



14 September 2023

Rachel Thomas  
Australian Energy Market Commission  
GPO Box 2603  
Sydney NSW 2000

Dear Ms Thomas

## **RE: Integrating price-responsive resources into the NEM**

Shell Energy Australia Pty Ltd (Shell Energy) welcomes the opportunity to respond to the Australian Energy Market Commission's (AEMC) Integrating price-responsive resources into the National Electricity Market (NEM) rule change consultation paper. We note this rule change is also commonly known as 'Scheduled Lite' based on the rule change request and refer to it as such through this submission.

### **About Shell Energy in Australia**

Shell Energy is Shell's renewables and energy solutions business in Australia, helping its customers to decarbonise and reduce their environmental footprint.

Shell Energy delivers business energy solutions and innovation across a portfolio of electricity, gas, environmental products and energy productivity for commercial and industrial customers, while our residential energy retailing business Powershop, acquired in 2022, serves households and small business customers in Australia.

As the second largest electricity provider to commercial and industrial businesses in Australia<sup>1</sup>, Shell Energy offers integrated solutions and market-leading<sup>2</sup> customer satisfaction, built on industry expertise and personalised relationships. The company's generation assets include 662 megawatts of gas-fired peaking power stations in Western Australia and Queensland, supporting the transition to renewables, and the 120 megawatt Gangarri solar energy development in Queensland.

Shell Energy Australia Pty Ltd and its subsidiaries trade as Shell Energy, while Powershop Australia Pty Ltd trades as Powershop. Further information about Shell Energy and our operations can be found on our website [here](#).

### **General comments**

Shell Energy agrees that benefits could come from having more consumer energy resources (CER) integrated into the NEM through either scheduling more resources or factoring in their intended behaviour into forecasts and dispatch. The rule change request aims to achieve these outcomes through encouraging resources to either signal their intentions to the Australian Energy Market Operator (AEMO) through indicative bids (visibility mode) or through providing firm bids to dispatch or consume at different price bands, similar to a scheduled load

---

<sup>1</sup>By load, based on Shell Energy analysis of publicly available data.

<sup>2</sup> Utility Market Intelligence (UMI) survey of large commercial and industrial electricity customers of major electricity retailers, including ERM Power (now known as Shell Energy) by independent research company NTF Group in 2011-2021.



(dispatch mode). We recognise that allowing AEMO to factor in this behaviour from 'controllable' resources could improve dispatch forecasts and outcomes, reliability assessments and improve utilisation of the network.

The reliability impact of projected CER and demand side participation (DSP) developments sensitivity analysis contained in AEMO's 2023 Electricity Statement of Opportunities (ESOO) report shows the reliability benefits that could eventuate with greater coordination of CER and demand response.<sup>3</sup> While we do not necessarily agree with AEMO's base case assuming no additional coordination in the future without rule changes, we do recognise that there could be benefits associated with AEMO having greater visibility of CER. Indeed, the ESOO sensitivity analysis does not suggest that increased CER will not occur without this rule change (and others), merely that AEMO will not factor it into reliability assessments. Such an outcome of excluding CER and demand side participation from the reliability assessment could result in less accurate future reliability assessment forecasts and inefficient investment or market intervention.

As distributed battery systems become more widespread, with aggregators potentially seeking to automatically respond to market prices for both charging and discharging, there would be benefits to the broader market through having these intentions bid into the market. Other price-responsive loads could provide similar benefits if their intentions were signalled to the market.

Shell Energy considers that if this rule change is to genuinely deliver benefits to the wider market, the benefits for individual participants must outweigh the costs of participating (e.g. bidding, responding, compliance, updating systems and metering if required). Should the requirements be too onerous, or the benefits to participants too limited, then the mechanism is unlikely to be a success, in which case costs will have been imposed on the whole market for no net benefit.

When analysing the prospects of the proposed dispatch mode we recommend the AEMC first consider why there has been such limited participation as a scheduled load in the history of the NEM. As a retailer to large customers, we see that energy users rarely want to be actively involved in their energy consumption decisions on a daily basis. There are some customers who choose to be involved in demand response activities or use pool-price pass through arrangements to provide signals for consumption, but there are relatively few. The main issue is that with a retailer, a customer still has control over their decision to consume energy (i.e. produce widgets) at certain times. A customer may choose not to participate in a demand response event due to a range of reasons – from having to fulfil orders, not having alternative activities available for staff to perform or having already engaged in enough demand response activity at the time.

If a consumer was to do this as a scheduled load however, the decision is out of their hands. They must comply with their dispatch instructions or risk fines for breaching bidding and dispatch rules. If the design of the dispatch mode within the Scheduled Lite rule change fails to address this issue, then we doubt there will be significant participation.

### **Interaction with FTA**

We disagree with the rule change proponent's assertion that the Flexible Trading Arrangements (FTA) rule change is necessary for the Scheduled Lite mechanism rule change to be made. Shell Energy will separately outline its concerns about the FTA rule change in a submission on that rule change, but in short, the FTA rule change exposes retailers to costly risks. We doubt that the benefits of the Scheduled Lite rule change to a retailer would offset the costs and risks associated with the FTA rule change. In our view, separately metering controllable loads would be important but allowing for separate trading arrangements is not.

---

<sup>3</sup> AEMO, 2023 Electricity Statement of Opportunities, pp 93-95.



Further, even without separate metering arrangements a retailer (or trader) could still provide a guide as to the volume of loads (or supply) that would respond at different price bands: a 10 MW response from aggregated load would still change demand by 10 MW whether it was metered separately or not.

We also see that there may be advantages to avoiding FTA in the case of electric vehicles. There are three main streams of EV charging: at-home, destination charging and fleet charging. Given the AEMC proposes to exclude small customers from FTA, Scheduled Lite offers some benefit in terms of coordinated charging for small customers. Small customers are likely to plug in their EVs when returning home, so there could be benefits in shifting the actual recharge to times of either low demand or low price through automated responses. Seeing as small customers may be excluded from FTA, Scheduled Lite offers a viable alternative without relying on FTA.

We note that EV charging products are emerging in the market now without the need for rule changes. Scheduled Lite would therefore need to offer retailers sufficient benefits to encourage participation where the benefits can be shared with customers. Further, Scheduled Lite alone would not be a driver for automatically controlled or coordinated charging behaviour at home. Retail tariff structures (potentially supported by network tariff structures) will offer the main incentive for EV users to charge at home at certain times.

In the case of destination charging, such as at service stations or dedicated public EV chargers, Scheduled Lite is unlikely to offer any benefit – nor is FTA for that matter – as customers will expect to charge when they arrive. Pricing structures from the charging provider will be the driving force for changing behaviour and charging decisions.

Fleet charging will act in much the same way as at-home charging, but at a large site. Again, retailer pricing and network tariffs are likely to be the main incentive for charging at certain times. This could represent one potential source of participation in the Scheduled Lite mechanism, but the incentives would need to be sufficient.

## **Incentives**

Shell Energy largely agrees with the AEMC's assessment of the kinds of incentives that may be available to participants and the upsides and drawbacks of each. The question of incentives remains crucial in our mind, to deliver the response from the market AEMO seeks, without effectively penalising those who cannot or do not wish to participate.

As noted in the consultation paper, to the extent that Scheduled Lite participants receive lower costs for things such as ancillary services fees, other participants would face higher costs as a result. If there is little participation, possibly because incentives are too low, then there is limited impact on other participants. Conversely, if there is a strong degree of participation, the impact on non-participants may be higher, effectively penalising those who cannot participate. Evidently, there would be an efficient level of participation which should be sought. Finding what level of incentive that is will be complex.

We note that the ability to participate in contingency FCAS for visibility mode participants does provide a clear incentive to potential participants without materially impacting those unable to participate. Whether this is a sufficient incentive to drive participation is critical. Similarly, the extent to which any costs involved in participating in the visibility mode outweigh any benefits from contingency FCAS participation will also impact heavily on participation rates.

It should be noted that loads pay for contingency lower services, but absent the ability to increase consumption in response to a load loss event, a load would be unable to provide a lower service response. As such, even in the event of high contingency lower FCAS prices, no additional response from loads may be forthcoming, which would mute any incentive from participating as a Light Scheduled Unit.

In the case of the dispatch mode, it will be crucial to ensure that the level of incentives is valuable enough that there is a clear case to participate. Shell Energy considers that the concept of allowing participants in the dispatch mode to be eligible to provide regulation FCAS may be worthwhile. However, to provide regulation



FCAS, the load would currently need to install some form of automated consumption control system and importantly be able to provide changes in consumption similar to how a generator responds to output changes via automated generator output control. This would add costs to participate.

There is also no guarantee that a load moving from the residual category of regulation FCAS causer pays factor to its own stand-alone causer pays factor would face a lower causer pays factor. We consider that to improve the incentives for participation in Scheduled Lite, any Light Scheduling Unit also participating in regulation FCAS markets, should be allocated the lower of the individual or residual causer pays factors to such loads.

Further improvements can be made by allowing frequency responsive load to supply regulation FCAS via local frequency measurement and consumption control. Shell Energy has outlined such a change to regulation FCAS provision in detail in our submission to ERC0364 - Clarifying Mandatory Narrow Band Primary Frequency Response for Bi-Directional Units. Without these changes, we believe there is a real risk the incentives for participation as a Light Scheduling Unit would be insufficient.

We also recommend that participants in the dispatch mode should be eligible to participate in schemes such as the Capacity Investment Scheme or even be eligible to tender for LTESAs in NSW. We acknowledge that the AEMC is unable to guarantee such an outcome as neither of these schemes sits within the NER. We recognise that the AEMC is in a position where it may be able to influence the relevant governments in advocating for the benefits of participation in the dispatch mode including eligibility for schemes focussed on increasing levels of dispatchable capacity.

## Conclusion

Shell Energy understands the reasoning behind the rule change request and agrees that giving AEMO greater visibility of CER and understanding of CER dispatch (or consumption) behaviour in response to wholesale market prices offers some potential benefits to the broader market.

We disagree however that the unlocking CER benefits through flexible trading rule change (also known as Flexible Trading Arrangements) is necessary for the Scheduled Lite mechanism to be made. Shell Energy considers that although there are relationships between the two rule changes proposals, the Scheduled Lite rule change can achieve many of the same benefits with a far lower degree of risks and costs than the FTA rule change. Our reasoning is outlined separately in Shell Energy's submission to the FTA rule change.

Finally, we contend that participation in the Scheduled Lite mechanism is heavily dependent on delivering the right level of incentives to participants. Finding an adequate level of incentives will ensure that:

- 1) customers unable to participate in the mechanism are not effectively penalised for not participating, and
- 2) there are sufficient benefits to reward participation and justify the implementation costs across the market.

Shell Energy recommends that participants in the dispatch mode be eligible to participate in mechanisms such as the Capacity Investment Scheme that seek to increase levels of dispatchable capacity in the NEM.

For more detail on this submission, please contact Ben Pryor, Regulatory Affairs Policy Adviser ([ben.pryor@shellenergy.com.au](mailto:ben.pryor@shellenergy.com.au) or 0437 305 547).

Yours sincerely

[signed]

Libby Hawker  
GM Regulatory Affairs & Compliance