

Thursday, 28 September 2023

Ms Anna Collyer,

Submission to *Improving Security Frameworks for the Energy Transition* directions paper.

The Clean Energy Council (CEC) is the peak body for the clean energy industry in Australia, representing over 1,000 of the leading businesses operating in renewable energy, energy storage, and renewable hydrogen. The CEC is committed to accelerating the decarbonisation of Australia's energy system as rapidly as possible while maintaining a secure and reliable supply of electricity for customers.

We welcome the opportunity to comment on the Directions Paper for the Improving Security Frameworks for the Energy Transition rule changes.

The CEC considers the focus of essential system services (ESS) reforms must be on supporting investment in the provision of those services. This investment should be primarily delivered by the private sector, in order to leverage the benefits of competition for consumers.

Investors in renewable generation and storage stand ready to build the assets needed to deliver essential system services. However, the current opacity around system needs, and lack of development of modern ESS markets, is making it increasingly difficult for this investment to occur.

The need for clarity and standardisation

As we have consistently argued, clear investment signals for the provision of essential system services (ESS) are best provided by:¹

- Clearly defining and standardising system needs
- Defining specific services – noting that the definition of what is a 'service' is evolving – to match these standardised system needs
- Procuring through open and competitive market frameworks

The CEC originally supported the development of the HydroTasmania *Synchronous Services* rule change as it was based on clearly identified system needs – as defined in system limits and constraint equations - and also enabled defined, specific 'service responses' – the dispatch of units that were able to relieve the specific system limits by providing a synchronous response.

¹ The CEC considers there is a purposeful order to these three elements of ESS policy. Namely, system needs must come first, with service markets designed to meet those system needs at the lowest possible cost to consumers through leveraging competition.

We continue to support the development of the Inertia / RoCoF control services rule change for the same reasons, noting that reform to that proposal is necessary to ensure that zero carbon sources of inertia are prioritised.

It's recognised the concept of an ESS may be changing. Historically, a system service might be defined as a specific generator response – such as injecting or absorbing active or reactive power – to control a key element of the technical envelope - such as frequency or voltage.

In future, the concept of what is an ESS may become more specific and solutions based, to include things like periodic retuning of IBR responses to support increased system hosting capacity, operational coordination of multiple batteries under specific system conditions, or the provision of grid reference that enables stable operation of a system with high penetrations of grid following IBR relative to grid forming IBR.

While these new ESS may look different to those traditionally considered by the AEMC and ESB, the underpinning policy objective remains the same – that is, clear definition of system needs, a specified service response, and some form of competitive procurement to deliver these services at the lowest cost to consumers.

Summary of CEC commentary on the Directions paper

The CEC considers some of the short term reforms proposed by the AEMC will support security during the immediate part of the transition.

There are opportunities to refine and enhance the proposed framework, to ensure we do not lose sight of the long term objective of standardised system needs, delivered by well defined and competitive ESS markets.

There is much the AEMC can do to support AEMO in improving transparency about changing system needs, while enabling the development of new ESS, including the following key recommendations made in this submission:

1. **AEMO should build on work already being undertaken in the Engineering framework and the minimum SA unit combinations, to develop a detailed and industry collaborative work program**, the aim of which is to set a long term vision for the physical design of a stable, secure and reliable power system. This would involve developing a process to clearly define and standardise these system needs, in order to provide transparent advice as to what investments are needed. The CEC stands ready to facilitate this engagement.
2. **AEMO should undertake further knowledge sharing and industry engagement to explore system needs and solutions.** As part of the above, AEMO should continue and expand on the various industry collaborative trials it has undertaken to identify system needs, such as work on developing a VAR dispatch engine, the

Victorian inertia measurement tool and the various trials that have been undertaken in Tasmania exploring system limits and the use of synchronous machines to relieve those limits - which we understand underpinned the original HydroTas rule change that instigated this process.

3. **AEMO should publicly report on changing system needs and the specific system services** as identified in the above work program. Linked to the procurement of the various transitional NMAS contracts, a new NER obligation should be established to require AEMO to identify system needs and potential solutions in the electricity statement of opportunities and the general power system risk review.
4. **The AEMC should set a clear regulatory timetable that it will follow to progress toward better service definition**, to match the reporting from AEMO. The AEMC has a lead role to play in market development, and should work with AEMO to maintain progress in this area. A regular market review from the AEMC, exploring opportunities to develop ESS markets, should form an alternative to the stated 7 yearly review of the transitional NMAS.
5. **The AEMC should move to a second draft determination for this rule change**, on the basis that the models being proposed are entirely different to what was explored previously. There is significant uncertainty across industry regarding the multiple and complex reforms proposed in the paper, and further engagement is critical.
6. **The AEMC should bring forward consideration of the inertia rule change**, to run concurrently with this rule change process. While the CEC considers some enhancements are necessary to the AEC's rule change request to ensure that zero emissions technologies are prioritised, this rule change nevertheless forms a good avenue to maintain development of a transparent and open market solutions for ESS. The AEMC should not close off this avenue before it has been explored.
7. **The transitional contracting mechanism should be refined to separate out procurement of synchronous unit combinations, from development of new solutions and services**. Such forward looking contracts could be written to help meet the long term vision for system security as identified in point 1. Contracts for synchronous combinations NMAS should also be limited in tenor, and always coupled with a tender for new technology NMAS, so as to deliver long term investment certainty and deliver sustainable ESS.

As always, the CEC recognises the reality of the current policy reform environment, especially the AEMC's desire to move quickly to deliver immediate reform. Noting our general objective remains the development of open, standardised, and competitive procurement of ESS, we have provided the following detailed responses to the Directions paper.

Introducing an inertia floor for the mainland NEM for interconnected operation

General CEC comment:

We recommend the AEMC consider how the existing TNSP led procurement frameworks for inertia and system strength can be enhanced to support and prioritise contracting with storage providers, to help meet these system needs through network support agreements (NSA).

Utilisation of NSAs are likely to lead to lower costs for consumers, by leveraging the capability of storage assets to increase the hosting capacity of networks and reduce the need for additional network build.

The AEMC should prioritise examining the various elements of the NSA framework, particularly considering issues around treatment of opex vs capex in the regulatory determination process and the ability to carry opex spend through multiple regulatory determination periods.

The CEC welcomes further engagement with the AEMC to explore these issues.

Do stakeholders support the Commission's proposal to introduce an inertia floor for the mainland NEM?

Do stakeholders consider that the allocation of proportions of the floor across the NEM would promote balanced and proactive procurement?

The CEC supports the concept of sharing volumes of inertia across the mainland NEM, on the basis that this will increase the overall resilience of the power system.

In terms of the actual volumes of inertia procured through the new floor mechanism, we encourage the AEMC and AEMO to standardise these requirements, so that industry has the capability to respond and bring adequate investment to bear to meet system needs.

In particular, if AEMO is to increase the minimum inertia floor to levels above the current minimum / secure levels – perhaps to facilitate the staged 'hold point' to system transition alluded to in the Engineering Framework - then these levels must be clearly articulated to the competitive sectors of the energy industry.

Ideally, this clear articulation would occur through the development of some form of standard, such as an operability or resilience standard, developed by the Reliability Panel. This standard would describe the volumes of inertia needed to maintain reliability and operability, based on AEMO's modelling and analysis of system stability, working in conjunction with the Reliability Panel

Alignment of the inertia and system strength procurement timeframes

Do stakeholders support the Commission's proposal to require AEMO to project inertia needs for all sub-networks every 10 years?

Do stakeholders support requiring TNSPs to ensure that sufficient inertia is continuously available, based on the three-year compliance period?

As noted throughout this submission, the CEC considers that the optimal way to procure inertia or RoCoF control services is through some form of open, standardised and competitive market.

As such, we are concerned that this alignment of the inertia framework with the system strength framework could represent the AEMC prematurely foreclosing the future development of an inertia market.

The CEC strongly recommends the AEMC continue the development of an inertia / RoCoF control market, through the AEC proposal. This should be done simultaneously with this rule change. The current approach, whereby the AEMC has delayed the inertia rule change well beyond this rule change, seems to preclude the development of a market led approach.

We are also concerned that any such increase in inertia may also cripple the development of the new R1 / L1 FCAS markets, which are due to commence operation in October. Any uncertainty in the market regarding the extent to which these inertia volumes will reduce AEMO's procurement of FFR will markedly reduce investor willingness to engage in these nascent markets.

The AEMC must properly consider the impact of any increase in procured inertia volumes on the viability of emergent FFR markets.

Widening the eligibility of units capable of providing inertia

Do stakeholders agree with the Commission's proposal for TNSPs to be able to procure synthetic inertia to meet the minimum threshold level?

The CEC supports expansion of TNSP procurement to include synthetic inertia.

Do stakeholders agree with the requirement for AEMO to consult on and publish a specification of synchronous and synthetic inertia?

The CEC considers that the NER should provide a clear description of synthetic inertia, to provide investors with certainty as to what kinds of asset investment is required in the NEM. Leaving the bulk of the definition to a subordinate AEMO document, which is

subject to less consultation and may change relatively quickly, may create uncertainty and dissuade investment.

Of course, some of the technical detail of the service should be defined by AEMO – an example might be seen in approach taken to the Market Ancillary Services Specification (MASS). However, the NER should require AEMO to update this specification, in consultation with industry on a regular basis, with a view to recognising the rapidly changing field of grid forming inverter technology.

Removing the exclusion on inertia and system strength in the NSCAS framework

Do stakeholders agree with the Commission’s proposed approach to remove the current exclusion on inertia and system strength in the NSCAS framework?

The CEC supports this proposal.

RIT-T exemption

Do stakeholders think a RIT-T exemption should apply to inertia and system strength services where a shortfall arises within 18 months?

The CEC considers it is sensible to allow a RIT-T exclusion, in those instances where there is an urgent need for investment to meet a security driven shortfall. However, generally we consider that the RIT-T should be applied wherever possible for network procurement, to ensure that non-network solutions are given adequate and transparent consideration by TNSPs.

Commencement arrangements

**Do stakeholders agree with the proposed commencement arrangements?
Are there extra factors that the Commission should consider in transitioning to the new inertia arrangements?**

As per the rest of this submission, the CEC recommends the AEMC does not proceed to a final determination after this directions paper, but rather publishes a draft determination and undertakes further engagement with industry.

Need for, and design of, the transitional services framework

Do stakeholders agree on the need for a transitional services framework?

What are stakeholders’ thoughts on the design of the transitional services framework?

While the CEC’s preference is for standardised, open and competitive procurement of

ESS, we also acknowledge that contracting approaches can play a role in managing a stable system transition.

We consider these contracts can achieve three outcomes:

- Firstly, to bring forward investment in zero emissions sources of ESS, so that these assets are developed, constructed and commissioned well in advance of the exit of large synchronous thermal units.
- Secondly, to support industry learning, as well as enabling investment in new solutions, to deliver system security, stability and operability over the long term.
- Thirdly, they should inform the long term development of more open ESS procurement mechanisms, by helping to develop understanding of system needs and the services that can meet them.

We also consider these contracts must be coupled with clear signalling to the market to guide new investment, when and where this is needed.

The CEC considers that AEMO should be given a clearer role in the development of new services, in light of its unique understanding of where the power system is heading and what will be needed in coming years to maintain stability. AEMO should be enabled to utilise the Type 2 contracts, in particular, to explore and develop new ESS.

The CEC considers that the transitional NMAS framework be split into two parts, with different approaches taken to either type. Type 1 contracts for synchronous combination procurement should be limited in tenor and scope, while Type 2 contracts for new technologies should be longer term. Both should be linked to development of more permanent solutions.

Type 1 Transitional NMAS contracts - Synchronous combination procurement

These contracts should be designed around meeting a short lived but critical need, such as maintaining synchronous unit combinations in situations where transparent resilience metrics indicate this is necessary to manage the risk of major supply disruptions

While the CEC acknowledges that AEMO may need to procure these combinations to maintain the operability, resilience and stability of the system under specific circumstances, this method of ESS provision is not sustainable nor is it conducive to supporting new investment. If AEMO is going to enter into these arrangements, it should be strictly limited in time and scope.

We also question the extent to which AEMO will need to enter into these contracts in other regions. While it's true that AEMO has had to manually intervene and issue directions in South Australia, we can see that as transmission works, battery development and syncon build has progressed, AEMO has been able to relax its minimum synchronous requirements in SA.

We therefore consider that the outworking of the proactive system strength and revised inertia frameworks, coupled with the extensive transmission works being progressed in NSW, QLD and VIC, should significantly reduce the need for manual AEMO intervention, and therefore reduces the need for these synchronous combination contracts.

We also consider that if these combinations are being used to bolster the resilience of the power system, or otherwise improve operator confidence, then this should be made transparent by reference to some form of operational resilience metric and / or standard.

For example, as noted above, if AEMO's operational timeframe system analysis demonstrates that specific system conditions - such as levels of inertia below a given threshold, or levels of synchronous generation on the system - is likely to increase risks of a major supply disruption, this should be reflected in the development of some form of resilience measure that advises the market when these contracts will be needed – something akin to an LOR 1/2/3 system for general system resilience.

Another approach would be for these requirements to be standardised by the Reliability Panel. For example, if AEMO considers that system operability and resilience risks markedly increase in association with specific levels of inertia on the system, this could form the basis of an 'operability standard' that could be used to inform when and what contracts are procured.

Type 2 Transitional NMAS contracts - New ESS solution procurement

The CEC is more supportive of these kind of contracts, however the AEMC needs to undertake further assessment focussed around how they might be tailored to actually support new investment.

The CEC considers these contracts should be focussed around developing new solutions to meet system needs. We consider the Stability Pathfinder program developed by National Grid could inform the basis of these kinds of contracts.²

These contracts would be developed with the shared objectives of:

- developing new and sustainable forms of ESS and related solutions, with a view to sharing the learnings of the process with the broader market
- addressing the higher costs associated with developing new and exploratory solutions, by providing some financial support for those proponents actively engaging with AEMO

From the outset, it's possible to identify several types of new ESS / solutions that might benefit from such a contract, such as:

- grid forming service / solutions, coordinating the capability of grid forming inverters with grid following, to increase IBR hosting capacity
- zero carbon sources of fault current through synchronous storage assets like pumped hydro, compressed air or thermal energy storage systems
- retuning services, leveraging the ability to change IBR settings and therefore increase IBR hosting capacity
- coordinated responses of battery services, to help manage general stability and reliability under specific system configurations – as evidenced by the role of batteries during SA islanding events

It is critical that AEMO be permitted to utilise these contracts to bring forward new investment, as well as exploring new solutions. This requires the AEMC to make rules that explicitly allow for AEMO to budget for expenditure on these contracts. This is key to ensuring that internal AEMO budgeting constraints do not preclude the development of new ESS that will, in the long term, deliver lower cost outcomes for consumers.

These new technology procurement contracts must also recognise the provision of new system stability services are likely to face a number of significant cost hurdles.

² See [NOA Stability Pathfinder | ESO \(nationalgrideso.com\)](#)

For example, the CEC understands that the modelling exercises involved in the connection process for grid forming inverters are more onerous and costly for project developers, as opposed to utilising grid following technology.

More generally, there are additional time requirements and complexities that arise with the modelling and works associated with integrating new technologies or solutions. These costs should be actively accounted for in the design of any new technology procurement contracts.

We also recommend these contracts for new technologies and solutions be explicitly linked to the development of new markets for the procurement of new services. As such, AEMO would take the learnings of these contracts and feed them into the development of new service markets. AEMO should publish detailed information on what services it is procuring through these contracts, and what system limits they have been used to relieve. This could form something akin to the 'Knowledge Sharing' frameworks of the ARENA funding rounds.

Provision of meaningful investment signalling to the market

The CEC recommends the NER set out stronger obligations for AEMO to report on where new investments are needed, to help maintain the security, operability and stability of the power system. This is necessary so that long term stable solutions can be developed.

For example, AEMO should be required to clearly identify the basis of the system need that is being met by a Type 1 synchronous combination NMAS, so that AEMO and investors could develop a permanent solution while the Type 1 NMAS contract is active.

AEMO should also be enabled to automatically and concurrently procure both short tenor Type 1 synchronous combination NMAS contracts with longer tenor Type 2 NMAS. For example, if AEMO entered into a short term contract for synchronous combinations, it should also be allowed to open a tender for a long term contract for new ESS to meet the system need.

We also recommend AEMO be required to provide detailed information on these opportunities across the following documents:

- The ESOO should clearly set out specific system locations and solutions AEMO considers could help address identified system needs. Importantly, this should include a detailed description of the kinds of solutions and technologies AEMO considers might be most effective to resolve the identified need.

- The General Power System Risk review should also identify key stability issues and nominate the kinds of solutions that might be developed to address them

In both cases, AEMO should also be required to purposefully prioritise zero carbon solutions to meet these system needs. If identification of the specific system needs is not feasible, a fallback option could be for AEMO to be required to meet an increasing proportion of its system security / stability requirements through zero carbon solutions.

Review and expiry arrangements of the framework

Do stakeholders agree that a sunset clause is required?

Is a 10-year expiry an appropriate timeframe?

The CEC supports the various transparency requirements proposed by the AEMC, and notes this reflects our general recommendation for more granular information on changing system needs.

The requirement for AEMO to report on the 'security need' represents a good starting point for improving the transparency of information regarding what is needed on the power system. As noted above, we recommend the AEMC provide greater specificity in terms of how AEMO report on said security needs and specific services procured, including breaking this down into known elements of system operation, such as management of voltage, transient and oscillatory stability, and the specific ESS solutions procured to manage them.

As discussed throughout this submission, this must also be accompanied by a requirement for AEMO to maintain a work program towards identifying and standardizing specific system needs, with a view to developing new system service markets.

In regards to the sunset clause for the overarching transitional mechanism, the CEC considers the sunset timeframe for the mechanism should be tailored around moving towards a more sustainable and efficient long term solution. As noted throughout this submission, the CEC considers that such a long term solution remains the development of standardised system needs and clearly defined markets, for all ESS.

With that in mind, we consider the lifespan of the mechanism should be based around the following contract tenor considerations.

For the Type 1 synchronous combinations contracts, we consider these should be awarded for short tenors, likely no longer than 3.5 years (the time of the notice of closure

requirements). This reflects the fact that these contracts should be truly transitory in nature and replaced as quickly as possible with new asset investments.

These Type 1 contracts must also be targeted and not encroach on other services, such as ramping, reserves or frequency control, which are properly provided through the energy and FCAS markets. AEMO must be strictly prohibited from procuring these already defined, competitively procured services through any 'bundled' approach.

For the Type 2 new technology contracts, we recommend longer tenors, reflecting 1) the likely timeframes associated with moving to a fully unbundled ancillary service market, and 2) the need to provide meaningful signals to support investment in new technologies that may be further up the cost curve. We therefore consider that a tenor greater than three years would be desirable – up to a length of 10 years would be appropriate.

However, we also consider the tenor of these new technology contracts should be limited to the overall length of the scheme, which should itself conclude at a time that is consistent with the development of a sustainable market based procurement of system services.

In terms of the proposed AEMC review process, we consider this should form part of the overarching requirement for AEMO and the AEMC to maintain the reform momentum towards the development of a market based approach to system service procurement.

The AEMC should therefore review the general progression towards development of open and standardised ESS markets, perhaps through an annual or biannually produced review document.

AEMO enablement of contracts

Do stakeholders support the Commission's proposal to place the responsibility of enabling inertia and system strength contracts on AEMO, with an ability to enable NSCAS and transitional services if it is beneficial?

Are there any issues with split contracting and enablement responsibilities between TNSPs and AEMO that have not been outlined in section 5.3.3?

Do stakeholders support that the Commission's proposed levels for enablement, including the enablement of system strength contracts to levels above the minimum requirement only if it would result in an overall increase in dispatched IBR?

Do stakeholders consider the proposed enablement principles to be appropriate and adequate?

The CEC is broadly supportive of the approach taken by the AEMC in regards to AEMO's enablement of planning timeframe contracts. Focussing on maximising dispatch of inverter based generation should address the kinds of complexities and unintended consequences identified with the OSM. We also consider that focussing on maximising IBR dispatch is consistent with the new emissions reduction objective of the NEO.

As noted in previous consultations, a key issue for the AEMC to consider is how this mechanism will work with other approaches that create an intersection between planning and operational timeframes.

In particular, the Commission should consider how the Priority Access (PA) model, currently being developed as part of the Transmission Access Reform work program, will interact with the proposed enablement processes. The PA model will change outcomes in dispatch, by reference to where specific generators are located in a 'queue' that is determined in the planning timeframe.

It's possible that any such mechanism will intersect with the AEMC's proposed system strength contract enablement approach. For example, a key element of the PA model is that incumbent generators, including emissions intensive fossil fuel units, will be grandfathered and prioritised in dispatch. It's unclear how this will interact with the requirement described above to dispatch IBR volumes consistent with the system strength planning standard.

The AEMC will need to consider which of these dispatch outcomes are prioritised. Putting aside our strong concerns with the viability of the Priority Access model itself, the CEC urges the AEMC to prioritise the dispatch of IBR through the system strength contract enablement process, over any protection of the dispatch rights of emissions intensive generators under the PA model.

Do stakeholders support the Commission's proposal for AEMO to:

- **publish an enablement guideline**
- **provide daily information about the type, frequency and cost of enabled contracts**
- **publish an annual enablement report?**

The approach adopted by the AEMC seems generally consistent with earlier approaches considered, such as the Unit Commitment Scheduler model. As such, it appears sensible to allow AEMO to develop this tool, subject to the transparency requirements the AEMC has also proposed.

Amending the basis of directions compensation to a benchmark-based framework

Do stakeholders support the Commission's proposal to adopt the market suspension compensation framework and apply it to directions compensation?

Frequency and methodology of benchmark value calculation

Do stakeholders agree with the proposal to include annual updates to the schedule of benchmark values for the proposed new directions compensation framework, noting this would also apply to the market suspension framework?

Directions compensation for energy storage systems (see section 6.3.2)

Do stakeholders consider that an estimate of the value of storage should form part of the automatic compensation payable to directed hydro plants and batteries?

If so, should a proxy value, such as a relevant gas benchmark value based on the capacity factor of the storage system, be used?

Should an alternative approach to estimating the value of storage be adopted for batteries?

The CEC does not support the AEMC's proposal to move the directions compensation framework to a benchmarked direct cost based approach. This is mainly on the basis that this approach will not account for the actual costs of storage. Given that storage assets are increasingly likely to be called upon to support the reliability and security of the power system, it is perverse to be considering moving to a compensation framework that deliberately disregards opportunity costs, and therefore purposefully penalises storage assets.

No solid reasoning has been provided to justify a move away from basing compensation on the 90th percentile price – other than, presumably, a desire to lower short term energy prices for consumers.

In particular, the argument that the current directions compensation framework is somehow both failing to fairly compensate generators, and driving excessive costs to consumers, is incorrect.

For example, the argument that the 90th percentile price will somehow result in underpayment of generators does not take into account the existing processes to lodge secondary claims for any compensation not accounted for through the directions compensation process.

On the other side of this argument, the Commission's own analysis on page 97 demonstrates that in all but the outlier years of 2022 and 2023 - due to the market crisis of June/July 2022 driven by gas and coal price spikes – the 90th percentile price has been well within the range of most peaking units' SRMC. The argument that generators are being chronically overpaid is therefore also spurious.

However, the primary problem with the AEMC's proposed approach is the apparent rejection of the inclusion of opportunity costs for storage assets under the new framework. While the AEMC does provide some very high level commentary around potential opportunity cost based compensation for storage assets specifically, it seems as though the decision has been made that such an approach won't be entertained, noting that the Commission states:

If an exception were to be made to energy storage systems, and broad opportunity costs were to be included as part of the directions compensation framework, this would contradict the intent of directions compensation and would unfairly treat most scheduled generators who may incur both fuel and opportunity costs. Moreover, estimating opportunity costs is not a straightforward matter, and depends greatly upon whether the generator intends to participate in the market following a direction being revoked, as well as the estimation method used.

While it may be difficult to design a compensation framework to account for opportunity costs of storage assets, failure to do so would unfairly target one specific technology and would breach the technology neutrality principles set out in Chapter 3.

This will undoubtedly create perverse incentives for storage asset providers to avoid making themselves available, if they considered they would be forced into a loss making position under the proposed directions framework.

Improving market notices and directions reporting

Do stakeholders support the Commission's proposal to require AEMO to publish market notices when issuing directions that indicate information about the direction and why it is needed?

Do stakeholders support the Commission's proposal to replace the existing directions reporting requirements with a quarterly reporting requirement? Is the information that would be included in quarterly direction reports useful (or not) to stakeholders?

The CEC supports the AEMC's general direction here, on the basis that many of our members have concerns with the lack of transparency in the market notice process. Anything that increases transparency to the market is welcome.

As always the CEC welcomes further engagement on this complex topic. Please contact Christiaan Zuur on czuur@cleanenergycouncil.org.au for any further queries.

Kind regards

Christiaan Zuur
Director, Market Investment and Grid