

22 April 2021

Ms Georgina Lawrence
Manager, Licensing
Essential Services Commission of South Australia
GPO Box 2605
Adelaide SA 5001

Lodged via online portal

Dear Ms Lawrence,

Re: Authorisation of Virtual Power Plant operations consultation

Simply Energy welcomes the opportunity to provide feedback on the Essential Services Commission of South Australia's (ESCOSA) consultation on extending electricity generation licence exemptions for enrolled participants in the Australian Energy Market Operator's (AEMO) virtual power plant (VPP) demonstration program.

Simply Energy is a leading energy retailer with over 730,000 customer accounts across Victoria, New South Wales, South Australia, Queensland and Western Australia. As a consumer-centric retailer, Simply Energy supports the development of effective regulation to facilitate competition and positive consumer outcomes in the market.

Since March 2018, Simply Energy has also been leading VPPx, which is an ARENA funded project to build the first VPP that integrates with a distributed energy market platform. Simply Energy is collaborating on this project with several partners, including technology vendor GreenSync and distribution network service provider SA Power Networks.

Simply Energy's submission provides feedback on the benefits of extending the current licence exemption for participants of the VPP demonstration program and the need to allow VPP operators time to comply with any new conditions of the varied licence exemption.

Extending the VPP licence exemption would allow VPP operators to continue providing services

Simply Energy supports ESCOSA's proposal to extend the period of the licence exemption to current participants of the VPP demonstration program for a further 12 months. The extension would allow VPPs to continue to operate in South Australia with minimal disruption and allow for a transitional framework while VPP operators prepare and submit applications for longer-term licences.

Without this additional exemption, VPP operators would need South Australian generation licences in place by 30 June 2021 to provide ongoing services to their VPP customers. As ESCOSA undertakes a period of public consultation on generation licence applications, there will be insufficient time between the conclusion of this review and 30 June 2021 for VPP operators to apply for generation licences and have these approved before their licence exemptions expire. If VPP operators were required to cease providing services from 1 July 2021, this would create significant disruption for both VPP operators and their customers benefiting from participation in South Australian VPPs.

Simply Energy considers that a continuation of VPP licence exemptions would align with the South Australian Government's policy position on VPPs and would allow the further development of evidence on the benefits of VPPs to South Australian consumers and the energy market. These are discussed further below.

South Australian Government supports VPP development in South Australia

The South Australian Government has directly supported the development of VPPs through its investment in the Energy Locals / Tesla VPP. The Minister for Energy and Mining has highlighted the Energy Locals / Tesla VPP as a key element of the government's strategy to deliver secure, reliable and affordable energy for South Australians.¹

The South Australian Government has also recognised the consumer benefits of VPPs through the Retailer Energy Productivity Scheme (REPS) that commenced on 1 January 2021. The REPS is a government scheme that provides incentives for South Australian households and businesses to save energy. As part of the REPS, the government introduced a new activity specification that provides incentives for South Australians to connect a new or existing battery to a VPP.² The energy productivity benefits of connecting a battery to a VPP are based on a 10-year contract term with the VPP operator. This suggests that the government recognises the benefits of VPPs to consumers and envisages VPPs as a long-term feature of the South Australian energy market.

The VPP demonstration program has provided evidence of consumer benefits

While VPPs are still a developing area, AEMO's VPP demonstration program has provided evidence that consumers can benefit from the coordination of distributed energy resources (DER) through VPPs in two ways:³

- Consumers who own VPP assets can earn value from delivering grid services
- All other electricity consumers can benefit from a more efficient power system.

Simply Energy's VPPx project has enabled participating customers to increase their self-consumption of energy generation (through the combination of a solar panel system and battery storage) and embrace the development of renewable energy technologies. The integration of a distributed energy market platform in VPPx is intended to enable customers to access greater economic value from their energy storage assets.⁴ For example, VPPx customers are accessing the benefit of their energy storage systems trading in the FCAS market.

During the VPPx project, Simply Energy has demonstrated the performance of the VPP-enabled batteries in terms of their ability to provide reactive power, real power and frequency support for the grid.⁵ However, due to the limited size and dispersed nature of the installed fleet, VPPx has not yet been able to access monetary value for network services.⁶

While VPPs are still in their infancy, AEMO has found that the current VPP demonstrations have identified the value that VPPs can provide in relation to operational visibility and forecastability.⁷

¹ Government of South Australia 2020, Energy and Mining Strategy, October, p.13

² Minister for Energy and Mining 2020, The South Australian Government Gazette No. 98, 21 December 2020, p. 6102

³ AEMO 2020, AEMO Virtual Power Plant Demonstration – Knowledge Sharing Report #1, March, p.5.

⁴ Simply Energy 2019, Simply Energy VPPx – ARENA Stage 1 Knowledge Sharing Report, February, p.7.

⁵ Simply Energy 2020, Simply Energy VPPx – Stage 2 Knowledge Sharing Report, June, p.5.

⁶ Simply Energy 2020, Simply Energy VPPx – Stage 2 Knowledge Sharing Report, June, p.5.

⁷ AEMO 2021, AEMO Virtual Power Plant Demonstrations – Knowledge Sharing Report #3, February, p.14.

The current generation licence is not well-suited to the unique operating model of VPPs

Simply Energy considers that the conditions associated with a standard generation licence are better suited to a single large generation plant than distributed assets that are owned by residential customers (as per the operating model of VPPs). There are significant differences between generating electricity from a large generation plant and co-ordinating the discharge of electricity from small assets. In particular, VPP operators have much less control over the generation of electricity than a traditional generation plant.

While grid-connected VPPs tend to incorporate rooftop solar PV, battery storage and controllable load devices, it is only the rooftop solar PV that can be considered to be 'generating' electricity. The VPP operator may have no control over the electricity generation from solar PV and can only exert control over battery storage and controllable load devices. The addition of battery storage to a solar PV system does not create additional electricity generation, because the battery only allows for previously generated electricity to be discharged into the home or grid at a later time. This also aligns with how the Australian Energy Market Operator (AEMO) treats VPPs in frequency control ancillary services markets, where AEMO requires that the individual connections are classified as 'loads' rather than as 'generation'.⁸

Simply Energy considers that the unique operating model of VPPs means that the current generation licence is not appropriate and includes protections that are not commensurate for the potential consumer harm. In the following section, Simply Energy provides some examples of specific clauses of the generation licence that are not suited to VPP operators. Simply Energy recommends the development of a bespoke VPP licensing framework that reflects the unique operating model of VPPs and introduces any appropriate and reasonable protections for South Australian consumers.

It is not clear that additional exemption conditions would benefit South Australian consumers

Simply Energy does not consider that VPPs are creating harm for South Australian consumers under the current licence exemption and the consultation paper does not specify how significantly changing the exemption conditions would benefit consumers over the next 12 months.

While Simply Energy understands that VPPs operators will likely need to apply for a generation licence in the short-term, it is not clear why the standard generation licence conditions should apply immediately rather than at the end of the 12-month extension. VPP operators would face immediate costs to ensure compliance with any additional requirements, which may result in reduced value for VPP customers and the electricity grid. Alternatively, maintaining the current conditions would be less disruptive for VPP operators during this short extension period and would provide VPP operators with additional time to assess the benefits of applying for a generation licence against the potential ongoing costs.

Simply Energy recommends that ESCOSA extend most of the existing licence exemption conditions until VPP operators are required to apply for either a generation licence or a bespoke VPP licence. However, if ESCOSA decides to proceed with significant changes to the licence exemption conditions, Simply Energy has some specific concerns with aspects of ESCOSA's proposal, as discussed below.

⁸ The VPP Demonstration excludes any generating unit that is required to be registered as a Generator under the NER. Source: AEMO 2019, NEM Virtual Power Plant (VPP) Demonstrations Program: Final Design, July, p.15.

Several conditions in the standard generation licence do not align with the VPP operating model

Simply Energy considers that the following proposed conditions are not well-suited to the specific operating model of VPPs and the ownership of the underlying assets:

- **Clause 5 (access)** – Clause 5.1(a) proposes that the exemption holder grants a distribution network service provider (DNSP) with rights to use, or have access to, parts of the interconnected parts of the electricity generation plant. Simply Energy considers that the DNSP's connection agreement with the end consumer is a more appropriate mechanism for allowing access to any physical interconnections or interfaces with the DNSP's assets. The end consumers' connection agreement also sets the standards by which distributed energy resources can interface with the DNSP's network. It would be burdensome and unnecessary to require VPP operators to have in place a separate access agreement for the same assets that are already covered by the end consumers' connection agreement. In addition, VPP operators risk eroding their 'social licence'⁹ with their customers if they are required to inform them that signing up to a VPP will also provide DNSPs with rights to use their assets,
- **Clause 6 (dispute resolution)** – As this clause relates to disputes under clause 5, the issues are the same as described above. As VPP operators only own virtual assets, it is not clear what access could be reasonably given to DNSPs. Simply Energy considers that access to the physical assets (and any relevant access disputes) should be covered under the connection agreement between the end consumer (who owns the physical assets) and the DNSP.
- **Clause 8 (safety, reliability, maintenance and technical management plan)** – Similar to the above points, Simply Energy considers that the issues covered by the plan envisaged by clause 8 would be more appropriate to include in the end consumers' connection agreement than through a VPP operators' licence. This is because the physical generation assets are normally being operated by the consumer and this operation will be of most relevance to any plan related to safety, reliability, maintenance and technical matters.
- **Clause 9 (switching manual)** – Simply Energy does not own or maintain any of the equipment on-site (aside from a communications device on a small number of units), therefore any physical switching is likely to be unique to the property the DER is connected to or, at local/regional level, will be managed by the DNSP as part of their day-to-day operations.
- **Clause 17 (compatibility)** – SA Power Networks have an agreement between themselves and the consumer in relation to safe connection to the network (Technical Standard TS129), which covers the relevant rules, regulations, standards, and codes. It is not clear how South Australian consumers would receive additional protections by duplicating existing requirements in a VPP operators' licence or exemption.

The consultation paper has not proposed any time to transition to the new conditions

Simply Energy expects that ESCOSA's final decision will be published in May or June 2021, which would provide VPP operators with around one month to prepare to comply with the conditions of the varied exemption applying from 1 July 2021. As highlighted in the consultation paper, there are currently relatively few conditions on VPP operators as part of their licence exemptions, which means that ESCOSA's proposal is significantly more burdensome for VPP operators. While many of the proposed conditions will not require upfront work, several of the proposed conditions would require VPP operators to undertake significant work to develop and put in place the appropriate systems and plans.

⁹ See Energy Consumers Australia research paper, 'Social Licence for Control of Distributed Energy Resources', available at: <https://energyconsumersaustralia.com.au/publications/social-liscence-for-control-of-distributed-energy-resources>

An example is ESCOSA's proposed clause 8, which would require VPP operators prepare a 'safety, reliability, maintenance and technical management plan' and have this approved by the Technical Regulator prior to commencing operation of the generation facility. Conditions such as this will be impossible for VPP operators to comply with by 1 July 2021 and would force VPP operators to either operate in breach of their licence exemption or to cease providing VPP services until all licence exemption conditions are met.

Simply Energy urges ESCOSA to update the list of conditions to clarify the dates by which existing VPP operators must comply with specific clauses. As noted above, Simply Energy does not consider that the current operation of VPPs is creating consumer harm that needs to be immediately addressed. For that reason, there would be limited risk in permitting existing VPP operators to have a reasonable transition period to prepare for any new conditions under the extension of the licence exemption. For example, ESCOSA could consider requiring that existing VPP operators ensure they are fully compliant with any new conditions within six months.

Several proposed conditions are not likely to be relevant for a 12-month period

While ESCOSA's proposed conditions are wholly relevant for a generation licence holder and align with the requirements of the *Electricity Industry Act 1996*, several of the proposed conditions may not be relevant for a 12-month licence exemption.

For example, ESCOSA proposes to require the exemption holder to comply with several audit and reporting requirements during the 12-month period (such as in clauses 8.1(d), 13.3 and 14). It is not clear that the burden on VPP operators from these requirements would be outweighed by any potential benefit to consumers during a short 12-month period.

Concluding remarks

Simply Energy looks forward to continuing to work actively with ESCOSA to ensure that the extension of the current licence exemption for participants of the VPP demonstration program is appropriate for the VPP operating model and ensures that consumers continue to receive the benefits of VPPs going forward.

Simply Energy welcomes further discussion in relation to this submission. To arrange a discussion or if you have any questions please contact Matthew Giampiccolo, Senior Regulatory Adviser, at matthew.giampiccolo@simplyenergy.com.au.

Yours sincerely



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