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Australian Energy Market Commission (AEMC)  
Via <https://www.aemc.gov.au/contact-us/lodge-submission>

14 September 2023

Dear Chair

***Re: Integrating price-responsive resources into the NEM***

The Australian Aluminium Council (the Council) represents Australia's bauxite mining, alumina refining, aluminium smelting and downstream processing industries. The aluminium industry has been operating in Australia since 1955, and over the decades has been a significant contributor to the nation's economy. It includes six bauxite mines which collectively produce over 100 Mt per annum making Australia the world's largest producer of bauxite. Australia is the world's largest exporter of alumina with six alumina refineries producing around 20 Mt per annum of alumina. Australia is the seventh largest producer of aluminium, with four aluminium smelters and additional downstream processing industries including more than 20 extrusion presses. Aluminium is Australia's highest earning manufacturing export. The industry directly employs more than 17,000 people, including 4,000 full time equivalent contractors. It also indirectly supports around 60,000 families predominantly in regional Australia.

The Council welcomes the opportunity to provide feedback to the AEMC on its consultation paper Integrating price-responsive resources into the NEM (the Paper). The Paper responds to the AEMC's rule change request for a Scheduled Lite mechanism, following the P2025 Market Design Advice to Ministers. As each smelter, refinery and extruder has unique electricity arrangements, the Council will reserve its comments on the Paper to a high level.

**Aluminium industry and the National Electricity Market**

Within the National Electricity Market (NEM) the Australian aluminium industry has four aluminium smelters and two alumina refineries which use more than 10% of the electricity consumed in the NEM. Within each state, this can be much more significant, for example up to 35% of electricity used in Tasmania is used by Bell Bay Aluminium. Electricity typically accounts for around 30-40% of aluminium smelters' cost base, and therefore it is a key determinant of their international competitiveness. Alumina refineries, while not as electricity intensive as smelters, are also significantly exposed to electricity policy. Unlike some other large energy users<sup>1</sup>, both aluminium and alumina are globally traded commodities, which are unable to pass costs incurred domestically through to customers. There are also more than 20 extrusion presses, which while much smaller electricity users, are exposed to the retail and short term contract markets. For the aluminium industry, it is the delivered cost (including transmission) of electricity which drives international competitiveness.

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<sup>1</sup> <https://www.afr.com/companies/energy/we-either-pass-energy-costs-on-to-customers-or-shut-down-companies-20220706-p5azhc>

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;
- an ability to secure electricity supply under long-term contractual arrangements; and
- an ability to be compensated adequately for system services which smelters and refineries provide for the network and its stakeholders.

These outcomes need to be delivered within the framework of Australia's Paris Agreement emission targets.

### **Aluminium Industry and the Energy Transition**

Aluminium smelters already offer a range of services and functions which support the network over varying weather, network demand and operating conditions, including Reliability and Emergency Reserve Trader (RERT) and Frequency Control Ancillary Services (FCAS). Smelters' large and fast-acting interruptibility helps secure and restore stability to the network before and after contingencies occur. The industry has increasingly been called upon to support grid stability and reliability, as the challenges in managing the grid increase. For example, during May and June 2022 Tomago Aluminium provided 32 hours of modulation across 18 events which were a mixture of RERT and responding to high market price. This response by Tomago supported AEMO to manage a complex and challenging system and maintain supply to domestic customers. Additionally, smelters are increasingly offering rights in relation to the short-term reduction of volume at times of peak demand via contractual arrangements<sup>2</sup>.

### **Feedback to Paper**

The NEM is going through a once in a century transformation, as Australia moves towards net zero emissions by 2050 and that this transition will need to be carefully managed, to ensure that all consumers are provided with competitively priced, reliable, low emissions energy. The Council has for many years recognised that the NEM is at risk of becoming a system which lacks reliability and system strength and has been actively working with Australia's energy market bodies on the market reforms which will be necessary in the transition, including signals which will be needed to incentivise the new dispatchable capacity needed to maintain a secure and reliable energy market.

In the Council's submission to the Market Design process<sup>3</sup>, the key concern was any intent to make Scheduled Lite mandatory. The Council welcomes the increased focus in the Paper on this to be a voluntary mechanism.

However, the inclusion of Question 3 and 3a about consideration of mandatory participation is therefore of concern to the Council, which would not support any consideration of mandatory participation. Noting that even for large, sophisticated industrial users, the procurement of electricity is primarily seen as an input into production; rather than being the core process for the business itself. As the emphasis in design switches to more demand side participation, assumptions need to be continually tested regarding the complexity of requirements to participate. It is important to recognise that demand side participation will impact on both operational processes and safety; and has the potential to distract from the core business processes of end users. It requires complex technical considerations within the businesses of industrial users that interact with the market. All services that industrial users could provide – including participating in Scheduled Lite – should be provided on a voluntary basis and need to be adequately compensated for.

The Council supports the technical feedback provided by the Energy Users Association of Australia their submission the scheme design.

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<sup>2</sup> <https://www.agl.com.au/about-agl/media-centre/asx-and-media-releases/2023/august/portland-smelter-contract-renewal-finalised>

<sup>3</sup> <https://aluminium.org.au/wp-content/uploads/2021/06/210609-Aluminium-Response-to-P2025-Market-Design-Consultation-Paper.pdf>

**Conclusion**

At a time when manufacturers are facing serious challenges, energy is one of the few advantages Australia has to offer. The Council urges the AEMC to continue to focus on designing a voluntary scheme which incentivises participation, rather than creating a mandatory obligation which would penalise Australian industry. The ongoing electricity industry reforms, focused on the total system cost is of critical importance to the Council and its members. The Council is happy to provide further information on any of the issues raised in this submission.

Kind regards,



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