South
Australian
Chamber
Of
Mines &
Energy

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Department of Energy & Mining
Level 4, 11 Waymouth Street
ADELAIDE SA 5000

Via email: dem.ferm@sa.gov.au

Submission to the Firm Energy Reliability Mechanism Proposed Scheme Design Consultation Paper

The South Australian Chamber of Mines and Energy (SACOME) is the leading industry association representing the South Australian resource and energy sector, a powerhouse of the State's economy.

SACOME welcomes the opportunity to make this submission to the Department of Energy & Mining's (DEM) Firm Energy Reliability Mechanism (FERM) Proposed Scheme Design Consultation Paper.

1. Purpose of the FERM

SACOME notes that the FERM's purpose is to address 'reliability and resilience' gaps within the South Australian electricity resulting from high penetration of distributed energy resources (DER).

The following excerpt from the Consultation Paper provides context for the FERM (at pp. 14-15):

> *High levels of distributed renewables (including significant levels of household rooftop PV), prolonged periods of wind or solar "droughts" as well as transmission network outages drives the need for South Australia to have in place a long duration firm capacity fleet (capable of at least 8 hours of continuous rated output) that can quickly ramp-up and sustain high-output …*
>
> *… (h)ence, while renewable energy will form the backbone of the state's future power system, long duration firm capacity will continue to be needed as a shock absorber for long periods where weather-dependent generation cannot provide adequate supply.*

A 'key concept' informing design of the FERM is that 'long duration firm generation capacity is needed of at least 30MW that's capable of providing 8 continuous hours of rated output'. The Firm Energy Target (FET) is the mechanism through which this concept is given mechanical effect.

SACOME notes that the State is faced with the dual problem of scheduled retirement of thermal generation from 2026; and the often-negative price of renewable generation, combined with the cost of operation acting as a disincentive for thermal generators to provide supply in South Australia, recognising that it is no longer economic to do so.

Per the Consultation Paper (at p.28):

> *The FERM provides a competitive process for eligible long duration firm capacity to receive underwriting support and alleviate the revenue uncertainty associated with these assets.*
>
> *The FERM aims to provide this underwriting support as a revenue 'top-up' to ensure the commercial viability of long duration capacity remaining in the market for the length of the relevant tender period.*
>
> *Through competitive tenders, FERM contracts aim provide long duration firm capacity providers with the opportunity to at least recover their efficient cost of operation and earn an economic return at least commensurate with the risks involved with its continued operation.*
>
> *In exchange for underwriting support, capacity must be available for dispatch year round, with performance assess during Lack Of Reserve (LOR) 2 and 3 events.*

SACOME recognises that DEM is proposing to address this instance of South Australian energy market failure via an underwriting mechanism that retains firming capacity by subsidising dispatchable generator operators for ongoing supply.

These subsidies will be funded via a new levy on all South Australian energy customers, with Scheme costs recovered by Transmission Network Service Providers (TNSPs).

2. FERM Design

SACOME observes that the key features of FERM design are as follows:

- Creation of a new administrative entity in the form of the Scheme Administrator which will have responsibility for administration of the Scheme Financial Vehicle.
- Mandatory requirement for 'eligible long term duration firm capacity to respond to provide an annual tender for supply (N+4).

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- Mandatory requirement for long-lead time generators to submit periodic tender bids (N+6-8 years).

- A contracting function whereby the Scheme Administrator recommends successful bids to a Scheme Financial Vehicle (SFV), which contracts with eligible capacity to meet the FET (at the discretion of the Minister). Projects that are not awarded contracts choose to remain or exit the market.

- FERM capacity providers make claims or repay money to the SFV depending on their financial performance and in accordance with the Scheme commercial model.

- The Scheme Administrator and regulator monitor: (1) financial performance of the Scheme (2) compliance by generators with contract terms, and (3) compliance with Scheme regulatory obligations.

- Scheme costs are recovered through the Transmission Network Service Providers (TNSPs), by way of contribution orders issued to the TNSPs by the SFV, **and passed on to all energy consumers**.

SACOME notes the rationale underpinning FERM design per the Consultation Paper as follows (at p.28):

> *A key component of the FERM is an obligation on eligible generators to participate – this greatly improves the quality of the Firm Energy Reliability Assessment (FERA) and the effectiveness of the contracts awarded as part of FERM tenders to mitigate consumer costs that may result from high impact, low probability reliability events.*
>
> *By mandating participation, the Scheme effectively coordinates long duration firm capacity under a competitive framework that achieve value for money for consumers.*

SACOME acknowledges the South Australian Government's desire to avoid another system black event like that which occurred in 2016, and the associated 'incident cost' to the State which was approximately $367 million.

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3. Comment

SACOME acknowledges that a mechanism like the FERM is necessitated by the nature of the South Australian electricity system.

SACOME submits that the need for mechanisms like the FERM reflect the gap between the political rhetoric of the South Australian Government's renewables target and the reality of system operation, recognising that gas peaking is fundamental to the stability of South Australia's electricity system at this time, and will continue to be until such time as investment in storage and firming capacity to support renewables is made at sufficient scale.

SACOME notes the Malinauskas Government's recent announcement to bring forward its target for electricity generation to be sourced from net 100 per cent renewables by 2027, instead of its original 2030 date.

We further note the ambitions set by the State Prosperity Project, the Hydrogen Jobs Plan and the Hydrogen and Renewable Energy Act to 'to unleash huge new investments in renewable energy' and that 'under the plan excess renewable energy generated from large-scale wind and solar farms will be stored and utilised to provide a consistent output of supply, providing additional grid stability for homes and businesses around the State.' [1]

SACOME notes that the South Australian Government's Energy Transition White Paper, intended to be the 'foundation economic document for the remainder of the first half of the 21st Century', and for which preliminary consultation closed in August 2023, is still yet to be released.

It is reasonable to characterise the FERM as another reactive policy measure designed to address imminent market failure and system security issues resulting from a continued lack of system-level strategic planning.

SACOME has previously observed that South Australia's experience is one of a 'disorderly' energy transition where energy policy goals have been set and pursued in relative isolation, resulting in unintended consequences elsewhere in the energy system with associated unintended impacts on both consumers and the State's economy.[2]

[1] https://www.premier.sa.gov.au/media-releases/news-archive/new-target-for-renewables#:~:text=New%20data%20shows%20South%20Australia,in%20our%20mission%20to%20decarbonise.

[2] https://www.sacome.org.au/uploads/1/1/3/2/113283509/sacome_energy_transition_roadmap_2021_final_22.02.22.pdf (at pg.3)

Research commissioned by SACOME in 2023[3] demonstrated that direction charges, largely borne by commercial and industrial customers, increased from $6.15 million in Q4 2019 to $19.94 million in Q4 2022, a 224% increase.

An array of regulatory, pass-through and market intervention charges are being passed on to businesses - and inevitably consumers - with large industrial customers reporting that market intervention costs now account for approximately 20-30% of their electricity bills.

SACOME expresses concern that the FERM represents yet another such charge to South Australian energy consumers at a time where South Australian electricity prices remain the highest in the nation.

SACOME cautions that continuing to impose new levies upon the South Australian customer base risks undermining business viability and the investment attractiveness of South Australia as a jurisdiction.

DEM representatives advised in a consultation session with SACOME and its member companies held on 6 December 2024 that no indicative cost of the FERM to consumers could be provided; and that no advice on the likely duration of the FERM could be provided.

The corollary of this advice is that South Australian energy customers have no visibility or understanding of the cost of the FERM to customers; nor how long they will continue to be levied for the purpose of subsidising the continued operation of firming generators under the FERM.

SACOME submits that these costs must be made transparent as part of the consultation process, and on energy bills received by customers; and that a sunset clause that retires the FERM at a point in the future where it is on longer needed should be included as part of scheme design.

Member companies have identified the need for measures that prevent 'double dipping' by generators so that they are not subsidised via the FERM while also fetching the market cap price when supply is constrained. SACOME notes the potential for energy users to end up paying more without receiving greater reliability in such circumstances, as the generators are already participating in the energy market and customers are already paying for this.

[3] https://www.sacome.org.au/uploads/1/1/3/2/113283509/sacome_media_release_-_unplanned_energy_transition_costing_industry_final_-_18_september_2023.pdf

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Member companies also seek further clarification on how DEM will undertake due diligence in assessing the potential or availability of eligible assets; and seek to better understand which operators DEM seeks to incentivise via the FERM – whether this will be limited to major operators, or whether a DEM proposes a diversified approach to include smaller generators. SACOME members have observed that the FET mandates supply at 8-hours and at least 30MW, and that this will exclude most battery projects as they are under 8 hours.

SACOME members have commented that South Australia is overdue for the implementation of a capacity market and that the whole National Electricity Market (NEM) will require some form of capacity market in the medium term. As such, understanding how the FERM is likely to interact with the NEM is an important consideration.

SACOME remains committed to working collaboratively with the DEM and the South Australian Government to progress energy policy that meets the needs of the South Australian resources sector.

Yours sincerely

Rebecca Knol
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