

Scope of Work – Capability Class 2 Technologies (CC2T) Review

1. The review

1.1 Requirements of the review as outlined in the Rules

The Coordinator of Energy (Coordinator) must review several Electricity System and Market (ESM) Market Rules provisions related to energy and availability limited resources in accordance with section 4.13B of the ESM Rules. Under clause 4.13B.2 of the ESM Rules, the first review must be completed by 1 October 2026.

Section 4.13B of the ESM Rules outlines the requirements for this review. These requirements were originally introduced to the ESM Rules on 1 November 2021. On 15 January 2025, additional requirements for this review were introduced to implement the outcomes of the Reserve Capacity Mechanism (RCM) Review.

The Coordinator will undertake this first review in accordance with the ESM Rules that were in effect prior to 15 January 2025. The recently introduced 15 January 2025 Rules have only been in place for a short period and, therefore, the Coordinator considers it too soon to review these provisions. The Coordinator considers that it is appropriate to undertake a review of the provisions that have been in operation for five years at the completion of the review aligning with the intent of the relevant ESM Rules.

This is the relevant ESM Rules clause prior to 15 January 2025:

4.13B.3. A review conducted under clause 4.13B.1 must examine:

- (a) whether the methodology for rating the capacity of Electric Storage Resources for the purposes of setting Certified Reserve Capacity remains consistent with the *State Electricity Objective*;
- (b) whether the Electric Storage Resource Obligation Duration for Electric Storage Resources remains consistent with the *State Electricity Objective*;
- (c) whether the Electric Storage Resource Obligation Intervals for Electric Storage Resources remain consistent with the *State Electricity Objective*; and
- (d) whether the methodology and processes used by AEMO to determine the Electric Storage Resource Obligation Intervals, in which the Reserve Capacity Obligation Quantity for Electric Storage Resources applies, remain consistent with the *State Electricity Objective*.

EPWA notes that:

- the subject of clause 4.13B.3(b) was recently reviewed under the Availability Duration Gap review and changes were implemented in Tranche 8. Consequently, the Coordinator will not review this item for Electric Storage Resources (ESR) in its 2026 review; and

- the reference to *Wholesale Market Objectives* was replaced with the *State Electricity Objectives* to reflect the changes to the objectives in the *Electricity Industry Act 2004*. The review will assess the relevant provisions against the State Electricity Objective, rather than the Wholesale Electricity Objectives, to reflect recent changes to the objectives in the *Electricity Industry Act 2004*.

EPWA proposes the following approach to the review:

Table 1 – Proposed review scope

	Clause #	Review item	Approach for review	In scope for 2026?
1	Former 4.13B.3(a)	Whether the methodology for rating the capacity of ESR for the purposes of setting Certified Reserve Capacity remains consistent with the SEO	EPWA will undertake a jurisdictional review of ESR certification methods used by other capacity markets. The current method and other methods will be reviewed against a criterion (based on the SEO) to determine the most effective method and recommend changes, if necessary.	Yes
2	Former 4.13B.3(b)	Whether the ESR Obligation Duration for ESR remains consistent with the SEO	The Coordinator has recently reviewed the ESR Obligation Duration (ESROD) in undertaking the Availability Duration Gap Review. Changes to the method to determine the ESROD required to meet peak demand was implemented in Tranche 8 in June 2025. The Coordinator will not review this item again in its 2026 review. The Coordinator will review whether the obligation duration for Demand Side Programmes (DSPs) remains consistent with the SEO (clause 4.10.1(f)(vi)).	Yes (modified for DSPs only)
3	Former 4.13B.3(c)	Whether the ESR Obligation Intervals for ESR remain consistent with the SEO	The Coordinator will review whether the Obligation Intervals for ESR remain consistent with the SEO. Together with AEMO, EPWA will model the 1 in 10-years system peak demand to determine the duration, and start and end of the peak demand period. Together with AEMO, EPWA will develop and assess design options to maintain Power System Security and Reliability (PSSR) with the growing share of ESR in the SWIS.	Yes
4	Former 4.13B.3(d)	Whether the methodology and processes used by AEMO to determine the ESR Obligation Intervals, in which the Reserve Capacity Obligation Quantity for ESR applies, remain consistent with the SEO.	The Coordinator will review AEMO's methods and processes used to determine the ESROI. This will include the AEMO's method for setting the Mid Peak ESROI.	Yes

5	4.13B.1(c)	Review the effectiveness of Reserve Capacity Refunds for ESR and DSPs	Defer to next review under section 4.13B. Defer review of DSP RC Refunds as considerable changes to this framework for DSPs will commence on 1 October 2026.	No
6	4.13B.1(d)	Information published for Limb B assessment	Defer to next review under section 4.13B. The changes to clause 4.5.12 outlining the information to be published under this clause were introduced on 13 December 2023. EPWA considers it too soon to review this clause.	No
7	4.13B.3(b)	Whether use of different Peak ESRODs for ESR commissioned in different years remains consistent with SEO	Defer to next review under section 4.13B. The ESROD protection was extended to 10 years on 4 June 2025 and EPWA considers that it is a risk to investment certainty to make changes, which will impact the ESROD outside of the new ADG calculation framework at this stage.	No
8	4.13B.3(d)	AEMO's method for setting the Mid Peak ESROI is consistent with the SEO	This will be included in the review against the requirement of the former 4.13B.3(d) (refer above).	Refer above
9	4.13B.3(f)	Year to year ADG trends and implications for the approach of ESR certification	Defer to next review under section 4.13B. At the time of this review there will only be one ADG determined and published, meaning trends in year to year ADG values do not exist at this stage and cannot be reviewed.	No
9	4.13B.3(g)	Whether the method for determining the Peak and Flex DSP Dispatch Requirement remains consistent with the SEO	Defer to next review under section 4.13B. This method was introduced on 13 December 2023. EPWA considers that it is too soon to review this method.	No

In accordance with the ESM Rules, after the review and consultation, the Coordinator must publish a report containing:¹

- the issues identified by the Coordinator;
- the assumptions made by the Coordinator in undertaking the review;
- the results of any technical studies;
- a summary of any submissions received during consultation;
- the Coordinator's responses to the issues raised in those submissions;
- any recommendations of the Coordinator; and
- any other matters the Coordinator considers relevant to the review.

¹ Clause 4.13B.5

Any changes to be made, must be progressed through a Coordinator initiated Rule Change or Procedure Change Proposal (or recommend AEMO to initiate a Procedure Change Proposal where applicable).²

1.1.1 State Electricity Objective

The Coordinator must assess the effectiveness of each of the review items against the State Electricity Objective:

The State Electricity Objective is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to:

- (a) the quality, safety, security and reliability of supply of electricity; and
- (b) the price of electricity; and
- (c) the environment, including reducing greenhouse gas emissions.

2. Background

2.1 History of certification of ESR

The current method for certifying energy limited technologies was implemented ahead of the 2021 Reserve Capacity Cycle³ by the Energy Transformation Taskforce.⁴

A requirement was introduced for the Coordinator to conduct a review every 5 years to ensure the framework for accrediting ESR remains consistent with the market objectives. The intent of this review is to consider whether changes should be made given, as the Energy Transformation Taskforce (the Taskforce) noted, it was likely that the system peak duration may change over time while ensuring sufficient time between reviews to provide participants with some certainty that the method for ESR certification will be applied consistently for a fixed period.

Additional items were introduced to the requirements for the Coordinator's review on the 15 January 2025 ESM Amending Rules, which implemented the outcomes of the RCM Review. These additional requirements relate to provisions which, at the time of the review, would have been implemented for less than 3 years.

EPWA considers that sufficient time has not passed to warrant reviewing these new provisions and proposes to defer these items to the next review under section 4.13B in 2031. To allow sufficient time prior to reviewing these items, EPWA proposes to reduce the scope of the current review as outlined in table 1.

² Clause 4.13B.6

³ Implemented in Tranches 2 and 3

⁴ [Information Paper Reserve Capacity Mechanism - Changes to support the implementation of constrained access and facilitate storage participation.pdf](#) (section 4)

2.1.1 Items under Review

This section provides further detail for the review items outlined in table 1.

1. Method for rating capacity of ESR – former clause 4.13B.3(a)

Capacity Credits are currently assigned to ESR by using the linearly derating model. Linear derating determines the maximum capacity, in MW, that an ESR can be guaranteed to be available over the ESROD assuming continuous discharge across the period. The linear derating model is a simple approach that accounts for the energy limited nature of ESR.

When determining how to certify ESR, the Taskforce considered that the existing methods of certifying capacity for other technologies (non-intermittent generation, intermittent generation and Demand Side Programmes) each posed different barriers to storage participation in the RCM. As a result, the Taskforce decided to investigate an alternate certification method which recognises that storage can guarantee its availability during peak demand, but for a shorter duration in comparison to other technologies.⁵

Three different methods were assessed by the ETS, with linear derating being chosen.

Derating method



	Linear	Effective Load Carrying Capability	Equivalent Firm Capacity	Least worst regrets
Minimises complexity for market participants and AEMO	Green	Yellow	Yellow	Red
Alignment with existing approaches to de-rating.	Red	(Once new RLM introduced)	Red	Red
Not overly volatile.	Yellow	Yellow	Yellow	Yellow
Compatible with other aspects of the RCM	Green	(Once new RLM introduced)	Yellow	Red
Transparent	Green	Yellow	Yellow	Red
Accurately measures the contribution of resources of different durations	Yellow	Green	Green	Green
Ease of implementation.	Green	Yellow	Yellow	Red

Taskforce endorsed approach: Linear model

In 2021, the ESR reserve capacity obligation period was set to 4 hours, as this was modelled by AEMO to be the typical peak demand event duration. Storage which was not able to meet this obligation would need to be derated.

Linear derating of capacity was chosen to rate ESR's capacity as this method was considered to strike a balance between:

- ensuring that facilities, which can control their output, that participate in the RCM are available in the energy market when required to ensure that the system reliability criteria is met; and
- ensure appropriate flexibility for storage resources given that there is a range of services they can provide in the market and their capacity is energy limited.

⁵ [Storage participation in the RCM – Information Paper](#)

Following the RCM Review, the concept of the Availability Duration Gap (ADG) was introduced on 13 December 2023 to allow for the ESR obligation duration to extend when needed. If an ADG is determined and published in the Electricity Statement of Opportunities, the ESR discharge period (now known as the ESROD) extends by the duration of the ADG to ensure no gaps in capacity emerge due to the energy limited nature of ESR.

The CC2T review would examine alternative methods for certifying ESR capacity used by other capacity markets and assess whether the linear derating method is still the most effective method for the WEM compared to other methods.

2. Facility obligation duration – former clause 4.13B.3(b)

The Coordinator has recently reviewed the ESR Obligation Duration (ESROD) in undertaking the Availability Duration Gap Review. Changes to the method to determine the ESROD required to meet peak demand was implemented by the Tranche 8 ESM Amending Rules in June 2025. The Coordinator will not review this item again in the 2026 CC2T review.

The Coordinator will instead review whether the DSP 12 hour DSP obligation duration remains consistent with the SEO (clause 4.10.1(f)(vi)).

DSPs have an RCOQ equal to the quantity of Capacity Credits assigned to the Facility.

However, their RCOQ can be zero in some circumstances:

- DSPs must be available for dispatch between 8am and 8pm on each Business Day. Their RCOQ is set at zero otherwise; or
- If the Facility has been dispatched for the maximum allowable number of hours in a year, then the RCOQ is zero for the rest of that Capacity Year.

Amending Rules have been gazetted with no commencement date which split this period from 6am to 10pm and 2pm to 10pm on all Business Days. This change was made to allow for aggregated DSPs which contain behind the meter storage to charge in the middle of the day.

The CC2T review should seek to assess the most efficient obligation period of DSPs. This includes:

- Modelling the dispatch of DSPs across the period, including of DSPs containing behind-the-meter storage;
- Assessing whether behind the meter storage associated with a DSP would have sufficient time to recharge, if applicable;
- Assessing whether splitting the obligation period would likely create a barrier to entry of some types of DSP; and
- Considering how the DSP obligation period works together with the ESR Obligation Intervals.

3. Whether ESROI for ESR is consistent with the SEO – former clause 4.13B.3(c)

The ESR Obligation Intervals (ESROI) determine the time-of-day ESR must be available to meet the peak. These intervals are determined by AEMO.

This review should undertake a technical study of the 1 in 10-years system peak demand to determine the duration, and start and end time, of the typical peak demand event.

This part of the review will also develop and assess options to maintain PSSR with the growing share of ESR capacity in the SWIS, including during the peak demand periods.

This will also address the issues raised by AEMO In its Engineering Roadmap FY2026 Priority Actions, which identified that the significant growth of ESR capacity by 2027 may require appropriate solutions to mitigate PSSR issues.⁶

This review should be done together with AEMO and in conjunction with review item 4 below.

4. Whether the methodology and processes used by AEMO to determine the ESROI is consistent with the SEO – former clause 4.13B.3(c)

The Mid Peak ESROI sets the midpoint of each ESR facility's ESROD, thus determining when during the day the ESR's obligation lies. AEMO must determine the Mid Peak ESROI, which is the Trading Interval which is the midpoint of the peak demand period, in accordance with a [WEM Procedure](#) outlined in clause 4.11.3A(c).

AEMO must publish the Mid Peak ESROI in the Electricity Statement of Opportunities (ESOO) for each Trading Day. The Mid Peak ESROI does not need to be the same Trading Interval for each day. AEMO may revise previously published Mid Peak ESROI ahead of the Capacity Year in subsequent ESOOs under clause 4.11.3A(b) (in developing this scope, EPWA identified errors in this clause which will be amended in this review).

By 6:50am before the Trading Day, AEMO may adjust and publish the Peak ESROI that will apply in that Trading Day to meet system needs, and must publish the Peak ESROI it expects will apply for the next 7 days under clause 6.3A.2. AEMO must keep a record of the Mid Peak ESROI which applied for each day under section 6.3.

This review should consider whether the methodology and processes used by AEMO are consistent with the SEO. This will be undertaken in conjunction with review item 3.

3. Out of scope

As proposed in Table 1, anything which was implemented in the last five years and anything which has recently been reviewed and amended is out of scope.

4. Deliverables

1. Jurisdictional review
 - Undertake a review of the different methods used by other capacity markets to certify capacity provided by ESR and any market design characteristics for the operation of ESR to maintain PSSR, including during peak demand periods.
2. Development of criterion
 - Development of a criterion, based on the State Electricity Objective, for assessment of methods to certify ESR capacity.
3. Assessment of the following:
 - Methods identified in the jurisdictional review (deliverable 1) against the criterion (deliverable 2);
 - Assess the effectiveness of the current method and other methods used by other jurisdictions for certification of ESR; and
 - The methodology and processes used by AEMO to determine the ESROI. This assessment should consider findings from the technical analysis in deliverable 4, and include, but not limited to, assessment of the following:
 - The WEM procedure developed under clause 4.11.3A(c) of the ESM Rules;

⁶ [engineering-roadmap-fy2026-priority-actions-report.pdf](#)

- Publication requirements in clauses 4.11.3A(a) and (b), and 6.3A.2; and
 - Section 6.3 and the Glossary.
4. Technical analysis of the following:
 - The 1 in 10-years system peak demand to determine the duration, and start and end time, of the typical peak demand event;
 - What the ESROI should be during the 1-in-10 years peak day which is most consistent with the SEO;
 - Analysis to determine whether the 12 hour obligation duration for DSP is consistent with the SEO;
 - The efficiency of DSP alternative obligation periods:
 - (i) 8am-8pm, or
 - (ii) 6am-10am and 2pm-10pm, including whether DSPs containing behind-the-meter storage would have sufficient time to recharge and whether the split window would create barriers to entry for certain types of DSPs; and
 - How the DSP obligation should work together with the ESR Obligation Intervals.
 - Development and assessment of design options to maintain Power System Security and Reliability (PSSR) with the growing share of ESR in the SWIS.
 5. Assessment of outcomes of deliverables 3 and 4 and the development of ESM Amending Rules or WEM procedure changes, if required.
 6. Consultation paper
 - Develop and publish a consultation paper, and undertake public consultation.
 7. Information paper
 - Develop and publish Information Paper.
 8. Rule change process (if applicable)

5. Project schedule

Tasks/Milestones	Task undertaken
Project establishment	
Finalisation of project scope	July 2025
Bring Scope to Market Advisory Committee and establish working group	24 July 2025
Approve Terms of Reference for CC2T Review Working Group	
Procure consultant	August 2025
Assessment of current method and development of proposals	
Deliverable 1. Undertake jurisdictional review of different methods to certify capacity of ESR.	August 2025

Tasks/Milestones	Task undertaken
Deliverable 2. Develop a criterion for assessment of methods to certify ESR.	August 2025
Deliverable 3. Assessment of: <ul style="list-style-type: none"> ▪ effectiveness of the current method and alternative methods used by other jurisdictions for certification of ESR against the criterion; and ▪ methodology and processes used by AEMO to determine ESROI. 	September 2025
CC2T Review Working Group (CC2TRWG) to present overview of deliverables 1 and 2.	October 2025
Deliverable 4. Technical analysis of: <ul style="list-style-type: none"> ▪ The start and end time of the 1 in 10-years system peak demand to determine the duration, and start and end time, of the typical system peak demand event; ▪ The time of day the ESROI should apply during the 1-in-10 years peak day; ▪ Analysis to determine whether the 12 hour obligation duration for DSP is consistent with the SEO; ▪ Development and assessment of design options to maintain Power System Security and Reliability (PSSR) with the growing share of ESR in the SWIS; ▪ The efficiency of DSP alternative obligation periods: <ol style="list-style-type: none"> (i) 8am-8pm, or (ii) 6am-10am and 2pm-10pm, including whether DSPs containing behind-the-meter storage would have sufficient time to recharge and whether the split window would create barriers to entry for certain types of DSPs. 	October 2025
CC2T Review Working Group (CC2TRWG) – present overview of outcomes from deliverables 3-4 to CC2TRWG and workshop proposed changes (deliverable 5).	November 2025
Deliverable 5. Assess outcomes of Deliverables 3 and 4 and, if required, develop ESM Amending Rules or WEM procedure changes.	November 2025
CC2TRWG meeting – present proposed changes to CC2TRWG for input ahead of public consultation.	December
Consultation	December-January
Deliverable 6 – develop Consultation Paper. <ul style="list-style-type: none"> ▪ Includes assessment and consideration of Working Group feedback/comments 	December
Consult with the MAC on draft Consultation Paper	18 December 2025

Tasks/Milestones	Task undertaken
Public consultation	December 2025 – February 2026
Development of CC2T Review Information Paper	February 2026 - March 2026
Consider responses received in the public consultation and finalise proposals.	February 2026
Deliverable 7– develop and publish Information Paper, and respond to feedback/comments received during public consultation.	March 2026
Rule Change Process (if applicable)	April 2026 – September 2026
Coordinator consults MAC prior to development of Rule Change Proposal (RCP) (<i>see clause 2.5.1C</i>)	18 December 2025
Coordinator considers MAC feedback and submits RCP (Day n)	
Coordinator decides to progress RCP (Day n + 5BD)	
Coordinator publishes notice of RCP (Day n + 7 BD)	
Ministerial approval required to accept a COE initiated RCP (<i>see clause 2.5.8A</i>)	
COE must notify MAC whether the RCP requires a meeting (day after notice of RCP is published)	
First RCP submissions (30BD)	
Draft Rule Change Report (20 BD)	
Second RCP submissions (20BD)	
Final Rule Change Report (20BD)	
Ministerial Approval (if necessary) (20BD)	
Implementation of final rules	
Commencement of final rules (if applicable)	1 October 2026