



Low Load Responses – Distributed Photovoltaic Generation Management

Discussion Paper Summary

To assist the Australian Energy Market Operator (AEMO) maintain power system security during extreme low load events, Energy Policy WA is assessing the introduction of DPV Management capability for use as a last resort measure.

Western Australians are embracing distributed energy resources at record rates. These small-scale devices include batteries, electric vehicles, and distributed rooftop solar photovoltaic (known as DPV) systems.

This uptake presents significant opportunities for customers to produce and use low-cost, low-emissions electricity generation.

However, the unprecedented speed and scale of DPV uptake is also making the power system increasingly challenging to manage, particularly during times when customers' electricity demand from the grid (known as load) is very low. This challenge is growing rapidly as customers install more DPV.

On 28 September 2021, AEMO released its *Renewable Energy Integration – SWIS Update* report, outlining the risks of declining levels of demand, including heightened threats to power system security during times of low load. In this report, AEMO recommends the capability to remotely manage the generation from DPV systems (known as DPV Management) be introduced as soon as practically possible.

Energy Policy WA will be working collaboratively with industry to implement DPV Management capability in Western Australia. DPV Management will help facilitate greater amounts of low-cost, low-emissions renewable generation to be connected, while managing the risks to the power system. A *Discussion Paper* has now been released for comment, which outlines the proposed implementation model, and related requirements for DPV systems to introduce DPV Management.

Information for customers

- If you already have rooftop solar installed, you will not be impacted by these proposed changes.
- If you are planning to install or upgrade your rooftop solar next year and your new system has a generating capacity of 5kW or below (almost all new systems), your system may need to meet proposed new requirements.
 - Information will be available, at the time of making an application, from Synergy and your installer.
- If you are planning to install or upgrade your rooftop solar next year and your new system has a generating capacity of more than 5kW, under the proposed changes your application is more likely to be approved, but your system will be subject to limits on the amount it can export.

Information for installers

- Under the proposed changes, installers will have to ensure that systems meet new requirements from mid-February 2022.
- For installations with generating capacity above 5kW, installers will have to ensure DPV systems meet the Western Power connection guidelines requirements – these are expected to be updated by Western Power in November 2021.
 - Under proposed changes, systems greater than 5kW (without an export agreement) will be subject to export limits.
- For installations 5kW or below, installers will have to ensure DPV systems meet the Western Power connection guidelines requirements; including validation of an approved method for DPV Management (see section 4.3.1 of the *Discussion Paper*), in coordination with Synergy.
 - Information will be provided by Synergy on how installers can meet requirements under the proposed changes.

Feedback is welcomed on the Discussion Paper and can be provided prior to 5.00pm (AWST) on Friday 12 November 2021.