2026 Reliability Standard and Settings Review

Quality Assurance Report

Australian Energy Market Commission

26 March 2026

Version History

Version	Date	Change / Description
V01c	17 Feb 2026	Initial draft
V02a	20 March 2026	Addressed AEMC comments, added comparison charts
V02b	26 March 2026	Final version

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Table of Contents

List of Acronyms

Acronym	Term
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
APC	Administered Price Cap
BESS	Battery Energy Storage System
CPI	Consumer Price Index
CPT	Cumulative Price Threshold
DSP	Demand Side Participation
ESOO	Electricity Statement of Opportunities
IASR	Inputs, Assumptions and Scenarios Report
IES	Intelligent Energy Systems
ISP	Integrated System Plan
MPC	Market Price Cap
MT	Medium-Term (PLEXOS)
MW	Megawatt
MWh	Megawatt hour
NEM	National Electricity Market
NER	National Electricity Rules
NSW	New South Wales
OCGT	Open Cycle Gas Turbine
POE	Probability of Exceedance
QA	Quality Assurance
RSSR	Reliability Standard and Settings Review

Acronym	Term
SA	South Australia
ST	Short-Term (PLEXOS)
TAS	Tasmania
USE	Unserved Energy
VCR	Value of Customer Reliability
VIC	Victoria

Executive Summary

Introduction

Under the National Electricity Rules, the Reliability Panel (the Panel) is required to review the reliability standard and associated reliability settings every four years. The Panel is currently undertaking the 2026 Reliability Standard and Settings Review (RSSR) to determine the appropriate level of the reliability standard and market price settings for the National Electricity Market (NEM) for the period from 1 July 2028 to 30 June 2032. The Panel's review is supported by the Australian Energy Market Commission (AEMC), including the underlying modelling methodology and approach.

Intelligent Energy Systems was engaged to provide independent quality-assurance over the AEMC's methodology and modelling approach. This included reviewing and validating the PLEXOS and supporting Excel models used to assess system reliability, determining the efficient reliability standard, and optimal market price settings, specifically the Market Price Cap (MPC) and Cumulative Price Threshold (CPT).

In undertaking this role, IES provided assurance over key modelling assumptions, model behaviour, and outputs. This included providing recommendations (or QA) during modelling development to help ensure results were robust, internally consistent, and fit-for-purpose.

Based on our review across all assessed areas, we conclude that the modelling is robust and reliable, providing a sound basis for determining the efficient level of the reliability standard and the corresponding market price settings.

Approach

The approach involved conducting checks across every step of the modelling process for both components (Figure 1 and Figure 2). These checks addressed multiple aspects, as summarised in Table 5 below. In general, all steps were reviewed to identify potential misapplications or calculation errors. Where initial concerns were flagged, or where specific steps were known to potentially have high materiality for final regulatory determinations or had been highlighted for improvement in the 2022 RSSR, more detailed and targeted assessments were also undertaken.

The review was conducted on a subset of systems, code bases, and output datasets, and did not include full access to all elements required to validate all AEMC outputs and interim calculations, i.e., the review was conducted on a limited assurance basis, relying on the accuracy and completeness of the materials supplied. It is, however, our view that the materials provided were sufficient to allow IES to conduct a reasonable assessment across the various QA areas in Table 1.

Figure 1 Overview of Phase 1 methodology

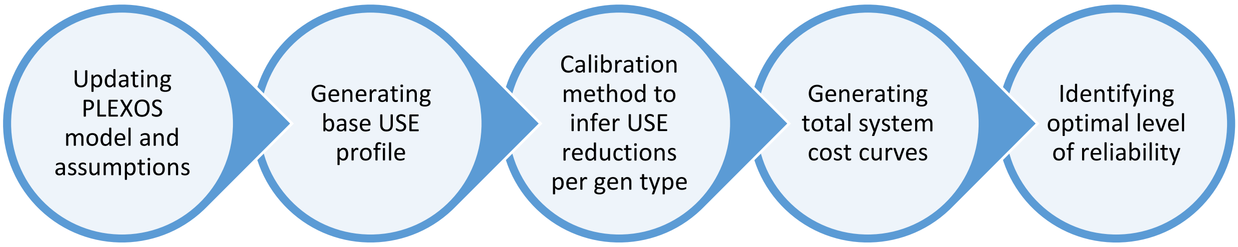


Figure 2 Overview of Phase 2 methodology

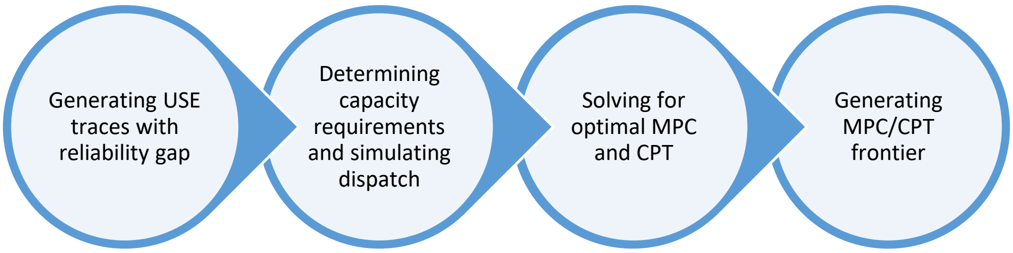


Table 1 QA areas

Area	Description
Model structure and methodology	Checking that the modelling approach is suitable for the questions being addressed and consistent with prior frameworks or regulatory expectations.
Data integrity	Completeness, consistency, accuracy, and appropriateness of input datasets.
Correct application of assumptions	Ensuring assumptions are applied consistently and in line with methodology.
Calculation accuracy	Verifying formulas, model or code logic, and computational outputs are correct.
Reasonableness of judgements	Assessing whether any expert or model-based judgements are defensible and aligned with evidence.
Sensitivity or assumptions testing	Confirming that key sensitivities and alternative scenarios are appropriately tested.
Reported limitations	Assessment of whether the reported limitations are reasonable.[1]

[1] Table C.2 of the AEMC Report.

Risk ratings

A simple risk ratings framework was used to support the QA review of the modelling. Each issue identified through the QA process is assessed against two dimensions: its materiality to the efficient level of the reliability standard and market price settings, and the level of effort required to address the issue. The resultant risk rating is determined by the combination of the materiality and effort assessments. The following provides a summary of the risk rating definitions.

- Low: Issue has low materiality to the reliability standard or price-setting outcomes and does not warrant further action.
- Medium: Issue has moderate materiality and can be addressed with proportionate effort. Addressing the issue is recommended to ensure robust modelling outcomes.
- High: Issue has high materiality to the determination of the reliability standard or optimal price settings. AEMC should address the issue regardless of the effort required.
- Opportunity for improvement: Issue has low materiality, however, addressing the issue will improve model robustness, transparency, or accuracy. Addressing these issues would be discretionary, however, should be reported for future reference.

Table 2 Overall risk ratings

Risk Rating	Low Effort	Medium Effort	High Effort
Low Materiality	Low	Opportunity for Improvement	Opportunity for Improvement
Medium Materiality	High	Medium	Medium
High Materiality	High	High	High

Conclusion

Based on our review across all assessed areas, we conclude that the modelling is robust, reliable, and provides a sound basis for informing the efficient level of the reliability standard and the corresponding MPC/CPT. The methodology has been carefully applied, incorporating relevant technical and economic parameters, and aligns closely with the 2022 RSSR approach. The main difference from the 2022 RSSR modelling is adopting a more pragmatic approach by reducing reliance on simulating outcomes solely from PLEXOS, which is time- and cost-intensive. This change allows the RSSR review to cover additional NEM regions and sensitivities, which, in our view, is more important to address, providing greater confidence that the outcomes accurately reflect the requirements and fit for purpose across the NEM.

A high-level assessment of the review areas is summarised in Table 3, with outstanding areas to address outlined in Table 4. Overall, the review confirms that the 2026 RSSR modelling is of high quality, fit for purpose, and provides a reliable foundation for informing decisions regarding the efficient reliability standard and associated market settings.

Table 3 QA summary

Area	Overall assessment
Model structure and methodology	The modelling approach is appropriate for addressing the relevant questions, scope of coverage and is consistent with the core 2022 RSSR modelling approach.
Data integrity	Input datasets were complete, consistent, accurate, and appropriate for the analysis.
Correct application of assumptions	Assumptions were applied consistently and in accordance with the established methodology; this was achieved after concerns and errors were promptly addressed.
Calculation accuracy	Formulas, model logic, and computational outputs were verified and found to be correct after modelling revisions throughout the process.
Reasonableness of judgements	Model-based judgements were reasonable, transparent, and aligned with supporting analysis.
Sensitivity or assumptions testing	Key sensitivities were adequately tested, ensuring that outcomes are robust to reasonable variations in assumptions. Running Phase 2 reliability standard sensitivities is also an improvement over the limited output set from 2022 RSSR.
Reported limitations	Any limitations of the modelling were clearly reported and are reasonable in the context of the review.

Table 4 Outstanding areas to address (medium or higher risk rating)

Area	Process or calculation	Description of finding	Rating
None			

1 Introduction

1.1 Background

Under the National Electricity Rules (NER), the Reliability Panel is required to review the reliability standard and associated reliability settings every four years. The Panel is currently undertaking the 2026 Reliability Standards and Settings Review (RSSR) with support from the AEMC. The aim of the review is to make recommendations on the appropriate levels of the reliability standard and market price settings for the National Electricity Market (NEM) for the period from 1 July 2028 to 30 June 2032.

Intelligent Energy Systems (IES) conducted the previous Reliability Standards and Settings Review in 2022. For the current review, IES was engaged to provide independent quality assurance (QA) over the AEMC's methodology and modelling approach. This included reviewing and validating the PLEXOS and supporting Excel models used to assess system reliability, determining the efficient reliability standard, and determining the optimal reliability settings, specifically the Market Price Cap (MPC) and Cumulative Price Threshold (CPT) for the NEM.

In undertaking this role, IES provided assurance over key modelling assumptions, model behaviour, and outputs. This included providing recommendations (or QA) during modelling development to help ensure results were robust, internally consistent, and fit-for-purpose.

This report summarises the QA review to confirm that the RSSR modelling framework and results were of a standard suitable to support the AEMC's advice to the Reliability Panel.

1.2 Scope of work

The scope of work is to conduct a quality assurance review to assess the quality of the AEMC's RSSR models and their outputs. As part of the QA process, IES also provided recommendations during the model development to help ensure the results are accurate and reasonable. IES' QA process of AEMC's models and processes included, but was not limited to:

- Reviewing the PLEXOS model and associated post-processing Excel model used to determine the efficient reliability standard, by:
  - Developing a reliability model based on AEMO's published ISP and ESOO as a base case.
  - Running the model across different outage samples, weather reference years, and capacity levels.
  - Ensuring the behaviour of generators and batteries is reasonable and consistent with expectations.
- Reviewing the optimisation process to determine reliability settings, by:
  - Developing an optimisation model to identify efficient reliability settings for a given standard.
  - Ensuring the model accommodates different technology types, including batteries and DSP.
- Producing a written report confirming that the model setup and outputs are of high quality, reliable, and fit for purpose.

Refer to Section 2.1 for further information.

1.3 Structure of report

The report is structured as follows:

- Section 2 covers the scope, general approach and QA process.
- Section 3 covers the Phase 1 modelling review.
- Section 4 covers the Phase 2 modelling review.
- Section 5 provides a summary of the findings.

2 Approach and process

2.1 Approach

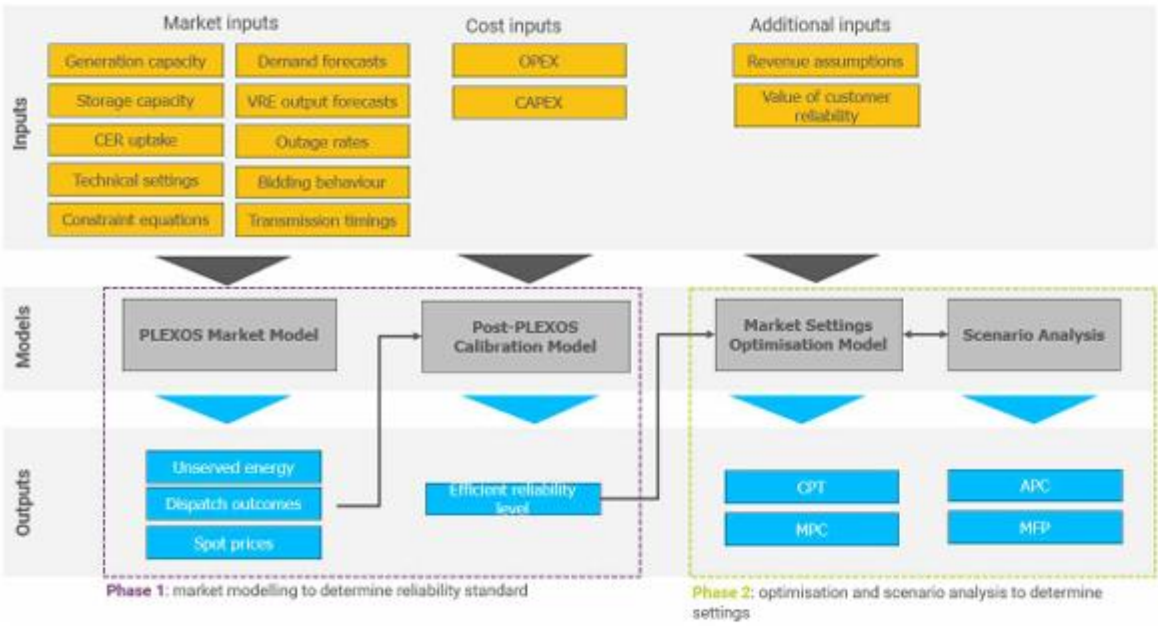
2.1.1 AEMC modelling approach

The AEMC's approach to the 2026 RSSR builds on the work undertaken by IES in the 2022 RSSR. The fundamental principles of the modelling and analysis have remained largely consistent, which is important for ensuring continuity and regulatory stability as part of the reliability framework. The AEMC modelling approach involves two sequential phases, or two broad phases of modelling required for the review:

1. The first phase is to determine an **efficient level of the reliability standard** through a combination of time sequential market modelling using the optimisation software PLEXOS and through post-simulation scenario analysis.
2. Once an efficient reliability level has been derived, the second phase of modelling uses optimisation methods and further scenario analysis to **determine the appropriate market settings**, in particular the MPC and CPT, that will provide market signals to support the level of investment needed for that level of reliability.

The high-level modelling approach is illustrated in figure below.

Figure 3 Overview of AEMC modelling approach



Source: AEMC, 2026 Reliability Standard and Settings Review, Draft Report (27 November 2025)

2.1.2 IES approach to QA review

The approach involved conducting checks across every step of the modelling process for both components. These checks addressed multiple aspects, as summarised in Table 5 below. In general, all steps were reviewed to identify potential misapplications or calculation errors. Where initial concerns were flagged, or where specific steps were known to potentially have high materiality for final regulatory determinations or had been highlighted for improvement in the 2022 RSSR, more detailed and targeted assessments were also undertaken.

It is important to note that, while efforts were made to achieve reasonable coverage of the AEMC modelling process, the primary objective was to ensure that the overall outcomes were calculated correctly, consistent, explainable, and robust for the purposes of the 2026 RSSR. The QA review was therefore focused on assessing the general robustness of the results, rather than validating every individual data point throughout the entire process. The review was conducted on a subset of systems, code bases, and output datasets, and did not include full access to all elements required to validate all AEMC outputs and interim calculations, i.e., the review was conducted on a limited assurance basis, relying on the accuracy and completeness of the materials supplied. It is, however, our view that the materials provided were sufficient to allow IES to conduct a reasonable assessment across the various QA areas.

Table 5 QA areas

Area	Description
Model structure and methodology	Checking that the modelling approach is suitable for the questions being addressed and consistent with prior frameworks or regulatory expectations.
Data integrity	Completeness, consistency, accuracy, and appropriateness of input datasets.
Correct application of assumptions	Ensuring assumptions are applied consistently and in line with methodology.
Calculation accuracy	Verifying formulas, model or code logic, and computational outputs are correct.
Reasonableness of judgements	Assessing whether any expert or model-based judgements are defensible and aligned with evidence.
Sensitivity or assumptions testing	Confirming that key sensitivities and alternative scenarios are appropriately tested.
Reported limitations	Assessment of whether the reported limitations are reasonable.[2]

Any issues that were found and addressed during the review process are also noted accordingly.

2.1.3 Data and materials

Table 6 lists all data items provided to IES for review and summarises the checks performed on each item. Public documents such as the various AEMO ESOO and ISP PLEXOS database and data sources were not provided, however, separate checks were conducted to ensure the inclusion (where relevant) and correct application. More detailed review findings and their implications for data use are presented in the subsequent QA review sections.

Table 6 List of materials provided

Date provided	Item and description	General checks performed
2025/12/03	**Phase 1:** PLEXOS model for running the simulations.	Confirmed model updates aligned with AEMC report assumptions.

[2] Table C.2 of the AEMC Report.

Date provided	Item and description	General checks performed
2025/12/03	**Phase 1:** Excel model for calculating the total costs for each new entrant type.	Verified cost inputs; checked alignment with IASR assumptions; ensured annualised capex and emissions costs were included.
2025/12/03	**Phase 1:** Excel model for calculating the required MW to reach reliability targets from the baseline.	Checked that MW requirements for each technology type to address reliability were reasonable.
2026/01/05	**Phase 1 and Phase 2:** The baseline unserved energy (USE) traces from all PLEXOS simulations.	Validated weighted USE calculations; confirmed completeness of simulation samples and run outputs.
2026/01/12	**Phase 1 and Phase 2**: The USE from all PLEXOS simulations. Updated to include missing simulations.	Validated weighted USE calculations; confirmed completeness of simulation samples and run outputs.
2026/01/14	**Phase 1:** Capacity required outputs due to an error in the calculation of the USE. This was a re-run.	Re-checked the reasonableness of OCGT and battery MW requirements after correction.
2026/02/02	**Phase 1:** Python model to calculate the required new entrant MW for each reliability level.	No formal checks performed; model used to understand general methodology and to assist in diagnosing issues.
2026/01/23	**Phase 2:** MPC and CPT model outputs.	Verified the correctness of MPC and CPT calculations for the OCGT new entry.
2026/01/16	**Phase 2:** Python model to calculate MPC and CPT.	No formal checks performed; model used to understand methodology and to assist in diagnosing issues.
2026/02/27	**Phase 2:** Baseline USE outputs, and MPC and CPT outputs.	Re-checked new entrants and MPC/CPT frontier.

2.1.4 Process

IES worked closely with the AEMC throughout the 2026 RSSR to conduct quality assurance in an iterative, collaborative manner. Key elements of the quality assurance process included:

- Regular bi-weekly meetings with the AEMC to discuss methodology, progress and interim/key findings.
- Detailed walkthroughs of the PLEXOS model, Excel model and optimisation models.
- Ongoing technical discussions conducted to answer modelling questions and provide timely feedback on approaches and results.
- Targeted checks and ad-hoc reviews of specific modelling inputs, assumptions and outputs as required.

These processes ensured that QA was applied continuously across the development of the 2026 RSSR modelling, rather than solely as a final review step, helping to improve confidence and reliability of the results.

2.2 Risk ratings

A simple risk ratings framework is used to support the QA review of the modelling for the efficient level of the reliability standard and to determine the optimal market price settings (MPC and CPT). Each issue identified through the QA process is assessed against two dimensions: its materiality to the reliability standard and market price setting outcomes, and the level of effort required to address the issue. The effort required to address an issue is an important consideration given the extensive modelling involved in both components of work, where any revisions are likely to push out project timelines and/or potentially incur significant compute costs. Accordingly, the ratings are intended to balance the need to re-run the modelling with whether an issue can be more appropriately addressed in future reviews. The combination of these two dimensions produces a single QA finding for each issue, being low, medium, high, or an opportunity for improvement.

The framework ensures QA findings are proportionate and risk based. Issues that materially affect reliability outcomes or price signals should be prioritised even if the remediation effort is significant. Conversely, issues with low materiality are not escalated solely due to implementation effort and are instead captured as opportunities for improvement.

2.2.1 Materiality

Materiality reflects the potential impact of the issue on modelling outcomes that inform the level of the reliability standard or market price settings. These are in accordance with the definitions below. Given IES will need to apply judgement across issues, an estimated quantitative range will be provided where relevant to support the materiality rating.

- Low: Negligible impact on outcomes. Results would remain directionally and quantitatively similar.
- Medium: Noticeable impact on model accuracy, assumptions, or transparency that could influence the calibration of the reliability standard or price settings but is unlikely to materially change regulatory conclusions.
- High: Significant impact on model results that could materially affect the efficient reliability standard, optimal price settings, or associated regulatory decisions.

2.2.2 Effort

Effort reflects the scale of work required to address the issue within the modelling framework. This likely depends on whether the issue requires re-running PLEXOS.

- Low: Minor changes such as correcting parameters, clarifications in the public reports, fixing coding errors, or making small modelling adjustments without re-running major scenarios or PLEXOS.
- Medium: Targeted re-modelling, additional sensitivity analysis, or changes to model structure or inputs requiring partial re-runs.
- High: Fundamental model redesign, redevelopment of key datasets, extensive re-simulation, or major changes to the modelling methodology.

2.2.3 Risk rating matrix

The resultant risk rating is determined by combining the materiality and effort assessments, with ratings established in the context of the RSSR review project. The following provides a summary of the risk rating definitions. Any issues raised with AEMC and rectified are also reported accordingly.

- Low: Issue has low materiality when determining the optimal reliability standard or associated price settings and does not warrant further action.

- Medium: Issue has moderate materiality and can be addressed with proportionate effort. Addressing the issue is recommended to ensure robust modelling outcomes.
- High: Issue has high materiality to the determination of the reliability standard or optimal price settings. AEMC should address the issue regardless of the effort required.
- Opportunity for improvement: Issue has low materiality, however, addressing the issue will improve model robustness, transparency, or accuracy. Addressing these issues would be discretionary, however, should be reported for future reference.

Table 7 Overall risk ratings

Risk Rating	Low Effort	Medium Effort	High Effort
Low Materiality	Low	Opportunity for Improvement	Opportunity for Improvement
Medium Materiality	High	Medium	Medium
High Materiality	High	High	High

3 Phase 1: Optimal level of the reliability standard

3.1 Outline of methodology

The Phase 1 methodology is to assess the optimal reliability standard for each NEM region, based on the trade-off between reliability and total system costs. The efficient reliability level is then used to calculate the corresponding Market Price Cap and Cumulative Price Threshold. Rather than simulating each reliability step for every region, the AEMC adopted a 'calibration approach', whereby capacity requirements and incremental total system costs for tighter reliability standards were inferred. This approach significantly reduced modelling solve times and associated PLEXOS computing costs, at the expense of a marginal reduction in accuracy.

IES reviewed and agreed with the methodology adopted by the AEMC for Phase 1 (Figure 4). The AEMC provided the PLEXOS model, the full set of baseline simulation outputs, the Excel marginal cost model, and the calibration results that compared PLEXOS outcomes with the out-of-simulation USE adjustments. A comparison of the 2026 approach compared to what was conducted in the 2022 RSSR is outlined in Table 8.

Figure 4 Overview of Phase 1 methodology

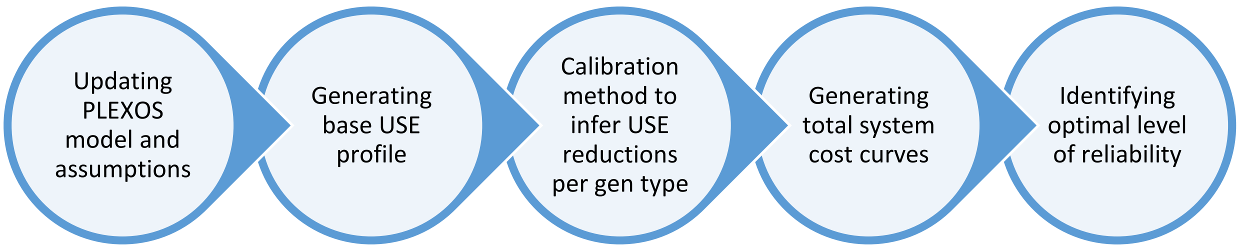


Table 8 Phase 1 methodology comparison

Step	AEMC 2026 RSSR	IES 2022 RSSR	Implications
Underlying market model and assumptions	Based on the latest ESOO database with generator timing updates	Based on the latest ESOO with the addition of state-based policy new entrants and general generator timing updates.	See base USE profile discussion below.
Regions covered	All NEM regions, except TAS	Only NSW given it was the only region at risk of a reliability gap[3]	AEMC coverage across all regions enables more informed regulatory decision-making.
Generating the base USE profile	Not including policy new entrants over the modelling period produced the high USE baseline starting point.	Generated through the removal of baseload coal units at-risk of early retirement.	The type of generator not added or removed can influence the overall distribution of USE outcomes and least-cost reliability new entrant. The significant

[3] Project scope, timing and budget was also a limiting factor.

Step	AEMC 2026 RSSR	IES 2022 RSSR	Implications
			divergence in OCGT BESS outcomes suggests this would not have been material.
Simulation of USE reduction per reliability new entrant type	A calibrated approach was used to infer the amount of capacity (per gen type) needed to reach each reliability level, without conducting detailed Monte Carlo simulations.	IES simulated every new entrant addition in PLEXOS to generate the reliability and the cost curve.	AEMC would need to carry out additional sensitivity checks to ensure that the assumptions used and the outcomes from the calibration approach were reasonably accurate.
Generating total system cost curves	The calibration approach implicitly assumes existing production costs remain unchanged and only incremental costs were used in the cost trade-off	All simulations were conducted in PLEXOS, and the total cost was a simple output to report	The 2026 approach is likely adequate for OCGT however, BESS operations can also impact or provide additional system benefits outside of reliability events. AEMC needed to also test this.
Identifying the optimal level of reliability	Based on multiple regions and sensitivities such as VCR	Based on NSW only, and reported for a range of sensitivities	Outside of the region coverage, the approach to determining the optimal reliability level was generally consistent.

3.2 Review steps

3.2.1 Update PLEXOS model and assumptions

In this step, IES reviewed AEMC's PLEXOS model to confirm that all updates made by AEMC were consistent with the assumptions documented in the AEMC Report, and/or included relevant assumptions updates to the ESOO model given timing differences between the ESOO database release and subsequent assumptions updates. The focus was on ensuring that the modelling framework, scenario configuration, and key input assumptions were correctly implemented in the PLEXOS model. The PLEXOS model is used to generate the baseline USE samples.

Table 9 Phase 1: PLEXOS modelling findings

Area	Process or calculation	Description of finding	Risk Rating
Correct application of assumptions	Removal of specific generators	The removed generators as reported in the AEMC Report was implemented correctly in PLEXOS.	N/A
Model structure and methodology	MT and ST schedule options are set correctly	The ESOO model release incorrectly sets the MT chronology section to *Partial* was initially used by AEMC, rather than *Fitted*.	Fixed [High]. The *Partial* setting is not appropriate for modelling storage and overstates USE.[4]
Model structure and methodology	Time-step changed from 1-hour to 30-minutes	Time steps are 30-minute intervals.	N/A

[4] When combined with Decomposition Method set to Target across Battery and Storage objects.

Area	Process or calculation	Description of finding	Risk Rating
Model structure and methodology	Stochastic object which sets sampling is set correctly	This was implemented correctly.	N/A
Model structure and methodology	Random Number Seeds are consistent	There are two different random number seeds used which impact the forced outage schedules. This does not materially affect the results as all outage patterns are equally possible. However, it does create difficulty in the comparing USE drivers across weather reference years.	Opportunity for Improvement
Model structure and methodology	Scenarios (input assumptions feeding into the model runs) are set-up correctly	Two simulation runs were set up with incorrect demand traces.	Fixed [High]

3.2.2 Generating base USE starting point

In this step, IES reviewed the baseline unserved energy (USE) outputs produced from the PLEXOS simulations and the subsequent USE profiles generated by the AEMC. The purpose of the review was to ensure that the baseline USE traces were complete, that the overall level of USE was correctly calculated, and that it was produced using a method consistent with the AEMC's stated approach. The USE baseline establishes the rightmost point (least reliable) on the reliability versus cost trade-off chart.

Table 10 Phase 1: Base USE starting point

Area	Process or calculation	Description of finding	Rating
Data Integrity	Process the baseline USE samples across all simulations	Completed USE traces from some simulations were not extracted and included.	Fixed [High]
Data Integrity	Implementing checks to ensure output data samples processed aligns to expectation	The lack of these checks led to incorrect reliability calculations	Fixed [Opportunity for Improvement]
Calculation accuracy	Calculation of weighted average USE	The weighted average unserved energy applied the incorrect weighting.	Fixed [Medium]
Calculation accuracy	Reasonableness check of the USE samples	AEMC presented the average USE outcomes by region, across reference years and POE samples. The simulation outputs looked reasonable with one exception where P50 USE was significantly higher than P10. The	N/A

Area	Process or calculation	Description of finding	Rating
		modelling issue was identified and addressed by AEMC.	

3.2.3 Calibration method

Reliability new entrants are then added to the USE starting point from the prior step. As more units are added, the system becomes more reliable with changes to the underlying (incremental) system cost comprised of USE costs and generation costs. The AEMC opted with a calibration method or post-processing method, whereby PLEXOS was not used, to establish improvements to reliability and changes to the system cost with incrementally more reliability new entrants.

Table 11 Phase 1: Calibration method

Area	Process or calculation	Description of finding	Rating
Methodology	Simulating the USE profiles at different reliability levels	To ensure the calibration method remained robust, the AEMC tested and the presented the calibration outcomes compared to PLEXOS simulations. IES reviewed this process and found the implementation by AEMC to be reasonable.[5] IES constructed our own independent post-processing of the USE baseline to validate the output from AEMC's calibration model.	N/A. However, this process led to the finding that the ESOO MT Schedule setting of Partial Chronology was incorrect (refer to Section 3.2.1).
Calculation accuracy	The calibrated OCGT MW are calculated correctly as described in the methodology.	The new entrant MW was calculated incorrectly using the wrong weighting for each sample. The MW required for each reliability standard was understated, however, it was understated across the entire efficiency curve and did not impact the optimal level of the standard.	Fixed [Medium]
Calculation accuracy	The calibrated Battery MW are calculated correctly as	Same issue as above. There was a minor issue with the calibration of battery which	Fixed [Medium]

[5] IES had employed similar post-processing steps with the intention of sense-checking PLEXOS outputs as part of the 2022 RSSR.

Area	Process or calculation	Description of finding	Rating
	described in the methodology.	understated the MW for each reliability level.	
Correct application of assumptions	Determination of OCGT capacity ignores de-ratings such as planned outage, forced outage, and seasonal ratings. The seasonal de-rating for a large OCGT is 7.8% in summer, 1.5% in winter, and 2% if forced outages were also applied.	AEMC had omitted these assumptions, which implicitly assume no de-ratings. The inclusion would result in up to 10% in additional capacity or potentially an increase of an additional 1 unit to achieve the same reliability, however, the optimal level of reliability remains the same.[6]	Fixed, as this has material implications for Phase 2 [Opportunity for Improvement]
Correct application of assumptions	Maximum and minimum state of charge constraints were applied correctly	The minimum and maximum state of charge was applied correctly in determining the required new entrants at each USE level.	N/A
Correct application of assumptions	Calculation of cost assumptions (retirement costs)	The calculation of retirement costs was not correctly added into the relevant column which feeds into the calculation of generation costs. A cost formula was applied correctly to all but a single cell.	Fixed [Low]
Correct application of assumptions	Calculation of cost assumptions (capex)	Capex figures were based on a single location within the region, whereas capex values can differ by up to 5% depending on its location.	Low

3.2.4 Optimal level of reliability

The optimal reliability level is identified from the reliability cost curve, which is based on the estimated new entrant capacity required to achieve each reliability standard. IES reviewed the supporting data and charts to confirm that the optimal range produced by the model was reasonable and consistent with expectations.

Table 12 Phase 1: Optimal level of reliability

Area	Process or calculation	Description of finding	Rating
Methodology	Cost of different levels of reliability standard	Methodology is appropriate in determining the relative cost across different levels of reliability standard	N/A

[6] Relates to integer new entrants considered under Phase 1.

Area	Process or calculation	Description of finding	Rating
Calculation accuracy	Cost curves from Excel Model	Double counts retirement/rehab cost (only for small OCGT)	Fixed [Low]
Reasonableness of judgements	Determination of the efficient reliability level per region is done on a visual inspection	There is a statement in the AEMC Report that incorrectly identifies the efficient level for Victoria and South Australia being lower (more reliable) than New South Wales and Queensland. Identifying the minimum point scientifically would be preferred rather than visual inspection, however, the change in cost from the current 0.002% level should also be reported for materiality.[7]	Fixed [Medium]
Reported limitations	The modelling framework only considers total incremental system costs. The calibration method assumes all existing generation, and associated costs remain the same and can therefore only focus on the incremental system cost with each add	This is reasonable for the added OCGT units which are dispatched during reliability events. BESS, however, would be expected to operate throughout the year displacing higher cost generation and provide additional benefits outside of reliability events. The calibration method allows for estimations of additional BESS benefits but was ultimately not used due to difficulties in calibrating and testing the parameters.	Opportunity for Improvement. The reliability and cost curve for BESS sits significantly above OCGT in this review, however, is likely to converge towards OCGT levels in future reviews.

3.2.5 Drivers and reasonableness of results

The optimal reliability standard is fundamentally determined by two factors: the cost of achieving higher reliability outcomes and the value customers place on reliability, as captured by the Value of Customer Reliability (VCR). Since the 2022 RSSR, OCGT capital and operating costs have increased, while the VCR has

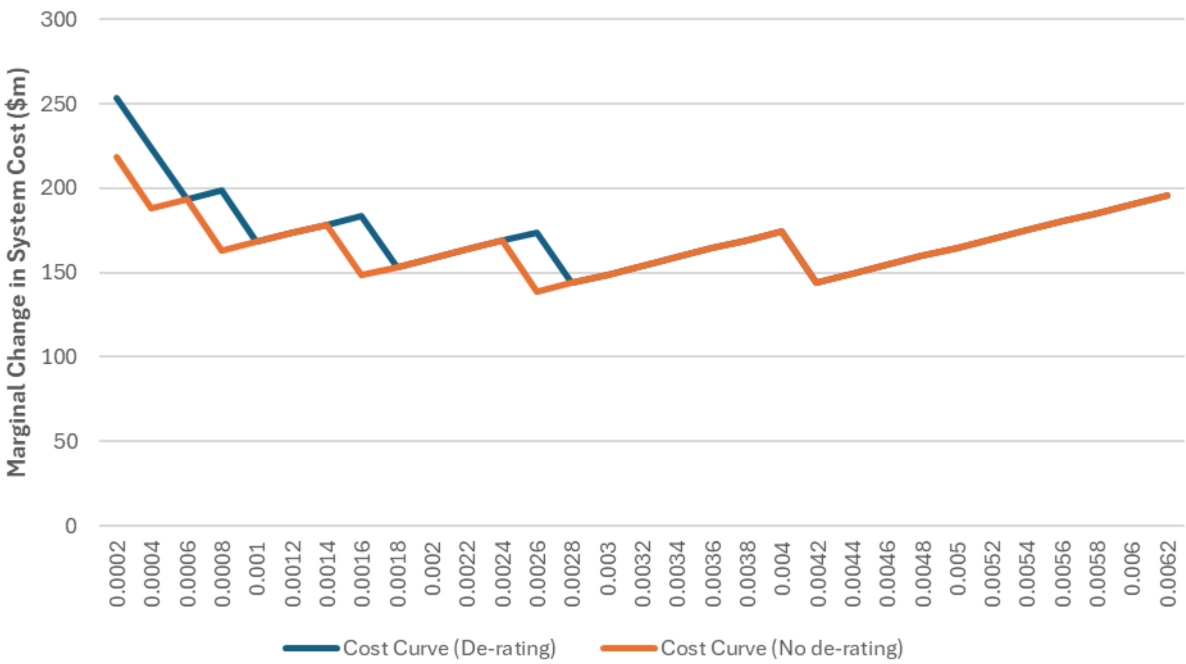
[7] Visual inspection was also used in the 2022 RSSR, however, this was much easier with only a single region modelled.

declined. Holding all else constant, these changes imply a higher economically efficient reliability standard, consistent with the outcome presented in the AEMC Report.

There are also changes to the efficient level of the reliability standard when considering a battery. However, the marginal cost of meeting tighter reliability settings assuming a battery reliability new entrant remains materially higher than that of a large OCGT. In effect, the battery capital cost reductions relative to the previous review do not materially alter the cost–reliability trade-off, which is addressed by the large OCGT new entrant.

The modelling outcomes produced by the AEMC are consistent with IES's independent calculations. In earlier iterations, seasonal de-ratings were not applied by the AEMC, but has been addressed. Figure 5 illustrates the impact of applying seasonal de-ratings on the number of marginal new units required in NSW. With seasonal de-ratings applied, the number of units required to meet the reliability standard increases earlier at certain breakpoints. This change does not materially affect the recommended optimal range of the reliability standard.

Figure 5 Phase 1: Impact of De-Rating on Cost Curve



3.3 Key findings

The materials provided allowed IES to confirm that the Phase 1 assumptions were correctly implemented and that the baseline USE profiles and marginal cost calculations aligned with the AEMC methodology. The calibration model was also found to be a reasonable approximation, as confirmed by checks of sample PLEXOS simulations against its outputs.

AEMC also supplied the Python code and the associated intermediate and final outputs used in Phase 1. This covered the extraction of USE from PLEXOS, the weighting and aggregation steps, the post-processing used to generate different reliability levels, and the calculation of the required new entrant capacity. IES reviewed each part of this process and confirmed that the calculations were performed as intended and were consistent with the stated approach.

The review of the methodology and its implementation identified a range of issues, spanning low to high materiality. All identified matters were acknowledged by AEMC, and all issues with medium or higher materiality have since been addressed and resolved in the Final Report. Table 14 outlines low risk rating findings or opportunities for improvement in subsequent RSSR.

Table 13 Outstanding areas to address (medium or higher risk rating)

Area	Process or calculation	Description of finding	Rating
None			

Table 14 Low Risk Rating or Opportunities for Improvement

Area	Process or calculation	Description of finding	Rating
Generating base USE starting point [Model structure and methodology]	Random Number Seeds are consistent	There are two different random number seeds used which impact the forced outage schedules. This does not materially affect the results as all outage patterns are equally possible. However, it does create difficulty in the comparing USE drivers across weather reference years.	Opportunity for Improvement
Optimal level of reliability [Reported limitations]	The modelling framework only considers total incremental system costs. The calibration method assumes all existing generation, and associated costs remain the same and can therefore only focus on the incremental system cost with each add	This is reasonable for the added OCGT units which are dispatched during reliability events. BESS, however, would be expected to operate throughout the year displacing higher cost generation and provide additional benefits outside of reliability events. The calibration method allows for estimations of additional BESS benefits but was ultimately not used due to difficulties in calibrating and testing the parameters.	Opportunity for Improvement. The reliability and cost curve for BESS sits significantly above OCGT in this review, however, is likely to converge towards OCGT levels in future reviews.
Calibration method [Correct application of assumptions]	Calculation of cost assumptions (capex)	Capex figures were based on a single location within the region, whereas capex values can differ by up to 5% depending on its location.	Low

4 Phase 2: Form and level of market price settings

4.1 Outline of methodology

Phase 1 establishes the optimal reliability standard. Phase 2 concerns the setting of the market price cap and cumulative price threshold to incentivise a new entrant to achieve that standard. The market price cap and cumulative price threshold must be set at levels sufficient to enable cost recovery, taking risk into account, while remaining as low as possible to align with the broader least cost national energy objectives.

Phase 2 comprises several elements. A key finding of the 2022 RSSR was that the market price cap and cumulative price threshold can be adjusted in tandem to achieve cost recovery outcomes. In effect, there is a frontier or curve that represents all feasible combinations of these parameters.

In addition to price settings, Phase 2 draws on the modelling undertaken in Phase 1, including the dispatch of reliability new entrants to determine the capacity required to meet a specified reliability level. An overview of the Phase 2 modelling is Figure 6 below. A comparison to the 2022 RSSR methodology is provided in Table 15, and the underlying principles of determining the optimal price settings remain the same.

Figure 6 Overview of Phase 2 methodology

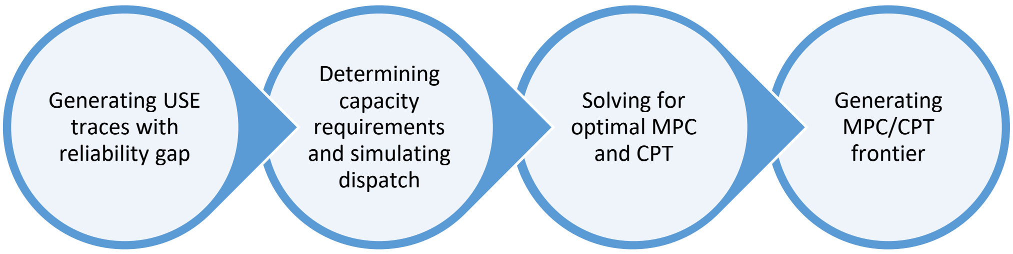


Table 15 Phase 2 methodology comparison

Step	AEMC 2026 RSSR	IES 2022 RSSR	Implications, if any
Region coverage	All NEM states, excluding TAS	NSW and VIC only. Project scope only focused on regions exhibiting potential reliability gaps.[8]	AEMC's coverage provides more robust outcomes and implications of the current form of the reliability price settings given the issue raised in the AEMC Report.[9]
Setting reliability gap assumption[10]	Set to 0.001%, i.e., the reliability new entrant addresses a system USE	This was set to 0.0005% for NSW, but 0.001% for VIC due to the underlying issue	All else being equal, a smaller reliability gap addressed by the new

[8] Based on ESOO 2022.
[9] Question 5. How should the Panel meet the varying needs of different regions through the MPC and CPT?
[10] This is reported as a modelling limitation in the AEMC Report.

Step	AEMC 2026 RSSR	IES 2022 RSSR	Implications, if any
	state at 0.003% to 0.002% (targeted reliability standard)	relating to varying region sizes and uniform market price settings. *"The reliability standard expressed as a percentage of regional demand is inherent more costly to address in smaller regions."* [11]	entrant will result in a much higher MPC/CPT combination due to lower utilisation. Given higher OCGT costs, lower VCR and the findings from Phase 1, setting a lower reliability gap would exacerbate differences in the required MPC/CPT.
Reliability new entrant types	OCGT (large and small), and BESS (2 and 4 hour)	OCGT (large and small), BESS (2 and 4 hour), and DSP	DSP was included with OCGT in the 2022 RSSR which had the effect of reducing the required MPC/CPT settings.[12] DSP was considered highly contextual and was considered out of scope in the 2026 RSSR.
Creating traces with targeted reliability gap to calculate market settings for marginal new entry	AEMC generated the reliability gap by applying out-of-simulation adjustments to the baseline USE profiles at different reliability levels. The price settings corresponding to a 0.002% USE standard are designed to produce an underlying USE level of 0.003%, with the marginal new entrant responsible for reducing USE from 0.003% to 0.002%	PLEXOS simulation to achieve a baseline reliability of 0.0025% with the targeted gap of 0.0005% to be met by marginal new entry.[13]	Baseline USE traces generated from PLEXOS allowed IES to use the underlying spot prices preceding USE events to determine the CPT. However, achieving simulated outcomes that aligned with the actual targeted reliability gap without extensive re-runs was largely fortuitous. The method adopted by the AEMC is more pragmatic and robust, although it requires additional assumptions regarding spot prices leading up to USE events.
Determining capacity requirements and simulating dispatch	The capacity requirements to achieve the targeted reliability standard	Developed dispatch logic as part of the Phase 2 optimisation model, as	The underlying approach is the same, with some differences in the application of derating

[11] Intelligent Energy Systems, *Reliability Standard and Settings Review 2022 – Modelling Report*, August 2022, Section 12, p. 124.
[12] DSP assumptions used in the 2022 RSSR were also highly uncertain, and generally optimistic.
[13] The VIC USE trace was subsequently post-processed targeting a reliability gap of 0.001% given interim findings showing MPC levels at levels similar or higher than the VCR in the 2022 RSSR modelling.

Step	AEMC 2026 RSSR	IES 2022 RSSR	Implications, if any
	leverages the modelling from Phase 1.	Phase 1 was solely simulated in PLEXOS.	assumptions. Refer to Section 4.2.2.
Solving for optimal MPC and CPT	Grid search algorithm by fixing the MPC and then looking for the lowest possible CPT where the marginal new entrant is revenue sufficient. Tolerances are included to speed up solve times.	Similar to AEMC, however, the logic employed was to start at a very high CPT level, then gradually step down in small $5,000 increments until net revenues transitions from positive to negative.[14]	The method is similar, however, there are potential differences owing to tolerances used in AEMC's solve logic. Refer to Section 4.2.3.
Generating MPC/CPT frontiers	The solve for MPC and CPT combinations is repeated for different MPC values within the range of considered values to generate the frontier of MPC/CPT combinations.	Same as 2026 RSSR.	No implications.

4.2 Review steps

4.2.1 Generating USE traces

This step involves post-processing the starting USE baseline trace (out of PLEXOS) from Phase 1 by adding new entrant capacity until the USE trace reaches the targeted reliability gap. This step leverages the modelling in Phase 1, with the exception that capacity increments are considered continuous to ensure the USE traces meet the targeted reliability gap. No issues were identified for this step.

Table 16 Phase 2: Generating USE traces

Area	Process or calculation	Description of finding	Rating
Data integrity	The data inputs to Phase 2 should be consistent with those used in Phase 1	The baseline USE used in generating USE traces are the same as Phase 1.	N/A
Methodology	Generating the USE traces for each reliability level from the baseline USE profiles for each region.	Because the AEMC's method relies on post-processing rather than re-running PLEXOS for each reliability level, its accuracy depends on the robustness of the USE adjustment methodology. IES reviewed this process and found it reasonable, noting that the AEMC undertook calibration exercises	N/A

[14] The CPT corresponding to the first net negative amount is returned. Given the small CPT step used, taking the CPT value either side of zero would effectively be the same.

Area	Process or calculation	Description of finding	Rating
		comparing the post-processed USE reductions with full PLEXOS simulations. The calibration results supported the validity of the AEMC's approach, and IES is satisfied that the methodology is appropriate.[15]	

4.2.2 Capacity requirements and dispatch

This step determines the capacity needed to close the reliability gap for each type of reliability new entrant in each region. The required capacity depends on the underlying technical parameters, so the generation dispatch must be accurately modelled. For battery energy storage systems, for example, both the battery duration and the length of the USE event are key factors in establishing the necessary capacity.

Table 17 Phase 2: Capacity requirements and dispatch

Area	Process or calculation	Description of finding	Rating
Correct application of assumptions	Determination of OCGT capacity ignores de-ratings such as planned outage, forced outage, and seasonal ratings. The seasonal de-rating for a large OCGT is 7.8% in summer, 1.5% in winter, and 2% if forced outages were also applied.	This has a larger impact in Phase 2 than Phase 1, as the treatment of capacity requirements assumes continuous (partial) new entry. In the case of NSW, where most of the USE occurs in summer, the application of seasonal deratings would increase the capacity requirement by approx. 7.5%, which translates to higher reliability revenues to achieve cost recovery.[16]	Fixed [Medium].
Calculation Accuracy	The charging of BESS accounts for available resources.	BESS is assumed to be able to charge at maximum load capacity during non-USE intervals during USE events irrespective of actual available system capacity.	Opportunity for Improvement. The new entrant battery is generally small in size, however, spare capacity for charging during USE events is expected to also be tight.

[15] Issues around derating do not impact this step. Refer to Section 4.2.2.
[16] The non-reliability revenues would also increase with the increased capacity; however, the net effect still results in a higher MPC/CPT combination.

Area	Process or calculation	Description of finding	Rating
Calculation Accuracy	The dispatch of BESS accounts for physical or technical limitations.	The BESS assumes a more conservative assumption of entering all USE events at only 80% state of charge.	N/A

4.2.3 Solving for MPC and CPT

Once dispatch and capacity requirements are determined from the previous step, the fixed and variable costs are known. For the reliability new entrant to be developed, these costs must be recovered. The new entrant is assumed to earn revenue outside USE periods, leaving a residual cost that must be recovered through the MPC, subject to the CPT (and APC), across all modelled USE traces.

A MPC/CPT combination set above the level required to meet the reliability standard increases end-user costs and leads to over-recovery, which is inefficient. Conversely, a MPC/CPT combination set below the level required results in under-recovery, failing to provide sufficient incentives for new entrant development and thereby compromising reliability. A high MPC/CPT combination that is appropriately calibrated to meet (but not exceed) the reliability standard does not imply over-recovery. This step therefore aims to determine the MPC/CPT combination that is just sufficient to meet the reliability standard, balancing cost recovery for new entrants with minimisation of end-user costs.

Comparisons of outcomes between the outputs from the AEMC Report and independent calculations are shown in Section 4.2.5.

Table 18 Phase 2: Solving for MPC and CPT

Area	Process or calculation	Description of finding	Rating
Reported limitations	*Spot prices around unserved energy events influence outcomes as they are included in the calculation of cumulative prices that affect when the CPT is triggered. We assume a flat price of $150/MWh in the week receding USE events in all regions, rather than model spot prices explicitly.*	This assumption is needed as spot prices for all periods other than the USE periods are also not known due to the calibration method (i.e., not simulated in PLEXOS). However, the price adjustment for periods with no unserved energy could be set to $300 where the modelled prices exceeded $10,000.	Low.
Calculation Accuracy	The calibration approach adds capacity back into the model outside the simulation runs. As a result, spot prices are also modified for periods that have unserved energy in the original simulation but	Prices are set to $300 where there was unserved energy in the base USE starting point, but no USE in the calibrated USE results.	N/A

Area	Process or calculation	Description of finding	Rating
	not in the calibrated results. For these periods, a flat spot price of $300 is assumed.		
Calculation Accuracy	Application of Administered Price Period	When an interval exceeds the Cumulative Price Threshold, the Administered Price Period should apply to the entire trading day. Currently, it is being applied at the interval level.	Opportunities for improvement
Calculation Accuracy	Application of Administered Price Cap	When the CPT is triggered, all prices have been set to the APC rather than the minimum of the APC and underlying spot price	Fixed [Low]
Sensitivity or assumptions testing	Setting and testing of the non-reliability revenues assumption	The sensitivity testing, showing the amount of non-reliability revenues needed to be earnt by a BESS (4-hr) was used to test whether or not the proposed MPC ranges were sufficient to incentivise investment. The analysis, however, was based on addressing a reliability gap of 0.0004%, rather than 0.001% used in the MPC/CPT determination.	Opportunity for Improvement. BESS as shown in the Phase 1 work was a significantly higher cost option to address the reliability gap, and therefore does not set the MPC/CPT.
Reported Limitations	Setting and testing of the non-reliability revenues assumption *Revenues outside unserved energy periods* *are very difficult to forecast, so we use a* *default figure of $50k/MW/year for OCGT.*	The 2026 RSSR adopted the same non-reliability revenue assumption for OCGT as the 2022 RSSR with adjustments for CPI. This has a material impact on the required MPC/CPT combination. The AEMC Report presents historical analysis of OCGT revenues which, while highly variable and different across regions, highlights the challenges in setting this assumption. Nonetheless, the $50,000/MW/year assumption is not unreasonable.	Opportunity for Improvement. The materiality would be Medium but requires significant effort to provide forward looking estimates.]

4.2.4 Generating MPC/CPT frontier

The previous step was concerned with generating a single MPC/CPT combination meeting cost recovery and minimisation of end-user cost objectives. The Reliability Panel and AEMC must consider all possible combinations, which is described across the MPC/CPT frontier. The frontier is essentially the derivation of the minimum viable CPT across all MPC levels. There are combinations or ranges of the MPC/CPT under which the cost recovery objective is not satisfied, effectively establishing the lower bound for the MPC. The frontier stops at around $45,000/MWh as the MPC cannot be set above the VCR. Comparisons of outcomes between the outputs from the AEMC Report and independent calculations are shown in Section 4.2.5.

Table 19 Phase 2: Generating MPC/CPT frontier

Area	Process or calculation	Description of finding	Rating
Calculation Accuracy	Plotting the MPC/CPT frontier	The frontier curve looks reasonable with decreasing CPT for higher MPC. There are instances where an increase in MPC leads to earlier CPT triggers and requires a higher CPT to achieve cost recovery, particularly at higher MPC levels. This is not shown in the AEMC Report outputs but is considered not material.	N/A
Calculation Accuracy	Solving for MPC and CPT	The number of marginal units required to meet the reliability standard is rounded to two decimal places which can translate to small differences (<1%) compared to the unrounded result.[17].	Low
Calculation Accuracy	Solving for MPC and CPT	On review of the outputs and code, the grid search of the MPC and CPT stops once it reaches defined tolerances (iterations and revenue target). This can potentially understate/overstate the CPT outcomes.[18]	Low
Sensitivity or assumptions testing	Solving MPC and CPT for different levels of reliability	IES calculations generally line up to the MPC/CPT values provided in the AEMC report for 0.002% and 0.003%,	N/A. The additional sensitivities relating to reliability levels better informs all stakeholders of

[17] For instances where the number of units needed is less than 1.

[18] The difference between 5% under-recovery and full recovery of cost can result in more than a 5% difference in MPC based on IES testing.

Area	Process or calculation	Description of finding	Rating
		subject to the findings covered in Section 4.2.3.	implications across regions, and broader considerations relating to the setting of the reliability standard as part of Phase 1.

4.2.5 Drivers and reasonableness of results

The overall MPC/CPT outcomes presented in the AEMC Report, consistent with Phase 1, indicate a higher MPC across all regions for a given CPT to achieve a 0.002% reliability standard, with OCGT identified as the preferred reliability new entrant.[19] BESS remains relatively uncompetitive as a reliability new entrant, given the uncertainties associated with the underlying modelling and the marginal unit's low capacity factor.

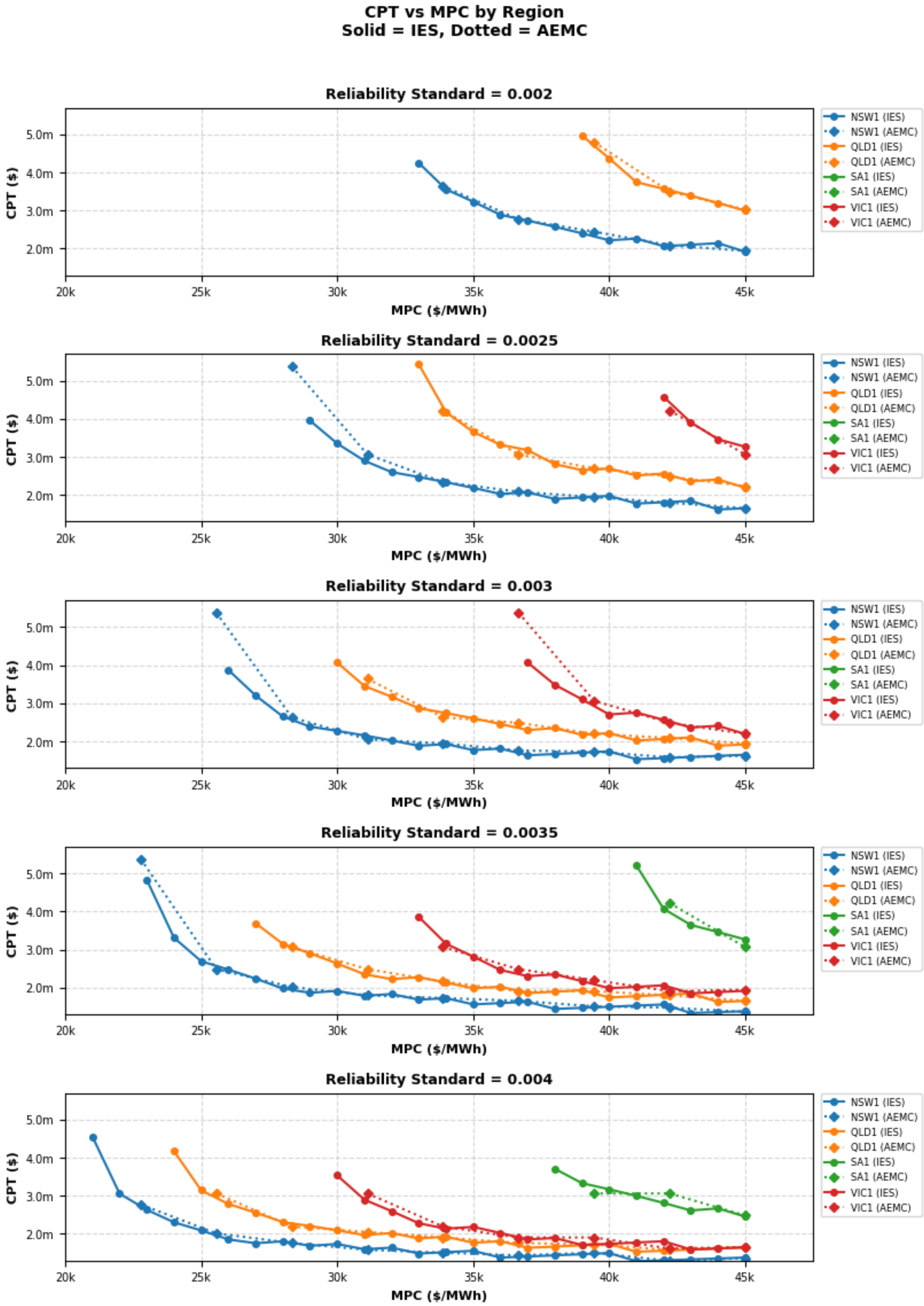
The upward shift in required price settings is primarily driven by higher capex costs. Figure 7 compares the MPC/CPT frontier based on a large OCGT meeting different reliability standards. The dotted lines represent AEMC's MPC and CPT frontier in comparison to IES' frontier in solid lines. There are minor differences between the two curves as a result of the following:

- Phase 2 assumes a continuous level of marginal new entry to meet the reliability standard, whereas Phase 1 assumes a fixed number of discrete units. As part of the Phase 2 calculations, the number of new entrants was rounded to two decimal places. IES did not apply rounding to the number of new entrants in its calculations.
- The tolerance applied in the AEMC grid search for the MPC and CPT allows for negative net revenues, whereas IES assumed that net revenues must be the smallest positive value identified in the grid search.

These differences result in only small deviations in the MPC/CPT frontier and do not materially affect the overall conclusions regarding the appropriate level or form of the market price settings. Accordingly, these matters are assessed as low materiality and are best characterised as an opportunity for improvement, rather than a material modelling concern.

[19] Only NSW and VIC were covered in the 2022 RSSR.

Figure 7 Phase 2: Comparison of frontier outputs



4.3 Key findings

We acknowledge that the Phase 2 modelling has been iterated and updated to address errors and concerns throughout the process. No further concerns with the modelling are anticipated, and we can conclude that the MPC/CPT modelling is robust and reliable, providing a sound basis for setting the MPC and CPT. The methodology has been carefully applied, incorporates relevant technical and economic parameters, and aligns with the previous 2022 RSSR methodology, giving confidence that the outcomes accurately reflect the requirements.

Table 20 Outstanding areas to address (medium or higher risk rating)

Area	Process or calculation	Description of finding	Rating
None			

Table 21 Low Risk Rating or Opportunities for Improvement

Area	Process or calculation	Description of finding	Rating
Calculation Accuracy	Solving for MPC and CPT	The number of marginal units required to meet the reliability standard is rounded to two decimal places instead of allowing for continuous new entry.	Low
Calculation Accuracy	Solving for MPC and CPT	On review of the outputs and code, the grid search of the MPC and CPT stops once it reaches defined tolerances (iterations and revenue target). This can potentially understate/overstate the CPT outcomes.[20]	Low
Capacity requirements and dispatch [Calculation Accuracy]	The charging of BESS accounts for available resources.	BESS is assumed to be able to charge at maximum load capacity during non-USE intervals during USE events irrespective of actual available system capacity.	Opportunity for Improvement. The new entrant battery is generally small in size, however, spare capacity for charging during USE events is expected to also be tight.
Solving for MPC and CPT [Reported limitations]	*Spot prices around unserved energy events influence outcomes as they are included in the calculation of cumulative prices that affect when the CPT is triggered. We assume a flat price of $150/MWh in the week*	This assumption is needed as spot prices for all periods other than the USE periods are also not known due to the calibration method (i.e., not simulated in PLEXOS).	Low.

[20] The difference between 5% under-recovery and full recovery of cost can result in more than a 5% difference in MPC based on IES testing.

Area	Process or calculation	Description of finding	Rating
	receding USE events in all regions, rather than model spot prices explicitly.	However, the price adjustment for periods with no unserved energy could be set to $300 in some instances.	
Solving for MPC and CPT [Calculation Accuracy]	Application of Administered Price Period	When an interval exceeds the Cumulative Price Threshold, the Administered Price Period should apply to the entire trading day. Currently, it is being applied at the interval level.	Opportunities for improvement
Solving for MPC and CPT [Sensitivity or assumptions testing]	Setting and testing of the non-reliability revenues assumption	The sensitivity testing, showing the amount of non-reliability revenues needed to be earnt by a BESS (4-hr) was used to test whether or not the proposed MPC ranges were sufficient to incentivise investment. The analysis, however, was based on addressing a reliability gap of 0.0004%, rather than 0.001% used in the MPC/CPT determination.	Opportunity for Improvement. BESS as shown in the Phase 1 work was a significantly higher cost option to address the reliability gap, and therefore does not set the MPC/CPT.
Solving for MPC and CPT [Reported Limitations]	Setting and testing of the non-reliability revenues assumption *Revenues outside unserved energy periods* *are very difficult to forecast, so we use a* *default figure of $50k/MW/year for OCGT.*	The 2026 RSSR adopted the same non-reliability revenue assumption for OCGT as the 2022 RSSR with adjustments for CPI. This has a material impact on the required MPC/CPT combination. The AEMC Report presents historical analysis of OCGT revenues which, while highly variable and different across regions, highlights the challenges in setting this assumption. Nonetheless, the $50,000/MW/year assumption is not unreasonable.	Opportunity for Improvement. The materiality would be Medium but requires significant effort to provide forward looking estimates.

5 Conclusion

Based on our review across all assessed areas, we conclude that the modelling is robust and reliable, and provides a sound basis for determining the efficient level of the reliability standard and the corresponding MPC/CPT. The methodology has been carefully applied, incorporating relevant technical and economic parameters, and aligns closely with the 2022 RSSR approach. The main difference from the 2022 RSSR modelling is adopting a more pragmatic approach by reducing reliance on simulating outcomes solely from PLEXOS, which is time- and cost-intensive. This change allows the RSSR review to cover additional regions and sensitivities, which, in our view, is more important to address, providing greater confidence that the outcomes accurately reflect the requirements and fit for purpose across the NEM.

A high-level assessment of the review areas is summarised in Table 22, with outstanding areas to address outlined in Table 23. Overall, the review confirms that the 2026 RSSR modelling is of high quality, fit for purpose, and provides a reliable foundation for informing decisions regarding the efficient reliability standard and associated market settings.

Table 24 lists recommendations for improvements to be considered for subsequent reviews.

Table 22 QA summary

Area	Overall assessment
Model structure and methodology	The modelling approach is appropriate for addressing the relevant questions, scope of coverage and is consistent with the core 2022 RSSR modelling approach.
Data integrity	Input datasets were complete, consistent, accurate, and appropriate for the analysis.
Correct application of assumptions	Assumptions were applied consistently and in accordance with the established methodology; this was achieved after concerns and errors were promptly addressed.
Calculation accuracy	Formulas, model logic, and computational outputs were verified and found to be correct after modelling revisions throughout the process.
Reasonableness of judgements	Model-based judgements were reasonable, transparent, and aligned with supporting analysis.
Sensitivity or assumptions testing	Key sensitivities were adequately tested, ensuring that outcomes are robust to reasonable variations in assumptions. Running Phase 2 reliability standard sensitivities is also an improvement over the limited output set from 2022 RSSR.
Reported limitations	Any limitations of the modelling were clearly reported and are reasonable in the context of the review.

Table 23 Outstanding areas to address (medium or higher risk rating)

Area	Process or calculation	Description of finding	Rating
None			

Table 24 Opportunities for Improvement

Area	Process or calculation	Description of finding	Rating
Phase 1: Generating base USE starting point [Model structure and methodology]	Random Number Seeds are consistent	There are two different random number seeds used which impact the forced outage schedules. This does not materially affect the results as all outage patterns are equally possible. However, it does create difficulty in the comparing USE drivers across weather reference years.	Opportunity for Improvement
Phase 1: Optimal level of reliability [Reported limitations]	The modelling framework only considers total incremental system costs. The calibration method assumes all existing generation, and associated costs remain the same and can therefore only focus on the incremental system cost with each add	This is reasonable for the added OCGT units which are dispatched during reliability events. BESS, however, would be expected to operate throughout the year displacing higher cost generation and provide additional benefits outside of reliability events. The calibration method allows for estimations of additional BESS benefits but was ultimately not used due to difficulties in calibrating and testing the parameters.	Opportunity for Improvement. The reliability and cost curve for BESS sits significantly above OCGT in this review, however, is likely to converge towards OCGT levels in future reviews.
Phase 2: Capacity requirements and dispatch [Calculation Accuracy]	The charging of BESS accounts for available resources.	BESS is assumed to be able to charge at maximum load capacity during non-USE intervals during USE events irrespective of actual available system capacity.	Opportunity for Improvement. The new entrant battery is generally small in size, however, spare capacity for charging during USE events is expected to also be tight.
Phase 2: Solving for MPC and CPT [Calculation Accuracy]	Application of Administered Price Period	When an interval exceeds the Cumulative Price Threshold, the Administered Price Period should apply to the entire trading day. Currently, it is being applied at the interval level.	Opportunities for improvement

Area	Process or calculation	Description of finding	Rating
Phase 2: Solving for MPC and CPT [Sensitivity or assumptions testing]	Setting and testing of the non-reliability revenues assumption	The sensitivity testing, showing the amount of non-reliability revenues needed to be earnt by a BESS (4-hr) was used to test whether or not the proposed MPC ranges were sufficient to incentivise investment. The analysis, however, was based on addressing a reliability gap of 0.0004%, rather than 0.001% used in the MPC/CPT determination.	Opportunity for Improvement. BESS as shown in the Phase 1 work was a significantly higher cost option to address the reliability gap, and therefore does not set the MPC/CPT.
Phase 2: Solving for MPC and CPT [Reported Limitations]	Setting and testing of the non-reliability revenues assumption *Revenues outside unserved energy periods are very difficult to forecast, so we use a default figure of $50k/MW/year for OCGT.*	The 2026 RSSR adopted the same non-reliability revenue assumption for OCGT as the 2022 RSSR with adjustments for CPI. This has a material impact on the required MPC/CPT combination. The AEMC Report presents historical analysis of OCGT revenues which, while highly variable and different across regions, highlights the challenges in setting this assumption. Nonetheless, the $50,000/MW/year assumption is not unreasonable.	Opportunity for Improvement. The materiality would be Medium but requires significant effort to provide forward looking estimates.