11 July 2022

Charles Popple
Commissioner / Reliability Panel Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Submitted online: www.aemc.gov.au

Dear Mr Popple

2022 Reliability Standard and Settings Review – Draft Report

Origin Energy Limited (Origin) welcomes the opportunity to provide comments on the Reliability Panel's 2022 Reliability Standard and Settings Review Draft Report. Our views on the Panel's key recommendations / findings are summarised below, with additional detail provided in Attachment 1.

Form/level of the standard

There is no clear evidence to suggest a change in the form or level of the standard is required at this time. To address the Panel's concern that there may be a need to better account for the impact of 'tail risk' in the future as the level of variable renewable energy (VRE) in the system increases, we agree it would be prudent to set out the key issues that require more detailed consideration as part of the Panel's Final Report, as well as a time frame for when a change to the form of the standard may be necessary.

Market price cap and cumulative price threshold

Origin considers there is a need to improve investment signals for flexible dispatchable resources that are required to complement renewables, as evidenced by the Panel's finding that existing market settings may not be sufficient to support the required level of investment in new marginal plant. The extent to which long term investment signals can be materially improved solely under the energy-only market framework while also managing the associated costs/risks for consumers is unclear. This compares with the alternate approach of supplementing the NEM's current energy only design by establishing a capacity mechanism to help facilitate timely levels of new entry, which may preclude the need for any substantial increase in the MPC.

Notwithstanding this, we generally support the proposed guidelines for determining what changes are required to facilitate efficient levels of new entry across all NEM regions, noting the potential introduction of a capacity mechanism is not within the Panel's scope.

Administered price cap

The APC is intended to be set at a level that minimises financial stress in the market during administered pricing periods (APP) while also providing sufficient incentives for generators to make themselves available during an APP. Recent events have demonstrated the current APC does not adequately balance these objectives, with AEMO directing 5 GW of generation through its intervention powers on

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14 June 2022 during an APP.[1] To address this, the level of the APC should be revised such that it better reflects potential fuel price relativities for marginal plant.

If you wish to discuss any aspect of this submission further, please contact Shaun Cole at shaun.cole@originenergy.com.au or on 03 8665 7366.

Yours Sincerely,

Steve Reid
Group Manager, Regulatory Policy

[1] AEMO, 'AEMO suspends NEM wholesale market', media release, 15 June 2022.

1. Form of the standard

Origin is generally supportive of retaining the existing form of the standard. However, we recognise the Panel's concern that as the penetration of VRE increases in the NEM, there may be a need to augment the unserved energy metric (USE) to better account for a potential increase in the level of 'tail risk'. Given additional analysis is required to better evaluate the case for change, we agree the Panel's Final report should not endorse a specific change, but rather set out the key issues requiring further consideration and likely time frame for when a change may be necessary. A fundamental issue that would need to be explored in this respect is the potential implication for consumers. This is because any revision to the form of the standard that results in greater weighting being applied to high impact, but low probability events, implies a higher level of reliability is desired. However, as outlined below, there is no clear evidence to suggest such a change would align with consumer preferences.

2. Level of the reliability standard

Origin considers there is no clear basis for revising the reliability standard at this time, with IES' modelling indicating there would be no material benefits associated with tightening the standard from 0.002 per cent of USE when base case values of customer reliability (VCR) are considered. However, if there is a view a tighter standard is likely to be desired in the future based on government / consumer preferences, consideration should be given to the cost-effectiveness of relying on inherently expensive emergency reserve procurement arrangements like the Interim Reliability Measure (IRM) to achieve it.

3. Market price cap and cumulative price threshold

Origin considers there is a need to improve investment signals for flexible dispatchable resources in the NEM such as long duration storage, which is required to complement growth in VRE. The Panel's preliminary finding that current settings may not be sufficient to support adequate investment in new marginal plant over the outlook period substantiates the need for reform in this respect, through changes to market settings and/or the introduction of a capacity mechanism.

The Panel's Draft Report indicates a relatively substantial increase to the MPC is required in the range of $21,000-29,000/MWh, potentially coupled with an increase to the CPT. IES estimates an MPC of $29,000/MWh is what would be needed to ensure adequate investment signals in Victoria (and by extension all other regions), largely due to the states peakier demand profile providing less MWh for a candidate marginal new entrant to recover their costs.

These findings highlight the inherent challenges associated with solely relying on the energy only market framework (and its associated settings) to drive investment in new capacity as the market transitions. Raising the MPC (in the order proposed) would substantially increase the risk profile for retailers / market customers. This would notionally strengthen investment signals by increasing revenue potential for market participants and incentivising more hedging by retailers to manage increased financial exposure. However, as we have previously noted, it may not resolve the fundamental uncertainties that make investment in dispatchable resources challenging, such as the adequacy of revenue to cover fixed costs (given reliance on relatively infrequent and unpredictable high price events).

This compares with the alternate approach of supplementing the NEM's current energy only design by establishing a capacity mechanism to help facilitate timely levels of new entry, which may preclude the need for any substantial increase in the MPC.

Notwithstanding the above, we generally support the proposed guidelines for determining changes to the MPC/CPT that would be required to facilitate efficient levels of new entry across all NEM regions, noting the potential introduction of a capacity mechanism is not within the Panel's scope. In assessing whether potential revenue would be sufficient to support marginal new entry (for a given MPC/CPT combination), we also agree it will be important for the Panel to consider key factors that could limit

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overall revenue potential, such as lack of perfect foresight and uncertainty around the frequency/duration of price spikes.

Where substantial increases to the MPC/CPT are recommended, Origin does not consider those changes would need to be implemented incrementally unless the notice period prior to implementation was insufficient. Based on forward contracting practices, it would be prudent to ensure market participants are provided with around 3 years notice of any substantial increase to those settings.

4. Administered price cap

Recent events have demonstrated there is a need to increase the level of the APC

As noted by the Panel, the APC is intended to be set at a level that minimises financial stress in the market during APPs while also providing sufficient incentives for generators to make themselves available during an APP. Recent events have demonstrated the current APC does not adequately balance these objectives, with AEMO directing 5 GW of generation through its intervention powers on 14 June 2022.[2]

We recognise the Panels view that it is uncertain if present conditions (which are unprecedented) will lead to a substantial and permanent increase in the fuel costs of generators over the outlook period sufficient to warrant a change to the APC. However, it is clear gas prices are higher on average and more volatile relative to historic levels that would have been considered when the APC was set at the current level. Gas/electricity markets are also becoming more interlinked as the NEM transitions towards higher levels of VRE, heightening the need to ensure pricing relativities between those markets are adequately accounted for when determining the level of the APC.

The level of the APC should better reflect potential fuel price relativities for marginal plant

To support efficient NEM operations, the APC should be set at a level that would incentivise sufficient generation to be available during an APP, and by extension, minimise the need for any reliance on directions/compensation claims. Given the prominent role of gas power generation (GPG) as the marginal supplier in the NEM, this could be achieved by setting the APC based on the short-run marginal cost (SRMC) of a representative (benchmark) open cycle gas turbine (OCGT) plant. A challenge with this approach would be to determine an appropriate fuel cost for the plant. There is a risk that utilising forecast average gas prices (based on AEMO modelling inputs) would underestimate GPG fuel costs during periods of market stress. An option to address this could be to assume fuel costs equivalent to the APC in the Short Term Trading Market (STTM) / Declared Wholesale Gas Market (DWGM) on the basis that during extreme periods, this is likely to be an indicator of the marginal cost of fuel.

To account for any further changes in fuel costs over time, the APC should also be subject to indexation going forward, consistent with the MPC/CPT.

5. Market floor price

Origin generally agrees with the Panel's preliminary position that no change to the MFP is required at this time, noting the prevalence of MFP events has seemingly reduced since the introduction of five minute settlement and semi-scheduled generator dispatch rule changes in October 2021. However, given those reforms have only been in place for a limited period, additional consideration may need to be given to the need/rationale for change if the reduced frequency of MFP events is not sustained.

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[2] Ibid.