



AGL Energy Limited
ABN: 74 115 061 375
Level 24, 200 George St
Sydney NSW 2000
Locked Bag 1837
St Leonards NSW 2065
t: 02 9921 2999
f: 02 9921 2552
agl.com.au

Integrating price-responsive resources into the NEM rule change– ERC0352

Submission via AEMC website

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AGL Response to Integrating price-responsive resources into the NEM rule change consultation paper

AGL Energy (AGL) welcomes the opportunity to comment on the AEMC Integrating price-responsive resources into the NEM rule change consultation paper (**consultation paper**).

Proudly Australian for more than 185 years, AGL supplies around 4.3 million energy and telecommunications customer services. AGL is committed to providing our customers simple, fair and accessible essential services as they decarbonise and electrify the way they live, work and move.

We are actively expanding decentralised assets across all regions in the NEM. AGL's FY 27 target is to have 1.6GW of decentralised assets under orchestration.

The consultation paper sets out AEMO's rule change proposal to make changes to the National Electricity Rules (**NER**) that introduce a mechanism that integrates price-responsive resources (PRR) into the scheduling processes.

Broadly, we support improvements in information reporting to AEMO that lead to more accurate forecasting and market efficiency, this in turn ensures customers pay no more than is necessary for electricity.

As set out below, we consider the AEMC's focus should be narrowed to PRR that are material to forecasting and lend themselves to real time reporting and bidding due to the systems and telemetry that already exist to manage these types of resources. In our view the primary focus should be on VPP batteries. We also propose that when an aggregator or retailer's VPP is above a certain threshold the visibility requirements become compulsory. Further we highlight the importance of establishing operational parameters for these types of resources to address system security and forecasting improvements.

The submission also explores why the improvements to system security and price efficiency may be overstated in the consultation paper as a result of the proposed visibility improvements.

DO YOU AGREE THAT PRICE-RESPONSIVE RESOURCES NEED TO BE INTEGRATED INTO THE NEM?

We consider the ultimate driver to participate in visibility mode will be whether the existing technical capabilities of the PRR are already capable of meeting the reporting requirements under the mechanism.

Broadly, this relates to C&I and residential battery VPPs. These aggregated portfolios are currently expanding within the NEM. We expect these types of resources will become an increasingly greater proportion of energy storage capacity in the NEM over the next 5 years. Due to the dispatchable and operational nature of these resources, these assets are already capable of real-time reporting to AEMO.



Other forms of PRR are likely less certain as to whether a response will occur, and if so, when it will exactly occur. This uncertainty may make real time reporting difficult for the participant and have limited benefit to AEMO in applying this type of reporting to their forecasts.

Any AEMO reporting should therefore aim to utilise the existing reporting capabilities of the PRR without unduly changing system and processes already in place. This will ensure that participants aren't faced with barriers to participate due to costly system upgrades.

Given the growing capacity of VPPs, we also propose the AEMC consider if reporting requirements should be compulsory if a retailer, or aggregator, combined VPP portfolio is above 30MW within a given region. Particularly if the VPP has fast ramping capability. Whilst a retailer, or aggregator, may have numerous VPPs below this threshold, there should be a threshold in which the combined size of the VPP portfolio requires greater reporting and transparency of operations within a region. This is particularly important as the combined portfolio capacity will likely have material impact on market outcomes and forecasting.

We note the AEMC's assessment of challenges associated with price efficiency, FCAS requirements and additional resources for reliability due to PRR. In some cases, these assessments may overstate the PRR impacts for the following reasons:

- The AEMC should be mindful of not overstating the price impact in the energy market as PRR will only respond at these high prices. Therefore, without the high price, the PRR may not have responded. Integrating PRR, such as demand response, may therefore have limited impact on high price events. On some occasions, a forecast that includes PRR may lower the price but will result in no actual demand response due to the low price, in turn requiring FCAS raise services to meet the shortfall.
- We agree with the assessment of additional costs associated with deviations with actual and forecast demand. However, the intermittent and fast ramping capability of VPP batteries may still require significant FCAS responses regardless of whether the PRR is visible or not.
- Whilst the forecasts that give rise to LOR conditions may be avoided if PRR are better taken into account, the forecast will likely place minimal weight on this type of capacity for the following reasons; firstly, the expected response may not be certain or guaranteed. Secondly, the capacity may be able to respond within critical periods, however the timing and duration of the response may be limited or uncertain. This may therefore provide limited impact on the forecast response as the LOR conditions may be in place over several hours and the PRR may only address supply/demand requirements for part of this time.

ASSESSMENT OF VISIBILITY AND DISPATCH MODE

We agree that improved visibility of PRR will result in improvements in market efficiency and system support, however as noted above there will likely be remaining costs to the system for PRR participation regardless as to whether it is visible or not.

This gives rise to an equally important issue regarding not just visibility and dispatch, but also how these resources operate in the system. For some PRR, the response capability is gradual and has minimal impact on forecasting or energy markets, by contrast there are other PRR that will respond significantly quicker. For these fast response PRR, the AEMC should consider if there are operational constraints reasonably required to preserve a stable system and improved AEMO forecasting capability. For example, residential batteries are capable of instantaneous export,



charge, or cessation of operations. As VPP capacity increases to above a materiality threshold, this instantaneous high speed ramping capability will likely cause significant strain on the system as large amounts of capacity are suddenly withdrawn or injected into the network. This issue will occur regardless as to whether or not it is visible. There is merit in considering if ramping constraints should be applied to these technology types to ensure system security is not unduly impacted and forecast demand is not placed in the impossible position of predicting these large movements in capacity.

The AEMC should therefore consider if certain operational parameters are necessary to preserve the accuracy of system forecasts and system security. This will become increasingly important as battery VPP capacity expands over the coming years.

If you have any queries about this submission, please contact me on (03) 8633 6854 or KAuret@agl.com.au.

Yours sincerely,

Kyle Auret

Senior Manager Wholesale Markets Regulation