

30 November 2018

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Dear Rajat

PROPOSED COST_LR VALUES FOR REVIEW PERIOD FROM 1 JULY 2019 TO 30 JUNE 2022

SUBMISSION OF PROPOSED COST_LR VALUES FOR REVIEW PERIOD

In accordance with clause 3.13.3B(a) of the Wholesale Electricity Market Rules (**WEM Rules**), the Australian Energy Market Operator (**AEMO**) is pleased to provide the Economic Regulation Authority (**ERA**) with its proposed Cost_LR values for the period from 1 July 2019 to 30 June 2022 (**the Review Period**).

PROCESS

The proposed Cost_LR values must be sufficient to cover the costs of providing the Load Rejection Reserve Service (L) and the System Restart Service (R) over the Review Period.¹

AEMO engaged Ernst & Young (**EY**) to provide an independent assessment of the L component of the Cost_LR parameter for the Review Period. EY has produced a confidential report (Attachment 1 – *2019/20 Load Rejection Reserve Service Final Report*) (**the Report**). The Report covers the key market-related assumptions applied in the Wholesale Electricity Market modelling, the calculation of costs and the modelling methodology applied, and the results of the modelling simulations. A copy of the Report is attached for your consideration.

Pursuant to clause 3.11.8A of the WEM Rules, AEMO has entered into Ancillary Service Contracts with Market Participants for the System Restart Service. AEMO has proposed the R component of the Cost_LR values for the Review Period based on these contracts. AEMO has outlined its approach for determining the R component of the Cost_LR values in Appendix 1 of this letter.

PROPOSED COST_LR VALUES FOR REVIEW PERIOD

In accordance with the recommendations of the Report, AEMO proposes the following Cost_LR values to apply during the Review Period:

Component	Proposed			Approved
	2019–20 \$'000	2020–21 \$'000	2021–22 \$'000	2018–19 \$'000
Load Rejection Reserve (L)	4,738	4,344	1,087	1,400
System Restart (R)	3,326	3,292	3,374	575.7
Cost_LR	8,064	7,636	4,461	1975.7

¹ As at the date of this letter, AEMO does not anticipate that it will incur Dispatch Support Service costs during the Review Period, for the purposes of clause 3.13.3B(a) of the WEM Rules.

A discussion of the key drivers for the changes to the Cost_LR values is presented in the Report and Appendix 1.

To estimate the cost of providing the Load Rejection Reserve Service, AEMO and EY have used modelling assumptions of how the market will evolve over the Review Period. As per EY's report the key driver for change in cost in the third year is due to the information provided on availability of Synergy generating units.

The final contracts and pricing for the System Restart Service in the North Metropolitan and South Metropolitan areas for the period beyond 30 June 2021 have not yet been determined. It is possible that the indicative values for the R component of the Cost_LR values proposed by AEMO may change.

For any year in the Review Period, if AEMO determines that the requirement for load rejection will be materially different than the costs provided under clause 3.13.3B, AEMO will submit an updated Cost_LR proposal in accordance with clause 3.13.3C(a) of the WEM Rules.

DETERMINATION OF COST_LR VALUES FOR REVIEW PERIOD

AEMO notes the following process has been implemented for the Cost_LR review for the Review Period:

- This year AEMO was required to calculate proposed margin values for the 2019/20 Financial Year [clause 3.13.3A(a) of the WEM Rules] and calculate a proposed Cost_LR value for the 2019/20, 2020/21 and 2021/22 Financial Years [clause 3.13.3B(a) of the WEM Rules] for submission by 30 November 2018. Given the similar nature of the methodologies for these reviews, AEMO engaged one consultant to provide consultancy services in support of both reviews in order to ensure consistent modelling outcomes.
- AEMO undertook a competitive tender process to engage a consultant. On 21 June 2018, AEMO held a workshop, which was attended by representatives from six prospective consultants. AEMO subsequently received and evaluated three submissions, and EY was appointed as the consultant.
- On 31 August 2018, AEMO published the WEM Modelling and Backcasting Report on the Market Web Site.² This report provided an overview of the model used to simulate the Wholesale Electricity Market, including key inputs and outputs used, and outlined the results of the backcasting exercise.
- On 14 September 2018, AEMO published a draft public version of an the Assumptions Report (prepared by EY) on the Market Web Site,² and invited interested stakeholders to provide written submissions on this report. Two written submissions were received. The final assumptions, including AEMO's opinion on the submissions, are included in the Report.
- The confidential version of the draft Assumptions Report included assumptions regarding the generation facilities of 18 Market Generators. AEMO provided each of the 18 Market Generators, including Synergy, with the specific assumptions relating to its generation facilities, and requested feedback.¹³ Market Generators provided feedback, and a number of input assumptions were updated.
- AEMO undertook a competitive tender process to procure system restart services for the South Country Sub-network area. This resulted in the Kemerton contract being awarded to Synergy.

² Available at: <https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Security-and-reliability/Ancillary-services/Ancillary-Services-Parameters>.

Please contact Teresa Smit on (08) 9469 9992 if you have any queries or would like to discuss further.

Kind regards

Dean Sharafi
Group Manager - System Management

APPENDIX 1 – SUMMARY OF SYSTEM RESTART SERVICE COST

The System Restart Service is defined in clause 3.9.8 of the Market Rules:

System Restart Service is the ability of a Registered Facility which is a generation system to start without requiring energy to be supplied from a Network to assist in the re-energisation of the SWIS in the event of system shut-down.

The use of this service only occurs when there is a complete shutdown of the South West Interconnected System (SWIS). Ideally, it should almost never be called upon, as this event may only occur once every 10 – 20 years. However, should a complete shutdown event happen, and the service fails, the SWIS may be without power for several days.

AEMO considers that there should be at least three Facilities that can start under 'black system' conditions and that can energise the remainder of the SWIS. Three Facilities are required to ensure that the System Restart Service is available to cover planned and forced outages that affect two out of the three Facilities concurrently, but still have adequate provision for the System Restart Service to meet the desired reliability target.

In addition, the multiple Facilities providing the System Restart Service should not be in the same location in order to mitigate the risk of common failure in the same geographic or electrical area (sub-networks). Therefore, the requirement for the System Restart Service is based on having restart capability in each of the three electrical sub-networks, being North Metropolitan, South Metropolitan and South Country.

Pursuant to clause 3.11.8A of the WEM Rules, AEMO has entered into Ancillary Service Contracts with Market Participants for the System Restart Service.

Under these contracts, service providers are paid monthly. The contracts provide a payment adjustment mechanism to address periods when the System Restart Service is, or is taken to be, unavailable.

Of further note is that there is now a System Restart Service provider in the South Country area, after the successful commissioning of the service in October 2018. This service has replaced the Kwinana GT1 System Restart Service contract that expired on 30 June 2018.

AEMO has the following contracts for the System Restart Service:

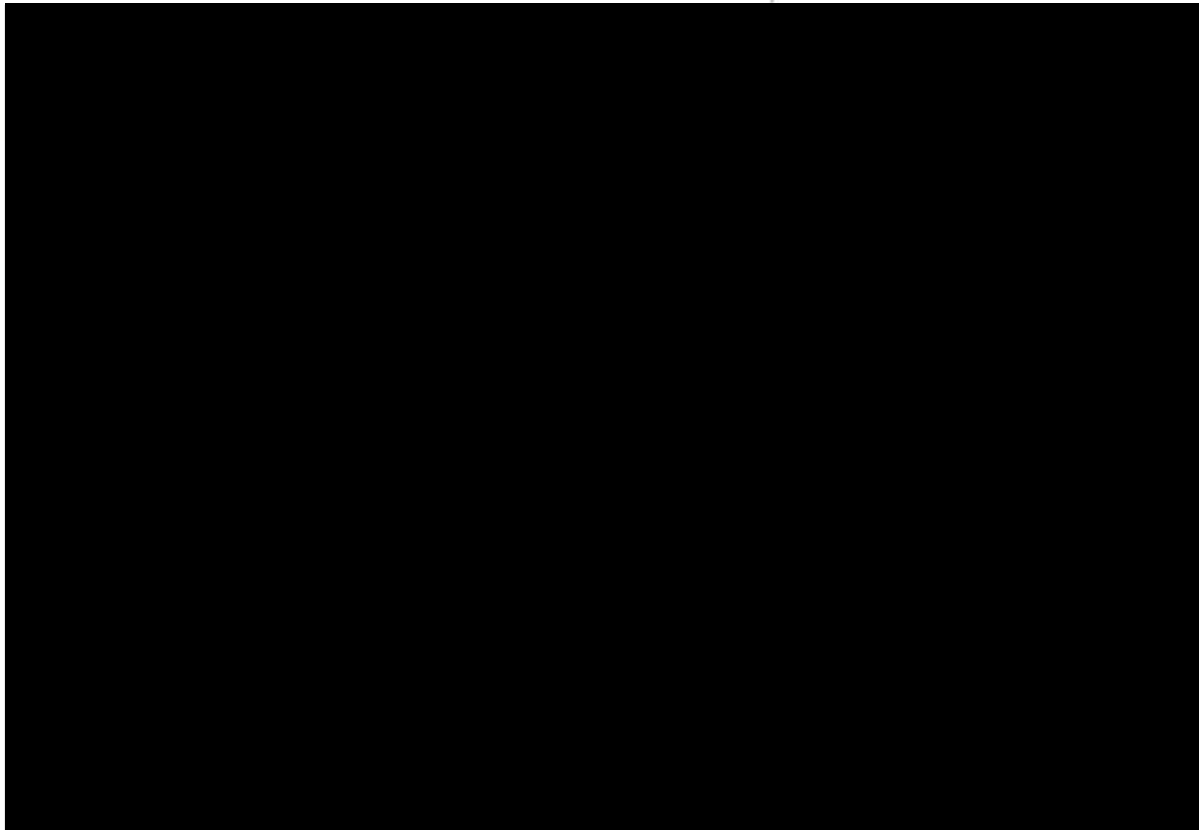
Market Participant	Facility	Contract Expiry	Sub-Network Area
Synergy	PINJAR_GT3 and PINJAR_GT5	30 June 2021	North Metropolitan
Perth Energy	PERTHENERGY_KWINANA _GT1	30 June 2021	South Metropolitan
Synergy	KEMERTON_GT11 & KEMERTON_GT12	2027	South Country

The 2016 Cost_LR proposal (submitted by Western Power System Management) was based on the first two contracts. The contract terms will end on 30 June 2021. AEMO intends to discuss the possibility of extending the contract terms so that the Synergy and Perth Energy contracts cover the full Review Period. In Table 1 of this letter, the proposed R component of the proposed Cost_LR value for the 2021-22 financial year assumes that the contract terms will be extended, and allows for an escalation rate³ of 1.5%, 2% and 2.5% per annum respectively over the Review Period.

Further information regarding these calculations is set out in the confidential **Appendix 2**.

³ Based on the WA Department of Treasury's Consumer Price Index Forward Estimates - http://www.treasury.wa.gov.au/Treasury/Economic_Data/Economic_Forecasts.

APPENDIX 2 – CONFIDENTIAL COST_LR CALCULATIONS



4 [REDACTED]
5 [REDACTED]

6 [REDACTED]
[REDACTED]

