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Energy Policy WA
Level 1, 66 Saint Georges Terrace
Perth, WA, 6000

Re: WEM Amending Rules (Miscellaneous Amendments No. 3)

Dear EPWA Team,

Starling Energy Group Pty Ltd (SEG) welcomes the opportunity to provide feedback on the Exposure Draft of the Miscellaneous Amendments No.3 WEM Amending Rules Consultation Paper.

SEG provides integrated energy asset management services. SEG is committed to changing the future of the energy industry by switching to cleaner, greener energy solutions.

We believe a managed energy distribution grid is the future for the industry and it will become our major infrastructure asset, which is why we offer full lifecycle asset management. We oversee everything – from hardware and software to provider negotiations and customer service.

SEG are the creators of the Plico Project, the largest managed residential DER resource in the SWIS. In total, SEG has over 2300 residential solar and battery systems under management with over 16MW of residential solar PV deployed, complemented by 8MVA of inverter capacity and 20MWh of usable energy storage.

SEG has a deep interest in, and understands the rationale for, the proposed amendments. SEG offers its concise views on this in the context of what has been achieved so far in the DER space in WA as well as the extensive learnings from those achievements.

SEG would welcome direct communication with EPWA on our responses and any other matter relating to DERs.

Regards,

George Martin

Chief Technology Officer
Starling Energy Group Pty Ltd

1. Definition of NMI

The NMI is a unique 11 digit number that identifies a connection point in the WEM and NEM. It is used for various purposes, such as metering, settlement, billing, and customer transfer. The NMI is also linked to the relevant network tariffs, connection agreements, and technical standards that apply to the Connection Point.

The draft rule change proposes to amend the definition of NMI to include a reference to a Metering Point, rather than a Connection Point. This is intended to allow the registration of a facility at the meter point level, rather than the connection point level, which could enable more granular and efficient management of DER and other emerging technologies.

However, SEG does not believe that the definition of NMI should be amended for the following reasons:

- Changing the definition of NMI would create significant complexity and confusion for the existing market participants and processes that rely on the NMI as a connection point identifier. For example, it may affect the allocation of network charges, the applicability of connection agreements, the assignment of metering roles and responsibilities, the transfer of customers between retailers, and the calculation of settlement amounts. It would also require changes to the metering data and IT systems that use the NMI as a key identifier.
- Changing the definition of NMI would undermine the national consistency and interoperability of AEMO's systems. This may result in unnecessary cost and overhead for market participants.
- Changing the definition of NMI is not necessary to achieve the intended outcome of the draft rule change, which is to enable the registration of a facility at the meter point level. SEG believes that the meter point of a facility can be adequately defined and identified without altering the definition of NMI. For example, the meter point could be designated by a sub-NMI or a suffix to the NMI that indicates the location and type of the facility within the connection point. This would preserve the existing meaning and function of the NMI as a connection point identifier, while allowing for more granular and flexible registration of facilities at the meter point level.

SEG does not support the proposed amendment to the definition of NMI, as it would create more problems than it would solve. We urge EPWA to reconsider this aspect of the draft rule change and explore alternative ways of defining and identifying the meter point of a facility that do not affect the existing role and purpose of the NMI.

2. Part 2: Amending rules to encourage participation of aggregated Demand Side Programs (DSP) in the RCM

Firstly, SEG would like to acknowledge and commend EPWA on the steps it has taken and is considering allowing Distributed Energy Resources to play a larger role in the WEM. SEG particularly welcomes the ability for DERs to contribute by both curtailing load and injecting into the SWIS during peak events.

SEG notes the majority of DSP changes proposed under Part 2 stem from the work done by the [Demand Side Response Review Working Group](#). SEG also notes the DSR Review [Terms of Reference](#) and associated [Scope of Works](#) do not include DERs. Indeed, the Scope of Works documents notes the DER Roadmap as a Relevant Review and DERs, and their nuances, were not considered as part of the extensive DSR Review. It is with this in mind that SEG would encourage EPWA to ensure the relevant learnings from Project Symphony, Encore and SEG's own experience, which has been widely shared with industry, be carefully considered when creating mechanisms for DER participation. Below, we highlight key areas of interest surrounding the proposed changes.

Baselines

One of the key challenges for DER participation in the RCM is the proposed DSP baselining methodology, which was originally designed for commercial and industrial loads. The baselining method relies on historical data to estimate the counterfactual consumption of a DSP during an event and uses this as the basis for calculating the capacity contribution and payment. However, this approach is not fit for purpose for residential and small business DERs, which have more complex and dynamic load profiles, influenced by factors such as weather, occupancy, behaviour, and appliance usage. Moreover, the baselining method does not consider the recent strides made by industry in WA to leverage advanced DER telemetry. These technologies can provide a more accurate, granular and transparent way of determining the actual impact of DERs on the SWIS during peak events and should be leveraged to create a more suitable baselining framework for DERs. Being prescriptive on the available baseline methodologies at this stage of DER integration into the market is not ideal.

SEG believes that a revised baselining methodology for DERs is essential to ensure a level playing field for DER providers in the RCM. Without this, there is a risk of underestimating the value of DERs, leading to inefficient outcomes and reduced incentives for DER participation. SEG encourages EPWA to consult with industry stakeholders and experts on the best practices and standards for measuring and verifying DER performance, and to incorporate these into the RCM rules as soon as possible.

Change of NMIs

An aggregation of residential DER heavily depends on acceptable propositions put forward to end consumers. With end consumers, comes constant change. For example, in SEG's case, changing a set of NMIs that comprise the makeup of certain MWs may change from month to month, either due to churn or the addition of new systems. It is SEG's understanding that NMIs need to be fixed from the onset which is challenging due to the inherent nature of a VPP business model.

DSP Framework not suitable for aggregated DER

The resounding success of Project Symphony as well as the various reports that have been produced and made public should provide ample guidance for thorough consultation and consideration when crafting the best possible policy framework for the inclusion of DERs in the market.

SEG does not believe the DSP Framework, even with the proposed transitional changes would be suitable for aggregated residential DER because it's still fundamentally designed to cater for predictable, large loads that reside behind very few connection points that do not change frequently or ever. SEG would like to note several learnings for various Project Symphony reports below that may further explain the rationale for this position.

The below is an excerpt from Project Symphony Work Page 7 Report – DER Participation Framework¹:

“The key findings from Project Symphony are that the capabilities of, and operational realities required for, aggregated DER differ significantly from those for existing Facility Classes as:

- *Aggregated DER portfolios are coordinated from a single central IT platform and can therefore act across many electrical locations, with the potential to span the entire SWIS.*
- *Aggregated DER facilities change incrementally and dynamically and require ongoing flexibility to change size, composition and even electrical location.*
- *Aggregators need to manage a diverse mix of resources and capability.*
- *Aggregations may be inclusive of passive DER and/or active DER and uncontrolled load and they are therefore better suited to participation on a net (dispatching to and from a baseline), rather than absolute basis. o Accounting for variability of controlled and uncontrolled load. o Accounting for a diverse mix and capability of controllable assets.*
- *Baseline forecasts were reflected as market submissions that were frequently updated to communicate expected aggregator capability to AEMO.*
- *The value that can be derived from aggregated DER spans multiple operation modes, demonstrating capability similar, but not equivalent, to existing Facility Classes.*
- *Constraints on aggregated DER (in the form of DOEs) are not presently visible to, or managed by, AEMO and will need to be made visible specifically for aggregated DER.*
- *Integration and coordination between the DSO and DMO is critical to enable Aggregators to provide services with consistent, achievable obligations, and so that market and system operations can be undertaken effectively within network limits.”*

¹ [Project Symphony DER Participation Framework Work Package 7 Report – page 32.](#)

The above is culminated in Finding 1 as follows:

“DER aggregations demonstrate capabilities that can support system needs for the secure and reliable operation of the SWIS. Market arrangements should be established to enable value to be derived from these capabilities.”

Findings 2 and 3² of the same report also read as follows:

“Finding 2: WEM Registration processes must provide flexibility to enable customers and DER equipment to enrol/unenroll from the aggregated facility, and to accommodate network switching.

Finding 3: DER aggregations should be expected to provide a coordinated response across many connection points, potentially spanning the entire SWIS, through a single orchestration platform. This may extend across multiple Facilities as defined in the WEM Rules.”

As the proposed rules currently stand, there are still restrictions on enrolment and enrolment and constraints relating to TNIs. These are fit for purpose for larger DSPs but not necessarily for vastly geographically spread DERs.

The number one outcome and lesson in the Project Symphony Final Lessons Learnt Report³ states

“Outcome: The interaction of aggregated DER with the energy market is fundamentally different to that contemplated by the existing WEM arrangements.

Lesson: ‘Facilities’ comprising aggregated customer-owned DER, with or without stand-alone DER (such as distribution-connected battery), could provide additional value through modes of operation base on capabilities that cut across those contemplated for multiple Facility Classes in the WEM’s existing registration framework, rather than aligning neatly with a single Facility Class.”

Absent a new Facility Class for DERs, it is clear to SEG that EPWA has indeed contemplated changes to the DSP to allow for DERs, which, again, is very much welcomed. However, it is possible these transitional arrangements may be more detrimental to DER participation during the transitional period than short-term SRC and NCESS participation.

SEG proposes to continue working with EPWA on the establishment of a specific Facility Class for aggregated DER as well as on the adoption of single communication protocol for all inverter-based DER, such as CSIP-AUS to maximise standardisation. This, in addition to the work currently underway by AEMO, in the CER Data Exchange⁴ may enable the use of DER telemetry data for baselining as only this data can provide more accurate insight into the value being derived behind the meter and the overall system. SEG does indeed view that, in the medium to long-term, full integration of DERs into the WEM (including the RCM), is the ultimate goal and is willing to work closely with industry to make that a reality.

² [Project Symphony DER Participation Framework Work Package 7 Report – page 37.](#)

³ [Project Symphony Final Lessons Learnt Report – page 19](#)

⁴ [CER Data Exchange Industry Co-Design](#)