Enel X Australia Pty Ltd
ABN 49 104 710 278
Level 18, 535 Bourke Street
Melbourne, Victoria 3000
Australia
T +61-3-8643-5900
www.enelx.com.au

AEMO
Submitted by email: StakerholderRelations@aemo.com.au

14 July 2022

Dear Mr Morrow

RE: Scheduled Lite – Draft High Level Design paper

Enel X appreciates the opportunity to provide feedback on Draft High Level Design paper on Scheduled Lite.

Enel X operates Australia's largest virtual power plant[1] with over 350MW of flexible assets under management across more than 150 commercial and industrial sites. We were the first registered Demand Response Service Provider (DRSP) and work with commercial and industrial energy users to develop demand-side flexibility. This flexibility is offered it into the NEM's energy and ancillary services markets, the RERT mechanism, and to network businesses.

This submission sets out our response to the Draft High Level Design paper on Scheduled Lite. We are supportive of the intent of Scheduled Lite as a way to introduce new options for demand-side participation as we move toward a two-sided market. We consider it a good complement to the Wholesale Demand Response Mechanism (WDRM) for demand-side assets providers to engage in the wholesale market, moving the NEM toward a two-sided market.

We remain concerned about the limited incentives for potential providers to participate in a voluntary scheme and the scale that AEMO would require to get benefit from its use. To that end, we remain hesitant that Scheduled Lite is necessary or desirable for the NEM at this time. Additionally, Scheduled Lite should be truly voluntary for providers – be they retailers or aggregators. If it is not, we expect it would become a barrier to demand-side participation in the spot or existing and future ancillary markets, which would lessen competition to the detriment of consumers.

Enel X's submission key points are:

- **Incentives to encourage participation:** We support the use of payment for service/capability to be used to incentivise participation in both Scheduled Lite models. This allows the mechanism to be truly voluntary during the implementation of these new approaches (SCADA for DER, central dispatch of residential DER) where inevitably some issues will arise.
- **Aggregation processes and portfolio thresholds:** The models should allow for as much flexibility as possible for aggregation into portfolios of visibility/dispatchability units. Barriers, such as those that exist for WDRM aggregation, prevent the efficient coupling of compatible loads, undermining service provision while in no way improving system

[1] Bloomberg NEF, December 2019.

security. Additionally, we consider the proposed 5MW threshold to be too limited in scope. Instead, we propose two thresholds should be used: a 5MW participation threshold and then a higher mandatory threshold of 15-30MW be used if a participation requirement incentive model is used. This provides flexibility while acknowledging the issues with aggregating some loads.

- **Data and bid increments:** The data required under both proposed models sounds reasonable to Enel X. The limiting factor for most of these is how that data is required to be communicated to AEMO. We consider, consistent with our submission to AEMO's Review of the Power System Data Communication Standard, that the most important thing is reasonable, cost-effective and practical SCADA for DER arrangements. We also agree that 100kW incremental bid quantities are beneficial for asset portfolios of less than 5MW.
- **Compliance:** We are supportive of the approach to compliance for both Scheduled Lite models. They provide an appropriate level of supervision given the lower level of risk to power system security from these assets not performing (compared to a scheduled generator and its compliance regime).

Enel X welcomes further engagement with AEMO on this High Level Design ahead of its submission of the Scheduled Lite concept as a rule change to the AEMC.

Regards

James Hyatt

Manager, Industry Engagement and Regulatory Affairs

James.Hyatt@enel.com

General comments – Increasing optionality for two-sided market participation

Enel X support the intent of Scheduled Lite in providing new options for providers to integrate demand-side assets into AEMO's forecasting and scheduling processes. Mechanisms such as this and the WDRM will help move the NEM towards a two-sided market.

The significant benefit for AEMO and consumers will be gaining visibility and scheduling of the biggest areas of invisibility in the market, being demand response (DR) activities that are currently not part of the WDRM. As such, Scheduled Lite should have a keen focus on how to uncover the (mainly residential) DR retailers are undertaking and incentivise them to participate in these models. We consider the current analysis insufficiently focuses on this important area – most importantly in regards to the incentives for their participation in either model.

Enel X also stresses the different roles that scheduling optionality plays in engaging the variety of flexible demand-side assets. Scheduled Lite will be well placed to assist assets that will be dispatched frequently in the energy market, which cannot easily participate in the WDRM because baseline methodologies do not work well in such cases. This is supported by the need for constant consumption/generation data provision to AEMO, as proposed under both models. The WDRM plays an important role for loads in the NEM by allowing consumers:

- that are rarely dispatched, and as such where baseline methodologies work well and constant provision of consumption forecasts are impractical and uneconomic, to participate in the wholesale market.
- to choose a third-party aggregator to offer their flexibility in the market, whereas Schedule Lite will require the involvement of the retailer.

Enel X sees a complementary role for WDRM and Scheduled Lite to work to bring all the different types of flexible demand-side assets into the wholesale spot and ancillary markets.

Incentives to encourage participation

Enel X supports the use of the 'payment for service/capability' incentive as the most compelling of those offered in the paper. We also strongly oppose the incentive of using participation in the models as a requirement to gain access to various existing or future ancillary energy markets.

Payments to providers will allow for most to recover the costs associated with participation in either model. These payments could be derived from the enhanced market operation. We do not see how providers can monetise this benefit themselves but do see that AEMO could. As such, the benefits provided to the market, be that less use of regulation FCAS etc, due to this greater information provision into AEMO's dispatch processes could be returned to those that provide the financial benefit. This is the only incentive explored in the paper that would equally induce participation by both aggregators and retailers without creating barriers to entry.

Enel X strongly opposes the participation requirement incentive. This effectively makes the models mandatory as it is a condition of access to some markets. Mandatory participation will be a barrier to entry into any new or existing energy or ancillary market. The paper rightly draws attention to the potential for barriers to entry and notes the intention is to reduce barriers to participation. The use of this type of incentive will risk doing the opposite and may

create unnecessary and unfair barriers to entry for low-cost, competitive assets during a time in the transition where they are most needed.

Further, no retailer DR activities would be encouraged to participate using these incentives as they will not be affected financially by restricting access to markets. To the best of our knowledge, no retailer offers any of their DR assets into contingency FCAS currently nor would we expect them to be offered into a capacity market. Using the participation requirement incentive to gain participation in either model would only unfairly punish aggregators and miss out on a significant portion of the flexible, active and currently invisible DR activities in both energy and ancillary markets.

Having said this, we do not consider that this will be a barrier to entry forever. When the market has matured with these concepts (such as SCADA for DER) further, it would be sensible and prudent to revisit the model's participation requirements. Doing so while the details and potential issues with the implementation of these models are still being worked out would only restrict aggregators from competing with utility-scale generation and retailer DR, to the detriment of consumers.

Further, the paper mentioned the idea of mandatory participation for "certain non-scheduled generators". We consider this nuance is important as large generators typically run to a schedule whereas customers' consumption of energy of equivalent size is not known in advance. As such, treating generators and loads of equivalent size having the same scheduling capabilities is a shortcoming of the design so far and should be considered closely in AEMO future development of the models.

The other incentive option to encourage participation, such as reduced energy and non-energy costs, favours retailers as it is an incentive that is not readily accessible to aggregators. As such, there would be limited benefits to using this incentive. Additionally, we question whether the savings would be substantial enough to support the required investment.

Aggregation processes and portfolio thresholds

Our WDRM experience shows that flexibility is required in the aggregation process and thresholds. Set thresholds create perverse incentives for portfolios to be unnecessarily limited.

Processes that increase complexity for aggregation will also lead participants to waste effort working around overly complex processes (such as having many units that aren't aggregated), to nobody's benefit. As such, it is best to provide simple mechanisms and we urge AEMO to focus on system security when creating limits for aggregation for either visibility or dispatchability units to avoid creating unnecessary disincentives to aggregate. That is, thresholds over which unit size approval is required by AEMO or DNSPs reduce the agility with which aggregators can react to sudden changes in circumstances. These approvals lead to many small units compared to larger aggregated units, which provide greater reliability at lower cost, and so are preferable for both the aggregator and AEMO.

Additionally, registration and other administrative fees that stop sensible and timely aggregation may limit participation in, and therefore benefits of both Scheduled Lite models. Cheaper and more agile aggregation processes need to be implemented with barriers only set up when a tangible cost or system security risk is present.

Further, the paper discusses a 5MW threshold for graduation from the Visibility model to the Dispatchability model. We consider this is a sensible threshold for aggregators to voluntarily become scheduled, but it should not be a hard line. A mandatory graduation line should be avoided where possible, but if required would better sit at 15-30MW – on the upper bound of resource scheduling limits. Allowing aggregators to graduate at 5MW, but not forcing them, acknowledges that not 5MW portfolios are the same. Some may be made up of thousands of residential batteries and others may be a single site. Allowing the aggregator discretion will be useful in knowing when the visibility unit is ready to be scheduled into dispatch.

Data and bid increments

Enel X considers the data sets AEMO is proposing to be collected from participants in both models to be reasonable. We note that this information is not usually the most costly in data provision, but rather how it is communicated. We support the use of APIs in both the visibility and dispatchability model.

Enel X continues to engage in AEMO's Review of Power System Data Communication Standard and reflects our advice to that review here. Overall, the principle should be that the solution is reasonable, cost-effective and practical. Traditional SCADA schemes, as widely acknowledged, are not suitable for DER. But so as long as modern, lightweight APIs are used as the basis for SCADA for DER schemes (or another cost-effective and practical solution is used) then we see the data and its collection under both models as a reasonable ask of providers.

However, in saying this, we note that such requirements come at a cost and this cost should not be forced on participants through punitive incentives, as previously discussed. The process should be truly voluntary initially, with some payment for service/capability made to incentivise early adopters.

Regarding bidding increments, we consider reducing the incremental bid to 100kW would be helpful, especially for aggregated units of less than 5MW. This will assist providers to remain compliant and accurate when bidding in small increments where rounding of bids can cause unnecessary errors. However, our experience shows that these rounding errors are less significant for units above 5MW.

Proportionate and flexible compliance regime

Enel X supports the proposed compliance regimes as being proportionate and flexible as required for aggregators dealing with many more variables than typical Scheduled assets. The WDRM compliance regime has been successful to date and in our experience is fit-for-purpose for the dispatchability model.