

SOUTH AUSTRALIAN DEPARTMENT OF ENERGY AND MINING - FIRM ENERGY RELIABILITY MECHANISM PROPOSED SCHEME DESIGN CONSULTATION PAPER

20 DECEMBER 2024

INTRODUCTION

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Thank you for the opportunity to make a submission under your Firm Energy Reliability Mechanism (FERM) Proposed Scheme Design Consultation Paper.

The EUAA support the pursuit of net zero targets but this must be achieved at least cost, not at any cost. To do this, we support the creation of efficient, transparent markets and supportive, well-targeted government mechanisms and incentives.

Additionally, we seek an equitable allocation of the costs and risks associated with the transition to net zero, as all too often energy consumers are expected to carry the heavy weight of market (i.e. shareholder and/or debt providers) risk that should sit with market participants. We firmly believe that this transfer of risk is inconsistent with the NEO.

We also see South Australia as the leader in Australia's transition, and often the "test-bed" for how the NEM can be managed with high penetrations of variable renewable energy resources. In recent years SA has had particular issues with the high penetration of rooftop solar that creates a negative demand on the network, but does not provide for essential system security, and the fast-ramping rate of generation required between rooftop solar reducing output while system demand approaches its maximum in the evening. These issues have been exacerbated by the exit of synchronous generation from the SA market that can provide both system security and ramping for the peak.

We recognise that SA is overdue for the implementation of a capacity market and that the whole NEM will require some form of capacity market in the medium term.

We consider that the proposed FERM should be relatively complimentary to the Commonwealth's Capacity Investment Scheme (CIS) and have the potential to significantly de-risk new firming capacity which hopefully leads to lower contract prices for consumers. We are mindful of project proponents "double dipping" between the two approaches (CIS and FERM) and request that the SA Government ensure that this either does not occur, and that

full transparency in funding sources for projects is required, including full disclosure by the SA Government of FERM contracts.

While we are generally supportive of the development of a capacity market alongside the current electricity-only market, we will only support capacity markets where it can be demonstrated that they will lead to the NEM improving its ability to meet the NEO, i.e. lower costs, higher efficiency, higher reliability etc

FERM FRAMEWORK

The EUAA are generally supportive of the Framework set out in the Consultation Paper, with the annual Firm Energy Requirements Assessment (FERA) informing a Firm Energy Target (FET) that is then met through the FERM, which then informs the next FERA.

We are generally supportive of the creation of a new independent body to manage the FERA and FERM, however reserve our final judgement until details of this new body are announced.

We have some concern in the timing between the FERA used to inform the FET and commencement of the FERM contracts. Given the FERA will be announced in the annual December Electricity Development Plan, there will be a 13-month delay between the FERA and the start of contracts for the FERM, in which time the actual requirement for firm energy may have changed.

We suggest that from the second EDP, a revised FET is released for the following year and that contracts allow for flexibility. That is,

- In December of year 1, FERA and FET are released as part of the EDP.
- During year 2 the contracts for FERM to commence in January of year 3 can be tendered, assessed, awarded and contracts negotiated, including an allowance for under and overs if the FET changes.
- In December of year 2, the FERA includes a revised FET for year 2 and a new FET for year 3
- etc

In this way, the error from modelling the FET more than 13 months in advance can be reduced at the start of each year's contract cycle.

We also support the long-term calculation of FET, and long lead-time contracts (up to 8 years in advance) to allow future investors' confidence to reach financial investment decision and construct the facility, however the long lead-time contracts should be for a maximum amount of the forward calculated FET (e.g. 80% of the FET with this number reducing the further in advance the contract is signed) to allow for fluctuation in the FET.

FERM OBJECTIVES AND CORE DESIGN PRINCIPLES

The EUAA are generally supportive of the Objectives and Core Design Principles set out in the Consultation Paper.

In our 31 August 2023 submission to the Capacity Investment Scheme (CIS) Public Consultation Paper we expressed concern that:

“The current EUAA view is that short duration capacity, or intra-day capacity gaps (i.e. up to 4 hrs), may well be met with existing (FCAS) and emerging (ESS) market settings (along-side energy market revenue) and that a capacity payment would simply represent an over-payment to those technologies. Our current view therefore is that the true problem is the longer duration (6+ hrs), or inter-day capacity gaps that may continue to emerge.”

“Challenge an approach where encouraging the deployment of batteries (either via capacity payments or subsidy scheme) with an export duration of 2-6 hours will alone resolve the longer duration gaps in supply and reliability that are emerging. The AEMO 2022 ISP calls for 10GW of gas generation as part of a broad portfolio of technologies (including pumped hydro) to meet the future energy market needs which highlights the need for a technology neutral approach.”

- This is consistent with the proposed FERM long duration (i.e. capable of injecting at 30MW for 8 hours or longer) design of the FERM and therefore we support the long duration nature of FERM.
 - However, care must be taken in defining FERM eligible facilities, as a 30 MW, 2-hour storage facility is, by virtue of its design, a 30MW, 8-hour facility, through slower electricity injection rates. The time component of this example is the facilities maximum discharge rate.
 - For this reason, we do not support insisting on a minimum injection rate of 8 hours as this removes flexibility in the way the facility is utilised.
 - We suggest changing the current wording of the FERM to:
“...long duration firm capacity means electricity capacity over 30MW capable of being dispatched for ~~a minimum of 8 hours~~ or more”
 - By performing this slight change in the long duration definition, more generators will be eligible and therefore SA will have more confidence and ability to meet its FET without unnecessarily over-investing in new plant.

- We are not supportive of the compulsory nature of the FERM. By making all plant capable of releasing 30MW over a minimum 8 hour period compulsory contributors (whether they have a FIRM contract or not), they will need to commit a portion of their plant to the FERM, reducing the flexibility of the plant and almost certainly creating an environment where more lack of reserves (LOR) periods are called as a 100MW plant can only operate and bid a maximum of 70MW into the PASA.
 - Instead, we suggest that plants should be able to notify the new independent body of the strike price and capacity they will make available for FET. i.e. a bid of “no contract” indicates no contract and a capacity of 0MWh indicates that they will not provide capacity into the FERM.
- We support the 1-year contracts for “existing” FERM eligible participants that are likely to exit the market in the next, to allow these participants to evaluate their viability on an annual basis.
- However, we disagree with the proposed definition of “existing” eligible capacity having an energisation date of 1 January 2026. We consider the 1-year contracts should be reserved for plant that are likely to be exiting the NEM in the next 5-10 years to allow for planned replacement, rather than unnecessarily restricting plant built in the last 5-10 years (or currently being built) from having to trade on a year-to-year FERM contract.
- We are concerned with the compulsory 15-year contracts for new eligible capacity. In the early years of the FERM, the one-year contracts will provide flexibility to adjust the amount of FERM year-on-year to fill the FET, however once all of that capacity has left the market, SA will be left with just 15-year contracts and may not have contracts ending each year.

- We are also concerned that while some investors will want a long-term contract, others will not.
- We suggest allowing new eligible capacity participants to nominate the length of their contracts, from 5-15 years with a maximum percentage of the FET each year to be made up of contracts with more than 10 years remaining (i.e. each year there should be a number of FERM contracts ending to ensure flexibility) and that at the end of an initial 15 year period, that contract lengths be reduced.

SCHEME OPERATION

- As far as we understand the FERM approach is not a CFD arrangement similar to the NSW Long Term Energy Service Agreements (LTESA). LTESA arrangement act as CFD option (with a strike price) for the project proponent whereas the FERM is more like the CIS in that it is a more arms-length approach that provides a cap and collar (which acts differently to a specific strike price). If the cap and collar are broad enough this should provide down-side risk management for debt while still allowing normal wholesale market functions to occur (such as PPA's).
- All things being equal, we see that the FERM design has the potential to provide a “safe place” for investors to move forward with investment decisions and for market participants to transact (subject to some minor modifications we've detailed above).
- Given the complimentary nature of FERM with CIS, we suggest a “single tender” approach where project proponents can bid for both FERM and CIS support as the two approaches appear sufficiently different so as to achieve different but complimentary outcomes.
- We support, in principle, the FERM performance and compliance obligations, however are concerned that when an LOR is declared, FERM participants will hold back capacity until the FERM starts, and therefore create a deeper and longer LOR event than had been forecast. We maintain that any scheme designed to address market failures (such as the lack of firming capacity in SA), need to not unduly exacerbate the market failure during events through poor design.
- While we support in-principle, the creation of capacity markets in the NEM, we are concerned with non-transparent nature of collecting payments from consumers such as through transmission use of system (TUOS) charges. Instead, we propose that the charges be collected from retailers and itemised on consumers bills, so that the charges are fully transparent and the impact on energy consumption costs can be observed. If the scheme is established correctly, the energy consumption component of the bill should reduce over time by more than the additional FERM charges.

CONCERNS

Missing from the Consultation Paper are two very important aspects; transparency and costs.

Interventions in the SA market have been increasing year-on-year since 2016 when the Leigh Creek coal fired generator closed. These interventions have placed upward pressure on SA electricity bills with one of our members with a site in SA reporting that 30% of their current bill is market interventions and system security charges. While renewables are the least cost technology for generation, and may get cheaper over time, we are concerned that our members bills are increasing.

For this reason, we are adamant that transparency of the FERM is a must have, including contracts and cost to consumers (i.e. an itemised line on the bill, and not another charge hidden in TUOS). We appreciate the need for confidentiality but urge the highest degree of transparency possible to help build consumer confidence that the FERM is working in their long-term interest.

We are also extremely disappointed that no attempt at modelling or costing the FERM has been performed, or if it has, that this was not released as part of the current Consultation Paper. While we understand modelling and costing a new scheme like the FERM is difficult, it is not impossible. For example, identifying what costs would be avoided (i.e. potential of directions to be reduced) would be a good start and provide some guidance as to the net benefits of FERM.

CONCLUDING REMARKS

The EUAA supports transparent mechanisms that provide for the efficient and least-cost transition to net-zero. We believe that the SA Government's FERM is close to achieving an efficient and potentially least-cost approach to electricity capacity issues, however with implementation of our suggestions in this submission, including greater transparency now and during the FERM's operations, plus an economic model provided with the consultation, the FERM could be a model scheme for capacity markets in the NEM.

The EUAA welcomes further discussions with us and our members around the issues raised in this submission.

Do not hesitate to be in contact should you have any questions.



Andrew Richards
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