The Australian Energy Market Operator (AEMO) is responsible for the efficient operation of the Australian power system and market, ensuring all Australian energy consumers can access a reliable and secure electricity supply.

Australia is the world’s fastest adopter of rooftop solar power (photovoltaics or PV) and new technologies, such as batteries and electric vehicles, are quickly emerging. These Distributed Energy Resources have been so successful in Australia that their combined effect is changing the way that AEMO needs to plan and operate the energy system. Getting this right for everyone requires better visibility of DER devices installed across Australia.

What are DER and why do we need to keep track of all the DER devices?

Distributed Energy Resources, or DER, includes all forms of generation and storage systems rated up to 30 MW and connected to the national electricity grid. For installers and electrical contractors this includes rooftop solar PV and batteries in homes and businesses. But it also includes other generation types, such as cogeneration, that operate in a grid-connected mode and larger stand-alone generators that connect directly to the grid.

Knowing the locations and specifications of all the DER connected to the electricity grid is critical for sustaining a secure and reliable electricity supply for all Australians. With the help of electricity sector participants, AEMO is establishing an online DER Register to record and hold this data so we can map out where all the DER devices are across Australia.

The DER Register will assist AEMO to safely and effectively integrate all DER devices into the electricity grid and market, which will enable AEMO to build innovative new markets for customers to participate in with their DER devices.

When will the DER Register open?

The DER Register will officially be in operation from 1 December 2019. All relevant installations after this date must to be recorded in the DER Register.

What is changing with the DER Register?

From 1 December 2019, a regulatory requirement will mandate that your electricity network service provider (NSP) supply data to AEMO on every relevant generator or battery device connected to its network within 20 business days of the DER device being connected to the grid and capable of generating. This information will be collected during the grid connection application process from customers or DER retailers acting on the customers’ behalf, as a condition for connecting small generating units to the electricity network. This will include information about the equipment installed on site.

Electrical contractors who are installing DER equipment will be required to provide supplementary information about what has been installed on site to the DER Register and if any attributes have changed from what was applied for. Your local NSP will provide instructions for what to do after 1 December.

What does this mean for DER Installers?

To facilitate the efficient capture of DER information, your local NSP will be asking applicants for additional technical information about the DER proposed to be installed or modified during the Connect Application process.

The new regulations require NSPs to collect up to 11 additional pieces of information about DER equipment installed on site. This includes inverter serial numbers, and panel and battery details. Where enabled by the network data entry can be supported by using existing data sets, such as those from the Clean Energy Council’s approved product databases.
How can DER Installers access information about the new requirements?
Before 1 December 2019, AEMO is liaising with stakeholders and will have information available on the AEMO website to ensure a seamless transition to the new requirements.
Your NSP also has more information available on its website.

How does the new system change the DER connection process?
The connection process will remain unchanged for customers and applicants, and your NSP should always be the first place to go to get connected. But the NSP will be required to provide information into the DER Register and will ask applicants and DER installers to provide information about what is proposed to be, and what is actually, installed on site into the DER Register.
AEMO will generate a confirmation receipt for the NSP once the DER installation is registered in the DER Register, which will be available within 20 business days of the installation being turned on.

Want more information?
Ask your local network service provider, or check the AEMO website for more information.
You can also email us at DERRegister@aemo.com.au