



Mr. Andrew Swanson
Project Leader [EMO0045]
Australian Energy Market Commission (AEMC)
Lodged online 24 May 2023

RE: Submission to the AEMC Review into consumer energy resources technical standards

Dear Mr. Swanson,

sonnen Australian (sonnen) is pleased to provide a response to the AEMC's Draft Report (EMO0045) and supports a coordinated, well-governed energy system transition which is consumer-driven and industry-led. sonnen, is an innovative new market entrant, founded in Germany in 2010 with a rapidly growing Australian presence and an Australian HQ in South Australia. Our vision is for *clean, affordable energy for everyone*. Energy is an essential service, and we are committed to designing a system that provides for all energy consumers. sonnen is at the cutting-edge of implementing household CER coordination, and specifically, residential battery energy management systems. **sonnen has 'institutional lived experience' of the costs and the opportunities of this consumer-led system transition – with unique, real-world, Behind-the-Meter (BtM) insights of Australian consumers.**

We support measures to improve coordination, consistency and standardisation (including a centralised policy body), and other measures to improve compliance outlined in the Commission's Draft Recommendations. Further, we are in principal aligned with the Clean Energy Council, and endorse the Original Equipment Manufacturer group (OEM group) submission. However, sonnen may offer some additional nuance, for example, in Draft



Recommendation 2: Make 'Region A' the default setting — This may create errors¹ or difficulty for installers because Australia also includes Regions B and C, where some installers might be inclined in relying on the default grid settings. In Draft recommendation 8: Introduce commissioning sheets for CER devices — A high-level guide may be useful — however — this cannot replace detailed, product-specific, up-to-date instructions provided for installers. That is, **commissioning for sonnen is systematic, simple and intuitive.**

We refer the Commission to an outlined of sonnen's **method in Appendix A** as an indication of what we believe to be a 'best in class' internal industry method because it resulted in early high-compliance of almost 100%.

We look forward to continued engagement and providing feedback as required,


Kind regards,

Dr Veryan Hann
Policy & Regulatory Manager

Mr Leonid Kukarin
Head of Technical Operations

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¹ See GSES AS/NZS 4777.2 2020 Updates <https://www.gses.com.au/as-nzs-4777-2-2020-grid-connected-inverter-updates-what-you-need-to-know/>



Submission to the AEMC Review into Consumer Energy Resources Technical Standards Draft Report [EMO0045]

INDUSTRY CASE STUDY - sonnen Australia Pty Ltd
23 May 2023

Appendix A: An industry leader on installer compliance

Industry example: sonnen's "Commissioning Assistant"

sonnen is knowledge-sharing this industry case study to outline what sonnen believes is industry best practice for encouraging compliance.

- Developed across international jurisdictions for implementing residential-scale CER/BESS, sonnen accredited installers are provided with an online **Commissioning Assistant**.
- In addition to product-specific training that sonnen provides, sonnen tracks and monitors each installation and installer. Each installation identifies the installer and installers are notified if their accreditation is due or for product updates.
- The Commissioning Assistant is effectively an intuitive, product-specific process, accessed through a web-interface. The process is a step-by-step 'wizard' that runs through functionalities such as selecting the region, key grid codes or metering to ensure each step is correct and compliance is achieved.

Example: sonnen commissioning

sonnen aims to make it as easy as possible for the installer, we have *dedicated technical staff with a focus on installer training to identify gaps* and to work together with the installers to find “what the missing pieces of information are to get the job done”.

sonnen has created a constant feedback loop of information with the installers

- The installer can make adjustments remotely via **System Dashboard** designed for installer use.
- The installer can check the system remotely & photos of the installation are provided to the Service Team in Adelaide to activate the warranty for the customer.
- The data is real-time which provides the monitoring for high compliance.
- The installer has access to 24/7 online training, so as sonnen releases different products & the commissioning process stays consistent, and remains familiar for the installers.
- Installers are required to be accredited with sonnen for the warranty & for consumer confidence. Details of when a system was installed & by who by etc are recorded. Sonnen has an accreditation number.

Commissioning Assistant 2

Inverter Setting

- Select the appropriate grid profile in accordance with the DNSP requirements and AS/NZS 4777.2:2020:
 - AS/NZS 4777.2:2020 Australia A
 - AS/NZS 4777.2:2020 Australia B
 - AS/NZS 4777.2:2020 Australia C
 - AS/NZS 4777.2:2020 New Zealand

Example: installer wizard designed to be a systematic, simple and intuitive commissioning procedure

sonnen

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Inverter Setting

Please set the country code of the inverter to assure a correct grid operation.

AS/NZS 4777.2:2020 Australia A ✓ Country code is set correctly

AS/NZS 4777.2:2020 Australia A

AS/NZS 4777.2:2020 Australia B

AS/NZS 4777.2:2020 Australia C

AS/NZS 4777.2:2020 New Zealand

230 Nominal Voltage (VAC)

±4 RoCoF (Hz/s)

250 RoCoF Minimum Measurement Time (ms)

DRM0 Activation / Deactivation

(Rapid Shutdown - DRM0 is off as default, if activated a DRED compatible device must be installed.)

Inverter power settings

In accordance with the requirement AS / NZS 4777.2: 2020, settings for the inverter for active and reactive power as well as for frequency must be made in the following chapters.

Set configuration

Connection & Reconnection settings have been applied ✓

SPI settings have been applied ✓

Frequency power settings have been applied ✓

P(U) settings have been applied ✓

Reactive power settings have been applied ✓