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Submission to the South Australian Electricity Development Plan

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 in response to the Department of Energy & Mining's (DEM) inaugural Electricity Development Plan (EDP).

SACOME and its members thank you for your extensive and continuing engagement in relation to the Electricity Development Plan, and the activities of the South Australian Forecasting & Planning (SAFP) function.

SACOME acknowledges the complexity of the South Australian Forecasting & Planning Division's work and that of the broader energy transition process, of which South Australia continues to be at the forefront.

1. Introduction

SACOME recognises that SAFP is tasked with undertaking South Australian-specific technical analysis and energy market and network modelling, recognising that national modelling is not adequately capturing South Australia's unique circumstances for system planning purposes.

SACOME notes that SAFP is required to produce the EDP on an annual basis; and that the EDP *'will support industry decision making and will be guided by stakeholder*

engagement to facilitate the least cost pathway for electricity supply capacity to meet demand reliably and securely, while also meeting South Australia's carbon emissions targets'.

SACOME notes that the EDP is intended to provide *'renewed focus and planning ... required to overcome emerging challenges associated with moving beyond the state's current level of 74 per cent net renewable generation'.*

2. Key EDP Modelling Results

SACOME notes that SAFP commissioned 'wholesale market modelling to assess South Australian requirements for long duration firm capacity across a five-year horizon in further detail than what is currently explored in AEMO's Integrated System Plan'.

We further note that the EDP represents work undertaken throughout 2024 to detail the Forecasting and Planning functions, and to consider the most cost-effective manner to maintain reliability and resilience in the South Australian network.

SACOME observes that the EDP's core finding from base-case modelling is:

'the importance of maintaining a level of long duration firm capacity to provide power system resilience at least in the immediate term as inter-connected states continue to increase their renewable generation and battery storage infrastructure to replace their ageing coal-fired power stations.'

This outcome reflects the high penetration of variable renewable generation in South Australia and the associated challenge of maintaining system reliability and security when generation is impacted by weather/environmental conditions; and due to a lack of storage to support renewable generation.

We note that *'up to 2300MW of long duration firm capacity is required in the South Australian power system from financial year 2025-26 to 2029-30, balancing power system resilience and reliability against cost to consumers.'*

SACOME recognises that the focus of the 2024 EDP is largely restricted to questions of firming capacity for the purpose of ensuring energy reliability and security. This outcome is supported, recognising the importance of maintaining a reliable and secure supply of energy for the State.

SACOME notes, however, that the EDP has a tactical (rather than strategic) focus in that it aims to address specific issues within the South Australian energy system rather than

the broader structural issues that continue to be of concern to the South Australian resources sector.

3. Comment

3.1 Reactive versus Proactive Policy Measures

While SACOME does not dispute the merits of ensuring reliability and security, nor the value of undertaking modelling that better reflects South Australia's unique circumstances, our broader strategic concern is the lack of integration of informed industry policy as part of energy policy development in South Australia.

SACOME recognises that the Firm Energy Reliability Mechanism (FERM) proposed by DEM in late 2024 is one of the mechanisms through which firming capacity will be implemented across the South Australian electricity network.

The FERM is a logical outcome of the EDP, however, it represents yet another reactive measure to address the threat of market failure created by the influx of renewable generation; and the impact to security and reliability that would result were peaking generators to exit the market.

SACOME submits that the need for mechanisms like the FERM reflect the gap between the political rhetoric of the South Australian Government's renewables ambition 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.

That the South Australian Government is regulating a mandatory requirement for 'eligible long term duration firm capacity to respond to provide an annual tender for supply'; and that this mandatory requirement will be paid for via a levy on South Australian customers continues a trend of reactive, narrowly considered policy that attempts to solve a particular problem without sufficient regard to the others it creates.

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

The Malinauskas Government’s recent retreat from its Hydrogen Jobs Plan policy prompted by GFG being placed into administration will likely necessitate a rethink in preparing the 2025 EDP, particularly given that the State Prosperity Project is listed as one of the major points of policy interface for the EDP.

The \$593 million investment in hydrogen that must now be walked back represents a significant loss of time, money and momentum. It dramatically highlights the urgent necessity for whole-of-State strategic planning to provide order to a South Australia’s disorderly energy transition process.

Given South Australia sits at the forefront of the energy transition, the continued operation of existing industry must be given proper consideration if the State’s industrial base is to be preserved. Uncoordinated policy measures and a continued reliance on pass through costs paid for by customers to fund reactive measures create significant investment and operational risks for industry.

SACOME members have commented on the volume and speed at which government is proposing, consulting upon, and implementing change. SACOME members observe that this approach makes it difficult to achieve policy coordination and submit that government should adopt a more considered and strategic approach that is guided by a clear set of objectives and a pathway for their achievement.

The Energy Policy Institute of Australia provides useful advice in considering how to achieve the policy aims of energy transition, decarbonisation and economic growth:

If we think of energy policy as an optimisation problem across a complicated system what we should be doing is starting from the end and working back to get some idea of the best trajectory ...

It is not enough to rely on short-term levelised costs or energy cost estimates that ignore systems-wide implications and trajectories of development.

These (system-wide implications and trajectories) include grid-level costs, such as the costs of wires and poles and buffering, system level costs, including balancing and

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>.

back up, land use costs, costs to industry, waste disposal costs and larger impacts on the economy as a whole.²

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.

While SACOME recognises that the role of SAEP is to provide input to policy formulation and decision making; and that the task of strategic policy development falls outside of its direct purview, better aligning the EAP with strategic policy development would represent a useful expansion of its function.

3.2 Cost

Research commissioned by SACOME in 2023³ 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.

While the EDP aims to develop a 'least cost' pathway and this approach is supported in-principle, it belies the reality that significant cost has already been borne by customers, and this cost continues to increase. This in turn affects competitiveness of SA as a jurisdiction for investment and operation.

SACOME seeks further detail on how the SAEP intends to develop this least cost pathway, noting that this should include the retirement of regulator levies and pass-through costs where relevant.

² Stephen Anthony 'Electricity Generation and Emissions Reduction in Australia: We need a Coherent Policy to Foster Technological Development and Investment', Energy Policy Institute of Australia, August 2021 p.5

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

3.3 Support for Energy Users Association of Australia's Submission

As a member of the Energy Users Association of Australia's (EUAA), SACOME expresses its support for the EUAA's submission to the EDP and the positions expressed therein.

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

Yours sincerely



Rebecca Knol

Chief Executive Officer

South Australian Chamber of Mines & Energy