



SA Power Networks | Industry News

PV Process Update #2

17 October 2013

SA Power Networks

ITEMS COVERED IN THIS INDUSTRY NEWS

This Industry News Bulletin is the third and final bulletin of a series for this period aimed at providing Industry participants and customers with an understanding of their ongoing and future obligations for those that have, wish to install or modify existing SEG systems in the future.

This Industry News covers a number of topics that should be important to all Industry participants.

The topics covered in this Industry News are:

1. Will installing Solar or altering my power supply change my Network tariff?
2. Installation of fuel cells and battery energy storage systems
3. Helpful hint – Downloading Service & Installation Rules to smart phones.

1. Will installing Solar or altering my power supply change my Network tariff?

Any change/alteration to an existing installation, including new consumer mains, new main switch board, relocate existing main switch board or the installation of solar etc may have tariff implications.

Business customers with a capacity greater than 100 amp (current transformer metering) who make any change/alteration, including the installation of any size solar system, will be placed on the current applicable network tariff. The current applicable tariff for customers with a capacity greater than 100 amp is *Low Voltage Stepped Demand (kVA)*

1.1. How are costs calculated on the Low Voltage Stepped Demand (kVA) Tariff?

The costs applicable for the *Low Voltage Stepped Demand (kVA) Tariff* have two components, a demand component and an energy component.

The demand component is structured as blocks, which fill up and then overflow to the next block if the demand value is high enough. The energy component provides a comparatively low charge for the energy used at the site. Although the tariff is structured as having both peak and off peak energy components, the rates are currently identical, so all energy will be charged at the same rate.

1.2. How will my network costs change?

Example:

A business customer has a capacity greater than 100 amp (current transformer metering) and their current network tariff is *Business Two Rate*. The customer currently has an annual Peak energy usage of 86,000kWh and an Off Peak usage of 45,000kWh with a demand of 120kVA. The customer is considering the installation of a 3kW solar system.



Current network charges on *Business Two Rate*

Peak Block 1 first 20,000kWh @ 19.8082c per kWh = \$ 3,961.64 pa

Peak Block 2 next 66,000kWh @ 19.7313c per kWh = \$ 13,022.66 pa

Off Peak 45,000kWh @ 5.7087 per kWh = \$ 2,568.92 pa

Total network charge of \$ 19,553.22 pa excl. GST

Network charges on *low voltage stepped demand (kVA)*

Annual Demand Block 1 first 100kVA @ \$ 18.4133 per kVA per month = \$ 22,095.96 pa

Annual Demand Block 2 next 20kVA @ \$ 12.1328 per kVA per month = \$ 2,911.87 pa

Peak 86,000kWh @ 3.8237c per kWh = \$ 3,288.38 pa

Off Peak 45,000kWh @ 3.8237c per kWh = \$ 1,720.67 pa

Total network charge of \$ 30,016.88 pa excl. GST

1.3. Will installing Solar allow the demand to be reduced?

Potentially, peak solar output may not coincide with the demand peak. Also solar power is considered an intermittent generation source and, as such, cannot be guaranteed to be operating at the time required to reduce the demand (i.e. cloud cover will reduce the output of the PV system).

More information on SA Power Networks tariffs can be found in the Network tariffs and negotiated services manual at :

www.sapowernetworks.com.au/centric/industry/our_network/network_tariffs.jsp

2. Installation of fuel cells and battery energy storage systems

As customers and the Industry seek the next technological innovation to reduce electricity demand and reliance on conventional electricity distribution networks, the emergence of fuel cells and battery storage systems is starting to gain momentum. As with any other form of energy generation device to be connected to Distribution Network, SA Power Networks needs to be aware of and approve this equipment for suitability for connection to the State's electricity grid. This is a critical safety issue for SA Power Networks, the community, and any parties that may work on or access our network infrastructure.

As with solar generators, this equipment can cause interference on our network and can impact the quality of supply for other users connected to the local network. Consequently, in accordance with the Electricity Act and Distribution Code of SA, any customers wishing to install this type of equipment will need to seek and obtain approval from SA Power Networks before installing and connecting this equipment to their installation.

In the interim, until modifications can be made to the current Small Embedded Generator Request Form to specifically cater for this equipment, SA Power Networks has implemented an interim process for dealing with Fuel Cells and or Battery Storage systems while a longer term solution is developed. Customers, or their agents, wishing to install this equipment must follow these steps:



-
1. From the SA Power Network Web site access the “Small Embedded Generator Request Form”
 2. Select “Existing Installation”
 3. Respond to the question “What is the intended dominant purpose for the installation of this SEG?”
 4. Complete the SEG application form as normal but add “(Fuel Cell) or (Battery)” whichever is applicable for the equipment your intent to install to the last name e.g. Smith (Battery)
 5. State the Peak Capacity of the proposed device.
 6. Complete the proposed grid connection compatible inverter details associated with the new equipment.
 7. Complete the rest of the form as required and submit.

Once assessed an approval number and letter will be issued.

Please note:

- An appropriate import/export meter will need to be installed on the customer’s meter board, at the customer’s cost, if one doesn’t already exist,
- If a customer currently receives feed-in credits under the Solar Feed-in Scheme, they will no longer be eligible for receipt of credits once they install a battery storage system or a Fuel Cell system.

3. Helpful hint – Downloading Service & Installation Rules to smart phones

A few RECs have asked whether SA Power Networks is going to develop an App for smart phones and iPads to enable quicker access to the SA Power Networks website and allied applications, forms, technical specifications etc. At this stage there is no intent to produce such an App, but that does not mean it is off the agenda indefinitely.

A helpful hint for those people that wish to download a copy of the SA Power Networks Service & Installations rules. All documents currently available from the SA Power Networks website are saved as PDF versions. This means that if you have iBooks or some other similar eBook App on your smart phone, you can save a copy of the Service & Installations Rules directly to this App. The document is reasonably easy to read through this App.

To download a copy to your smart phone simply search for the SA Power Networks website through your phone’s internet browser. Find the link to the Service and Installations Rules or follow the following link, below, and open the PDF.

www.sapowernetworks.com.au/industry/contractors_and_designers/service_and_installation_rules

The document will open on your smart phone and you can save it to your iBooks or Ebook app library for easy access next time.

Authorised by: Ian Rogers, Manager Connection Services, SA Power Networks

