

# Customer fact sheet: Emergency solar management



To maintain the stability of the electricity system and support the continued installation of rooftop solar, the WA State Government has introduced emergency solar management – the capability to remotely turn off (and on again) new and upgraded residential rooftop solar systems.

## What are the new requirements for residential rooftop solar systems?

In response, technical requirements for connecting and operating residential rooftop solar systems to Western Power's network have changed.

From 14 February 2022, all new and upgraded residential solar systems with an inverter capacity of 5kW or less must have the capability to be remotely turned off in an emergency solar event where a:

1. Synergy Distributed Energy Buyback Scheme application is received on or after 14 February 2022; or,
2. Synergy Distributed Energy Buyback Scheme application is received before 14 February 2022 and the rooftop solar system it relates to is installed on or after 14 March 2022. Where the installation occurs after 14 March 2022, a new application may be required.

Note: a 5kW system includes systems with a 5kW inverter and 6.6kW of panel capacity.

## Why do rooftop solar systems need to be turned off?

Distributed rooftop solar is an important source of low cost and low emission power. To allow WA's electricity grid to support a larger amount of renewable generation, new measures are needed to ensure system security.

Large amounts of rooftop solar generation are making the electricity system more vulnerable and increasing the risk of electricity supply interruptions. As a last resort measure, emergency solar management could assist in managing the current risks to the electricity system and support the continued rate of rooftop solar installations as we transition to a more sustainable energy future.

## How will emergency solar management be applied in WA?

- The new requirements **only apply to new or upgraded rooftop solar system** from 14 February 2022, or where a Synergy Distributed Energy Buyback (DEBS) application was received prior to 14 February 2022 and the installation or upgrade is not completed prior to 14 March 2022.
- Synergy residential customers with **existing rooftop solar systems will not be affected** unless their system was upgraded on or after 14 February 2022.
- Emergency solar management is proposed **only to be used in emergencies** – which is expected to be infrequent and only for short periods to prevent the loss of electricity supply within the grid during these times.
- **Households will only be impacted as a last resort** – all other options to protect the electricity system, including turning off large scale generators, are proposed to be exhausted first.
- Emergency solar management **does not interrupt electricity supply from the network** – only rooftop solar generation is turned off. Customers will continue to receive electricity from the grid if their rooftop solar system is remotely managed.
- Emergency solar management is intended to **support more renewable generation to be installed overall** – by managing infrequent periods of high risk, customers will be able to continue to install rooftop solar systems.
- As part of the [Energy Transformation Strategy](#), the WA State Government is already undertaking a number of other actions intended to improve the resilience of the electricity system in response to low load and to **reduce the need for emergency solar management as a last resort measure in the future**.

## How will rooftop solar systems be remotely managed and turned off?

There are currently two ways to remotely manage and turn off residential rooftop solar systems with an inverter capacity of 5kW or less. The API cloud solution is currently expected to provide the best outcome for most customers – it is generally lower cost and aligned to future opportunities for DER participation.

### API cloud solution

The **API cloud solution** uses a software integration - an API (Application Programming Interface) to remotely manage rooftop solar systems. This requires installing a compatible inverter and maintaining a consistent internet service that the inverter is connected to.



Manage customer inverter using household internet through a cloud API

### Metering solution

The **metering solution** requires a meter with communications capability enabled and the inverter isolated so that it can be remotely managed. This solution should only be selected where the API cloud solution is not suitable or available.



Remotely turn off the customer inverter via an AMI meter

### **If neither solution is applicable**

Export limiting is an option available for households who can't meet the API cloud or metering solution requirements but still wish to install a rooftop solar system. Please note that households who choose this option are not eligible for the Distributed Energy Buyback Scheme (DEBS) and would not be affected by an emergency solar management event.

## What about new and upgraded rooftop solar systems that are larger than 5kW?

In an emergency solar management event, residential rooftop solar systems that are installed or upgraded after 14 February 2022, with an inverter capacity greater than 5kW, will be subject to export limits to ensure they do not contribute to low load events. Export limits are set in accordance with [Western Power's Basic Embedded Generator Connection Technical Requirements](#).

## What other measures are the WA State Government undertaking to manage system reliability?

The introduction of emergency solar management and the delivery of the WA State Government's [Distributed Energy Resources Roadmap](#), a plan to integrate solar PV, batteries, electric vehicles and other energy devices into the SWIS, are part of WA's Energy Transformation Strategy (ETS), providing a blueprint to ensure the delivery of secure, reliable, sustainable and affordable electricity to Western Australians for years to come.

As part of the ETS, the WA State Government is already undertaking a number of other actions intended to improve the resilience of the electricity system, including considering the use of virtual power plants, investment in large-scale and community battery storage and planning for the integration of electric vehicles into the grid.

Emergency solar management represents a stepping-stone to reaching this future, to assist in maintaining system security and reliability and enabling renewables to continue to be installed in the grid.

## How do I learn more?

Households should discuss the emergency solar management requirements with their chosen solar installer prior to the purchase of a new rooftop solar system or proposed changes to their existing system.

You can also learn more about emergency solar management, including FAQs, at [synergy.net.au/dpvmangement](https://www.synergy.net.au/dpvmangement)