



Clean Energy Council submission to Energy Networks Australia

Improving transparency and accessibility of grid connection requirements

The Clean Energy Council (CEC) welcomes the opportunity to provide feedback to the Energy Networks Australia (ENA) on how best to improve transparency and accessibility of grid connection requirements following what we understand to be the cessation of work on the National Connection Guidelines.

The CEC is the peak body for the clean energy industry in Australia. We represent and work with hundreds of leading businesses operating in solar, wind, hydro, bioenergy, marine and geothermal energy, energy storage and energy efficiency along with more than 6,200 solar installers. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

The CEC has supported and will continue to support changes to grid connection rules that improve the customer value proposition, safety and/or the DER hosting capacity of the distribution network.

The CEC has for several years supported ENA's intention to establish National Distributed Energy Resources (DER) Grid Connection Guidelines. We understand that the Grid Connection Guidelines are not proceeding due to the difficulties encountered with reaching agreement among distribution network service providers (DNSPs) on a common set of rules. This is a very disappointing development.

To assist with reaching agreement on next steps, the CEC strongly advocates for changes consistent with the following principles and approach:

- Recognise the value of a formal consultation process,
- Transparency and accessibility of grid connection rules should be the highest priority,
- Allow flexibility for technology providers to solve for required outcomes, rather than simply comply with prescriptive requirements
- Draw upon Australian and international standards wherever possible,
- Avoid mandating capabilities that cannot be tested against a standard, and
- The aim for more consistency should not stifle innovation.

These issues are explored in greater detail below. This submission also outlines proposed next steps for improving transparency and accessibility, including the potential roles for the Australian Energy Market Commission (AEMC) and the Australian Energy Regulator (AER).

We would be very happy to discuss these issues in further detail. We look forward to working with the ENA on the development, communication and implementation of this important area for program and policy development.

1. CEC response to the difficulties reaching agreement on the Guidelines

1.1 Continue to recognise the value of a formal consultation process

The CEC appreciated the opportunity to provide feedback on the ENA's National Connection Guidelines as they were being developed. Now that it appears that the National Connection Guidelines project is not continuing, we urge the ENA to continue consultation with all parts of industry, including the CEC and its member companies.

1.2 Transparency and clarity of grid connection rules should be the highest priority

The highest priority for grid connection rules should be to improve transparency and accessibility.

There is no web site or other reference point with a summary of the grid connection rules of Australian DNSPs. What would be most useful would be a single portal or web site with current information on the current grid connection rules of all DNSPs. This would greatly assist with addressing potential confusion as grid connection requirements change.

One approach to improving transparency and accessibility of grid connection requirements would be for the ENA to create a single reference point with current information on DNSPs' grid connection rules. Alternatively, we are keen to explore whether it would be more appropriate for the AER to host a web site that maintains an up to date summary of DNSPs' grid connection rules.

1.3 Clearly articulate the rationale for grid connection rules

There will be stronger support for grid connection rules that have a clearly articulated purpose and rationale. Rules that appear to be ad hoc will enjoy less support from industry and consumers.

The CEC has supported and will continue to support changes to grid connection rules that:

- Improve the customer value proposition, including the work underway to allow for increased use and market participation from DER assets,
- Support improved product capability and service quality,
- Improve safety, and
- Improve the DER hosting capacity of the distribution network.

Moves toward dynamic management of DERs will enable improvement of the customer value proposition, while assisting with grid management and improving hosting capacity. Grid connection processes and connection agreements should support the transition to dynamic management of DERs.

The CEC actively supports initiatives to improve the safety of DER systems. For example, we collect and publish information on the inverters that meet the anti-islanding requirements of the Australian Standard (AS 4777.2) and the international standard (IEC 62116). We have supported initiatives by some DNSPs (e.g. Western Power and Energy Queensland) to require inverters to demonstrate compliance with IEC 62116, which is above and beyond the minimum requirement of the Australian Standard.

The CEC supports initiatives that improve inverter standards to enhance grid management and increase DER hosting capacity of distribution networks. Some of these initiatives (such as Volt-Watt and Volt-var response) will reduce the value of DER exports and it will be important to communicate why this is expected from DER customers. DNSPs and customers should be encouraged to move from DER systems capable of autonomous response to systems that support dynamic management.

1.4 Allow flexibility for technology providers to solve for required outcomes, rather than simply comply with prescriptive requirements

Providing a clear rationale for grid connection rules, with a description of the problem being addressed will enable technology providers to solve for an outcome, rather than simply adhere to strict prescriptions. DNSPs should allow technology providers to adopt this approach.

1.5 Draw upon Australian and international standards wherever possible

The CEC encourages regulators, policy makers and DNSPs to draw upon widely adopted Australian and international standards, wherever possible. It is problematic when DNSPs or policy makers specify equipment capabilities for which there is no recognised Australian or international standard against which the capability can be tested.

The CEC maintains and publishes records of the capability of solar products. We also manage an independent program that tests products for the capabilities claimed by the manufacturer.

The CEC database on the capabilities of solar equipment is based on standards against which the capabilities can be tested. When capabilities are required and there is no standard against which they can be independently tested, demonstrating compliance becomes unnecessarily costly and complicated.

The CEC is concerned that some DNSPs mandate inverter capabilities that cannot be tested against a widely used Australian or international standard. This adds an unnecessary administrative burden to the work of DNSPs, manufacturers of solar products, solar installers and organisations such as the CEC.

1.6 The aim for more consistency should not stifle innovation

Consistency in grid connection rules is desirable, particularly for businesses that operate across the jurisdictions of multiple states, territories and DNSPs. However, the aim for more consistency should not stifle innovation.

2 Next steps

The CEC urges the ENA to consider establishing a web site with an up-to-date summary of all DNSPs' grid connection requirements.

We are also keen to explore whether the AER would be a more appropriate organisation to host a web site that maintains an up to date summary of DNSPs' grid connection rules.

The CEC will explore whether the AER should maintain a central portal for all grid connection rules and guidelines, building on its current approval and regulatory role. We understand that a rule change would be required to enable the AER to undertake this role.

There will also be an important role for the AEMC in deciding which types of network services can be mandated as a requirement of grid connection and which should be remunerated. This will become increasingly important as we move from the current system of autonomous response to a future system of dynamic control.