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Energy Security Board  
c/- COAG Energy Council Secretariat  
Department of the Environment and Energy  
GPO Box 787  
CANBERRA ACT 2601

By email: [info@esb.org.au](mailto:info@esb.org.au)



AUSTRALIAN  
ALUMINIUM  
COUNCIL LTD

PO Box 63, Dickson  
ACT 2602

Ph: 6267 1800

[info@aluminium.org.au](mailto:info@aluminium.org.au)

### CONSULTATION ON POST 2025 MARKET DESIGN

Thank you for the opportunity to provide a submission on the Issues Paper: Post 2025 Market Design. This submission is made on behalf of Australia's aluminium industry, and covers the significant electricity use and economic activity associated with aluminium smelters and alumina refineries connected to the National Electricity Market (NEM).

The Australian aluminium industry has a strong interest in electricity policy. Aluminium smelters are particularly exposed to electricity costs and it is a key determinant of international competitiveness. Alumina refineries, while not as electricity intensive as smelters, are also significantly exposed to electricity policy.

The electricity supply requirements of the aluminium industry can be summarised as follows:

- least cost, and an internationally competitive electricity cost, as a minimum;
- consistent uninterrupted electricity supply; and
- an ability to secure electricity supply under long-term contractual arrangements.

Some context for the aluminium industry's requirements from electricity supply has been appended to this letter.

The post 2025 market design project will be critical in determining the ability of the National Electricity Market (NEM) to deliver on these objectives. If the NEM is to function in a way that enables the viability of aluminium smelters and refineries, it should include the following features:

- *Competition*: There should be sufficient competition forces in all stages of electricity supply to ensure that electricity is delivered at least cost;
- *All services*: The market should be structured in a way that all aspects of electricity supply that are of value to consumers – such as reliability, and security – are appropriately incentivised, noting the point above regarding competitive pressures and least cost; and
- *User participation*: The services that large electricity users provide to the electricity system – such as demand management, stability, ancillary services, and emergency

response – should be compensated at a level that reflects their value, and provided on an optional basis.

At this early stage of the post 2025 market design project, the aluminium industry is broadly supportive of the design as outlined in the Issues Paper. We offer some comments on specific issues below:

*Scenarios and Modelling:*

- A key issue when designing scenarios, and more importantly when modelling, will be to consider the impact on the viability of large electricity users such as aluminium smelters and alumina refineries;
- Large industrial electricity users are likely to be the most sensitive to changes in electricity prices and it is unlikely that broad economic models, or even specific models of the NEM, are sufficiently informed to determine the impact on the viability of these facilities;
- This matter will be critical to any scenario modelling, not just because the viability of the facilities will be a significant economic impact of any scenario; but also because the presence of the large industrial users in the electricity grid provides stability, ancillary services, and other benefits, the loss of which would have flow-on impacts to all other electricity users, and electricity supply; and
- The significance of these ‘feedback loops’ requires that meaningful assessment of scenarios, including through economic modelling, must include an accurate assessment of impact on large industrial electricity users.

*Assessment Framework*

- Similarly, an assessment of potential shocks to the electricity system, such as proposed in sections 3.3 and 3.5 of the Issues Paper, should consider shocks on the consumer/user side of the NEM, including a substantial reduction (and also significant increase) in electricity demand, beyond what is predicted by economic models. The assessment should further consider the flow on impacts of these shocks to supply and to other users.

Thank you again for the opportunity to provide a submission on the Issues Paper: Post 2025 Market Design. I am happy to provide further information on any of the issues raised in this letter and look forward to working further with the Energy Security Board on these matters.

Yours sincerely



**MILES PROSSER**

EXECUTIVE DIRECTOR

AUSTRALIAN ALUMINIUM COUNCIL

T 02 6267 1800

M 0429 923 605

[miles.prosser@aluminium.org.au](mailto:miles.prosser@aluminium.org.au)

## CONTEXT – ALUMINIUM AND ELECTRICITY

The following points are relevant to a consideration of electricity market design as it relates to the aluminium industry in Australia:

- Australia has an endowment of energy resources, which when converted to competitively priced forms of energy (electricity, gas etc), attracted and maintained investment in many industries – including alumina refining and aluminium smelting.
- However, Australia is no longer converting its energy resources to energy products at internationally competitive energy prices and this has halted investment in energy intensive industries and is endangering the viability of existing assets.
- Australia’s world class conventional and renewable resources should be the basis for internationally competitive energy pricing for Australian industry.
- The ultimate test of Australia’s energy policy will be whether Australia can return to internationally competitive energy costs – particularly for electricity.
- Delivering material improvements in electricity pricing will require more than adjustments to the NEM. Importantly, it will also require real improvements in the quantity and diversity of domestic gas supply.
- In the short- to medium-term at least, thermal generation will be required, to have any chance to deliver firmed electricity at an internationally competitive price for industry.
- Recent and current experiences in the contract market are showing that non-thermal options for firm contracts (batteries, hydro, pumped hydro) are not yet cost competitive at scale. Policy makers should therefore ensure there are viable future business models for thermal generation under the new policy settings;
- Even with adjustments to the operation of the NEM, electricity prices may not fall to the level needed for electricity dependent industry to be internationally competitive, and further policy action may be required to ensure reliable electricity is available at an internationally competitive price today and a transition to future competitive supply sources is effectively managed.

The Council highlights that these remain critical issues for the immediate future of energy policy in Australia and should remain prominent in all discussions of energy policy.