What actions are taken?

AEMO and electricity networks have worked together to put in place a number of actions to manage risks during these rare periods when the power system is under stress at the same time as high rooftop solar generation.

AEMO has introduced notifications to let the market know about these actions, and if we think there may be a problem ahead that could result in rooftop solar being affected. These notices signal a market response such as additional load prior to operational measures being taken.

AEMO has a process to manage periods when there is not enough energy supply in reserve to meet forecast demand. These are Lack of Reserve (LOR) conditions, involving three notifications. These notices let the market know there may not be enough supply and a risk of load shedding, they seek a market response such as additional generation and then advise the operational actions being taken to manage the energy shortfall.

This process for managing a ‘lack of supply’ is being mirrored for when there is a ‘surplus of supply’ at times of stress on the power system. AEMO is asking for help to manage these events and communicating what actions are being taken.

Why do we need to do this?

The electricity grid wasn’t designed with rooftop solar in mind and we are working extremely hard to fix this. It was designed for energy from large power stations that would be dispatched at the request of a system operator and which would flow in one direction from generators to homes and businesses. Now energy is also flowing into the system independently, and in particular at times of stress on the grid.

The electricity grid wasn’t designed with rooftop solar in mind and we are working extremely hard to fix this. It was designed for energy from large power stations that would be dispatched at the request of a system operator and which would flow in one direction from generators to homes and businesses. Now energy is also flowing into the system independently, and in particular at times of stress on the grid. It was designed for energy from large power stations that would be dispatched at the request of a system operator and which would flow in one direction from generators to homes and businesses. Now energy is also flowing into the system independently, and in particular at times of stress on the grid.

Where will rooftop solar PV be affected?

Right now, the types of risks that would require AEMO and networks to take available steps to maintain system security, such as cancelling rooftop solar generating as a last resort to clear the risk and that AEMO is able to take sufficient action to avoid blackouts.

This means the market hasn’t been able to take sufficient action to clear the risk and that AEMO is able to take sufficient action to avoid blackouts.

Signals that some rooftop solar PV is being prevented from generating as a last resort to protect system security and reduce risks, such as a state-wide black-out.

Notice 1 – Advance notice of possible curtailment of rooftop solar PV disconnecting at the same time as a large power station and/or minimum system load.

This notice will generally be issued 1 day in advance where challenging operating conditions are forecast to provide the market time to prepare, and respond, but could be issued quite quickly if unexpected conditions arise.

Notice 2 – Confirm operational actions taken

This will only take place as a large power station and/or minimum system load.

Notice 3 – Notify that curtailment of rooftop solar PV is prevented from generating as a last resort to protect system security and reduce risks, such as a state-wide black-out.

AEMO does not take these steps lightly but just as occurs today with last resort load shedding to let the electricity market know about these actions and why we do it.

South Australia Smarter Homes Program

Customers installing or upgrading household rooftop solar are required to appoint a Relevant Agent who is responsible for disconnecting and reconnecting the system as a last resort during events that increase the risk of power system staying secure.

The SA Smarter Homes Program and Contingency Minimum System Load Framework will help AEMO keep the system in balance while other solutions are developed.