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15 August 2023

Ms Jenness Gardner
Chief Executive Officer
Economic Regulation Authority
Email: publicsubmissions@erawa.com.au

Dear Ms Gardner,

## Submission on Frequency Co-optimised Essential System Services Offer Price Ceiling – Draft Determination

The Australian Energy Market Operator (AEMO) welcomes the opportunity to provide this submission on the Economic Regulation Authority's (ERA) Frequency Co-optimised Essential System Services (FCESS) Offer Price Ceiling Draft Determination.

AEMO notes that in its final determination, the ERA will determine the single identical price which AEMO will apply to offers in all five FCESS markets when the new Wholesale Electricity Market (WEM) commences on 1 October 2023, as well as the five individual values to be applied from 1 March 2024.

While AEMO supports the ERA's general approach in the draft determination, Attachment 1 outlines AEMO's preliminary concerns with the proposal to set the Rate of Change of Frequency Control Service (RCS) Offer Price Ceiling at \$0 MWs per hour from 1 March 2024. AEMO considers that these concerns could be mitigated, while managing potential excessive price events, by applying a small but non-zero RCS Offer Price Ceiling.

AEMO notes that the FCESS Offer Price Ceilings may need to be reviewed and revised by the ERA once the new market has commenced and there is access to more accurate operational data. This review may also need to occur before the five individual values are applied from 1 March 2024.

Should you wish to discuss any of the matters raised in this submission, please contact Mena Gilchrist, Manager – WA Regulatory Affairs at mena.gilchrist@aemo.com.au.

Yours sincerely,

Martin Maticka

**Group Manager – WA Development** 





# Attachment 1: Preliminary concerns with the proposed Rate of Change of Frequency Control Service Offer Price Ceiling

Information in this Attachment represents AEMO's theoretical understanding of the implications of a \$0 MWs per hour Offer Price Ceiling for RCS. Due to timing and resource constraints in the lead up to the New WEM Commencement Date (NWCD), AEMO has not undertaken detailed modelling and analysis at this time and will not be able to confirm aspects of this submission through testing until after the NWCD.

#### **Economic trade-off**

The WEM Dispatch Engine (WEMDE) is built on the premise that there is both a secure limit for RCS and an economic trade-off to be made with Contingency Reserve Raise (CRR). In the absence of any economic trade-off, WEMDE will attempt to dispatch the maximum quantity of RCS available to it. While actual dispatch will be limited to Facilities that are online, this may result in significant distortions in forward schedules, as offline but 'Available Capacity' for RCS must be considered. If all tranches of RCS are offered at \$0/MWs per hour, then WEMDE will attempt to schedule¹ every offered tranche, which may cause unintended consequences in the forward schedules.

### **Tiebreaking**

The obligations regarding price tiebreaking in the WEM Rules mean that all tranches of RCS offered as In-Service Capacity will need to be cleared simultaneously. AEMO is unable to confirm that this will lead to no additional unintended consequences until testing can be undertaken.

### **RCS Incentives**

The ERA's draft determination assumes that RCS can only be provided by generators providing energy. Notwithstanding, several Market Participants have tested and confirmed their capability to provide RCS while running generators as synchronous condensers. The use of synchronous condensers is important in the management of minimum load events, for example when high distributed PV limits the capability to commit other sources of inertia. Under a price cap of zero there will be no incentive for these providers to offer RCS, thereby limiting options available to AEMO in managing these events.

## **Obligations**

In accordance with clause 1.49.9 of the WEM Rules, all Facilities accredited for RCS will be required to submit offers for RCS for six months following NWCD. However, without any ongoing financial incentives, it is plausible that Market Participants may not offer RCS into the market past this date. While AEMO has mechanisms to manage projected shortfalls, such as directing Facilities to commit, this would be an inefficient outcome for the market.

<sup>&</sup>lt;sup>1</sup> Because the service is "free" from the dispatch engines' perspective.