

1/08/2022

Ms Anna Collyer
Chair
Energy Security Board
Submitted via email: Info@esb.org.au

Dear Ms Collyer,

Re: Post 2025 Market Design – Capacity mechanism – High Level Design Consultation Paper

Thank you for the opportunity to participate in consultation on the Energy Security Board's (the ESB) high level design consultation paper on the further work to develop a detailed design to value capacity.

Quarter 2 2022 in the National Electricity Market demonstrated the need to immediately facilitate the timely entry of the current pipeline of capacity projects seeking connection and working towards final investment decisions. Our way out of market suspensions, capped prices and high fuel costs is to invest in renewables, storage and transmission, and to establish policy frameworks that seek to facilitate them.

ATCO is supportive of capacity mechanism that prioritises this objective as its primary deliverable – bringing forward the right type of capacity build - and mitigates the risk of this capacity entering late or not at all.

As the ESB refines its high-level design for a capacity mechanism, ATCO are in a position to offer unique feedback. Our growing footprint in the NEM includes the Central West Pumped Hydro (CWPH) project - a 325MW capacity, 8-hour storage facility near Bathurst in New South Wales. As a new entrant without a retail book to hedge against, we understand the avenues the NEM presently provides to de-risk assets and secure low-cost finance, as well as the additions that would best encourage capital-intensive projects like ours to competitively and cost-effectively reach financial close.

As per the Board's request, this submission comments on the key issues to resolve in the next steps of the design. ATCO does not seek to comment on all mechanism components explored in the high-level design consultation paper. Instead, we have limited our feedback to those features that relate to securing investment certainty, improving financeability, and de-risking new build in a way that alleviates market power concerns and promotes competition among capacity solution providers.

The key points this submission seek to convey are:

- 1. Any new mechanism should prioritise the de-risking of new entry.** ATCO are sympathetic to points made by the ESB that there are complications to excluding existing capacity providers from an in-market mechanism. However, design choices should recognise that facilitating entry ought to be a new mechanism's primary deliverable. Where it values existing capacity, it should do so proportional to their contribution towards reliability, and should not crowd out new assets that might provide the same capacity more competitively.
- 2. Centralised forecasting and procurement improves investment certainty.** While well intended, hybrid models, where retailers sit alongside a central buyer-forecaster, introduce unnecessary complexity, and may provide an unintentional benefit to vertically integrated retailers and generators.
- 3. Auctions must offer long-term products to make new capacity financeable and lower cost.** Capital-intensive projects, like pumped hydro or offshore wind, are long life projects which require longer term stable revenue certainty to support the lowest cost capital structure. Designs which provide revenue certainty over longer horizons allow proponents to access lower borrowing costs. This means projects get built at lower cost and can pass these savings onto consumers.
- 4. The method for accrediting capacity factors should align with the method for compensation in the proposed performance obligations.** Misalignment between these two components risks consumers paying for a service that is different to the one provided. Variability of performance payments should also be limited to improve the bankability of the product, and an ex-post compliance regime should instead be employed to ensure non-compliant providers do not receive a 'free ride.'
- 5. NEM frameworks should inform jurisdictional scheme design, rather than encumbering a capacity mechanism to adjudicate between eligible state-supported projects.** The ESB suggests projects awarded jurisdictional support may participate in some aspects of a capacity mechanism, but not all. While sympathetic to the risk of double payments, ATCO propose this risk is best managed by jurisdictions as they design their schemes around the market. Alternatively, as jurisdictional schemes evolve, we risk proponents not having certainty as to how they will be treated under the NEM.

Any new mechanism should prioritise de-risking new entry

AEMO's 2022 ISP forecasts a need for 45GW of new storage.¹ At least 7GW of this will be medium storage, of which AEMO has declared "the most pressing utility-scale need in the next decade."² Cost effectively bringing forward such capacity, and other types identified in the ISP, should be the primary deliverable of any major market reform, including a capacity mechanism.

ATCO recognise the policy choice determined in the consultation paper that "all resources that participate in the market contribute to reliability," and that a "mechanism where all capacity is eligible to participate should encourage a more efficient mix and utilisation of resources."³ ATCO understand that this design process presents an opportunity to explore better ways to value existing capacity in the market, where a different product or 'shape' of market revenue may enable assets to better optimise their energy provision (such as through enabling certainty over fuel procurement or planning refurbishment costs).

In balancing the needs of both new and existing fleet, ATCO recommend the ESB be mindful that a design that appropriately values both categories is unlikely to be achieved with a 'once size fits all'

¹ 2022 Draft Integrated Systems Plan, AEMO, 2021

² Ibid.

³ Capacity Mechanism High Level Design Consultation Paper, Energy Security Board, June 2022. P. 17.

approach. Bespoke products are required to overcome challenges for new entry, and the due attention these products require should not come at the expense of a design that seeks to solve too many challenges, or that caters predominantly for existing capacity. New projects that are servicing larger and longer shaped debt profiles will require more support to cover long run marginal costs which might be significantly discounted for existing projects, which may only need to cover refurbishment or operating costs.

For these reasons, ATCO is supportive of measures proposed by the ESB that “the mechanism will consider the challenges faced by new capacity and provide it with additional support,”⁴ and recommend the ESB explore the merit of an array of additional supports in the next phase of the design process.

A range of policy options exist to prioritise the needs of new entry, while also catering for the requirements of existing capacity providers. Auctioning different capacity allotments to new and existing capacity providers according to a forecast demand will assist in overcoming these challenges, while bifurcating price settings in auctions – so that new capacity can recover a higher clearing price than existing capacity – will support competitive provision of capacity over longer periods of time.

Centralised forecasting and procurement improves investment certainty

ATCO consider a centralised approach to procurement and forecasting of capacity to be most likely to facilitate timely entry. The remit for procurement and forecasting by a central buyer should be targeted, transparent, and responsive to the increasing flexibility of emerging retailer portfolio positions.

A targeted centralised option for forecasting and procurement – complemented by design choices that ameliorate impacts of market power concentration and consumer captivity issues – is most likely to provide capacity providers the certainty needed to build business cases off a predictable central procurement, while also ensuring market customers are not held captive to over-procurement risks.

ATCO caution against proceeding with hybrid models for capacity forecasting and procurement, where retailers sit alongside a central buyer-forecaster. ATCO’s view is this approach will substantially reduce transparency and will introduce unnecessary complexity into a design that already risks becoming cumbersome, and may distract from designing a reliable, bankable investment signal best provided by a high credit-rated central buyer.

Alternative policy options may better balance the interests of market customers, including consultation and transparency obligations regarding a central body’s procurement and forecasts to identify shortfalls, annual updates to retailer cost allocations, and ex-post settlement arrangements that recognise non-scheduled demand response capability in retailer portfolios.

Auctions must offer long-term products to make new capacity financeable and lower cost

ATCO strongly support the position arrived at by the ESB that “longer-term investment support is necessary to support the financing of new capacity investment, lowering the cost of investor capital, with those cost savings likely passing to end consumers.”⁵ Particularly, ATCO support the intent of the ESB to consider “the terms of support on offer to capacity providers through auctions, including long-term capacity contracts for new capacity.”⁶

If the market is expected to deliver large capital intensive projects to meet the needs of consumers (like pumped hydro or offshore wind), the proponents of these projects must have access to tools to manage the risks associated with them.

⁴ Ibid, P.17

⁵ Ibid. P. 40

⁶ Ibid. P. 38

The scale of the projects likely to provide significant new capacity provision are akin to other large civil initiatives, like tunnels or bridges, or the existing large thermal fleet, which was mostly funded off the balance sheets of state governments. Such projects recover their costs over multiple decades, and require certainty over their revenue streams for their operating life to secure cheaper debt costs from financiers. In the NEM – outside of jurisdictional schemes - this revenue can generally be secured either through;

- selling futures contracts with a typical 2-3 years' horizon,
- selling longer-dated offtake agreements to market customers with typical 8-10 year horizons, or
- by vertically integrating and hedging against a retail portfolio.

ATCO's view is the long-term interests of consumers is best served by introducing a long-dated product backed by a central buyer with a high credit rating as a key feature and priority of a capacity mechanism. This will allow capacity providers to secure cheaper debt costs for essential new projects which will be passed on to the consumer in the form of lower capital costs. It will also allow new capacity providers without pre-existing retail positions a means to manage their long-term revenue risks independently from the incumbent vertically-integrated players, facilitating more competitive outcomes.

ATCO's perspective is that longer dated reverse auctions are an effective means to facilitate longer-term certainty capacity entry that is otherwise difficult to build on the basis of short-horizon offtake contracts. The length of these contracts should at least extend beyond the offtake horizons currently available in the market, and be informed by input from financiers, and the tenor of revenue certainty they require to provide cheaper debt costs. As is made in other markets to facilitate revenue certainty, arrangements can be implemented for prospective projects to 'book' capacity to be cleared in future auctions, which can be complemented by penalties for non-delivery aligned with AEMO's existing definitions for committed projects.

ATCO are aware that longer-term procurement of capacity accentuates the risk that consumers are captive to a product that is to be consumed a long time from the point that it was procured. This risk is best managed by both the de-rating and forecasting components of the capacity mechanism design, to ensure that long-term contracts are allocated to the right mix of resources best equipped to efficiently meet the needs of consumers over the course of the transition. ATCO note however that the cost risks associated with providing certainty to projects through long-dated capacity procurement may pale in comparison to costs incurred in a counterfactual where these projects – and the system services they provide - enter the market late or not at all.

The method of accrediting capacity factors should align with the basis for compensation in the proposed performance obligations

ATCO note the ESB's consideration that "alignment between the at-risk periods for the purpose of de-rating and the compliance events is desirable."⁷ ATCO recommend this intent be pursued by the ESB, even if it necessitates a more complex approach to allocating capacity revenues according to plant performance. It is ATCO's view that a misalignment between these two components may risk consumers paying for a service that is different to the one provided.

ATCO also note the intent of the ESB to separate capacity payments into an availability component and a performance component, which reflect availability during periods of lack or reserve conditions. ATCO are supportive of the ESB's intent to ensure capacity payments reflect the needs of the market, are allocated to providers that are available when the system is under stress, and that they ultimately reward assets that are flexible and dispatchable. However, ATCO note that a compensation regime with a significant variable factor – such as the performance component – will limit the bankability of the revenue stream.

⁷ Ibid. P.55

In assessing the revenue certainty of a prospective project under the current design, financiers will heavily discount any variable revenue component of the capacity payment, limiting debt to the availability payment. This risk can be mitigated by instead implementing a clear, transparent ex-post compliance regime which allocates fines or adjustment to de-rating factors as a consequence for non-performance. This will afford projects improved revenue certainty, ensures non-compliant providers do not receive a 'free ride,' and maximises the capacity payment providing greater revenue certainty against which debt can be sized.

NEM frameworks should inform jurisdictional scheme design, rather than a capacity mechanisms adjudicating between eligible state-supported projects

ATCO notes the early work of the ESB to discern between categories of jurisdictional support, and whether receipt of such support should exclude projects from participating in parts of an in-market capacity mechanism. ATCO is sympathetic of the ESB's intent, that where the risk of double payments for capacity provision emerges, a policy process should seek to mitigate this risk in the interests of consumers.

It is ATCO's view that this risk, however, is best managed by the jurisdictions as they design their schemes around the market. Establishing a policy process for the market bodies to manage that can identify the range of policy support that is and will be provided by jurisdictions over the course of the transition, and then categorises them as either 'upfront capital' or 'output related payments'⁸, introduces unnecessary investment risk to proponents seeking to establish certainty over their revenue streams.

The approach suggested by AEMO Services in their recent Draft Tender Pack for the Long Duration Long Term Energy Services Agreement is an encouraging example of how jurisdictions can manage their interaction between their own provisions to support capacity, and those that may emerge in the market. AEMO Services as suggested that future revenue streams established in the NER be recoverable to a project, but all project revenue remain subject to a net revenue threshold cap, above which historical payments are returned to the jurisdiction and are not incurred by consumers.⁹

We thank the ESB again for the opportunity to make a submission. If you have any questions or would like to discuss any of the comments made in this submission, please contact myself or Ollie Tridgell, Manager NEM Energy Policy at oliver.tridgell@atco.com. In the meantime, ATCO look forward to advancing capacity mechanism design elements alongside other industry players in upcoming Technical Working Group and sub-group discussions.

Yours sincerely



Karen Nielsen
Managing Director Global Renewables

⁸ Ibid. P.71

⁹ AEMO Services, Draft Tender Pack, July 2022.