

Meeting Agenda

Meeting Title:	WEM Investment Certainty Review Working Group (WICRWG)
Date:	Wednesday 24 April 2024
Time:	9:30 AM – 11:00 AM
Location:	Online, via TEAMS.

Item	Item	Responsibility	Type	Duration
1	Welcome and Agenda	Chair	Noting	2 min
2	Meeting Apologies/Attendance	Chair	Noting	1 min
3	<ul style="list-style-type: none"> • Conflicts of interest • Competition Law 	Chair	Noting	2 min
4	Support for renewable investment - recap	RPB	Discussion	30 min
5	Commonwealth Capacity Investment Scheme	RPB	Discussion	30 min
6	Next Steps	RPB	Discussion	20 min
7	General Business	Chair	Discussion	5 min

Please note, this meeting will be recorded.

Competition and Consumer Law Obligations

Members of the MAC's WEM Investment Certainty Review Working Group (**Members**) note their obligations under the *Competition and Consumer Act 2010 (CCA)*.

If a Member has a concern regarding the competition law implications of any issue being discussed at any meeting, please bring the matter to the immediate attention of the Chairperson.

Part IV of the CCA (titled "Restrictive Trade Practices") contains several prohibitions (rules) targeting anti-competitive conduct. These include:

- (a) **cartel conduct**: cartel conduct is an arrangement or understanding between competitors to fix prices; restrict the supply or acquisition of goods or services by parties to the arrangement; allocate customers or territories; and or rig bids.
- (b) **concerted practices**: a concerted practice can be conceived of as involving cooperation between competitors which has the purpose, effect or likely effect of substantially lessening competition, in particular, sharing Competitively Sensitive Information with competitors such as future pricing intentions and this end:
 - a concerted practice, according to the ACCC, involves a lower threshold between parties than a contract arrangement or understanding; and accordingly; and
 - a forum like the MAC is capable being a place where such cooperation could occur.
- (c) **anti-competitive contracts, arrangements understandings**: any contract, arrangement or understanding which has the purpose, effect or likely effect of substantially lessening competition.
- (d) **anti-competitive conduct (market power)**: any conduct by a company with market power which has the purpose, effect or likely effect of substantially lessening competition.
- (e) **collective boycotts**: where a group of competitors agree not to acquire goods or services from, or not to supply goods or services to, a business with whom the group is negotiating, unless the business accepts the terms and conditions offered by the group.

A contravention of the CCA could result in a significant fine (up to \$500,000 for individuals and more than \$10 million for companies). Cartel conduct may also result in criminal sanctions, including gaol terms for individuals.

Sensitive Information means and includes:

- (a) commercially sensitive information belonging to a Member's organisation or business (in this document such bodies are referred to as an Industry Stakeholder); and
- (b) information which, if disclosed, would breach an Industry Stakeholder's obligations of confidence to third parties, be against laws or regulations (including competition laws), would waive legal professional privilege, or cause unreasonable prejudice to the Coordinator of Energy or the State of Western Australia).

Guiding Principle – what not to discuss

In any circumstance in which Industry Stakeholders are or are likely to be in competition with one another a Member must not discuss or exchange with any of the other Members information that is not otherwise in the public domain about commercially sensitive matters, including without limitation the following:

- (a) the rates or prices (including any discounts or rebates) for the goods produced or the services produced by the Industry Stakeholders that are paid by or offered to third parties;
- (b) the confidential details regarding a customer or supplier of an Industry Stakeholder;
- (c) any strategies employed by an Industry Stakeholder to further any business that is or is likely to be in competition with a business of another Industry Stakeholder, (including, without limitation, any strategy related to an Industry Stakeholder's approach to bilateral contracting or bidding in the energy or ancillary/essential system services markets);
- (d) the prices paid or offered to be paid (including any aspects of a transaction) by an Industry Stakeholder to acquire goods or services from third parties; and
- (e) the confidential particulars of a third party supplier of goods or services to an Industry Stakeholder, including any circumstances in which an Industry Stakeholder has refused to or would refuse to acquire goods or services from a third party supplier or class of third party supplier.

Compliance Procedures for Meetings

If any of the matters listed above is raised for discussion, or information is sought to be exchanged in relation to the matter, the relevant Member must object to the matter being discussed. If, despite the objection, discussion of the relevant matter continues, then the relevant Member should advise the Chairperson and cease participation in the meeting/discussion and the relevant events must be recorded in the minutes for the meeting, including the time at which the relevant Member ceased to participate.



Government of Western Australia
Energy Policy WA

WEM Investment Certainty Review Working Group Meeting 2024_04_24

24 April 2024

Working together for a
brighter energy future.

Meeting Protocols

- Please place your microphone on mute, unless you are asking a question or making a comment
- Please keep questions relevant to the agenda item being discussed
- If there is not a break in discussion and you would like to say something, you can 'raise your hand' by typing 'question' or 'comment' in the meeting chat
- Questions and comments can also be emailed to EPWA - Energy Markets energymarkets@dmirs.wa.gov.au after the meeting
- The meeting will be recorded and minutes will be taken (actions and recommendations only)
- Please state your name and organisation when you ask a question
- If you are having connection/bandwidth issues, you may want to disable the incoming and/or outgoing video

Agenda

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4. Support for renewable investment – recap

Initiative 3 - Scope

The Reserve Capacity Mechanism (RCM) review forecast declining revenues for renewable generators after 2030 when conventional baseload retires:

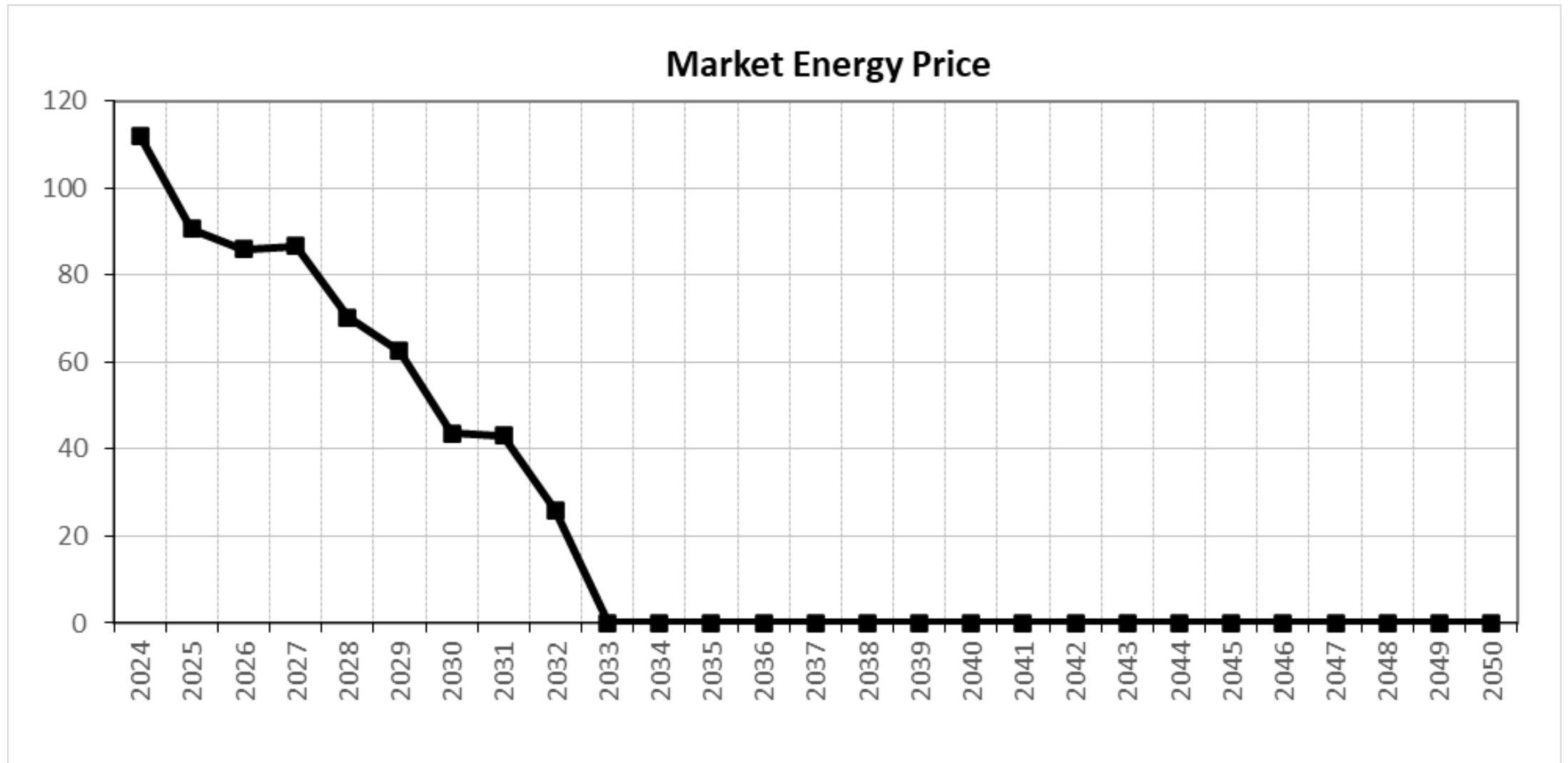
- Meeting the Reserve Capacity Target means building significant volumes of renewable capacity. That means being oversupplied with renewables and storage much of the time.
- Renewable projects need to recover some fixed costs in the energy market as their fixed costs per MW are higher than the technology used to set the Benchmark Reserve Capacity Price (BRCP), and they only get Capacity Credits for 15-30% of their nameplate capacity.
- As conventional generation retires, renewable generators with low variable costs will more frequently set the Real-Time Market energy price, driving prices to zero or below most of the time. As a result, renewable projects will no longer recover their long run marginal cost through the RCM, energy and Frequency Co-optimised Essential System Service.

At the same time, Commonwealth programmes are changing:

- The mandatory large-scale generation certificates (LGC) programme will end in 2030, and there is no clear successor mechanism to replace these revenues.
- The Commonwealth Capacity Investment Scheme (CIS) will provide additional revenue for some facilities but not for others.

The objective of Initiative 3 is to consider the need for a “top-up” of Wholesale Electricity Market (WEM) revenues for renewable generators to address the risk that the renewables may not recover enough revenue to justify investment.

Average RTM energy prices – WICR forecast (\$AUD/MWh)



Design criteria

An acceptable mechanism should address the three parts of the market objective:

Emissions

- Provide investment certainty for renewable energy producers, without encouraging inefficient oversupply
- Be simple and predictable – avoid adding complexity to an already complex market

Cost

- Maintain competitive pressures on participating facilities by avoiding a regulated price for energy – eligible facilities must not be insulated from energy market signals
- Account for other revenue streams – avoid double dipping
- Not increase end-user energy prices compared to *previous* price levels

Security

- Ensure demand can be met at various levels of renewable resource availability by supporting firming of intermittent renewables

Initiative 3 – Key Topics

1. **The overall approach to the scheme**
2. Trigger for scheme commencement and retirement including timing
3. Eligibility criteria for technologies to be considered and the firming requirement
4. **Calculation of the “top-up”**
5. Method of recovery of the “top-up” from the WEM
6. Administration of the scheme
7. Design of the WEM Rules to amend the changes.

We are still focusing on topics 1 and 4.

Working group discussion

Working group discussion identified that:

- Some members would prefer to avoid additional revenue mechanisms and handle this through the RCM if possible (e.g. by having the BRCP set by intermittent renewables). Other members would prefer a separate revenue stream targeted to renewables
- An up-front capital contribution from government is not an option
- The design should:
 - maintain incentives to produce energy, by maintaining exposure to Real-Time Market outcomes
 - maintain incentive to participate in the CIS, and be compatible with CIS outcomes
 - avoid free riders – paying for something that would have happened anyway
- It is probably reasonable for developers to bear time/budget risk and volume risk, and for consumers to bear energy price risk.

Options

Four options remained on the table at the end of the last meeting:

- Approach A: An energy purchaser obligation (like the Renewable Energy Target [RET])
- Approach B: A capacity-based revenue top up, linked to CIS outcomes
- Approach C: A price guarantee linked to pricing in a trigger year (with a cap and floor)
- Approach D: Setting the BRCP based on renewable capital costs (accounting for expected capacity derating)

Options B and D had most support, but none could be ruled out until the CIS approach became clear.

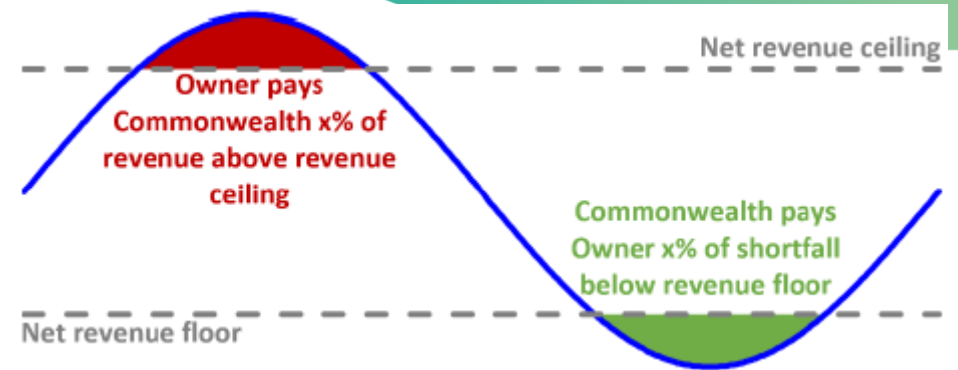
Options B and D are mutually exclusive.

5. Commonwealth Capacity Investment Scheme

CIS in the WEM (1)

The Commonwealth CIS will guarantee *net* revenue for selected facilities through a series of competitive tenders for clean renewable generation and/or storage.

- Successful projects will have a revenue floor and ceiling for up to 15 years.
- Not all capacity will be successful, so the market may end up with similar projects with and without CIS support.
- Eligible tech must have zero scope 1 emissions (renewable fuels, storage charging from the grid or collocated with renewables, potentially demand response in the future).
- Recipients must participate in the RCM and be eligible for Capacity Credits to receive CIS payments, and changes to the RCM would apply to CIS projects.
- Underwriting calculations include bilateral contract revenues but exclude effects of any RCM refunds and negative prices.
- CIS tenders are run in advance of RCM certification (apart from the 2024 Reserve Capacity Cycle), and applications can be pre-financial close.
- Non-Co-optimised Essential System Service facilities not eligible.



CIS in the WEM (2)

CIS will issue two types of contracts in the WEM:

- Clean Dispatchable Capacity Scheme Investment Agreements (firmed): 1.1 GW / 4.4 GWh over the period to 2030
- Generation Capacity Scheme Investment Agreements (intermittent): 6.5 TWh to 2030

Bid parameters:

- Clean Dispatchable Capacity Scheme Investment Agreements: floor and ceiling revenue in \$/MW of Capacity Credits held
- Generation Capacity Scheme Investment Agreements: two components for each of floor and ceiling:
 - Energy component: \$/MWh of generation in the relevant support year
 - Capacity component: \$/MW of Capacity Credits held in the relevant support year

Two assessment stages:

- Project bid stage: Strongest performers based on technical, commercial, social license and reliability contribution invited to second stage.
- Financial bid stage: Select projects based on contribution to reliability and lower prices for consumers

First WEM CIS tender: June 2024 – Feb 2025. Indicative target: 500 MW / 2,000 MWh clean dispatchable capacity. Projects receiving Capacity Credits in the 2024 Reserve Capacity Cycle eligible to participate.

Future WEM CIS tenders would be conducted annually in advance of RCM certification.

6. Next Steps

Next steps on renewable support

Now that we have more information on how the CIS will work in WA:

1. Eliminate options A and C
2. Future work can focus on options B and D.

Broad approach for option B was to use CIS outcomes to set a revenue top up for non-CIS facilities:

3. Does this approach still seem reasonable?
4. Can we base the top-up on the average outcome (\$/MW and \$/MWh) of the CIS range for the top-up? Or just on the average \$/MWh outcome?
5. Could undesirable incentives arise from this approach?

Implementation would need to lag CIS implementation (commissioning in 2026 and 2027 capacity years), so payments would apply from the 2028 capacity year or from a later capacity year.

Future meetings

April – Consultation paper released

May:

- Renewable support analysis
- Renewable support initial proposal

June:

- Renewable support final proposal
- Updates to other proposals based on submissions

July – Information paper / consultation paper on renewable support released

August:

- Draft Amending WEM Rules (part 1)
- Updates to renewable support proposal based on submissions

September – Information paper on renewable support released

October:

- Draft Amending WEM Rules (renewable support)

Questions or feedback can be emailed to energymarkets@dmirs.wa.gov.au

9. General Business

*We're working for
Western Australia.*

Appendix A – Options

Approach A: Energy purchaser obligation

The RCM requires consuming participants to procure Capacity Credits to meet their Individual Reserve Capacity Requirement (IRCR).

The RET requires purchasers to procure renewable energy certificates to meet their calculated obligation.

A renewable energy retailer obligation would work like an extension to the RET, but with certificates issued only for *firmed* renewable energy output. A central body would need to:

- Certify facilities as eligible
- Issue certificates for energy output
- Calculate obligations for purchasers
- Log certificate transactions

This approach would increase bankability for renewable projects without explicitly guaranteeing revenues for eligible facilities. It may be possible to adopt or adapt aspects of the existing RCM or the RET scheme rather than creating all new functions.

Approach B: Capacity based revenue top-up (RCM)

Under the CIS, a central body needs to determine:

- A revenue requirement for each eligible facility, through a competitive auction process.
- Actual revenue for each eligible facility.
- The top-up payment, which could be simply the requirement less actual revenue, or could relate to a range with a cap and a floor.
- Whether a facility had met energy and availability requirements and if not, the adjustment required to the payment (like RCM refunds)

This requires relatively complex administrative activities. An additional WA-specific scheme could avoid this complexity by:

- using CIS results to determine the average \$/MW top-up amount paid to CIS facilities
- treating this value as an additional payment to eligible facilities (through the RCM or separately)

Approach C: Price guarantee

A price guarantee would require the WEM Rules or a central body to determine:

- A reference price or price range
- The prevailing Real-Time Market price
- The top-up payment for eligible facilities, based on their output and capture price.

The relevant price could be:

- regularly recalculated (like the price caps or the BRCP)
- set once (though with ongoing CPI adjustment) based on prevailing prices in a trigger year:
 - The trigger would likely be linked to cumulative conventional generation retirement
 - The selected year would be from before the price collapse

Approach D: BRCP based on renewables

The WEM Rules require the BRCP to be determined based on the fixed costs of a marginal new entrant capacity provider (the Benchmark Capacity Provider). Historically, that provider has been a 160 MW OCGT, and from 2025 it will be a 200 MW / 800 MWh Lithium-ion battery electric storage system.

If the Benchmark Capacity Provider was determined to be, for example, a wind or solar generator (with or without storage), then capacity payments alone should be sufficient revenue for renewable generation.

This value would need to reflect that the contribution of an intermittent renewable facility to meeting the capacity target is less than its nameplate capacity.

Such a BRCP would be significantly higher than the fixed costs of standalone firm generation or storage, so careful consideration would be needed to avoid incentivising non-renewables and storage without sufficient generation to charge it.

Appendix B – Additional topics

Initiative 3 – Key Topics

1. The overall approach to the scheme
2. **Trigger for scheme commencement and retirement including timing**
3. **Eligibility criteria for technologies to be considered and the firming requirement**
4. Calculation of the “top-up”
5. **Method of recovery of the “top-up” from the WEM**
6. **Administration of the scheme**
7. Design of the WEM Rules to amend the changes.

This appendix provides additional material on topics 2, 3, 5, and 6.

Eligibility

Whatever approach is used to provide an additional revenue stream, the WEM Rules will need to clearly define eligibility. To be eligible, a facility could need to:

- Be powered by renewable sources. The CIS requirements are probably suitable.
- Have an arrangement to firm its output (see next slide)
- Receive Peak Capacity Credits – Certified Reserve Capacity alone would not be sufficient
- Have applied to the CIS and not been successful

Unlike the CIS, the WEM renewable support scheme will not require an additional competitive process.

Support should only be provided in relation to energy that actually flows through the WEM, i.e. not intermittent loads.

Firming requirements

A key component of eligibility for the guarantee is that the proponent is not completely intermittent – it provides some level of firm capacity.

This means that a wind or PV facility would need to also have storage (whether battery or not) or demand response (a Demand Side Programme (DSP) or some new construct) either collocated or contracted to respond when needed.

If collocated, any top-up would be associated with the intermittent component of the facility, not with the firming component.

The firming must be for a particular capacity over a defined duration. For example, to be eligible for the CIS, a facility “must be able to dispatch its **nameplate capacity** continuously for a minimum of **2 hours.**”

Firming requirements

EPWA has identified three options for setting the firming duration requirement. A supported project could be required to have contracts or collocated firming to:

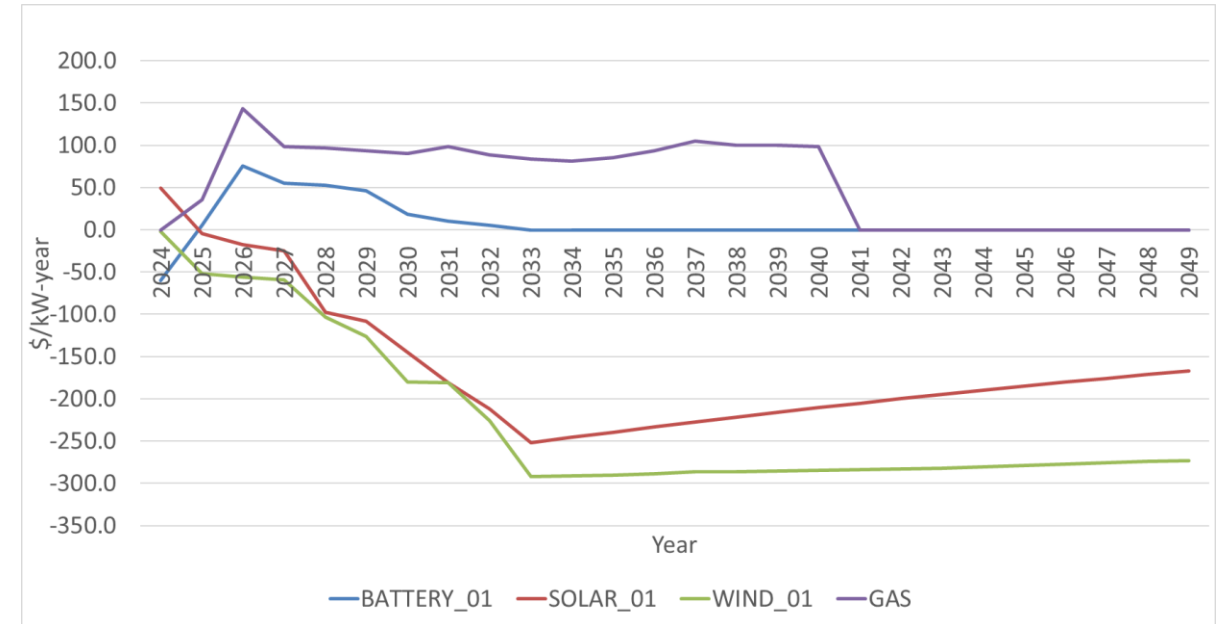
- match the Scheduled Facility requirement. This would require the facility to have storage contracted to at least 50% of its capacity.
- match the Energy Storage Resource (ESR) Duration. This is the natural reference for a WEM duration requirement. It is currently 8 Trading Intervals, and from the 2024 ESOO, will be calculated by AEMO based on the shape of the load curve.
- One of the above *and* be capable of generating a certain amount of energy over a multi-day period.

EPWA considers that the duration should be set to support intra-day firming rather than inter-day firming, and that the duration should be linked to the ESR duration.

Timing – options

Support could begin:

- in a specific year, for example the year following retirement of the last conventional baseload facility
- when actual prices fall below reference prices
- when payments under CIS contracts start being made in the WEM



Profitability of New Entrant Capacity (\$/kW/yr)

(WIC Review Consultation Paper, April 2024)

Payments and Cost Allocation

If intermittent output is covered by a bilateral energy contract, then it is likely to already be receiving contributions to fixed costs from that revenue stream. Guarantee payments need to relate only to energy not sold under bilateral contracts.

Costs of providing the guarantees could be recovered from:

- All consuming participants on a per MWh basis (effectively functioning as an adder to energy prices)
- All participants on an IRCR basis (functioning as an adder to capacity prices)
- Only participants buying Capacity Credits from the specific facilities holding guarantees
- Only participants purchasing from the Real-Time Market, on a per MWh basis.

Scheme administration

Elements of the scheme require new administrative processes. These roles could be performed as follows:

- Registration and eligibility assessment – AEMO, with guidance in the WEM Rules and Head of Power for a WEM Procedure
- Retailer obligation (if using RET-like scheme) – AEMO, with specific calculations in rules
- Reference determination (if using price top-up) – ERA/Coordinator as per the BRCP
- Settlement – AEMO, using calculations in the rules