

22 August 2022

Anna Collyer
Chair
Energy Security Board

Submitted electronically

Dear Ms. Collyer,

PIAC response to Electric Vehicle Smart Charging - Issues Paper

The Public Interest Advocacy Centre (PIAC) welcomes the opportunity to respond to the Electric Vehicle Smart Charging Issues Paper. We commend the Energy Security Board (ESB) for taking proactive steps to support the effective integration of customer energy resources and flexible demand.

PIAC considers the accelerated uptake of electric vehicles (EVs) an essential part of any timely and efficient plan to decarbonise the economy. We recognize the importance of EVs in enabling the electrification of transportation, supporting emissions reduction, increasing the flexibility of the energy system and making progress on net zero goals.

A key focus of EV policy development must be delivering outcomes for all energy consumers (not just those with EVs). It is critical that policy settings reflect the potential implications of a significant electrification of the transport fleet and promote fairness and equity between EV and non-EV consumers during this transition.

Ensuring that the deployment of EVs delivers long-term benefits for consumers requires understanding preferences around their integration and usage and the impact of these practices on the electricity system. This must inform the design of network tariffs and retail products that enable consumers' use of EVs in a way that supports the overall system, and does not impact on other energy consumers.

Minimum smart charging equipment standards

PIAC acknowledges that minimum smart charging equipment standards are an important enabler for active coordination by aggregators. We consider it sensible that minimum functionality requirements include built-in scheduling and remote management with consumer over-ride capabilities. We see these requirements as providing future optionality for managing

peak demand and supporting electric vehicle supply equipment (EVSE) coordination via remote communications.

We support measures to ensure default charging configurations minimise the potential to create or exacerbate peak demand issues. Although EV uptake is unlikely to impact evening peak demand for a number of years, this is no reason to delay the roll-out of minimum technical standards as long-term signals are needed for tariff planning.

We recognise that implementing default tariff configurations is not without its challenges. Given the unique nature of the issues and opportunities of EVs, it is necessary for distributors and retailers to offer EV-specific tariffs, especially where the EV load is externally controlled by any party.

EV-specific tariffs would ensure that the upstream benefits of the efficient use of EV charging and discharging are captured and reflected in the signal and incentives seen by the consumer. Even if EVSE users do not respond to such price signals, introducing EV-specific tariffs would contribute to a fairer distribution of costs between consumers on a beneficiary-pays or causer pays basis.

EV smart charging: Consumer participation

PIAC views smart management of EV load as an important tool to support more equitable outcomes for non-EV consumers who would otherwise be significantly impacted by EV driven network costs required to manage increases in peak demand.

A delayed implementation of smart charging coordination raises equity concerns as those most responsible for creating the problem of peak demand growth (early adopters of EVSE) are exempt from its mitigation since their devices are not activated into coordination functionality. We therefore support efforts to accelerate the introduction of minimum communication and performance standards to enable active coordination of EV charge points.

PIAC recognises a role for charge point operators (CPOs) to carry out this coordination function in a manner that minimises both cost to consumers and impact on the grid. To this end, CPOs should seek to encourage the efficient take-up of EVs while mitigating costs of EVs for consumer who do not benefit from them.

We expect CPOs such as energy retailers to develop EV-specific offers that package the signals in network tariffs into a form that reflects consumer preferences and makes smart charging easy and attractive.

System operations requirements

PIAC considers it appropriate that there be a minimum requirement to capture installation of EVSE to assist with effective planning and operational management. We support AEMO undertaking this work in collaboration with the ESB and underscore the need for continued consultation with consumer groups, industry, and interested stakeholders on potential EVSE data collection mechanisms and delivery options.

We recognise the risk posed by a large number of charge points starting to charge or changing their rate of charging simultaneously when recovering from a power outage or in response to a time of use tariff signal. While this risk can be mitigated by requiring smart chargers to include

randomised delay functionality, we consider it most effective to introduce this requirement alongside EV-specific tariffs to ensure grid stability.

Public electric vehicle charging

Public charging is essential to the well-managed integration of EVs with the electricity system. We acknowledge that in the early phases of EV adoption this infrastructure is likely to operate at low utilisation and may consequently be an expensive method of charging when compared to domestic charging. However, the impact of this on operators should not be assumed, as public charging operators will have an incentive to offset scale costs in other ways.

Distribution networks should seek to develop public charging tariffs that are cost-reflective and affordable for operators and customers while not forcing other customers to pay for services they do not benefit from. While we support networks designing tariffs to cater to increasing EV uptake, we stress these tariffs should be cost reflective, designed and implemented in consultation with customers and other affected parties.

PIAC does not support transitional cross subsidisation of network costs related to public charging, unless engagement demonstrates an explicit community preference for this. Should availability and affordability of public charging in the early years of Australian EV uptake become an issue, this should be addressed by state and federal governments through external subsidies until sufficient scale of EVs are using the charge network.

We acknowledge that a variety of pricing models exist across EV public charging providers and recognise the need for flexibility to encourage more efficient customer behaviour and outcomes for the electricity system. However, there is also a need for coherent consumer protections that help facilitate the uptake of EVs by providing consumer confidence. As such, we encourage the ESB to undertake further efforts to examine what arrangements would best facilitate the clear and consistent display of public charging prices. Insights from the AERs recent work developing the Better Bills framework should be used as an example of how to approach this.

PIAC notes the need for greater ease-of-use across payment platforms for public charging. We support the adoption of roaming standards that ensure customers do not face barriers to access what is an essential service and allow seamless billing from one provider to another. Payment platforms should provide transparent charge session data to the customer, such as the price per kWh and charge duration.

Continued engagement

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

Yours sincerely

Jan Kucic-Riker
Policy Officer, Energy and Water

+61 2 8898 6525

jkuciriker@piac.asn.au