

27/07/2022

Anthea Harris

Chief Executive Officer

Submitted to: [info@esb.org.au](mailto:info@esb.org.au)

Dear Anthea,

## Re: High-level design of the capacity market

Flow Power welcomes the opportunity to make a submission in response to the Energy Security Board's high-level design of a capacity market.

Flow Power is an electricity retailer that works with energy customers throughout the National Electricity Market (NEM). Together with our customers, Flow Power is committed to our vision of creating Australia's renewable future.

We empower customers to take meaningful action. By providing energy knowledge and innovative technology, we are delivering smarter ways to connect customers to clean energy to make our renewable future a reality. We provide our customers with:

- Engineering support, access to live data and transparent retail tariffs that reward demand flexibility and encourage electricity usage at times of plentiful renewable output.
- Hardware solutions that equip customers with greater information, visibility and control over energy use.
- Access to renewable energy, either through distributed solar and storage installed on site, or through a virtual generation agreement with utility-scale wind and solar farms

We believe that by equipping customers with these tools, we can lower costs for all energy users and support the transition to a renewable future.

## Overview

Flow Power is deeply concerned that the continued development of a capacity market is a major risk to the energy transition. We agree with many other stakeholders who have highlighted concerns with the model being pushed by the ESB, most notably that a case for change hasn't been articulated, and that its introduction would delay the energy transition and increase costs for consumers.

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The key points we would like to make regarding the ESB's paper are:

- **The ESB's capacity market still has not been justified.** Flow Power disagrees with the ESB's assertion that the case for a capacity market has been made. In the initiation paper, the ESB noted that they would develop a base case and use it to assess options. However, a base case has not been developed, and the ESB has already ruled out multiple capacity mechanism designs. The ESB should establish this base case and use it to assess the options outlined by the ESB and from industry stakeholders before committing to specific policies. This would reduce the risk of costly, unnecessary, and misguided regulatory change.

The ESB has also suggested the need to introduce a capacity market is derived from directions from Ministers. However, the ESB has also played a central role in advocating to Ministers for a capacity market to be introduced. This circularity has left the perception of an absence of accountability for demonstrating the need for such a major change.

- **Supporting new investment is the most effective option for the energy transition.** In its initiation paper, the ESB called for stakeholders to develop and submit alternative models. Models were developed by Iberdrola, Origin Energy, Delta Electricity, Tesla and Flow Power. There has been consistent support amongst stakeholders for the models that promote investments in new capacity but the ESB has ruled these models out with very little justification and without providing opportunities for discussion. Coupling these investment options with the continued development of transmission infrastructure and planning for coal retirements will be significantly more effective than the ESB's capacity market design.
- **The ESB should reset timelines and undertake further consultation.** The expedited implementation of a capacity market is a substantial regulatory risk for market participants and investors. There is a high likelihood of unintended consequences, rule revisions and future government intervention. These risks undermine the transition at an exceptionally important point.

We are already experiencing these negative impacts. Current negotiations for long-term power purchase agreements with renewable generators stalling as each party tries to address the risk of a capacity market on their relative positions. Investors and participants are reminded of the impact of the introduction and then removal of the carbon scheme, which in some cases triggered lengthy court disputes on the impacts of those schemes on long-term agreements. As our own business contemplates material investments in storage, our initial discussions with lenders and financiers illustrate that the views of the most conservative players (typically large banks) have an enormous impact on the development of new capacity; if these organisations foresee regulatory uncertainty than the speed of our energy transition will slow considerably.

We have provided some additional comments on various aspects of the consultation paper below. We've discussed:

- The basis for introducing a capacity market
- Alternative proposals
- General comments.

## The basis for introducing a capacity market

Introducing a capacity market is an enormous undertaking. Reforms of the scale envisaged by the ESB have been undertaken in numerous overseas markets and the transition to a new market for electricity has been shown to create political and regulatory challenges, and have consistently experienced delays. Therefore, the Energy Security Board (ESB) should provide a robust case to support any recommendation to endorse a capacity market. In our view, this is missing from the high-level design paper.

The ESB's arguments for the introduction of a payment for capacity have been inconsistent, and this has added to the regulatory uncertainty arising from this process. The ESB have previously argued that a capacity mechanism would only be a small change to the market, akin to a "top-up". However, the ESB's high-level design sets out a major overhaul of the NEM by introducing a centralised capacity market. For example, the former chair of the ESB, Dr. Kerry Schott dismissed concerns from stakeholders regarding the previous iteration of the capacity mechanism design, because "they were confusing it with a full capacity market". However, these dismissed concerns now appear well founded given the most recent high-level design outlining a centralised capacity market.

In addition, the ESB have previously suggested the counterfactual of not introducing a capacity payment would be having the wholesale market price cap be raised to \$60,000/MWh.<sup>1</sup> However, this argument was not supported by the most recent findings in the Reliability Panel's reliability standards and settings review.

Both these examples show that the ESB has been unclear and varying in its rationale. This makes it more difficult for stakeholders to understand the ESB's rationale, and engage in the policy development process.

In their high-level design, the ESB again has failed to present the necessary analysis to assess whether the change of the magnitude outlined in the paper is needed. The ESB has not adequately demonstrated how a capacity mechanism would improve outcomes for consumers nor how the design preferred by the Board would deliver the stated objectives. The ESB has even admitted that the reforms it is considering could lead to:<sup>2</sup>

- imposing bigger regulatory burdens
- overcompensation of existing thermal generation assets
- reducing the liquidity of contract markets
- eroding competition in retail and wholesale markets.

## No comparison against a base case

In its initiation paper, the ESB committed to undertaking an assessment of options. It stated:

*“As part of considering a capacity mechanism for the NEM, a ‘base case’ will be developed. The base case will represent the best alternative to introducing a capacity mechanism. It will be an important consideration in the design process and will form the basis against which options can be compared.”*

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<sup>1</sup> Source: A. Macdonald-Smith, Power reforms needed to avoid \$60K prices: Schott, Australian Financial Review, August 2021, accessed 19 July 2022. Available [here](#).

<sup>2</sup> Energy Security Board, *Options Paper – Part A*, p. 36.

Despite this commitment, it is not clear when the ESB will develop this base case or how it will be used to assess multiple options. The high-level design has a commitment to a single design, and this has been decided in the absence of a base case being developed or being compared in detail against other options.

We consider it is still vitally important for the ESB to develop a base case. When developing the base case, the ESB should:

- account for the impact on recent regulatory changes including the introduction of five-minute settlement and the existing RRO.
- account for the impact of the future expansions of the market price settings, NSW Electricity Investment Roadmap, jurisdictional reserves, markets for fast frequency response, and other markets for essential system services.
- consider how a capacity mechanism will add costs for consumers, and the distribution of these costs across market customers coupled with an assessment of how this would impact the viability of small retailers and demand response projects.
- clearly articulate the metrics for assessing the base case against the impact of a capacity mechanism. This is needed to assess the extent of the costs/benefits associated with moving away from our current regulatory and market frameworks.
- assess the impact of a capacity mechanism on wholesale prices and wholesale price volatility. The ESB should seek to understand how this might diminish the incentives to invest in storage and demand flexibility.
- consider the various options and models submitted by stakeholders to the ESB in response to their initiation paper.

If the ESB has decided this assessment is no longer necessary, more detailed explanations should be provided for why the design outlined in the ESB's paper is preferred, and why the industry models have not been progressed.

### **New capacity vs. new and existing capacity**

The ESB concluded that both existing and new capacity should be eligible to participate in the capacity market. It suggests this is necessary because it would:

- incentivise the most efficient mix of resources to ensure reliability
- discourage the premature exit of existing capacity
- avoid over-building new capacity

The ESB's rationale is that focussing on only new investments could risk situations such as the premature retirement of a marginal gas fired power station where this represents the cheapest capacity.

As raised in submissions to the ESB and through the technical working group, there is strong stakeholder support for focussing on new investment in the design of a capacity mechanism. The ESB did not respond to the various arguments in favour of the new investment only approach, which include:

- facilitating new investment when a reliability shortfall is expected, and not imposing costs on consumers when it is not needed

- preserving retail competition and not creating new market power risks
- responding to political objectives, including the stance from the Victorian government to exclude coal and gas from the ESB's mechanism
- a much faster implementation with lower implementation costs and regulatory burden

The ESB's rationale for ruling out industry models appears inconsistent with design decisions for the ESB's preferred model. For example, the ESB has suggested its design would provide targeted incentives for replacement capacity, stating that:

*“the capacity mechanism would provide more targeted incentives to ensure replacement capacity arrives when it is needed, giving greater assurance that the exit of these generators will be well managed”<sup>3</sup>*

Further, the ESB suggests it would be necessary to structure specific support for new entrants, saying:

*“new generation may require more support over a longer time period to make the investment viable”*

Our view is that a properly designed capacity mechanism can achieve these intended outcomes. For example, each of the models proposed by industry that focus on supporting new investment were explicitly designed to provide targeted incentives to ensure replacement capacity is developed. The need for greater support for new capacity is exactly the rationale for a new-only capacity mechanism. Yet, the ESB has ruled out the alternative models promoted by stakeholders while at the same time suggesting “more support” may be required for new investment.

Separately, the ESB has not articulated why its concerns about the premature retirement of gas generators<sup>4</sup> would not occur under their model if those gas generator were undercut when competing against new entrants getting longer term support through the capacity mechanism.

If the ESB is going to put forward a preferred model that has an imbalanced playing field between new and existing capacity, it should revisit the industry supported options that do this much more effectively.

Frustratingly, as a proponent of an alternative model, we were not provided with opportunities to respond the ESB's response to our model. Considering the ESB asked for stakeholders to develop and submit alternative options, we do not believe there were sufficient opportunities for these models to be considered and we do not consider the ESB's paper provides a clear, consistent rationale for excluding a new-only approach.

### **Investment in new capacity**

As noted above, the ESB's capacity market is supposed to deliver investment in new dispatchable capacity. The ESB's paper highlights concerns with the results of investors taking a “wait and see” approach to developing capacity in response to perceived uncertainty.<sup>5</sup> However, as the ESB has noted, the central auctioning of capacity over four years is unlikely to support investments in new capacity, hence the need to also consider longer term options.

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<sup>3</sup> Energy Security Board, *Capacity mechanism – high level design*, p. 18.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid, p. i.

In practice, we believe the ESB's approach is likely to delay and deter investment in new renewables and new dispatchable capacity. The prospect of having a capacity market expedited into the NEM creates significant new uncertainty. These include:

- How will derating be determined, and how much will it vary year on year? How is it impacted by network constraints or changes in the demand profile?
- How much firmness can be provided by interconnectors? The high-level design proposed to treat interconnectors very simply. How does this impact the RIT-T assessments of the benefits to consumers of more interconnectors?
- How will the design manage competition risks? Despite acknowledging the potential competition risks, the ESB offered little insight into how these risks might be managed in practice beyond reiterating aspects of the existing financial RRO. It has not clarified how the bias towards vertical integration in the capacity market could be resolved. It has also provided limited discussion of any price controls in the capacity auction.
- What are the impacts on wholesale prices, and wholesale price volatility? The capacity market is likely to extend the operating life of coal generators, which will in turn flatten forward estimates for electricity prices. This dampens the case for investing in new storage and demand flexibility.

### **Improving operational outcomes**

By design, energy-only markets provide highly effective price signals to deliver the most efficient operational outcome. Unless the ESB intends to leave the spot price as is and add capacity payments on top, materially increasing the costs of electricity for consumers, the capacity market does not strengthen operational incentives for balancing supply and demand.

Under the ESB's design a generator that has been paid for capacity only risks not receiving its payment if it isn't available when needed. Generators would receive part of the capacity payment for being available year round, which means generators will be paid for when they are not needed. This is a less effective design than the energy-only market and financial contracting, which has incredibly strong performance incentives that reward capacity when it is needed and punish generators who are unavailable when needed.

### **A capacity mechanism does not clarify retirement dates**

Both the ESB and State and Federal governments have raised concerns with the speed of generator retirement. Early retirements themselves are not necessarily problematic. Instead, the far greater challenge is the unexpected withdrawal of capacity. Unexpected retirements can create security, reliability, and price concerns.

Under the current arrangements, the market and regulators have visibility on planned retirements through the notice of closure provisions and through forecasts like MT-PASA. Since the retirement of Hazelwood Power Station, greater emphasis has been placed on understanding the timing of these withdrawals to help manage the impacts.

In contrast, we don't have visibility of unplanned outages or retirements that occur through technical failure. Indeed, it is impossible to accurately predict these technical failures in any deterministic manner. As such, significant unplanned outages continue to pose a challenge for the NEM through the transition.

Despite suggestions to the contrary from the ESB, it is unclear how the introduction of a capacity market provides any additional certainty regarding the timing of generator retirements. It was

suggested there may be a marginal increase in visibility of planned retirement through withholding of capacity in the capacity auctions. However, under the ESB's design, aging thermal generators are likely to either offer all their capacity because there is no compliance associated with being unavailable, or, if there is a more robust compliance framework introduced, withhold capacity in auctions to hedge against the risk of unplanned outages. The withholding of capacity would be more pronounced over longer timeframes, as the risks of outages increase, and availability is less certain. Neither of these outcomes provide additional certainty compared to existing notice of closure provisions.

The capacity mechanism would not change the risk of unplanned retirements. Occasional qualitative arguments regarding increased maintenance resulting from certificate trading have been made, but these ignore existing requirements to keep plant maintained to meet performance standards and license requirements. Additionally, it may exacerbate this risk by increasing incentives for plant operators to keep units in the market as they continue to age.

On top of this, the ESB and State governments are separately exploring the introduction of contracts to fix the retirement date of large generators. These contracts (which State governments can, and have, already bilaterally entered) and the regulatory controls already in place to address the timing of generator retirements leave no residual role for a capacity market designed to manage thermal generator retirements.

### **Political willingness to intervene**

Political intervention in the NEM has had a major impact, and its continuation is undeniably a key challenge. However, it is a misnomer to think that the introduction of a capacity market would break this cycle. The State governments are driven to intervene in the market for a range of reasons, including addressing climate change, driving regional growth, and energy price concerns, not just reliability.

In its review of international markets, the ESB would have observed the proclivity of governments to intervene in capacity markets. Capacity markets have routinely been subjected to court challenges and adjustments as central planners seek to influence outcomes. In another clear indication that a capacity mechanism is not an effective shield against political intervention, the United Kingdom has a capacity market like that proposed by the ESB, and has just commenced a review of their electricity market arrangements.<sup>6</sup>

Commendably, the Victorian government has confirmed it would not pay coal and gas through a capacity market. This highlights that the capacity market high-level design is unlikely to reduce the willingness of governments to intervene, particularly when the capacity market acts at odds with emissions targets.

The ESB has also provided no clarity on what the value of capacity is likely to be. Based on overseas experiences, the price for capacity could be highly volatile, not unlike the wholesale price for electricity. As such, the ESB's capacity market design may not even address concerns about price volatility and the impacts for consumer bills held by governments.

### **Implementation timeframes**

The ESB is suggesting an incredibly ambitious timeframe of holding the first capacity auction in less than two years from now and have suggested that this auction would somehow help with

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<sup>6</sup> Department for Business, Energy and Industrial Strategy, *Review of electricity market arrangements*, July 2022. Accessed 19 July 2022, available [here](#).

addressing any reliability shortfalls in 2025-26. In less than two years, the ESB would need agree incredible amounts of detail and guidelines. Experience implementing other smaller reforms suggests we are unlikely to meet these timeframes. However, this does create significant regulatory uncertainty.

The ESB should be clear about the trade-offs associated with different implementation timeframes instead of focussing on expediting their preferred mechanism. The ESB will need to consider the impacts on the default market offer, Victorian default offer, market price cap, forecasts in the integrated system plan, cost/benefit analyses being undertaken for RIT-Ts, retailer reliability obligation, existing contracts and more.

## **A more effective role for a capacity mechanism in the NEM**

In our submission to the initiation paper, we suggested that, subject to demonstrating a clear need for a capacity mechanism through an assessment of the base case, the ESB should consider options for a more targeted capacity mechanism. We've reiterated the case for focussing on mechanisms that support new investment into the system to manage the energy transition.

We strongly consider a capacity mechanism that intends to provide greater certainty regarding the timing of generator retirements, in addition to being unnecessary, forces the mechanism to be far more complex and costly than would otherwise be necessary.

By setting aside generator retirements (and addressing them separately through orderly exit management contracts) and focussing on new investments, a capacity mechanism could be designed to:

- Facilitate new investment when a reliability shortfall is expected, and does not cost anything if not needed
- Preserve competition and would not create market power risks
- Responds to political objectives
- Be implemented quickly and have lower implementation costs and regulatory burden.

More detail on what this model could look like, and its advantages is outlined below.

### **Proposed model**

The ESB should consider the development of a targeted capacity mechanism. Broadly, this mechanism would:

- Set out a robust framework for assessing the likely risks of future reliability shortfalls.
- In the event of an expected shortfall that might not be resolved otherwise, undertake auctions for reliability options that would be intended to bolster the investment cases for projects being planned.
- The successful projects would receive the reliability option for a pre-determined timeframe, and the costs would be recovered across the market through energy retailers. These options would be intended to remove some of the downside risk of investing in the NEM and could come with conditions to protect consumers from excessive costs.

It would also aim to work with the objectives of State governments and provide an option for state governments to support greater levels of reliability, but still providing transparency and some competitive tension to the process.

### **Metric for determining auction trigger**

The process leading into an auction should provide the market with transparency and foresight regarding expected shortfalls. It should leverage off the existing processes for triggering the retailer reliability obligation, where T-3 instruments are issued when reliability gaps are forecast three years out. This would both provide warning to market participants, and parties who would be interested in tendering for the reliability options. Closer to the shortfall, a second assessment is undertaken and, if the shortfall has persisted, the auction process would commence.

As is the case with the existing RRO, there would be processes in place to dispute the declaration of shortfalls. The AER or even the Reliability Panel could provide oversight of the modelling and stakeholders would have the opportunity to challenge the modelling inputs and outcomes.

While the targeted capacity mechanism would ideally be nationally consistent, it could be tailored to state-specific objectives. As demonstrated by the list of principles provided to the ESB from Energy Ministers, State governments have clearly indicated their preference to have some influence over the development of energy supply in their jurisdictions. Instead of creating an oversupply as the solution to political concerns about reliability (as the PRRO would do), this targeted capacity mechanism could provide a transparent, competitive process for State governments to guide the development of electricity supply in their states. For example, it would be amenable to state-specific technology requirements including exclusions on fossil-fuel based investments. It could also integrate with existing energy policies like the NSW Infrastructure Investment Roadmap. State governments would also be able to outline any additional specifications regarding the timing and structure of the forecasting process, such as the timeframes between triggers and the auction.

### **Auctions for options**

If an expected supply gap is forecast, and it is not resolved by the second trigger, an auction is triggered for reliability options. The expectation would be that the numerous projects firming up their investment cases would apply to the auction for the reliability options to help de-risk the project and proceed into development. If these projects were likely to invest anyway, the auction prices should be driven down, reducing risks and costs to consumers. This could include supporting new investments in storage, renewables, or demand response if they can contribute to addressing the predicted shortfall.

These auctions could also be developed to coincide with flagged thermal generator retirements to provide confidence that projects would be available to replace lost supply.

As a default, the auctions would be technology-agnostic. It would be open to demand-side participation as well as new supply. However, as noted above, State governments have indicated technology preferences. If State governments did wish to impose specific requirements regarding technology types, this can easily be incorporated through the allocation of the options.

### **Awarding options**

The auctions would allow proponents to bid for a minimum level of cap contract payout (the revenue for generators associated with the wholesale price exceeding \$300/MWh) over the first five years of the project, starting with when the gap is forecast to occur. Successful projects would all receive a guaranteed level of revenue.

Additional conditions could be added to the awarding of contract. For example, successful applicants could be required to provide market liquidity, and clawback mechanisms could be developed to address any subsequent windfall gains made by the projects supported through the mechanism.

The design of the new entrant support should also maintain a competitive balance between incoming projects, and incumbent generators and demand response. The floored cap payouts would not shield projects from wholesale price signals.

The costs of the new entrant support would be recovered from all retailers. There are multiple ways this could be achieved. The simplest is apportioning costs across all market customers on a MWh basis. This has the advantage of being simplest to administer and is consistent with cost recovery arrangements for other non-energy costs.

## Advantages of the proposed model

The design of a targeted capacity mechanism has numerous advantages over the ESB's capacity market.

- The design is far simpler. Many aspects of the mechanism already exist in the existing RRO, and most of the design work relates to the preferred reliability option. This should also mean much lower implementation costs and reduced regulatory burden for existing participants.
- By focussing on new investment, emphasis can be placed on options most compatible with existing financing processes. Where the ESB's capacity market would create a volatile, uncertain revenue stream that will likely take years to be treated as a firm revenue stream in project financing, the targeted capacity mechanism support is designed to reduce the downside of future energy prices the project will be exposed to could be easily incorporated into standard project financing.
- More amenable to State-specific requirements. A targeted capacity mechanism would work with State-specific technology requirements, or with states opting in/out of the mechanism.
- Preserves retail competition. The capacity market requires all retailers to pay for capacity equivalent to their level of demand, a cost that vertically integrated retailers have a pre-existing hedge against. Standalone retailers, who have long term price protection through *financial* hedges, would be left to pass on a cost their competitors have hedged. This would undermine retail competition. A targeted capacity mechanism would not give vertically integrated retailers a hedge and wouldn't undermine burgeoning retail competition.
- Protects consumers from excessive costs. The auction would only be triggered when new capacity is demonstrably needed. There is no risk of providing new, large revenue streams to large thermal generators on the verge of retirement for no benefit to consumers.

While there are numerous details and design questions unresolved with this model, we think it presents significant advantages over the model preferred by the ESB. The ESB should reconsider this model, especially in light of comments from the Federal Energy Minister regarding the need for a fast implementation of a capacity mechanism, and a desire to provide support for new technologies.

## Reserve mechanism

If the ESB is concerned that the Flow Power proposal does not directly address the risks associated with unexpected closure of coal generators, it should be considered alongside a reserve mechanism.

The Iberdrola reserve market model is the most effective proposal for managing the impact of unexpected coal retirements, by providing for capacity to be developed and held in reserve. This could provide for a smooth transition between aging thermal generators and new dispatchable capacity, while minimising any impacts on incumbent projects. It also provides certainty to governments that there will be capacity developed to replace coal generators.

The introduction of a reserve mechanism should be considered further, particularly as a measure to manage the unexpected or unplanned failures of coal generators. As was the case with the ESB's response to the Flow Power model, there was very little feedback provided explaining why this proposal was discarded. Before the ESB explores its preferred model in depth, a more fulsome analysis of the Iberdrola model is warranted.

## Other aspects for consideration

### Market power

The introduction of a capacity market could very easily create the conditions for market power to be exercised.

The introduction of a capacity market, by design, creates a revenue stream from consumers, via retailers, to specific generation assets. These generation assets are mostly parts of gentailer portfolios. Under the current market design, the retailers that have vertically integrated with large, dispatchable assets are typically large themselves. In the current market, smaller retailers looking for hedging products can use financial hedges to help mitigate the effects of this concentration.

The market power concerns highlighted by the ESB are legitimate, and of their own making. A mechanism that creates revenue for existing generators and excludes financial intermediaries and recovers costs from retailers is highly exposed to risks of market power emerging. Vertically integrated retailers have a pre-existing hedge against the introduction of a capacity market through generation ownership. The most likely form of long-term hedge available to small retailers are PPAs, which provide no protection against the introduction of a capacity mechanism. The ESB should focus on the imbalance between vertically integrated retailers and standalone retailers created by the introduction of a capacity market. To address these risks, the ESB will need to rely on imperfect regulation which also risks undermining the intent of the capacity market's introduction.

A capacity mechanism that excludes all incumbent capacity neatly avoids concerns regarding the concentration of dispatchable capacity and the associated market power risks.

### Consideration of demand-side options

For retailer-led demand response, this is primarily delivered through innovative tariff structures that encourage consumers to respond to high wholesale prices. The ESB suggests retailers would be able to utilise this demand response to reduce their actual demand, and therefore reduce the number of certificates they would need to procure. However, this disregards the fact that most demand response occurs following high wholesale prices which is not necessarily the "risk periods" envisaged by the ESB. If the "risk periods" are administratively set, such as LOR conditions or being paid year-round, as opposed to referencing wholesale prices, it makes it very difficult for retailers to rely on demand response.

The capacity mechanism gets even more complicated when envisaging non-retailer demand response. If a demand response aggregator or DRSP wished to participate in the capacity mechanism, the ESB would need to work through processes for:

- How AEMO would determine the capacity an aggregator would be eligible for. This would need to account for the capacity of aggregations that will grow and shrink over time, and that may not have the historical performance available for AEMO to benchmark against. This is also likely to create administrative challenges for AEMO dealing with large amounts of data either collected directly from thousands of devices or connection points for each aggregation.
- To avoid double counting of the response (i.e., through the payment for capacity and through the reduction of retail load) all the response from the demand response aggregator would need to be added back to the retailer's liability under the capacity mechanism. This would involve creating baselines for all the response and adding that back to each retailer that had their liable load impacted. This is almost impossible to do in any meaningful way at

a residential level, especially so for highly flexible resources like electric vehicles and pool pumps.

If the ESB wants to maintain an equal playing field between DER, demand response and centralised generators, it must work out how to address these challenges. If it does not, it will exclude demand side resources participating in the capacity mechanism, undermining efforts from the ESB and industry to utilise the demand-side in moving toward a two-sided market.

We look forward to continuing to engage with the ESB further on the development of a capacity market.

If you have any queries about this submission, please contact me on (02) 9161 9068 or at [Declan.Kelly@FlowPower.com.au](mailto:Declan.Kelly@FlowPower.com.au).

Yours sincerely,

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Regulatory Policy Manager

Flow Power