Pricing Proposal 2017 /18 March 2017





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Executive summary

This Annual Pricing Proposal (APP or Pricing Proposal) has been prepared by SA Power Networks in accordance with the requirements of the National Electricity Rules¹ (NER, or the Rules). It provides details of our proposed network prices for 2017/18 and comprehensive information on the price changes for each type and size of customer. It is the first APP prepared since our 2017-20 Tariff Structure Statement (TSS) was approved by the AER at the end of February 2017. The pricing arrangements in this APP are required to conform with the policies and indicative pricing levels outlined in that TSS.

Each electricity customer's retail bill comprises the following components, the first four of which are included in this APP:

- 1. SA Power Networks' distribution network charges;
- 2. Transmission network charges from ElectraNet and MurrayLink;
- 3. Jurisdictional Scheme Obligation charges, required to fund the South Australian Government's Feed-in Tariff (FiT) credits to the owners of qualifying solar photo-voltaic (PV) electricity generators;
- 4. Metering charges; and
- 5. Retail charges, including the cost of energy generation, and obligations under the national Renewable Energy Target (RET) and the South Australian Government's Residential Energy Efficiency Scheme (REES).

The first three components are collectively referred to as 'Network Use of System' or 'NUOS' charges and usually equate to just under half of the total bill paid by consumers. The distribution and transmission charges reflect the cost of transporting electricity across the State's electricity grid from where it is produced to where it is consumed. The fourth charge generally applies to small customers for their Type 6 metering provided by SA Power Networks.



Figure 1 – Supply chain cost components for a typical customer

Electricity retailers tend to pass through these NUoS charges as separate items on the bills of large customers. For households and small business customers, retailers tend to bundle these charges with the cost of buying electricity in the wholesale market and with other fees and charges. Figure 1 represents a typical 2-3-person household consuming 5,000 kWh (5 MWh) across the year in 2016/17. Given retail prices for 2017/18 are not yet available, we have used 2016/17 pricing in this chart for comparison purposes.

Under the National Electricity Market (NEM), for Distribution Network Service Providers (DNSPs) like SA Power Networks, the total revenue that we can

¹ National Electricity Rules 6.18.2(a)(2) Ver 65 (Note, the former Rules apply on account on Rule 11.73.1(b) Ver 89).

recover is set by the Australian Energy Regulator (**AER**) each five years². With our total revenue capped, our tariffs represent the way that we allocate these total costs to our diverse customer base.

The way we allocate these costs to customers is changing. A NER rule change in late 2014 required us to develop what can be referred to as a more 'user pays' approach to the way we price for use of the network³. Network pricing needs to become more 'cost-reflective' over time.

Our longer term approach to implementing these NEM pricing reforms is encapsulated in our TSS⁴. This APP is complementary to our TSS. The TSS outlines our proposed tariff structure changes over a Regulatory Period⁵, whilst the APP sets out the actual tariff levels that will be applied to the tariff structures set out in the TSS and passed onto retailers. Our initial TSS covers the next three years 2017/18 through to 2019/20.

Changes are required to our pricing from July 2017, however we have endeavoured to ensure the pricing changes are aligned with the direction of the new pricing rules as explained in our TSS, while limiting the potential for significant price changes to customers in the period to 2020.

Revenue and pricing outcomes for 2017/18

A summary of the pricing outcomes proposed in our 2017/18 APP and how these outcomes align with our TSS indicative price schedule is set out below.

Distribution Charges

Our allowed Distribution Use of System (**DUoS**) revenue rises from \$759.6M (2016/17) to \$788.5M (2017/18). This increase includes CPI, X factor (ie the Regulatory-approved year-on-year revenue adjustment for 2017/18) and any incentive scheme outcomes. After allowing for the rebalance of distribution charges due to a small over-recovery in the last two years, we forecast to recover \$778.7M from customers. DUoS prices will increase on average by 5.8% (residential prices increase by 7.9% whilst business prices increase by 3.6%).

Distribution prices will be 0.9% higher on average than the TSS forecast for 2017/18 as allowed revenue is 1.2% higher than the TSS forecast (note that charges to business customers will on average be 2.75% higher than forecast, while residential charges will on average be 0.7% lower than forecast because the average residential price increases for 2017/18 are limited to a maximum increase of 8.47% due to the NER side constraint rule. Distribution recovery has declined in recent years through energy efficiency and in-house solar PV use which reduces billings. Costs to supply residential customers have not declined as air-conditioning has maintained the same level of peak demand.)

² The AER released its final determination for the 2015-20 regulatory period in October 2015.

³ Distribution Network Pricing Arrangements Rule Change ERC0161 <u>www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements</u>

⁴<u>www.aer.gov.au/networks-pipelines/determinations-access-arrangements/pricing-proposals-tariffs/sa-power-networks-tariff-structure-statement-2015</u> Further information is also available on our *Talking Power* website: <u>http://talkingpower.com.au/your-views/tariff-structure-statement-consultation/</u>

⁵ In this case, due to the timing of the introduction of the changes, our first TSS covers the final three years of our current regulatory period and this APP is required to be prepared in accordance with version 65 of the Rules (preceding the changes). However, we are seeking to provide a consistent approach wherever possible.

Transmission Charges

The transmission charges for 2017/18 are forecast to decline from \$246M (2016/17) to \$239M (2017/18). This is a reduction of 3% due to high proceeds from inter-regional settlements on the interconnection. Combining the reduction in transmission charges with the estimated over-recovery balance at June 2017 means our 2017/18 transmission prices will recover \$230M and thus Transmission Use of System (**TUOS**) prices will fall on average by 4%.

The 2017/18 transmission prices will now be 12.7% lower on average than forecast in our TSS.

JSO (PV FiT) Payments/Charges

The revenue collected for the State Government's solar PV FiT as a JSO will be less in 2017/18 due to the expiry the '16 cent' scheme⁶ in September 2016. Payments to customers are forecast to reduce from \$90.3M (2016/17) to \$83.6M (2017/18). Combining the reduction in forecast PV FiT payments with half of the estimated over-recovery balance at June 2017 means that our 2017/18 JSO prices will recover \$73.5M, with our PV FiT prices falling on average by 17%. Prices should stay at this level in 2018/19 as well as the over-recovery balance is being returned to customers over a two year period.

The 2017/18 JSO (PV FiT) prices will be 15.0% lower on average than forecast in our TSS.

Network Prices Summary (DUoS plus TUoS plus PV FiT)

Overall, the average Network Use of System (**NUoS**) price combining distribution, transmission and JSO recovery, increases in 2017/18 by 1.7%, just above the CPI of 1.5%. The average residential outcome is a 4.0% increase whilst business has an average 0.6% reduction.

⁶ More information is available by searching on 'solar feed in' at <u>www.sa.gov.au</u>

Summary – Residential and small business prices

Table 1 below provides a comparison of the annual cost for a typical 2-3-person household (consuming 5,000 kWh pa). The retail prices for 2017/18 have not been published therefore 2016/17 energy/retail prices have been used. The typical annual retail bill will increase by \$27 (1.5%) due to network and metering charges. Note that the typical retail bill used in this analysis includes a 12% retail discount of about \$184.

Component of price (a) Average Residential Customer	2016/17	2017/18	Decrease / Increase	Impact on typical	
Using 5,000 kWh pa	\$ per annum	\$ per annum	\$ per annum	retail bill	
1. SA Power Networks DUoS charge	\$ 560	\$ 598	+\$ 38	+2.1%	
2. Transmission charge(b)	\$ 154	\$ 159	+\$ 5	+0.3%	
3. Jurisdictional Scheme Amount (PV)	\$ 85	\$ 67	-\$ 18	-1.0%	
Total Networks charges	\$ 800	\$ 825	+\$ 25	+1.4%	
4. Metering (Alternative control)	\$ 29	\$ 31	+\$ 2	+0.1%	
Total Regulated charges	\$ 829	\$ 856	+\$ 27	+1.5%	
5. Retail (c)	\$ 1,013				
Typical Retail Bill includes GST	\$ 1,842				
Typical Retailer Discount (d)	\$ 184				
Undiscounted Retail Bill includes GST	\$ 2,026				

Table 1:Typical residential customer bill for 2017/18

Notes:

(a) All amounts are nominal and contain GST.

(b) Using ElectraNet 15 March 2017 final advice of 2017/18 prices.

(c) Using AGL Standard Retail Contract prices for July 2016 less a 12% discount on usage charges.

(d) A 12% discount on usage charges from AGL Standard Retail Contract prices for July 2016. The AEMC has used 12% as a typical level of SA discount in the 2016 Residential Electricity Price Trends (December 2016)

The AER has typically used a 10 MWh pa small business single-rate customer to illustrate typical small business customer outcomes. The outcomes are shown below in Table 2, and result in a \$30 (0.8%) increase to the retail bill.

Table 2: Typical business single rate cus	stomer bill for 2017/18
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Component of price (a) Average Business Customer	2016/17	2017/18	Decrease / Increase	Impact on typical retail bill
Using 10,000 kWh pa	\$ per annum	\$ per annum	\$ per annum	
1. SA Power Networks DUoS charge	\$ 1,176	\$ 1,211	+\$ 35	+0.9%
2. Transmission charge (b)	\$ 314	\$ 332	+\$ 19	+0.5%
3. Jurisdictional Scheme Amount (PV)	\$ 107	\$ 82	-\$ 26	-0.7%
Total Networks charges	\$ 1,597	\$ 1,625	+\$ 28	+0.8%
4. Metering (Alternative control)	\$ 29	\$ 31	+\$ 2	+0.0%
Total Regulated charges	\$ 1,626	\$ 1,656	+\$ 30	+0.8%
5. Retail (c)	\$ 2,096			
Typical Retail Bill includes GST	\$ 3,722			
6. Typical Retailer Discount (d)	\$ 466			
Undiscounted Retail Bill includes GST	\$ 4,189			

Notes:

(a) All amounts are nominal and contain GST.

(b) Using ElectraNet 15 March 2017 final advice of 2017/18 prices.

(c) Using AGL Standard Retail Contract prices for July 2016 less a 12% discount on usage charges.

(d) A 12% discount on usage charges from AGL Standard Retail Contract prices for July 2016. The AEMC has used 12% as a typical level of SA discount in the 2016 Residential Electricity Price Trends (December 2016)

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1 Introduction

The NER rule 6.18.2(a)(2) requires SA Power Networks to submit an APP (**APP** or **Pricing Proposal**) to the Australian Energy Regulator (**AER**) at least three months before the commencement of each regulatory year of the regulatory control period.

This Pricing Proposal is for the 2017/18 regulatory year and has been prepared in accordance with the requirements of the NER⁷, the AER's 2015-20 revenue determination⁸ for SA Power Networks and our AER-approved 2017-20 Tariff Structure Statement (**TSS**).

The Pricing Proposal sets out proposed prices for all of SA Power Networks' standard control services tariffs and alternative control services (ie metering) for the 2017/18 regulatory year.

1.1 Our business

SA Power Networks is a Distribution Network Service Provider (**DNSP**) which operates within the National Electricity Market (**NEM**).

Our distribution network serves the State of South Australia, with a service territory of about 178,200 km², with a coastline of over 5,000 km. The network's route length extends to more than 87,000 km, with approximately 19% underground. The network includes 403 zone substations, 72,600 distribution transformers, approximately 723,000 poles and 1.1 million meters. The extent of SA Power Networks' operations in South Australia is shown in Figure 2.



Figure 2: SA Power Networks' service area

With the exception of much of the coastal area and the Adelaide Hills, South Australia is very sparsely settled. Approximately 70% of customers reside in Adelaide, including the great majority of business and commercial customers. However, the extensive area serviced by the distribution network results in 70% of the network infrastructure delivering energy to the remaining 30% of customers. Compared with other states, South Australia has relatively few regional centres, and they are generally small and sparsely located. As a result, the average customer density across the State is very low.

Our primary role is operating, building, extending, maintaining and upgrading South Australia's distribution network. In this capacity, SA Power Networks plays an important role in supporting the achievement of South Australia's economic, community and social objectives.

7 Version 89

⁸ AER, Final Decision – SA Power Networks determination 2015-16 to 2019-20, October 2015.

We are committed to delivering on our regulated obligations, including high levels of service, reliability, safety and efficiency for the South Australian community. The key services we provide include:

- Delivering electricity from ElectraNet's transmission network, through the distribution poles and wires, to homes and businesses;
- Maintaining the reliability and safety of the distribution network of substations, poles, wires and transformers;
- Extending and upgrading the distribution network to meet changing needs; and
- Providing an emergency response in the event of power outages.

We also install, maintain and reading electricity meters⁹ and maintain street lights. These two services are provided under separate pricing arrangements to our standard control services.

1.2 Network tariff objectives

Our network tariffs have been developed in accordance with Rules 6.18.2(b)(2) to (8). The methodologies described in our AER-approved 2017-20 TSS are designed to allow for recovery of efficient regulated costs of providing distribution services to our customers.

1.3 Summary of changes

This section sets out the differences between the indicative prices that were published in our 2017-20 TSS and the prices published in this APP. For more information, refer to Section 3.4.

Standard control services prices

The standard control services pricing for 2017/18 have been set in-line with our TSS methodology, and vary minimally from the 2017/18 indicative prices. Distribution prices are 0.9% higher, transmission prices are 12.7% lower and JSO (PV FiT) prices are 15.0% lower than indicated in the TSS. Residential distribution prices increased by 2% compared to the average distribution increase whilst business distribution changes were 2% lower than the average distribution increase. Note that while individual tariff elements changed at rates different to the average, the pricing proposed in this APP is in-line with the indicative prices published in our TSS. By using the TSS indicative prices as our basis for the 2017/18 prices, we have ensured compliance with the pricing principles which were assessed by the AER when approving our TSS in February 2017.

For transparency we have updated the indicative prices for future years (2018/19 and 2019/20). Overall the future prices have generally required a slight reduction in price outlook from that indicated in the TSS, eg in the order of 1.4% for future distribution prices, 1.0% for transmission and 3.3% a JSO reduction due to lower payments on the 44 cent scheme. Movements in total network prices (NUoS) for each tariff is set out in section 3.4, enabling a direct comparison with 2016/17 actual prices, 2017/18 proposed prices and the 2017/18 TSS 2017/18 prices.

⁹ Note that from 1 December 2017 the responsibility for new meters and meter replacement will transfer to the customers retailer, as part of a change to the NER.

We have made two amendments to the standard control services tariff notes (refer Appendix A), to clarify the type of equipment that is approved for use on the controlled load (OPCL) tariff, as summarised below.

- Electric-Vehicle chargers are permitted to be connected to the OPCL circuit providing the charging equipment is not operating at more than 32 amps.
- Battery chargers are permitted to be temporarily connected to the OPCL circuit for the purpose of off-peak charging providing they are disconnected from the general circuit during peak times. The battery can only be connected to either the general circuit or the OPCL circuit at any one time. The battery charger cannot operate at more than 32 amps.
- Where multiple appliances are connected to a single phase of the OPCL circuit, eg hot water, EV batteries, battery storage and under-floor heating, only one appliance can operate at a time on that phase.

If a customer needs to use appliances rated more than 32 amps, or needs to use appliances simultaneously on a single phase, then the general circuit should be used. The residential actual demand tariff provides peak demand incentives and a low network usage price (lower than OPCL), that is suitable for such applications.

Alternative control services prices

The alternative control services (metering) pricing for 2017/18 have been updated in-line with the AER's price cap arrangements. The pricing changes set out below are a direct outcome of that price cap formula.

1.4 Structure of this document

This Pricing Proposal has been structured to demonstrate compliance with the specific requirements of the Rules and the AER's revenue determination for 2015-20. The substantive sections of the Pricing Proposal are set out in Table 3.

Section Pu		Purpose	Rule clause
1	Introduction	Introduces the Pricing Proposal and provides background information	-
2	Tariff classes and tariffs	Explains how we recover revenue from our customers and outlines our tariff classes, tariff structures and their charging parameters	6.18.1(b)(2- 3,8); 6.18.3
3	Standard control services charges	Demonstrates compliance with the Rules and the AER's Final Decision with respect to the control mechanism, the revenue X factors, side constraints and the NER pricing principles. Sets out our cost recovery for DUoS, TUoS and JSO	6.18.2(b)(4- 8);6.18.5; 6.18.6; 6.18.7 and 6.18.7A

 Table 3:
 Structure of SA Power Networks' Pricing Proposal

Secti	on	Purpose	Rule clause
4	Alternative control services	Sets out our tariffs for alternative control services (metering) as per the AER's requirements described in its revenue determination	6.18.2(a)(2)
Арре	endices		
A	Standard control services tariff schedules	Sets out our standard control services tariff schedules	6.18.2(d)(e)
В	Alternative control services tariff schedules	Sets out our alternative control services tariff schedules for metering	6.18.2(d)(e)
С	Shortened forms	Provides a description of the shortened forms used within this document	-
D	List of attachments	Lists attachments to this Pricing Proposal	-

1.5 Confidential information

Clause 6.19.2 of the Rules classifies as confidential all network pricing information about a Distribution Network User used by a DNSP for the purposes of network pricing. SA Power Networks has nominated 'Attachment A – Revenue cap model' which constitutes part of this Pricing Proposal, as confidential.

SA Power Networks requests that the AER does not disclose the information contained in Attachment A to any person outside of the AER.

2 Tariff classes and tariffs

This section describes SA Power Networks' standard control service tariff classes and related tariff structures. It sets out the way in which they have been constructed to comply with the requirements of the Rules and the AER's revenue determination.

2.1 How we recover revenue

SA Power Networks' NUoS tariffs are an aggregation of DUoS tariffs, metering services tariffs, transmission cost recovery tariffs and solar Photo Voltaic Feed-in Tariffs (**PV FiT**).

Retailers may pass through the components of SA Power Networks' network tariffs to customers directly, or modify their structure by bundling with the retail component, which includes the cost of purchasing wholesale energy from the NEM and retail costs.

This section outlines the distribution tariff structures, which are designed to recover the cost of providing standard control services to customers.

Section 4 of this Pricing Proposal outlines the arrangements for SA Power Networks' alternative control services (ie metering) tariffs which, in accordance with clause 6.18.3(c) of the Rules, have been constituted as a separate tariff class with separate charging parameters.

The process by which SA Power Networks recovers the SA Government solar PV-FiT payments through the Jurisdictional Scheme Obligation (**JSO**) is described in Section 3.3.

The Rules require tariff structures to have two main functions:

- to send a price signal for efficient consumption via the retailer; and
- to recover revenue from customers in a way that as much as possible reflects the total efficient cost of supplying those customers without distorting the efficient price signal.

Our allocation of revenue requirements to tariff classes and then tariffs is illustrated below in Figure 3. It is a three-stage process, involving determining the allowed revenue, splitting that revenue across the five tariff classes (and their tariffs) and finally setting prices for each tariff parameter to recover from customers the revenue allocated to that tariff class (and their tariffs).

Allocation of revenue to tariff classes/tariffs and to tariff parameters Figure 3:



* This charge may not appear in all demand-based tariff structures.

The grouping of customers into standard control services tariff classes and the tariffs therein has historically distinguished between customers on the basis of the following factors:

- The nature and extent of usage of different types of customer;
- For business customers, the nature of connection to the network, including the voltage of connection;
- Whether the customer also receives a controlled load service; and
- The type of meter installed at the premises (for large LV business customers).

Standard control services tariff classes 2.2

SA Power Networks' network tariff classes and tariffs for 2017-20 are summarised in Table 4 below. The tariff classes have been constituted with regard to the provisions of clause 6.18.3(d) of the Rules concerning economic efficiency and transaction costs.

The suite of tariffs provides:

- A range of tariffs which are dependent upon a customer's size, consumption characteristics and voltage of connection (these factors are generally related); and
- More Long Run Marginal Cost (**LRMC**) cost-reflectivity in the demand tariff options, facilitated by the metering arrangements.

Tariff class	Customer type	Tariffs
Residential	Low voltage residential customers, single phase and three phase	RSR, MRD
Small business	Low voltage businesses consuming less than 160MWh per annum, single phase and multi-phase	B2R, SBDT, SBD, LVUU, LVUU24, BSR, SLV
Large LV business	Low voltage businesses consuming more than 160MWh per annum	BD, LV, LBSR, LB2R, LVSG, BDT
High Voltage business	High voltage businesses generally supplied at 11kV	HV, HV400, HBD, B2R124H
Major business	Businesses requiring at least 5MVA of capacity connected to the sub- transmission network or a zone substation	STN, STNXXX, ZSN, ZSNXXX

Table 4: SA Power Networks' tariff classes and associated tari	ffs
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The structure of our tariffs, and the associated tariff charging parameters for each tariff within a tariff class, follow in Section 2.3.

2.3 Tariff structure

Within each of our five standard control services tariff classes we offer a number of different network tariffs. The basic structure of our tariffs is very similar to that of other electricity distributors in the NEM with three key tariff components:

- A fixed supply charge (\$ per day, month or quarter);
- A peak demand charge to send a forward LRMC price signal (\$ per kW or kVA per day); and
- A volume charge (\$/kWh) to recover residual costs not recovered by the other two elements.

Many small customers do not use a peak demand charge today, therefore the volume charge recovers a greater portion of total costs. Figure 4 outlines the options for tariff assignment.



Figure 4:SA Power Networks' tariff assignment options

The following section sets out our tariff structures and charging parameters for the 2017/18 regulatory year.

2.3.1 Residential tariff class

The residential tariff class structure and charging parameters are set out in Table 5 and include:

- An inclining block energy tariff (RSR). This tariff consists of a fixed daily charge and an inclining two block energy component. A separate energy rate applies to the energy consumption within each block level;
- A fully cost-reflective opt-in actual kW demand tariff (MRD); and
- There is a controlled load (hot water) 'partner' tariff available with these residential tariffs. The controlled load tariff is used to control permanently installed hot water services and other appliances generally consuming less than 25 Amps between 23:00 – 07:00 hours CST, with an option for use between 10:00 – 15:00 hours CST when high solar PV output typically occurs.

Network tariff	Status	Components	Measurement	Charging parameter
Residential single- rate (RSR)	Default	Fixed	\$/customer/day	Fixed supply charge per annum
		Usage	\$/kWh	 Anytime based on usage, inclining block¹⁰: Block 1: 0-4MWh pa Block 2: >4MWh pa
		Controlled load	\$/kWh	Based on usage
Residential monthly actual kW demand	Opt-in	Fixed	\$/customer/day	Fixed supply charge per annum
(MRD)		Usage	\$/kWh	Anytime based on usage
		Demand	\$/kW/day	 Maximum demand charge based on monthly maximum kW demand measured: Over a 30 minute time period Between 16:00-21:00hrs local time All days except Christmas Day Higher charge from November to March (Peak) Lower charge April to October (Shoulder)
		Controlled load	\$/kWh	Based on usage

Table 5: Residential tariff structures and charging parameters

 $^{^{\}rm 10}$ Block 1 and 2 are proposed to be replaced by a single block in 2019/20.

2.3.2 Small low voltage business tariff class (<160MWh pa)

The small low voltage business customer tariff class structures and charging parameters are set out in Table 6 and include:

- A two rate energy tariff (peak and off-peak) with a fixed daily charge (B2R). Off-peak DUoS and TUoS pricing is set at half of peak pricing. This tariff applies to existing customers and new single phase customers;
- An actual kVA demand tariff with a fixed daily charge (SBD). The demand charges reflect LRMC costs, with shoulder demand priced at half of peak demand. This tariff is suitable for larger (eg three phase) small customers, particularly those with either a seasonal load that varies across the year or a flexible load;
- A transitional version of the kVA demand tariff which is default (mandatory) for new multiphase customers or existing multiphase customers who alter their supply and require a new meter, including single phase customers converting to a multiphase supply (SBDT). The transitional version of the kVA demand tariff is optional for all customers. This transitional price is a 50%/50% combination of actual demand and two rate energy tariffs through to June 2020;
- An unmetered 12 hour energy tariff (LVUU). This tariff is typically used for overnight public lighting;
- An unmetered 24 hour energy tariff (LVUU24). This tariff is typically used for public phones, traffic lights and telecommunications installations;
- A single rate energy tariff (anytime) with a fixed daily charge (BSR). This tariff has been closed to new small business customers from July 2010 as it is more suited to large business customers;
- An annual kVA agreed demand tariff with a fixed daily charge (SLV). This tariff has been closed to new customers from July 2016; and
- There was a controlled load (hot water) partner tariff available with the business two rate and business single rate tariffs. This partner tariff is now closed to new applicants. The controlled load tariff is used to control permanently installed hot water services and other appliances consuming less than 25 Amps between 23:00 – 07:00 hours CST, with an option for use between 10:00 – 15:00 hours CST when high solar PV output typically occurs.

Network tariff	Status	Components	Measurement	Charging parameter
Business two-rate (B2R)	Default single	Fixed	\$/customer/day	Fixed supply charge per annum
	closed to multi- phase	Usage	\$/kWh	 Based on usage¹¹: Higher rate for peak 07:00 to 21:00 hrs CST workdays; and Lower rate for off-peak 21:00 to 07:00hrs CST workdays and all hours non-work days.
		Controlled load	\$/kWh	Based on usage

Table C.	Small business tariff structures and sharping parameters $(z_1(0))$
Table 0.	Sinali business tarin structures and charging parameters (<100000001 pa)

¹¹ Where metering does not record public holidays or weekends, peak rates will apply at times on non-work days.

Network tariff	Status	Components	Measurement	Charging parameter
Business monthly actual kVA	Default multi-	Fixed	\$/customer/day	Fixed supply charge per annum
demand transitional (SBDT)	phase also Opt-in	Usage	\$/kWh	 Based on usage: Higher rate for peak 07:00 to 21:00 hrs CST workdays; and Lower rate for off-peak 21:00 to 07:00hrs CST workdays and all hours non-work days.
		Demand	\$/kVA/day	 Maximum demand charge based on actual monthly maximum kVA demand measured: Over a 30 minute time period; and 12:00 to 16:00hrs local time, workdays, 12 months (Shoulder); 16:00 to 21:00hrs local time, workdays, Nov-March (Peak).
Business monthly actual kVA	Opt-in	Fixed	\$/customer/day	Fixed supply charge per annum
demand (SBD)		Usage	\$/kWh	Anytime based on usage
		Demand	\$/kVA/day	 Maximum demand charge based on actual monthly maximum kVA demand measured: Over a 30 minute time period; and 12:00 to 16:00hrs local time, workdays, 12 months (Shoulder); 16:00 to 21:00hrs local time, workdays, Nov-March (Peak).
Unmetered 12hr (LVUU) Streetlights	Special purpose	Usage	\$/kWh	Anytime, based on usage
Unmetered 24hr (LVUU24)	Special purpose	Usage	\$/kWh	Anytime, based on usage
Business single-	Closed	Fixed	\$/customer/day	Fixed supply charge per annum
		Usage	\$/kWh	Anytime based on usage
		Controlled load	\$/kWh	Based on usage
Annual agreed kVA demand	Closed	Fixed	\$/customer/day	Fixed supply charge per annum
(SLV)		Usage	\$/kWh	Anytime based on usage
		Demand	\$/kVA/day	 Peak period Nov-March, 12:00 to 21:00 local time, work days agreed peak demand, declining block: Block 1: 0-1000 kVA Block 2: >1000kVA Additional demand applies outside of peak

2.3.3 Large low voltage business tariff class (>160MWh pa)

Large low voltage business customer tariff class structures and charging parameters are set out in Table 7 and include:

- An actual kVA demand tariff with a fixed daily charge (BD). The demand charges reflect LRMC costs, with shoulder demand priced at half of peak demand prices. This tariff is the default tariff for large LV business customers and is suitable for larger customers, particularly those with either a seasonal load that varies across the year or a flexible load;
- A transitional version of the actual kVA demand tariff was created for customers on fully costreflective tariffs who were facing cost increases (BDT). As of July 2016 the transitional version of this tariff was closed to existing large LV business customers. In 2017/18 the transitional tariff comprises 67%/33% of actual demand and two-rate energy. In 2018/19 the ratio will be 84%/16% and in 2019/20 the tariff will be 100% actual demand;
- An agreed kVA demand tariff with a fixed daily charge (LV). This tariff is available on an optin basis for large LV business customers. The demand charge is stepped according to the customer's size, to reflect the LRMC of providing network capacity at the particular voltage level. There are variants of this tariff available for:
 - Back-up supply (LVB); and
 - Sportsgrounds with significant floodlighting (LVSG). This variant uses a peak demand period of 12:00 to 19:00 local time, December to February on work days. This is because floodlights are not typically used during extreme heat;
- A single rate transitional tariff with a fixed daily charge (LBSR). This tariff is for large business customers with a Type 6 meter only; and
- Two rate transitional tariff with a fixed daily charge (LB2R). This tariff is for large business customers with a Type 6 meter only.

Network tariff	Status	Components	Measurement	Charging parameter
Business	Default	Fixed	\$/customer/day	Fixed supply charge per annum
kVA demand (BD)		Usage	\$/kWh	Anytime based on usage
(BD)		Demand	\$/kVA/day	 Maximum demand charge based on actual monthly maximum kVA demand measured: Over a 30 minute time period; 12:00 to 16:00hrs local time, workdays, 12 months (Shoulder); and 16:00 to 21:00hrs local time, workdays, Nov-March (Peak).
Business annual agreed kVA	Opt-in Fixed		\$/customer/day	Fixed supply charge per annum
demand (LV)		Usage	\$/kWh	Anytime based on usage
		Demand	\$/kVA/day	Peak period Nov-March, 12:00 to 21:00 local time, work days agreed demand, declining block:Block 1: 0-1000 kVA

|--|

Network tariff	Status	Components	Measurement	Charging parameter
				• Block 2: >1000kVA
		Additional demand	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
Business single	Type 6	Fixed	\$/customer/day	Fixed supply charge per annum
(LBSR)	only	Usage	\$/kWh	Anytime based on usage
		Controlled load	\$/kWh	Based on usage
Business two rate transition	Type 6 meters	Fixed	\$/customer/day	Fixed supply charge per annum
(LD2N)	Ulity	Usage	\$/kWh	 Based on usage: Higher rate for peak 07:00-21:00hrs CST workdays; and Lower rate for off-peak 21:00-07:00hrs CST workdays and all hours non-work days.
		Controlled load	\$/kWh	Off peak, based on usage
Sportsground	Special	Fixed	\$/customer/day	Fixed supply charge per annum
kVA demand (LVSG)	parpose	Usage	\$/kWh	Anytime based on usage
		Demand	\$/kVA/day	 Peak period Dec-Feb, 12:00 to 19:00hrs local time, workdays, agreed demand, declining block Block 1: 0-1000kVA Block 2: >1000kVA
		Additional demand	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
Business annual	Special	Fixed	\$/customer/day	Fixed supply charge per annum
demand back-	purpose	Usage	\$/kWh	Anytime based on usage
		Demand	\$/kVA/day	Anytime based on agreed demand
Business	Closed	Fixed	\$/customer/day	Fixed supply charge per annum
kVA demand transition (BDT)		Usage	\$/kWh	 Based on usage: Higher rate for peak 07:00-21:00hrs CST workdays; and Lower rate for off-peak 21:00-07:00hrs CST workdays and all hours non-work days
		Demand	\$/kVA/day	 Maximum demand charge based on actual monthly maximum kVA demand measured: Over a 30 minute time period; 12:00-16:00hrs local time, workdays, 12 months (Shoulder); and 16:00-21:00hrs local time, workdays, Nov-March (Peak).

2.3.4 High voltage business tariff class

High voltage customer tariff class structures and charging parameters are set out in Table 8 and include:

- A high voltage annual agreed kVA demand tariff which is suitable for larger high voltage customers with demands above 400 kVA (HV). This is the default tariff for the HV tariff class. There are variants of this tariff as follows:
 - 400kVA variant which is more suited to demands below 400kVA (HV400). This variant is the equivalent of the large LV business agreed demand tariff; and
 - A back-up tariff for customers who have a second supply source for a higher security of supply (HVB);
- An actual kVA demand tariff suitable for large customers, for seasonal large customers whose load varies across the year and also those large customers with very flexible load (HBD); and
- A high voltage business two rate tariff which is closed to new customers (B2R124H).

 Table 8:
 High voltage business tariff structures and charging parameters

Network tariff	Status	Components	Measurement	Charging parameter
High voltage	Default	Fixed	\$/customer/day	Fixed supply charge per annum
agreed kVA		Usage	\$/kWh	Anytime based on usage
		Demand	\$/kVA/day	Peak period Nov-March, 12:00 to 21:00 local time, work days agreed demand
		Additional	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
High voltage	Opt-in	Fixed	\$/customer/day	Fixed supply charge per annum
agreed kVA demand		Usage	\$/kWh	Anytime based on usage
<400kVA (HV400)		Demand	\$/kVA/day	Peak period Nov-March, 12:00 to 21:00 local time, work days agreed demand, declining block: Block 1: 0-1000 kVA Block 2: >1000kVA
		Additional	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
Business	Opt-in	Fixed	\$/customer/day	Fixed supply charge per annum
kVA demand		Usage	\$/kWh	Anytime based on usage
(ספוו)		Demand	\$/kVA/day	 Maximum demand charge based on actual monthly maximum kVA demand measured: Over a 30 minute time period; 12:00 to 16:00hrs local time, workdays, 12 months (Shoulder); and 16:00 to 21:00hrs local time, workdays, Nov-March (Peak).

Network tariff	Status	Components	Measurement	Charging parameter
High voltage business annual agreed kVA demand back- up (HVB)	Special purpose	Usage Demand	\$/kWh \$/kVA/day	Anytime based on usage Based on agreed (anytime) demand
High voltage business two- rate (B2R124H)	Closed	Fixed Usage	\$/customer/day \$/kWh	 Fixed supply charge per annum Based on usage: Higher rate for peak 07:00-21:00hrs CST workdays; and Lower rate for off-peak 21:00- 07:00hrs CST workdays and anytime non-workdays.

2.3.5 Major business tariff class

The major business customers are the largest 20 customers connected to SA Power Networks' network. They comprise a range of industrial, manufacturing and commercial enterprises. Most of these customers have a maximum demand exceeding 10 MVA or usage exceeding 40 GWh pa and their transmission tariff component is priced locationally.

Network tariff	Status	Components	Measurement	Charging parameter
Sub-transmission	Default	Usage	\$/kWh	Anytime based on usage
kVA demand non-locational (STN)		Demand	\$/kVA/day	Peak period Nov-March, 12:00 to 21:00 local time, work days agreed demand
		Additional	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
Sub-transmission annual agreed	Locational	Fixed	\$/customer/day	Supply charge reflecting a fixed amount per annum
locational (STNXXX)*		Usage	\$/kWh	Anytime based on usage
(0.10000)		Demand	\$/kVA/day	Peak period Nov-March, 12:00 to 21:00 local time, work days agreed demand
		Additional	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
Sub-transmission	Special	Usage	\$/kWh	Anytime based on usage
kVA back-up (STNB)	purpose	Demand	\$/kVA/day	Based on agreed (anytime) demand
Zone substation	Default	Usage	\$/kWh	Anytime based on usage
kVA demand non-locational (ZSN)		Demand	\$/kVA/day	Peak period Nov-March, 12:00 to 21:00 local time, work days agreed demand
		Additional	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
Zone substation annual agreed	Locational	Fixed	\$/customer/day	Supply charge reflecting a fixed amount per annum
locational (ZSNXXX)*		Usage	\$/kWh	Anytime based on usage
		Demand	\$/kVA/day	Peak period Nov-March, 12:00 to 21:00 local time, work days agreed demand
		Additional	\$/kVA/day	Based on agreed demand that exceeds the peak agreed demand
Zone substation	Special purpose	Usage	\$/kWh	Anytime based on usage
kVA back-up (ZSNB)	purpose	Demand	\$/kVA/day	Based on agreed (anytime) demand

 Table 9:
 Major Business tariff structures and charging parameters

* Zone substation and sub-transmission customers with locational transmission charges have an individual tariff identifier.

2.4 Pricing variations from 2016/17

The following sections provide information on the three NUoS components of SA Power Networks' tariffs (ie DUoS, TUoS and JSO) and the movement in revenue recovery proposed for 2017/18 compared to 2016/17 by each of the five tariff classes.

Tables 10 to 13 compare NUoS¹² changes with changes on the overall retail bill for customers consuming between 2 and 16MWh pa¹³. These tables also show the SA Power Networks' related DUoS price changes but excludes the alternative control services Type 6 metering costs typically associated with this customer.

2.4.1 Low voltage residential tariff class

Low voltage residential tariff

The low voltage residential tariff has a single-rate with an inclining block structure and two consumption steps. The 2017/18 annual bill and price change for this tariff is shown in Table 10, for a range of representative customer consumption levels.

Annual Usage MWh pa	NUoS 2016/17 \$ pa	NUoS 2017/18 \$ pa	Change in NUoS %	Change in Retail %	DUoS 2016/17 \$ pa	DUoS 2017/18 \$ pa	Change in DUoS %	Change in Retail %
2	345	373	8.2	3.5	252	283	12.5	3.9
4	580	608	4.8	2.0	407	441	8.4	2.5
5	727	750	3.2	1.4	509	544	6.8	2.1
8	1,168	1,176	0.7	0.3	818	854	4.5	1.4
16	2,344	2,313	-1.3	-0.6	1,640	1,681	2.5	0.8

 Table 10:
 Low voltage residential price change in 2017/18

Note: NUoS = DUoS + TUoS + JSO

Residential with controlled load tariff

The controlled load tariff has a single block. The 2017/18 annual bill and price change is shown in Table 11 for residential customers with hot water, for a range of representative consumption levels.

¹² NUoS comprises distribution, transmission and JSO (PV FiT) charges.

¹³ Retail bill changes are based on AGL transactional contract charge determined from the AGL standing contract offer including a 12% discount on usage charges.

Annual Usage MWh pa	NUoS 2016/17 \$ pa	NUoS 2017/18 \$ pa	Change in NUoS %	Change in Retail %	DUoS 2016/17 \$ pa	DUoS 2017/18 \$ pa	Change in DUoS %	Change in Retail %
2 + 1	399	435	9.1	3.8	284	322	13.3	4.0
4 + 2	688	732	6.4	2.7	471	519	10.0	2.9
5 + 3	889	936	5.3	2.3	606	661	9.0	2.6
8 + 4	1,384	1,425	3.0	1.3	947	1,010	6.7	2.0
16 + 5	2,613	2,624	0.4	0.2	1,802	1,876	4.1	1.3

 Table 11:
 Low voltage residential + hot water price change in 2017/18

Note: NUoS = DUoS + TUoS + JSO

2.4.2 Low voltage small business tariff class

Low voltage small business single rate tariff (obsolete)

The low voltage small business single rate tariff has an anytime consumption charge with an inclining block structure and two consumption steps. Table 12 shows the 2017/18 annual bill and price change for this tariff, for a range of annual consumption levels.

Annual Usage MWh pa	NUoS 2016/17 \$ pa	NUoS 2017/18 \$ pa	Change in NUoS %	Change in Retail %	DUoS 2016/17 \$ pa	DUoS 2017/18 \$ pa	Change in DUoS %	Change in Retail %
4	647	674	4.2%	1.8%	486	516	6.2%	2.0%
10	1,452	1,478	1.8%	0.8%	1,069	1,101	3.0%	0.9%
20	2,794	2,817	0.8%	0.3%	2,041	2,076	1.7%	0.5%
40	5,478	5,495	0.3%	0.1%	3,985	4,026	1.0%	0.3%
80	10,846	10,851	0.0%	0.0%	7,873	7,926	0.7%	0.2%

 Table 12:
 Low voltage business single rate NUoS price change in 2017/18

Note: NUoS = DUoS + TUoS + JSO

Low voltage small business 2-rate tariff

The effect of the price change in 2017/18 for low voltage business 2-rate will depend upon the customer consumption profile, in particular the ratio of peak to off-peak period usage. Table 13 shows how the 2017/18 annual bill has changed for this tariff, for different customer consumption levels and average peak to off peak consumption proportions of 50%.

Table 13.	LOW VOILage R			mange in 2017	710			
Annual Usage MWh pa	NUoS 2016/17 \$ pa	NUoS 2017/18 \$ pa	Change in NUoS %	Change in Retail %	DUoS 2016/17 \$ pa	DUoS 2017/18 \$ pa	Change in DUoS %	Change in Retail %
8	1,028	1,052	2.3%	1.0%	756	786	4.0%	1.2%
20	2,405	2,422	0.7%	0.3%	1,743	1,775	1.8%	0.6%
50	5,847	5,846	0.0%	0.0%	4,212	4,249	0.9%	0.3%
100	11,585	11,554	-0.3%	-0.1%	8,327	8,371	0.5%	0.2%
160	18,470	18,403	-0.4%	-0.2%	13,265	13,318	0.4%	0.1%

 Table 13:
 Low voltage business 2-rate NUoS price change in 2017/18

Note: NUoS = DUoS + TUoS + JSO

2.4.3 Low voltage large business tariff class

Low voltage kVA agreed demand/actual demand/transition actual demand tariff

The average NUoS price increase for low voltage agreed kVA customers in 2017/18 is 1.4%.

The average NUoS price decrease for low voltage actual kVA customers in 2017/18 is -8.8%.

The average NUoS price increase for low voltage transition kVA customers in 2017/18 is -6.7%¹⁴.

2.4.4 High voltage business tariff class

High voltage kVA agreed demand < 400 kVA tariff

The prices for high voltage < 400 kVA and the low voltage kVA agreed demand tariffs are unchanged.

High voltage kVA agreed demand tariff

The average NUoS price decrease of high voltage kVA agreed demand customers in 2017/18 is -0.5%.

¹⁴ Note that the transition tariff increases from a 50%/50% two-rate and actual demand combination in 2016/17 to a 67%/33% ratio in 2017/18. The transition tariff will change again in 2019/20 to 83%/17% and will be 100% demand based in 2019/20.

2.4.5 Major business tariff class

Zone substation and Sub-transmission kVA agreed demand locational tariffs

There is little variability between the individual price changes for these customers and the averages for the tariff. There is considerable variability in locational transmission prices for individual major businesses.

The DUoS and JSO (PV-FiT) price changes are common to all major businesses. On average the combined DUoS/JSO charges for 2017/18 decrease by 9.3%.

3 Standard control services charges

This section sets out how SA Power Networks' tariffs for the 2017/18 regulatory year comply with the Rules and the AER's revenue determination for SA Power Networks.

The standard control services charges for 2017/18 have been calculated in accordance with the methodologies described within our 2017-20 TSS. For detailed information on our pricing methodologies for 2017/18, refer to our 2017-20 TSS Part B.

3.1 Distribution charges

3.1.1 Control mechanism

The form of control mechanism (including the X factor) for SA Power Networks' standard control services for the 2015-20 regulatory control period is a revenue cap. The revenue cap for SA Power Networks for any given regulatory year is the total annual revenue (**TAR**) calculated using the formula in the AER's 2015-20 revenue determination Attachment 14 plus any adjustment required to move the DUoS under/over account to zero.

3.1.2 Compliance with the revenue cap

The AER's Revenue Cap model has been used and amended for the purposes of demonstrating compliance with the provisions of the 2015-20 revenue cap. This model is submitted as Attachment A (confidential) and forms part of this Pricing Proposal.

3.1.3 2017/18 prices for standard control services

Revenue cap formulae

SA Power Networks' revenues must be consistent with the total annual revenue formulae set out below¹⁵ plus any unders and overs adjustment needed to move the balance of its DUoS unders and overs account to zero¹⁶.

1. <i>TAR</i> _t	$z \ge \sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij}$	i=1,,n and j=1,,m and t=1,,5
2. <i>TAR</i> _t	$= AR_t \pm I_t \pm B_t \pm C_t$	t=1,2,,5
3. AR_t =	$= AR_{t-1}(1 + \Delta CPI_t)(1 - X_t)(1 + S_t)$	t=1,2,,5
Where:		
TAR _t	is total annual revenue in year t.	

p_t^{ij}	is the price of component i of tariff j in year t.
q_t^{ij}	is the forecast quantity of component i of tariff j in year t

¹⁵ AER, Final Decision – SA Power Networks determination 2015-16 to 2019-20, October 2015, Attachment 14 pp.11-12.

¹⁶ AER, Final Decision – SA Power Networks determination 2015-16 to 2019-20, October 2015, Attachment 14 pp.16.

 AR_t is the annual smoothed expected revenue for year t. For the first year of the 2015–20 regulatory control period, this amount will be equal to the smoothed revenue requirement for 2015/16 set out in the Post Tax Revenue Model (**PTRM**).

- I_t is the final carryover amount from the application of the Demand Management Incentive Scheme (**DMIS**) from the 2010–15 distribution determination. This amount will be deducted from/added to allowed revenue in the 2017/18 Pricing Proposal.
- C_t is the approved pass through amounts (positive or negative) with respect to regulatory year t, as determined by the AER.
- B_t any under or over recovery of actual revenue collected through DUoS charges as calculated using the method in appendix A.¹⁷
- ΔCPI_t is the annual percentage change in the Australian Bureau of Statistics (**ABS**) Consumer Price Index All Groups, Weighted Average of Eight Capital Cities from December in year t-2 to December in year t-1. For example, for the 2015/16 year, t-2 is December 2013 and t-1 is December 2014 and in the 2016/17 year, t-2 is December 2014 and t-1 is December 2015 and so on.
- X_t the smoothing factor determined in accordance with the PTRM as approved in the AER's final decision, and annually revised for the return on debt updated in accordance with the formula specified in the return on debt appendix I calculated for the relevant year.
- S_t is the Service Target Performance Incentive Scheme (**STPIS**) factor sum of the raw s-factors for all reliability of supply and customer service parameters (as applicable) to be applied in year t.¹⁸

Table 14 sets out our revenue cap calculation for the 2017/18 regulatory year.

Revenue cap calculation	
Annual revenue t-1 \$000	759,584
Percentage change in CPI (all groups, weighted average, eight capital cities)	1.476%
X factor	-0.935%
S factor	1.349%
Ar _t = Ar _{t-1} x (1+CPI) x (1-X x (1+S)	\$788,497

Table 14:
 Revenue cap calculation

¹⁷ AER, Final Decision – SA Power Networks determination 2015-16 to 2019-20, October 201, Attachment 14, appendix A. ¹⁸ In the formulas in the STPIS attachment, the AR_{t+1} is equivalent to AR_t in this formula. Calculation of the S factor adjustments are made accordingly.

3.1.4 Tariff class side constraints

SA Power Networks must demonstrate in its Pricing Proposal that proposed DUoS prices for the next year (t) will meet the side constraints formula for each tariff class¹⁹.

Side constraints

$$\frac{(\sum_{i=1}^{n} \sum_{j=1}^{m} d_{t}^{ij} q_{t}^{ij})}{(\sum_{i=1}^{n} \sum_{j=1}^{m} d_{t-1}^{ij} q_{t}^{ij})} \le (1 + \Delta CPI_{t}) \times (1 - X_{t}) \times (1 + 2\%) \times (1 + S_{t}) + I_{t}^{'} + B_{t}^{'} + C_{t}^{'}$$

where each tariff class has up to 'm' components, and where:

- d_t^j is the proposed price for component 'j' of the tariff class for year t.
- d_{t-1}^{j} is the price charged by SA Power Networks for component 'j' of the tariff class in year t-1.

 q_t^j is the forecast quantity of component 'j' of the tariff class in year t.

- ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from December in year t-2 to December in year t-1.
- X_t is the smoothing factor determined in accordance with the PTRM as approved in the AER's final decision, and annually revised for the return on debt updated in accordance with the formula specified in the return on debt appendix I calculated for the relevant year. If X>0, then X will be set equal to zero for the purposes of the side constraint formula.
- S_t is the STPIS factor sum of the raw s-factors for all reliability of supply and customer service parameters (as applicable) to be applied in year t.²⁰
- I_t is the final carryover amount from the application of the DMIS from the 2010–15 distribution determination. This amount will be deducted from/added to allowed revenue in the 2017/18 Pricing Proposal.
- B_t is any under or over recovery of actual revenue collected through DUoS charges as calculated using the method in appendix A.²¹
- C_t is the sum of adjustments relating to pass through events.
- $DUoS_t$ is an annual adjustment factor related to the balance of the DUoS unders and overs account with respect to regulatory year t.

With the exception of the CPI and X factors, the percentage for each of the other factors above can be calculated by dividing the incremental revenues (as used in the total annual revenue formula) for each factor by the expected revenues for regulatory year t-1 (based on the prices in year t-1 multiplied by the forecast quantities for year t).

¹⁹ AER, Final Decision – SA Power Networks determination 2015-16 to 2019-20, October 2015, Attachment 14 pp.13.

²⁰ In the formulas in the STPIS attachment, the AR_{t+1} is equivalent to AR_t in this formula. Calculation of the S factor adjustments are made accordingly.

²¹ AER, Final Decision – SA Power Networks determination 2015-16 to 2019-20, October 2015, Attachment 14, appendix A.

Tariff class movement side constraint

Table 15 sets out the maximum increase in distribution charges as determined by the side constraint equation.

Table 15: Side constraint equation	
Criterion	2017/18 Value %
Consumer Price Index	1.476
X Factor	-0.935
S Factor	1.349
/ Factor	0.0
<i>B</i> Factor	2.583
C Factor	0.0
Side C(1+CPI)x(1-X)x(1+2%)+/+B+C-1	8.470

Revenue requirement and pricing X factors for standard control services

Attachment 1 of the 2015-20 revenue determination contains SA Power Networks' standard control services 2015/16 smoothed revenue requirements of \$682 M and revenue X factors for subsequent years. Attachment 16 contains alternative control metering services prices for 2015/16 and X factors for subsequent years.

Weighted average revenue

SA Power Networks is required to demonstrate compliance with the side constraint formula and clause 6.18.2(b)(4) of the Rules. Tables 15 to 18 set out, for each tariff class related to standard control services, the expected weighted average revenue for the relevant regulatory year (2017/18) and also for the current regulatory year (2016/17).

Our allowed DUoS revenue rises from \$759.6M (2016/17) to \$788.5M (2017/18). This increase includes CPI of 1.5%, X factor (ie the Regulatory-approved year-on-year revenue adjustment for 2017/18) of 0.9% and the performance incentive scheme outcomes (for 2015/16 performance) of 3.6%. After allowing for the rebalance of distribution charges due to a small over-recovery in the last two years, we forecast to recover \$778.7M from customers. DUoS prices will increase on average by 5.8% (residential prices increase by 7.9% whilst business prices increase by 3.6%).

The TSS set out indicative prices for 2017/18 which required an increase to residential prices relative to business prices. A NER side constraint rule applies which limits the increase in prices to a tariff class such as residential to no more than 2% above the average distribution price increase. Whilst distribution prices will be 0.9% higher on average than indicated in the 2017/18 TSS forecast, business

customers will on average be 2.75% higher than indicated, while residential charges will on average be 0.7% lower than indicated. Further price rebalancing is forecast for 2018/19.

Table 16 below demonstrates that all tariff class increases in 2017/18 are below the 8.47% increase permitted by the side constraint rule.

Tariff class	2016/17 Revenue \$'000	2017/18 Revenue \$'000	Change in weighted average revenue %	Side constraint %
Major Business	9,508	8,702	-8.5%	8.47%
HV Business	32,947	35,013	6.3%	8.47%
Large LV Business	187,988	198,313	5.5%	8.47%
Small Business	129,941	131,311	1.1%	8.47%
Residential	375,667	405,367	7.9%	8.47%
Total	736,051	778,707	5.8%	-

Table 16:	DUoS revenue using forecast of	uantities at 2016/17 and 2017/18 prices

TUoS component increases have been calculated with final prices provided by ElectraNet, and broadly applied across all tariff classes and elements to non-major business customers. Major Business locational prices have been determined based on the final locational prices released by ElectraNet on 15 March 2017.

The TUoS charges for 2017/18 are forecast to decline from \$246M (2016/17) to \$239M (2017/18). This is a reduction of 3% due to high proceeds from inter-regional settlements on the interconnection. Combining the reduction in transmission charges with the estimated over-recovery balance at June 2017 means our 2017/18 TUoS prices will recover \$230M with prices falling on average by 4%.

The 2017/18 transmission prices will now be 12.7% lower on average than forecast in our TSS.

Tariff class	2016/17 Revenue \$'000	2017/18 Revenue \$'000	Change in weighted average revenue %
Major Business	16,152	14,564	-9.8%
HV Business	17,473	15,407	-11.8%
Large LV Business	68,087	60,164	-11.6%
Small Business	35,929	36,723	2.2%
Residential	101,387	102,718	1.3%
Total	239,028	229,577	-4.0%

 Table 17:
 TUoS component using forecast quantities at 2016/17 and 2017/18 prices

The revenue collected for the State Government's solar PV FiT as a JSO will be less in 2017/18 due to the expiry the '16 cent' scheme²² in September 2016.

Payments to customers are forecast to reduce from \$90.3M (2016/17) to \$83.6M (2017/18). Combining the reduction in forecast PV FiT payments with half of the estimated over-recovery balance at June 2017 means that our 2017/18 JSO prices will recover \$73.5M, with our PV FiT prices falling on average by 17%. Prices should stay at this level in 2018/19 as well due to the over-recovery balance, before increasing to \$83.5M in 2019/20.

The 2017/18 JSO (PV FiT) prices will be 15.0% lower on average than forecast in our TSS.

Tariff class	2016/17 Revenue \$'000	2017/18 Revenue \$'000	Change in weighted average revenue %
Major Business	898	649	-27.8%
HV Business	3,012	2,425	-19.5%
Large LV Business	16,236	13,317	-18.0%
Small Business	11,722	9,833	-16.1%
Residential	57,075	47,229	-17.3%
Total	88,943	73,452	-17.4%

Table 18:JSO component using forecast quantities at 2016/17 and 2017/18 prices

Summating the three sets of charges shown above equates to the NUoS outcome. Overall, the average NUoS price increases in 2017/18 by 1.7%, just above the CPI of 1.5%. The average residential outcome is a 4.0% increase whilst business has an average 0.6% reduction.

Tariff class	2016/17 Revenue \$'000	2017/18 Revenue \$'000	Change in weighted average revenue %
Major Business	27,294	24,754	-9.3%
HV Business	55,449	55,190	-0.5%
Large LV Business	272,573	272,056	-0.2%
Small Business	177,592	177,867	0.2%
Residential	534,128	555,315	4.0%
Total	1,067,036	1,085,181	1.7%

 Table 19:
 NUoS outcomes using forecast quantities at 2016/17 and 2017/18 prices

²² More information is available by searching on 'solar feed in' at <u>www.sa.gov.au</u>

3.1.5 Compliance with pricing principles

When setting prices for standard control services, clause 6.18.5 (e) – (j) of the Rules requires SA Power Networks to comply with the pricing principles where, for each tariff class, the revenue we expect to recover should lie on or between:

- an upper bound representing the stand alone cost of serving the customers who belong to that class; and
- a lower bound representing the avoidable cost of not serving those customers.

Where a tariff consists of two or more charging parameters, each charging parameter for a tariff class must take into account the LRMC for the service or, in the case of a charging parameter, for the element of the service to which the charging parameter relates.

SA Power Networks must also ensure each tariff class has regard to the transaction costs associated with the tariff or each charging parameter and whether customers of the relevant tariff class are able or likely to respond to price signals.

Stand-alone and avoidable costs

The stand-alone and avoidable cost methodologies applied are consistent with those used for the 2010-15 regulatory control period, however the calculations have been updated as part of the LRMC recalculation for our 2017-20 TSS. The stand-alone and avoidable cost methodologies are used to calculate the revenues for each standard control services tariff class. These costs are compared with the weighted average revenue derived from SA Power Networks' proposed tariffs. For detailed information on our stand-alone and avoidable cost methodologies, refer to Appendix C of our 2017-20 TSS Part B.

The revenue expected to be recovered from each of SA Power Networks' tariff classes in 2017/18 is compared with the stand-alone and avoidable costs in Table 20.

Tariff class	Stand-alone cost	Tariff revenue	Avoidable cost
Major business	5.0	8.7	91.0
HV business	4.0	35.0	102.0
Large LV business	35.0	198.3	244.0
Small business	54.0	131.3	308.0
LV residential	255.0	405.4	641.0

	Table 20: St	and-alone and avoidable distribution network costs (\$ M)
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SA Power Networks' tariff classes lie within the subsidy free range, in that the expected DUoS revenue collected from each tariff class lies between the avoidable and stand-alone costs of supply and therefore complies with clause 6.18.5(e).

Long Run Marginal Costs

The consideration of LRMC applies where price signalling charging parameters (peak period energy and demand related components) form part of a tariff. SA Power Networks aims to ensure that where price signals are varied, they are moved in such a direction as to improve alignment with the LRMC. Charging components that materially over-recover or under-recover the LRMC would not pass on an efficient pricing signal to customers that represents their cost of utilising the network.

Where such price signalling charging parameters of a tariff do not recover sufficient revenue to cover the capital, operating and maintenance costs of the existing assets, the shortfall is recovered through a charging component that minimises distortion of the customers' consumption decisions, such as a fixed daily charge or an energy usage charge.

SA Power Networks applied the average incremental cost (**AIC**) approach to determine the network LRMC for our tariff classes. The methodology has been set out in detail in Part B, Appendix C of our 2017-20 TSS. The TSS set out the compliance of our indicative prices with these pricing principles, with the LRMC pricing signals set at appropriate levels. We have utilised these indicative prices as the basis for the 2017/18 distribution prices with negligible adjustment, which ensures our compliance in this APP with the pricing principles.

3.1.6 Distribution cost recovery

Distribution use of system overs and unders account balance

In accordance with Attachment 14A of the AER's 2015-20 revenue determination, Table 21 provides the forecast 30 June 2017 balance of SA Power Networks' distribution use of system overs and unders amounts. It is very close to zero with only \$0.010M under-recovered.

Overs and unders account	2015/16 Actual	2016/17 Estimate	2017/18 Forecast
Revenue from distribution cost recovery (A)	717,803	730,781	778,707
Less TAR components for regulatory year =	682,000	759,584	788,497
+ Annual smoothed revenues (ARt)	682,000	759,584	788,497
+ DMIS carryover amount (It)	-	-	-
+ Approved pass-throughs (Ct)	-	-	-

Table 21:	Distribution overs and unders account balance (\$'0	00)	
OVERS AND UNDERS ACCOUNT			
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Annual rate of interest applicable to balances	6.17%	6.19%	6.17%
Opening balance	-	36,890	9,492
Interest on opening balance	-	2,282	586
(Under)/over recovery for financial year	35,803	(28,803)	(9,791)
Interest on (under)/over recovery	1,088	(878)	(298)
Closing balance	36,890	9,492	(10)

3.2 Transmission charges

SA Power Networks' Pricing Proposal is required under clause 6.18.2(b) of the Rules to set out how the TUoS charges it incurs are passed on to customers.

3.2.1 Transmission cost recovery

The key principles of SA Power Networks' transmission cost recovery (**TCR**) tariff methodology are:

- The total TUoS allocated to network tariffs aligns with the total estimated transmission charge to be paid by SA Power Networks, adjusted for any overs and unders account balance;
- To the extent possible, given the constraints of metering and tariff structures, transmission charges are allocated to network tariffs in a manner that reflects the cost drivers present in transmission pricing;
- Customers with a demand of 10 MW or consumption in excess of 40 GWh pa have individually calculated tariffs with transmission charges allocated in a manner that preserves the location and time signals of transmission pricing in accordance with the principles in Part J of Chapter 6A of the Rules; and
- Network tariffs for smaller customer classes have transmission charges allocated on an energy basis, as location signals cannot be preserved. Small customers are assumed to have a load factor better suited to using ElectraNet's non-locational energy prices than the capacity-based price. Large business cost-reflective tariffs have costs allocated on a capacity basis, but are then priced partly as demand and partly as energy. This ensures a reasonable outcome across the large business tariff classes that do not receive an individually calculated transmission price.

3.2.2 Avoided TUoS payments

With respect to avoided TUoS for embedded generators, SA Power Networks calculates the avoided TUoS for all embedded generators that export to its distribution network at the same rates for the locational component which would be applied to a load of similar size at the same connection point. These calculations are prepared on a with/without basis.

This payment of avoided TUoS charges to embedded generators is in accordance with clauses 5.5(h), 5.5(i) and 5.5(j) of the Rules. These avoided TUoS payments to embedded generators would be recouped through the recovery mechanism for the TUoS charges.

SA Power Networks proposes to make payments in 2017/18 to the Adelaide-based land-fill gas generators and to the Bordertown generator, but only to the extent that these generators are providing network support or have historically reliable generation. These payments will be at the TUoS locational price for the level of reliable generation. No payments were made in 2015/16 however minor payments are estimated to occur in 2016/17.

3.2.3 Transmission use of system overs and unders account balance

In accordance with Attachment 14B of the AER's 2015-20 revenue determination, Table 22 provides the forecast 30 June 2017 balance of SA Power Networks' TUoS overs and unders amounts. It is very close to zero with only \$0.027M over-recovered.

Overs and unders account	2015/16 Actual	2016/17 Estimate	2017/18 Forecast
Revenue from transmission cost recovery	278,448	239,897	229,577
Transmission charges to be paid to TNSP	256,975	246,334	239,072
(Settlement residue payments)	256,975	246,216	238,955
Avoided TUoS payments	-	118	118
Inter-DNSP payment	-	-	-
OVERS AND UNDERS ACCOUNT			
Annual rate of interest applicable to balances	6.17%	6.19%	6.17%
Opening balance	(6,759)	14,950	9,241
Interest on opening balance	(417)	925	571
Under/over recovery for financial year	21,473	(6,437)	(9,496)
Interest on under/over recovery	652	(196)	(289)
Closing balance	14,950	9,241	27

Table 22:Transmission overs and unders account balance (\$'000)

3.2.4 Charging parameters for transmission recovery tariffs

SA Power Networks' transmission recovery tariffs are included in the bundled NUoS rates of customer tariffs. The charging parameters associated with transmission cost recovery tariffs are shown in Section 2 in Tables 5 through to Table 9. For customers with a demand greater than 10 MW or

consumption in excess of 40 MWh pa the transmission cost recovery tariff is location specific; for all other customers including small customers it is averaged.

Transmission cost recovery amounts are billed at the same frequency as the relevant tariff for standard control services.

3.2.5 Transmission recovery tariffs for 2017/18

SA Power Networks' 2017/18 transmission charges are forecast to decrease from an estimated \$246.3M in 2016/17 to \$239.1M in 2017/18. The forecast reduction of \$7.2M is a 3% decrease and is due to a decrease in ElectraNet's charges in 2017/18 as a result of higher settlement residues.

SA Power Networks has prepared prices for 2017/18 that recover ElectraNet's charges and also return \$9.2M to customers for past over-recoveries. Prices for locational customers are based on the ElectraNet Price List.

All other customers have had prices applied on a State-wide non-locational basis, using the pricing signals provided by ElectraNet, the billing parameters available for that customer segment and the customer demand assumptions for that customer segment.

3.3 Jurisdictional scheme obligations (PV-FiT)

The solar PV feed-in tariff (PV-FiT) scheme is a SA Government initiative which commenced on 1 July 2008 and is to apply for 20 years. It was reviewed by the SA Government in 2009/10 and amendments to the legislation took effect from 29 July 2011²³. The amendments to the legislation introduced two further schemes – one which required application by September 2011 which also applies until June 2028 and a further scheme for subsequent applications which applied until September 2016 and is no longer in effect. Entry to the 2028 scheme is closed. Under the SA Government legislation, SA Power Networks is obliged to make PV-FiT payments to qualifying customers that have solar PV generators, for energy they export to the grid.

The purpose of the JSO is to allow SA Power Networks to recover from all of its customers the cost of the SA Government legislated Feed-in Tariff payments that SA Power Networks is required to make to those customers that have qualifying solar PV generators.

Under the JSO arrangements, SA Power Networks is required to provide information on the payments and recoveries of PV FiT in the same manner to that used for transmission (see Section 3.2 for these requirements). The AER has confirmed in its revenue determination (Attachment 14 C) that these requirements continue.

SA Power Networks recovers the JSO as an additional component of its bundled NUoS charges. Since 2016/17 we have applied the tariff class outcome for PV FiT broadly equally across all tariffs and elements within that tariff class.

²³ Government of South Australia, Electricity (Feed-In Scheme—Solar Systems) Amendment Act 2008.

3.3.1 Jurisdictional Scheme Obligation (JSO) overs and unders account balance

In accordance with the AER's 2015-20 revenue determination Attachment 14 C of the Final Decision, Table 23 provides the forecast 2017/18 balance of SA Power Networks' JSO overs and unders amounts.

Overs and unders account	2015/16 Actual	2016/17 Estimate	2017/18 Forecast
Revenue from JSO recovery (PV FiT) tariffs	122,978	88,240	73,452
PV Incentive Scheme Payments for export PV – 2028 scheme	15,121	15,121	15,121
PV Incentive Scheme Payments for export PV – 2028S scheme	68,445	68,445	68,445
PV Incentive Scheme Payments for export PV – 2016 scheme	35,426	6,742	-
Total JSO (PV pass through) payments	118,991	90,307	83,565
OVERS AND UNDERS ACCOUNT			
Annual rate of interest applicable to balances	6.17%	6.19%	6.17%
Opening balance	14,984	20,017	19,125
Interest on opening balance	924	1,238	1,181
(Under)/over recovery for financial year	3,987	(2,067)	(10,113)
Interest on (under)/over recovery	121	(63)	(308)
Closing balance	20,017	19,125	9,885

Table 23:	JSO overs and unders account balance (\$'000)

3.3.2 Charging parameters for JSO recovery tariffs

SA Power Networks' JSO cost recovery tariffs are included in the bundled NUoS Rates of customer tariffs. The charging parameters associated with JSO cost recovery tariffs are shown in Section 2.3.

JSO cost recovery amounts are billed at the same frequency as the relevant tariff for standard control services.

3.3.3 JSO recovery tariffs for 2017/18

The JSO will be paid to qualifying generation customers via two types of payments:

- Payments under the original scheme (the '2028' Scheme): This scheme closed to new applicants in August 2010. Payments of \$15.1M are estimated for 2016/17 and the forecast payment for 2017/18 is also \$15.1M;
- Payments under the subsequent scheme (the '2028 Stepped' Scheme): This scheme opened to new applicants when the 2028 scheme closed, and required applications to be approved by September 2011. The number of generators approved under this scheme is much higher than under the 2028 scheme, and the size of the PV generation in each installation is also much higher. As a result, payments under this scheme are significantly higher than the original 2028 scheme, with estimated payments in 2016/17 of \$68.4M and the forecast payment for 2017/18 is also \$68.4M.

Both of these 2028 schemes have payments set at 44 cents/kWh for qualifying generation until June 2028.

Payments under the 2016 scheme ceased from 30 September 2016 and as a result the estimated payments for 2016/17 is \$6.7M and there will be nil payments in 2017/18.

SA Power Networks' JSO (PV-FiT) recovery tariffs are estimated to recover a total of \$88.2M for 2016/17 and the forecast recovery payment for 2017/18 is \$73.5M. The over-recovery balance estimated for June 2017 of \$19.1M is being returned to customers through lower JSO prices in 2017/18 and in 2018/19 we forecast the over-recovery balance to decline to \$9.9M by June 2018.

3.4 Pricing for 2017/18 – 2019/20 compared to the TSS

The pricing for 2017/18 and indicative pricing for 2018/19 to 2019/20 for each tariff is shown in Tables 24 to 27 below. These tables show where prices/recoveries have varied from the indicative forecast published in our 2017-20 TSS.

Distribution

As shown in Table 24, DUoS prices are forecast to recover an additional \$9.5M (1.2%) in 2017/18 compared to that forecast in our TSS.

Standard control (DUoS)	2017/18	2018/19	2019/20
Tariff published in 2017-20 TSS	769.2	796.3	825.2
Cost of debt adjustment	-0.4	-0.5	-0.6
Adjusted	768.8	795.8	824.6
Actual CPI adjustment	-7.7	-8.0	-8.2
STPIS adjustment	27.5	-	-
Other changes eg recovery	-9.9	-	-
TOTAL	778.7	787.8	816.4

Table 24:DUoS movement compared to the 2017-20 TSS \$ Million

Standard control (DUoS)	2017/18	2018/19	2019/20
Change from 2017-20 TSS \$	9.5	-8.5	-8.8
Change from 2017-20 TSS %	1.2%	-1.1%	-1.1%

Transmission

As shown in Table 25, TUoS prices are forecast to recover an \$33.5M (12.7%) less in 2017/18 compared to that forecast in our TSS.

Table 25:	TUoS movement compared to the 2017-20 TSS \$ Million

Standard control (TUoS)	2017/18	2018/19	2019/20
Tariff published in 2017-20 TSS	263.1	239.8	254.1
Actual CPI adjustment	-2.6	-2.4	-2.5
Other changes - ElectraNet	-21.4	-	-
Other changes eg recovery	-9.5	-	-
TOTAL	-2.6	-2.4	-2.5
Change from 2017-20 TSS \$	-33.5	-2.4	-2.5
Change from 2017-20 TSS %	-12.7%	-1.0%	-1.0%

JSO

As shown in Table 26, JSO prices are forecast to recover an \$14.5M (16.5%) less in 2017/18 compared to that forecast in our TSS.

Table 26:	JSO movement compared to the 2017-20 TSS \$ Million
	•

Standard control services (JSO)	2017/18	2018/19	2019/20
Tariff published in 2017-20 TSS	88.0	88.0	88.0
Other changes – lower payments	-4.4	-4.4	-4.4
Other changes eg recovery	-10.1	-10.2	-
TOTAL	73.5	73.4	83.6

Standard control services (JSO)	2017/18	2018/19	2019/20
Change from 2017-20 TSS \$	-14.5	-14.6	-4.4
Change from 2017-20 TSS %	-16.5%	-16.6%	-5.0%

NUoS

As shown in Table 27, overall NUoS prices are forecast to recover \$38.6M (3.4%) less in 2017/18 compared to that forecast in our TSS.

Standard control (NUoS)	2017/18	2018/19	2019/20
Tariff published in 2017-20 TSS	1,120.3	1,124.1	1,167.3
Changes DUoS	9.5	-8.5	-8.8
Changed TUoS	-33.5	-2.4	-2.5
Changes JSO	-14.5	-14.6	-4.4
TOTAL	1,081.7	1,098.7	1,151.5
Change from 2017-20 TSS \$	-38.6	-25.4	-15.8
Change from 2017-20 TSS %	-3.4%	-2.3%	-1.4%

 Table 27:
 NUoS movement compared to the 2017-20 TSS \$ Million

The indicative prices for future years are also reduced by 2.3% in 2018/19 and 1.4% in 2019/20. The actual outcome will depend on various factors as reflected in the 2017/18 adjustments if they occur in later years. For example, a major TUoS price change could occur if settlement residues vary from current levels, or from the AER reset of ElectraNet's transmission revenue recovery from July 2018.

3.4.1 Compliance of the 2017/18 APP with the 2017-20 TSS

The AER approved our revised 2017-20 TSS in February 2017. Our approach to setting pricing for our annual direct control services must comply with the approach set out in our TSS. On this basis, our APP has used the TSS's:

- Five tariff classes into which retail customers for direct control services are divided;
- Tariff assignment and reassignment policies and procedures used for retail customers;
- Tariff structures;
- Charging parameters for each tariff; and
- Approach taken in setting each tariff's price.

We have adjusted the TSS indicative prices for 2017/18 by a separate factor for the distribution, transmission and PV FiT recovery components of the network charges. We have set out below any deviation from the assumptions used to develop the TSS indicative prices. These arrangements have

enabled a transparent conversion of the TSS indicative prices into those applied in this APP. It also ensures that the APP complies with the distribution pricing principles, as the TSS indicative prices were developed for such compliance.

Distribution

Under the TSS directional, residential prices were to increase slightly more over time than business.

The APP has a side constraint obligation which limits the increase to a tariff class's distribution prices to no more than 2% higher than the average price movement for that year. Therefore, in 2017/18, we have applied an average increase in residential pricing 2% above the average price increase. Given residential recovers about half of the total distribution charges, this implies that overall business prices have increased by 2% below the average. A further 2% residential increase will be required relative to average price movements in 2018/19 to complete the transition to indicative price levels proposed in the TSS.

The average price increase set out in the TSS indicative prices would have been 1.009, ie DUoS prices would have been 0.9% higher in 2017/18 than indicated in the TSS. To comply with the tariff class side constraint, we adjusted residential prices 0.7% lower from that indicated in the TSS and business prices increased by 2.8%. Note that despite this adjustment, residential DUoS prices increased by an average of 7.9% whereas overall the average DUoS price increases were 5.8% (business DUoS price increases averaged 3.6%).

There were two situations where a small departure from the TSS was necessary:

- 1. Residential actual demand tariff This tariff is used by a very small number of customers at this point time. In the AER's Final Decision on our Revised TSS (p 49), the AER indicated support for the opt-in tariffs to have a slightly lower relative level than the opt-out tariff. Consequently, we have retained the relative price levels for the two residential tariffs (residential actual demand and residential single rate) by lowering the residential actual demand tariff's usage rate by one cent/kWh. This is about a 9% reduction in distribution charges (6.7% in NUoS charges) for this tariff from that indicated in the TSS. Forecast DUoS recovery from this tariff is only \$0.006M.
- 2. Small low voltage business actual demand, large low voltage business actual demand, and high voltage business actual demand tariffs When the TSS was prepared, the diversity of customers using this tariff was determined using the 2015/16 summer which was generally mild apart from December 2015. Greater diversity was measured in that survey period compared to previous data which suggested a significant reduction in demand prices for this tariff (for DUoS and TUoS). We are cautious in lowering prices by the full amount suggested by the survey until we conduct further reviews (eg of 2016/17 diversity of peak demand). We also need to consider the likely impact of such a large reduction in the actual monthly demand tariff versus that implied for the agreed demand tariff (where diversity is not as great). We have proposed an overall NUOS price reduction of 8.1% for these tariffs from 2016/17 prices. These tariffs and the associated transition tariffs account for \$48.3M in 2017/18 forecast NUOS recovery. These demand prices may reduce further in 2018/19 subject to findings from new data analysis.

Transmission

All non-locational transmission 2017/18 prices were set at 87.3% of the TSS indicative price. The locational transmission prices were determined separately by reference to the detailed ElectraNet 2017/18 transmission pricing structures and prices for those major business customers using locational prices.

The Business actual demand tariff adjustment to the peak and shoulder demands discussed above is the only variation from the indicative prices methodology used in the TSS.

JSO (PV-FiT)

All JSO 2017/18 prices were set at 85.0% of the TSS indicative price.

In the APP, we have set the prices for all usage components in a tariff class to the same level. Whereas in the TSS, we had crossed-over between some tariff classes with related tariffs, for example in the TSS we had a common PV-FiT usage rate of \$0.0115/kWh for OPCL (hot water) whether it was for application in residential or small business. The residential PV-FiT usage rate was \$0.0115/kWh whereas the small business rate was \$0.0074/kWh. In this APP, we have used the same PV-FiT usage rate throughout small business (\$0.0062/kWh after the 85% adjustment), including where OPCL is used.

3.4.2 Changes to tariff charging components compared to the TSS

Within the framework of SA Power Networks' longer term tariff strategy, this section sets out our pricing schedule for tariff charging components of standard control services for:

- the actual 2016/17 prices;
- the indicative pricing schedule for 2017/18 as forecast in the TSS;
- this APP's proposed pricing schedule for 2017/18; and
- this APP's indicative pricing schedule for 2018/19 and 2019/20.

It should be noted that the information in this section relates to SA Power Networks' standard control services and pass-throughs (if relevant). These NUoS charges to customers are bundled charges that contain:

- SA Power Networks' standard control services (DUoS);
- Transmission cost recovery components (TUoS); and
- JSO (PV-FiT) cost recovery components.

The charges bundled to customers can also include alternative control services charges for metering. These charges are explicitly set out separately in our tariff list, but are not part of the standard control services network charges (NUOS) to customers. Metering is discussed separately in Appendix B.

Residential									
Tariff	Component	2016/17 Actual	2017/18 TSS	2017/18 APP	2018/19 APP F'cast	2019/20 APP F'cast			
Residential single rate (RSR)									
Supply Rate	\$/day	0.301	0.388	0.380	0.387	0.401			
Usage Block 1	\$/kWh	0.118	0.124	0.117	0.126	0.133			
Usage Block 2	\$/kWh	0.147	0.149	0.142	0.134	0.133			
Controlled Load	\$/kWh	0.054	0.066	0.062	0.063	0.066			
Residential monthly	actual kW dem	nand (MRD)							
Supply Rate	\$/day	-	0.388	0.380	0.387	0.401			
Usage	\$/kWh	0.065	0.061	0.048	0.049	0.052			
Controlled Load	\$/kWh	0.054	0.066	0.062	0.063	0.066			
Peak Actual kW	\$/kW/day	0.428	0.390	0.375	0.384	0.396			
Shoulder Actual kW	\$/kW/day	0.211	0.193	0.185	0.189	0.196			
Off-Peak Actual kW	\$/kW/day	-	-	-	-	-			

Table 28:	SA Power Networks'	indicative resi	idential tariff i	rates for NUo	S charges
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Table 29: SA Power Networks' indicative small low voltage business tariff rates for NUoS charges

Small business									
Tariff	Component	2016/17 Actual	2017/18 TSS	2017/18 APP	2018/19 APP F'cast	2019/20 APP F'cast			
Small business 2-rate (B2R)									
Supply Rate	\$/day	0.301	0.388	0.380	0.387	0.401			
Peak Usage	\$/kWh	0.158	0.153	0.150	0.149	0.155			
Off-Peak Usage	\$/kWh	0.071	0.080	0.078	0.078	0.081			
Controlled Load	\$/kWh	0.054	0.066	0.059	0.060	0.062			

Small business	Small business								
Small business mont	hly actual kVA d	lemand (SBD)							
Supply Rate	\$/day	-	0.388	0.380	0.387	0.401			
Usage	\$/kWh	0.051	0.054	0.052	0.052	0.054			
Peak Actual kVA	\$/kVA/day	0.491	0.348	0.413	0.410	0.424			
Shoulder Actual kVA	\$/kVA/day	0.244	0.173	0.205	0.204	0.211			
Off-Peak Actual kVA	\$/kVA/day	-	-	-	-	-			
Small business mont	hly actual kVA d	lemand transi	tion (SBDT)						
Supply Rate	\$/day	0.151	0.388	0.380	0.387	0.401			
Peak Usage	\$/kWh	0.105	0.100	0.097	0.101	0.105			
Off-Peak Usage	\$/kWh	0.061	0.066	0.064	0.065	0.068			
Peak Actual kVA	\$/kVA/day	0.246	0.189	0.222	0.205	0.212			
Shoulder Actual kVA	\$/kVA/day	0.122	0.094	0.110	0.102	0.105			
Off-Peak Actual kVA	\$/kVA/day	-	-	-	-	-			
Unmetered 24 hour a	and 12 hour (str	eetlights) (LVI	UU and LVUU2	24)					
Usage	\$/kWh	0.069	0.061	0.060	0.059	0.062			
Small business single	-rate (obsolete	July 2010) (BS	R)						
Supply Rate	\$/day	0.301	0.388	0.388	0.387	0.401			
Usage	\$/kWh	0.134	0.137	0.134	0.133	0.138			
Controlled Load	\$/kWh	0.054	0.066	0.059	0.060	0.062			
Small business annua	al agreed kVA do	emand (obsol	ete July 2016)	(SLV)					
Supply Rate	\$/day	11.134	10.000	10.309	10.170	10.461			
Usage	\$/kWh	0.031	0.042	0.041	0.041	0.043			
Agreed kVA Block 1	\$/kVA/day	0.319	0.277	0.274	0.273	0.282			
Agreed kVA Block 2	\$/kVA/day	0.263	0.226	0.221	0.220	0.228			
Additional kVA	\$/kVA/day	0.128	0.107	0.110	0.108	0.111			

Large business										
Tariff	Component	2016/17 Actual	2017/18 TSS	2017/18 APP	2018/19 APP F'cast	2019/20 APP F'cast				
Large business annual agreed kVA demand (LV)										
Supply Rate	\$/day	11.134	10.000	10.275	10.137	10.424				
Usage	\$/kWh	0.031	0.040	0.039	0.038	0.040				
Agreed kVA Block 1	\$/kVA/day	0.319	0.277	0.274	0.273	0.282				
Agreed kVA Block 2	\$/kVA/day	0.263	0.226	0.221	0.220	0.228				
Additional kVA	\$/kVA/day	0.128	0.107	0.110	0.108	0.111				
Large business monthly actual kVA demand (BD)										
Supply Rate	\$/day	-	0.349	0.346	0.353	0.363				
Usage	\$/kWh	0.051	0.052	0.050	0.050	0.052				
Peak Actual kVA	\$/kVA/day	0.491	0.348	0.413	0.410	0.424				
Shoulder Actual kVA	\$/kVA/day	0.244	0.173	0.205	0.204	0.211				
Off-Peak Actual kVA	\$/kVA/day	-	-	-	-	-				
Large business monthly	actual kVA dem	and transitio	on (obs. July 2	016) (BDT)						
Supply Rate	\$/day	0.151	0.349	0.346	0.353	0.363				
Peak Usage	\$/kWh	0.105	0.085	0.083	0.067	0.052				
Off-Peak Usage	\$/kWh	0.061	0.060	0.059	0.055	0.052				
Peak Actual kVA	\$/kVA/day	0.246	0.232	0.275	0.342	0.424				
Shoulder Actual kVA	\$/kVA/day	0.122	0.115	0.137	0.170	0.211				
Off-Peak Actual kVA	\$/kVA/day	-	-	-	-	-				
Large business single-rat	te transition (Ty	pe 6 meter)	(LBSR)							
Supply Rate	\$/day	0.301	0.349	0.346	0.353	0.363				
Usage	\$/kWh	0.161	0.160	0.157	0.157	0.162				
Controlled Load	\$/kWh	0.054	0.066	0.057	0.058	0.060				

 Table 30:
 SA Power Networks' indicative large low voltage business tariff rates for NUoS charges

Large business									
Large business two-rate transition (Type 6 meter) (LB2R)									
Supply Rate	\$/day	0.301	0.349	0.346	0.353	0.363			
Peak Usage	\$/kWh	0.190	0.180	0.177	0.176	0.182			
Off-Peak Usage	\$/kWh	0.085	0.092	0.091	0.090	0.094			
Controlled Load	\$/kWh	0.054	0.066	0.057	0.058	0.060			

Table 31: SA Power Networks' indicative high voltage business tariff rates for NUoS charges

High Voltage Business									
Tariff	Component	2016/17 Actual	2017/18 TSS	2017/18 APP	2018/19 APP F'cast	2019/20 APP F'cast			
HV business annual agreed kVA demand (HV)									
Supply Rate	\$/day	80.411	68.493	70.377	69.428	71.395			
Usage	\$/kWh	0.024	0.028	0.027	0.027	0.028			
Agreed Peak kVA	\$/kVA/day	0.232	0.222	0.217	0.217	0.224			
Additional kVA	\$/kVA/day	0.119	\$.128	0.132	0.130	0.133			
HV business monthly actual kVA demand (HBD)									
Supply Rate	\$/day	-	0.349	0.346	0.353	0.363			
Usage	\$/kWh	0.051	0.050	0.049	0.049	0.051			
Peak Actual kVA	\$/kVA/day	0.491	0.348	0.413	0.410	0.424			
Shoulder Actual kVA	\$/kVA/day	0.244	0.173	0.205	0.204	0.211			
Off-Peak Actual kVA	\$/kVA/day	-	-	-	-	-			
HV business annual agre	eed kVA demand	l < 400 kVA (H	IV400)						
Supply Rate	\$/day	11.134	10.000	10.275	10.137	10.424			
Usage	\$/kWh	0.031	0.038	0.037	0.037	0.039			
Agreed Peak kVA	\$/kVA/day	0.319	0.277	0.274	0.273	0.282			
Additional kVA	\$/kVA/day	0.128	0.107	0.110	0.108	0.111			

Major Business									
Tariff	Component	2016/17 Actual	2017/18 TSS	2017/18 APP	2018/19 APP F'cast	2019/20 APP F'cast			
Zone substation annual agreed kVA demand (non-locational) (ZSN)									
Supply Rate	\$/day	-	-	-	-	-			
Usage	\$/kWh	0.015	0.016	0.015	0.015	0.015			
Agreed Peak kVA	\$/kVA/day	0.191	0.171	0.164	0.164	0.170			
Additional kVA	\$/kVA/day	0.098	0.099	0.102	0.100	0.103			
Sub transmission a	nnual agreed k	VA demand (no	n-locational) (S	TN)					
Supply Rate	\$/day	-	-	-	-	-			
Usage	\$/kWh	0.010	0.013	0.011	0.011	0.012			
Agreed Peak kVA	\$/kVA/day	0.113	0.094	0.086	0.087	0.091			
Additional kVA	\$/kVA/day	0.021	0.022	0.038	0.023	0.023			

Table 32:	SA Power Networks' i	indicative maio	or business ta	ariff rates for	NUoS charges
10010 32.	JATOWCI NCLWOIKS I	nuicative majo			NOOD Charges

4 Alternative control services charges

In its 2015-20 revenue determination, the AER determined that a price cap applies for Alternative Control Services (ie regulated metering services). Attachment 16 to the revenue determination sets out all of the pricing arrangements and the final prices that will apply. Part A of Attachment 16 sets out the annual metering charges (AER Table 16.11) and the upfront capital charges (AER Table 16.14, with annual X-factors set out in AER Table 16.15), as set out in Table 33 and 34 below.

The annual metering charges contain a capital and a non-capital charge, with different prices applying to the three categories of alternative control services metering, ie whole current (**WC**), current transformer (**CT**) and Exceptional meters.

There are four different combinations of metering fees possible:

- Existing customers using SA Power Networks' meters. These customers continue to pay the capital and non-capital charges;
- Where an existing customer at June 2015 has the meter replaced by an alternate meter provider eg with a type 4 meter, the customer will continue to pay the capital charge, but will cease paying the non-capital charge;
- Where a new customer connects to the network and elects to use an SA Power Networks meter, the customer incurs an upfront capital charge for the new meter, and also incurs the annual non-capital charge. The customer is not liable for any ongoing capital charges; and
- Where an existing customer at June 2015 was not using an SA Power Networks meter but one supplied by an alternate meter provider, eg a type 4 meter, the customer is not liable for any annual metering charges to SA Power Networks.

Our alternative control services annual metering charges for the 2017/18 regulatory year and the forecast charges for 2018/19 and 2019/20 are set out in Table 34. Our alternative control services upfront capital metering charges for the 2017/18 regulatory year and the forecast charges for 2018/19 and 2019/20 are set out in Table 36.

4.1 Annual metering charges

Table 33: AER nominated metering charges starting prices, CPI escalation and X-Factors

Metering Charges St CPI Escalation and X	tarting Prices, -Factors	2015/16	2016/17	2017/18	2018/19	2019/20	
Annual Non-Capital x-factor (table 16.12)		-	-34.81%	5.00%	5.00%	5.00%	
Annual Capital x-fac	-	-20.47%	-15.00%	-15.00%	-15.00%		
Annual metering charges starting prices (table 16.11)							
	non-capital	135.07					
Exceptional	capital	176.18					
	non-capital	73.52					
Type 5-6 CT	capital	95.90					
Type 5-6 WC	non-capital	8.98					
	capital	11.71					

Table 34: SA Power Networks annual metering charge (\$ nominal)

Price ^t = Price ^{t-1} x (CPI ^t /CPI ^{t-1}) x (1 - X ^t)		2015/16 \$pa	2016/17 \$pa	2017/18 \$pa	2018/19 F'cast \$pa	2019/20 F'cast \$pa	2017/18 \$/day
Type 1-4 'Exceptional'	Non-capital	135.07	185.16	178.50	173.82	\$169.25	0.4890
remotely read interval meter	Capital	176.18	215.83	251.87	296.89	349.96	0.6900
	Non-capital and capital	311.25	400.99	430.37	470.70	519.21	1.1791
Type 5-6 CT connected manually read meter	Non-capital	73.52	100.79	97.16	94.61	92.13	0.2662
	Capital	95.90	117.48	137.10	161.60	190.49	0.3756
	Non-capital and capital	169.42	218.27	234.26	256.21	282.62	0.6418
Type 5-6 WC manually read meter	Non-capital	8.98	12.31	11.87	11.56	11.25	0.0325
	Capital	11.71	14.35	16.74	19.73	23.26	0.0459
	Non-capital and capital	20.69	26.66	28.61	31.29	34.51	0.0784

4.2 Upfront capital charges

Upfront capital starting price and x- factor	2015/16 Table 16.14	2016/17 Table 16.15	2017/18 Table 16.15	2018/19 Table 16.15	2019/20 Table 16.15
Type 5 single element	163.92	-17.43%	-0.60%	-0.75%	-0.87%
Type 5 two element	235.02	-17.65%	-0.60%	-0.75%	-0.87%
Type 5 three phase	404.13	-17.39%	-0.60%	-0.75%	-0.87%
Type 6 single element	102.00	-7.64%	-0.60%	-0.75%	-0.87%
Type 6 two element	259.44	-6.57%	-0.60%	-0.75%	-0.87%
Type 6 three phase	304.19	-7.27%	-0.60%	-0.75%	-0.87%
	Actual	Actual	Actual	Forecast	Forecast
CPI index	106.6	108.4	110.0	112.75	115.57

Table 35:Upfront capital starting price and x-factor

 Table 36:
 SA Power Networks upfront metering charge (\$ nominal)

	2015/16 \$	2016/17 \$	2017/18 \$	2018/19 F'cast \$	2019/20 F'cast \$
Type 5 single element	163.92	195.74	199.82	206.35	213.35
Type 5 two element	235.02	281.17	287.03	296.41	306.47
Type 5 three phase	404.13	482.42	492.48	508.57	525.82
Type 6 single element	102.00	111.65	113.97	117.70	121.69
Type 6 two element	259.44	281.15	287.02	296.40	306.45
Type 6 three phase	304.19	331.81	338.73	349.80	361.67

Appendix A: Standard control services tariff schedules

This appendix includes the standard control services and negotiated services tariff schedules for 2017/18 and indicative tariff schedules for 2018/19 and 2019/20.

Table 37:NUoS tariff schedule 2017/18

	SA Power Networks' Tariffs 2017/18	Supply		Ener	gy based us	age		Annual agreed kVA	demand	Monthly	actual kVA	demand	Monthly	/ actual kW	demand
	Final Network Prices Schedule	Supply	Usage	Usage	Usage	Usage Off-	Controlled			Summer	Year	Year	Summer	Winter	Year
	comprises DUoS, PV FiT and TUOS	Rate	Block 1	Block 2	Peak	Peak	Load	Block 1 Block 2	Additional	Peak	Shoulder	Off-Peak	Peak	Shoulder	Off-Peak
	excludes GST, Metering	\$/day	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kVA/day \$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs							Annual Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia	I Tariff Class														
RSR	Residential	\$ 0.3797	\$ 0.1173	\$ 0.1421			\$ 0.0622								
MRD	Residential Monthly Actual kW Demand (min demand 1.0 kW)	\$ 0.3797	\$ 0.0475				\$ 0.0622						\$ 0.3754	\$ 0.1854	\$ -
Small Bue	noss Tariff Class								_						
	Linnetered 12 hour (streetlights)		\$ 0.0595												
LVUU24	Unmetered 24 hour		\$ 0.0595												
BSR	Business Single-Rate (obsolete July 2010)	\$ 0.3797	\$ 0.1339				\$ 0.0586								
B2R	Business Two-Rate	\$ 0.3797			\$ 0.1501	\$ 0.0782	\$ 0.0586								
SBD	Business Monthly Actual kVA Demand	\$ 0.3797	\$ 0.0522							\$ 0.4126	\$ 0.2048	\$-			
SBDT	Business Monthly Actual kVA Demand Transition	\$ 0.3797			\$ 0.0974	\$ 0.0644				\$ 0.2217	\$ 0.1101	\$ -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ 10.3087	\$ 0.0407					\$ 0.2739 \$ 0.2211	\$ 0.1097						
BSRN	Business Single-Rate (negotiated service)	\$ 0.3797	\$ 0.1339												
B2RN	Business Two-Rate (negotiated service)	\$ 0.3797			\$ 0.1501	\$ 0.0782									
Lorgo Port	need IV Tariff Class (IV and a 160 MWh)														
	Business Sindle-Rate Transition	\$ 0.3460	\$ 0.1574				\$ 0.0566								
LB2R	Business Two-Rate Transition	\$ 0.3460	φ 0.1374		\$ 0 1769	\$ 0,0906	\$ 0.0566								
BD	Business Monthly Actual kVA Demand	\$ 0.3460	\$ 0.0502		φ 0.1700	φ 0.0000	φ 0.0000			\$ 0.4126	\$ 0.2048	s -			
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 2016)	\$ 0.3460	• • • • • • • • • •		\$ 0.0828	\$ 0.0589				\$ 0.2750	\$ 0.1365	\$ -			
LV	Business Annual Agreed kVA Demand	\$ 10.2750	\$ 0.0387					\$ 0.2739 \$ 0.2211	\$ 0.1097						
LVSG	Sportsgrounds Annual Agreed kVA Demand	\$ 10.2750	\$ 0.0387					\$ 0.2739 \$ 0.2211	\$ 0.1097						
LVB	Business Annual Agreed kVA Demand (back-up)	\$ 10.2750	\$ 0.0387					\$ 0.1097 \$ 0.1097	\$ 0.1097						
LVN	Business Annual Agreed kVA Demand (negotiated service)	\$ 10.2750	\$ 0.0387					\$ 0.2739 \$ 0.2211	\$ 0.1097						
Link Valta	na Duaina na Tani# Olana								_						
	High Voltage Rusiness Two-Pate (obsolete, July 2015)	\$ 0.3460			¢ 0.1755	¢ 0.0902									
HBD	Business Monthly Actual kVA Demand	\$ 0.3460	\$ 0.0488		\$ 0.1755	\$ 0.0032				\$ 0.4126	\$ 0.2048	¢ .			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ 10.2750	\$ 0.0373					\$ 0.2739	\$ 0.1097	¢ 0.1120	¢ 0.2010	Ŷ			
HV	HV Business Annual Agreed kVA Demand	\$ 70.3767	\$ 0.0266					\$ 0.2172	\$ 0.1315						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ 10.2750	\$ 0.0373					\$ 0.2739	\$ 0.1097						
HVB	Business HV Demand kVA (back-up)	\$ -	\$ 0.0266					\$ 0.1315	\$ 0.1315						
HVN	Business HV Demand kVA (negotiated service)	\$ -	\$ 0.0266					\$ 0.2172	\$ 0.1315						
HVS658	Business HV Demand kVA (negotiated service)	\$ -	\$ 0.0145					\$ 0.1545	\$ 0.1315						
									_						
7SN	Zone Substation Annual Agreed kVA Demand (non-locational)	¢ .	\$ 0.0146					\$ 0.1642	\$ 0.1015						
ZSNB	Zone Substation KVA (back-up)	\$ - \$	\$ 0.0146					\$ 0.1042	\$ 0.1015						
STN	Sub Transmission Annual Agreed kVA Demand (non-locational)	\$-	\$ 0.0111					\$ 0.0857	\$ 0.0375						
STNB	Subtransmission kVA (back-up)	\$ -	\$ 0.0111					\$ 0.0230	\$ 0.0230						
	Zone Substation Annual Agreed kVA Demand (locational)														
ZSN021	ZSN021	\$ 433.00	\$ 0.0053					\$ 0.2800	\$ 0.1015						
ZSN022	ZSN022	\$ 185.00	\$ 0.0053					\$ 0.2277	\$ 0.1015						
ZSN024	ZSN024	\$ 202.00	\$ 0.0053					\$ 0.2330	\$ 0.1015						
ZSN026	ZSN026 (closed)	\$ -	\$ -					\$ - \$ 0.0040	\$ -						
ZSN035 79N121	ZSN035 7SN131	\$ 161.00 \$ 104.00	\$ 0.0053 \$ 0.00F3					\$ 0.2843 \$ 0.2274	\$ 0.1015 \$ 0.1015						
ZSN228	ZSN228	\$ 218.00	\$ 0.0053					\$ 0.2274	\$ 0.1015						
ZSN438	ZSN428	\$ 85.00	\$ 0.0053					\$ 0.2337	\$ 0.1015						
ZSN608	ZSN608	\$ 65.00	\$ 0.0053					\$ 0.2337	\$ 0.1015						
ZSNB230	ZSNB230 (back-up)	\$ -	\$ 0.0053					\$ 0.1015	\$ 0.1015						
	Sub Transmission Annual Agreed kVA Demand (locational)														
STN018	VSTN018	\$ 626.00	\$ 0.0130					\$ 0.1157	\$ 0.0230						
STN084	VSTN084	\$ 1,120.00	\$ 0.0018					\$ 0.2065	\$ 0.0230						
STN161	VSTN161	\$ 563.00	\$ 0.0131					\$ 0.0713	\$ 0.0230						
S IN162	VS IN162	\$ 126.00	\$ 0.0130					\$ 0.0710	\$ 0.0230						
STN575	VO 11N378 VSTN557	φ 46∠.00 \$ 220.00	\$ 0.0018					\$ 0.2065	\$ 0.0230						
STN609	VSTN609	\$ 2 760 00	\$ 0.0018					\$ 0.2400	\$ 0.0230						
STN788	VSTN788	\$ 308.00	\$ 0.0018					\$ 0.1483	\$ 0.0230						
STN840	VSTN840	\$ 95.00	\$ 0.0131					\$ 0.0713	\$ 0.0230						
STNB164	VSTNB164 (back-up)	\$ -	\$ 0.0130					\$ 0.0230	\$ 0.0230						
STNB796	VSTNB796 (back-up)	\$-	\$ 0.0018					\$ 0.0230	\$ 0.0230						

Table 38:NUoS indicative tariff schedule 2018/19

	SA Power Networks' Tariffs 2018/19	Supply	/		Ener	rav b	ased us	ade		Annual a	areed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW	demand
	Indicative Network Prices Schedule	Suppl		lloggo	Llonge	9, 2		Llos go Off	Controllad	7	igiood ittiit	aomana	Summer	Veer	Veer	Summer	Winter	Veer
	comprises DUOS only NUoS	Bato	'	Block 1	Block 2		Book	Book	Load	Block 1	Block 2	Additional	Book	Shouldor	Off-Boak	Book	Shouldor	Off-Book
	oxcludos GST. Motoring	¢/day		¢/kWb	¢/kW/b	e		¢/kM/b	¢/kW/b			¢/k\/ A/day		\$/k\/A/day		¢/kW/day	¢/kW/day	¢/kW/day
	Tariff Class and Tariffs	-φ/uay		\$/KVVII	\$/KVVII	4	/	φ/KVVII	\$/ KVVII	Appual	Annual	Appual	5 months	12 months	12 months	5 months	7 months	\$/KW/uay
Posidontia	Tariff Class		-			-				Annuar	Annual	Annual	5 monuts	12 monuis	12 monuts	5 monuis	7 monuis	12 monuis
Residentia	Besidential	¢ 0.20	67	¢ 0 1 2 4 2	¢ 0.1244				¢ 0.0633									
NOR	Residential	\$ 0.38	07	\$ 0.1243	φ 0.1344				\$ 0.0633							¢ 0.0005	¢ 0.4004	¢
WRD	Residential Monthly Actual KW Demand (min demand 1.0 KW)	\$ 0.38	67	\$ 0.0486					\$ 0.0633							\$ 0.3835	\$ 0.1894	ъ -
Orres III Deve			_															
Small Bus	Iness Tariff Class	¢		¢ 0.0502														
	Unmetered 24 hour	ф 6		\$ 0.0592														
LV0024	Difficience Circle Date (charlete, July 2010)	φ -	~7	\$ 0.0592					¢ 0.0507									
BSR	Business Single-Rate (obsolete July 2010)	\$ 0.38	67	\$ 0.1332		~	0 4 40 4	¢ 0.0770	\$ 0.0597									
D2R	Business Iwo-Rate	\$ 0.38	07	¢ 0.0500		φ	0.1494	\$ 0.0778	\$ 0.0597				¢ 0.4404	¢ 0.0007	¢			
SBD	Business Monthly Actual KVA Demand	\$ 0.38	67	\$ 0.0520		~	0 4007	¢ 0.0040					\$ 0.4104	\$ 0.2037	5 - ¢			
SBDT	Business Monthly Actual KVA Demand Transition	\$ 0.38	67	¢ 0.0405		Э	0.1007	\$ 0.0649		¢ 0.0705	¢ 0.0004	¢ 0.4000	\$ 0.2052	\$ 0.1019	ъ -			
BODN	Business Annual Agreed KVA Demand (obsolete July 2016)	\$ 10.16	99	\$ 0.0405						\$ 0.2725	\$ 0.2204	\$ 0.1062						
BSRN	Business Single-Rate (negotiated service)	\$ 0.38	67	\$ 0.1332		~	0 4 40 4	¢ 0.0770										
DZRIN	Business Two-Rate (negotiated service)	φ 0.36	67			Φ	0.1494	\$ 0.0778										
Lorgo Du	iness IV Tariff Class (IV and 160 MWh)		-			_												
	Rusiness Single Pate Transition	¢ 0.25	24	¢ 0.1566					\$ 0.0577									
LDOK	Business Single-Rate Hanshoft	φ 0.35 ¢ 0.05	34	φ 0.1566		e.	0 1760	¢ 0.0004	\$ 0.0577									
LB2R	Dusiness Two-Rate Transition	φ 0.35 ¢ 0.05	34	¢ 0.0500		Э	0.1760	\$ 0.0901	φ U.US//				¢ 0.4404	¢ 0.0007	¢			
BD	Business Monthly Actual KVA Demand Trans (-t http://doi.org/	\$ 0.35	34	φ 0.0500		e.	0.0674	¢ 0.0540					\$ 0.4104	\$ 0.2037	ф -			
BDI	Business wonthly Actual KVA Demand Trans. (ODS. July 2016)	φ 0.35 ¢ 40.40	34 65	¢ 0.0005		Э	0.0674	φ 0.0548		¢ 0.0705	¢ 0.0000	¢ 0.4000	φ 0.3420	\$ 0.1698	φ -			
LV	Business Annual Agreed KVA Demand	\$ 10.13	65	\$ 0.0385						\$ 0.2725	\$ 0.2204	\$ 0.1082						
LVSG	Sportsgrounds Annual Agreed KVA Demand	\$ 10.13	65	\$ 0.0385						\$ 0.2725	\$ 0.2204	\$ 0.1082						
LVB	Business Annual Agreed kVA Demand (back-up)	\$ 10.13	65	\$ 0.0385						\$ 0.1082	\$ 0.1082	\$ 0.1082						
LVN	Business Annual Agreed kVA Demand (negotiated service)	\$ 10.13	65	\$ 0.0385						\$ 0.2725	\$ 0.2204	\$ 0.1082						
			_			_												
High Volta	ge Business Tariff Class																	
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$ 0.35	34			\$	0.1746	\$ 0.0887	\$ 0.0535									
HBD	Business Monthly Actual kVA Demand	\$ 0.35	34	\$ 0.0486									\$ 0.4104	\$ 0.2037	\$ -			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ 10.13	65	\$ 0.0371						\$ 0.2725		\$ 0.1082						
HV	HV Business Annual Agreed kVA Demand	\$ 69.42	81	\$ 0.0266						\$ 0.2166		\$ 0.1298						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ 10.13	65	\$ 0.0371						\$ 0.2725		\$ 0.1082						
HVB	Business HV Demand kVA (back-up)	\$ -		\$ 0.0266						\$ 0.1298		\$ 0.1298						
HVN	Business HV Demand kVA (negotiated service)	\$ -		\$ 0.0266						\$ 0.2166		\$ 0.1298						
HVS658	Business HV Demand kVA (negotiated service)	\$-		\$ 0.0143						\$ 0.1525		\$ 0.1298						
	T 1// Al		_															
Major Bus	iness Tariff Class																	
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)	\$ -		\$ 0.0147						\$ 0.1643		\$ 0.1002						
ZSNB	Zone Substation KVA (back-up)	\$ -		\$ 0.0147						\$ 0.1002		\$ 0.1002						
SIN	Sub Transmission Annual Agreed kVA Demand (non-locational)	\$ -		\$ 0.0113						\$ 0.0868		\$ 0.0227						
SINB	Subtransmission kVA (back-up)	\$-		\$ 0.0113						\$ 0.0227		\$ 0.0227						
7011004	Zone Substation Annual Agreed KVA Demand (locational)		~~	• • • • • •						• • • • • • • • • •								
ZSN021	ZSN021	\$ 429.	98	\$ 0.0052						\$ 0.2774		\$ 0.1002						
Z5IN022	Z5INU22 78N034	\$ 183. \$ 200	6	\$ 0.0052						\$ 0.2255		\$ 0.1002						
25INU24		φ ∠00. ¢	59	φ 0.0052 ¢						\$ 0.2307 ¢		φ 0.1002 ¢						
2511026	ZONO26 (Closed)	ф 4 то	I	φ -						ф -		ф -						
ZSN035	ZSNU35 ZSN131	a 159.	88	\$ 0.0052						\$ 0.2817		\$ 0.1002						
25IN131	ZON131 ZON000	\$ 192. ¢ 042	00	\$ 0.0052						\$ 0.2252		\$ 0.1002						
ZSN228	ZSN228	\$ 216.	48	\$ 0.0052						\$ 0.2484		\$ 0.1002						
201N438	2019430 70 NG09	φ 84. ¢ ^ ·	41	\$ 0.0052						\$ 0.2314		\$ 0.1002						
ZSIN608		\$ 64. ¢	55	\$ 0.0052						\$ 0.2314		\$ 0.1002						
25INB230	ZSINBZ3U (DACK-UP) Sub Transmission Annual Agroad kVA Domand (lagotional	φ -		φ 0.0052						\$ 0.1002		\$ 0.1002						
STN019		¢ 624	62	\$ 0.0120						\$ 0.1147		\$ 0.0227						
STN018	VSTN018	\$ 021.	40	\$ 0.0129						\$ 0.1147		\$ 0.0227						
STN161	V 3 111004 V 3 TN161	φ 1,112. ¢ 550	19	\$ 0.0018						\$ 0.2049		\$ 0.0227						
STNICT		φ 559. ¢ 105	12	¢ 0.0130						\$ 0.0706		¢ 0.0227						
STN102	V 3 111102 V (STN279	φ 125. ¢ 469	70	\$ 0.0129 \$ 0.0012						\$ 0.0704		\$ 0.0227						
OTNEE7		φ 408. ¢ 207	22	¢ 0.0018						¢ 0.2049		¢ 0.0227						
S THOOD		φ 237. ¢ 0.740	33	\$ 0.0018						\$ 0.2388		\$ 0.0227						
STN009		φ 2,740.	10	\$ 0.0130						\$ 0.0227		φ 0.0227 ¢ 0.0227						
S 111/88		φ 305. ¢ 04	CO 24	\$ 0.0018						\$ 0.1471		\$ 0.0227						
S11N840		ъ 94. ¢	34	\$ 0.0130 \$ 0.0460						\$ 0.0706		\$ 0.0227						
STNB164	VSTNBT04 (back-up)	÷ ÷	1	\$ 0.0129						\$ 0.0227		\$ 0.0227						
31100/90	v S IND/90 (back-up)	φ		φ 0.0018						φ 0.0227		φ 0.0227						

Table 39:NUoS indicative tariff schedule 2019/20

	SA Bower Networks' Tariffs 2019/20	с.	upply		Eno	av basod	162 00			Appual a	arood kVA	domand	Monthly	actual kVA	domand	Monthly	actual kW	domand
	SA FOWEI NELWORKS TAITIIS 2019/20	31	ирріу		Ener	gy based	usaye			Annuara	Igreed KVA	uemanu	wonuny	actual KVA	uemanu	wonun		uemanu
	Indicative Network Prices Schedule NUoS	S	upply	Usage	Usage	Usage	Usag	ge Off-	Controlled				Summer	Year	Year	Summer	Winter	Year
	comprises DUoS only	F	Rate	Block 1	Block 2	Peak	P	Peak	Load	Block 1	Block 2	Additional	Peak	Shoulder	Off-Peak	Peak	Shoulder	Off-Peak
	excludes GST, Metering	\$	/day	\$/kWh	\$/kWh	\$/kWh	\$/	/kWh	\$/kWh	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs									Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residential T	ariff Class																	
RSR	Residential	\$	0.4011	\$ 0.1328	\$ 0.1328				\$ 0.0664									
MRD	Residential Monthly Actual kW Demand (min demand 1.0 kV	۸ <u>\$</u>	0.4011	\$ 0.0515					\$ 0.0664							\$ 0.3964	\$ 0.1958	\$ -
									• •••••							• •••••	• • • • • • • • • • • • • • • • • • • •	*
Small Busin																		
	Lippotorod 12 hour (strootlights)	¢		¢ 0.0619														
	Unmetered 12 hour (streetlights)	ф Ф	-	\$ 0.0018														
LV0024	Unmetered 24 hour	\$		\$ 0.0618														
BSR	Business Single-Rate (obsolete July 2010)	\$	0.4011	\$ 0.1384					\$ 0.0624									
B2R	Business Two-Rate	\$	0.4011			\$ 0.155	0\$	0.0810	\$ 0.0624									
SBD	Business Monthly Actual kVA Demand	\$	0.4011	\$ 0.0544									\$ 0.4242	\$ 0.2106	\$ -			
SBDT	Business Monthly Actual kVA Demand Transition	\$	0.4011			\$ 0.104	7 \$	0.0677					\$ 0.2121	\$ 0.1053	\$ -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ 1	0.4614	\$ 0.0425						\$ 0.2817	\$ 0.2281	\$ 0.1113						
BSRN	Business Single-Rate (negotiated service)	\$	0.4011	\$ 0.1384														
B2RN	Business Two-Rate (negotiated service)	\$	0.4011			\$ 0.155	0 \$	0.0810										
						• • • • • • •												
Largo Ruein	oss IV Tariff Class /IV and >160 MWb)																	
	Business Single Bate Transition	¢	0.2624	¢ 0.1600					¢ 0.0601									
LDOR	Business Single-Rate Hanshon	φ	0.3634	\$ 0.1623					\$ 0.0601									
LB2R	Business Two-Rate Transition	\$	0.3634			\$ 0.182	3 \$	0.0935	\$ 0.0601									
BD	Business Monthly Actual kVA Demand	\$	0.3634	\$ 0.0521									\$ 0.4242	\$ 0.2106	\$ -			
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 201	10\$	0.3634			\$ 0.052	1 \$	0.0521					\$ 0.4242	\$ 0.2106	\$ -			
LV	Business Annual Agreed kVA Demand	\$ 1	10.4237	\$ 0.0402						\$ 0.2817	\$ 0.2281	\$ 0.1113						
LVSG	Sportsgrounds Annual Agreed kVA Demand	\$ 1	0.4237	\$ 0.0402						\$ 0.2817	\$ 0.2281	\$ 0.1113						
LVB	Business Annual Agreed kVA Demand (back-up)	\$ 1	0.4237	\$ 0.0402						\$ 0.1113	\$ 0.1113	\$ 0.1113						
LVN	Business Annual Agreed kVA Demand (negotiated service)	\$ 1	0 4237	\$ 0.0402						\$ 0.2817	\$ 0.2281	\$ 0.1113						
2000	Bacilloco / Illinaal / Igrood IX// Bolilana (liogotiatod bol lioo)	Ψ.	10.1207	\$ 0.010L						φ 0.2011	φ 0.2201	φ 0.1110						
High Voltage	Business Tariff Class																	
	Business farm Glass	¢	0.0004			¢ 0.400		0 0000	¢ 0.0554									
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$	0.3634			\$ 0.180	8 \$	0.0920	\$ 0.0554									
HBD	Business Monthly Actual kVA Demand	\$	0.3634	\$ 0.0505									\$ 0.4242	\$ 0.2106	\$-			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ 1	10.4237	\$ 0.0387						\$ 0.2817		\$ 0.1113						
HV	HV Business Annual Agreed kVA Demand	\$ 7	71.3950	\$ 0.0278						\$ 0.2242		\$ 0.1335						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ 1	0.4237	\$ 0.0387						\$ 0.2817		\$ 0.1113						
HVB	Business HV Demand kVA (back-up)	\$	-	\$ 0.0278						\$ 0.1335		\$ 0.1335						
HVN	Business HV Demand kVA (negotiated service)	\$	-	\$ 0.0278						\$ 0.2242		\$ 0.1335						
HV/S658	Business HV Demand kVA (negotiated service)	\$	-	\$ 0.0147						\$ 0.1568		\$ 0.1335						
		-		• • • • • • •														
Major Rusin																		
701	Zone Substation Annual Agreed k\/A Demond (non logational			¢ 0.0154						¢ 0.1704		¢ 0.1020						
ZOND	Zone Substation Annual Agreed KVA Demand (non-locational	uφ	-	\$ 0.0154						\$ 0.1704		\$ 0.1030						
ZSNB	Zone Substation KVA (back-up)	\$	-	\$ 0.0154						\$ 0.1030		\$ 0.1030						
SIN	Sub Transmission Annual Agreed kVA Demand (non-location	n \$	-	\$ 0.0119						\$ 0.0907		\$ 0.0233						
STNB	Subtransmission kVA (back-up)	\$	-	\$ 0.0119						\$ 0.0233		\$ 0.0233						
	Zone Substation Annual Agreed kVA Demand (locationa	al)																
ZSN021	ZSN021	\$	455.62	\$ 0.0055						\$ 0.2908		\$ 0.1030						
ZSN022	ZSN022	\$	194.66	\$ 0.0055						\$ 0.2358		\$ 0.1030						
ZSN024	ZSN024	\$	212.55	\$ 0.0055						\$ 0.2414		\$ 0.1030						
ZSN026	ZSN026 (closed)	\$		\$ -						\$ -		\$ -						
ZSN035	ZSN035	\$	169.41	\$ 0.0055						\$ 0.2954		\$ 0,1030						
ZSN131	ZSN131	ŝ	204 13	\$ 0,0055						\$ 0.2355		\$ 0 1030						
7SNI229	75N228	¢	220.20	\$ 0,0055						\$ 0.2601		\$ 0.1000						
2011220	201/220	¢ ¢	229.39	\$ 0.0055						\$ 0.2001		\$ 0.1030						
Z31N430	2314436	÷.	09.44	\$ 0.0055						\$ 0.2421		\$ 0.1030						
25IN608	ZSIN608	\$	68.40	\$ 0.0055						\$ 0.2421		\$ 0.1030						
ZSNB230	ZSNB230 (back-up)	\$	-	\$ 0.0055						\$ 0.1030		\$ 0.1030						
	Sub Transmission Annual Agreed kVA Demand (location	nal)																
STN018	VSTN018	\$	658.70	\$ 0.0137						\$ 0.1209		\$ 0.0233						
STN084	VSTN084	\$1,	,178.51	\$ 0.0019						\$ 0.2164		\$ 0.0233						
STN161	VSTN161	\$	592.41	\$ 0.0138						\$ 0.0742		\$ 0.0233						
STN162	VSTN162	\$	132.58	\$ 0.0137						\$ 0.0738		\$ 0.0233						
STN378	VSTN378	\$	486.14	\$ 0.0019						\$ 0.2164		\$ 0.0233						
STN557	VSTN557	ŝ	251 49	\$ 0,0019						\$ 0.2523		\$ 0.0233						
STN609	VSTN609	\$ 2	904 18	\$ 0.0138						\$ 0.0233		\$ 0.0233						
STN799	VSTN799	¢Z	224.00	\$ 0.0138						\$ 0.0255		\$ 0.0200						
0111/00	V 3 11V/00	÷.	324.09	\$ 0.0019						¢ 0.1552		φ 0.0233						
S 11N840		\$	99.96	\$ 0.0138						\$ 0.0742		φ U.U233						
S INB 164	VSINB164 (back-up)	\$	-	\$ 0.0137						\$ 0.0233		\$ 0.0233						
SINB796	VSINB796 (back-up)	\$	-	\$ 0.0019						\$ 0.0233		\$ 0.0233						
1		1																

Table 40:DUoS tariff schedule 2017/18

	SA Power Networks' Tariffs 2017/18	Supply		Ener	gy based us	age		Annual agree	ed kVA d	demand	Monthly	actual kVA	demand	Monthly	actual kW o	demand
	Final Distribution Prices Schedule DUoS comprises DUoS only excludes GST, Metering	Supply Rate \$/day	Usage Block 1 \$/kWh	Usage Block 2 \$/kWh	Usage Peak \$/kWh	Usage Off- Peak \$/kWh	Controlled Load \$/kWh	Block 1 Bl \$/kVA/day \$/k	lock 2 VA/day	Additional \$/kVA/day	Summer Peak \$/kVA/day	Year Shoulder \$/kVA/day	Year Off-Peak \$/kVA/day	Summer Peak \$/kW/day	Winter Shoulder \$/kW/day	Year Off-Peak \$/kW/day
De ei de ati	Tariff Class and Tariffs							Annual Ar	nnual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia RSR MRD	Residential Residential Residential Monthly Actual kW Demand	\$ 0.3460 \$ 0.3460	\$ 0.0786 \$ 0.0243	\$ 0.1034			\$ 0.0390 \$ 0.0390							\$ 0.2916	\$ 0.1440	\$-
Small Bus LVUU LVUU24 BSR B2R SBD SBDT SLV BSRN B2RN	iness Tariff Class Unmetered 12 hour (streetlights) Unmetered 24 hour Business Single-Rate (obsolete July 2010) Business Two-Rate Business Monthly Actual kVA Demand Business Monthly Actual kVA Demand (bisolete July 2016) Business Single-Rate (negotiated service) Business Two-Rate (negotiated service)	\$ 0.3460 \$ 0.3460 \$ 0.3460 \$ 0.3460 \$ 10.2750	\$ 0.0408 \$ 0.0408 \$ 0.0975 \$ 0.0340 \$ 0.0252		\$ 0.1099 \$ 0.0719	\$ 0.0550 \$ 0.0445	\$ 0.0390 \$ 0.0390	\$ 0.2112 \$	0.1584	\$ 0.1097	\$ 0.3195 \$ 0.1597	\$ 0.1586 \$ 0.0793	\$- \$-			
Large Bus LBSR LB2R BD BDT LV LVSG LVB LVN	iness LV Tariff Class (LV and >160 MWh) Business Single-Rate Transition Business Two-Rate Transition Business Monthy Actual kVA Demand Business Monthy Actual kVA Demand Trans. (obs. July 2016) Business Annual Agreed kVA Demand Sportsgrounds Annual Agreed kVA Demand Business Annual Agreed kVA Demand (back-up) Business Annual Agreed kVA Demand (negotiated service)	\$ 0.3460 \$ 0.3460 \$ 0.3460 \$ 0.3460 \$ 10.2750 \$ 10.2750	 \$ 0.1170 \$ 0.0340 \$ 0.0252 \$ 0.0252 		\$ 0.1319 \$ 0.0593	\$ 0.0660 \$ 0.0410	\$ 0.0390 \$ 0.0390	\$ 0.2112 \$ \$ 0.2112 \$	0.1584 0.1584	\$ 0.1097 \$ 0.1097	\$ 0.3195 \$ 0.2130	\$ 0.1586 \$ 0.1057	\$- \$-			
High Volta B2R124H HBD HV400 HV HV400N HVB HVN HVS658	ge Business Tariff Class High Voltage Business Two-Rate (obsolete July 2015) Business Monthly Actual kVA Demand HV Business Annual Agreed kVA Demand < 400 kVA HV Business Annual Agreed kVA Demand Business HV Demand < 400 kVA (negotiated service) Business HV Demand kVA (negotiated service) Business HV Demand kVA (negotiated service) Business HV Demand kVA (negotiated service)	\$ 0.3460 \$ 0.3460 \$ 10.2750 \$ 70.3767	\$ 0.0340 \$ 0.0252 \$ 0.0145		\$ 0.1319	\$ 0.0660		\$ 0.2112 \$ \$ 0.1545 \$	-	\$ 0.1097 \$ 0.1315	\$ 0.3195	\$ 0.1586	\$-			
Major Bus ZSN ZSNS STNB STNB ZSN021 ZSN022 ZSN024 ZSN025 ZSN131 ZSN24 ZSN026 ZSN035 ZSN438 ZSN438 ZSN608 ZSN438 ZSN448 ZSN457 STN408 STN8164 ZSN457 ZSN454 ZSN454 ZSN454 ZSN454 </td <td>iness Tariff Class Zone Substation Annual Agreed kVA Demand (non-locational) Zone Substation kVA (back-up) Sub Transmission Annual Agreed kVA Demand (non-locational) Subtransmission kVA (back-up) Zone Substation Annual Agreed kVA Demand (locational) ZSN021 ZSN022 ZSN024 ZSN026 ZSN035 ZSN131 ZSN28 ZSN28 ZSN28 ZSN830 (back-up) Sub Transmission Annual Agreed kVA Demand (locational) VSTN018 VSTN018 VSTN084 VSTN084 VSTN161 VSTN162 VSTN162 VSTN378 VSTN378 VSTN378 VSTN378 VSTN378 VSTN378 VSTN409 VSTN404 (back-up) VSTN8164 (back-up)</td> <td>\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$</td> <td>\$ 0.0046 \$ 0.0011 \$ 0.0046 \$ 0.0041 \$ 0.0011</td> <td></td> <td></td> <td></td> <td></td> <td>\$ 0.1015 \$ \$ 0.0230 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$</td> <td></td> <td>\$ 0.1015 \$ 0.0230 \$ 0.1015 \$ 0.0230 \$ 0.02</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	iness Tariff Class Zone Substation Annual Agreed kVA Demand (non-locational) Zone Substation kVA (back-up) Sub Transmission Annual Agreed kVA Demand (non-locational) Subtransmission kVA (back-up) Zone Substation Annual Agreed kVA Demand (locational) ZSN021 ZSN022 ZSN024 ZSN026 ZSN035 ZSN131 ZSN28 ZSN28 ZSN28 ZSN830 (back-up) Sub Transmission Annual Agreed kVA Demand (locational) VSTN018 VSTN018 VSTN084 VSTN084 VSTN161 VSTN162 VSTN162 VSTN378 VSTN378 VSTN378 VSTN378 VSTN378 VSTN378 VSTN409 VSTN404 (back-up) VSTN8164 (back-up)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 0.0046 \$ 0.0011 \$ 0.0046 \$ 0.0041 \$ 0.0011					\$ 0.1015 \$ \$ 0.0230 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.1015 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$ \$ 0.0230 \$		\$ 0.1015 \$ 0.0230 \$ 0.1015 \$ 0.0230 \$ 0.02						

Table 41: DUoS indicative tariff schedule 2018/19

	SA Power Networks' Tariffs 2018/19	Supply		Ener	av based us	sane		Annual a	areed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW (demand
	Indicative Distribution Prices Schedule	Supply	Lisago	Lieago	lleago		Controlled	Annuara	greed KFA	demana	Summor	Voar	Voar	Summor	Winter	Voar
	comprises DUoS only DUoS	Bato	Block 1	Block 2	Boak	Book	Load	Block 1	Block 2	Additional	Book	Shouldor	Off-Book	Book	Shouldor	Off-Book
	excludes GST Metering	\$/day	\$/kWb	\$/kWb	\$/kWb	\$/kWb	\$/kWb	\$/kVA/day	\$/kVA/day	\$/kVA/day	¢/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs	<i>w</i> aay	<i>\$</i> //K////	φ/RTTΠ	Ψ	Ψ	φ/RTTΠ	Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia	I Tariff Class							Annuar	Annuar	Annuar	5 montais	12 11011113	12 montais	omonais	7 111011413	12 11011013
RSR	Residential	\$ 0.3534	\$ 0.0850	\$ 0.0952			\$ 0.0398									
MRD	Residential Monthly Actual kW/ Demand	\$ 0.3534	\$ 0.0251	φ 0.0002			\$ 0.0398							\$ 0.2978	\$ 0.1471	\$.
NIT (D	Residential Monthly Actual KW Demand	φ 0.0004	φ 0.0201				φ 0.0000							φ 0.2570	φ 0.1471	Ψ
Small Bus	iness Tariff Class															
LVUU	Unmetered 12 hour (streetlights)	s -	\$ 0.0402													
LVUU24	Unmetered 24 hour	\$ -	\$ 0.0402													
BSR	Business Single-Rate (obsolete July 2010)	\$ 0.3534	\$ 0.0962				\$ 0.0398									
B2R	Business Two-Rate	\$ 0.3534			\$ 0.1084	\$ 0.0542	\$ 0.0398									
SBD	Business Monthly Actual kVA Demand	\$ 0.3534	\$ 0.0335								\$ 0.3152	\$ 0.1565	\$ -			
SBDT	Business Monthly Actual kVA Demand Transition	\$ 0.3534			\$ 0.0710	\$ 0.0439					\$ 0.1576	\$ 0.0782	\$ -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ 10.1365	\$ 0.0249					\$ 0.2084	\$ 0.1563	\$ 0.1082						
BSRN	Business Single-Rate (negotiated service)															
B2RN	Business Two-Rate (negotiated service)															
Large Bus	iness LV Tariff Class (LV and >160 MWh)															
LBSR	Business Single-Rate Transition	\$ 0.3534	\$ 0.1154				\$ 0.0398									
LB2R	Business Two-Rate Transition	\$ 0.3534			\$ 0.1301	\$ 0.0651	\$ 0.0398									
BD	Business Monthly Actual kVA Demand	\$ 0.3534	\$ 0.0335								\$ 0.3152	\$ 0.1565	\$ -			
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 2016)	\$ 0.3534			\$ 0.0460	\$ 0.0370		• • • • • • • •			\$ 0.2627	\$ 0.1304	\$-			
LV	Business Annual Agreed KVA Demand	\$ 10.1365	\$ 0.0249					\$ 0.2084	\$ 0.1563	\$ 0.1082						
LVSG	Sponsgrounds Annual Agreed KVA Demand	\$ 10.1365	\$ 0.0249					\$ 0.2084	\$ 0.1563	\$ 0.1082						
	Business Annual Agreed kVA Demand (back-up)															
	Business Annual Agreed KVA Demand (negotiated service)															
High Volta	ne Business Tariff Class															
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$ 0.3534			\$ 0.1301	\$ 0.0651	\$ 0.0398									
HBD	Business Monthly Actual kVA Demand	\$ 0.3534	\$ 0.0335		φ 0.1001	φ 0.0001	φ 0.0000				\$ 0.3152	\$ 0.1565	¢ .			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ 10 1365	\$ 0.0249					\$ 0.2084		\$ 0.1082	φ 0.010 <u>2</u>	φ 0.1000	Ψ			
HV	HV Business Annual Agreed kVA Demand	\$ 69.4281	\$ 0.0143					\$ 0.1525		\$ 0.1298						
HV400N	Business HV Demand < 400 kVA (negotiated service)		• • • • • • •					+								
HVB	Business HV Demand kVA (back-up)															
HVN	Business HV Demand kVA (negotiated service)															
HVS658	Business HV Demand kVA (negotiated service)															
Major Bus	ness Tariff Class															
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)	\$ -	\$ 0.0046					\$ 0.1002		\$ 0.1002						
ZSNB	Zone Substation kVA (back-up)															
STN	Sub Transmission Annual Agreed kVA Demand (non-locational)	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STNB	Subtransmission kVA (back-up)															
	Zone Substation Annual Agreed kVA Demand (locational)															
ZSN021	ZSN021	<u></u> -	\$ 0.0046					\$ 0.1002		\$ 0.1002						
ZSN022	ZSN022	\$ -	\$ 0.0046					\$ 0.1002		\$ 0.1002						
ZSN024	ZSN024 ZSN026	ъ - е	\$ 0.0046					\$ 0.1002		\$ 0.1002						
ZSN020	ZS11020 ZSN035	÷	\$ 0.0046					\$ 0.1002		\$ 0 1000						
ZSN131	ZSN033 ZSN131	\$ -	\$ 0.0046					\$ 0.1002		\$ 0.1002						
ZSN228	ZSN131 ZSN228	s -	\$ 0.0046					\$ 0.1002		\$ 0.1002						
ZSN438	ZSN438	\$ -	\$ 0.0046					\$ 0,1002		\$ 0,1002						
ZSN608	ZSN608	\$ -	\$ 0.0046					\$ 0.1002		\$ 0.1002						
ZSNB230	ZSNB230 (back-up)															
	Sub Transmission Annual Agreed kVA Demand (locational)															
STN018	VSTN018	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN084	VSTN084	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN161	VSTN161	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN162	VSTN162	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN378	VSTN378	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN557	VSTN557	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN609	VSTN609	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN788	VSTN788	<u> </u>	\$ 0.0011					\$ 0.0227		\$ 0.0227						
STN840	VSTN840	\$ -	\$ 0.0011					\$ 0.0227		\$ 0.0227						
SINB164	VS INB164 (back-up)															
S 11NB / 96	VS INB/90 (back-up)															
1		-														

Table 42:DUoS indicative tariff schedule 2019/20

	SA Power Networks' Tariffs 2019/20	Supply		Ener	av based us	200		Annual agreed k	/A demand	Monthly	actual kVA	demand	Monthly	actual kW (hemand
	Indicative Distribution Bridge Schodule	Cumply	lles es	Line	gy based as	Line and Off	Controlled	Annuar agreed k	Aucinana	Cummen	Veer	Veer	Cummer	Minter	Veer
	comprises DIJOS only DUoS	Supply	Usage Block 1	Usage Block 2	Usage	Usage On-	Controlled	Block 1 Block	Additional	Summer	fear	fear Off Book	Summer	Shouldor	fear Off Book
	excludes GST. Metering	¢/day	SIOCK I	SIUCK Z	¢/kWb		¢/kWb				\$/kVA/day	¢/kVA/day	¢/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffe		\$/KVVII	φ/KVVII	\$7 KVVII	φ/ K • • 11	φ/KvvII		ay wiki Avuay	5 months	12 months	12 months	5 months	7 months	12 months
Besidential								Annual Annua	Annuar	5 11011115	12 11011013	12 11011013	5 11011013	7 111011113	12 11011013
RSR	Residential	\$ 0.3634	\$ 0.0907	\$ 0.0907			\$ 0.0409								
MRD	Residential Monthly Actual kW/ Demand	\$ 0.3634	\$ 0.0261	φ 0.0007			\$ 0.0409						\$ 0.3062	\$ 0.1513	\$.
WITE	Residential Monthly Actual KW Demand	φ 0.0004	φ 0.0201				φ 0.0400						φ 0.0002	φ 0.1010	Ψ
Small Busin	ess Tariff Class														
LVUU	Unmetered 12 hour (streetlights)	\$ -	\$ 0.0414												
LVUU24	Unmetered 24 hour	\$ -	\$ 0.0414												
BSR	Business Single-Rate (obsolete July 2010)	\$ 0.3634	\$ 0.0989				\$ 0.0409								
B2R	Business Two-Rate	\$ 0.3634			\$ 0.1115	\$ 0.0558	\$ 0.0409								
SBD	Business Monthly Actual kVA Demand	\$ 0.3634	\$ 0.0345							\$ 0.3241	\$ 0.1609	\$-			
SBDT	Business Monthly Actual kVA Demand Transition	\$ 0.3634			\$ 0.0730	\$ 0.0451				\$ 0.1621	\$ 0.0805	\$-			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ 10.4237	\$ 0.0256					\$ 0.2143 \$ 0.16	07 \$ 0.1113						
BSRN	Business Single-Rate (negotiated service)														
B2RN	Business Two-Rate (negotiated service)														
Large Busin	ess LV Tariff Class (LV and >160 MWh)														
LBSR	Business Single-Rate Transition	\$ 0.3634	\$ 0.1187				\$ 0.0409								
LB2R	Business Iwo-Rate Transition	\$ 0.3634			\$ 0.1338	\$ 0.0669	\$ 0.0409					•			
BD	Business Monthly Actual KVA Demand	\$ 0.3634	\$ 0.0345		¢ 0.0045	¢ 0.0045				\$ 0.3241	\$ 0.1609	5 - ¢			
вы	Business Monthly Actual KVA Demand Trans. (obs. July 2016	\$ 0.3634			\$ 0.0345	\$ 0.0345			-	\$ 0.3241	\$ 0.1609	ъ -			
	Sports grounds Appuel Agreed kVA Demand	\$ 10.4237	\$ 0.0256					\$ 0.2143 \$ 0.16	J7 \$ 0.1113						
LVSG	Sportsgrounds Annual Agreed kVA Demand	\$ 10.4237	\$ 0.0256					\$ 0.2143 \$ 0.16	57 \$ 0.1113						
	Business Annual Agreed kVA Demand (back-up) Business Annual Agreed kVA Demand (back-up)														
	Business Annual Agreed KVA Demand (negotiated service)														
High Voltage	Business Tariff Class														
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$ 0.3634			\$ 0.1338	\$ 0.0669	\$ 0.0409								
HBD	Business Monthly Actual kVA Demand	\$ 0.3634	\$ 0.0345							\$ 0.3241	\$ 0,1609	\$ -			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ 10.4237	\$ 0.0256					\$ 0.2143	\$ 0.1113						
HV	HV Business Annual Agreed kVA Demand	\$ 71.3950	\$ 0.0147					\$ 0.1568	\$ 0.1335						
HV400N	Business HV Demand < 400 kVA (negotiated service)														
HVB	Business HV Demand kVA (back-up)														
HVN	Business HV Demand kVA (negotiated service)														
HVS658	Business HV Demand kVA (negotiated service)														
	T. 1// 01								_						
Major Busine	255 Tariff Class	¢	¢ 0.0047					¢ 0.4000	¢ 0.4000						
ZSN	Zone Substation Annual Agreed KVA Demand (non-locational)	ъ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
25NB STN	Zone Substation KVA (back-up)	¢	¢ 0.0012					¢ 0.0222	¢ 0.0000						
STNR	Subtransmission kVA (back-up)	φ -	\$ 0.0012					\$ 0.0233	\$ 0.0233						
SIND	Zone Substation Annual Agreed kVA Demand (locational														
7SN021	Zone Substation Annual Agreed KVA Demand (rocational)	\$ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSN022	ZSN021	\$-	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSN024	ZSN024	\$ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSN026	ZSN026	\$ -	\$ -					\$ -	\$ -						
ZSN035	ZSN035	\$ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSN131	ZSN131	\$ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSN228	ZSN228	\$ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSN438	ZSN438	\$ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSN608	ZSN608	\$ -	\$ 0.0047					\$ 0.1030	\$ 0.1030						
ZSNB230	ZSNB230 (back-up)														
	Sub Transmission Annual Agreed kVA Demand (location	al)	-												
S IN018	VSIN018	ъ -	\$ 0.0012					\$ 0.0233	\$ 0.0233						
S1N084	VSIN084	ъ - с	\$ 0.0012				_	\$ 0.0233	\$ 0.0233						
S IN161	VS1N161	ъ - ¢	\$ 0.0012					\$ 0.0233	\$ 0.0233						
STN102	V S IIN 102 V/STN1279	φ - Φ	\$ 0.0012					\$ 0.0233	\$ 0.0233						
STN570	V S 11837 0 \/STN557	÷ -	\$ 0.0012					\$ 0.0233	\$ 0.0233						
STN609	VSTN609	\$ -	\$ 0.0012					\$ 0.0233	\$ 0.0233						
STN788	VSTN788	\$ -	\$ 0.0012					\$ 0.0233	\$ 0.0233						
STN840	VSTN840	\$ -	\$ 0.0012					\$ 0.0233	\$ 0.0233	1					
STNB164	VSTNB164 (back-up)	-							÷ 0.0200						
STNB796	VSTNB796 (back-up)														

Table 43:TUoS tariff schedule 2017/18

	SA Power Networks' Tariffs 2017/18	Supply		Ene	rgy based u	sage		Annual a	greed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW	demand
	Final Transmission Prices Schedule	Supply	Usage	e Usage	Usage	Usage Off-	Controlled		•		Summer	Year	Year	Summer	Winter	Year
	comprises TUOS only	Rate	Block	1 Block 2	Peak	Peak	Load	Block 1	Block 2	Additional	Peak	Shoulder	Off-Peak	Peak	Shoulder	Off-Peak
	excludes GST, Metering	\$/day	\$/kWI	n \$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs							Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia	I Tariff Class															
RSR	Residential	\$ -	\$ 0.02	89 \$ 0.0289			\$ 0.0134									
MRD	Residential Monthly Actual kW Demand	\$ -	\$ 0.01	34			\$ 0.0134							\$ 0.0838	\$ 0.0414	\$ -
Small Busi	iness Tariff Class															
LVUU	Unmetered 12 hour (streetlights)		\$ 0.01	25												
LV0024	Unmetered 24 nour	¢	\$ 0.01	25			¢ 0.0404									
BOR	Business Single-Rate (obsolete July 2010)	ф -	\$ 0.03	02 \$ 0.0302	¢ 0.0340	¢ 0.0170	\$ 0.0134									
SBD	Business Monthly Actual kVA Demand	ф с	\$ 0.01	20	\$ 0.0340	\$ 0.0170	\$ 0.0134				\$ 0.0931	\$ 0.0462	¢			
SBDT	Business Monthly Actual kVA Demand Transition	\$ -	φ 0.01	20	\$ 0.0193	\$ 0.0137					\$ 0.0620	\$ 0.0308	φ \$-			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ -	\$ 0.00	93	¢ 0.0100	φ 0.0101		\$ 0.0627	\$ 0.0627	\$ -	¢ 0.0020	¢ 0.0000	Ŷ			
BSRN	Business Single-Rate (negotiated service)	\$ -	\$ 0.03	02 \$ 0.0302				• ••••	• • • • • • • • • • • • • • • • • • • •	Ť						
B2RN	Business Two-Rate (negotiated service)	\$ -			\$ 0.0340	\$ 0.0170										
Large Busi	iness LV Tariff Class (LV and >160 MWh)															
LBSR	Business Single-Rate Transition	\$ -	\$ 0.03	62 \$ 0.0362			\$ 0.0134									
LB2R	Business Two-Rate Transition	\$ -			\$ 0.0408	\$ 0.0204	\$ 0.0134									
BD	Business Monthly Actual kVA Demand	\$ -	\$ 0.01	20							\$ 0.0931	\$ 0.0462	\$ -			
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 2016)	\$ -			\$ 0.0193	\$ 0.0137					\$ 0.0620	\$ 0.0308	\$-			
LV	Business Annual Agreed kVA Demand	\$ -	\$ 0.00	93				\$ 0.0627	\$ 0.0627	\$ -						
LVSG	Sportsgrounds Annual Agreed kVA Demand	\$ -	\$ 0.00	93				\$ 0.0627	\$ 0.0627	\$ -						
	Business Annual Agreed kVA Demand (back-up)	ф -	\$ 0.00	93				φ - Φ 0.0627	\$ - \$ 0.0607	ъ - с						
	Business Annual Agreed KVA Demand (negotiated service)	φ -	φ 0.00	93				\$ 0.0627	\$ 0.0627	φ -						
High Volta	ge Business Tariff Class															
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	s -			\$ 0.0408	\$ 0.0204										
HBD	Business Monthly Actual kVA Demand	\$ -	\$ 0.01	20							\$ 0.0931	\$ 0.0462	\$ -			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ -	\$ 0.00	93				\$ 0.0627		\$ -						
HV	HV Business Annual Agreed kVA Demand	\$ -	\$ 0.00	93				\$ 0.0627		\$ -						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$-	\$ 0.00	93				\$ 0.0627		\$ -						
HVB	Business HV Demand kVA (back-up)	\$ -	\$ 0.00	93				\$ -		\$ -						
HVN	Business HV Demand kVA (negotiated service)	\$ -	\$ 0.00	93				\$ 0.0627		\$ -						
HVS658	Business HV Demand kVA (negotiated service)	\$ -	\$					\$ -		\$ -						
Major Busi	noss Tariff Class															
	Zono Substation Annual Agrood kV/A Domand (non-locational)	¢	¢ 0.00	02				\$ 0.0627		¢						
ZSNB	Zone Substation Allida Agreed KVA Demand (nor-locational)	ф с	\$ 0.00	93				\$ 0.0027		φ - \$						
STN	Sub Transmission Annual Agreed kVA Demand (non-locational)	\$-	\$ 0.00	93				\$ 0.0627		\$ 0.0145						
STNB	Subtransmission kVA (back-up)	\$ -	\$ 0.00	93				\$ -		\$ -						
-	Zone Substation Annual Agreed kVA Demand (locational)															
ZSN021	ZSN021	\$ 433.00	\$					\$ 0.1785		\$ -						
ZSN022	ZSN022	\$ 185.00	\$					\$ 0.1262		\$ -						
ZSN024	ZSN024	\$ 202.00	\$					\$ 0.1315		\$ -						
ZSN026	ZSN026	\$-	\$					\$ -		\$ -						
ZSN035	ZSN035	\$ 161.00	\$					\$ 0.1828		\$ -						
ZSN131	ZSN131	\$ 194.00	\$					\$ 0.1259		\$ -						
ZSN228	ZSN228 78N429	\$ 218.00	¢					\$ 0.1493		ф -						
ZSIN438	2019438 70N609		ф. С					\$ 0.1322		ф - Ф						
ZSN8230	ZSNB230 (back-up)	\$ 05.00	ф С					\$ 0.1322		ф - С						
_0110200	Sub Transmission Annual Agreed kVA Demand (locational)	÷ -	Ψ					\$		÷ -						
STN018	VSTN018	\$ 626.00	\$ 0.01	12				\$ 0.0927		\$ -						
STN084	VSTN084	\$ 1,120.00	\$					\$ 0.1835		\$ -						
STN161	VSTN161	\$ 563.00	\$ 0.01	13				\$ 0.0483		\$ -						
STN162	VSTN162	\$ 126.00	\$ 0.01	12				\$ 0.0480		\$ -						
STN378	VSTN378	\$ 462.00	\$					\$ 0.1835		\$ -						
STN557	VSTN557	\$ 239.00	\$					\$ 0.2176		\$ -						
STN609	VSTN609	\$ 2,760.00	\$ 0.01	13				\$ -		\$ -						
STN788	VSTN788	\$ 308.00	\$					\$ 0.1253		\$ -						
SIN840	VSIN840	\$ 95.00	\$ 0.01	13				\$ 0.0483		\$ - ¢						
SINB164	VS INB164 (back-up)	ф -	\$ 0.01 ¢	12				ъ - с		ф -						
31100/90	vond/so (back-up)	φ -	φ					φ -		φ -						

Table 44: TUoS indicative tariff schedule 2018/19

	SA Power Networks' Tariffs 2018/19	Supply		Ener	gy based us	sage		Annual	agreed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW o	demand
	Indicative Distribution Prices Schedule	Supply	Usage	Usage	Usage	Usage Off-	Controlled				Summer	Year	Year	Summer	Winter	Year
	comprises DUoS only TUoS	Rate	Block 1	Block 2	Peak	Peak	Load	Block 1	Block 2	Additional	Peak	Shoulder	Off-Peak	Peak	Shoulder	Off-Peak
	excludes GST, Metering	\$/day	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs		-					Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia	I Tariff Class															
RSR	Residential	\$-	\$ 0.0296	\$ 0.0296			\$ 0.0137									
MRD	Residential Monthly Actual kW Demand	\$ -	\$ 0.0137				\$ 0.0137							\$ 0.0857	\$ 0.0423	\$ -
Small Busi	ness Tariff Class															
LVUU	Unmetered 12 hour (streetlights)	\$ -	\$ 0.0128													
LVUU24	Unmetered 24 hour	\$-	\$ 0.0128				A 0.0407									
BSR	Business Single-Rate (obsolete July 2010)	\$ -	\$ 0.0309		¢ 0.0047	¢ 0.0474	\$ 0.0137									
SBD	Business Two-Rate Business Monthly Actual kVA Demand	ъ - ¢	\$ 0.0123		\$ 0.0347	\$ 0.0174	\$ 0.0137				\$ 0.0052	\$ 0.0472	¢			
SBDT	Business Monthly Actual KVA Demand Transition	φ - \$ -	φ 0.0125		\$ 0.0235	\$ 0.0148					\$ 0.0476	\$ 0.0236	φ - \$ -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$-	\$ 0.0095		φ 0.0200	φ 0.0140		\$ 0.0641	\$ 0.0641	s -	φ 0.0470	φ 0.0200	Ψ			
BSRN	Business Single-Rate (negotiated service)	\$-	\$ 0.0309						• • • • • • • •	÷						
B2RN	Business Two-Rate (negotiated service)	\$ -			\$ 0.0347	\$ 0.0174										
Large Busi	ness LV Tariff Class (LV and >160 MWh)															
LBSR	Business Single-Rate Transition	\$ -	\$ 0.0370				\$ 0.0137									
LB2R	Business Two-Rate Transition	\$ -			\$ 0.0417	\$ 0.0208	\$ 0.0137									
BD	Business Monthly Actual kVA Demand	\$-	\$ 0.0123								\$ 0.0952	\$ 0.0472	\$ -			
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 201	\$ -			\$ 0.0172	\$ 0.0137		• • • • • • • • •	• • • • • • • • •	•	\$ 0.0793	\$ 0.0394	\$ -			
	Sportogrounds Appuel Agreed kVA Demand	ъ - с	\$ 0.0095					\$ 0.0641	\$ 0.0641	ъ - ¢						
LVSG	Business Annual Agreed kVA Demand (back-up)	φ - \$	\$ 0.0095					\$ 0.0641	\$ 0.0041	÷ ÷						
	Business Annual Agreed kVA Demand (back up)	φ \$-	\$ 0.0095					\$ 0.0641	\$ 0.0641	÷ .						
2014	Dusiness Annual Agreed KVA Demand (negotiated service)	Ψ	φ 0.0000					φ 0.0041	φ 0.0041	φ						
High Volta	ge Business Tariff Class															
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$ -			\$ 0.0417	\$ 0.0208	\$ 0.0137									
HBD	Business Monthly Actual kVA Demand	\$ -	\$ 0.0123								\$ 0.0952	\$ 0.0472	\$-			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ -	\$ 0.0095					\$ 0.0641		\$ -						
HV	HV Business Annual Agreed kVA Demand	\$ -	\$ 0.0095					\$ 0.0641		\$ -						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ -	\$ 0.0095					\$ 0.0641		\$ -						
HVB	Business HV Demand kVA (back-up)	\$ -	\$ 0.0095					\$ -		\$ -						
HVN	Business HV Demand kVA (negotiated service)	\$ -	\$ 0.0095					\$ 0.0641		\$ -						
HV 5658	Business HV Demand KVA (negotiated service)	ъ -	ъ -					ъ -		ф -						
Maior Busi	ness Tariff Class															
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational	\$ -	\$ 0.0095					\$ 0.0641		s -						
ZSNB	Zone Substation kVA (back-up)	\$ -	\$ 0.0095					\$ -		\$ -						
STN	Sub Transmission Annual Agreed kVA Demand (non-location	\$ -	\$ 0.0095					\$ 0.0641		\$ -						
STNB	Subtransmission kVA (back-up)	\$ -	\$ 0.0095					\$ -		\$						
	Zone Substation Annual Agreed kVA Demand (locationa	<i>p</i>														
ZSN021	ZSN021	\$ 429.98	\$ -					\$ 0.1773		\$ -						
∠SN022	ZSN022	\$ 183.71	\$ - ¢					\$ 0.1253		\$ - ¢						
ZSN024 ZSN026	ZSINU24 ZSN026	\$ 200.59 \$	ъ - \$					\$ 0.1306		- 6						
ZSN020	ZSN020	\$ 159.88	\$ -					\$ 0.1815		\$ -						
ZSN131	ZSN131	\$ 192.65	\$ -					\$ 0.1250		\$ -						
ZSN228	ZSN228	\$ 216.48	\$ -					\$ 0.1483		\$ -						
ZSN438	ZSN438	\$ 84.41	\$ -					\$ 0.1313		\$ -						
ZSN608	ZSN608	\$ 64.55	\$ -					\$ 0.1313		\$ -						
ZSNB230	ZSNB230 (back-up)	\$ -	\$ -					\$ -		\$ -						
	Sub Transmission Annual Agreed kVA Demand (location	al)														
STN018	VSTN018	\$ 621.63	\$ 0.0111					\$ 0.0921		\$ - ¢						
STN084	VSIN084	\$ 1,112.19	\$ -					\$ 0.1822		ъ - с						
STN161		φ 559.07 ¢ 125.12	\$ 0.0112					\$ 0.0480		ф -						
STN378	VS10102 VST0378	φ 120.12 \$ 458.79	\$ 0.0111					\$ 0.1822		φ - \$ -						
STN557	VSTN557	\$ 237.33	\$ -					\$ 0.2161		\$ -						
STN609	VSTN609	\$ 2,740.75	\$ 0.0112					\$ -		\$ -						
STN788	VSTN788	\$ 305.85	\$ -					\$ 0.1244		\$ -						
STN840	VSTN840	\$ 94.34	\$ 0.0112					\$ 0.0480		\$ -						
STNB164	VSTNB164 (back-up)	\$-	\$ 0.0111					\$ -		\$ -						
STNB796	VSTNB796 (back-up)	\$-	\$ -					\$ -		\$ -						
1		1														

Table 45: TUoS indicative tariff schedule 2019/20

	SA Power Networks' Tariffs 2019/20	Supply		Ener	ov based u	sade		Annual a	areed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW d	demand
	Indicative Distribution Prices Schedule	Cuppiy	lleago	Lleago	lleago		Controlled	, unidar c	igrood itrii	aomana	Summor	Yoar	Voar	Summor	Winter	Voar
	comprises DUOS only TUOS	Supply Pate	Block 1	Block 2	Boak	Book	Load	Block 1	Block 2	Additional	Book	Shoulder	Off-Book	Boak	Shouldor	Off-Book
	excludes GST Metering	Supply Rate \$/day	\$/kWb	\$/kWh	\$/kWb	\$/kWb	\$/kWb	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs	φ/ddy	φ/κττη	ψηκιτη	φ/κιντι	ψικιτι	Ψ	Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residential	Fariff Class							Annual	Annual	Annuar	5 11011113	12 11011013	12 11011013	5 montais	7 111011113	12 11011113
RSR	Residential	\$ -	\$ 0.0311	\$ 0.0311			\$ 0.0144									
MRD	Residential Monthly Actual kW Demand	\$ -	\$ 0.0144	• • • • • • • •			\$ 0.0144							\$ 0.0901	\$ 0.0445	\$ -
	····· , ··· ,						• • •							• • • • • •	• • • •	
Small Busin	ess Tariff Class	1														
LVUU	Unmetered 12 hour (streetlights)	\$ -	\$ 0.0135													
LVUU24	Unmetered 24 hour	\$-	\$ 0.0135													
BSR	Business Single-Rate (obsolete July 2010)	\$ -	\$ 0.0324				\$ 0.0144									
B2R	Business Two-Rate	\$-			\$ 0.0365	\$ 0.0183	\$ 0.0144									
SBD	Business Monthly Actual kVA Demand	\$-	\$ 0.0129								\$ 0.1001	\$ 0.0497	\$-			
SBDT	Business Monthly Actual kVA Demand Transition	\$ -			\$ 0.0247	\$ 0.0156					\$ 0.0500	\$ 0.0248	\$-			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ -	\$ 0.0100					\$ 0.0674	\$ 0.0674	\$ -						
BSRN	Business Single-Rate (negotiated service)	\$ -	\$ 0.0324													
B2RN	Business Two-Rate (negotiated service)	\$ -			\$ 0.0365	\$ 0.0183										
-																
Large Busin	ess LV Tariff Class (LV and >160 MWh)															
LBSR	Business Single-Rate Transition	\$ -	\$ 0.0389		A A A A A A A A A A		\$ 0.0144									
LB2R	Business Iwo-Rate Transition	5 - 0			\$ 0.0438	\$ 0.0219	\$ 0.0144				• • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•			
BD	Business Monthly Actual KVA Demand	ъ -	\$ 0.0129		¢ 0.0400	¢ 0.0100					\$ 0.1001	\$ 0.0497	5 - C			
БЛІ	Business Monthly Actual KVA Demand Trans. (obs. July 2016 Business Appuel Agreed k)/A Demand	с ф с	¢ 0.0100		\$ 0.0129	\$ 0.0129		¢ 0.0674	¢ 0.0674	¢	\$ 0.1001	\$ 0.0497	ъ -			
	Business Annual Agreed kVA Demand	ф -	\$ 0.0100					\$ 0.0674	\$ 0.0674	 -						
LVSG	Sponsgrounds Annual Agreed kVA Demand (back-up)	ф - С	\$ 0.0100					\$ 0.0674	\$ 0.0674	- ¢						
	Business Annual Agreed kVA Demand (back-up) Business Appual Agreed kVA Demand (back-up)	φ - ¢ -	\$ 0.0100					φ - \$ 0.0674	φ - \$ 0.0674	ф -						
	Business Annual Agreed KVA Demand (negotiated service)	φ	\$ 0.0100					\$ 0.0074	\$ 0.0074	φ -						
High Voltage	Business Tariff Class	1														
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$ -			\$ 0.0438	\$ 0.0219	\$ 0.0144									
HBD	Business Monthly Actual kVA Demand	\$ -	\$ 0.0129		¢ 0.0.00	¢ 0.0210	φ 0.0111				\$ 0 1001	\$ 0.0497	s -			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ -	\$ 0.0100					\$ 0.0674		s -	¢ 0.1001	φ 0.0101	Ŷ			
HV	HV Business Annual Agreed kVA Demand	\$-	\$ 0.0100					\$ 0.0674		\$ -						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ -	\$ 0.0100					\$ 0.0674		\$ -						
HVB	Business HV Demand kVA (back-up)	\$ -	\$ 0.0100					\$ -		\$ -						
HVN	Business HV Demand kVA (negotiated service)	\$ -	\$ 0.0100					\$ 0.0674		\$-						
HVS658	Business HV Demand kVA (negotiated service)	\$ -	\$ -					\$ -		\$ -						
Major Busine	ess Tariff Class															
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)	\$-	\$ 0.0100					\$ 0.0674		\$-						
ZSNB	Zone Substation kVA (back-up)	\$ -	\$ 0.0100					\$ -		\$ -						
STN	Sub Transmission Annual Agreed kVA Demand (non-locationa	\$-	\$ 0.0100					\$ 0.0674		\$ -						
STNB	Subtransmission kVA (back-up)	\$ -	\$ 0.0100					\$ -		\$ -						
	Zone Substation Annual Agreed kVA Demand (locational	2	-													
ZSN021	ZSN021	\$ 455.62	<u></u> -					\$ 0.1878		<u>\$</u> -						
ZSN022	ZSN022	\$ 194.66	\$ -					\$ 0.1328		\$ -						
ZSN024	ZSN024	\$ 212.55	\$ - ¢					\$ 0.1384		\$ - ¢						
ZSINU20	ZSIN020 7SN035	φ - ¢ 160.44	÷ ÷					φ - ¢ 0.1022		ф - С						
ZSIN035	ZSN131	\$ 204.12	÷ -					\$ 0.1923		φ - \$						
ZSN1228	75N229	\$ 204.13	÷ -					\$ 0.1525		¢ -						
ZSN/220	ZSN220 ZSN238	\$ 229.39	φ - \$ -					\$ 0.1391		\$ -						
ZSN608	ZSN608	\$ 68.40	\$-					\$ 0.1391		\$-						
ZSNB230	ZSNB230 (back-up)	\$ -	\$ -					\$ -		\$ -						
	Sub Transmission Annual Agreed kVA Demand (location	al)														
STN018	VSTN018	\$ 658.70	\$ 0.0118					\$ 0.0975		\$-						
STN084	VSTN084	\$ 1,178.51	\$ -					\$ 0.1931		\$ -						
STN161	VSTN161	\$ 592.41	\$ 0.0119					\$ 0.0508		\$ -						
STN162	VSTN162	\$ 132.58	\$ 0.0118					\$ 0.0505		\$-						
STN378	VSTN378	\$ 486.14	\$ -					\$ 0.1931		\$ -						
STN557	VSTN557	\$ 251.49	\$ -					\$ 0.2290		\$-						
STN609	VSTN609	\$ 2,904.18	\$ 0.0119					\$ -		\$ -						
STN788	VSTN788	\$ 324.09	\$ -					\$ 0.1318		\$ -						
STN840	VSTN840	\$ 99.96	\$ 0.0119					\$ 0.0508		\$ -						
STNB164	VSTNB164 (back-up)	\$ -	\$ 0.0118					\$ -		\$ -						
STNB796	VSTNB796 (back-up)	\$-	\$-					\$ -		\$-						
1		1														

Table 46:JSO PV tariff schedule 2017/18

	SA Power Networks' Tariffs 2017/18	Supply		Ener	rgy based us	sage		Annual	agreed kVA	demand	Monthly	actual kVA	demand	Monthl	y actual kW	demand
	Final JSO (PV FiT) Prices Schedule	Supply	Usage	Usage	Usage	Usage Off-	Controlled				Summer	Year	Year	Summer	Winter	Year
	comprises PV FiT recovery only JSO (PV)	Rate	Block 1	Block 2	Peak	Peak	Load	Block 1	Block 2	Additional	Peak	Shoulder	Off-Peak	Peak	Shoulder	Off-Peak
	excludes GST, Metering	\$/day	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs							Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia	I Tariff Class															
RSR	Residential	\$ 0.0337	\$ 0.0098	\$ 0.0098			\$ 0.0098									
MRD	Residential Monthly Actual kW Demand	\$ 0.0337	\$ 0.0098				\$ 0.0098							\$ -	\$-	\$ -
Small Busi	ness Tariff Class															
LVUU	Unmetered 12 hour (streetlights)		\$ 0.0062													
LVUU24	Unmetered 24 hour		\$ 0.0062													
BSR	Business Single-Rate (obsolete July 2010)	\$ 0.0337	\$ 0.0062				\$ 0.0062									
B2R	Business Two-Rate	\$ 0.0337			\$ 0.0062	\$ 0.0062	\$ 0.0062									
SBD	Business Monthly Actual kVA Demand	\$ 0.0337	\$ 0.0062								\$ -	\$-	\$ -			
SBDT	Business Monthly Actual kVA Demand Transition	\$ 0.0337			\$ 0.0062	\$ 0.0062					\$ -	\$-	\$ -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ 0.0337	\$ 0.0062					\$-	\$-	\$ -						
BSRN	Business Single-Rate (negotiated service)	\$ 0.0337	\$ 0.0062													
B2RN	Business Two-Rate (negotiated service)	\$ 0.0337			\$ 0.0062	\$ 0.0062										
<u> </u>																
Large Bus	ness LV Tariff Class (LV and >160 MWh)															
LBSR	Business Single-Rate Transition	\$ -	\$ 0.0042			0	\$ 0.0042									
LB2R	Business Iwo-Rate Transition	5 -			\$ 0.0042	\$ 0.0042	\$ 0.0042				0					
BD	Business Monthly Actual KVA Demand	ъ - с	\$ 0.0042		¢ 0.00 to	¢ 0.0010					ф -	ъ - ¢	ф -			
	Business Monthly Actual KVA Demand Trans. (obs. July 2016)	ф -	\$ 0.0040		φ 0.0042	\$ 0.0042		¢	2	¢	φ -	φ -	φ -			
	Seate served A served A presed (VA Demand	ъ - с	\$ 0.0042					ъ - с	ъ - с	 -						
LVSG	Sponsgrounds Annual Agreed kVA Demand	ф - с	\$ 0.0042					ф - с	ъ - с	- ¢						
	Business Annual Agreed kVA Demand (back-up)	ф -	\$ 0.0042					ф - с	ф - с	ф - с						
	Dusiness Annual Agreed KVA Demand (negotiated service)	φ -	\$ 0.0042					φ -	φ -	φ -						
High Volta	ne Business Tariff Class		1											1		
B2B124H	High Voltage Business Two-Rate (obsolete, July 2015)	\$ - 2			\$ 0.0028	\$ 0.0028										
HBD	Business Monthly Actual k\/A Demand	φ \$	\$ 0.0028		φ 0.0020	φ 0.0020					¢ -	¢.,	\$ _			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	ф 5 -	\$ 0.0028					s -		s -	Ψ	Ψ	Ψ			
HV	HV Business Annual Agreed kVA Demand	\$-	\$ 0.0028					\$ -		\$ -						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ -	\$ 0.0028					\$ -		\$ -						
HVB	Business HV Demand kVA (back-up)	\$-	\$ 0.0028					\$ -		\$ -						
HVN	Business HV Demand kVA (negotiated service)	\$ -	\$ 0.0028					\$ -		\$ -						
HVS658	Business HV Demand kVA (negotiated service)	\$ -	\$ -					\$ -		\$ -						
Major Busi	ness Tariff Class															
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)	\$ -	\$ 0.0007					\$ -		\$ -						
ZSNB	Zone Substation kVA (back-up)	\$ -	\$ 0.0007					\$ -		\$ -						
STN	Sub Transmission Annual Agreed kVA Demand (non-locational)	\$ -	\$ 0.0007					\$ -		\$ -						
STNB	Subtransmission kVA (back-up)	\$ -	\$ 0.0007					\$-		\$ -						
	Zone Substation Annual Agreed kVA Demand (locational)															
ZSN021	ZSN021	\$ -	\$ 0.0007					\$ -		\$ -						
ZSN022	ZSN022	\$ -	\$ 0.0007					\$ -		\$ -						
ZSN024	ZSN024	\$ -	\$ 0.0007					\$ -		\$ -						
ZSN026	ZSN026	\$ -	\$ -					\$ -		\$ -						
2SN035	ZSN035	- ÷	\$ 0.0007					\$ - ¢		\$ -						
25N131	ZSN131	ъ - с	\$ 0.0007					ъ - ¢		ъ - с						
ZSN228	ZSN228 75N439	ф -	\$ 0.0007					ф -		ф -						
231N438	201V438 201/000	ф -	\$ 0.0007					ф -		ъ -						
25N608	ZSN608	ф -	\$ 0.0007					ф -		ф -						
ZOINB230	Sub Transmission Annual Agroad kVA Domand (locational)	φ -	\$ 0.0007					φ -		φ -						
STN018	VSTN018	¢	\$ 0.0007					\$		\$.						
STN084	VSTN084	\$ -	\$ 0.0007					\$ -		\$ -						
STN161	VSTN161	\$ -	\$ 0.0007					\$ -		\$ -						
STN162	VSTN162	\$ -	\$ 0,0007					\$ -		\$ -						
STN378	VSTN378	\$ -	\$ 0.0007					\$ -		\$ -						
STN557	VSTN557	\$ -	\$ 0.0007					\$ -		\$ -						
STN609	VSTN609	\$ -	\$ 0.0007					\$ -		\$ -						
STN788	VSTN788	\$ -	\$ 0.0007					\$ -		\$ -						
STN840	VSTN840	\$ -	\$ 0.0007					\$ -		\$ -						
STNB164	VSTNB164 (back-up)	\$ -	\$ 0.0007					\$ -		\$ -						
STNB796	VSTNB796 (back-up)	\$ -	\$ 0.0007					\$ -		\$ -						
	· · · ·															

Table 47: JSO PV indicative tariff schedule 2018/19

	SA Power Networks' Tariffs 2018/19	Supply		Ener	gy based us	age		Annual	agreed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW	demand
	Indicative Distribution Prices Schedule	Supply	Usage	Usage	Usage	Usage Off-	Controlled				Summer	Year	Year	Summer	Winter	Year
	comprises DUoS only JSO (PV)	Rate	Block 1	Block 2	Peak	Peak	Load	Block 1	Block 2	Additional	Peak	Shoulder	Off-Peak	Peak	Shoulder	Off-Peak
	excludes GST, Metering	\$/day	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs							Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia	I Tariff Class															
RSR	Residential	\$ 0.0334	\$ 0.0097	\$ 0.0097			\$ 0.0097							¢	¢	¢
MRD	Residential Monthly Actual KW Demand	\$ 0.0334	\$ 0.0097				\$ 0.0097							ъ -	ъ -	ф -
Small Bus	iness Tariff Class															
LVUU	Unmetered 12 hour (streetlights)	s -	\$ 0.0062													
LVUU24	Unmetered 24 hour	\$ -	\$ 0.0062													
BSR	Business Single-Rate (obsolete July 2010)	\$ 0.0334	\$ 0.0062				\$ 0.0062									
B2R	Business Two-Rate	\$ 0.0334			\$ 0.0062	\$ 0.0062	\$ 0.0062									
SBD	Business Monthly Actual kVA Demand	\$ 0.0334	\$ 0.0062								\$ -	\$-	\$ -			
SBDT	Business Monthly Actual kVA Demand Transition	\$ 0.0334			\$ 0.0062	\$ 0.0062					\$ -	\$ -	\$ -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ 0.0334	\$ 0.0062					\$-	\$ -	\$ -						
B2RN	Business Two-Rate (negotiated service)	\$ 0.0334	\$ 0.0062		\$ 0.0062	\$ 0.0062										
DZINI	Dusiness Two Nate (negotiated service)	φ 0.0004			φ 0.0002	φ 0.0002										
Large Bus	iness LV Tariff Class (LV and >160 MWh)															
LBSR	Business Single-Rate Transition	\$ -	\$ 0.0042				\$ 0.0042									
LB2R	Business Two-Rate Transition	\$ -			\$ 0.0042	\$ 0.0042	\$ 0.0042									
BD	Business Monthly Actual kVA Demand	\$-	\$ 0.0042								\$ -	\$-	\$ -			
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 2016)	\$ -			\$ 0.0042	\$ 0.0042					\$ -	\$ -	\$-			
LV	Business Annual Agreed kVA Demand	\$ -	\$ 0.0042					\$ -	\$ -	\$ -						
LVSG	Sportsgrounds Annual Agreed kVA Demand	ф -	\$ 0.0042					ф -	ф - с	ф -						
	Business Annual Agreed kVA Demand (back-up) Business Annual Agreed kVA Demand (back-up)	ф - \$-	\$ 0.0042					ф - \$-	арт – S –	э - \$ -						
2010	Business Annual Agreed KVA Demand (negotiated service)	Ψ	\$ 0.0042					Ψ	Ψ	Ψ						
High Volta	ge Business Tariff Class															
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$ -			\$ 0.0028	\$ 0.0028										
HBD	Business Monthly Actual kVA Demand	\$ -	\$ 0.0028								\$ -	\$-	\$ -			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ -	\$ 0.0028					\$ -		\$ -						
HV	HV Business Annual Agreed kVA Demand	\$ -	\$ 0.0028					\$ -		\$ -						
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ -	\$ 0.0028					\$ -		\$ -						
HVB	Business HV Demand KVA (back-up)	ъ - с	\$ 0.0028					\$ - ¢		\$ - ¢						
HV/S658	Business HV Demand kVA (negotiated service)	ф с	\$ 0.0028					ф - С		ф - с -						
1100000	Dusiness IIV Demand KVA (negotiated Service)	Ψ	Ψ					Ψ		Ψ						
Major Bus	ness Tariff Class															
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)	\$-	\$ 0.0007					\$-		\$ -						
ZSNB	Zone Substation kVA (back-up)	\$ -	\$ 0.0007					\$ -		\$ -						
STN	Sub Transmission Annual Agreed kVA Demand (non-locational)	\$ -	\$ 0.0007					\$ -		\$ -						
STNB	Subtransmission kVA (back-up)	\$-	\$ 0.0007					\$-		\$ -						
79N021	Zone Substation Annual Agreed KVA Demand (locational)	¢ .	\$ 0,0007					¢		¢						
ZSN021 ZSN022	ZSN021 ZSN022	а - С	\$ 0.0007					φ - \$		ф - \$						
ZSN024	ZSN024	\$-	\$ 0.0007					\$ -		\$ -						
ZSN026	ZSN026	\$-	\$ -					\$-		\$ -						
ZSN035	ZSN035	\$-	\$ 0.0007					\$ -		\$ -						
ZSN131	ZSN131	\$ -	\$ 0.0007					\$-		\$ -						
ZSN228	ZSN228	\$ -	\$ 0.0007					\$ -		\$ -						
ZSN438	ZSN438	\$ -	\$ 0.0007					\$ -		\$ -						
ZSN608	ZSN608	\$ -	\$ 0.0007					\$ - ¢		\$ -						
23106230	Sub Transmission Annual Agreed kVA Demand (locational)	φ -	\$ 0.0007					φ -		φ -						
STN018	VSTN018	\$ -	\$ 0.0007					\$-		\$ -						
STN084	VSTN084	\$ -	\$ 0.0007					\$ -		\$ -						
STN161	VSTN161	\$-	\$ 0.0007					\$-		\$ -						
STN162	VSTN162	\$ -	\$ 0.0007					\$ -		\$ -						
STN378	VSTN378	\$ -	\$ 0.0007					\$ -		\$ -						
STN557	VSTN557	5 -	\$ 0.0007					\$ -		5 -						
S 11N609	VS1N609	ъ - с	\$ 0.0007					ф -		ъ - ¢						
STN840	VS119700 VSTN840	9 - S -	\$ 0.0007					ф - \$-		φ - \$ -						
STNB164	VSTNB164 (back-up)	\$ -	\$ 0.0007					\$ -		\$ -						
STNB796	VSTNB796 (back-up)	\$ -	\$ 0.0007					\$ -		\$ -						
1																

Table 48: JSO PV indicative tariff schedule 2019/20

	SA Power Networks' Tariffs 2019/20	Su	Inply Energy based usage						Annual	agreed kVA	demand	Monthly	actual kVA	demand	Monthly actual kW demand		
	Indicative Distribution Brices Schedule	e	mphy	Lion go	Llongo	lloogo		Controlled	Annuar	agreed KTA	ucilianu	Summer	Veer	Veer	Summer	Winter	Veer
	JSO (PV)	Su	ippiy	Usage	Usage Blook 2	Usage	Usage On-	Controlled	Block 1	Block 2	Additional	Summer	fear	fear Off Book	Summer	Shouldor	fear Off Book
	excludes CST. Metering		dov	C/L/M/b	BIUCK Z	fear ¢/LML	fear ¢/LAA/b	¢/LM/b	C/k//A/day	CIUCK Z	¢/k/A/day	fear ¢//////dov	\$/k\/A/day	CII-Feak	fear ¢/k/k/day	\$//www.dow	Cli-Feak
	Tariff Class and Tariffs	¢/	uay	\$/KVVII	\$/KVVII	\$/KVVII	\$/KVVII	\$/KVVII	\$/KVA/uay	\$/KVA/Udy	\$/KVA/Uay	\$/KV A/uay	\$/KVA/uay	\$/KVA/uay	\$/KW/uay	3/KW/Uay	\$/KVV/uay
De si de stiel i									Annual	Annual	Annual	5 monuis	12 monuis	12 monuis	5 monuis	7 monuis	12 monuis
Residential	Pagidential	e /	0 0277	¢ 0.01	0 € 0.0110			¢ 0.0110									
MPD	Residential Monthly Actual I/W Demand	9 0	0.0377	\$ 0.01	0 \$ 0.0110			\$ 0.0110							¢	¢	¢
MRD	Residential Monthly Actual KW Demand	φι	0.0377	\$ 0.01	0			\$ 0.0110							φ -	φ -	φ -
Small Buein	oss Tariff Class	-															
	Lipmotored 12 hour (streetlights)	¢		¢ 0.00	70												
	Lipmetered 24 hour	¢		\$ 0.00	0 70												
BSR	Business Single-Rate (obsolete July 2010)	\$ (0.0377	\$ 0.00	<u> </u>			\$ 0.0070									
B2R	Business Two-Rate	s d	0.0377	φ 0.00	0	\$ 0.0070	\$ 0.0070	\$ 0.0070									
SBD	Business Monthly Actual kVA Demand	\$ (0.0377	\$ 0.00	0	¢ 0.0070	φ 0.0070	\$ 0.0070				\$ -	s -	s -			
SBDT	Business Monthly Actual kVA Demand Transition	\$ (0.0377	φ 0.00	•	\$ 0.0070	\$ 0.0070					\$ -	\$-	\$ -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$ (0.0377	\$ 0.00	0				\$ -	\$ -	\$ -	Ť	· *	Ť			
BSRN	Business Single-Rate (negotiated service)	\$ (0.0377	\$ 0.00	0					·							
B2RN	Business Two-Rate (negotiated service)	\$ (0.0377			\$ 0.0070	\$ 0.0070										
		·															
Large Busin	ess LV Tariff Class (LV and >160 MWh)																
LBSR	Business Single-Rate Transition	\$	-	\$ 0.00	7			\$ 0.0047									
LB2R	Business Two-Rate Transition	\$	-			\$ 0.0047	\$ 0.0047	\$ 0.0047									
BD	Business Monthly Actual kVA Demand	\$	-	\$ 0.00	7	• • • • •						\$ -	s -	\$ -			
BDT	Business Monthly Actual kVA Demand Trans, (obs. July 2016	\$	-	• • • • •		\$ 0.0047	\$ 0.0047					\$ -	\$-	\$ -			
LV	Business Annual Agreed kVA Demand	ŝ	-	\$ 0.00	17		• ••••		\$ -	\$-	\$ -	+	Ť	Ŧ			
LVSG	Sportsgrounds Annual Agreed kVA Demand	ŝ	-	\$ 0.00	17				\$ -	\$ -	\$ -						
LVB	Business Annual Agreed kVA Demand (back-up)	ŝ	-	\$ 0.00	17				\$ -	\$ -	\$ -						
LVN	Business Annual Agreed kVA Demand (back up)	\$	-	\$ 0.00	17				\$ -	\$ -	\$ -						
	Babiliood / Inidal / Grood IC// Bolhana (liogoliated coritoo)	Ŷ		φ 0.00					Ŷ	Ŷ	Ŷ						
High Voltage	e Business Tariff Class																
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)	\$	-			\$ 0.0031	\$ 0.0031										
HBD	Business Monthly Actual kVA Demand	ŝ	-	\$ 0.00	31		• •••••					s -	s -	s -			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	ŝ	-	\$ 0.00	31				\$ -		\$ -	+	Ť	Ŧ			
HV	HV Business Annual Agreed kVA Demand	\$	-	\$ 0.00	31				\$ -		\$ -						
HV400N	Business HV Demand < 400 kVA (negotiated service)	ŝ	-	\$ 0.00	31				\$ -		\$ -						
HVB	Business HV Demand kVA (back-up)	ŝ	-	\$ 0.00	31				\$ -		\$ -						
HVN	Business HV Demand kVA (negotiated service)	ŝ	-	\$ 0.00	31				\$ -		\$ -						
HVS658	Business HV Demand kVA (negotiated service)	ŝ	-	\$ -					\$ -		\$ -						
	(13	·															
Major Busine	ess Tariff Class																
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)	\$	-	\$ 0.00	8				\$ -		\$ -						
ZSNB	Zone Substation kVA (back-up)	\$	-	\$ 0.00	8				\$ -		\$ -						
STN	Sub Transmission Annual Agreed kVA Demand (non-locational	\$	-	\$ 0.00	8				\$-		\$ -						
STNB	Subtransmission kVA (back-up)	\$	-	\$ 0.00)8				\$ -		\$ -						
	Zone Substation Annual Agreed kVA Demand (locational	2															
ZSN021	ZSN021	\$	-	\$ 0.00)8				\$ -		\$ -						
ZSN022	ZSN022	\$	-	\$ 0.00	8				\$ -		\$ -						
ZSN024	ZSN024	\$	-	\$ 0.00	8				\$ -		\$ -						
ZSN026	ZSN026	\$	-	\$-					\$ -		\$ -						
ZSN035	ZSN035	\$	-	\$ 0.00)8				\$ -		\$ -						
ZSN131	ZSN131	\$	-	\$ 0.00	8				\$ -		\$ -						
ZSN228	ZSN228	\$	-	\$ 0.00)8				\$ -		\$ -						
ZSN438	ZSN438	\$	-	\$ 0.00	8				\$ -		\$ -						
ZSN608	ZSN608	\$	-	\$ 0.00	8				\$ -		\$ -						
ZSNB230	ZSNB230 (back-up)	\$	-	\$ 0.00	8				\$ -		\$ -						
0701040	Sub Transmission Annual Agreed KVA Demand (location	ai)		• • • • •					^		•						
STN018	VSIN018	\$	-	\$ 0.00	8				\$ - ¢		\$ - ¢						
S 11NU84	V S 110084	ф Ф	-	\$ 0.00	0				ф -		ф -						
STINIO	VSTN161	¢	-	\$ 0.00	18				ъ - с		ъ - с						
STIN162	VS1N162	\$	-	\$ 0.00	18				ъ - с		3 -						
S 11N378	VSTN378	¢	-	\$ 0.00	18				ъ - с		ъ - с						
STNCCO		Ф Ф	-	\$ 0.00	10				ф - с		ъ - с						
S 1N609	VSIN609	\$	-	\$ 0.00	8				ъ - с		ъ -						
S1N/88	VS1N/88	\$	-	\$ 0.00	8				ъ - с		ъ -						
S1N840		\$	-	\$ 0.00	8				ф -		ф -						
STND706	VSTNBT04 (back-up)	9	-	\$ 0.00	10				ф - с		<u></u> ф -						
3 INB/90	VS INB/96 (back-up)	Ф	-	φ 0.00	0				φ -		φ -						
									-								

 Table 49:
 Negotiated services tariff schedule 2017/18

SA Power Networks' Tariffs 2017/18				Ener	gy based us	age		Annual agreed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW o	demand
	Final Negotiated Service Prices Neg Serv comprises negotiated services only	Supply Rate	Usage Block 1	Usage Block 2	Usage Peak	Usage Off- Peak	Controlled Load	Block 1 Block 2	Additional	Summer Peak	Year Shoulder	Year Off-Peak	Summer Peak	Winter Shoulder	Year Off-Peak
di	stribution element charged as negotiated service	\$/day	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kVA/day \$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
Residentia	I Tariff Class							Annual Annual	Annuar	5 months	TE monting	12 months	5 montais	7 11011113	12 months
RSR MRD	Residential Residential Monthly Actual kW Demand (min demand 1.0 kW)	\$- \$-	\$- \$-	\$ -			\$- \$-						\$-	\$-	\$-
Small Bus	iness Tariff Class		¢												
LVUU24	Unmetered 12 hour (streetlights)		ъ - \$ -												
BSR	Business Single-Rate (obsolete July 2010)	\$-	\$ -				\$-								
B2R	Business Two-Rate	\$ -	<u>_</u>		\$ -	\$ -	\$ -			<u>_</u>		•			
SBD	Business Monthly Actual KVA Demand	\$ - \$ -	ъ -		¢ .	¢ .				\$ - \$ -	\$ - \$ -	ъ - с -			
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)	\$-	\$ -		Ψ	Ψ		s - s -	s -	Ψ	Ψ	Ŷ			
BSRN	Business Single-Rate (negotiated service)	\$ 0.3460	\$ 0.0975												
B2RN	Business Two-Rate (negotiated service)	\$ 0.3460			\$ 0.1099	\$ 0.0550									
Large Bus	iness LV Tariff Class (LV and >160 MWh)														
LBSR	Business Single-Rate Transition	\$ - ¢	\$-		¢	¢	\$ - ¢								
BD	Business Monthly Actual kVA Demand	э - \$ -	\$ -		Φ -	φ -	φ -			s -	\$ -	s -			
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 2016)	\$ -	Ť		\$ -	\$-				\$ -	\$ -	\$-			
LV	Business Annual Agreed kVA Demand	\$ -	\$ -					\$ - \$ -	\$ -						
LVSG	Sportsgrounds Annual Agreed kVA Demand	\$ -	\$ -					\$ - \$ - \$ 0.1007 \$ 0.1007	\$ - \$ 0.1007						
	Business Annual Agreed kVA Demand (back-up)	\$ 10.2750	\$ 0.0252					\$ 0.2112 \$ 0.1584	\$ 0.1097						
			• • • •					• • • • • •							
B2B124H	High Voltage Business Two-Rate (obsolete July 2015)	s -			\$ -	s -									
HBD	Business Monthly Actual kVA Demand	\$-	\$-		Ψ	Ψ				\$-	\$-	\$ -			
HV400	HV Business Annual Agreed kVA Demand < 400 kVA	\$ -	\$ -					\$ -	\$ -						
HV	HV Business Annual Agreed kVA Demand	\$ -	\$ -					\$ -	\$ -						
HV400N	Business HV Demand < 400 KVA (negotilated service) Business HV Demand kVA (back-up)	\$ 10.2750	\$ 0.0252					\$ 0.2112 \$ 0.1315	\$ 0.1097						
HVN	Business HV Demand kVA (negotiated service)	\$-	\$ 0.0145					\$ 0.1545	\$ 0.1315						
HVS658	Business HV Demand kVA (negotiated service)	\$-	\$ 0.0145					\$ 0.1545	\$ 0.1315						
Major Bus	ness Tariff Class														
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)	\$ -	\$ -					\$ -	\$ -						
ZSNB	Zone Substation kVA (back-up) Sub Transmission Appual Agreed kVA Demand (non-locational)	\$ - \$ -	\$ 0.0046					\$ 0.1015	\$ 0.1015 \$ -						
STNB	Subtransmission kVA (back-up)	\$ -	\$ 0.0011					\$ 0.0230	\$ 0.0230						
_	Zone Substation Annual Agreed kVA Demand (locational)	•						• • • • •	• • • • • •						
ZSN021	ZSN021	\$ -	\$ -					\$ -	\$ -						
ZSN022	ZSN022 ZSN034	\$ - ¢	\$ - ¢ .					\$ - ¢	\$ - ¢						
ZSN024 ZSN026	ZSN024 ZSN026	\$ -	\$ -					\$ -	\$- \$-						
ZSN035	ZSN035	\$-	\$-					\$ -	\$-						
ZSN131	ZSN131	\$ -	\$ -					\$ -	\$ -						
ZSN228	ZSN228 ZSN228	\$ - ¢	\$ - ¢ .					\$ - ¢	\$ - ¢						
ZSN608	ZSN608	\$ - \$	\$ - \$					\$ -	\$ - \$						
ZSNB230	ZSNB230 (back-up)	\$ -	\$ 0.0046					\$ 0.1015	\$ 0.1015						
	Sub Transmission Annual Agreed kVA Demand (locational)														
STN018	VSTN018	\$ - ¢	\$ - ¢					\$ - ¢	\$ - ¢						
STN161	VSTN161	ф - \$-	φ - \$ -					ф - \$-	э - \$-						
STN162	VSTN162	\$ -	\$ -					\$ -	\$-						
STN378	VSTN378	\$ -	\$ -					\$ -	\$ -						
STN557	VSTN557	\$ -	\$ -					\$ -	\$ -						
STN788	VS1N609 VSTN788	ъ - \$ -	ъ - \$ -					\$ - \$ -	ъ - \$ -						
STN840	VSTN840	\$ -	\$ -					\$ -	\$ -						
STNB164	VSTNB164 (back-up)	\$-	\$ 0.0011					\$ 0.0230	\$ 0.0230						
STNB796	VSTNB796 (back-up)	\$ -	\$ 0.0011					\$ 0.0230	\$ 0.0230						

Table 50: Negotiated services indicative tariff schedule 2018/19

SA Power Networks' Tariffs 2018/19		Su	, pply		Ene	rgy based us	sage		Annual a	greed kVA	demand	Monthly	actual kVA	demand	Monthly	actual kW o	lemand
	Indicative Negotiated Service Prices	Su	pply	Usage	Usage	Usage	Usage Off-	Controlled				Summer	Year	Year	Summer	Winter	Year
	comprises negotiated services only Neg Serv	R	ate	Block 1	Block 2	Peak	Peak	Load	Block 1	Block 2	Additional	Peak	Shoulder	Off-Peak	Peak	Shoulder	Off-Peak
di	stribution element charged as negotiated service	\$/	day	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kW/day	\$/kW/day	\$/kW/day
	Tariff Class and Tariffs								Annual	Annual	Annual	5 months	12 months	12 months	5 months	7 months	12 months
Residentia	I Tariff Class																
RSR	Residential																
MRD	Residential Monthly Actual KW Demand (min demand 1.0 KW)																
Small Bus	iness Tariff Class																
LVUU	Unmetered 12 hour (streetlights)																
LVUU24	Unmetered 24 hour																
BSR	Business Single-Rate (obsolete July 2010)																
B2R	Business Two-Rate																
SBD	Business Monthly Actual kVA Demand																
SBDT	Business Monthly Actual kVA Demand Transition																
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)		0504	¢ 0.0000													
BORN	Business Single-Rate (negotiated service)	\$ C	0.3534	\$ 0.0964		¢ 0.1094	¢ 0.0542										
DZKIN	Business Two-Rate (negotiated service)	φU	1.5554			\$ 0.1064	\$ 0.0542										
Large Bus	iness LV Tariff Class (LV and >160 MWh)	1															
LBSR	Business Single-Rate Transition																
LB2R	Business Two-Rate Transition																
BD	Business Monthly Actual kVA Demand																
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 2016)																
LV	Business Annual Agreed kVA Demand																
LVSG	Sportsgrounds Annual Agreed kVA Demand	e 40	4005	¢ 0.004					¢ 0.4000	¢ 0.4000	¢ 0.4000						
	Business Annual Agreed kVA Demand (back-up)	\$ 10	1365	\$ 0.024					\$ 0.1082	\$ 0.1082	\$ 0.1082						
	Business Annual Agreed KVA Demand (negotiated service)	φιά	. 1305	\$ 0.0243					φ 0.2004	\$ 0.1505	\$ 0.1002						
High Volta	ge Business Tariff Class																
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)																
HBD	Business Monthly Actual kVA Demand																
HV400	HV Business Annual Agreed kVA Demand < 400 kVA																
HV	HV Business Annual Agreed kVA Demand																
HV400N	Business HV Demand < 400 kVA (negotiated service)	\$ 10	0.1365	\$ 0.0249					\$ 0.2084		\$ 0.1082						
HVB	Business HV Demand kVA (back-up)	\$	-	\$ 0.014					\$ 0.1298		\$ 0.1298						
	Business HV Demand KVA (negotiated service)	ф Ф	-	\$ 0.014					\$ 0.1525		\$ 0.1298						
1100000	Dusiness IIV Demand KVA (negotiated service)	Ψ		φ 0.0140					φ 0.1020		φ 0.1250						
Major Bus	ness Tariff Class																
ZSŇ	Zone Substation Annual Agreed kVA Demand (non-locational)																
ZSNB	Zone Substation kVA (back-up)	\$	-	\$ 0.0046	i				\$ 0.1002		\$ 0.1002						
STN	Sub Transmission Annual Agreed kVA Demand (non-locational)					_											
STNB	Subtransmission kVA (back-up)	\$	-	\$ 0.001					\$ 0.0227		\$ 0.0227						
76 10001	Zone Substation Annual Agreed KVA Demand (locational)																
ZSIN021	ZSN021 ZSN022																
ZSN022	ZSN022 ZSN024																
ZSN026	ZSN026																
ZSN035	ZSN035																
ZSN131	ZSN131																
ZSN228	ZSN228																
ZSN438	ZSN438					_											
251N608	ZSINDUB ZSNB230 (back-up)	¢		\$ 0.004					\$ 0,1002		\$ 0.1000						
23110230	Sub Transmission Annual Agreed kVA Demand (locational)	φ	-	\$ 0.0046					\$ 0.1002		\$ 0.1002						
STN018	VSTN018	1															
STN084	VSTN084	I															
STN161	VSTN161	l															
STN162	VSTN162																
STN378	VSTN378																
STN557	VSTN557	I				_											
S IN609	VSTN509	I															
STN840	VSTN840	l															
STNB164	VSTNB164 (back-up)	s	-	\$ 0.001					\$ 0.0227		\$ 0.0227						
STNB796	VSTNB796 (back-up)	\$	-	\$ 0.001					\$ 0.0227		\$ 0.0227						

Table 51: Negotiated services indicative tariff schedule 2019/20

	SA Power Networks' Tariffs 2019/20	Su	nnlv					Annual		demand	Monthly	actual kVA	demand	Monthly actual kW deman			
	Indicative Negotiated Service Prices	Cu Cu		11	Line	gy based as	Line are Off	Controlled	Annuar	Igreed KVA	acinana	Cummen	Veen	Veee	Cummen	Minter	Veer
	comprises periodiated services only Neg Serv	Su	ppiy	Usage Block 1	Usage Block 2	Usage	Usage On-	Controlled	Block 1	Pleak 2	Additional	Summer	fear	fear Off Book	Summer	Shouldor	fear Off Book
	intribution clement observed as negatisted services	R.	ate	BIOCK 1	BIOCK Z	Peak	Peak ¢/www	Load ¢/k/k/k	BIOCK 1	BIOCK Z		Peak ¢/////dov	Shoulder \$/k\/A/dev	CIT-Peak	Peak ¢////dov	Shoulder	CIT-Peak
u	Tariff Class and Tariffs		uay	\$/KVVII	φ/ K ¥ ¥ 11	\$/KVVII	\$/KVVII	\$/KVVII	\$/KVA/uay	\$/KVA/uay	\$/KVA/uay	5/KVA/day	\$/KVA/uay	\$/KVA/uay	\$/KW/day	\$/KW/Udy	\$/KW/uay
Posidontial .									Annuar	Annual	Annuar	5 monuis	12 11011015	12 monuis	5 monuis	7 monuis	12 11011015
DSD	Posidential																
MPD	Residential Monthly Actual kW/ Domand (min domand 1.0 kW/	、 、															
WITE	Residential Monthly Actual KW Demand (min demand 1.0 KW)	í															
Small Busin	ess Tariff Class																
LVUU	Unmetered 12 hour (streetlights)																
LVUU24	Unmetered 24 hour																
BSR	Business Single-Rate (obsolete July 2010)																
B2R	Business Two-Rate																
SBD	Business Monthly Actual kVA Demand																
SBDT	Business Monthly Actual kVA Demand Transition																
SLV	Business Annual Agreed kVA Demand (obsolete July 2016)																
BSRN	Business Single-Rate (negotiated service)	\$ C	0.3634	\$ 0.0989													
B2RN	Business Two-Rate (negotiated service)	\$ C	0.3634			\$ 0.1115	\$ 0.0558										
Large Busin	ess LV Tariff Class (LV and >160 MWh)																
LBSR	Business Single-Rate Transition																
LB2R	Business Two-Rate Transition																
BD	Business Monthly Actual kVA Demand																
BDT	Business Monthly Actual kVA Demand Trans. (obs. July 2016	5)															
LV	Business Annual Agreed kVA Demand																
LVSG	Sportsgrounds Annual Agreed kVA Demand																
LVB	Business Annual Agreed kVA Demand (back-up)	\$ 10).4237	\$ 0.0256					\$ 0.1113	\$ 0.1113	\$ 0.1113						
LVN	Business Annual Agreed kVA Demand (negotiated service)	\$ 10).4237	\$ 0.0256					\$ 0.2143	\$ 0.1607	\$ 0.1113						
High Voltage	Business Tariff Class																
B2R124H	High Voltage Business Two-Rate (obsolete July 2015)																
	Business Monthly Actual KVA Demand																
	HV Business Annual Agreed KVA Demand																
	Business HV Demand $< 400 \text{ kVA}$ (negotiated service)	\$ 10	4237	\$ 0.0256					\$ 0.2143		\$ 0.1113						
HVB	Business HV Demand kVA (heck-up)	\$	-	\$ 0.0147					\$ 0.1335		\$ 0.1335						
HVN	Business HV Demand kVA (negotiated service)	\$	-	\$ 0.0147					\$ 0.1568		\$ 0.1335						
HVS658	Business HV Demand kVA (negotiated service)	\$	-	\$ 0.0147					\$ 0.1568		\$ 0.1335						
	Basinese III Beinana IIII (ingenalea contee)	Ŷ		¢ 0.0111					φ 0.1000		¢ 0.1000						
Maior Busin	ess Tariff Class																
ZSN	Zone Substation Annual Agreed kVA Demand (non-locational)																
ZSNB	Zone Substation kVA (back-up)	\$	-	\$ 0.0047					\$ 0.1030		\$ 0.1030						
STN	Sub Transmission Annual Agreed kVA Demand (non-locationa	al)															
STNB	Subtransmission kVA (back-up)	\$	-	\$ 0.0012					\$ 0.0233		\$ 0.0233						
	Zone Substation Annual Agreed kVA Demand (locational	5															
ZSN021	ZSN021																
ZSN022	ZSN022																
ZSN024	ZSN024																
ZSN026	ZSN026	I															
ZSN035	ZSN035	ļ															
ZSN131	ZSN131																
ZSN228	ZSN228																
ZSN438	ZSN438																
ZSN608		•		• • • • • • • • • •					A 0 4000								
ZSNB230	ZSNB230 (back-up)	⇒	-	\$ 0.0047					\$ 0.1030		ъ 0.1030						
CTNO19	Sub Transmission Annual Agreed KVA Demand (locationa	a <i>i)</i>															
STN084	VSTN084																
STN161	VSTN161	l															
STN162	VSTN162	I															
STN378	VSTN378	1															
STN557	VSTN557																
STN609	VSTN609																
STN788	VSTN788																
STN840	VSTN840	1							1								
STNB164	VSTNB164 (back-up)	\$	-	\$ 0.0012					\$ 0.0233		\$ 0.0233						
STNB796	VSTNB796 (back-up)	\$	-	\$ 0.0012					\$ 0.0233		\$ 0.0233						
1		1															

Notes accompanying the 2017/18 tariff schedules

- 1. Network tariffs are calculated on a GST <u>exclusive</u> basis. GST is added to the distribution tariffs.
- 2. SA Power Networks must assign each Distribution Network User to a distribution tariff in respect of each of its connection points in accordance with the following principles.

Assignment to cost-reflective (demand based) tariffs

- i. A Distribution Network User that connected to or altered the supply arrangements with the Distribution Network from 1 July 2010 and requiring more than 100 amps (70 kVA) supply must be assigned to a distribution network tariff that includes a demand component in respect of that connection point.
- ii. A Distribution Network User connected to the Distribution Network that has a maximum demand of 250 kVA or more in respect of a connection point, must be assigned to a distribution tariff that includes a demand component in respect of that connection point.
- iii. From 1 July 2015, a Distribution Network User connected to the Distribution Network that would qualify as a large customer (annual usage of 160 MWh or more) must be assigned to a distribution network tariff that includes a demand component in respect of that connection point. If the customer has a Type 6 meter, then a transition business single-rate or transition business 2-rate tariff must be used until a Type 1-5 meter is installed.
- iv. A new Distribution Network Business User connecting or an existing Distribution Network Business User altering the supply arrangements to the Distribution Network from 1 July 2015 and requiring multi-phase supply must be assigned to a distribution network tariff that includes a demand component in respect of that connection point. A Type 1-5 meter is required at such sites. Customers should note that where they choose to have a Type 1-4 meter, they have the right to exercise choice regarding their metering service provider. Installation of a Type 1-5 meter by itself is not an alteration to supply, but installation of an inverter, eg for solar PV Equipment or Battery Storage, is an alteration to supply.

General notes applicable to demand tariffs:

- 1. Agreed Demand charges for business customers are determined on the basis of the maximum half-hour trading interval for:
 - a. Agreed Maximum Demand (Annual Peak Demand) on workdays between 1200 and 2100 local time, during November to March only;
 - b. Agreed additional maximum demand (Additional Demand), as the difference between the customer's anytime maximum demand and the agreed (peak) maximum demand; and
 - c. For business customers on the Sports Ground demand kVA tariff, the Agreed Peak Demand shall be determined on work days between 1200 and 1900 local time, during December to February only. Additional Demand shall be determined using all other times of the year.

- 2. Actual Demand charges for business customers are determined on the basis of the maximum half-hour trading interval since the last meter read (Type 1-4 meters are assumed to be read each calendar month) for:
 - a. Summer Peak Demand on work days between 1600 and 2100 local time, during November to March only;
 - b. Year-round Shoulder Demand on work days between 1200 and 1600 local time; and
 - c. Off-peak Demand at all other times (the price is zero for actual off-peak demand).
- 3. Actual Demand charges for residential customers are determined on the basis of the maximum half-hour trading interval since the last meter read (Type 1-4 meters are assumed to be read each calendar month) for:
 - a. Summer Peak Demand on all days between 1600 and 2100 local time during November to March only;
 - b. Winter Shoulder Demand on all days between 1600 and 2100 local time; and
 - c. Off-peak Demand at all other times (the price is zero for actual off-peak demand).
- 4. Peak energy is energy consumed on business days between the hours of 0700 and 2100 CST. Type 6 meters typically measure this component during week days whereas Type 1-5 meters will measure this in on work days. For customers with Type 6 metering that does not recognise specific days, peak energy is energy consumed on each day between the hours of 0700 and 2100 CST.
- 5. Off-peak energy is energy consumed other than peak energy.

Residential tariff notes:

- The low voltage residential single rate tariff is currently available to eligible residential customers taking supply at less than 1 kV. These customers ordinarily use a Type 1-6 National Electricity Market (NEM) compliant meter. The metered energy consumption is charged in two blocks. Block 1 is 0-4MWh pa, Block 2 is >4MWh pa.
- 2. The low voltage residential monthly actual demand tariff is available to eligible residential customers taking supply at less than 1 kV. These customers will require a Type 1-5 NEM compliant meter read at least monthly. The metered energy consumption is charged at a single rate. The maximum kW demand charge is based on the actual maximum demand measured over a half hour interval, on any day in the month between 16:00 and 21:00 hours local time. A higher price applies during the summer period (November to March) than the winter period (April to October). Currently, there is no charge for demand that is higher outside of the peak 16:00 and 21:00 local time, time period. The demand charge is applied on a 'per day' basis according to the days in the month.
 - 3. Controlled load is an optional partner tariff component used to control permanently installed hot water services and other appliances (including electric vehicles and battery chargers up to

32A), during off peak times between 23:00-07:00 hours Central Standard Time (**CST**). Operation anywhere within this window is permitted based on the customer's requirements but with a randomised start time. Where multiple appliances are connected to a single phase of the OPCL circuit, eg hot water, EV batteries, battery storage and under-floor heating, only one appliance can operate at a time on that phase. A solar sponge version is also available between 10:00-15:00 hours CST.

Small business tariff notes:

- The low voltage business two rate tariff has a TOU structure with peak and off-peak consumption charges. This tariff is the default tariff for new single phase customers. Peak charges (at a higher rate) apply work days 07:00-21:00 hours CST with all other times including non-work-days defined as off-peak (charged at a lower rate). Peak and off-peak is charged in single blocks. A Type 1-6 NEM compliant meter is required.
- 2. The small business monthly actual kVA demand transition tariff is mandatory for new multi-phase small business customers or existing small business customers who upgrade to a multi-phase supply and require a new meter. The usage portion has peak charges (at a higher rate) that apply work days 07:00-21:00 hours local time, with all other times including non-work-days defined as off-peak (charged at a lower rate). The demand charge is based on the actual maximum kVA demand measured over a half hour interval, on any day in the month between 12:00 and 16:00 hours local time, work days, for the shoulder period (12 months). An additional peak demand price applies during the peak period (November to March) between 16:00 and 21:00 hours local time, on workdays. Currently, there is no charge for demand that is higher outside of the peak 16:00 and 21:00 time period. The tariff is a combination of 50% business 2-rate and 50% small business actual demand. These customers require a Type 1-5 interval meter read at least monthly.
- 3. The small business actual kVA demand tariff is optional to small business customers taking supply at less than 1 kV. Metered energy consumption is charged at a single rate. Shoulder demand (12 months) applies to the monthly workday maximum kVA demand (measured over a half hour interval) between 12:00 and 16:00 hours local time, for each month of the year. Peak demand prices also apply during the peak period (November to March) between 16:00 and 21:00 hours local time, on workdays. These customers will require a Type 1-5 interval meter read at least monthly.
- 4. Unmetered supply tariffs are applicable to supply points that are not metered. Unmetered tariffs comprise of an energy rate that is applied to the calculated electricity consumption using an agreed algorithm from the applicable Metrology Procedure. Unmetered supply tariffs are generally invoiced monthly.
- 5. The business single rate tariff is a closed tariff that was available for use before July 2010. The consumption is charged on a flat scale (previously inclining block until July 2016).
- 6. The low voltage agreed kVA demand tariff is a closed tariff that was available for use before July 2016. The peak demand is agreed, and measured on work days between 12:00 and 21:00 hours local time, during the summer months of November to March and is charged on an inclining scale
in two demand blocks. Block 1: 0-1000kVA, block 2: >1000kVA. An additional demand applies where higher levels of demand are required during the year than are required during the peak demand period. Customers (through their retailer) can apply for agreed demand to be amended. Reduction requests require supporting evidence. This tariff requires a Type 1-5 interval meter capable of measuring both active and reactive power.

7. Controlled load is a closed optional partner tariff component used to control permanently installed hot water services and other appliances, during off peak times between 23:00-07:00 hours CST. Operation anywhere within this window is permitted based on the customer's requirements but with a randomised start time. A solar sponge version is also available between and 10:00-15:00 hours CST.

Large LV business tariff notes:

- The large LV business actual kVA demand tariff is the default tariff for large LV business customers. It has a fixed daily charge and a metered energy consumption charged at a single rate. Shoulder demand (12 months) applies to the monthly workday maximum kVA demand (measured over a half hour interval) between 12:00 and 16:00 hours local time, for each month of the year. An additional peak demand price applies during the peak period (November to March) between 16:00 and 21:00 hours local time, on workdays. These customers will require a Type 1-5 interval meter read at least monthly.
- 2. The large LV business agreed kVA demand tariff is an opt-in tariff for large LV business customers. It has a fixed daily charge and a metered energy consumption charged at a single rate. The peak demand is measured on work days between 12:00 and 21:00 hours local time, during the summer months of November to March and is charged on a declining scale in two consumption blocks. Block 1: 0-1000kVA, block 2: >1000kVA. An additional demand applies where higher levels of demand are required during the year than are required during the peak demand period. Customers (through their retailer) can apply for agreed demand to be amended. Reduction requests require supporting evidence. This tariff requires a Type 1-5 interval meter capable of measuring both active and reactive power.
- 3. The sportsground agreed kVA demand tariff is a special purpose tariff for sportsgrounds with significant floodlighting. It has a fixed daily charge and a metered energy consumption charged at a single rate. The peak demand is measured on work days between 12:00 and 21:00 hours local time, during the summer months of December to February and is charged on a declining scale in two consumption blocks. Block 1: 0-1000kVA, block 2: >1000kVA. An additional demand applies where higher levels of demand are required during the year than are required during the peak demand period. Customers (through their retailer) can apply for agreed demand to be amended. Reduction requests require supporting evidence. This tariff requires a Type 1-5 interval meter capable of measuring both active and reactive power.
- 4. The back-up agreed kVA demand tariff is special purpose tariff. It has a fixed daily charge and metered energy consumption charged at a single rate. The peak demand is measured on work days between 12:00 and 21:00 hours local time, during the summer months of November to March and is charged on a flat scale. Customers (through their retailer) can apply for agreed

demand to be amended. Reduction requests require supporting evidence. This tariff requires a Type 1-5 interval meter capable of measuring both active and reactive power.

- 5. The single rate transitional tariff has a fixed daily charge. The metered energy consumption is charged on a flat scale. This tariff is only available to businesses with a Type 6 meter.
- 6. The two rate transitional tariff has a fixed daily charge and a TOU structure with peak and offpeak consumption charges. Peak charges (at a higher rate) apply on work days from 07:00-21:00 hours local time, with all other times including non-work-days defined as off-peak (and charged at a lower rate). Peak usage and off-peak is charged in single blocks. This tariff is only available to businesses with a Type 6 meter.
- 7. A controlled load partner tariff is a closed optional tariff component used to control permanently installed hot water services and other appliances, during off peak times between 23:00-07:00 hours CST. Operation anywhere within this window is permitted based on the customer's requirements but with a randomised start time. A solar sponge version is also available between and 10:00-15:00 hours CST.

High voltage business tariff notes:

- 1. The high voltage annual agreed kVA demand tariff is the default tariff for this tariff class. It consists of a single block of peak demand, a single usage price for energy and a significant fixed daily charge. An additional demand applies where higher levels of demand are required during the year than are required during the peak demand period. Customers (through their retailer) can apply for agreed demand to be amended. Reduction requests require supporting evidence. This tariff requires a Type 1-5 interval meter capable of measuring both active and reactive power.
- 2. The high voltage annual agreed kVA demand <400kVA tariff is available on an opt-in basis however the customer's maximum demand must not exceed 400 kVA. It consists of a single block of peak demand, a single usage price for energy and a fixed daily charge.

An additional demand charge applies where higher levels of demand are required during the year than are required during the peak demand period. Customers (through their retailer) can apply for agreed demand to be amended. Reduction requests require supporting evidence. This tariff requires a Type 1-5 interval meter capable of measuring both active and reactive power.

- 3. The business monthly actual kVA demand tariff is an opt-in tariff. It has a metered energy consumption charged at a single rate. Shoulder demand applies to the monthly workday maximum kVA demand (measured over a half hour interval) between 12:00 and 16:00 hours central local time every month of the year. An additional peak demand price applies during the peak period (November to March) between 16:00 and 21:00 hours local time, on workdays. These customers will require a Type 1-5 interval meter read at least monthly.
- 4. The back-up annual agreed kVA demand tariff is a special purpose tariff. It consists of a single block of peak demand and a single usage price for energy. An additional demand applies where higher levels of demand are required during the year than are required during the peak demand period. Customers (through their retailer) can apply for agreed demand to be amended.

Reduction requests require supporting evidence. This tariff requires a Type 1-5 interval meter capable of measuring both active and reactive power.

5. The two rate tariff is closed to new customers. It has a fixed daily charge and a TOU structure with peak and off-peak consumption charges. Peak charges (at a higher rate) apply during work days from 07:00-21:00 hours local time, with all other times including non-work-days defined as off-peak (charged at a lower rate). Peak and off-peak usage is charged in single blocks. This tariff is only available to businesses with a Type 6 meter.

Major business tariff notes:

- 1. The sub-transmission and zone substation kVA demand tariff is for business customers that take supply directly from the sub-transmission network or a zone substation but do not utilise locational transmission pricing (ie their demand is < 10 MW and their annual usage is below 40 GWh pa). It consists of a single block of peak demand and a single usage price for energy. The peak demand price applies during the peak period (November to March) between 12:00 and 21:00 hours local time, on workdays. An additional demand charge applies where higher levels of demand are required during the year than are required during the peak demand period. The minimum level of agreed demand (peak plus additional) for this tariff is 5,000 kVA. A Type 1-4 interval meter is required with the ability to measure both active and reactive power.</p>
- 2. The locational sub-transmission and zone substation kVA demand tariff is for business customers that take supply directly from the sub-transition network or a zone substation and are subject to locational transmission pricing (ie their demand is > 10 MW and their annual usage is above 40 GWh pa). It consists of a fixed daily rate based on locational pricing, a single block of peak demand and a single usage price for energy. The peak demand price applies during the peak period (November to March) between 12:00 and 21:00 hours local time, on workdays. An additional demand charge applies where higher levels of demand are required during the year than are required during the peak demand period. The minimum level of agreed demand (peak plus additional) for this tariff is 5,000 kVA. A Type 1-4 interval meter is required with the ability to measure both active and reactive power.
- 3. The sub-transmission and zone substation kVA demand back-up tariff is a special purpose tariff for business customers that require additional security of supply. It consists of a single block of peak demand and a single usage price for energy. A Type 1-4 interval meter is required with the ability to measure both active and reactive power is required.
- 4. Sub-transmission and zone substation customers on locational tariffs have individually calculated charges.

General notes applicable to demand tariffs:

- 1. Agreed Demand charges for business customers are determined on the basis of the maximum half-hour trading interval for:
 - d. Agreed Maximum Demand (Annual Peak Demand) on workdays between 1200 and 2100 local time, during November to March only;

- e. Agreed additional maximum demand (Additional Demand), as the difference between the customer's anytime maximum demand and the agreed (peak) maximum demand; and
- f. For business customers on the Sports Ground demand kVA tariff, the Agreed Peak Demand shall be determined on work days between 1200 and 1900 local time, during December to February only. Additional Demand shall be determined using all other times of the year.
- 2. Actual Demand charges for business customers are determined on the basis of the maximum half-hour trading interval since the last meter read (Type 1-4 meters are assumed to be read each calendar month) for:
 - d. Summer Peak Demand on work days between 1600 and 2100 local time, during November to March only;
 - e. Year-round Shoulder Demand on work days between 1200 and 1600 local time; and
 - f. Off-peak Demand at all other times (the price is zero for actual off-peak demand).
- 3. Actual Demand charges for residential customers are determined on the basis of the maximum half-hour trading interval since the last meter read (Type 1-4 meters are assumed to be read each calendar month) for:
 - d. Summer Peak Demand on all days between 1600 and 2100 local time during November to March only;
 - e. Winter Shoulder Demand on all days between 1600 and 2100 local time; and
 - f. Off-peak Demand at all other times (the price is zero for actual off-peak demand).
- 4. Peak energy is energy consumed on business days between the hours of 0700 and 2100 CST. Type 6 meters typically measure this component during week days whereas Type 1-5 meters will measure this in on work days. For customers with Type 6 metering that does not recognise specific days, peak energy is energy consumed on each day between the hours of 0700 and 2100 CST.
- 5. Off-peak energy is energy consumed other than peak energy.

Alternative control services tariff schedules Appendix B:

This appendix includes the alternative control services tariff schedules for 2017/18 and indicative tariff schedules for 2018/19 and 2019/20.

Price ^t = Price ^{t-1} x (CPI ^t /CPI ^{t-1}) x (1 - X ^t)		2015/16 \$pa	2016/17 \$pa	2017/18 Şpa	2018/19 F'cast \$pa	2019/20 F'cast \$pa	2017/18 \$/day
Type 1-4 'Exceptional ' remotely read interval meter	Non-capital	135.07	185.16	178.50	173.82	\$169.25	0.4890
	Capital	176.18	215.83	251.87	296.89	349.96	0.6900
	Non-capital and capital	311.25	400.99	430.37	470.70	519.21	1.1791
Type 5-6 CT connected manually read meter	Non-capital	73.52	100.79	97.16	94.61	92.13	0.2662
	Capital	95.90	117.48	137.10	161.60	190.49	0.3756
	Non-capital and capital	169.42	218.27	234.26	256.21	282.62	0.6418
Type 5-6 WC manually read meter	Non-capital	8.98	12.31	11.87	11.56	11.25	0.0325
	Capital	11.71	14.35	16.74	19.73	23.26	0.0459
	Non-capital and capital	20.69	26.66	28.61	31.29	34.51	0.0784

SA Power Networks annual metering charge (\$ nominal) Table 52.

SA Power Networks upfront metering charge (\$ nominal) Table 53:

	2015/16 \$	2016/17 \$	2017/18 \$	2018/19 F'cast \$	2019/20 F'cast \$
Type 5 single element	163.92	195.74	199.82	206.35	213.35
Type 5 two element	235.02	281.17	287.03	296.41	306.47
Type 5 three phase	404.13	482.42	492.48	508.57	525.82
Type 6 single element	102.00	111.65	113.97	117.70	121.69
Type 6 two element	259.44	281.15	287.02	296.40	306.45
Type 6 three phase	304.19	331.81	338.73	349.80	361.67

General notes applicable to metering tariffs:

There are four different combinations of metering fees possible:

- Existing customers using SA Power Networks' meters. These customers continue to pay the capital and non-capital charges;
- Where an existing customer at June 2015 has the meter replaced by an alternate meter provider eg a type 4 meter, the customer will continue to pay the Capital-related charge, but will cease paying the non-capital related charge;
- Where a new customer connects to the network and elects to use an SA Power Networks meter, the customer incurs an upfront capital charge, and also incurs the annual non-capital charge. The customer is not liable for any ongoing capital charges; and
- Where an existing customer at June 2015 was not using an SA Power Networks meter but that of an alternate meter provider, eg a type 4 meter, the customer is not liable for any annual metering charges to SA Power Networks.

Capital charges continue to apply to customers using Type 5,6 WC and CT meters and to Type 1-4 Exceptional meters where customers elect to switch to another meter type and/or meter provider from 1 July 2015. Under the AER's Final Decision these charges continue to June 2020.

The Agreed Demand Tariffs have previously been specified in this tariff schedule as having the agreed kVA demand amount applied on a per month basis. These tariffs are applied on a per day basis, so the charge shown in this year's tariff schedule comprises the amount determined by allowing for 12 months and 365 days in the year, ie the daily amount will be 12 / 365 times the monthly amount.

Appendix C: Shortened forms

Abbreviation	Definition or description			
AER	Australian Energy Regulator.			
Augmentation	Investment in new network assets to meet increased demand.			
Capacity	The amount of electrical power that a part of the network is able to carry.			
Capital Contributed Works	Works for which the customer(s) contribute towards the cost of supplying assets, typically because they are the sole users.			
COAG	Council of Australian Governments.			
Contestability	Customer choice of electricity or related service supplier.			
Controlled Load	The DNSP controls the hours in which the supply is made available.			
Cost of Supply Model	Theoretical and algorithmic model used to calculate prices, which conform to the pricing goals.			
Cross subsidy	Where the price to a tariff class falls outside the range between the avoidable incremental cost of supply and the cost of stand-alone supply, an economic cross subsidy from or to other customers is said to exist.			
Decision	The Australian Energy Regulator's Final Decision on South Australia - distribution determination 2015–16 to 2019–20, October 2015			
Demand	Electricity consumption at a point in time.			
Demand Management	Attempt to modify customer behaviour so as to constrain customer demand at critical times.			
Distribution Network	The assets and service which links energy customers to the transmission network.			
Distributor, DNSP	Distribution Network Service Provider.			
DUoS	Distribution Use of System. The utilisation of the distribution network in the provision of electricity to consumers (a component of NUoS).			
DAPR	Distribution Annual Planning Report.			
ESCoSA	Essential Services Commission of South Australia, a South Australian Regulator of energy and other infrastructure.			
FiT	Feed-in Tariff, paid to customers that have solar PV generators.			

Abbreviation	Definition or description
High Voltage	Equipment or supplies at voltages of 7.6kV or 11kV.
IBT, Inclining Block Tariff	A network tariff energy rate in which the rate increases above specific consumption thresholds.
JSA	Jurisdictional Scheme Amount, a component of the Network Use of System charge to fund Feed-in Tariff payments to customers that have solar PV generators.
kva, mva	Kilo-volt amps and Mega-volt amps, units of apparent total electrical power demand. Usually the peak demand is referenced. See also PF for the relationship between power demand quantities.
kVAr, MVAr	Kilo-volt amps (reactive) and Mega-volt amps (reactive) units of instantaneous reactive electrical power demand. Usually the peak demand is referenced. See also PF for the relationship between power demand quantities.
kW, MW	Kilo-watts and Mega-watts, units of instantaneous real electrical power demand. Usually the peak demand is referenced. See also PF for the relationship between power demand quantities.
kWh, MWh	Kilo-watt hours and Mega-watt hours, units of electrical energy consumption.
Low Voltage	Equipment or supply at a voltage of 230V single phase or 400V, three phase.
Marginal Cost	The cost of providing a small increment of service. The Long Run Marginal Cost (LRMC) includes future investment, Short Run Marginal Cost (SRMC) considers only the costs involved without extra investment.
Market Participant	Businesses involved in the electricity industry are referred to as Market or Code Participants.
Supply Rate	The fixed daily cost component of a Network price.
NEL	National Electricity Law.
NEM	National Electricity Market.
NER	National Electricity Rules.
NUoS	Network Use of System. The utilisation of the total electricity network in the provision of electricity to consumers (NUoS = DUoS + TUoS).
PV	Photo-Voltaic

Abbreviation	Definition or description
PF	Power Factor, a measure of the ratio of real power to total power of a load. The relationship between real, reactive and apparent power is as follows:
	Power Factor = Real Power (kW) / Apparent Power (kVA)
	Apparent Power (kVA) = $\sqrt{[\text{Real Power (kW)}^2 + \text{Reactive Power (kVAr)}^2]}$
Price Signal	Prices set to convey a desired behaviour because of the costs associated with supplying the service.
Price Structure	The components that make up a Price available to customers.
Retailer	A Full Retail Contestability market participant (business) supplying electricity to customers.
Rules	National Electricity Rules.
Sub-transmission	Equipment or supplies at voltage levels of 33kV or 66 kV.
Tariff	Network price components and conditions of supply for a tariff class.
Tariff class	A class of customers for one or more direct control services who are subject to a particular tariff or particular tariffs with similar electricity demand and usage requirements.
ToU	Time of Use, a system of pricing where energy or demand charges are higher in periods of peak utilisation of the network.
Transmission Network	The assets and service that enable generators to transmit their electrical energy to population centres. Operating voltage of equipment is 275kV and 132kV with some at 66kV.
TUoS	Transmission Use of System charges for the utilisation of the transmission network.
Unmetered supply	A connection to the distribution system which is not equipped with a meter and has estimated consumption. Connections to public lights, phone boxes, traffic lights and the like are not normally metered.

Appendix D: List of attachments

Attachment	Title	
Attachment A	Revenue cap model (confidential)	
Attachment B	S-Factor calculation	
Attachment C	ElectraNet's 2017/18 TUoS tariffs	
Attachment D	Audit report on SA Power Networks' schedules of billing and revenue data for 2015/16	

 Table 54:
 List of attachments to the 2017/18 Pricing Proposal