonstrated in Appendix 7 (SCS Pricing Model). We have also demonstrated how our tariff strategy is consistent with the AER approved TSS published in April 2019. This is discussed in section 3.3 of this document.
6.18.2(b)(7A)	demonstrate how each proposed tariff is consistent with the corresponding indicative pricing levels for the relevant regulatory year as set out in the relevant indicative pricing schedule, or explain any material differences between them; and	See section 5.2.3 for a full description of why the revised indicative pricing schedule in the 2020-21 pricing proposal differs from the indicative pricing schedule submitted in the TSS.
6.18.2(b)(8)	describe the nature and extent of change from the previous regulatory year and demonstrate that the changes comply with the Rules and any applicable distribution determination.	See section 3 of this document which discusses the key inputs that drive the calculation of tariffs (sections 3.1 and 3.2) and the tariff strategy that establishes changes at a charging parameter level to achieve the TAR.
6.18.2(c)	The AER must on receipt of a pricing proposal from a Distribution Network Service Provider publish the proposal.	Noted
6.18.2(d)	At the same time as a Distribution Network Service Provider submits a pricing proposal under paragraph (a), the Distribution Network Service Provider must submit to the AER a revised indicative pricing schedule which sets out, for each tariff and for each of the remaining regulatory years of the regulatory control period, the indicative price levels determined in accordance with the Distribution Network Service Provider's tariff structure statement for that regulatory control period and updated so as to take into account that pricing proposal.	This is set out at Appendix 2 for SCS, Appendix 3 for ACS Metering, Appendix 4 for ACS Quoted Service, and Appendix 5 for ACS Fee Based Services. The underlying inputs, forecasts and calculations for SCS are contained in Appendix 7 for SCS and Appendix 8 for ACS.

Rule	Requirement Relevant	Relevant Section
6.18.2(e)	Where the Distribution Network Service Provider submits an annual pricing proposal, the revised indicative pricing schedule referred to in paragraph (d) must also set out, for each relevant tariff under clause 6.18.1C, the indicative price levels for that relevant tariff for each of the remaining regulatory years of the regulatory control period, updated so as to take into account that pricing proposal.	We have not exercised our option under 6.18.1C. That is we have not sought the AER's approval for a new proposed tariff (a relevant tariff) that is outside of our approved TSS.
6.18.5	Pricing principles	
6.18.5(e)	For each tariff class, the revenue expected to be recovered must lie on or between:	
6.18.5(e)(1)	an upper bound representing the stand alone cost of serving the retail customers who belong to that class; and	See section 5.1.2
6.18.5(e)(2)	a lower bound representing the avoidable cost of not serving those retail customers.	Table 13 section 5.1.2
6.18.5(f)	Each tariff must be based on the long run marginal cost of providing the service to which it relates to the retail customers assigned to that tariff with the method of calculating such cost and the manner in which that method is applied to be determined having regard to:	See section 5.1.3
6.18.5(f)(1)	the costs and benefits associated with calculating, implementing and applying that method as proposed;	See section 5.1.3 and refer to our AER approved TSS for a fuller description underlying our method.
6.18.5(f)(2)	the additional costs likely to be associated with meeting demand from retail customers that are assigned to that tariff at times of greatest utilisation of the relevant part of the distribution network; and	Refer to our AER approved TSS for a fuller description underlying our method.
6.18.5(f)(3)	the location of retail customers that are assigned to that tariff and the extent to which costs vary between different locations in the distribution network.	Refer to our AER approved TSS for a fuller description underlying our method.
6.18.5(g)	The revenue expected to be recovered from each tariff must:	
6.18.5(g)(1)	reflect the Distribution Network Service Provider's total efficient costs of serving the retail customers that are assigned to that tariff;	See section 3.1 which shows that we have used the AER's calculation of TAR. Implicit in the calculation is the AER's smoothed revenue requirement, ACS prices and X-factors from its 2019-24 Distribution Determination for Power and Water. These reflect the AER's assessment of efficient costs for SCS and ACS.
6.18.5(g)(2)	when summed with the revenue expected to be received from all other tariffs, permit the Distribution Network Service Provider to recover the expected revenue for the relevant services in accordance with the applicable distribution determination for the Distribution Network Service Provider; and	This is demonstrated in Appendix 7 (SCS pricing model)

Rule	Requirement Relevant	Relevant Section
6.18.5(g)(3)	comply with sub-paragraphs (1) and (2) in a way that minimises distortions to the price signals for efficient usage that would result from tariffs that comply with the pricing principle set out in paragraph (f).	See section 5.1.4
6.18.5(h)	A Distribution Network Service Provider must consider the impact on retail customers of changes in tariffs from the previous regulatory year and may vary tariffs from those that comply with paragraphs (e) to (g) to the extent the Distribution Network Service Provider considers reasonably necessary having regard to:	Section 5.1 describes how we have considered the pricing principles in our tariffs for 2020-21. This draws out areas where we have considered bill impacts on major customers as a key consideration.
6.18.5(h)(1)	the desirability for tariffs to comply with the pricing principles referred to in paragraphs (f) and (g), albeit after a reasonable period of transition (which may extend over more than one regulatory control period);	See section 5.1.5 and a more detailed description of our approach in our AER approved TSS.
6.18.5(h)(2)	the extent to which retail customers can choose the tariff to which they are assigned; and	See section 2.3 on our procedures to assign customers to tariff classes. Our tariff assignment is based on consumption levels, metering and voltage connection. Customers do not have the ability to opt-in to different tariffs.
6.18.5(h)(3)	the extent to which retail customers are able to mitigate the impact of changes in tariffs through their usage decisions.	See the Summary where we note that we expect major customers who may have an increase in price to be able to offset this by shifting some of their energy usage from peak to off-peak periods.
6.18.5(h)(3) (ha)	However, for a distribution determination for a Distribution Network Service Provider in this jurisdiction that will apply or applies during the 1st regulatory control period, the reference in paragraph (h) to "the previous regulatory year" must be regarded as a reference to "the year that precedes the relevant regulatory year of the 1st regulatory control period (which may be the last year of the 2014-19 NT regulatory control period)".	Noted
6.18.5(i)	The structure of each tariff must be reasonably capable of being understood by retail customers that are assigned to that tariff, having regard to:  1) the type and nature of those retail customers; and (2) the information provided to, and the consultation undertaken with, those retail customers.	See Section 5.1.6 on why we consider the tariffs are relatively simple to understand compared to other jurisdictions. We note the significant consultation on tariff structures that we undertook in developing our approved TSS
6.18.5(j)	A tariff must comply with the Rules and all applicable regulatory instruments.	See this compliance checklist, and a detailed description of compliance in Chapter 5 of this document. Other regulatory instruments include our AER approved TSS (see chapter 2 and section 3.3) and the AER's determination such as control mechanism formula (see section 3.1)

Rule	Requirement Relevant	Relevant Section
6.18.6	Side constraints on tariffs for standard control services	See Section 5.2.1 where we show that our proposed tariffs comply with the side constraints in the NT NER.
6.18.7	Recovery of designated pricing proposal charges	We have no designated pricing proposal charges as discussed in section 3.1
6.18.7A	Recovery of jurisdictional scheme amounts	We have no jurisdictional scheme amounts as discussed in section 3.1
6.18.8	Approval of pricing proposal	AER
6.18.9	Publication of information about tariffs and tariff classes	We publish tariffs and tariff classes once approved by the AER.

# **APPENDIX 2 - SCS REVISED INDICATIVE PRICING SCHEDULE**

Table 19 sets out our proposed TSS tariff charges for 2020-21 (bold) by charging parameter, together with the approved tariff charge in 2019-20, and the indicative tariff charge in the remaining years of the regulatory period. This constitutes our revised indicative pricing schedule for SCS.

Table 19: Indicative price schedule for SCS (nominal \$, excluding GST)

		Approved	Proposed	Indicative	Indicative	Indicative
Tariff	Basis of charging	2019-20	2020-21	2021-22	2022-23	2023-24
Tariff 1: Residential						
SAC	\$ per day per NMI	0.640	0.917	0.950	0.988	1.024
Anytime Energy Charge	\$/kWh	0.10238	0.08500	0.08807	0.09153	0.09490
Tariff 2: Non-residential						
SAC	\$ per day per NMI	1.350	1.500	1.554	1.615	1.675
Anytime Energy Charge	\$/kWh	0.10430	0.09000	0.09326	0.09692	0.10048
Tariff 3: LV Smart Meter						
SAC	\$ per day per NMI	1.350	1.500	1.554	1.615	1.675
Anytime Energy Charge	\$/kWh	0.03000	0.02300	0.02383	0.02477	0.02568
Demand	\$/kVA	20.510	17.500	18.133	18.845	19.537
Tariff 4: Unmetered						
Anytime Energy Charge	\$/kWh	0.05506	0.05300	0.05492	0.05707	0.05917
Tariff 5: LV Majors						
SAC	\$ per day per NMI	70.000	71.200	73.775	76.673	79.490
Anytime Energy Charge	\$/kWh	0.02630	0.02000	0.02072	0.02154	0.02233
Demand	\$/kVA	11.000	12.298	12.743	13.243	13.730
Tariff 6: HV Minors						
SAC	\$ per day per NMI	1.350	1.500	1.554	1.615	1.675
Anytime Energy Charge	\$/kWh	0.03000	0.02300	0.02383	0.02477	0.02568
Demand	\$/kVA	9.500	8.370	8.673	9.014	9.345
Tariff 7: HV Majors						
SAC	\$ per day per NMI	70.000	85.000	88.074	91.534	94.896
Anytime Energy Charge	\$/kWh	0.02630	0.02350	0.02435	0.02531	0.02624
Demand	\$/kVA	8.270	8.370	8.673	9.014	9.345

# **APPENDIX 3 - ACS METERING REVISED INDICATIVE PRICING SCHEDULE**

Table 20 sets out our proposed price by meter type in 2020-21 (bold) together with the approved price in 2019-20, and the indicative price in the remaining years of the regulatory period. This constitutes our revised indicative pricing schedule for ACS metering services.

Table 20: Indicative price schedule for ACS Metering services (nominal \$, excluding GST)

Service	Basis of charging	Approved	Proposed	Indicative	Indicative	Indicative
		2019-20	2020-21	2021-22	2022-23	2023-24
1 Phase Meters (including Prepayment)	\$/Year/Meter	\$61.48	\$64.66	\$68.39	\$72.34	\$76.52
3 Phase Meters	\$/Year/Meter	\$67.69	\$71.19	\$75.30	\$79.65	\$84.25
Dedicated CT and VT meters	\$/Year/Meter	\$114.65	\$120.58	\$127.54	\$134.90	\$142.69

# **APPENDIX 4 - ACS QUOTED REVISED INDICATIVE PRICING SCHEDULE**

Table 21 sets out our proposed price by ACS quoted service (labour only) in 2020-21 (bold) together with the approved price in 2019-20, and the indicative price in the remaining years of the regulatory period. This constitutes our revised indicative pricing schedule for ACS quoted services.

Table 21: Indicative price schedule for ACS quoted services (nominal \$, excluding GST)

Service	Basis of	Approved	Proposed	Indicative	Indicative	Indicative
	charging	2019-20	2020-21	2021-22	2022-23	2023-24
Design related services	\$/Hour	\$155.62	\$159.39	\$164.59	\$170.22	\$176.03
Connection applications	\$/Hour	\$155.62	\$159.39	\$164.59	\$170.22	\$176.03
Access permits, oversights and facilitation	\$/Hour	\$155.62	\$159.39	\$164.59	\$170.22	\$176.03
Notices of arrangement and completion notices	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61
Network related property services	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61
Site establishment services	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61
Network safety services	\$/Hour	\$132.71	\$135.92	\$140.36	\$145.16	\$150.11
Network tariff change request	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61
Planned interruption - customer request	\$/Hour	\$132.71	\$135.92	\$140.36	\$145.16	\$150.11
Performance of a statutory right (access prevented)	\$/Hour	\$132.71	\$135.92	\$140.36	\$145.16	\$150.11
Provision of network related training to third parties	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61
Non-standard reporting services	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61
Services provided for retailer of last resort event	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61
Rectification of illegal connections service	\$/Hour	\$132.71	\$135.92	\$140.36	\$145.16	\$150.11
Network changes at customer or retailer's request	\$/Hour	\$132.71	\$135.92	\$140.36	\$145.16	\$150.11
Annual prepayment meter licensing fee *	\$/Hour	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61

# APPENDIX 5 - ACS FEE BASED REVISED INDICATIVE PRICING SCHEDULE

Table 22 sets out our proposed price by ACS fee based service in 2020-21 (bold) together with the approved price in 2019-20, and the indicative price in the remaining years of the regulatory period. This constitutes our revised indicative pricing schedule for ACS fixed based services.

Table 22: Indicative price schedule for ACS Fee based services (nominal \$, excluding GST)

Service	Basis of charging	Approved	Proposed	Indicative	Indicative	Indicative
		2019-20	2020-21	2021-22	2022-23	2023-24
Disconnection (and final read)	\$/Request	\$66.99	\$65.35	\$64.00	\$62.64	\$61.24
Reconnection	\$/Request	\$66.99	\$65.35	\$64.00	\$62.64	\$61.24
Reconnection - after hours	\$/Request	\$124.43	\$121.39	\$118.88	\$116.35	\$113.75
Temporary disconnection and reconnection - physical dismantling	\$/Request	\$737.30	\$755.16	\$779.80	\$806.48	\$834.00
Provision of 3 phase service	\$/Request	\$1,400.88	\$1,434.81	\$1,481.63	\$1,532.31	\$1,584.60
Standard temporary builder's connection	\$/Request	\$657.68	\$673.61	\$695.59	\$719.39	\$743.94
Temporary disconnection and reconnection - no dismantling	\$/Request	\$286.07	\$293.00	\$302.56	\$312.91	\$323.59
Complex disconnection	\$/Request	\$312.62	\$320.19	\$330.64	\$341.95	\$353.62
Wasted visit fee	\$/Request	\$153.36	\$157.07	\$162.20	\$167.75	\$173.47
Special meter test	\$/Request	\$299.35	\$306.60	\$316.61	\$327.44	\$338.61
Exchange or replace meter – three phase	\$/Request	\$660.39	\$676.38	\$698.45	\$722.34	\$746.99
Exchange or replace meter - single phase	\$/Request	\$552.87	\$566.26	\$584.74	\$604.74	\$625.38
Relocation of meter	\$/Request	\$312.62	\$320.19	\$330.64	\$341.95	\$353.62
Remove meter	\$/Request	\$312.62	\$320.19	\$330.64	\$341.95	\$353.62
General meter inspection	\$/Request	\$140.09	\$143.48	\$148.16	\$153.23	\$158.46
Special meter read - no appointment	\$/Request	\$35.60	\$36.46	\$37.65	\$38.94	\$40.27
Special meter read - appointment	\$/Request	\$77.00	\$78.86	\$81.43	\$84.22	\$87.09
Class 3 PV Assessment	\$/Request	\$1,187.82	\$1,216.59	\$1,256.29	\$1,299.27	\$1,343.61
Meter program change	\$/Request	\$161.61	\$165.52	\$170.92	\$176.77	\$182.80
Historical data requests	\$/Request	\$197.14	\$201.91	\$208.50	\$215.63	\$222.99
Standing data requests	\$/Request	\$43.59	\$44.65	\$46.11	\$47.69	\$49.32

Service	Basis of charging	Approved	Proposed	Indicative	Indicative	Indicative
		2019-20	2020-21	2021-22	2022-23	2023-24
Customer transfers	\$/Request	\$174.37	\$178.59	\$184.42	\$190.73	\$197.24
Network tariff change request	\$/Request	\$43.59	\$44.65	\$46.11	\$47.69	\$49.32
Prepayment Vending Charge	\$/Request	\$0.48	\$0.49	\$0.51	\$0.53	\$0.55
Prepayment Meter Support Charge	\$/Request	\$66.36	\$67.97	\$70.19	\$72.59	\$75.07
Installation of Minor Apparatus	\$/Request	\$624.50	\$639.62	\$660.49	\$683.08	\$706.39
Class 1 & 2 PV service	\$/Request	\$87.19	\$89.30	\$92.21	\$95.36	\$98.61

# **APPENDIX 6 - SCS REVENUE AUDIT**

Please refer to separate PDF document titled *KPMG: Report on the audit of standard control services* revenue calculation – 30 October 2019 – Public

# **APPENDIX 7 - SCS PRICING MODEL**

Please refer to separate excel workbook titled *Power and Water Corporation – 2020-21 SCS Pricing Model – 31 March 2020 – Public.* 

# **APPENDIX 8 - ACS PRICING MODEL**

Please refer to separate excel workbook titled *Power and Water Corporation – 2020-21 ACS Pricing Model – 31 March 2020 – Public.*