FACT SHEET:
IRRIGATION NETWORK TARIFFS

TasNetworks
Delivering your power

Introduction

Agriculture has long been a key part of Tasmania's economy and the continuing expansion of irrigation across the State means that agriculture will continue to power our economic future for a long time to come. In the main, the investment in new irrigation infrastructure has been powered by electricity, delivered to primary producers and irrigation schemes by TasNetworks.

We have approximately 3,200 customers who rely on electricity to pump water into storages and to irrigate their land during the regular dry spells Tasmania experiences in spring, summer and autumn

Irrigation tariff structure

Most of those customers take their supply under an irrigation network tariff which is only available to business customers whose installations are used primarily for the irrigation of crops (including pasture).

This dedicated irrigation tariff is a consumption based time of use tariff which consists of a daily service charge and a charge for each unit of energy consumed (kWh). The consumption charge varies depending on whether energy is consumed during pre-defined peak, off-peak or shoulder periods of the day, which are defined differently in the warmer and cooler months of the year.

While contemporary agricultural practices can see crops being irrigated throughout the day, the time periods applying to irrigation tariff have been set with reference to the demands being placed on the network at different times of the day.

The power lines servicing remote and rural areas often span large areas and serve customers located a long way from the network's nearest connection point with the transmission network. As distances from transmission substations increase, the strength of the network decreases. As a result, even small changes in demand can place greater localised stress on the network than similar loads might in other parts of our

network. And transformers in rural settings often have to be over sized in order to cope with the start-up currents associated with irrigation pumps.

So, although the peak demand on our wider network occurs in winter, many of the network assets used to connect irrigation customers experience their peak during the summer months, largely as a result of an increased need for irrigation in warmer weather.

As a result, the irrigation tariff is unique amongst our time of use network tariffs in that it is priced based on a summer peak. In this sense, the current irrigation tariff is cost reflective, in that its time of use periods recognise the impact that the use of electricity by irrigators has at different times of the day, and the year, on our network costs. Further details about the structure of the irrigation tariff are available in Table 1 .

Table 1 – Time of use periods for irrigation low voltage time of use network tariff

Time periods	Summer (1 October – 31 March)	Winter (1 April – 30 September)
Week days (Monday – Friday) 07:00 – 22:00	Shoulder	Peak
Weekends (Saturday and Sunday) 07:00 – 22:00	Off-peak	Shoulder
Any day (Monday – Sunday) 22:00 – 24:00	Off-peak	Off-peak
Any day (Monday – Sunday) 0:00 – 07:00	Off-peak	Off-peak

Network charge trend

As can be seen in Figure 1, the introduction of a new tariff structure for irrigation customers in 2012-13 has been followed by a period of price stability, in real terms, with regard to the average network charges for a typical irrigation customer. As a result of cost savings in our own business, the average network charge for irrigation customers in 2017-18 decreased significantly, before a forecast relatively stable trend until the end of the 2019 24 regulatory period, in line with the majority of our network tariffs[1].

Figure 1 – Average annual network charge for irrigation customers ($2018-19 real)

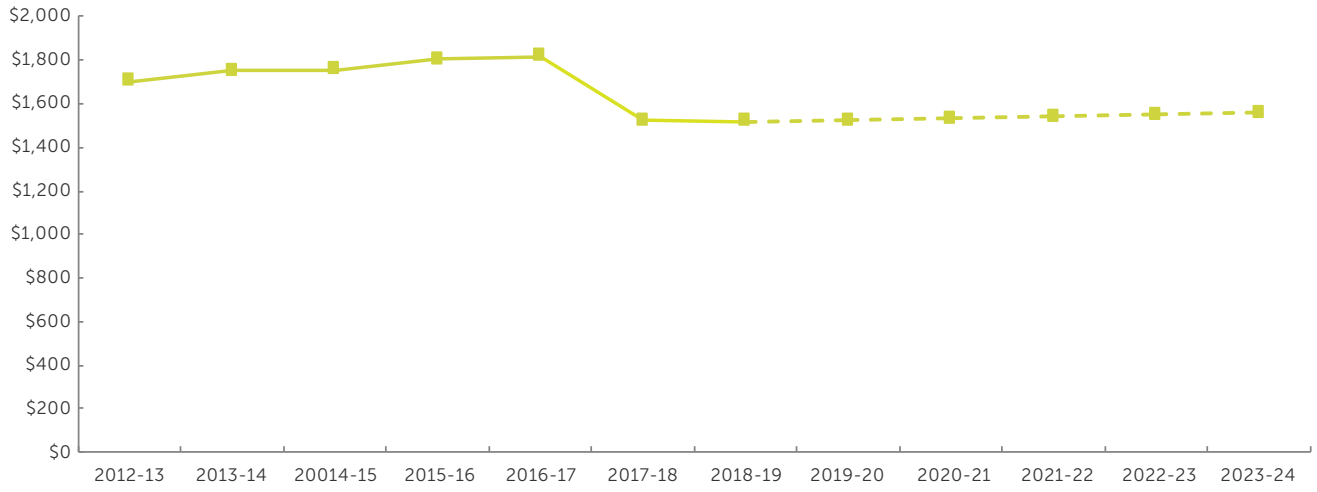


Table 2 – Change in irrigation network tariff components 2015-16 to 2023-24[2]

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Service charge (c/day)	219.051	230.006	230.294	237.692	244.823	252.167	259.732	267.524	275.550
Peak (c/kWh)	15.614	15.553	10.365	10.419	10.727	11.042	11.367	11.704	12.051
Shoulder (c/kWh)	9.585	9.535	6.219	6.252	6.437	6.625	6.822	7.022	7.231
Off-peak (c/kWh)	1.489	1.505	1.555	1.563	1.609	1.657	1.704	1.756	1.808

More choice for our customers: Network tariff options

Irrigators represent a distinct tariff class made up of large users of electricity who are located in regional areas of our network and connect to our system at low voltage. They are defined by the commercial purpose for which they use energy – irrigating land.

As well as the dedicated irrigation tariff, our irrigation customers also have the option of taking their supply under a number of other network tariffs that are available to any customers who take a low voltage supply where that supply is not being used to provide power to premises that are wholly or primarily used as a residential dwelling. Those options are:

Business Low Voltage General (TAS22) – The TAS22 tariff consists of a daily service charge and a charge for each unit of energy consumed. The consumption charge does not vary based on the time of day or the time of year the energy is consumed.

Business Low Voltage kVA Demand (TAS82) – The tariff structure of TAS82 consists of a daily service charge, a charge for each unit of energy consumed and a charge based on the maximum demand recorded in kilovolt amps (kVA) for the month. Neither the consumption charge nor the demand charge varies according to the time of day or the time of year.

Business Low Voltage Commercial Time of Use Demand (TAS88) – TAS88 consists of a daily service charge and a charge based on the maximum demand recorded in kilo Watts (kW) for the month. The demand charge does vary based on whether it occurred during peak or off-peak periods. The demand charge does not vary throughout the year.

Business Large Low Voltage Commercial Time of Use Demand (TAS89) – The TAS89 tariff comprises a daily service charge and a charge based on the maximum demand recorded in kVA for the month. The demand charge varies based on whether it occurred during peak or off-peak periods. However, the demand charge does not vary throughout the year.

Business Low Voltage Time of Use (TAS94) – The TAS94 tariff consists of a daily service charge and a charge for each unit of energy consumed. The consumption charge varies based on whether energy is used during peak, off-peak or shoulder periods, but the consumption charge is the same throughout the year

The following charts compare the total network charges that might apply to a typical irrigation customer under some of the tariff options available to irrigators. For the purpose of comparison, total annual consumptions of 17,500 kWh and 86,500 kWh have been assumed respectively for the medium and high usage customers in the examples.

When comparing the various network tariff options, irrigators should consider their own circumstances, as their use of energy may not be consistent with the usage profiles attributed to the typical customers in this comparison, which may result in network charges that differ from the charges indicated in the examples.

Figure 2 – Medium Usage Irrigation Customer ($2018-19 real)

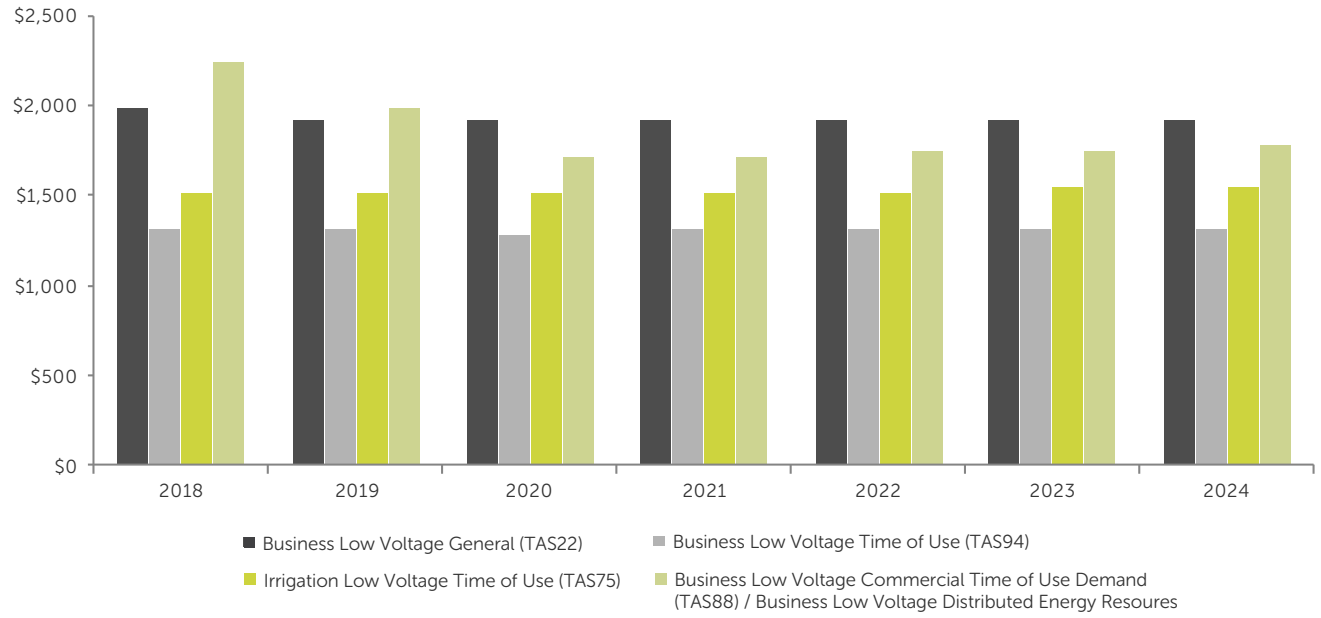
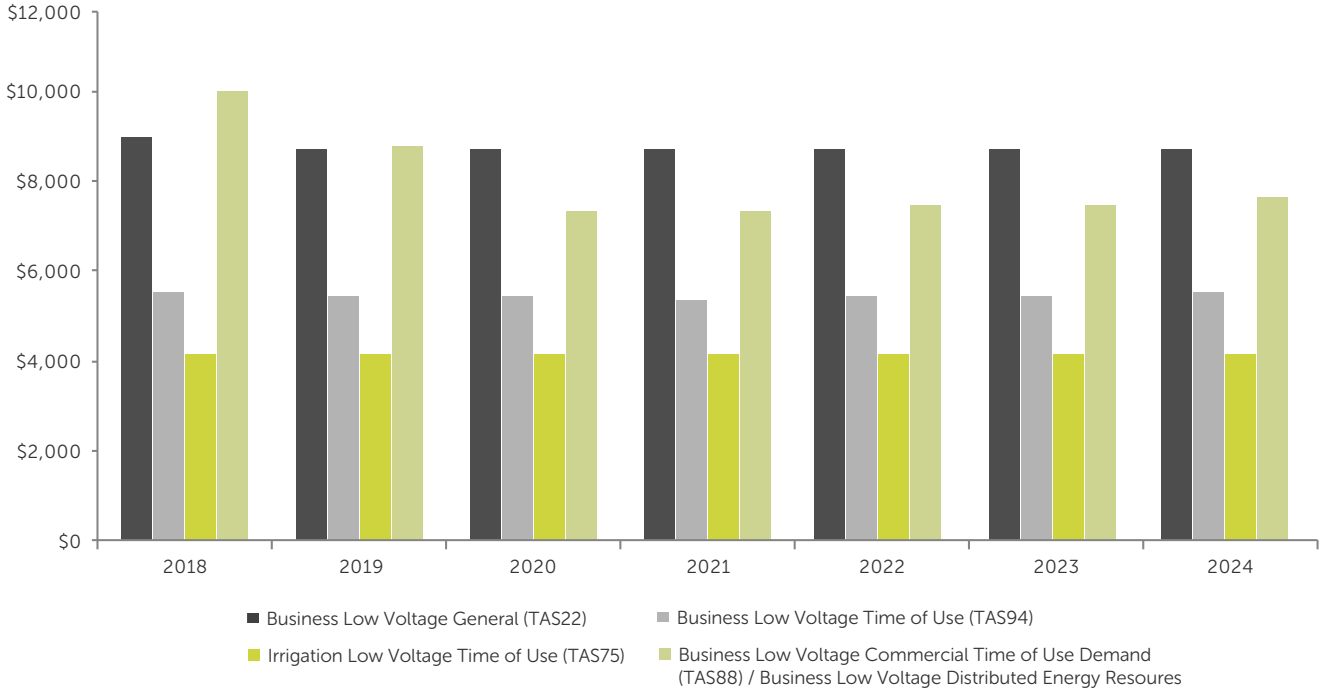


Figure 3 – High Usage Irrigation Customer ($2018-19 real)



Future learning opportunities

As for any tariff class, it's important that network tariffs for irrigation customers in the future are both fit-for-purpose and fair for all our customers. With that in mind, we will look for trial opportunities in the 2019-24 regulatory control period that will enable us to learn more about irrigation customers and understand potential opportunities for demand management initiatives. Our Demand Management Engagement Strategy has more information on this topic[3].

By conducting trials we will:

- provide data to support customer charge comparisons which will inform the refinement of our distribution pricing strategy and the development of new network tariffs for irrigation customers;
- test our customer communication and education processes, to help us establish the most effective methods to support customers and retailers during the transition to more cost reflective network tariffs; and
- build community awareness of changing tariff offerings and advanced meter benefits.

Engagement plan

We welcome feedback on the information provided in this fact sheet and are particularly interested to understand how people who are involved with irrigation would like to engage with us in the future. To have your say, you can:

- Email your views to: **revenue.reset@tasnetworks.com.au**
- Go on line at **http://www.tasnetworks.com.au/customer-engagement**
- Post your submission to:

Leader Regulation
PO Box 606
Moonah Tas 7009

We look forward to hearing from you.

1 The annual network charges shown for the 2019-24 period are indicative only and are therefore subject to change

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3 https://www.tasnetworks.com.au/TasNetworks/media/pdf/electricity_network/Demand-Management-Engagement-Strategy.pdf