



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

Energy Security Board

via email: info@esb.org.au

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AGL Response to Consultation on two-sided markets

AGL Energy (**AGL**) welcomes the opportunity to comment on the Energy Security Board's (**ESB**) consultation on moving toward a two-sided market in the NEM.

AGL Energy Limited (AGL) is one of Australia's leading integrated energy companies and the largest ASX listed owner, operator, and developer of renewable generation. Our diverse power generation portfolio includes base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources. AGL is also an energy retailer and provides energy solutions to over 3.5 million customers in New South Wales, Victoria, Queensland, Western Australia, and South Australia.

Greater demand side participation will be an important part of the NEM over the coming years to provide vital security services and help manage peak demand reliability concerns. Demand response could help to defer investment in generation that is only needed for several hours per year and could therefore help to minimise the overall costs for consumers. Many consumers are interested in taking up behind-the-meter solutions with orchestration that allows them to optimise their energy use and directly participate in the energy sector transformation. However, as DER penetration increases and becomes more widely orchestrated and responsive to price signals, it may become more difficult for the operator to forecast the activities of the demand side, to match supply and demand in real time.

Taking steps towards a two-sided market has the potential to increase participation of demand side resources and improve transparency of demand side activities for the market operator.

This can be achieved through incremental steps that improve transparency and participation of demand side resources in a cost-effective way. The additional benefits of requiring all load to participate in a full two-sided market are unclear, and we don't feel commitments need to be made at this stage. There will inevitably be some customers that are unable or not interested in DER participation or responding to price signals. Requiring participation of this load at this stage of market reform is of little benefit. In addition, the costs of implementing a full two-sided market in the medium-term could be prohibitive compared to a voluntary two-sided market. In short, the case has not been made for the full transition, and the steps outlined should be seen as potential elaborations rather than an inevitable path.

We appreciate that a two-sided market is being considered for the future and the paper envisages the transition could be over a long-term period. The costs of technologies may come down significantly over that time, and there are likely to be other market developments and behavioural barriers that must be taken into account in considering each step.

We suggest that each transitional step set out by the ESB is thoroughly and robustly assessed, rather than assumed, before committing to that step. ESB must take into account the most up to date costs and benefits



and to ensure there is evidence for proceeding – for example, clear evidence that there is significant further demand response to be unlocked.

Given the evidence we have seen, a voluntary mechanism looks most prospective in the P2025 timeframes. The reforms underway around DRM and VPPs, which are themselves steps towards a two-sided market, will help to determine how demand side resources can best participate in the NEM and how to efficiently manage those resources.

There may also be significant value in setting up a trial or sandbox arrangement for a two-sided market, to more fully understand the demand response that it would unlock and any challenges of bidding different types of load into the NEM. It will be important to get the regulatory framework right, based on evidence from trials, to set up a voluntary mechanism. Once this is successfully implemented, we can consider whether a selective or full two-sided market will deliver additional benefits.

The remainder of this submission provides comments to selected issues raised in the ESB's consultation paper.

Participation, implementation costs and transition

As noted above, AGL is supportive of investigating whether a voluntary two-sided market mechanism could be implemented that facilitates and incentivises greater participation from the demand side and provides greater transparency to AEMO of these controlled resources. This should be informed by trials and the DRM to determine the best way these resources can participate in the NEM. A voluntary mechanism would help to drive demand response and DER to address peak demand issues over the medium term and to assist with local security and reliability issues.

A voluntary two-sided market could be implemented alongside cost effective measures to improve the transparency of other resources – to assist AEMO with scheduling uncertainties.

Moving towards a two-sided market with any form of mandatory participation in the medium term (over the next five to ten years) is likely to be of significant cost. It would require the obligated participants to roll out technologies and systems to support the collection of near-real time customer data, to participate in a five-minute spot market, at significant upfront cost. Obligated participants would also need to set up some form of “trading desk” to actively monitor usage of demand at the sites and bid into the NEM. AGL anticipates that the cost effectiveness of the required technology is similar to that required for the Distribution Market Operator reforms – a more likely timeframe for consideration might be post-2030.

Scheduling and Bidding

The consultation paper seeks feedback around how the demand side could participate in the NEM, noting that generators currently provide information to the PASA process, submit bids into pre-dispatch, follow dispatch instructions and meet technical requirements (such as telemetry). AGL agrees that these requirements are onerous and should be re-examined in the context of driving greater demand side engagement.

There are likely to be opportunities to improve the visibility of non-scheduled generation, DER and other price responsive loads, without requiring participation in a two-sided market. AGL considers that this reform should focus on better ways to integrate supply and controllable demand – not necessarily all demand – in a cost-effective way.



Participation in a voluntary two-sided market could be incentivised. As an example, certain costs that are levied on market customers (such as FCAS or RERT) could be waived or discounted for loads that participate in the NEM and for follow scheduling and dispatch instructions, on the basis that their participation is helping to maintain system security. Given the nature of certain loads, it may be appropriate that the load is taken to have followed dispatch instructions if it does so within a reasonable margin of error. Beyond the margin of error, the trader could be increasingly “penalised” and exposed to the FCAS or RERT costs it had avoided by participating.

The DRM and VPP trials will help to illustrate the ability of loads to be scheduled and follow dispatch instructions and will inform fair and suitable requirements.

Should a mandatory two-sided market (selective or full) be introduced, it might be more appropriate that certain loads are not penalised for not following their forecasts. There will be circumstances where the obligated participant has little or no control over the customer’s demand.

We note that a full two-sided market would place the risk of incorrect forecasts on the retailer, with the rationale that retailers have the best information about the demand profile of their customers. However, this is not necessarily the most efficient outcome for forecasts of uncontrollable demand, as a centralised forecast has the same level of historical data but has the benefit of looking at the demand on a NEM wide basis – it is more likely to be accurate compared to the sum of individual retailer forecasts. Forecasts related to controllable or responsive demand (ie DR and VPPs) may be different, because the retailer/ aggregator would have better information than the operator.

Other comments and questions

1. The consultation paper notes that both retailers and aggregators may be providing energy services to end users. The DRM rule change has set out the relationships between retailers, aggregators and customers, but it is unclear how this would transition to a two-sided market where total demand at a connection point would be bid into the NEM. Could the ESB clarify these arrangements?
2. There may be complexities related to the obligated participants using off-market data to participate in the NEM, where this data is not yet verified by AEMO. We suggest that AEMO and industry begin investigating ways to improve the accuracy and timeliness of off-market data, as well as working through other technical issues that may be creating barriers to greater demand side participation in the NEM.

Concluding comment on the Post 2025 Market Design Process

In all this it will be important to approach the task of Market Design in a careful manner to underpin investment confidence, and to ensure solutions that are durable and robust to the different directions the energy transition may take.

The key first step is to carefully identify the problems and challenges the market faces now, or is likely to face in the future. The next step is to design solutions that address these issues most directly and for maximum net benefit and robustness.

AGL has concerns that the current design process has some elements where solutions are assumed with inadequate problem definition, and also that multiple design approaches are being progressed in parallel, ostensibly to solve similar problem. Such an approach has been an issue in the recent past, producing a



range of disjointed market rule changes or processes, which have absorbed significant effort relative to reform advances, and involved more substantial transitional costs than first estimated. We cannot repeat this approach.

This particular MDI is ultimately aimed at ensuring demand response is available to the maximum extent possible, particularly given technological developments that potentially make it more accessible. This is important in its own right, but contributes to the central issue shared by the stream of work looking at resource adequacy – how to ensure market design most efficiently incentivises investment and manages peak demand circumstances. This MDI also seeks to improve transparency of demand side resources, which overlaps with the examination of ahead markets (another MDI where not enough attention has been paid to problem definition). These overlaps must be managed and it is important that this work on two-sided markets is framed in the context of issues to resolve, rather than the assumption that a ‘full’ two-sided market is the destination.

We urge the ESB and other market bodies continue to focus on these principles of sound policy formulation as it moves the post-2025 market design processes forward. We also encourage immediate and thorough consideration of the interactions between MDIs to minimise the risks of options being developed in silos.

AGL looks forward to further discussions on a two-sided market. If you have any queries about this submission, please contact Jenessa Rabone on (02) 9921 2323 or JRabone@agl.com.au.

Yours sincerely,

Barry Sterland
General Manager, Policy and Strategy