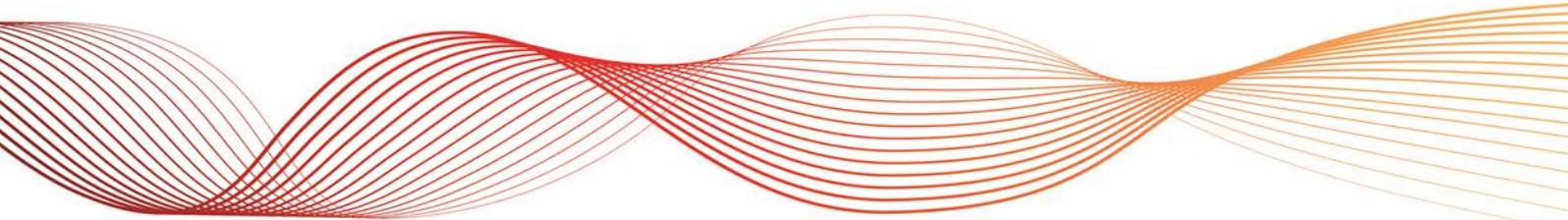




INVITATION TO PROVIDE SUBMISSIONS

2018 ENERGY PRICE LIMITS REVIEW FOR THE WHOLESALE
ELECTRICITY MARKET - DRAFT REPORT

Published: **April 2018**





IMPORTANT NOTICE

Purpose

The Australian Energy Market Operator (AEMO) has prepared this document to set out proposed inputs and seek feedback on the 2018 Energy Price Limits Review draft report. This document has been prepared and published by AEMO as required by clause 6.20.9 of the Wholesale Electricity Market (WEM) Rules.

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1. BACKGROUND

Clause 6.20.6 of the Wholesale Electricity Market (WEM) Rules requires the Australian Energy Market Operator (AEMO) to annually review the appropriateness of the values of the Energy Price Limits. In conducting the review, AEMO may propose revised values for the Maximum Short Term Energy Market (STEM) Price and the Alternative Maximum STEM Price. AEMO must calculate the proposed values using the methodology set out in clause 6.20.7 of the WEM Rules and then submit the proposed values to the Economic Regulation Authority (ERA) for approval.

The WEM Rules allow AEMO to delegate certain functions under the WEM Rules to a person or body of persons that is, in AEMO's opinion, competent to exercise the relevant functions (clause 2.1A.3 of the WEM Rules). Accordingly, AEMO engaged Jacobs Group Pty Ltd (Jacobs), an independent consultant, to assist AEMO in preparing the draft report for the annual review of the Energy Price Limits for 2018.

The 2018 review includes:

- determining whether the cost assumptions and probability levels adopted in the modelling of the Energy Price Limits in 2017 are still appropriate;
- addressing the feedback provided by the ERA in the 2017 Energy Price Limits Decision¹;
- revising the maximum prices by conducting an analysis of the relevant costs; and
- preparing a draft report.

As part of this review, Jacobs Group Australia Pty Ltd has prepared a draft report proposing revised Energy Price Limits for 2018. The draft report is available on the Market Web Site at:

<https://www.aemo.com.au/Stakeholder-Consultation/Consultations/>

¹ Published on the ERA website here <https://www.era.gov.au/electricity/wholesale-electricity-market/determinations/energy-price-limits>



2. INVITATION FOR SUBMISSIONS

AEMO invites all sectors of the Western Australian energy industry, including end-users, to make submissions on the draft report.

In accordance with clause 6.20.9 of the WEM Rules, the submission period is six weeks from the publication date of the draft report. Submissions must be delivered to AEMO by **5:00 PM (AWST) on Friday 18 May 2017**.

Submissions:

- should clearly address any issues that interested parties consider relevant to this review; and
- should provide any supporting evidence or calculations (if appropriate).

Please note that AEMO is required by clause 10.5.1(q) of the WEM Rules to make all submissions public. If confidential information is provided in a submission as supporting evidence, the submitting party must provide a public and a confidential version of the submission. The public submissions will be made available on the Market Web Site at: <https://www.aemo.com.au/Stakeholder-Consultation/Consultations/>

AEMO prefers to receive submissions by email to wa.operations@aemo.com.au.

Written submissions may also be sent to AEMO by post, addressed to:

Australian Energy Market Operator
Attn: Group Manager, WA Markets
PO Box 7096
Cloisters Square, PERTH, WA 6850

3. INVITATION FOR PUBLIC WORKSHOP

AEMO also invites all interested parties to attend a public workshop on the draft report, to be held at AEMO's Perth office from **1:00 PM – 2:00 PM (AWST) on Thursday 19 April 2018**.

The objective of the workshop is to discuss the draft report. Additional details including a draft agenda will be made available prior to the workshop on the Market Web Site at:

<https://www.aemo.com.au/Stakeholder-Consultation/Consultations/>

If you would like to register for this workshop, please email your name and details to wa.operations@aemo.com.au with 'Energy Price Limits Workshop' in the subject by **5:00 PM (AWST) on Wednesday 11 April 2018**.



4. SUMMARY OF THE REVIEW

4.1 Method

Two price caps were reviewed, the Maximum STEM Price, which applies when gas is used by the highest cost peaking plant, and the Alternative Maximum STEM Price, which applies when liquid fuel is required to be used.

The 2018 review has continued on the same basis for setting the Energy Price Limits as applied in 2017. The significant analysis differences are summarised below:

- Reviewed and addressed the ERA's recommendations captured in its 2017/18 Energy Price Limits decision¹ (further detail is provided in section 3.4 of the Draft Report).
- Revised the previous treatment of start-up cost methodology and cost uncertainty to better reflect the time value of money with respect to start-up costs.
- Revised the effective annual starts distribution used for the Pinjar machines, taking better account of the impact of low-load starts on the maintenance cycle.
- Updated the O&M costs for operating 40 MW gas turbines for both the industrial and aero-derivative types by accounting for movements in the cost of parts for both turbine types, foreign exchange rates and applying CPI cost escalation.
- Undertaken a review to determine of the highest cost OCGT as follows:
 - In May 2017, Synergy announced² it would retire four generation assets in order to meet the terms of the direction handed down last year by the state government to reduce its generation cap to a total of 2275 MW. The announcement noted that the Mungarra gas turbine units 1, 2 & 3 (113 MW) would retire on 30 September 2018
 - Jacobs has modelled the cost of Mungarra operating in peaking mode and found that it would have set the price if it was in consideration (presented in Appendix E). However, Mungarra will be operating in peaking duty for only part of the 2018-19 financial year and will not be operating over the Hot Season (December to March) when peaking operation is most likely to occur.
 - Jacobs has presented the analysis relating to Mungarra (see Appendix E in the Draft Report) and seeks stakeholder feedback on the approach proposed for the 2018-19 Energy Price Limits.

4.2 Results

The proposed revised values for the Energy Price Limits are as follows:

- **Maximum STEM Price:** The proposed revised value for the Maximum STEM Price is \$302/MWh using the gas price forecast method which had been applied in last year's review (alternative case). This is based on the estimated costs (with gas firing) for industrial type gas turbines. These units have shorter run times and higher start-up costs, which make them the higher cost resources; and
- **Alternative Maximum STEM Price:** The proposed revised value for the Alternative Maximum STEM Price is \$533/MWh using the estimated costs (with distillate firing) for industrial type gas turbines at

¹ Available at <https://www.erawa.com.au/cproot/18283/2/2017%20Energy%20Price%20Limits%20Decision.pdf>

² <https://www.synergy.net.au/About-us/News-and-announcements/Media-releases/Synergy-to-Reduce-Generation-Capacity-by-380-MW>



the distillate price of \$17.88/GJ. The Alternative Maximum STEM Price is calculated, applying this distillate price as the fuel cost, as the total of:

\$189.27/MWh + 19.211 multiplied by the Net Ex Terminal³ distillate fuel cost in \$/GJ.

Further information on the input parameters and key outcomes of the 2018 review can be found in the draft report produced by Jacobs Group Australia Pty Ltd.

Further details of historical Maximum STEM Prices and Alternative Maximum STEM prices are available on the Market Web Site at: <https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Data/Price-limits>.

Details of historical Energy Price Capacity Limit Reviews may also be found on AEMO's website if information on previous input parameters and key outcomes is required.

³ Wholesale price for distillate in Perth, Western Australia, after deduction of excise rebate and excluding GST. This price does not include road freight costs.