GOVERNMENT OF WESTERN AUSTRALIA
Department of Energy and Economic Diversification
Energy Policy WA

Scope of Work for the 2026 Benchmark Technology Review

1. Introduction

As required by the Electricity System and Market Rules (the ESM Rules), the Coordinator of Energy (Coordinator) is conducting a review of the Benchmark Peak Technology and Benchmark Flexible Technology, used to determine the Benchmark Reserve Capacity Prices (BRCPs), under clause 4.16.11 of the ESM Rules.

In accordance with the ESM Rules, the Benchmark Technology Review will aim to ensure that the BRCPs are based on the available technology(s) with the lowest fixed costs (capital and fixed Operating and Maintenance cost).

The Benchmark Technology[1] was last reviewed during the 2025 Benchmark Capacity Providers Review.[2]

Clause 4.16.11 requires that the Coordinator must determine the Benchmark Technology by the earlier of:

(a) initially, by 31 January 2024; and then the earlier of

(b) within six months of the revised Electricity Storage Resource (ESR) Duration Requirement being published in the Electricity Statement of Opportunities, if the ESR Duration Requirement determined by AEMO is different from the ESR Duration Requirement for the previous Reserve Capacity Cycle; or

(c) within three years of a previous determination made in accordance with clause 4.16.11.

AEMO's Electricity Statement of Opportunities was published on 23 June 2026 and included a revised ESR Duration Requirement (ESRDR) of 7 hours (an increase from 6 hours).

The Coordinator must conduct its review by the middle of October, at the latest, to allow time for the Economic Regulation Authority (ERA) to amend and consult on both of its BRCP methodology and the BRCPs for the 2029/30 Capacity Year.

2. Background

2.1 The BRCPs

The BRCPs are an important input for the calculation of the Reserve Capacity Prices as they provide the anchor points for the Reserve Capacity Price curves. The BRCP is the price point at which the total Reserve Capacity equals the Reserve Capacity Target for the relevant Capacity Year.

[1] Under the ESM Rules, Benchmark Technology refers to the Benchmark Flexible Technology or Benchmark Peak Technology or both (as the context requires).

[2] Following the conclusion of the 2025 Benchmark Capacity Providers Review, the defined term under the ESM Rules was adjusted from Benchmark Capacity Providers to Benchmark Technology, addressing stakeholder feedback regarding confusion with other defined terms.

The BRCP is intended to reflect the marginal fixed cost of providing additional Reserve Capacity in each Capacity Year and is determined by the ERA based on the WEM Procedure outlined in clause 4.16.3 of the ESM Rules.

The ERA must review the WEM Procedure for setting the BRCP at least every 5 years; or within one year of a review of the Benchmark Technology that results in a change to a Benchmark Technology.

The ERA usually publishes its BRCP Determination by 15 January, to be applied in that year's Reserve Capacity Cycle.

DEED is planning to propose to the Minister a rule change to be included in the anticipated 'Tranche 10' ESM Amending Rules to delay the deadline for the ERA to determine the BRCPs to 15 March. Adjustments to the timeline for the ERA's BRCP determination introduced through this rule change will include:

- changing the ERA's deadline for publishing the BRCP from 15 January to 15 March each time the Coordinator must determine the Benchmark Technology in accordance with clause 4.16.11(b); and
- requiring the ERA to review the WEM Procedure under clause 4.16.3 to meet the 15 March timeline for the determination of the BRCP in these circumstances.

These changes would provide the ERA with sufficient time, including for public consultation, to adjust the BRCP WEM Procedure and determine the BRCPs, without breaching any ESM Rule obligations.

2.2 Current Benchmark Technology

In the 2025 Benchmark Capacity Providers Review, the Coordinator determined the Benchmark Technology for both the Peak and Flexible BRCPs. It was the first time the Coordinator was required to determine a Benchmark Flexible Technology.

The Coordinator determined that the Benchmark Technologies are a lithium battery energy storage system (BESS) with:

- 200 megawatts (MW) of injection
- 1200 megawatt hours (MWh) of energy storage
- a 330 kilovolt (kV) connection located on the Clean Energy Link – North.

The following parameters for the Benchmark Technologies were then outlined in the BRCP WEM Procedure by the ERA:

- a lithium iron phosphate sub-chemistry
- an installed capacity that enables 200 MW injection on 1 October of Year 3 of the Reserve Capacity Cycle
- enough energy storage capacity to enable 1200 MWh charge and discharge on 1 October of Year 3 of the Reserve Capacity Cycle
- the minimum level of equipment or systems, as required by the ESM Rules

3. Project Scope

The objective of this 2026 review is to determine the most appropriate Benchmark Technology which:

- maintain sufficient investment signals to ensure system security and reliability; and
- by selecting the lowest fixed cost technology, ensure that customers don't overpay for capacity.

To do so, the Coordinator must determine the technical and other parameters to be used for determining the Benchmark Technology, including its size and capabilities. In addition, this needs to account for the use of a network location with relatively low congestion.

The following aspects related to the BRCP are out of scope for this review:

- the methods for setting the BRCPs; and
- the Reserve Capacity Price setting methodology.

The Benchmark Technology Review will:

(1) for the Benchmark Peak Technology:

(a) review whether the current Benchmark Peak Technology is still appropriate or if a different Benchmark Peak Technology should be selected to represent the lowest fixed cost available technology; and

(b) whether gross costs of new entry (CONE) or net CONE should apply to the Peak BRCP; and

(2) for the Benchmark Flexible Technology:

(a) review whether the current Benchmark Flexible Technology is still appropriate or if a different Benchmark Flexible Technology should be selected to represent the lowest fixed cost available technology; and

(b) whether gross CONE or net CONE should apply to the Flexible BRCP

Approach to the analysis

The following analysis will be undertaken in the Benchmark Technologies Review:

(1) **Review of the Benchmark Peak Technology**:

- Assess, based on available information, including relevant literature, whether the current Benchmark Peak Technology is still appropriate or if a different technology would better reflect the lowest fixed cost available technology for providing Peak Capacity in the SWIS under the ESM Rules.
    - The assessment must include the type and optimum size in MW of the technology and any relevant fixed costs and applicable specifications that are required so the technology can provide Peak Capacity in compliance with the ESM Rules and the State Electricity Objective.

(2) **Review whether gross CONE or net CONE should apply to the Peak BRCP**:

- Assess, whether the Benchmark Peak Technology identified under (1) would be the marginal energy supplier under the ESM Rules expected to be in place in the 2029 Capacity Year (in which case gross CONE should be applied) or, if not, further assess whether applying net CONE would be more appropriate.

(3) **Review of the Benchmark Flexible Technology**:

- Assess, based on available information, including relevant literature, whether the current Benchmark Flexible Technology is still appropriate or if a different technology would better reflect the most efficient new entry for providing Flexible Capacity in the SWIS under the ESM Rules.
    - The assessment must include the type and optimum size in MW of the technology, and any relevant fixed costs and specifications that are needed so the technology can provide Flexible Capacity in compliance with the ESM Rules and the State Electricity Objective.

Review whether gross CONE or net CONE should apply to the Flexible BRCP:

- Assess, whether the Benchmark Flexible Technology identified under (3) would be the marginal energy supplier, in the intervals Flexible Capacity would be required or, if not, whether the application of net CONE will be more appropriate given the value of capacity payments for Flexible Capacity.

Project Schedule

Tasks/Milestones	Timing
(1) Preliminary Steps	
(a) Appointment of consultants	June 2026
(b) Kick off meeting with consultant	June 2026
(2) Initial Assessment	
(a) Initial assessment based on ESM Rules	June 2026
(b) Hold WICRWG meetings on proposals	July & August 2026
(3) Consultation Paper	
(a) Publish Consultation Paper on proposals	August 2026
(b) Submissions on the Consultation Paper close	September 2026
(4) Further Assessment	
(a) Further assessment based on submissions received	September 2026
(5) Coordinator Determination	
(a) Publish the Coordinator's Determination	October 2026