

31 May 2024

Economic Regulation Authority
Level 4, Albert Facey House
469 Wellington Street
PERTH WA 6000

Dear Economic Regulation Authority

ENERGY OFFER PRICE CEILING 2024 – DRAFT DETERMINATION

Synergy welcomes the opportunity to provide a written response to the Economic Regulation Authority's (ERA's) Energy Offer Price Ceiling 2024 Draft Determination (Paper). Synergy raises the following concerns in relation to the Energy Offer Price Ceiling and the Paper. The Paper outlines the estimated new Energy Offer Price Ceiling of \$1,500/MWh (Proposed Price) which is proposed to replace the current transitional Energy Offer Price Ceiling of \$738/MWh (Current Price).

Appropriateness of the Methodology

The Paper identifies that a key driver for the significantly higher Proposed Price is due to the cost calculation being undertaken on the basis of the chosen facility operating at "the minimum dispatchable loading level". The Current Price was determined using a previous methodology that undertook the calculation on the basis of "the minimum capacity". The Paper notes that if the calculation used "the minimum capacity" instead, the Proposed Price is estimated to be \$800/MWh instead of \$1,500/MWh.

The paper notes that operation of the plant at the "minimum dispatchable loading level is highly costly and possibly unstable".¹ The WEMS Registration Technical Guide v4.2 indicates that a facility *minimum dispatchable loading level, expressed in MW* is "Defined as the emergency level. Note that this is typically equal to Minimum Generator Capacity, however the dispatchable generation could be set higher than the technical minimum generator capacity. This is generated at 15 °C."²

¹ Energy Offer Price Ceiling 2024 – Draft Determination, p ii <https://www.erawa.com.au/cproot/23956/2/Energy-Offer-Price-Ceiling-2024-Draft-determination-Redacted-for-publishing.PDF>

² WEMS Registration Technical Data Guide v4.2, p 32 https://aemo.com.au/-/media/files/electricity/wem/participant_information/guides-and-useful-information/wems-registration-technical-guide-v42clean.pdf?la=en

A facility's *minimum dispatchable loading level* can be lower than the *minimum stable loading level*, expressed in MW which "is generally equal to Minimum Generator Capacity and may be equal or lower than the Minimum Dispatchable Generation. This is generated at 15 °C."³

Synergy supports the ERA's comment in the Paper stating that "the use of minimum dispatchable loading level may not reflect the intent of the rules to mitigate the exercise of market power" and that "[m]arket participants typically aim to achieve dispatch of at least their minimum stable generation to avoid unstable dispatch".⁴ The operation of a Facility at its minimum dispatchable loading level is a least preferred operating state, and is generally avoided where possible.

Synergy notes the Proposed Price is based on theoretical operation of Merredin Power Station at its minimum dispatchable loading level. While this output level is not public information, Synergy notes that AEMO published SCADA data for Merredin Power Station indicates that dispatch intervals at very low output are heavily concentrated around start-up and shut-down events and that evidence of routine operation at very low levels is very limited in the SCADA data.

As this operating state is detrimental to facility operations and unideal, Synergy suggests that the Wholesale Electricity Market (WEM) Rules should be amended so that the Energy Offer Price Ceiling is calculated on the basis of the facility's minimum capacity.

Additionally, Synergy considers that potential market impacts of the change from 'minimum capacity' to 'minimum dispatchable load level' does not reflect the policy intent of clause 2.26.2 of the WEM Rules to mitigate the exercise of market power.

Market Interactions and lack of visibility

When considering the intent of the Proposed Price under the WEM Rules, Synergy recommends that the ERA and EPWA retain awareness of the unavoidable impacts of real-time load volatility and forecast inaccuracies which at times lead to unavoidable instances of the market exhausting in-service capacity and clearing at the applicable ceiling prices.

Synergy notes that there are regular, sudden, and unexpected changes to the WEMDE solutions for energy and FCESS dispatch and the respective price forecasts. Market data from 1 October 2023 (being the New WEM Commencement Day) show that a significant number of the intervals where high energy prices and high FCESS prices – including prices at the Energy Offer Price Ceiling and applicable price ceilings for FCESS markets – occur close to real-time without sufficient forewarning for Market Participants to update their offers to mitigate against these occurrences. Participants don't have enough notice to review and amend facility pricing, facility commitment decisions or facility operating configurations (such as coal unit mill configuration) to ensure sufficient 'In-Service' capacity is available to restrain and avoid high market price outcomes.

³ WEMS Registration Technical Guide v4.2, p 19 https://aemo.com.au/-/media/files/electricity/wem/participant_information/guides-and-useful-information/wems-registration-technical-guide-v42clean.pdf?la=en

⁴ Energy Offer Price Ceiling 2024 – Draft Determination, p ii <https://www.erawa.com.au/cproot/23956/2/Energy-Offer-Price-Ceiling-2024-Draft-determination-Redacted-for-publishing.PDF>

Synergy considers that there are several contributing factors to WEMDE's forecast inaccuracy, each of which is difficult to adequately resolve. The initial factors that come to mind are:

- Dynamic energy and FCESS co-optimisation ensures that the dispatching of In-Service capacity “competes” for energy and FCESS service. Due to this “competition”, it is likely that the tightness in one market could be the driver for high prices in the other markets (being energy and/or FCESS markets).
- Compounding dynamic co-optimisation tension, market signals generally favour the minimum volume of (generally out of merit) open-cycle-gas-turbines which are often online solely for the purpose of FCESS participation. This minimises FCESS costs and market uplift payments, however, it also minimises the volume of spare In-Service capacity with fast ramp rates. Where available In-Service energy or FCESS is consumed due to short-term forecast error, dynamic co-optimisation reveals high prices or the applicable market ceiling price that cannot be resolved by Market Participant adjustments in the short time available.
- Inability to accurately predict the generation of Distributed Energy Resources (DER) - particularly small-scale PV - owing to its volatility, especially on cloudy days. With the continued growth of DER, this factor will be of increasing concern and risk to the WEM.
- Inability to accurately forecast the generation and volatility of Semi-Scheduled Facilities (large-scale wind and solar). This factor will be an increasing concern and risk with the transition towards clean energy and net zero emissions.

Sudden forecast changes in the lead up to the Primary Dispatch Interval can consume all available capacity of In-Service facilities for energy purposes. This can lead to significant increases in the WEMDE market price forecasts (including cap pricing) in time periods where Market Participants are limited in their ability to respond. This is due to the unexpected increases occurring at periods sooner than the Start Decision Cut Off Time, or Notice Period for operational configuration amendments (such as coal mills) or Gate Closure. Due to the frequent short notice of changing WEMDE dispatch and market price signals, even the most prudent Market Participants are often unable to duly respond to amend trading bids or physical plant operations to avoid the occurrence of applicable market ceiling prices (or at times, service shortfalls) in energy and/or FCESS markets.

Synergy expects that the occurrence of applicable market ceiling prices due to insufficient time for Market Participants to respond will be an ongoing feature in the new WEM regardless of the Proposed Price before the Energy Offer Price Ceiling. Further, for the aforementioned reasons Synergy expects that the Energy Offer Price Ceiling is likely to occur across a range of WEM load levels and will not solely be associated with periods of peak WEM demand.

Potential cost impact to consumers

Synergy's initial high-level analysis has identified that between October 2023 and April 2024 3.1% of Dispatch Intervals have cleared at the Current Price, and that the weighted average

price of servicing the Operational Load⁵ in all trading intervals has been \$99.1 / MWh with a total market cost of \$1,105m.

Synergy's initial high-level analysis suggests that, if all of the Dispatch Intervals that cleared at the Current Price were instead to have cleared at the Proposed Price, the weighted average price of Operational Load⁶ in all trading intervals would rise by 30% to \$129.1 / MWh with a total market cost of \$1,323m.

Further, due to the co-optimisation between RTM energy prices and FCESS prices, the market cost of FCESS and FCESS Uplift Payments would likely also likely rise significantly (although Synergy is not able to quantify the exact magnitude of this increase).

While the initial impact of the Proposed Price will be worn by Market Participants in the Real-Time Market, these cost impacts will eventually be borne by consumers. Further, at present the majority of consumers do not directly see these price signals and do not currently have the means or incentives to respond in real-time to these price signals. As consumers have limited real-time exposure to these costs, or direct understanding of the relationship between the real-time prices and their bills, there will be limited consumer response to these price signals. This creates a significant concern of the Proposed Price resulting in increasing market prices and increasing costs to consumers with limited to no benefits being realised in the markets.

Yours



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⁵ Excludes DER exports

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