



Redback Technologies

Responses to SA Government Regulatory Changes for Smarter Homes

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Introduction

The South Australian government has announced a number of new technical standards and requirements to be introduced in South Australia. You can view the new technical standards on their webpage, [Regulatory Changes for Smarter Homes](#).

We have outlined each of the changes below and the impact it may have on Redback Smart Hybrid System installations.

1. **Voltage ride through standards for generating systems connected via an inverter in South Australia**

A proposed new technical standard for generating systems connected via low voltage power inverters to the South Australian distribution network will require that they meet ride-through standards as demonstrated by testing in accordance with testing standards in AS/NZS4777.2 and any applicable AEMO testing standard. This will contribute to ensuring new and replacement inverter connected distributed energy resources can ride through power system disturbances.

Response:

Redback inverters will support this requirement, however they are not compliant today. Compliance will be achieved through a firmware update. The SA Technical regulator has made an allowance for this approach, so there is no blockage to sale of Redback Systems.

Achieving compliance means that the change-over from on-grid to off-grid will not occur sub-cycle, (will take ~1s instead of ~0.01s). This means the system will operate as an EPS, not a UPS when installed in South Australia.

2. **Remote disconnection and reconnection requirements for prescribed distributed generating systems in South Australia**

A proposed new technical standard will require prescribed generating systems connecting to the South Australian distribution network to be capable of being remotely disconnected and reconnected by an agent registered with the Technical Regulator. This will contribute to increasing the ability of the distribution network to host distributed energy resources and secure operation of the power system.

Response:

Redback inverters can provide remote disconnection and reconnection and are therefore compliant with this requirement. SAPN will register as an agent and Redback will register our inverters with SAPN. Any customer installing a Redback inverter should use SAPN as their agent. If SAPN do not register as an agent prior to 28th of September, then the customer can register with Redback Technologies as the agent. Redback will transfer the agency to SAPN when they complete their registration.

3. **Export limit requirements for prescribed distributed generating systems in South Australia**

A proposed new technical standard will require that prescribed generating systems connecting to the South Australian distribution network are capable of being export limited and for export limits to be updated remotely. This will contribute to increasing the ability of the distribution network to host distributed energy resources by avoiding scenarios where the energy exported may exceed the capacity of the local network, or where there is insufficient demand for that energy in other parts of South Australia.

Response:

Redback inverters are compliant with this requirement.

4. **Smart meter minimum technical standards in South Australia**

A proposed new technical standard for smart meters will require that they must be capable of separately measuring and controlling an electricity generating plant and controllable load from essential load and must be installed in accordance with any guidelines issued by the Technical Regulator.

Response:

This is unrelated to the inverter installation. In practice when updating the meter, a compliant 2 element meter will need to be used. The office of the technical regulator should provide a list of compliant meters. A document with “deemed to comply” wiring rules will be published in the next few days by the Office of the Technical Regulator. Option 5 or 7 in that document allows you to install a Redback inverter in the same way that you do today, no special additional wiring required.

5. **Tariffs to incentivise energy use in low demand periods in South Australia**

A proposed new requirement on retailers operating in South Australia to provide tariff structures to customers with smart meters which incentivise electricity use in low demand periods. This will ensure retailers make offers which reward customers for using electricity in low demand periods.

Response:

This requirement does not impact the operation of the inverter. Redback technologies may partner with a retailer in the future to take advantage of these solar tariffs using the battery.

If you have any further enquiries regarding the SA government regulatory changes for smarter homes, please email info@redbacktech.com.