Department of Energy, Mines, Industry Regulation and Safety
Energy Policy WA
GOVERNMENT OF WESTERN AUSTRALIA

Meeting Agenda

Meeting Title:	WEM Investment Certainty Review Working Group (WICRWG)
Date:	Wednesday 29 May 2024
Time:	11:00 AM – 12:30 PM
Location:	Online, via TEAMS.

Item	Item	Responsibility	Type	Duration
1	Welcome and Agenda	Chair	Noting	2 min
2	Meeting Apologies/Attendance	Chair	Noting	3 min
3	• Conflicts of interest • Competition Law	Chair	Noting	2 min
4	Using CIS outputs to determine renewable top-us	RPB	Discussion	30 min
5	Other topics	RPB	Discussion	40 min
6	Next Steps	RPB	Discussion	10 min
7	General Business	Chair	Discussion	3 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_05_29

29 May 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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	Appendix: Impact of the BRCP on renewable profitability			

5. CIS based top-up

Last Working Group Discussion

The group agreed:

- WA specific support for renewable generation 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. This could be achieved by providing less support than is provided to CIS Agreement (CISA) holders.
  - avoid free riders – paying for something that would have happened anyway
- Option A is not suitable, as it would require replicating the Clean Energy Regulator just for WA.
- Option D is not appropriate. The Benchmark Capacity Provider should not be set to a renewable facility ahead of it becoming the marginal new entrant capacity provider. Renewable energy may become the marginal new entrant at some point. The WIC review should assess the potential for Benchmark Reserve Capacity Price (BRCP) changes to mitigate revenue shortfalls for renewable generators.
- Merge options B and C. Option B is preferable, but using CIS outcomes as a benchmark will only be possible in years where the CIS operates. If there is no CIS output, then another benchmark will be required.

CIS in the WEM

CIS will issue two types of contracts in the WEM:

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

Bid parameters:

- Clean Dispatchable CISAs: floor and ceiling revenue in $/MW of Capacity Credits held
- Generation CISAs: 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

Each CISA will be in place for 15 years.

Using the CIS output to determine revenue top up

The initial CIS auction is for Clean Dispatchable CISAs (firmed renewables), but the agreements we are primarily interested in are the Generation CISAs (non-firmed renewables), for which less detail is available.

The CIS will determine certain parameters for each successful Generation CISA:

- $/MWh cap and floor
- $/MW cap and floor.
- Total amount of annual top-up or recovery

The specific top-up provided to each CISA holder will depend on their actual generation and actual revenue (before the effect of any capacity refunds, and excluding any periods when energy prices are negative).

Example CIS top-up

- Wind facility with 100 MW of capacity and 30 MW of Capacity Credits.
- CISA floors of $1 per MWh of energy produced, and $2,000,000 per MW of Capacity Credits.
- Excluding periods where prices are below zero, facility generates 350 GWh. Some is sold via bilateral contracts, some on the market. Average price is $50/MWh.
- Total energy revenue for the year is 350,000 MWh * $50 = 17.5m
- WEM Reserve Capacity Price is $300,000/MW
- Total capacity revenue for the year is 30 MW * $300k = $9m.
- Total pre-top-up revenue for the year is $26.5m.
- Top-up = Max (0, Floor capacity revenue + floor energy revenue – actual capacity revenue – actual energy revenue)

  = Max (0, 30 MW * $2m + 350,000 MWh * 1 – $26.5m) * 0.9 = max (0, $60m + $350k – $26.5m) = $33.85m
- Total post-top up revenue = $60.35m.

Options for using CIS outputs

1. Apply the average* contracted floor and cap figures to non-CIS facilities.

   This would require calculating revenue for each facility, including accounting for refunds, bilateral contracts, and periods with below zero prices – basically replicating the CIS settlement calculations in the WEM systems. This would account for differences in generation between years.

2. Calculate the average* top-up paid to CISA facilities per MW of Capacity Credits, and pay that to non-CIS facilities.

   This would be a simpler payment approach, but would not account for the difference in generation between facilities. If (as in the example) CIS facilities made money on energy generation, then a non-CIS facility with lower average generation than the CIS facilities would receive less.

3. Calculate the average* top-up paid to CISA facilities per MWh generated, and pay that to non-CIS facilities based on their generation in periods with prices above zero.

   Again, this would require only simple settlement calculations, but would result in relatively lower payments to facilities who did not generate much.

Options assessment

Option 1 would be more reflective of the specifics of individual facilities, and would account for changes in generation between years, but would require significantly more complex settlement arrangements.

Options 2 and 3 would be simpler to calculate and settle, but could be skewed if there is a significant difference between the costs and generation profiles of CIS vs non-CIS facilities, or if there is a significant change in renewable generation from one year to the next. They would provide a strong incentive to generate as much as possible.

Options 2 and 3 would not consider contracted volumes, so contracts may need to be updated to specify treatment of the top-up payment.

Proposal: Option 3. Eligible facilities paid per MWh, based on actual CIS payments.

How to benchmark off the CIS

The CIS is a pay-as-bid mechanism. Successful applicants could receive different payments for the same service.

If WEM renewable revenue support (RRS) was based on the average CIS payment, each year some facilities would be paid less under their CISA than they would have received outside the CISA. This could give project proponents incentive to inflate offers into the CIS in order to increase the overall WEM RRS payment.

Project proponents will still have a strong incentive to put their best foot forward in the CIS, as the CIS will provide revenue certainty for 15 years, whereas the WEM RRS could change each year. Later CISAs will likely see lower floors as technology costs continue to improve.

Influence on CIS participation incentives could be addressed by basing the WEM RRS on:

- The lowest CIS payment
- The average CIS payment multiplied by a discount factor, e.g. 90%.

What do working group members think about this issue?

Post-CIS options

CIS auctions will only run until 2030. CISAs awarded in that year will apply until the mid 2040s. After that there will be no contemporary CIS outputs to benchmark against.

The scheme could be continued by determining alternative benchmarks, for example:

- Using the final year of CIS results in perpetuity
- Using final year of CIS results, adjusted by a deflator (for technology cost)
- Setting $/MWh figures based on the difference between the prevailing renewable capture price and the CISA-adjusted renewable capture price achieved over one or more previous years.
- Setting $/MW CC figures based on the difference between the prevailing Reserve Capacity Price (RCP) and the BRCP of renewable generation (essentially setting a second BRCP specific to renewables)

Proposal: Indicative approach to use final year CIS results with a deflator, but review once CIS has begun.

6. Other 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.

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 will need to:

- Be powered by renewable sources. The CIS requirements are probably suitable.
- Receive Peak Capacity Credits – Certified Reserve Capacity alone would not be sufficient
- Have applied to the CIS, been accepted in the first round, but not been successful in the second round. Facilities commissioned before the CIS would not be eligible.

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

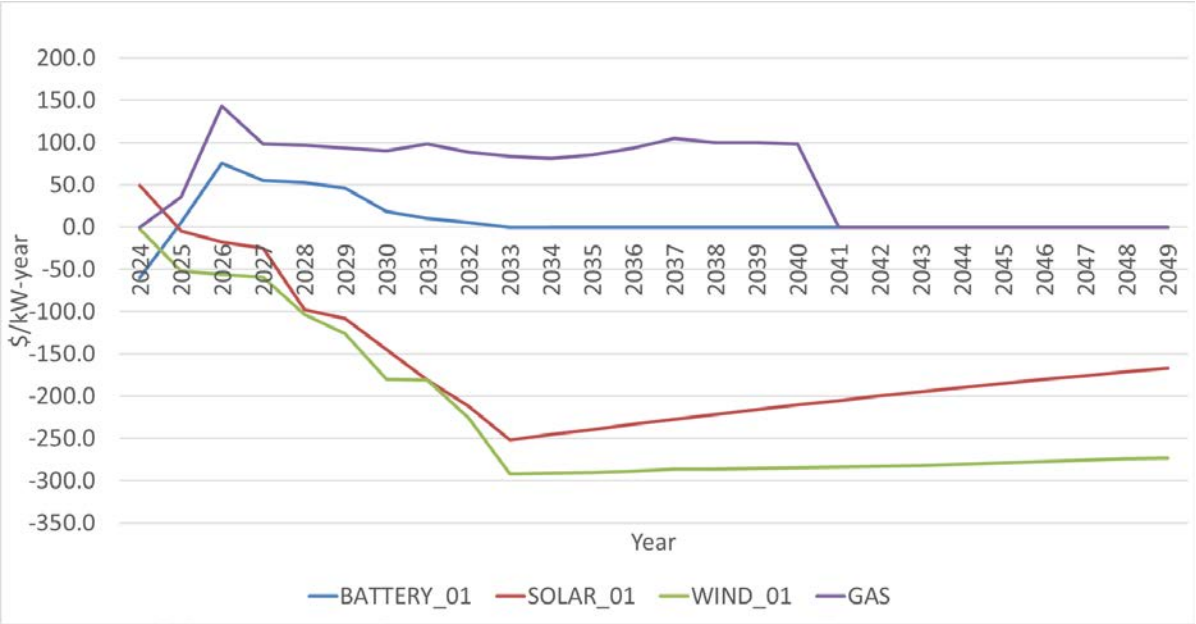
Support will only be provided in relation to facilities providing energy that actually flows through the WEM, i.e. not intermittent loads.

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

Proposal: Begin support in capacity year 2028 – the capacity year following the first CIS payments.



Profitability of New Entrant Capacity ($/kW/yr)
(WIC Review financial analysis)

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 account for energy 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 Individual Reserve Capacity Requirement (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.

Proposal: Recover from all consuming participants on a per MWh basis.

Scheme administration

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

- Registration and eligibility assessment – AEMO, with guidance in the WEM Rules and Head of Power for a WEM Procedure
- Settlement – AEMO, using calculations in the WEM Rules

7. Next Steps

Future meetings

June:

- Renewable support amended proposal

July – Consultation paper released

August:

- Updates to proposals based on submissions

September – Information paper released

October:

- Draft Amending WEM Rules

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

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Appendix A. Impact of the BRCP

Impact of the BRCP

The BRCP is set to reflect the per MW fixed costs of the marginal new entrant capacity provider. When Capacity Credits issued exactly meet the Reserve Capacity Target, the Peak RCP is equal to the BRCP.

For many years the BRCP has been set based on a 160 MW Open Cycle Gas Turbine plant, and from 2025 it will change to a 200 MW 800 MWh lithium-ion battery electric storage system.

Both these technologies are cheaper per MW than a wind or solar facility. A BRCP based on either of these technologies will be insufficient to meet the capital costs of a wind or solar facility, not to mention a hybrid renewable-battery system.

What if the BRCP were set based on cost of wind generation?

Wind generation receives capacity credits based on the Relevant Level Method. This method calculates the contribution from the intermittent generator fleet to meeting the energy demand of the SWIS, particularly at peak times. As a result, wind generators receive fewer Capacity Credits than their nameplate capacity – currently in the order of 15-30%.

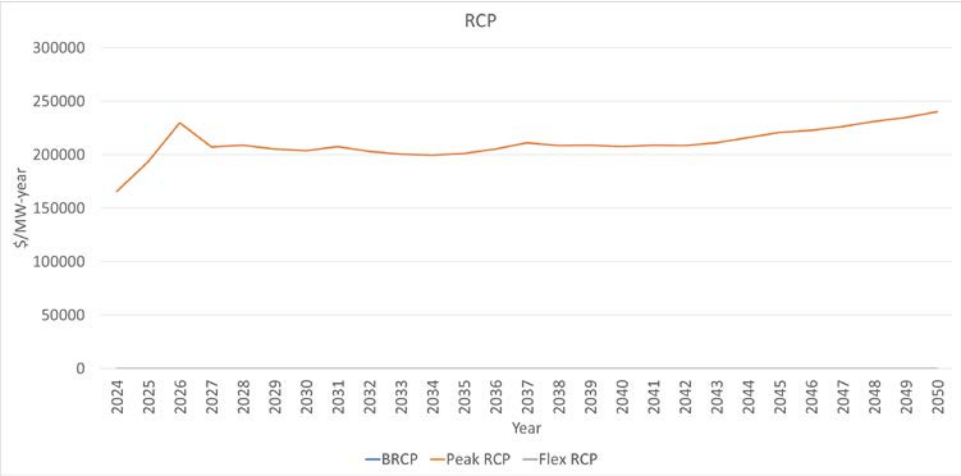
If wind were the marginal new entrant capacity provider, the BRCP (which is based on the cost per Capacity Credit) would need to account for this derating.

That is, the BRCP would be the cost per MW of new wind, multiplied by around 4 to reflect the derating. This would result in a significant increase in the capacity price.

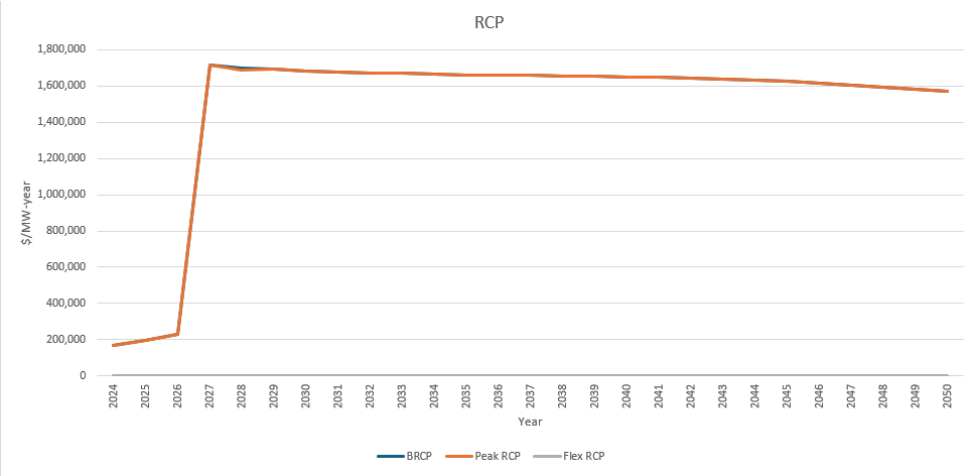
A BRCP based on solar generation would be even higher, as their capacity derating is even more severe, and likely to get more so over time.

Estimated RCP at CC = RC target

BRCP set by storage, with duration increasing over time

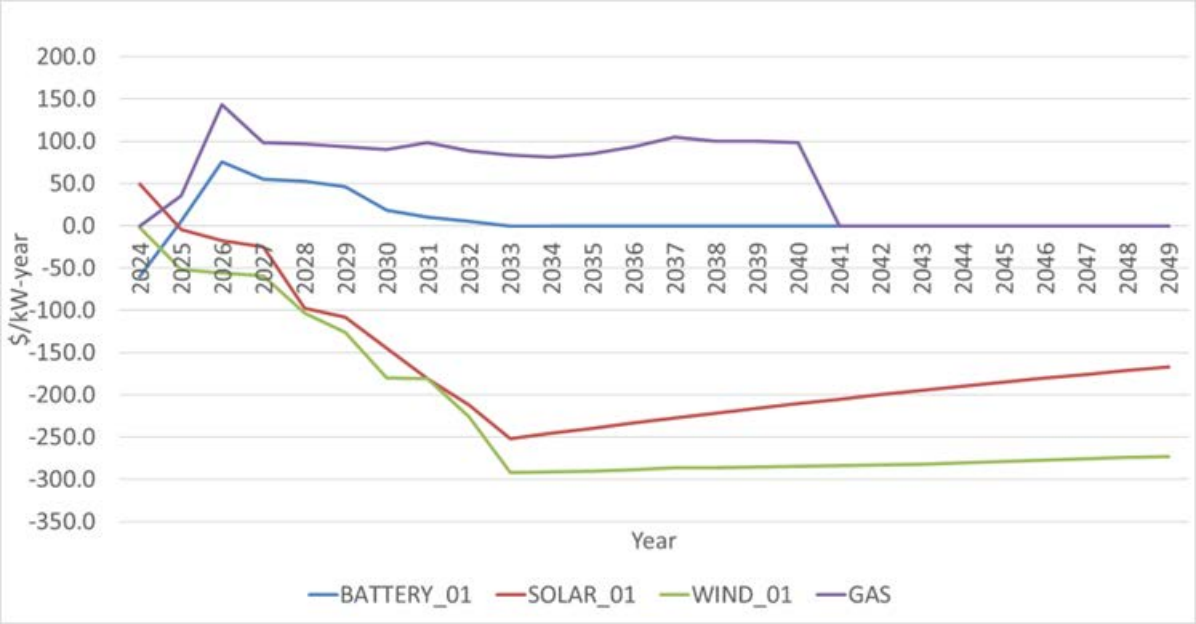


BRCP set by wind

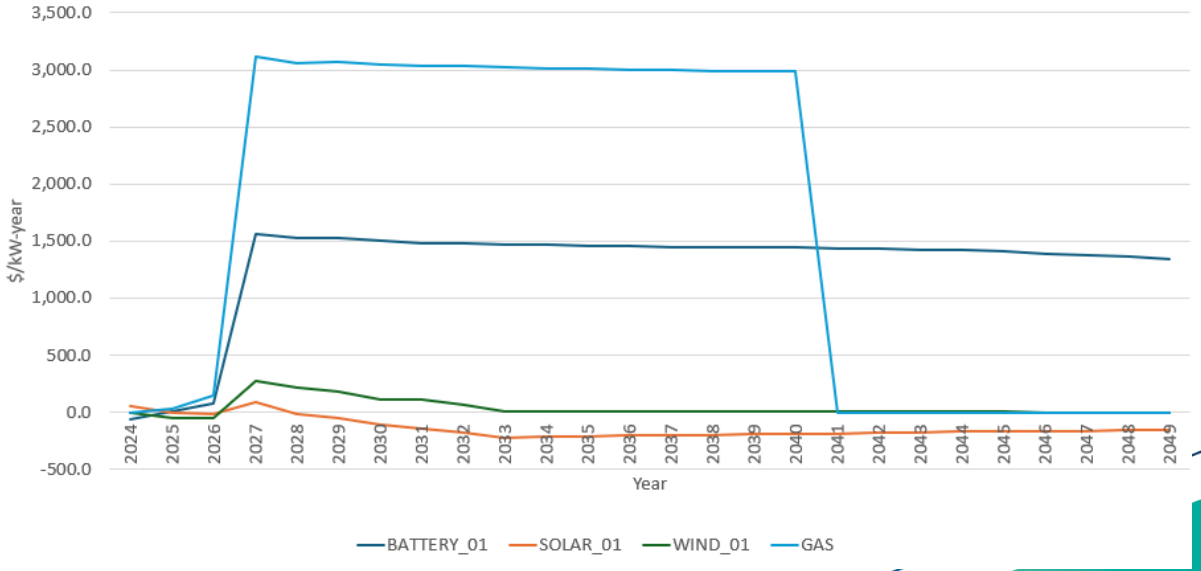


Estimated profitability of new entrants

BRCP set by storage



BRCP set by wind



Implications of a BRCP based on renewables

While a renewables based BRCP would address revenue issues for wind generators, it would result in significant over-recovery of costs for storage facilities.

The incentive for participants would be to build more and more storage facilities, even if there was nothing to charge them with. This would increase costs to consumers.

Resolving this issue would likely require redefining eligibility for capacity to include proof of energy supply.

Further, if wind capacity payments are significantly higher, facilities with CIS contracts would be less likely to need CIS top-ups.

If the BRCP is set based on renewable technology, it is unlikely that any separate top-up scheme would be required, or that the CIS would be required to encourage renewable generation build in WA.