

## **Capacity Investment Scheme**

**Market Briefing Note** 

Guidance on evaluation of Merit Criterion 6 – Financial value and system benefits

May 2025



### Introduction

This Market Briefing Note sets out information relating to the evaluation of Merit Criterion (**MC**) 6 – Financial value and system benefits in the Capacity Investment Scheme (**CIS**) Tender 4 – National Electricity Market (**NEM**) Generation (**CIS NEM Tender 4**).

#### What you need to know when preparing your Financial Value Bid

MC6 evaluates financial value and system benefits during the Financial Value Bid Stage, using a range of benefit and cost metrics. For a Financial Value Bid, it considers forecasts of the Project Benefits and Net CISA Cost to the Australian Government under the CISA.

Figure 1 lists the key Bid Variables, Scenarios, Financial Value (**FV**) Components and Metrics which are expected to influence the MC6 assessment. Bid Variables are inputs set by the Proponent for its CISA, and influence assessment. Modelling considers the potential operation of the Project and CISA across scenarios to develop FV Components, which serve as interim calculations underpinning the Metrics used for scoring.

Figure 1 MC6 Assessment Approach



To be considered higher merit in MC6, a Project is expected to be assessed as being likely to have high Project Benefits, including in relation to Renewable Energy Contribution, Wholesale Market Benefits and Reliability Contribution, along with a competitively low Net CISA Cost (collectively, the Financial Value Components), as outlined in Section 4.0. Projects with a COD Target Date of 31 December 2029 or earlier may be considered of higher merit.

Proponents must submit details of their Project and their nominated Bid Variables in the MC6 Returnable Schedule for assessment, including the Annual Payment Cap, Annual Floor, Annual Ceiling, Target Commercial Operations Date, and Final Expiry Date.

Bidding in Stage B should focus on providing a competitive set of Bid Variables to achieve the lowest Net CISA Cost to the Australian Government, as outlined in Section 5.0. Project parameters established and committed to in Stage A (e.g. location, technology type) may drive some of the Project's Financial Value Components but cannot be changed in Stage B.

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The description of financial value and system benefits in this Market Briefing Note is not an exhaustive or comprehensive summary of the evaluation process. AEMO retains discretion to score and assess Bids and make recommendations pursuant to the Tender Guidelines.

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Capitalised terms in this document have the meaning given in the Tender Guidelines, the Generation CISA or in Appendix 1 to this Market Briefing Note.

## 1.0 Purpose of this document

This Market Briefing Note has been prepared to provide information to Proponents in the CIS NEM Tender 4 about how Projects may be assessed against MC6 – Financial value and system benefits. It provides an overview of factors that are expected to affect the MC6 assessment of Projects, namely, the key Metrics and their underpinning Financial Value Components.

In this Market Briefing Note:

- Section 2.0 summarises the relevant MCs across each stage of tender assessment.
- Section 3.0 provides an overview of the MC6 assessment approach.
- Section 4.0 details each of the of the Financial Value Components.
- Section 5.0 outlines the characteristics of a competitive Financial Value Bid for the purposes of MC6.
- Section 6.0 outlines the evaluation approach for Hybrid and Staged Projects.

### 2.0 Tender Guidelines

This Market Briefing Note has been drafted in accordance with the <u>Tender Guidelines</u>, however, in the event of any discrepancies, the Tender Guidelines will take precedence over this Market Briefing Note. AEMO intends to assess Bids against nine Merit Criteria under a two-step process, as summarised below:

#### **Stage A: Project Bid Merit Criteria**

Contribution to system reliability and system benefits (MC1), Project deliverability and timetable (MC2), Organisational capability to deliver Project (MC3), First Nations engagement (MC4) and Community engagement (MC5).

#### $\blacksquare$

#### Stage B: Financial Value Bid Merit Criteria

Financial Value and system benefits (MC6), Commercial departures (MC7), First Nations Commitments (MC8) and Social Licence Commitments (MC9).

Projects that have progressed to the Stage B – Financial Value Bid assessment will be assessed against the Financial Value Bid Merit Criteria. Following this assessment, Financial Value Bids will be awarded an overall weighted score and ranked based on the overall weighted scores. The Financial Value Shortlist will be developed considering this list.

Projects in New South Wales seeking a Generation CISA and having received or seeking an Access Right in either the South-West or the Central-West Orana Renewable Energy Zone (REZ), should refer to Section 3.3.1 of the <u>Tender Guidelines</u> for information on this process.

# 3.0 Overview of MC6 for CIS NEM Tender 4

#### 3.1. Objectives

The Policy Objectives for CIS NEM Tender 4 include:

- supporting the deployment of an indicative target of 6 GW out of 23 GW of renewable energy generation by 2030 to help deliver the Australian Government's 82% renewable energy target;
- supporting Projects that can support system reliability; and
- putting downward pressure on electricity prices in Australia's rapidly changing energy market.

The MC6 assessment approach is designed to identify Projects that can contribute to meeting the Policy Objectives and that provide competitive Bids with low Annual Payment Caps, low Annual Floors,

low Annual Ceilings and fewer support years. Eligible Projects from all NEM jurisdictions can submit Bids for competitive assessment.<sup>1</sup>

#### 3.2. Financial Value Components

MC6 is expected to consider Bids across three Project Benefit components as well as Net CISA Cost. A summary of these components is provided in Table 1 below and described further in Section 4.0 'Financial Value Components'.

All else being equal, Projects that can demonstrate a higher value for Project Benefits components, and a lower value for Net CISA Cost, may be considered higher merit in Stage B. Project parameters, such as a Project's location, modelled generation traces, Maximum Capacity and storage capacity and duration (if applicable) will be inputs into the model to best reflect the expected generation profile of different technologies and Projects. These Project-specific parameters will therefore affect the Project Benefits components and Net CISA Cost.

Table 1: Financial Value Components assessed under MC6

Financial Value Component		Summary	
	Renewable Energy Contribution	<ul> <li>Forecasts the Project's ability to contribute to the Australian Government's target of 82% renewable electricity by 2030 and generate in periods in which it can displace fossil fuels.</li> <li>This is modelled using an adapted version of the Central scenario, as indicated in Table 2. See section 3.3 below.</li> </ul>	
Project Benefits	Wholesale Market Benefits	<ul> <li>Forecasts the wholesale market price impact of each Project on the NEM.</li> <li>This is modelled across several Electricity Market Scenarios, as indicated in Table 2. See section 3.3 below.</li> </ul>	
	Reliability Contribution	<ul> <li>Forecasts the Project's potential contribution to reducing modelled unserved energy in the NEM.</li> <li>This is modelled across different time-horizons in the Reliability Scenarios using a similar approach to that within AEMO's 2024 Electricity Statement of Opportunities (2024) (ESOO) and is distinct from the modelling of the other components. See section 3.3.2 below.</li> </ul>	
Costs	Net CISA Costs	<ul> <li>The net present value of forecast payments to and from the Australian Government under a CISA.</li> <li>Considers the Bid Variables of a Project and a forecast of each Project's Net Operational Revenue.</li> <li>This is modelled across several Electricity Market Scenarios for the given Support Period, as indicated in Table 2. See section 3.3 below.</li> </ul>	

Generally, Project Benefits are calculated by measuring the difference in certain values between a counterfactual scenario which excludes the Project being assessed (**Counterfactual Case**) and another scenario in which the Project being assessed is added to the model (**Project-Specific Case**). For example, the Renewable Energy Contribution of a Project will be measured as the modelled change in

<sup>&</sup>lt;sup>1</sup> CIS NEM Tender 4 invites bids for renewable generation Projects in the NEM with an indicative target of 6 GW subject to tender specific jurisdiction allocations. For more information, please refer to the <u>Market Brief on Renewable Energy Transformation Agreement allocations by jurisdiction.</u>

renewable energy and thermal generation between the Project-Specific Case and the Counterfactual Case. Costs are calculated as a function of the Project's Net Operational Revenue (NOR) modelled for each Electricity Market Scenario, and the Bid Variables provided in the MC6 Returnable Schedule. The processes for calculating Project Benefits and Costs is repeated individually for all Projects in the MC6 assessment.

#### 3.3. Scenarios

Market

The Financial Value Components are modelled across a set of scenarios to test the robustness of outcomes across a range of potential future market pathways.

Table 2 outlines three forecasting Scenarios (**Electricity Market Scenarios**) for Wholesale Market Benefits and Net CISA Cost. An adapted version of the Central scenario (excluding generic new-build generation capacity) is used to calculate the Renewable Energy Contribution. Reliability Contribution is modelled under a similar approach to that of the MC1 assessment, with updated AEMO's 2024 ESOO assumptions, and utilises a distinct approach to modelling from the other Financial Value Components. The modelling also has distinct scenarios reflecting different time-horizons (**Reliability Scenarios**). More detail on the different scenarios is provided in Sections 3.3.1 and 3.3.2.

Scenarios		Financial Value Component			
		Reliability Contribution	Renewable Energy Contribution	Wholesale Market Benefits	Net CISA Cost
Reliability	Horizons	✓			
Electricity	Central		✓	✓	✓
	Low			1	1

Table 2 Scenarios and relevant Financial Value Component

High

To be considered higher merit, Financial Value Bids should demonstrate value across the range of future scenarios. Lower value Financial Value Bids may only demonstrate value in one or fewer scenarios. Scenario-based outcomes will be weighted. The weighting may consider the importance of each scenario for evaluation, and the expected probabilities of a scenario occurring.

#### 3.3.1. Electricity Market Scenarios

In the Electricity Market Scenarios, the Central scenario is designed to reflect a balanced market view of expected market outcomes, with two supporting scenarios designed to capture extremely low and high forecasted wholesale prices.

Electricity Market Scenarios may vary across several input assumptions creating a range of future potential electricity market outcomes. For the MC6 assessment, Electricity Market Scenarios could be variations of the following:

Central scenario: a market-investor view of future energy market outcomes. This would generally
align with assumptions from the latest 'Input Assumptions and Scenarios Report' by AEMO and
the 'Infrastructure Investment Objectives Report' by AEMO Services. This scenario considers the
financial value of Bids on their most-likely Wholesale Market Benefit, Renewable Energy
Contribution and Net CISA Cost outcomes.

- Low scenario: reflective of a future NEM in which many levers coincide to drive lower average
  wholesale prices, lower intra-day spreads, and lower volatility. This may include lower fuel cost
  inputs. This scenario aims to consider the financial value of Bids in a future NEM in which there are
  relatively lower Wholesale Market Benefits and relatively higher expected Net CISA Costs to the
  Australian Government.
- High scenario: reflective of a future NEM in which many levers coincide to drive higher average
  wholesale prices, higher intraday spreads, and higher volatility. These may include higher fuel costs
  inputs and higher CAPEX. This scenario aims to consider financial value of Bids when there are
  relatively higher Wholesale Market Benefits, and relatively lower expected Net CISA Costs to the
  Australian Government.

Input assumptions for the scenarios may differ by:

- Input assumptions on market developments: future electricity market prices will be affected by
  market developments including (but not limited to) demand, coal retirements, fuel prices, uptake
  of distributed energy resources, renewable energy availability and transmission augmentation.
- Weather reference years: weather variations impact both renewable generation output and consumer demand. Multiple historical reference years may be used to reduce the risk of basing evaluation on weather patterns of a particular year and their effect on the operation of Projects.

#### 3.3.2. Reliability Scenarios

Projects are also assessed on their ability to reduce unserved energy in a model that generally aligns with assumptions from AEMO's 2024 ESOO for each region across different time horizons. Reliability Scenarios could be designed to reflect different stages of the energy transition. For example, the Reliability Scenarios for MC6 assessment could consider:

- **Medium-Term:** reflects a further progressed scenario in which major network limitations are resolved, and the system is closer to having 82% renewable energy contribution.
- **Short-Term**: with a focus on reducing reliability risks in near-term, noting the potential for delivery risk in upcoming transmission projects.

#### 3.4. Metrics

Metrics may be used for scoring to translate the Financial Value Components into comparable scores for assessment. The MC6 assessment is intended to result in higher MC6 scores for Financial Value Bids which perform well against the Financial Value Components and the Metrics listed in Table 3 below.

Table 3: Primary Financial Value Scoring Metrics for MC6 assessment

Scoring Metric	Ratio	Description	Direction of preference			
	Components					
Renewable Energy Contribution	MWh or Contribution Factor	Contribution to Renewable Energy in the NEM relative to a Counterfactual Case, reflecting a Project's ability to support increased renewable energy output.	Higher value is preferred, all else being equal.			

Scoring Metric	Ratio	Description	Direction of preference
Wholesale Market Benefits	\$, net present value	Reduction in NEM market costs relative to a Counterfactual Case, weighted across several Electricity Market Scenarios.	Higher value is preferred, all else being equal.
Reliability Contribution	Contribution Factor	Reduction in unserved energy relative to a Counterfactual Case.	Higher value is preferred, all else being equal.
Net CISA Costs	\$, net present value	The net present value of forecast payments from the Australian Government under a CISA, weighted across Electricity Market Scenarios.	Lower value is preferred, all else being equal.
		Key metrics	
Renewable Energy Contribution-Cost Ratio (RECCR)	Contribution/ \$	Renewable Energy Contribution per dollar of scenario-weighted Net CISA Cost (\$, net present value).  Considers both the Project's contribution to the 82% renewable electricity target as well as its scenario-weighted Net CISA Cost.	Higher value is preferred, all else being equal.
Benefit-Cost Ratio (BCR)	\$/\$	Scenario-Weighted Wholesale Market Benefits per dollar (\$, net present value) of Scenario-Weighted Net CISA Cost (\$, net present value). Considers both Scenario-Weighted Wholesale Market Benefits and Scenario-Weighted Net CISA Cost.	Higher value is preferred, all else being equal.
Reliability-Cost Ratio (RCR)	Contribution/ \$	Reliability Contribution per dollar of Scenario-Weighted Net CISA Cost (\$, net present value).  Considers both the Project's Reliability Contribution as well as its Scenario-Weighted Net CISA Cost.	Higher value is preferred, all else being equal. Reliability Contribution and RCR are expected to be given a relatively lower weight in assessing MC6.
Maximum Liability	\$	Calculated by assuming that the Project is paid the maximum amount of financial support available under the CISA across the Support Period (which may be limited by the Annual Payment Caps applicable to each Support Year in the Support Period).  This assumes zero revenue for Projects and is not dependent on the scenarios.	Lower value is preferred, all else being equal.

Further Metrics may also be considered, or a combination of the metrics above, where they are developed to assess the benefits, cost and financial risks of Financial Value Bids. This could include a consideration of a Financial Value sensitivity for a Project's Net CISA Cost which considers average NEM price forecasts. Additional metrics may be less aggregated (e.g. per scenario or scenario-weighted) and may be based on one or several of the Financial Value Components identified.

## 4.0 Financial Value Components

This section provides further detail of each Financial Value Component, including the intent and method of calculation. This section also provides an indication of how the Project's parameters and the Bid Variables in the CISA may affect the Financial Value Components.

#### 4.1. Renewable Energy Contribution

A key Policy Objective of the CIS is to incentivise the deployment of 23 GW of renewable energy generation by 2030 and to help deliver the Australian Government's 82% renewable target.

In CIS NEM Tender 4, the Renewable Energy Contribution is based on the difference in renewable energy in the NEM between the Project-Specific Case and Counterfactual Case. Any increase in marketwide renewable energy is attributed as a benefit of the Project.

#### Impact of Project parameters / Bid Variables

The Renewable Energy Contribution is expected to be higher for Projects that have:

- a forecast generation profile that displaces more fossil fuel generation;
- are located where they can minimise their own curtailment and that of other renewable energy projects;
   and
- for Assessed Hybrid Projects:
  - o more energy available to be dispatched during times of need; and
  - o a forecast operating profile that displaces more fossil fuels.

#### 4.2. Wholesale Market Benefits

A key Policy Objective of the CIS is to support Projects that can put downward pressure on electricity prices in Australia's rapidly changing energy market.

Wholesale Market Benefits are measured based on the difference in cost of meeting NEM-wide demand (load cost) between the Project-Specific Case and the Counterfactual Case across all Electricity Market Scenarios, subject to their respective weightings. Any reduction in load is attributed as a benefit of the Project. As such, Wholesale Market Benefits are expected to occur when a Project lowers load-weighted prices. For example, Generation Projects might provide Wholesale Market Benefits by providing more zero-marginal cost energy during periods when supply is tighter. Assessed Hybrid Projects might provide Wholesale Market Benefits by reducing intra-day price spreads and volatility, or by improving supply adequacy and reducing curtailment of low-cost generators.

#### Impact of Project parameters / Bid Variables

Wholesale Market Benefits may reward Projects that can:

- have a forecast generation profile that makes more energy available for dispatch during periods of high prices;
- for Assessed Hybrid Projects, offer more energy to be dispatched during periods of high prices;
- commit to an earlier Commercial Operation Target Date, as there is greater opportunity in early years for Projects to have a positive impact on any forecast high prices;
- provide greater contribution to the market by locating in network locations that have good access to load centres; or

#### Impact of Project parameters / Bid Variables

• provide more years of benefits through longer asset lives for different technologies.

#### 4.2.1. Calculating Wholesale Market Benefits

Generation Projects are expected to put downward pressure on wholesale electricity prices. Modelling considers the impact of Projects on wholesale electricity prices across the NEM as benefits may be shared between regions. This may be particularly relevant for Projects located near regional interconnectors.

Formulaically, Wholesale Market Benefits may be represented as below:

$$\Sigma_{s=1}^{n}W_{s}\times(ALC-ALC')$$

for each Region in the NEM, and over the Project's asset life.

#### Where:

- $W_s$  is the weighting of each modelled scenario and n is the number of modelled scenarios.
- ALC is the annual load cost in a region and scenario before the addition of the Project being assessed.
- ALC' is the annual load cost in a region and scenario after the addition of the Project being assessed.

#### 4.3. Reliability Contribution

A key Policy Objective of the CIS is to support Projects that can support system reliability. Projects will be assessed on their ability to reduce unserved energy and therefore reducing reliability risks across the NEM in both the near-term and the medium-long term, with CIS NEM Tender 4 having a higher focus on mitigating medium-long term risks.

The Reliability Contribution for a Project is measured by the difference in modelled unserved energy between the Project-Specific Case and Counterfactual Case for the Reliability Scenarios.

The Reliability Contribution in MC6 is similar in modelling approach to that undertaken for MC1, however it includes updated modelling which reflects the latest available assumptions (aligned with AEMO's 2024 ESOO).

#### Impact of Project parameters / Bid Variables

Reliability Contribution is expected to be higher for Projects which:

- are located close to load centres;
- are unlikely to be constrained during times of high demand; and
- for Assessed Hybrid Projects: have a larger energy storage capacity (MWh) due to having:
  - o a longer storage duration (hours); and/or
  - a larger dispatch capacity (MW).

#### 4.4. Net CISA Cost

Competitive Bids are expected to have a low Net CISA Cost relative to less competitive Projects. Net CISA Costs are a function of the Project's NOR and the Bid Variables in a CISA. A Project's potential

NOR across available markets and Electricity Market Scenarios is forecast to inform the calculation of Net CISA Cost.

#### 4.4.1. Forecasting Net Operational Revenue

An Energy Market Model is run for each Project to forecast NOR. This considers the Project's specific parameters and is modelled for each Electricity Market Scenario, and therefore may take on a range of values. For assessment, NOR is forecast as the sum of revenues for the Project from:

- Dispatch-Weighted Average Price (**DWAP**) for each Project, which can be forecast using generation output profiles provided by Proponents.
- Green product revenues as a source of revenue for a Project.

#### 4.4.2. Calculation of Net CISA Cost

Formulaically, the calculation of annual CISA cash flows over the Support Period is the net present value of the CISA cashflow for the Financial Value Bid. This may be represented as below: (where positive values are a payment to Project Operators)<sup>2</sup>

$$Annual\ CISA\ Cashflows = \left\{ \begin{array}{cc} & SP, & if\ NOR_{year} < ARF \\ & 0, & if\ ARF < NOR_{year} < ARC \\ & -RS, & if\ NOR_{year} > ARC \end{array} \right.$$

$$SP = minimum (90\% \times (ARF - NOR), APC)$$
  
 $RS = minimum (50\% \times (NOR - ARC), APC)$ 

#### Where<sup>3</sup>:

NOR is Net Operational Revenue, which is the modelled revenues for the Project.

- SP is the annual support amount paid under the CISA, expressed as a positive amount.
- RS is the annual revenue sharing amount payable under the CISA, expressed as a negative amount.
- *ARF* is the Annual Revenue Floor, which is equal to the Annual Floor multiplied by a modelled notional quantity of energy dispatched by the Project.
- ARC is the Annual Revenue Ceiling, which is equal to the Annual Ceiling multiplied by a modelled notional quantity of energy dispatched by the Project.
- APC is the Annual Payment Cap.

<sup>&</sup>lt;sup>2</sup> Note the displayed formula is used for annual modelling in the MC6 assessment and may not directly match the calculations contained in the Generation CISA. Please refer to the <u>CISA</u> for information on support payment calculations.

<sup>&</sup>lt;sup>3</sup> For more information on terms please refer to the <u>CISA</u>.

#### Impact of Project parameters / Bid Variables

Net CISA Costs and risk to the Australian Government are expected to reduce if the Financial Value Bid or Project has the following features (all else being equal):

- A low Annual Payment Cap, low Annual Floor and low Annual Ceiling.
- Fewer Financial Years requiring support, particularly those Financial Value Bids which have an earlier Final Expiry Date or exclude periods in which high support payments would otherwise be expected.

## 5.0 Impact of Project parameters and Bid Variables

Project parameters and Bid Variables will have varying impacts on the MC6 assessment. This section outlines how these parameters and Bid Variables could impact the MC6 assessment. The flexibility of the CISA aims to provide Proponents with the ability to develop Financial Value Bids in a targeted way that can best suit their use-cases while also potentially reducing Net CISA Cost to the Australian Government.

Table 4 and Table 5 list various variables and their possible impact on MC6 assessment. Table 4 pertains to all Projects and Table 5 is relevant to Assessed Hybrid Projects only.

Table 4: Potential impact of Project Parameters and Bid Variables on MC6 assessment for all Projects

Project parameter or Bid Variable	Key Financial Value Component impacted	Impact, all else being equal
Annual Payment Cap	Net CISA Cost	Lower values reduce modelled CISA payments for Net CISA Cost and also reduce the Australian Government's maximum exposure to CISA costs. A lower Annual Payment Cap can make a Project more competitive.
Annual Floor	Net CISA Cost	Lower values put downward pressure on Net CISA Cost and may make a Financial Value Bid more competitive. A lower Annual Floor may lower the expected CISA support payments from the Australian Government to the Project.
Annual Ceiling	Net CISA Cost	Lower values put downward pressure on Net CISA Cost as they could increase expected CISA revenue sharing in some scenarios. A low Annual Floor and low Annual Payment Cap are expected to have higher impact on the assessment than having a low Annual Ceiling.
Support Period	Net CISA Cost	Competitive Projects may reduce their Net CISA Cost by bidding in a way that the Support Period is shorter, or otherwise that:  • excludes support years when the Net CISA Cost would otherwise be expected to be high (e.g. when Project revenues are low); and  • includes support years which may involve revenue sharing (e.g. when Project revenues are high).

Network Connection Point	All Components	A Project is expected to perform well across all Project Benefit components if it connects to a location with low network congestion and low likelihood of having its output constrained in different dispatch scenarios, including during peak demand periods. It may also be better able to earn higher market revenues, therefore lowering Net CISA Cost.
Target Commercial Operation Date	Wholesale Market Benefits, Net CISA Cost	Projects with a Target Commerical Operation Date of 31 December 2029 or earlier may be considered of higher merit. Lower discounting on earlier years may increase Wholesale Market Benefits in present value terms but may also coincidentally increase Net CISA Costs.
Generation Profile	All Components, all else being equal	A Project that can generate in periods of high prices when demand is typically met by thermal generation is expected to perform well across all Project Benefit components. It may also earn higher market revenues, therefore lowering Net CISA Cost.
Operation Life	Wholesale Market Benefits	Technologies with a longer asset life are expected to provide Wholesale Market Benefits for a longer period.

Table 5: Potential impact of Project parameters and Bid Variables on MC6 assessment for Assessed Hybrid Projects only

Project parameter in Assessed Hybrid Project	Key Financial Value Component impacted	Impact, all else being equal
Storage Capacity	All Components, all else being equal	An Associated Project with a larger energy storage capacity (MWh) is expected to perform well across all the Project Benefit components and NOR in absolute terms, all else being equal.
Round-trip efficiency	All Project Benefit components	An Associated Project with an energy storage technology type that can operate more efficiently is expected to perform well across all Project Benefit components and achieve higher NOR.

## 6.0 Hybrid and Staged Projects

This section provides a short summary on the evaluation approach of Hybrid and Staged Projects. Hybrid Projects are eligible to participate in the CIS NEM Tender 4, unless they are participating in the CIS NEM Tender 3 Process.

#### 6.1. What is a Hybrid or Staged Project?

Hybrid Projects<sup>4</sup> are Projects that are or will be co-located generation and dispatchable assets, in which both assets share a common Connection Point.

Staged Projects are co-located generation assets, where a Project expands the generation capacity of an existing generation asset, with both the Project and existing generation asset sharing a common Connection Point. The Project and existing generation asset may have some common existing infrastructure.

A combined generation asset (e.g., wind and solar) that shares a connection point is not considered a Hybrid Project for MC6 evaluation and the Net CISA Cost and Project Benefits will be assessed as a single generation Project.

As outlined in the Tender Guidelines, Proponents with Hybrid Projects are required to bid as either:

- Assessed Hybrid Project Bid: Both the Project (i.e. the generation component) and the Associated
  Project (i.e. the dispatchable component) is assessed against the Merit Criteria. The Proponent, if
  awarded a CISA in respect of an Assessed Hybrid Project Bid, will be contractually required to
  deliver both the Project and the Associated Project; or
- **Non-Assessed Hybrid Project Bid:** Only the Project (i.e. the generating asset) is assessed against the Merit Criteria. The Proponent, if awarded a CISA, will not be contractually required to deliver the Associated Project.

#### 6.2. Assessment of Hybrid Project in MC6

Only Assessed Hybrid Projects will be evaluated as Hybrid Projects in MC6. Compared to a generation only Project, Assessed Hybrid Projects may provide additional Renewable Energy Contribution, Wholesale Market Benefits and Reliability Contribution.

This assessment is expected to cover:

- Project Benefits: Assessed by considering the time-shifted dispatch of the Associated Project. This
  may occur through shifting generation into periods of system tightness and high prices, and/or
  displacing fossil fuel generation.
- **Net CISA Cost**: Assessed by considering only the dispatch and DWAP of the Project, excluding the time-shifted dispatch and DWAP of the Associated Project.

#### 6.3. Assessment of Staged Projects

Project Benefits in MC6 will be assessed for the Project only, and not the existing generation asset or existing infrastructure in accordance with Section 3.5 of the Tender Guidelines. .

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<sup>&</sup>lt;sup>4</sup> See the <u>Tender Guidelines</u> for information on Hybrid Projects (in particular, Section 3.5).

## Appendix 1 – Definitions

Term	Definition	
AEMO	Either or both of AEMO Limited and AEMO Services.	
Annual Floor	A dollar per MWh value bid by the Proponent, that represents the minimum Net Operational Revenue per MWh attributable to the Project during a Financial Year, below which the Commonwealth is required to pay the Annual Support Amount under the draft CISA.	
Annual Payment Cap	A dollar cap representing the maximum amount of financial support payable by the Commonwealth to the Project Operator, or the maximum amount of revenue payable by the Project Operator to the Commonwealth, under the draft CISA for each Financial Year during the Term.	
Annual Ceiling	A dollar per MWh value bid by the Proponent, that represents the maximum Net Operational Revenue per MWh attributable to the Project during a Financial Year, beyond which the Project Operator is required to pay the Annual Revenue Sharing Amount under the draft CISA.	
Access Right	South West or Central West Orana Renewable Energy Zone Access Right.	
Assessed Hybrid Project	A Hybrid Project for which the Proponent seeks that both the Project (i.e. the generation component) and the Associated Project (i.e. the dispatchable component) is assessed against the Merit Criteria.	
Asset Life	Operational guarantee life of the Project facility.	
Associated Project	In respect of a Hybrid Project, means the storage assets co-located with the Project which either:  a. share a common AEMO registration;  b. share a common Connection Point; or  c. have a direct connection that allows for the storage asset to be charged directly from the generation asset.	
Benefit-Cost Ratio (or 'BCR')	In respect of a Financial Value Bid, the net present value of the Wholesale Market Benefits per dollar of the Net CISA Cost.	
Bid	The documentation submitted by a Proponent in relation to the Project in response to Stage Project Bid or Stage B – Financial Value Bid of the Tender Process (including any Default Financial Va Bid and Alternative Financial Value Bid), including, Returnable Schedules, together with any addition information submitted by the Proponent.	
Bid Variables	The bid variables to be nominated by a Proponent in their Bid for a CISA including, but not limited to, Annual Floor, Annual Ceiling, Annual Payment Cap, Target COD and Final Expiry Date.	
CIS	Capacity Investment Scheme.	
CIS NEM Tender 4	Capacity Investment Scheme Tender 4 – National Electricity Market Generation.	
CISA (or 'Generation CISA')	Has the meaning given in the Tender Guidelines.	
COD	Commercial Operation Date.	
COD Target Date	The target date (as may be extended) in the CISA for the Project Operator to achieve commercial operations for the Project.	
Commonwealth	The Australian Government (Commonwealth of Australia) as represented by DCCEEW.	
Counterfactual Case	A hypothetical modelled scenario which does not include the Project being assessed, for the purpose of isolating the effect on the Financial Value Components in that scenario when the Project being assessed is later added.	
DCCEEW	Department of Climate Change, Energy, the Environment and Water.	
Dispatch-Weighted Average Price (or 'DWAP')	The average wholesale electricity price received by a Project for its dispatch, calculated by dividin wholesale energy market revenue by the volume of energy dispatched across a given period.	
Electricity Market Price Scenarios (or 'Scenarios')	Has the meaning given to that term in section 3.3 of this Market Briefing Note.	
Energy Market Model	The model used to forecast each Project's impact on forecast power prices and Net Operation. Revenue.	
Electricity Statement of Opportunities (or 'ESOO')	The National Electricity Market Electricity Statement of Opportunities, published by AEMO under clause 3.13.3A of the NER.	
Financial Value Bid	The document(s) submitted by a Proponent in Stage B of the Tender Process in relation to a Project, as described in Section 2.3 of the Tender Guidelines, comprising:  a. in all cases, a Default Financial Value Bid; and  b. if the Proponent wishes, an Alternative Financial Value Bid,	
	and including, in both cases, any Returnable Schedules and any additional information	

#### Market Briefing Note | Financial Value

Term	Definition		
	submitted by the Proponent.		
Financial Value Components	The components considered and modelled across a set of electricity market scenarios during the MC6 assessment, including the Project Benefits and the Net CISA Cost.		
Financial Value Evaluation Framework (or 'Framework')	The framework used to evaluate financial value.		
Financial Value Metrics	The metrics used to translate data and analysis derived from the Project and modelling into information used to assess Financial Value Bids in MC6, including Scenario-Weighted Project Benefit Scenario-Weighted Net CISA Cost, Reliability-Cost Ratio and BCR.		
Financial Value Shortlist	A shortlist of Financial Value Bids selected during Stage B as potential Recommended Bids.		
Hybrid Project	Has the meaning given to that term in the draft CISA, being a co-located generation and dispatchable project being the Project, the Associated Project and the Shared Infrastructure.		
Maximum Liability	Has the meaning given in section 3.4 of this Market Briefing Note.		
Merit Criteria or MC	The Merit Criteria against which Bids are assessed, set out in Section 3.2 of the Tender Guidelines.		
NEM	The National Electricity Market.		
Net CISA Cost	The net present value of forecast payments to and from the Australian Government under a CISA, determined as outlined in Table 1.		
Net Operational Revenue (or 'NOR')	All revenue that can be attributed to the Project facility. Estimated only as the sum of uncontracted spot market revenue and uncontracted green product revenue for MC6 modelling purposes.		
Policy Objectives	Has the meaning given to that term in the Tender Guidelines.		
Project	A generation asset that is built, or intended to be built, in connection with which a Generation CISA is sought in this Tender 4 Process, including any Shared Infrastructure.		
Project Benefits	A sub-set of Financial Value Components, including the Renewable Energy Contribution, Wholesale Market Benefits and Reliability Contribution metrics.		
Project Operator	The legal entity which is to be the counterparty to the Project Documents which the Australian Government may offer to the Proponent.		
Project-Specific Case	Has the meaning given to that term in section 3.2 of this Market Briefing Note.		
Proponent	An entity that registers to participate in the Tender Process including those entities that submit, or intend to submit, a Project Bid or any Financial Value Bid.		
Reliability Contribution	A metric used in the MC6 assessment to measure a Project's forecast potential contribution to reduce modelled unserved energy as existing generators in the NEM are retired.		
Reliability-Cost Ratio (or 'RCR')	In respect of a Financial Value Bid, a metric which is used to represent the potential value of a Project's modelled Reliability Contribution as against its Scenario-Weighted Net CISA Cost.		
Reliability Scenarios	Has the meaning given to that term in section 3.3.2 of this Market Briefing Note.		
Renewable Energy Contribution	Forecasts the Project's ability to contribute to the target of 82% renewable electricity by 2030 a displacing fossil fuels.		
Renewable Energy Contribution-Cost Ratio (or 'RECCR')	In respect of a Financial Value Bid, the Project's Renewable Energy Contribution divided by its Scenario-Weighted Net CISA Cost.		
REZ	Renewable Energy Zone.		
Scenario-Weighted	Indicates that the metric uses weighted outcomes from multiple scenarios.		
Scoring Metrics	Has the meaning given to that term in section 3.4 of this Market Briefing Note.		
Staged Project	Co-located generation assets, where a Project expands the generation capacity of an existing generation asset, with both the Project and existing generation asset sharing a common Connection Point. The Project and existing generation asset may have some common existing infrastructure.		
Support Period	Has the meaning given in the draft CISA.		
Tender Guidelines	The CIS Tender 4 Guidelines.		
Wholesale Market Benefits	A metric used in the MC6 assessment to forecast any reduction in load cost (i.e. the cost of meetir demand) from the addition of the assessed Project against a counterfactual case of load cost without he Project.		

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