Market Briefing Note

Financial Value and System Benefits assessment for Firming Projects in Tender Round 7

Introduction

This Market Briefing Note sets out information relating to the assessment of Merit Criterion 1 (MC1) – Financial Value and System Benefits in Tender Round 7 for firming infrastructure.

What you need to know when preparing your Bid

ASL (in its capacity as Consumer Trustee) is conducting NSW Tender 7 to address the forecast firm capacity shortfalls for the summer of 2027-28 against the Energy Security Target (**EST**).

MC1 assesses the costs and benefits of the Project associated with Bids for a Long-Term Energy Service Agreement (**LTESA**). The Bid Variables (**Bid Variables**) drive forecast costs and a Project's physical characteristics (**Project Parameters**) inform costs and benefits. The MC1 assessment uses financial value metrics (**Metrics**) for scoring Bids from high merit to low merit.

How are bids assessed – In the MC1 assessment, costs and benefits are considered across Reliability Contribution, Wholesale Market Benefits, Net LTESA Cost, System Strength and System Security Services (collectively '**Components**'). Three of these Components are then modelled across Scenarios: Reliability Contribution is modelled across Reliability Scenarios, and Wholesale Market Benefits and Net LTESA Cost are modelled across Electricity Market Scenarios (collectively '**Scenarios'**). These Scenario-weighted Components and the other Components are used to calculate Metrics for MC1 scoring.

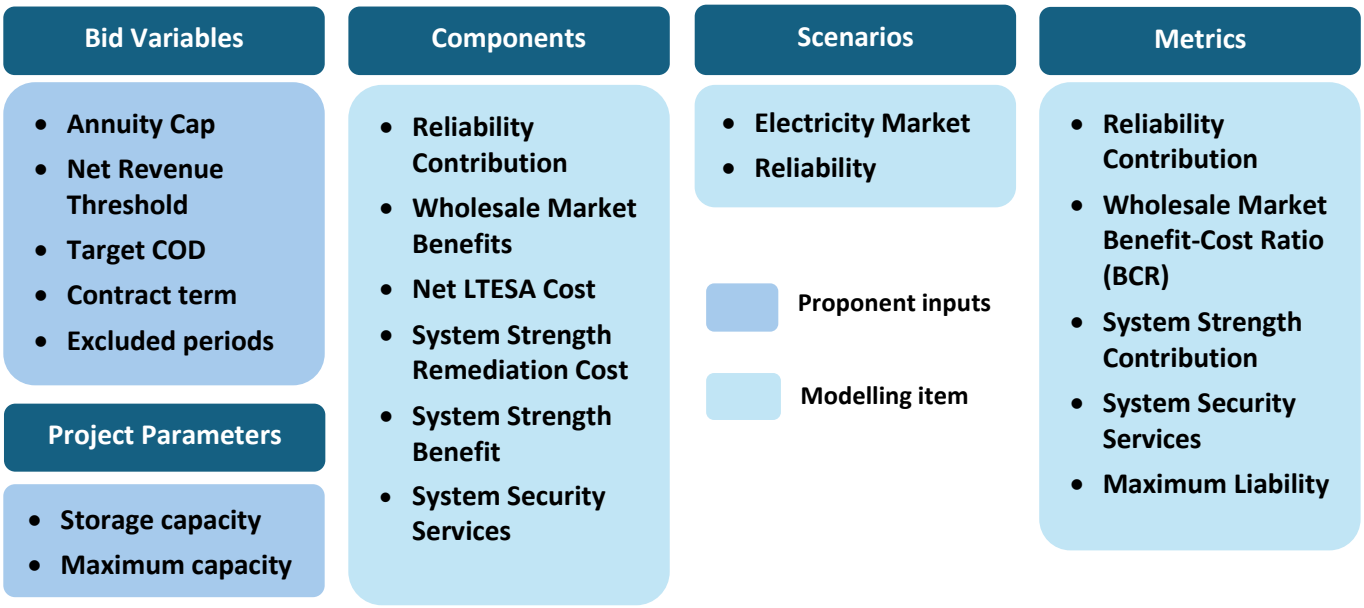
What makes a competitive Bid – A high contribution to reliability and reduction to wholesale market prices, providing system security benefits, and having low LTESA costs. A competitive Bid is expected to include low Annuity Caps (to reduce LTESA costs), being located in a strong part of the network (including having a high Locational Reliability Factors), earlier Commercial Operations Date (**COD**) and longer dispatch duration. Section 3 provides more detail on features of competitive Bids in MC1.

To have a Reliability Contribution and Wholesale Market Benefits, a Project will need to meet the conditions of contribution towards EST ("**Contribution Towards EST**") as outlined in Section 2.1.

What to provide – Proponents are required to complete the MC1 Returnable Schedule with Bid Variables and Project Parameters. Proponents should focus on providing a competitive set of Bid Variables to achieve the lowest Net LTESA Cost relative to the Project's benefits.

The figure below provides an overview of the MC1 process.

Figure 1: MC1 assessment approach overview



Please note, the description of the financial value assessment in this Market Briefing is not an exhaustive or comprehensive summary of the assessment process. It is provided for information purposes only and is not intended as advice. Scoring against Merit Criteria is a key input considered by ASL. Under the *Electricity Infrastructure Investment Act 2020* (NSW) (**EII Act**) ASL may only recommend a Bid where it considers that the recommendation would be in the long-term financial interests of NSW electricity customers (having regard to the assessment as a whole), and the recommendation satisfies or is consistent with all relevant statutory requirements and duties. ASL retains discretion to score and assess Bids and make recommendations. It will not be held to a rigid assessment formula or policy. Nothing in this Market Briefing should be construed as binding on ASL or limiting its statutory discretion. To the extent of any inconsistency between this Market Briefing and the Tender Guidelines, the Tender Guidelines will prevail.

1. Purpose of this Document

This Market Briefing aims to help Proponents understand the assessment process for MC1. It provides an overview of factors expected to impact this assessment and provides examples of what was assessed as being competitive in previous Tender Rounds. This information is provided to support Proponents in preparing competitive Bids.

Competition and assessment methodologies evolve with each Tender Round and as such, examples of competitive Bid characteristics provided in this Market Briefing are provided for information purposes only and are not indicative of the characteristics that may constitute a winning Bid.

This Market Briefing refers to the Firming LTESA for Tender Round 7. Two types of Firming LTESA Product are available: the Firming Supply LTESA and Demand Response LTESA. Projects will be assessed against the same Components and Metrics in MC1 except where specified. Please refer to Section 2.1 of the Tender Guidelines for additional details.

In this Market Briefing:

- Section 2 provides an overview of the MC1 assessment process.
- Section 3 outlines the characteristics of high performing Bids in previous Tender rounds.
- Appendix provides further details on how the Components are calculated.

This Market Briefing should be read in its entirety. For information on submitting a Bid, please see the Tender Guidelines.

2. MC1 assessment overview

2.1 Objectives

The NSW Minister directed ASL, as the Consumer Trustee, to conduct a tender for 500 MW of firming capacity, targeting the forecast firm capacity shortfalls for the summer of 2027-28 against the Energy Security Target (**EST**).

ASL will make recommendations on Projects to receive an LTESA based on a combined evaluation against all Merit Criteria as detailed in the Tender Guidelines, with financial value being the primary consideration. Please refer to the Tender Guidelines for the consideration of the Infrastructure Investment Objectives (**IIOs**) for tender assessment.

To have a Contribution Towards EST, it is expected that a Project will need to meet the following conditions:

- not be classified as existing, committed or anticipated, as per the July 2025 AEMO Generation Information update;
- for Demand Response, not include Wholesale Demand Response Units that were registered with AEMO before 30 July 2025; and
- for Projects below 5 MW which are ordinarily not recorded as part of AEMO Generation Information, have not already reached Final Investment Decision by the end of July 2025.

The conditions listed above will be applied to Reliability Contribution and Wholesale Market Benefits such that Project's will not have a benefit against either Component unless they meet the conditions for Contribution Towards EST.

The MC1 assessment approach is designed to identify Projects that provide a high contribution to reliability and reduction to wholesale market prices, providing system security benefits, and have low LTESA costs.

All else being equal, competitive Bids in MC1 are expected to have competitive Bid Variables, commit to earlier CODs and be available to the market in-time to address the forecast shortfall in EST by 2027-28, be located in a strong network location (including in areas with relatively high Locational Reliability Factors in NSW in the near-term) and have longer storage durations.

Further information on what makes a competitive bid is provided in the sections below.

2.2 Components

Bids will be considered across a range of Components of benefits and costs in the assessment of MC1. A summary of these Components is provided in Table 1, Table 2 and Table 3 below.

Components are modelled using Bid Variables and Project Parameters submitted by Proponents through the Bid Form and MC1 Returnable Schedule. Refer to the Appendices for more information on the calculation of Components.

Components drive the Metrics used for scoring MC1, as outlined below and in Section 2.4.

Table 1: Project Benefits Components

Component	Summary
Reliability Contribution	• Forecasts a Project's potential to reduce unserved energy in NSW. • System reliability contribution assessment is based on modelling that draws on methodologies used in AEMO's Electricity Statement of Opportunities (**ESOO**). • Modelled across different time-horizons in Reliability Scenarios (see Section 2.3.2)

Wholesale Market Benefits	• Projects incentivised to enter the market through a Firming LTESA are expected to put downward pressure on wholesale electricity prices, reducing costs to NSW electricity customers. • Electricity market modelling is conducted to compare the wholesale price impact of the Project (**Project-Specific Case**) against baseline scenarios of the future without the Project (**Counterfactual Case**). • Modelled across several Electricity Market Scenarios (see Section 2.3.1).

Table 2: LTESA Cost Components

Component	Summary
Net LTESA Cost	• Estimated costs to the Scheme Financial Vehicle (**SFV**) which may be incurred under an LTESA. • Calculated with the Annuity Cap and Net Revenue Threshold of the Bid, and the forecast revenues of the Project considering its Project Parameters. • There are no costs in periods where proponents have excluded an LTESA option. • Modelled across several Electricity Market Scenarios (see Section 2.3.1).

Table 3: System Security Components

Component	Summary
System Strength Remediation Cost	• Estimated remediation cost of any general system strength impact in NSW, if applicable.
System Strength Benefits	• Estimated contribution to meet minimum fault level or achieve efficient levels of system strength in NSW.
System Security Services	• Assessment of Project's ability to provide system security services. • System security services include voltage management, frequency management, synchronous or synthetic inertia, and black start capability.

Demand Response

Demand Response will be assessed on the ability of the proposed portfolio of Wholesale Demand Response Units to provide a Reliability Contribution, Wholesale Market Benefits and provide any benefits to System Security (only where relevant). The Net LTESA Cost will also be considered. Proponents will need to provide further information that allows for Demand Response to be modelled, including maximum reduction periods and maximum number of reductions per year.

Aggregated Projects

For Aggregated Projects in this assessment, the component projects to be aggregated are expected to be modelled individually to best reflect features such as location. The Components (e.g. Reliability Contribution) will be calculated and assessed as the sum of the individual component projects for the Aggregated Project. Proponents will need to provide further information that allows for Aggregated Projects to be modelled, including the locations and configurations of the individual units to be aggregated.

Hybrid Projects

Projects that bid as an assessed Hybrid will be contractually committed to deliver both the firming and generation components under the PDA if awarded an LTESA. For these Projects, the MC1 assessment will consider the ability of firming and generation components to provide a Reliability Contribution, Wholesale Market Benefits and provide benefit to System Security in NSW. Net LTESA Cost will only consider the firming component in the calculation of Net LTESA Cost.

2.3 Scenario based analysis

Reliability Contribution, Wholesale Market Benefits and Net LTESA Cost are modelled across Scenarios to test for robustness of outcomes. Table 4 lists the Scenarios and the Components they apply to. Electricity Market Scenarios will be used to model Wholesale Market Benefits and Net LTESA Cost. Reliability Contribution uses a distinct modelling approach, with separate Reliability Scenarios reflecting reliability risks over different time-horizons.

Table 4: Scenarios used to assess the Components (a tick indicates that the Scenario applies to a related Component)

Scenarios		Components		
		Net LTESA Cost	Wholesale Market Benefits	Reliability Contribution
Electricity Market	Central	✓	✓	
	Low	✓	✓	
	High	✓	✓	
Reliability	Short-Term			✓
	Long-Term (Low VRE)			✓

2.3.1 Electricity Market Scenarios

Future electricity market prices are uncertain due to rapid changes underway in the National Electricity Market (**NEM**). Wholesale Market Benefits and Net LTESA Cost will be tested across Electricity Market Scenarios which represent a range of possible future market outcomes. This tests how Projects perform against multiple potential future pathways and helps to understand potential risks.

The Electricity Market Scenarios will consider a range of high and low average price and volatility. Competitive Bids are expected to have relatively high value to NSW electricity customers across the Electricity Market Scenarios.

Scenarios used in previous Tender Rounds have generally aligned with the narratives below:

- **Central Scenario:** Intended to represent the most likely future state, built on assumptions from the latest Input Assumptions and Scenarios Report by AEMO and the IIO Report by ASL but updated to reflect investor sentiment. This Scenario has previously considered delays to new generation development and possible delays to coal retirement.
- **Low Scenario:** A Scenario where market prices and volatility are low. This Scenario is driven by timely coal closures, low gas prices, low capex prices, timely transmission build and rapid renewable uptake. This Scenario expects lower Wholesale Market Benefits and higher Net LTESA Costs for Bids, compared with the Central Scenario.
- **High Scenario:** A scenario where there is high volatility through increased average volatility or extended duration of volatility events. This scenario is driven by high demand, high gas prices, early coal retirements, high demand growth, slow transmission build, slow renewable uptake and renewable energy droughts. This Scenario expects higher Wholesale Market Benefits and lower Net LTESA Cost for Bids, compared with the Central Scenario.

Weather variations impact both renewable generation output and consumer demand. Multiple historical reference years may be used to reduce the risk of basing the assessment on the weather patterns of a particular year.

A weighting is assigned to each Electricity Market Scenario based on relative importance for assessment. This can consider the Scenario's likelihood of occurrence (for example, a high weighting for the Central Scenario if it is considered the more likely) or risk-tolerance (for example, a high weighting on the Low Scenario to reflect preference for reducing Net LTESA Cost).

2.3.2 Reliability Scenarios

Reliability Contribution reflect a Project's ability to reduce unserved energy across different forecast horizons. Assumptions are generally based on analysis presented in AEMO's 2025 Enhanced Locational Information. The Reliability Scenarios are designed to reflect different horizons (stages) of the energy transition and aim to reward Projects that contribute the most to reducing system reliability risks.

The Reliability Scenarios are expected to consider the following narratives:

- **Near-Term**: Focus on near-term NSW reliability risks and a Project's ability to reduce these.
- **Long-Term (Low VRE)**: Focus on reliability risks in the longer-term horizon where coal thermal plants in NSW are retired and includes high levels of VRE. Focuses on a single historical weather year where low variable renewable energy (**VRE**) generation contributes most to unserved energy to consider its impact on Reliability Contribution.

It is expected that as many as 14 historical weather reference years will be used for the modelling of Short-Term. Only a single reference year will be considered in Long-Term (Low VRE).

In line with the tender objectives outlined in Section 2.1, the focus of the reliability contribution assessment will be the near-term. The Long-Term (Low VRE) scenario is designed to meet the updated requirements introduced in May 2025 under *Electricity Infrastructure Investment Amendment Regulation 2025*.

2.4 Metrics

The information in Components is translated into Metrics used for scoring. Metrics that are expected to inform scoring are outlined in the tables below. BCR and Reliability Contribution are expected to be the primary Metrics for MC1 scoring, supported by System Strength, System Security Services and Maximum Liability. Projects are expected to need to perform competitively across multiple Metrics to achieve a high score in MC1.

Table 5: Components for MC1 assessment

Components	Unit	Description	Direction of preference
Reliability Contribution	%, contribution	A Firmness Factor which reflects a Project's potential to reduce modelled unserved energy.	▲
Wholesale Market Benefits	$, net present value	Reduction in wholesale electricity market costs of meeting NSW demand.	▲
Net LTESA Cost	$, net present value	Forecast costs to the SFV which may be incurred under an LTESA.	▼
System Strength Remediation Cost	$ per MVA per year	Calculates the Project's remediation cost for its impact to system strength.	▼
System Strength Benefit	$ per MVA per year	A Project's potential fault current contribution and effectiveness across NSW system strength nodes.	▲
System Security Services	Number of services	Project's ability to provide essential system security services.	▲

Table 6: Metrics for MC1 assessment

Key Metrics	Unit	Description	Direction of preference
Reliability Contribution	%, contribution	A Firmness Factor which reflects a Project's potential to reduce modelled unserved energy.	▲
BCR	$/$	Calculated by dividing the scenario-weighted Wholesale Market Benefits by scenario-weighted Net LTESA Cost.	▲
System Strength Contribution	$ per MVA per year	Calculated by subtracting System Strength Costs from System Strength Benefits.	▲
System Security Services	Number of services	Projects are assessed on their capability to provide power system security benefits including voltage and frequency management, synchronous or synthetic inertia, and black start capability.	▲
Maximum Liability	$	Total potential cost to the SFV, calculated by assuming the Project earns zero Net Operational Revenue and is paid the full Annuity Cap for the contract term of the LTESA. This is not dependent on Scenarios.	▼

Components and Metrics may be considered on an absolute or a per unit (i.e. per MW or per MWh) basis. Further Metrics than those listed above may also be considered, or a combination of the Metrics above, where they are developed to assess the benefits, cost and financial risks of Bids. These additional Metrics may be less aggregated (e.g. per Scenario, or Scenario-weighted) and may be based on one or several of the Components identified.

A higher administrative cost per LTESA for smaller Projects may also be considered under financial value.

3. Characteristics of high performing Bids in previous Tender Round

Bids should be tailored to the Proponent's needs while minimising costs to NSW electricity customers. There is significant flexibility available in how a Bid for a Firming LTESA can be structured to allow it to balance providing necessary support to Proponents and also reducing Net LTESA Costs. Proponents are encouraged to use this flexibility across their Default and Alternative Bids.

This section draws on insights into the factors that made LTESA Bids competitive in previous tenders and is informed by previous Market Briefing Notes. Please refer to these documents for further information.

Table 7: Characteristics of high performing Bids in the LTESA assessment from previous tender rounds

	Key	Outcomes
Financial	**Net LTESA Cost**	A low Net LTESA Cost is critical for Bid success. The following features have previously been assessed favourably as they help lower Net LTESA Cost: • Low Bid Prices (in particular, a low Annuity Cap). • Reduced contract terms or excluding multiple Annuity Periods. All else being equal, these features are expected to reduce both cost and risk to the SFV on behalf of NSW electricity customers.
	Bid Prices	While both low Annuity Caps and Net Revenue Thresholds contribute to competitiveness, the Annuity Cap has a greater influence on financial value assessment outcomes. Bidders often set Annuity Caps below their Net Revenue Thresholds, indicating they are accepting some market revenue risk and not relying on the LTESA to fully cover their investment costs. This approach helps reduce Net LTESA Cost and Maximum Liability.
	Maximum Liability	Projects were more competitive if they had a competitively low Maximum Liability. Annuity Cap is the key driver for minimising Maximum Liability. Bids could also reduce their Maximum Liability by reducing their Contract Term or by excluding several Annuity Periods.
Physical	**Network location**	Connecting to strong parts of the NSW electricity network is critical to providing high Reliability Contribution, a key driver in delivering Wholesale Market Benefits, and is likely to allow for a higher contribution to System Strength. Stronger parts of the network are better able to transfer a Project's power to load centres during times of highest need.
	Dispatch duration	Projects with a dispatch duration above 2 hours have been assessed favourably, as the additional dispatch, which is often through more storage capacity, is assessed to lead to higher absolute Reliability Contribution and Wholesale Market Benefits, all else being equal.
	COD	An earlier COD has been assessed favourably where it allowed the Project to capture more market opportunities arising from early wholesale market volatility and fewer competing projects. This led to higher forecast Net Operational Revenues in earlier years which can put downward pressure on Net LTESA Costs. Earlier CODs can also increase Wholesale Market Benefits where the Project provides nearer-term wholesale price suppression.
	Technology	All else equal, the following technology-specific parameters would increase Wholesale Market Benefits and maximise System Strength Contribution: • Technologies with longer asset lives would be more competitive, all else equal, as they can earn Wholesale Market Benefits over a longer period. • Technologies with a lower Withstand Short Circuit Ratio (**WSCR**) and higher fault current contribution, potentially enabled by grid-forming capabilities, could be more competitive as they can minimise System Strength Remediation Cost while maximising System Strength Benefits.

Appendix A: Further details on Net LTESA Cost and Maximum Liability

A1. Net LTESA Cost

The Net LTESA Cost is the forecast costs to the SFV which may be incurred under an LTESA. This is calculated using the Bid Variables and forecasts of the Project's Net Operational Revenues under different scenarios. The Project's dispatch duration, network location and load potential are considered in forecasting Net Operational Revenue. There are no forecast costs during excluded periods or after the LTESA contract term.

Competition in the process is expected to require Bid Prices to be set competitively low to demonstrate high Financial Value in MC1

The Annuity Cap and Net Revenue Threshold (collectively **Bid Prices**) are expected to be set to reflect a Project's potential Net Operational Revenues and the residual funding gap. The Bid Prices and other Bid Variables are determinants of a Bid's Financial Value. The Annuity Cap sets an upper bound on annual LTESA payments from the SFV to the project and has a high impact on Net LTESA Costs. Projects with a lower Annuity Cap are likely to have lower costs to the SFV and NSW electricity customers. The Net Revenue Threshold, on the other hand, is a threshold of Net Operational Revenues, below which the SFV is expected to make a payment to the Project[1].

Bid Prices may not be immediately comparable across Projects. Projects with higher capacity and longer duration may naturally have higher Bid Prices but these can be offset by higher revenue potential which put downward pressure on Net LTESA Cost, or more broadly through higher Wholesale Market Benefits and Reliability Contribution.

Net LTESA Cost is driven by the forecast Net Operational Revenue of a Project

For MC1, Net Operational Revenues are modelled as the sum of Potential Energy Arbitrage Revenues (**PEAR**) and Frequency Control Ancillary Services Market Revenues (**FCAS**). These can take a range of values across the modelled scenarios. These Components are brought together in the formulae below and used to estimate Net LTESA Costs.

$$Net\ Operational\ Revenue = MerchantRevenues_{PEAR} + MerchantRevenues_{FCAS}$$

Where:

- *Net Operational Revenue* is the estimated Net Operational Revenue for the Project in a given year.
- $MerchantRevenues_{PEAR}$ is the estimate of Potential Energy Arbitrage Revenues for the Project assuming it operates in a way that maximises energy arbitrage revenue in the wholesale energy market. This may capture additional value to Projects with higher durations as the additional dispatch periods may be used to earn higher arbitrage revenues.
- $MerchantRevenues_{FCAS}$ is the estimate of FCAS market revenues.

[1] Revenues above the Net Revenue Threshold may be shared between the Project and SFV. This is also intended to be reflected in the assessment.

The Net LTESA Cost calculation is designed to reflect the payment mechanics of the Firming LTESA structure

Net LTESA Cost is expected to reduce as Bid Prices reduce, rewarding competitive Bid Prices. A low Annuity Cap is expected to be more impactful on assessment as it becomes increasingly likely to bind and limit payments to the SFV. This can affect both the Net LTESA Cost and Maximum Liability.

$$Net\ LTESA\ Costs = Present\ Value\left(CostEstimate_{year} - RepayEstimate_{year}\right)$$

$$for\ all\ scenarios\ and\ over\ all\ support\ years$$

$$CostEstimate_{year} = \begin{cases} AC\ if\ NOR \leq NRT - AC \\ AC - 0.75\left(NOR - (NRT - AC)\right)\ if\ NRT - AC < NOR \leq NRT + \frac{AC}{3} \\ 0\ if\ NRT + \frac{AC}{3} < NOR \end{cases}$$

$$And\ if\ Historical\ Net\ Payment\ is\ non\text{-}zero,$$

$$RepayEstimate_{year} = \begin{cases} 0, & if\ NOR_{year} \leq NRT - AC \\ \frac{1}{8}(NOR - (NRT - AC)), & if\ NRT - AC < NOR \leq NRT + \frac{AC}{3} \\ \frac{1}{2}(NOR - NRT), & if\ NRT + \frac{AC}{3} < NOR \end{cases}$$

Where:

- AC is the Annuity Cap bid in a given year.
- NRT is the Net Revenue Threshold bid in a given year.
- *NOR* is Net Operational Revenue as previously defined.

If net revenues are below NRT minus AC, the LTES Operator receives the full AC. The Firming LTESA annuity payment is reduced by 75% of every additional dollar of revenues above NRT minus AC. This is reflected in the formula as the additional term $0.75 \times \left(NOR - (NRT - AC)\right)$. This adjustment ensures that the LTES Operator continues to be incentivised to earn market revenues by retaining some of the additional net revenues it earns. As a result, the point above which the annuity payment is equal to zero is slightly above the NRT, and is equal to $NRT + \frac{AC}{3}$.

A2. Maximum Liability

Maximum Liability represents the total potential cost to the SFV over the full LTESA term, calculated by assuming an extreme scenario where the Project earns no Net Operational Revenue and is paid the full Annuity Cap for the entire contract term. This Metric is scenario-independent and reflects the highest possible financial exposure for the SFV.

While both the Annuity Cap and Net Revenue Threshold influence a Bid's competitiveness, the Net Revenue Threshold does not affect the Maximum Liability calculation. Its impact is generally more significant in scenarios where the Project is forecast to earn high Net Operational Revenues. Projects with a competitively low Maximum Liability have been assessed favourably, as they present lower financial risk to the SFV.

Appendix B: Further details on Wholesale Market Benefits

B1. Wholesale Market Benefits

Wholesale Market Benefits are measured based on the difference in the cost of meeting NSW electricity demand (load cost) between a Project-Specific Case and Counterfactual Case. This is modelled across the Electricity Market Scenarios and weighted by their respective weightings. Any reduction in wholesale electricity market costs is attributed as a benefit of the Project. As such, Wholesale Market Benefits are expected to occur where a Project lowers load-weighted prices, for example, by reducing intra-day price spreads and volatility, or by improving supply adequacy and reducing curtailment of low-cost generators.

For an individual Electricity Market Scenario, both the Counterfactual Case (see ***ALC*** in the equation below) and the Project-Specific Case (see ***ALC'*** in the equation below) are based on the same forecast of market developments including NSW demand growth and wholesale spot prices. The only difference is that the Project-Specific Case includes the Project being assessed.

Projects are assumed to dispatch based on modelled price signals – charging any storage during low market price periods and dispatching when prices are high. A Hybrid Project with renewable energy generation could be assumed to dispatch its generated energy according to its generation profile, which may contribute to Wholesale Market Benefits. ASL may consider generation profiles provided by AEMO or its advisors for the assessment.

Wholesale Market Benefits are represented by the following calculation:

$$Wholesale\ Market\ Benefits = \sum_{s=1}^{n} W_s \times (ALC - ALC')$$

for the NSW region in the NEM, all Electricity Market Scenarios and over the Project's expected operational life

Where:

- W_s is the weighting of each modelled Electricity Market Scenario,
- *S* is a particular Electricity Market Scenario,
- *N* is the number of modelled Electricity Market Scenarios,
- *ALC* is the annual load cost in NSW in a scenario before the addition of the Project being assessed,
- *ALC'* is the annual load cost in NSW in a scenario after the addition of the Project being assessed.

While not explicitly shown, the summation in the above equation refers to the sum of discounted future cashflows to develop a present value.

B2. Reliability Contribution

Reliability Contribution considers a Project's ability to reduce potential unserved energy, and therefore reliability risks, in NSW. This contribution is calculated as the effectiveness of the Project in reducing modelled unserved energy, relative to an energy-unlimited hypothetical project optimally located for reliability in NSW.

Reliability modelling is conducted over the Reliability Scenarios using methods aligned with ESOO modelling and is expected to focus on near-term reliability risks in NSW.

Reliability Contribution for a Project measures the difference in modelled unserved energy between a Project-Specific Case and the Counterfactual Case for the Reliability Scenarios. A Project's Firmness Factor is calculated by comparing the Project's Reliability Contribution against that of an energy-unlimited hypothetical project optimally located for reliability in NSW.

A Project's Firmness Factor, as a percentage, is determined by multiplying the Project's maximum capacity with its Locational Reliability Factor (Table 1 in the Tender Guidelines) and its Storage Firmness Factor (Table 2 in the Tender Guidelines), and dividing the result by the Project's maximum capacity. Please refer to Section F of the Tender Guidelines for the detailed methodology to calculate a Project's Firmness Factor.

Appendix C: Further details on System Strength and System Security Services

C1. System Strength

System Strength considers a Project's ability to effectively provide fault level support and the cost of remediation for a Project's system strength impact on NSW. The System Strength Benefit of the Project considers the amount and effectiveness of fault current contribution that the Project may supply to NSW. The System Strength Remediation Cost of the Project considers the Project's locational factors with respect to system strength nodes, WSCR and System Strength Unit pricing.

C2. System Security Services

Projects capable of providing system security services will be assessed favourably in MC1. Projects will be assessed on their ability to provide the following essential system services:

- Voltage Management
- Synchronous or Synthetic Inertia
- Frequency Management
- Black Start Capability
- Other network services (e.g. System Integrity and Protection Scheme).

Appendix D: Glossary

Term	Definition
Aggregated Project	As defined in the Tender Guidelines.
Annuity Cap	Annuity Cap is a Bid Variable. It sets the maximum payment that may be paid by the SFV to the LTES Operator in a Financial Year of an Annuity Period.
Annuity Period	As defined in the Firming LTESA.
ASL	AusEnergy Services Limited ACN
BCR	Benefit-Cost Ratio. One of the Metrics used in the MC1 assessment. Calculated by dividing Wholesale Market Benefits by Net LTESA Costs (both scenario-weighted and discounted).
Bid	Bid submitted by Proponents in a Tender Round.
Bid Prices	Refers to Annuity Cap and Net Revenue Threshold.
Bid Variables	Nominated inputs from a Project in the MC1 Returnable Schedule. Includes Annuity Cap, Net Revenue Threshold, contract term, excluded periods and Target COD.
COD (or Target COD)	Target Commercial Operations Date. Target COD is a Bid Variable.
Components	As defined in the Introduction of this Market Briefing.
Consumer Trustee	As defined in the Tender Guidelines.
Contribution Towards EST	The conditions listed below are a subset of those listed in the Tender Guidelines. To have a contribution towards EST, it is expected that a Project will need to meet the following conditions: • not be classified as existing, committed or anticipated, as per the July 2025 AEMO Generation Information update; • for Demand Response, not include Wholesale Demand Response Units that were registered with AEMO before 30 July 2025; and • for Projects below 5 MW which are ordinarily not recorded as part of AEMO Generation Information, have not already reached Final Investment Decision by the end of July 2025. The conditions listed above will be applied to Reliability Contribution and Wholesale Market Benefits such that Project's won't provide a benefit against either Component unless they meet the conditions for Contribution Towards EST.
Counterfactual Case	The no-project, baseline case for calculating Components for Electricity Market Scenarios.
Demand Response	As defined in the Demand Response LTESA.
Electricity Market Scenarios	Scenarios used for Electricity Market modelling.
ESOO	AEMO's Electricity Statement of Opportunities.
EST	Energy Security Target.
FCAS	Frequency Control Ancillary Services.
Firmness Factor	The firmness of various technologies in meeting maximum demand, in MW.
Hybrid Project	Hybrid Projects are defined in the Tender Guidelines as co-located firming and generation assets, in which both assets share a common connection point.
IIO	Infrastructure Investment Objective.
Locational Reliability Factors	As defined in the Tender Guidelines.
LTESA (or Firming LTESA)	Long-Term Energy Service Agreement. There are two types of Firming LTESA available in this Tender Round; Firming Supply LTESA and Demand Response LTESA.
Maximum Liability	Equal to the sum of the full Annuity Cap being paid in every Annuity Period over the Contract Term.
MC	As defined in the Tender Guidelines.
MC1	Merit Criterion 1 - Financial Value and System Benefits.
Metrics	Metrics including Reliability Contribution, BCR, System Strength Contribution, System Security Services and Maximum Liability that are used to evaluate Projects.
NEM	National Electricity Market.
Net LTESA Cost	As defined in Section 2.4 and Section A1 of this Market Briefing.
Net Operational Revenue	Intended to cover all revenue streams for the Project that are received by the LTES Operator, netted off against permitted costs. This would be gross revenue generated through the wholesale energy market, ancillary markets, network support, any future emerging markets and any other eligible contracts, minus certain costs of purchasing energy to generate these revenues.
Net Revenue Threshold	The Net Revenue Threshold is a Bid Variable. As a Project's Net Operational Revenue increases toward the Net Revenue Threshold, the annuity payment from SFV reduces below the Annuity Cap. If Net Operational Revenue exceeds the Net

	Revenue Threshold, a 50% revenue sharing percentage applies and a repayment to the SFV may apply. Repayments are capped at Historical Net Payments. A lower Net Revenue Threshold may reduce the Net LTESA Cost, all else being equal, but it had a lesser impact on Net LTESA Cost than minimising an Annuity Cap.
PEAR	Potential Energy Arbitrage Revenues.
Project Parameters	Project's physical characteristics.
Project-Specific Case	The project-Inclusive, project case for calculating Components for Electricity Market Scenarios.
Reliability Contribution	As defined in Section 2.4 and Section B2 of this Market Briefing.
Reliability Scenarios	Scenarios used for System reliability modelling.
Scenarios	Electricity Market Scenarios and Reliability Scenarios.
SFV	Scheme Financial Vehicle - the counterparty to the LTESAs and responsible for administering payments pursuant to section 62 of the EII Act.
System Security Services	As defined in Section 2.4 and Section C2 of this Market Briefing.
System Strength	As defined in Section 2.4 and Section C1 of this Market Briefing.
System Strength Benefit	As defined in Section 2.4 and Section C1 of this Market Briefing.
System Strength Remediation Cost	As defined in Section 2.4 and Section C1 of this Market Briefing.
Tender Guidelines	Please see Tender Guidelines on the ASL website.
VRE	Variable renewable energy.
Wholesale Demand Response Units	As defined in the Demand Response LTESA.
Wholesale Market Benefits	As defined in Section 2.4 and Section B1 of this Market Briefing.
WSCR	Withstand Short Circuit Ratio.

This publication has been prepared using information available at 2 October 2025 and does not include any changes since the date of publication.