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### **Expanded Capacity Investment Scheme (CIS) – Implementation Design Paper**

The Australian Energy Council ('AEC') welcomes the opportunity to make a submission in response to Department of Climate Change, Energy, Environment and Water (DCCEEW) *Expanded Capacity Investment Scheme (CIS) – Implementation Design Paper*.

The AEC is the peak industry body for electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. AEC members generate and sell energy to over 10 million homes and businesses and are major investors in renewable energy generation. The AEC supports reaching net-zero by 2050 as well as a 55 per cent emissions reduction target by 2035 and is committed to delivering the energy transition for the benefit of consumers.

Given its scale and accelerated timing, integrating the expanded CIS into the current market framework will need to be carefully managed. The aggregate 32 GW target intended to be met by 2030 represents around 51 per cent of the existing NEM capacity (63 GW), around half of which was built over the 25 years since the market's introduction. Furthermore, the 23 GW of renewables equates to approximately 64 TWh of annual generation and is almost twice the level of the existing large-scale renewable energy target (33TWh), with only about half the time earmarked for delivery.

It is therefore imperative the potential impact on the NEM is fully understood, and crucial that the scheme complements the current (and any future) market design. This includes by facilitating an appropriate level of risk allocation between the Federal Government (and hence Australian taxpayers) and project proponents. Achieving this balance, however, is inherently challenging.

The AEC considers that an effective CIS design should incorporate the following criteria:

- Minimise market distortions / ensure the wholesale market incentives still operate to the benefit of consumers.
- Minimise the risk of cost escalation or non-delivery.
- Minimise the long-term cost to consumers and taxpayers.
- Deliver an accelerated transition (including the time taken to get the scheme up and running).

With the CIS supporting market entry but not the retention of existing dispatchable capacity, it unavoidably undermines the economics of existing capacity. This increases the risk of bringing forward closure of existing dispatchable capacity before new capacity is ready to replace it. Given this, careful consideration needs to be given to both the CIS design to ensure it is complementary, and more broadly to the adequacy of NEM market settings and their consistency with reliability and system security settings.

#### **Cadence of tender schedule**

The Implementation Design Paper seeks feedback on the cadence of tender schedule. In particular:

*“Would your organisation benefit more from a 6-monthly cycle of simultaneous tenders for both generation and clean dispatchable products, or would an alternating 12-monthly cycle (consisting of one tender every six months, alternating between generation and clean dispatchable products) for each be more desirable?”*

The tender schedule should provide proponents with the maximum amount of certainty and visibility that is possible to ensure that proponents can plan their tender bids, which will involve significant bid costs, on the basis they have maximum information available. This will drive greater participation, increasing competitive tension, to the ultimate benefit of consumers.

In particular, the following should be transparent:

- A detailed / committed tender schedule for proponents to plan around;
- The minimum and maximum capacity Government will underwrite at each tender round (across the entire schedule, not as each tender round is released);
- Allocation across jurisdictions across the entire schedule of tenders; and
- Details of outcomes of each tender round released to inform subsequent tender rounds.

This certainty can only be delivered once the outcomes of Renewable Energy Transformation Agreements (RETAs) with jurisdictions are known and made transparent.

### **Incentives for participation in the contracts market**

The Implementation Design Paper seeks feedback on the incentives for participation in the contracts market. In particular:

*“We welcome feedback on risks to contract market liquidity and whether the design elements outlined in this section are sufficient to preserve incentives to participate in the contracts market.”*

The CIS encourages new investment by providing greater revenue certainty for projects, reducing project market risk and potentially lowering the cost of capital. In doing so it may insulate projects from an appropriate level of market risk. This is because by safeguarding against the downside risk of low spot market returns and shoring up project financing, the CIS can make projects indifferent to wholesale market signals and reduce their incentives and/or negate the need for them to contract with third parties such as retailers. This is particularly the case where proponents bid their Levelised Cost of Energy (LCOE) for the CISA floor. This would compromise efficient wholesale market operations and diminish contract market liquidity.

Generators may effectively be required to contract at their LCOE if expected market revenues (wholesale revenues plus Large-Scale Generation Certificates (LGC) / Renewable Electricity Guarantee of Origin (REGO) are not sufficient. This would be influenced by the rate of thermal generation exiting the system as new capacity enters the market, with mechanisms such as the Orderly Exit Management Framework potentially impacting this timing. In this case, the CIS would become a de facto contract for difference scheme and be highly distortionary.

Reduced incentives for projects to be active participants in secondary markets will reduce the ability of smaller independent retailers to manage market risk, which could lead to retailers exiting the market, an increase in concentration, and consequent increase in prices consumers pay. We note the ACCC’s recent recommendation in its Inquiry into the NEM that “Government funded variable renewable energy and storage projects should contribute to contract market liquidity”.<sup>1</sup>

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<sup>1</sup> [Inquiry into the National Electricity Market: December 2023 Report \(acc.gov.au\)](#), p.95

The 23 GW (i.e. 64 TWh) of renewables set to be delivered under the scheme equates to about 30 percent of annual NEM consumption, that may not be as readily available to retailers and large customers to hedge their load requirements. The CISA price collar could also have the effect of limiting the upside to wholesale market participation. We consider that by limiting the potential upside proponents can gain from projects the collar structure will:

- reduce the number of participants willing to participate in the CIS;
- result in participants requiring higher revenue floors to off-set the lost potential upside; and
- lead to less efficient commercial and operational decisions as participants are disincentivised from earning revenue above the ceiling.

### **Generation support mechanism**

The Implementation Design Paper seeks feedback on the generation support mechanism. In particular:

*“Would the proposed Eligible Wholesale Contract requirements present a significant barrier to your organisation participating in the wholesale contracts market with a generation project with a CISA?”*

*“Would the proposed negative price provisions present a significant barrier to any renewable capacity business model considered by your organisation. Could these provisions have any negative impact on project NEM bidding behaviour?”*

The Implementation Design Paper proposes that eligible contracts must be for at least one year. The AEC does not see the rationale for this restriction and would argue any contract length should be acceptable given that many derivative contracts will be for substantially shorter periods. In addition, ASX listed electricity swaps and caps have durations ranging from one to three months and many Over The Counter (OTC) products will have similar terms.

There should be no barriers to CIS providers participating in the financial market and, particularly in the case of storage providers, market participations should be able to offer firming products such as caps or possibly the ASX’s proposed new peak swap.<sup>2</sup> Failure to treat shorter term derivative contracts as eligible contracts could result in CIS providers being exposed to double liability if the costs associated with them are not considered as part of the revenue determination, which could discourage CIS providers from entering into derivative contracts.

In relation to the negative pricing provision, we suggest amending the wording to read “not require the Project Operator to bid for active energy dispatch when the respective regional reference price is less than \$0”. This would ensure commonly used Power Purchase Agreements (PPAs) are included as eligible contracts. Such wording combined with the negative price provision that the contractual payments are calculated based on a \$0/MWh floor would achieve the Government’s objectives while assisting participation in the contracts market.

### **Special Purpose Vehicle requirement**

The Implementation Design Paper seeks feedback on the special purpose vehicle (SPV) requirements. In particular:

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<sup>2</sup> [https://www.asxenergy.com.au/newsroom/industry\\_news/consultation-on-asx-australia](https://www.asxenergy.com.au/newsroom/industry_news/consultation-on-asx-australia)

*“Would the proposed SPV requirement present a major barrier to your organisation’s business model for renewable capacity and clean dispatchable capacity projects?”*

While the AEC appreciates the intent of the SPV arrangements to allow for arm’s length reporting of relevant revenues, care needs to be taken that efficient portfolio-based risk management practices are not impacted. The SPV arrangements outlined in the Implementation Design Paper would preclude an Unincorporated Joint Venture (UJV) bidding. Similarly, tolling arrangements, where the power purchaser directs how the plant is to be operated and dispatched would be precluded. The required transparency could be delivered by requiring the SPV to be the Project Operator, but not requiring the Project Operator to be a market participant, but rather an intermediary with appropriate accounting to drive transparency.

The provisions must also not rule out financial structures such as leasing of a project by the owner (developer) to a market participant who in all aspects becomes the financially responsible participant and controller of the project from a NEM markets perspective. We also wish to clarify whether a CISA Project may still bid under the intermediary provisions of the NEM registration classification criteria by the parent entity. It would be inefficient to require every project to have a dedicated and separate bidding provision and registration.

### **Alternative options to preserve incentives for generators to participate in wholesale contracts markets**

The Implementation Design Paper seeks feedback on alternative options to preserve incentives to participate in wholesale contracts markets. In particular:

- *Whether an option structure would be of value for the generation CISA*
- *Views on the inclusion of Eligible Wholesale Contract revenue into the net revenue calculation vis a vis the volumetric exclusion of Eligible Wholesale Contract revenue*
- *Views on the potential requirement for the Project Operator to physically deliver any Green Products to the Australian Government*

The alternative option structure places Government at the centre of the wholesale energy market, as it would have an active role as the on seller of energy contracts. This would likely distort the market more than the revenue floor proposed.

The Government should also consider the fixed competitive grants model previously suggested by the AEC. The fixed competitive grants would be paid upon completion or paid progressively according to availability. Under this model, the government would have no trailing liabilities, and, after completion, all ongoing market risks would be retained by the capacity. This remains a viable path to ensuring wholesale contracts market participation.

Should the government be unwilling to pursue such a major change, the AEC recommends reconsideration of models that are less complex such as a floor-only scheme such as that used in the New South Wales roadmap.

### **Merit and eligibility criteria**

The Implementation Design Paper seeks feedback on the proposed merit and eligibility criteria.

The approach to merit assessment should be to provide as much upfront certainty as to how projects will be assessed as possible. Elements of the assessment that are subject to interpretation, such as the Stage A requirements in relation to supply chain, community and First Nations Engagement could be codified, with a minimum standard made transparent to proponents. Given best practice in these areas is evolving, and the

requirement to accelerate deployment via the CIS, codification offers the prospect of lifting performance across all proponents, with detailed assessment of bids focusing on the Stage B bids.

Further information should be provided before the first tender on how projects will be assessed in relation to their location, particularly in areas currently network constrained but slated for network augmentation. Currently, the approach to tender assessment does not clearly show how projects that are poorly located with no transmission connection, poor Marginal Loss Factors and adverse impacts on interconnectors would be down rated relative to better located projects. If a project was awarded a CISA, only for its MLF to deteriorate, or increased curtailment due to network congestion, the consequence would be the price floor is more likely to bind, at significant cost to the Commonwealth and ultimately taxpayers.

More broadly in relation to location of projects, if a proponent locates within a Renewable Energy Zone (REZ) ahead of the relevant transmission capacity being built or augmented, how will that project be treated prior to the network becoming available, especially if that availability could be subject to delay.

### **Participation of hybrid projects**

The Implementation Design Paper seeks feedback on the treatment of hybrid projects. In particular:

- *Would the proposed approach enable the better participation of hybrid projects in CIS tenders?*
- *Would your organisation consider bidding for separate clean dispatchable capacity and generation CISA for the components of a hybrid?*
- *Would the proposed schedule that includes simultaneous clean dispatchable capacity and generation tenders support this option?*

Hybrid projects are only intended to be eligible for the generation CISA and are defined as co-located generation and energy storage assets that share a common connection point and are registered as an Integrated Resource Provider. If a project elects to bid as a hybrid project, the energy storage asset will be defined as an Associated Asset and will not be eligible for a Clean Dispatchable CISA.

However, for a proponent to proceed with a hybrid bid, it would need to know upfront the extent to which its bid would be uprated for the storage included without any compensation and make a judgement whether that uprating would be greater or less than the additional costs incurred in bidding in a hybrid approach, as this will inform its floor and ceiling bid. Absent this information, we expect proponents will bid separately, which runs counter to what may otherwise be an efficient approach from an energy system perspective.

The AEC recommends DCCEEW devise a less distortive approach to hybrid project assessment and every asset is treated independently.

### **LOR 3 performance requirements**

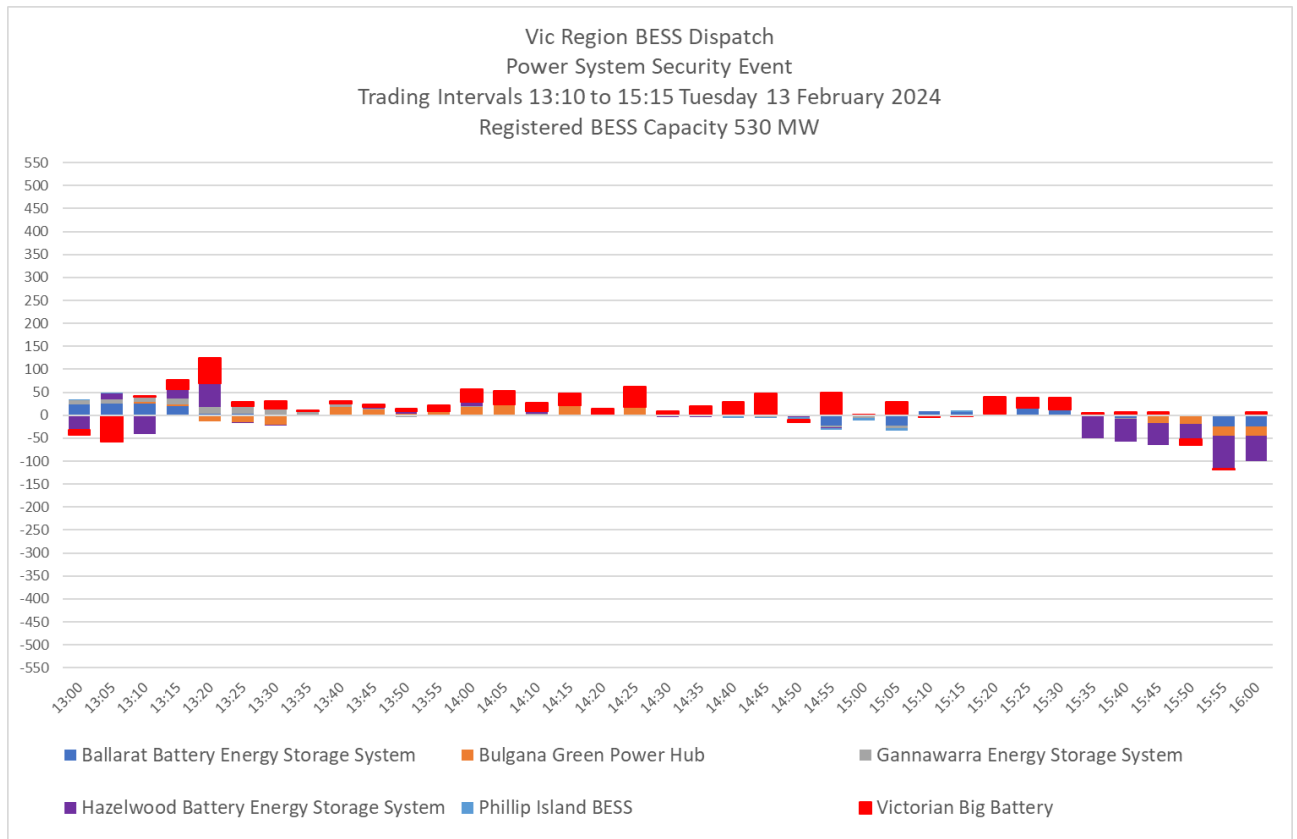
Operational restrictions on units should be limited to ensure units are able to participate fully in the market. We support DCCEEW's decision to remove the requirements for units to be available when spot prices exceed levels but note that the requirement to be available during LOR 3 events has remained. The CIS draft contract has a clause relating to performance of the Battery Energy Storage System (BESS) during an actual LOR3 event. The clause states that greater than 50 per cent of contracted capacity must bid throughout the LOR3 actual period, in order to be deemed to comply.

The Implementation Design Paper acknowledges the distortionary impact of the LOR 3 requirement but justifies it by saying that "it is important that projects receiving financial support prioritise making a system reliability contribution during low probability periods of system stress."

We consider that the purpose of the CIS is fundamentally different from emergency capacity schemes such as the RERT or AEMO's directions powers. The CIS exists to fund capacity that benefits the market at all times rather than focusing on providing capacity at critical times, for which existing mechanisms such as the RERT and AEMO's directions powers, already exist. The purpose of the CIS should be to increase capacity generally, making it less likely that an LOR 3 event will occur.

The LOR 3 requirements are problematic for the following reasons:

- Non-performance has two implications:
  - loss of floor payments for the contract year; and
  - potential exposure to termination for convenience.
- This arrangement is driven by an ongoing desire to link payments for “capacity” with physical availability triggers; an effective mistrust of the NEM signals.
- The suitability of LOR3 as a physical trigger has not been fully assessed by Government, as it is not suitable on its own, but it evolved during the ESB capacity market discussions.
- Across the NEM, LOR3 events predominantly occur without prior warning from AEMO and are most often associated with a multiple contingency or power system security event.
- The most impacted months tend to be those where it would be most lucrative to run to market signals and not speculate on the potential for unforecast LOR3 events. That is, charge when prices are forecast to be lowest and run when prices are forecast to be highest.
- Withholding greater than 50 per cent of capacity to manage potential LOR3 events (i.e. when LOR2 or LOR3 is forecast) will have a significant and lumpy revenue impact and undermine investment cases.
- Rewarding for a physical trigger has some policy logic where there is a forecast supply/demand imbalance (i.e forecast supply shortfall), but many significant LOR3 events are driven by unplanned outages and system issues which cannot be predicted and enforcing via an unmanageable penalty regime is flawed. The vast majority of LOR3 events are not forecast by AEMO.
- An energy storage system may not be in an acceptable physical location to relieve an LOR3 condition which are generally “location specific” and based on highly specific transmission network conditions. Most potential “location specific” sub-region areas are in heavily built-up areas making it impossible to locate an energy storage system there. The load shedding and LOR3 event in Vic on 13 February 2024 is a classic example of this. BESS was unable to generate additional output to remove the need for involuntary load shedding from 14:20 to 15:15 simply because they weren't in the right location to relieve the system security issue. In some locations BESS were dispatched by AEMO to charge to soak up energy that would otherwise have been spilt.



- Even if located in an acceptable location, to meet this requirement, participants would need to hold storage reserves during periods of forecast LOR1 and 2 conditions, “just in case”, resulting in increased wholesale prices and costs to consumers.
- Holding back storage, and its associated capacity, could drive an increase in reported actual LOR2 conditions as storage is held in reserve, “just in case”.
- By the CIS seeking to force batteries to operate in this way fundamentally undermines the logic of getting more batteries into the network to meet market signals / demand.
- The CIS is seeking to encourage in market investment to act like standby plant, which is particularly inefficient.
- At the very least, the clause should be amended to cover events forecast with more than 24 hours’ notice. We prefer the clause was removed so as to rely on market signals instead.
- If AEMO declared a potential LOR3 and batteries cut down on their generation to cover their CIS clause exposure, the stress on the system would be exacerbated where an actual LOR2 declaration becomes an actual LOR3 event.

The AEC recommends that the CIS design should not include an LOR 3 requirement. We consider that removing the LOR 3 requirements will result in more capacity being made available in the market, reduce the potential for unnecessary and costly market intervention and reduce the cost of the CIS to taxpayers. Existing mechanisms, such as the RERT and AEMO’s directions powers, if required, are adequate to manage unforecastable rare events.

If Government is minded to retain the LOR3 requirement, it should be on a reasonable endeavours basis, and any penalties associated with not meeting the requirement should not be punitive (eg. Allow for the termination of the CISA, as proposed in the Implementation Design Paper). The Term Sheet for the Victoria

/ South Australia pilot tender limits the penalty to a proportionate reduction in the level of payments that could be made to the Project Operator in each period – this is a more reasonable approach.

### **Annual Availability Requirement**

The AEC also seeks further clarity around the 90 per cent annual availability requirement. We consider that such a requirement would be more practical if it reflected Projected Assessment of System Adequacy (PASA) availability, as efficiently managing BESS charge and discharge in the wholesale market often requires maximum availability to often be set to zero, whilst remaining available to restore maximum availability if required, however it is not clear from the Implementation Design Paper if this is what is intended.

Questions about this submission should be addressed to David Feeney by email at [david.feeney@energycouncil.com.au](mailto:david.feeney@energycouncil.com.au).

Yours sincerely,



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