



9 June 2021

Dr Kerry Schott AO
Independent Chair
Energy Security Board

Submitted via email: info@esb.org.au

Dear Dr Schott

**Stanwell Corporation Limited Response to
Post 2025 Market Design Options – A paper for consultation**

Stanwell Corporation Limited (Stanwell) welcomes the opportunity to respond to the Energy Security Board's (ESB) Post 2025 Market Design Options – A paper for consultation (Options Paper).

Stanwell is a major provider of electricity to Queensland, the National Electricity Market (NEM) and large energy users throughout Australia. We own and operate two coal fired power stations, providing reliable and affordable energy, and we are exploring new generation and storage technologies that will help reduce emissions for tomorrow.

This submission contains the views of Stanwell in relation to the Options Paper and should not be construed as being indicative or representative of Queensland Government policy.

1. Introduction

The former Council of Australian Governments (COAG) Energy Council tasked the ESB with *“developing advice on a long-term, fit-for-purpose market framework to support reliability that could apply from the mid-2020s”*¹. Stanwell acknowledges both the enormity of that task and the work the ESB has done in raising some of the key challenges the industry must consider in order to ensure a secure and reliable transition to a lower carbon economy.

In order to meet COAG's stated objective, Stanwell had expected the ESB would develop a high-level, internally-consistent market design to address the challenges facing the market, both current and future. In our view, this should have included identifying, developing and analysing options for each reform area, both individually and their interactions with other proposed reforms. Our expectation was that stakeholders

¹ COAG Energy Council, Post 2025 Market Design - Scope and Forward Work Plan, March 2019, p1

should have then been engaged in a multi-staged consultation process to refine the detailed reform options prior to final recommendations being made to Ministers. Stanwell contends this has not occurred to a sufficient extent at this time.

Following the September 2020 Post 2025 Market Design Consultation Paper (Consultation Paper), Stanwell had expected that more analysis and detailed development of the proposed reform package options would have occurred prior to the next round of consultation. While we recognise that the ESB has narrowed some options down from the Consultation Paper and January 2021 Post 2025 Market Design Directions Paper (Directions Paper), it is our view that many of the proposed reforms presented in the Options Paper are still at the conceptual stage.

In our opinion, there is still insufficient detail or analysis on how the proposed reforms would work, what impacts they would have on the market and participants, and costs and benefits to the market and consumers. It is our view that at this time this makes it quite difficult for stakeholders to prosecute or assess many of the options presented in the Options Paper in any detail.

Stanwell is of the view that further work needs to be done in relation to developing the high-level market design, and assessing potential reform options in more detail. Stanwell believes the ESB should not be constrained to a nominal deadline for making recommendations on something as important as the future design of the electricity market. Implementing market reforms that have not undergone appropriate consideration and analysis could have long-lived impacts on consumers, the operation of the market and the energy transition. For this reason, Stanwell believes this vital work should occur before recommendations are made to Ministers, and would support an extension to the ESB's work program to allow this to occur.

Stanwell notes that those options that have progressed relate primarily to the creation of markets for system services, which is being led by the Australian Energy Market Commission (AEMC) in response to market participant and AEMO-initiated rule change requests. Stanwell had expected this market design initiative to deliver an overarching design for system services, based on definitions of the system services which are currently missing from the bulk-energy-centric market design. The reactive evaluation of un-coordinated rule change requests does not appear to have benefitted from the ESB's efforts to date.

While Stanwell recognises the complexity of the task faced by the ESB, as well as the time constraints imposed by COAG to conduct this work, we do have concerns about the ESB's options development and consultation processes and its response to concerns raised on the reform options. Our main concerns relate to:

- Lack of high-level market design;
- Lack of visible consideration of feedback to date;
- Recent presentation of new reform options;
- Information dissemination following deep-dive sessions;
- Lack of detailed/quantitative analysis of reform options; and

- Short timeframe to consider final submissions before making recommendations to Ministers.

We have outlined our specific concerns for the ESB's consideration in section 3 below, and Stanwell would be happy to discuss our concerns in more detail with the ESB.

2. Stanwell's reform positions

Stanwell's key regulatory reform priority remains the development of markets for essential system services (ESS). This requires a clear definition of what these services are, a plan for how they will be valued and procured, and identification of the interactions between each service and other market reform initiatives. It is Stanwell's view that this has not yet been communicated by the ESB. Stanwell's position is that the AEMC's work on progressing a number of independent ESS-related rule changes is not a substitute for the ESB delivering a high-level market design that ensures congruency between the components of the reform package.

As we have previously stated to the ESB, a comprehensive plan to address these "missing markets" will assist the market operator in managing the technical challenges it faces as we transition to higher levels of variable renewable energy (VRE), and "also address consistent themes that run throughout the ESB's work, including:

- *Meeting consumer needs;*
- *Strengthening investment signals to continue to operate existing capacity and establish new sources of firming or dispatchable plant that will maintain resource adequacy;*
- *Promoting competition and help keep prices as efficient as possible for consumers;*
- *Providing certainty to market bodies and governments that the energy system will continue to operate securely; and*
- *Addressing structural changes to our generation mix and the technology used to manage demand and supply.*²

A clear plan would also assist policy makers in assessing the other market design initiatives being progressed by the ESB. For example, how does a proposed resource adequacy mechanism address the availability of inertia, very fast frequency response or voltage support? Or how does the proposed transmission access reform deal with a generator (or load) which is providing inertia or absorbing reactive power?

In addition to the ESS markets being progressed as immediate and interim reforms, Stanwell encourages the ESB to identify the gaps between their assessed system needs and the rule change requests currently being considered by the AEMC, and submit rule change requests to address these gaps directly.

² Stanwell Corporation Limited, 2020 Energy Security Board, Post 2025 Market Design, Response to Consultation Paper, October 2020, p6.

In regard to this, Stanwell believes that the proposed delayed establishment of a market(s) for inertia is one such gap that the ESB should act on immediately. Stanwell strongly suggests that the ESB work with AEMO to develop and submit a rule change request to the AEMC to begin development of a market for the provision of inertia, in parallel with the other ESS rule changes. While the long-term objective is to develop an inertia spot market, analysis undertaken as part of the rule change process may show an alternative mechanism (e.g. structured procurement, or a combination of spot market mechanisms and contracting arrangements) is preferable in the short-term.

It should be noted that our submission does not provide extensive comments in relation to each individual reform option where we do not have material concerns with the high-level proposals, or the reform options have not progressed significantly from previous ESB papers. In addition, for those reforms that are progressing through AEMC rule change processes Stanwell is, and will continue to engage directly in those processes. Our objective in those processes is the development of workable, efficient and effective outcomes that will help facilitate the continued reliability and security of energy supply as the market transitions to higher levels of variable and energy limited resources.

With respect to the reforms outlined in the Options Paper, Appendix A provides Stanwell's indicative high-level position in relation to each of the options under the four ESB focus areas.

Stanwell does have specific concerns and issues it would like to raise with the ESB in relation to:

- The Modified Retailer Reliability Obligation (RRO) options;
- Scheduling mechanisms; and
- Access and transmission reforms.

Stanwell's detailed comments in relation to each of these matters is provided at Appendix B.

3. Concerns with process

Stanwell has a number of concerns with the Post 2025 Market Design work program in relation to the lack of progress on detailed development of reform options and the limited response of the ESB to concerns raised about the reform options. In addition, we are also concerned with the presentation of new reform options by the ESB very late in the process, only a few weeks out from making recommendations to Ministers.

Stanwell would like to provide the following comments for the ESB's consideration.

- *Lack of high-level market design* – The purpose of the Post 2025 work program was to develop a cohesive, high-level market design that will address the challenges facing the energy market as it transitions to higher levels of renewables. The suite of reform options presented by the ESB does not achieve this as there is limited analysis on how individual reform options presented by the ESB interact and potentially complement or conflict with each other.

In the absence of a high-level market design, much of the ESB's Post-2025 market design process is progressing through individual rule changes led by the AEMC. Stanwell is concerned that this piecemeal approach to developing and implementing a market design to underpin the energy transition may result in a sub-optimal design, with potential future reforms constrained by or counter-productive to current reforms.

- *Lack of visible consideration of feedback to date* – The ESB has been provided significant feedback on reform proposals through written submissions, workshops, deep dive sessions and one on one engagements. However, it is Stanwell's position that stakeholder concerns with reform proposals and a lack of coordination between reforms that interact/overlap with one another, does not appear to be acknowledged or addressed in the Options Paper.

Stanwell's analysis of the 92 public submissions in response to the Post 2025 Market Design Consultation Paper indicated that material issues raised with the proposed reforms were not acknowledged, represented or reflected in the next stage of the ESB's work (i.e. the Post 2025 Market Design Directions Paper).³ For example, the ESB has failed quantify or acknowledge in writing that 91 out of 92 public submissions opposed the proposed long-term whole-of-system transmission access reform option, raising material concerns with its implementation and operation and proposing alternative reforms.

In addition, it does not appear that alternative solutions proposed by stakeholders, including incremental changes to the status quo (such as those mentioned in Stanwell's submission to the Interim Report), have been considered or investigated by the ESB.⁴

- *Recent presentation of new reform options* – New reform options in relation to resource adequacy mechanisms and transmission and access were only recently introduced as options for consideration during the series of ESB led, access restricted "deep dive" sessions held in February and March 2021. These include:
 - Establishing a physical retail reliability obligation, which aims to provide a more direct contractual link between retailers and physical generation resources (dispatchable); and
 - Alternative medium-term whole of system transmission access solutions.

The Options Paper does provide some further conceptual information on these reform options over what was presented at the deep dive sessions, but they are still in the very early stages of development and no quantitative analysis has been undertaken as of yet.

- *Information dissemination following deep dive sessions* - The ESB limited participation in the deep dive sessions on the premise this approach would enable a more fulsome dialogue on the issues, compared with a broader forum. Stanwell requested that other stakeholders be permitted to listen in on the deep dive sessions to hear first-hand the concerns and issues being discussed and reduce reliance on

³ Energy Security Board, Post 2025 Market Design Directions Paper, January 2021. P2025 Market Design Directions Paper.pdf

⁴ Stanwell Corporation Limited, Response to AEMC Interim Report: Updated Technical Specifications and Cost-Benefit Analysis, October 2020, pp 4-5.

the ESB and second-hand sources for information dissemination. The ESB did not respond to this request. Following the deep dive session on Renewable Energy Zones held on 18 February 2021, the ESB posted 18 pages of meeting output material on their SharePoint site, but then removed this material and replaced it with 3 pages of extremely high-level “feedback themes”. Detailed information of what was discussed in the deep dives was not provided for subsequent sessions.

- *Lack of detailed/quantitative analysis of reform options* - In the Options Paper the ESB flagged that it will begin work to undertake quantitative analysis (cost/benefits) in relation to its proposed pathways. However, it is highly unlikely stakeholders will be provided an opportunity to review, assess or challenge this analysis prior to recommendations being finalised. Given the importance of this work to stakeholders’ ability to fully evaluate reform options, Stanwell believes stakeholders should be consulted on the outcomes of this work prior to final recommendations being made to Ministers.
- *Short timeframe to consider final submissions before making recommendations to ministers* – The ESB has flagged final recommendations for the Post 2025 Market Design will be presented to the jurisdictional and commonwealth Ministers in mid-2021. A comparison of the ESB’s original plan timeframe to what has actually occurred shows the four months to consider submissions and refine the recommendations for Ministers has now been reduced to approximately four weeks. Stanwell considers this timeframe too short for the ESB to properly consider submissions and reflect that in their advice to the Ministers, especially as we understand the recommendations need to be locked down well ahead of their presentation to the Ministers.

4. Conclusion

Stanwell’s top priority remains progressing initiatives to address the missing ESS markets. Identifying and addressing these services is required before meaningful analysis of the resource adequacy mechanism and transmission access workstreams can occur. Implementing these missing markets will assist the market’s transition to higher levels of VRE, meet consumer needs, strengthen investment signals, promote competition, support system security and address structural changes in the generation mix.

Given both the number of reforms that are progressing through AEMC rule changes and the lack of progress since the January 2021 Directions Paper, Stanwell has not provided extensive comments on the proposed reforms in this submission. Instead, Stanwell is providing comments on its indicative high-level position on each of the options presented under the ESB’s four focus areas, and its concerns with three initiatives that have progressed since the January 2021 Directions Paper (namely the modified RRO, scheduling mechanisms and transmission access reform). Stanwell will continue to engage with the AEMC on the individual rule changes under the Post-2025 market design process.

Stanwell also has concerns about the Post-2025 market design project process, including the lack of a high-level, internally-consistent market design to guide reform development, and the short amount of time the ESB has to consider and address the concerns raised in submissions prior to recommendations being made to the Minister. Stanwell believes this vital work should occur before final recommendations are made and would support an extension to the ESB work program to allow this to occur.

Stanwell welcomes the opportunity to further discuss the matters outlined in this submission. Please contact Evan Jones on (07) 3228 4155.

Yours sincerely,

A handwritten signature in blue ink, appearing to be 'I. Chapman', with a long horizontal flourish extending to the right.

Ian Chapman
Manager Market Policy and Regulatory Strategy

Appendix A

The tables below provide Stanwell's position on the initiatives discussed in the ESB Options Paper, grouped under the four market design initiatives.

| Stanwell's indicative position | |
|--------------------------------|----------------------------|
| ● | Support. |
| ● | Further analysis required. |
| ● | Do not support. |

Resource Adequacy Mechanisms and Aging Thermal Generation Strategy

| Reform | Stanwell's indicative position | |
|--|--------------------------------|---|
| Generator exit mechanisms | ● | Stanwell contends there are several existing and transparent mechanisms that place obligations on all generators to report, disclose and notify market bodies of operational and financial circumstances that drive decisions to participate or withdraw from the market. |
| Contingent scenario planning | ● | Support enhanced scenario planning through ISP, ESOO, GSOO, State of the Energy Market. |
| NEM-wide approach to jurisdictional investment schemes | ● | Stanwell does not have any concerns with this proposed reform initiative. |
| Modified RRO (financial) | ● | While Stanwell consider a number of improvements could be made to the current RRO design, these specific proposals do not appear to provide the greatest cost/benefit ratio. ESB needs to undertake a comparative analysis of the proposed modified RRO options against maintaining the current RRO, coupled with other market reforms that may have positive impacts on resource adequacy. Detailed comments provided in Appendix 2. |
| Modified RRO (physical) | ● | |
| Monitoring reliability | ● | Support continued monitoring and reporting of reliability. |

Essential System Services and Scheduling and Ahead Mechanisms

| Reform | Stanwell's indicative position | |
|---|--------------------------------|---|
| Fast Frequency Response | ● | Support immediate progression through AEMC rule change ERC0296 – <i>Fast frequency response market ancillary service.</i> |
| Primary Frequency Response incentive arrangements | ● | Support immediate progression through AEMC rule change ERC0263 – <i>Primary frequency response incentive arrangements.</i> |
| System Strength framework | ● | Support immediate progression through AEMC rule change ERC0300 – <i>Efficient management of system strength on the power system.</i> |
| Operating Reserves | ● | Question whether operating reserves would be needed after other system services have been implemented. Material concerns will be raised with the AEMC through rule change ERC0295 – <i>Operating reserve market.</i> |
| Unit Commitment for Security | ● | Support development through AEMC rule change ERC0300 – <i>Efficient management of system strength on the power system.</i> |
| System Security Mechanism | ● | Question the need for the mechanism. Material concerns will be raised with the AEMC through ERC0300 – <i>Efficient management of system strength on the power system.</i> |
| Potential spot market for inertia | ● | Stanwell encourages the ESB to submit a rule change request to the AEMC to begin immediate development of a market for the provision of inertia, in parallel with the other ESS rule changes. Some concern about whether a spot-only market is best-fit (at least initially). |
| Integrated ahead market and energy trading | ● | Stanwell does not support the extension of scheduling and ahead market mechanisms to energy, as it is unlikely there are any benefits to establishing an additional platform for energy hedging over existing mechanisms. |

Integration of Distributed Energy Resources and Demand Side Participation

| Reform | Stanwell's indicative position | |
|------------------------------------|--------------------------------|---|
| Integrating Energy Storage Systems | ● | Stanwell considers modifying existing participant categories is the appropriate reform proposed in the AEMC rule change process ERC0280 - <i>Integrating energy storage systems into the NEM</i> . Stanwell will continue to engage with the AEMC as this rule change progresses. |
| Consumer protections | ● | It is unclear from the Options Paper what current mechanisms are not working and what needs to be addressed. |
| Minimum demand | ● | Support progression of this work through AEMO and AEMC. |
| Flexible Trader Arrangements | ● | Question the need for this reform proposal. Stanwell will provide comments directly through AEMC rule change ERC0280 – <i>Integrating energy storage systems into the NEM</i> . |
| Trader Services Model | ● | Question the need for this reform proposal. Stanwell will provide comments directly through AEMC rule change ERC0280 – <i>Integrating energy storage systems into the NEM</i> . |
| Scheduling Lite | ● | Support development of this option through ERC0280 – <i>Integrating energy storage systems into the NEM</i> ; and ERC0256 – <i>Generator registrations and connections</i> . |
| DER enablers | ● | Question the requirement to define roles and responsibilities or the Maturity Plan if majority of work is progressing through AEMO and AEMC. |

Access and Transmission

| Reform | Stanwell's indicative position | |
|---|--------------------------------|---|
| Actionable IPS rules and delivery of ISP projects | ● | Support continued operation of the ISP. |
| Renewable Energy Zone rules and implementation | ● | Support development of the framework. |
| AEMC Dedicated connection assets rule change | ● | Support draft rule change ERC0294 – <i>Connection to dedicated assets</i> . Stanwell notes the final rule change is due by 8 July 2021. |
| Medium-term whole-of-system access solutions | ● | The case for additional short-lived access regime change (aligned with the ESB's preferred long-term transmission access reform) has not been made. |
| Congestion management information. | ● | Support increased congestion information provision. |
| Financing of large transmission projects | ● | RIT-T remains an appropriate initial assessment of new investment. |
| Transmission cost allocation | ● | Support continued examination of options, but highlight that a key benefit of the current regime is transparency of network costs. |
| Locational Marginal Pricing / Financial Transmission Rights | ● | Strongly oppose long-term access reform in the absence of evidence of the material issues it will address, analysis of potential options and modelling of the impacts on consumers. |

Appendix B

This appendix contains Stanwell's response to key proposed reforms.

Modified Retailer Reliability Obligation (RRO)

Stanwell notes that the ESB has identified that the "heavy lifting' for investment should come through signals in the real time market".⁵ Stanwell agrees with this statement and supported this position in our response to the ESB's September 2020 Consultation Paper. Specifically, we stated:

*"Existing resource adequacy mechanisms would be sufficient for providing investment signals in the energy market, if they are allowed to occur as designed without intervention. Initiatives developed under the ESB's Post-2025 Market Design process should aim to decrease the occurrence of interventions by governments and the market operator whilst allowing for appropriate investment market signals for both energy and ESS to occur naturally."*⁶

While we did provide cautious support for the ESB investigating options for a modified RRO, our position was that minor reforms may be sufficient, such as aligning RRO contract terms with the 42-month notice of closure requirements for generators. We also called for the ESB to develop potential modified RRO options in greater detail so they could be properly assessed as to their potential to provide additional investment signals to the market and benefits to consumers (i.e. contribution to the National Electricity Objective).

Unfortunately, resource adequacy mechanism options presented in the Options Paper have not progressed significantly from previous ESB papers. In addition, no cost/benefit analysis between the options (compared with status-quo) has been conducted to provide quantitative evidence of the advantages of one option over others.

The ESB stated that it will undertake a comparative analysis of the proposed modified RRO options against maintaining the current RRO, coupled with other market reforms that may have positive impacts on resource adequacy. Stanwell believes this analysis should also investigate how each option would contribute to the National Electricity Objective and then be published so that stakeholders have the opportunity to review, discuss and comment on the outcomes prior to a recommendation being made to Ministers. There appears little benefit in recommending a reform to Ministers only to find out that it is not supported by analysis.

⁵ Energy Security Board, Post 2025 Market Design Options - A paper for consultation, Part A, April 2021, p31

⁶ Stanwell Corporation Limited, Response to Consultation Paper, October 2020, Appendix A, April 2021, p13

Financial RRO

The risk is that in instances where the T-3 trigger is removed (automatically triggered) there is little incentive for retailers to hedge early, given the forecast adequacy of supply. A T-1 trigger would then be more likely to “surprise” retailers and cause a flurry of compliance buying which may distort outcomes.

If a modified trigger arrangement were desired, Stanwell contends it may be more beneficial to leave the T-3 trigger based on AEMO forecasts, but remove the T-1 trigger and establish systems to align the liability volumes between retailers and the AEMO forecasts. This would align the RRO with its intent as a planning (rather than operational) process and avoid the risk of last-minute shocks to retailers and customers.

Physical RRO

With respect to the option to develop and implement a physical RRO (PRRO), Stanwell is disappointed that this has been introduced as a serious option so late in the Post 2025 Market Design development process. While capacity markets (both centralised and de-centralised) have been briefly mentioned in previous ESB papers, there was little indication that this was under serious consideration as an alternative to more incremental modifications to the current RRO. The late addition to the options under consideration has seriously impeded stakeholders’ ability to analyse the potential costs and benefits of such a radical reform.

Stanwell is particularly concerned that the complexity and cost of developing and implementing a PRRO is grossly underplayed in the Options Paper. Unlike the option to move to a “triggerless” financial RRO, a PRRO would potentially be a massive change to the market and its systems. The complexity of such a change cannot be understated. Such a fundamental change to the market would likely take years to develop and implement at a significant cost to both market participants and AEMO.

Other concerns we have with a PRRO include the potential to increase barriers to retail competition and negative impacts on the liquidity of financial markets. It would also likely introduce a significant compliance burden on generators and retailers. All of these factors would ultimately increase the cost of electricity, which would ultimately be borne by customers, however without a well-developed proposal they are unable to be evaluated. As noted above, we encourage the ESB to undertake a thorough quantitative cost-benefit analysis of potential RRO options that can then be consulted on with stakeholders prior to a recommendation being made to Ministers.

Stanwell notes the challenge in evaluating the modified RRO, and resource adequacy proposals more generally, is in part derived from a lack of a clear overarching market design. Had the ESS workstream delivered a comprehensive description of market requirements, the design of an RRO may be different. Stanwell contends that had a clear description of how the various RAM mechanisms, modified RRO, operating reserves market and scheduling proposals work together been developed, the decision between financial and physical RRO designs may be clear.

Scheduling mechanisms

Unit Commitment for Security

The ESB has stated it “remains committed to some form of mechanism to support efficient scheduling of resources providing system security services that are not accounted for in real-time market prices or settings (including constraints)”.⁷ This assumes that the services can be clearly defined and are procured (made available) through the proposed System Security Mechanism (or similar). It is proposed that a Unit Commitment for Security (UCS) will provide AEMO the tools required to transparently, predictably and efficiently schedule system security resources.

Stanwell supports the development of a UCS mechanism where security requirements are clearly defined and published on this basis.

A minimal UCS appears to be a codification and extension of the last-resort powers currently held by AEMO where a current or future system requirement is clearly identified and out-of-market resources are called upon to meet that need – potentially displacing in-market resources in the process.

Stanwell does not support any expansion of the UCS beyond this objective which would essentially shift the market design from a market based on self-commitment to a centrally-committed market based on AEMO’s subjective commitment decisions.

System Security Mechanism

The stated remit of the System Security Mechanism is to “procure any system services that are not already provided through a real-time spot market”.⁸ Given the other ESS developments currently being progressed by the AEMC, Stanwell questions the volume of services other than system strength that would be procured through this proposed mechanism, or how the benefits of any such services procured would exceed the costs of establishing and maintaining this mechanism.

Stanwell fears that the introduction of this mechanism may incentivise generators to withdraw from offering long-term system strength services in favour of pursuing short-term contracts on the supply side, and disincentivise adequate network planning and entering long-term system strength contracts with generators on the demand side.

Stanwell contends that the need for a short-term mechanism would be extinguished if AEMO procured an adequate volume of long-term system strength contracts.

⁷ Energy Security Board, Post 2025 Market Design Options - A paper for consultation, Part A, April 2021, p47

⁸ Energy Security Board, Post 2025 Market Design Options - A paper for consultation, Part A, April 2021, p21

Further examination of the role of such a mechanism and the complex interactions with other market reform initiatives is warranted. Accordingly, Stanwell will continue to engage with the AEMC as the proposed initiatives are developed through the ERC0300 consultation process.

Access and transmission reforms

Long-term access reform

The ESB remains committed to long-term access reform incorporating Locational Marginal Prices (LMPs) and Financial Transmission Rights (FTRs), but to date has not articulated the rationale for their chosen access regime, identified and assessed alternative ways of improving locational signals and dispatch efficiency, demonstrated how the chosen regime will address the purported issues with the current access regime, or detailed how this significant change to the market design will provide a net benefit to consumers.

The issues the ESB is currently targeting with transmission access reform are locational signals at the investment timescale and dispatch efficiency at the operational timeframe.

Locational signals

With respect to locational signals at investment timeframes, there are a number of existing locational signals to guide investment decisions, which are being enhanced through further initiatives to improve congestion management information (e.g. AEMO's Congestion Information Resource (CIR)).

These signals will be augmented by the changes proposed in the efficient management of system strength rule change (ERC0300). If implemented, new investment locational decisions will be informed by an up-front charge based on their impact on system strength in the area of the network they are connecting to and their access standard will be set in relation to system strength.

Given the strong positive correlation between the system strength charge and any locational signal provided through access reform, Stanwell questions the expected marginal benefit of the locational signals provided by transmission access reform, both in absolute terms and in relation to the sizeable costs of the proposed reforms.

Efficient dispatch

The ESB has yet to provide compelling evidence that “inefficient” dispatch is a material issue for consumers or generators (both incumbent and intending). NERA estimated the total system costs related to race-to-the-floor bidding were in the order of \$140 to \$180 million per year, but acknowledged their analysis “may not reflect the frequency with which market participants race to the floor in practice and the balance of risk lies towards overstatement of the benefit”.⁹

⁹ NERA, Cost Benefit Analysis of Access Reform: Modelling Report, September 2020, p iv

NERA's analysis also assumes any available generation capacity offered at prices above marginal cost is under-utilised. Professor George Yarrow's analysis of efficient bidding in an energy-only market showed:

"Short-run efficiency can be achieved in energy-market designs provided that it is recognised that pricing should reflect economic costs, not incurred costs. Economic costs encompass scarcity rents as well as such things as expenditures on fuel used to generate electricity. ... What would be problematic is if misguided regulatory policy required that bids reflected within-period, marginal, incurred costs or set an unduly low upper bound to prices".¹⁰

NERA's estimate was considerably higher than previous estimates of historical and forecast impacts of disorderly bidding prepared by ROAM Consulting for the AEMC to inform the Transmission Frameworks Review.¹¹

Any analysis of the impact of inefficient dispatch on consumers would need to differentiate between those participants who are bidding below estimated short-run marginal cost (SRMC) because of expected market conditions (e.g. a limited period of low wholesale prices) and the technical characteristics of their plant (e.g. shut-down costs, restart costs, return to service time) versus participants bidding below SRMC for other reasons. The former is consistent with both robust wholesale market competition and the intention of the existing market design (principally the Market Price Floor of -\$1,000/MWh).

Further work is required to show long-term transmission access reform of the type proposed by the ESB is necessary before consumers should be asked to shoulder the costs of this significant access regime reform.

Medium-term whole-of-system access solutions

The ESB has not articulated the rationale for an additional short-lived change to the transmission access regime.

The ESB states that the medium-term options presented "attempt to mitigate the shortcomings of a partial access solution [i.e. REZs]".¹² Stanwell maintains that REZs are an alternative to long-term transmission access reform. As recently as August 2020 (the REZ planning consultation paper and draft rules), the ESB was highlighting the role REZs could play in coordinating transmission and generation investment:

"...a mechanism is required to co-ordinate the transmission and generation investments. Orderly renewables development will help to reduce risk associated with network congestion, low marginal loss factors and technical difficulties. REZs

¹⁰ Yarrow and Decker, Bidding in energy-only wholesale electricity markets, Final Report, November 2014, pp 4-5

¹¹ AEMC, Coordination of Generation and Transmission Investment - Access reform directions paper, June 2019, p 17 and p 40.

¹² Energy Security Board, Post 2025 Market Design Options - A paper for consultation, Part A, April 2021, p84

are a means of giving effect to orderly renewables development. They can promote more efficient and effective connection of generators including co-ordinated consideration of security issues.”¹³

The ESB also states “the medium-term access options are also designed to be a stepping-stone towards a longer-term solution locational marginal pricing (LMP) and financial transmission rights (FTRs)”.¹⁴ Stanwell maintains that the case for long-term access reform of the type proposed by the ESB has not been made. Accordingly, aligning medium-term access reform with the preordained long-term access reform will preclude potential options (including maintaining the status quo in the absence of a demonstrated need for change) from being identified and assessed.

The proposed medium-term options have inconsistent objectives and impacts on investment and operations decisions, further muddying the waters about what issues the ESB is attempting to address with transmission access reform. While three models (and two variations) have been proposed, both the report and ESB industry briefing sessions indicate that only two options are receiving serious consideration:

- Congestion Management Model modified for new generation and REZs; and
- Hybrid connection fee and Congestion Management Model.

As detailed above, Stanwell is concerned that five potential medium-term whole-of-network access reform options were raised late in the consultation process, but agrees with the ESB’s assessments of a connection fee and generator TUOS and does not believe these options should be pursued further.

Congestion Management Model

The ESB states that the medium-term options presented attempt to “address stakeholder concerns that have been raised with the long-term solution of LMPs and FTRs”.¹⁵ However, the favoured options do not address material concerns raised by stakeholders in previous consultation.

For example, one of the major concerns with the proposed long-term access reform is that FTRs are not firm, which would adversely affect generators’ ability and willingness to sell contracts. The proposed CMM rebate suffers from the same lack of firmness. This is expected to affect generators contracting activity, both with respect to any obligations under the RRO’s Market Liquidity Obligation (MLO), as well as contracting activity more broadly. This would act to reduce retail competition and increase retail prices for consumers.

¹³ Energy Security Board, Renewable Energy Zones Planning consultation paper and draft rules, August 2020, p2

¹⁴ Energy Security Board, Post 2025 Market Design Options - A paper for consultation, Part A, April 2021, p83

¹⁵ Energy Security Board, Post 2025 Market Design Options - A paper for consultation, Part A, April 2021, p84

Further, similar to concerns with FTRs, the non-firm CMM rebate would also be expected to worsen generator revenue certainty, as generators are potentially exposed to price risk and volume risk, affecting how generators participate in both the physical (current and proposed future essential system services markets) and financial contract markets.

Connection fee

Given the work being undertaken to enhance AEMO's Congestion Information Resource and the proposed system strength charge being progressed by the AEMC as part of ERC0300 - Efficient management of system strength on the power system, Stanwell does not see what additional locational signals would be provided by a connection fee.

Linkages to other reforms

In the absence of high-level market design, further information is required on how aspects of the reform package will align. With respect to the CMM, there are linkages to other Post-2025 market design initiatives that would need to be resolved, including:

- The impact of non-firm CMM rebate on contracting undertaken to meet RRO MLO obligations as well as contracting more broadly;
- The impact of CMM on generators who are generating to provide essential system services; and
- The contradictory incentives of generators to dispatch "efficiently" when their LMP is below SRMC versus generating to back physical certificates sold under the proposed PRRO.