

17 November 2022

Anthea Harris
Chief Executive Officer
Energy Security Board
Submitted electronically

Dear Ms. Harris,

PIAC response to Interoperability policy consultation paper

The Public Interest Advocacy Centre (PIAC) welcomes the opportunity to respond to the Energy Security Board's (ESB) Interoperability Policy consultation paper (the paper).

PIAC supports mandating technical standards for consumer energy resources (CER) and progressing the development of accompanying policies to ensure these standards work in consumers' best interests. Consumers should have access to secure, reliable, affordable, and sustainable energy no matter how they choose to participate and whether they have CER or not.

Interoperability standards should enable customers to easily and consistently access different products and services that meet their needs, where they wish to do so. As new products emerge, customers should not be unduly 'locked in' to choices based on manufacturers' design of their CER assets, or the business choices of those producers.

Interoperability can help overcome barriers to access, understanding and trust if settings are aligned with the interests and expectations of consumers. This may be achieved by ensuring consistent standards and providing consumers with clearer information at each stage of the CER journey, consistent messaging, and guidance on who to turn to for help.

Behavioural change should reward customers with flexible demand for responding to (and supporting) energy system needs but should not be sought as an outcome of interoperability in itself. PIAC notes that stakeholder consultation has found that 'consumers who have already invested in CER are not necessarily motivated to change the way they use their assets for the rewards that are currently on offer'¹.

¹ See [ESB – Consumer Insights Collaboration Knowledge Share Report](#)

Standard setting efforts should avoid working from the assumption that consumers have (and should have) the bandwidth to engage with their energy services any more than they already do in order to receive the benefits of a given service or product.

Prioritise the implementation of CER-network interoperability

PIAC considers CER-network interoperability the immediate priority across the five identified domains. The focus should be on achieving a nationally consistent approach to Common Smart Inverter Profile – Australia (CSIP-Aus) implementation and accelerating the rollout of dynamic operating envelope functionality.

We also acknowledge the critical role of behind-the-meter interoperability in facilitating embedded generation and demand management. Behind-the-meter interoperability enables the coordination of CER assets to make use of local generation, respond to cost reflective tariffs, respond to real-time electricity wholesale market conditions, or provide other power system services. Importantly, effective behind-the-meter interoperability will be crucial to enabling products and services delivering consumer benefit that is not dependant or contingent on consumer behavioural change.

As behind-the-meter assets may need to interact either locally at the premises or coordinate via the cloud, standards should seek to ensure that interoperability is maintained across their key functions. While behind-the-meter devices do not need to be entirely interoperable, they should be capable of coordination across major use-cases including inverter-device, gateway-device, cloud-mediated management, and meter-to-gateway data sharing.

The paper highlights that behind-the-meter interoperability has significant potential to deliver savings to consumers through avoided or deferred distribution and transmission network capital expenditure. While we do not dispute the quantum of these savings, we take issue with their framing.

PIAC caution against presenting benefits against future hypothetical scenarios and note the need for clearer differentiation between ‘avoided’ and ‘reduced’ costs. This is particularly relevant in scenarios where a single party both imposes costs and delivers savings (through the amelioration of those same costs) as in the case of flexible EV charging.

Mandate a nationally consistent approach to CSIP-Aus through a subordinate instrument

PIAC supports introducing a national mandate to require new or replacement embedded generator installations to comply with CSIP-Aus standards by July 2024 or sooner. We support the implementation of this mandate through introducing:

- an obligation on DNSPs to ensure that, when implementing Dynamic Operating Envelopes (including Flexible Export Limits), their server-side communications are consistent with CSIP-Aus, and
- an obligation on DNSPs to require that new installations are ‘flexible export ready’ by reference to a CSIP-Aus product certification and common installation commissioning procedure.

The National Electricity Rules (NER) specify that energy customers bear primary responsibility for ensuring compliance with Flexible Export Limits. More precisely, ‘the NER establishes a

contractual obligation on the energy customer to meet the requirements set by the DNSP in the standing offer for a basic connection service’.

PIAC considers this requirement is not justified because technology providers such as retailers, installers, and original equipment manufacturers (OEMs) are better placed to manage most of this risk. Given technology providers should ensure an installation is compliant with DNSP requirements in practice, the rules should better reflect this reality and align responsibility with the parties with the greatest incentive to act in accordance with the best interests of the consumers. This also aligns with PIACs recommendations to the AEMC review into CER technical standards, to ensure that effective compliance with standards is not dependent on consumer understanding or action².

We encourage the ESB to explore options other than waiting on asset replacement to achieve full compliance with the mandate for existing installations. This may include investigating the technical feasibility and requirements to enable CSIP-Aus capability in pre-existing systems, developing regulations and reforms to support retrofits, and providing consumers and technology providers with the necessary information (and potentially assistance) to implement them. For example, it may be possible to retrofit legacy inverters with demand response enablement device (DRED) control, the uptake of which could be promoted through attractive time of use tariffs and behind-the-meter monitoring.

PIAC supports setting requirements for a CSIP-Aus mandate through a subordinate instrument under the authority of the Australian Energy Regulator (AER). We consider this approach preferable as it ensures the standard is legally enforceable and that the AER has oversight of variations and extensions to CSIP-Aus over time, including the ability to mandate new features or versions of the standard. We consider the AER well placed to enforce and maintain the standard with advice from AEMO where appropriate.

Empower the Clean Energy Regulator to oversee flexible export product whitelisting

PIAC supports introducing a national testing and certification regime to ensure efficient and consistent processes across the Australian market. We share the ESB’s view that this arrangement must promote transparent and fair treatment of OEMs to ensure that products being installed are consistent with those listed.

Effective regulatory and governance frameworks are essential to ensuring that network and market interoperability standards and compliance measures are working in consumers’ interests and that consumers can participate, with confidence and appropriate protections, in competitive markets.

We do not support using industry self-regulation to oversee the certification of products against CSIP-Aus. We consider the Clean Energy Regulator best placed to establish appropriate governance arrangements for the product certification/de-certification process. Given the Clean Energy Regulator’s scope is currently limited to the voluntary small-scale renewable energy scheme, which is due to expire in 2030, it may be necessary to invest it with additional resources and power(s) to carry out these duties effectively.

² See PIAC submission to the AEMC Review of Consumer Energy Resources technical standards

Further engagement

PIAC welcomes the opportunity to discuss these matters further with the ESB and other stakeholders.

Yours sincerely

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