



AUSTRALIAN
ENERGY
REGULATOR

Semi scheduled generator – Proposed rule change ISSUES PAPER

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aer.gov.au

Competition law meeting protocol

All participants are reminded of their obligations with all applicable laws including the Competition and Consumer Act 2010 (CCA) for this meeting.

Participants in this discussion must:

- Ensure that discussions are limited to the matters contemplated by the agenda for the discussion.
- Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion.
- Immediately and clearly raise an objection with the Chair of the meeting if a matter is discussed that the participants is concerned may give rise to competition law risks or a breach of the meeting protocol.

Participants in this meeting **must not** discuss or agree on the following topics:

- Which customers they will supply or market to.
- The price or other terms at which Participants will supply.
- Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participants will participate in the bid.
- Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services).
- Refusing to supply a person or company access to any products, services or inputs they require.

Meeting housekeeping

- Please mute microphones unless speaking
- Please turn video off to reduce bandwidth burden
- Slides are on the AER website
- If you are on the phone – email questions to Wholesaleperformance@AER.gov.au
- Please feel free to use the chat functions for any questions or comments – we will pause regularly for discussion.

Agenda

- Introduction - Justin Oliver
- Background and AER timeline
- Issue paper overview
- Proposed rule change request
- Discussion

The rule change proposal request

- COAG EC requested the AER prepare two rule changes relating to the operation of semi scheduled generators:
 - Semi scheduled generators to be obligated to follow their dispatch targets, in a similar manner to scheduled generators; and
 - Semi scheduled generators being required to continually inform AEMO of any restrictions on their available capacity due to physical factors, ambient weather conditions and their market intentions.

Issues paper

- This is a discussion about the content of our issues paper
 - The paper is designed to promote discussion and get submissions regarding alternatives
 - There are a series of questions posed in the paper and we are seeking feedback on those and the options presented
 - This discussion today should assist all to understand more fully the background, the need and alternatives.

AER timeline

Date	Project step
24 June 2020	Issues paper released
2 July 2020	Stakeholder forum
24 July 2020	Submissions close
End of August 2020	AER submits rule change proposal to AEMC

- Consultation before submitting to AEMC for consideration of fast tracked rule change proposal #1

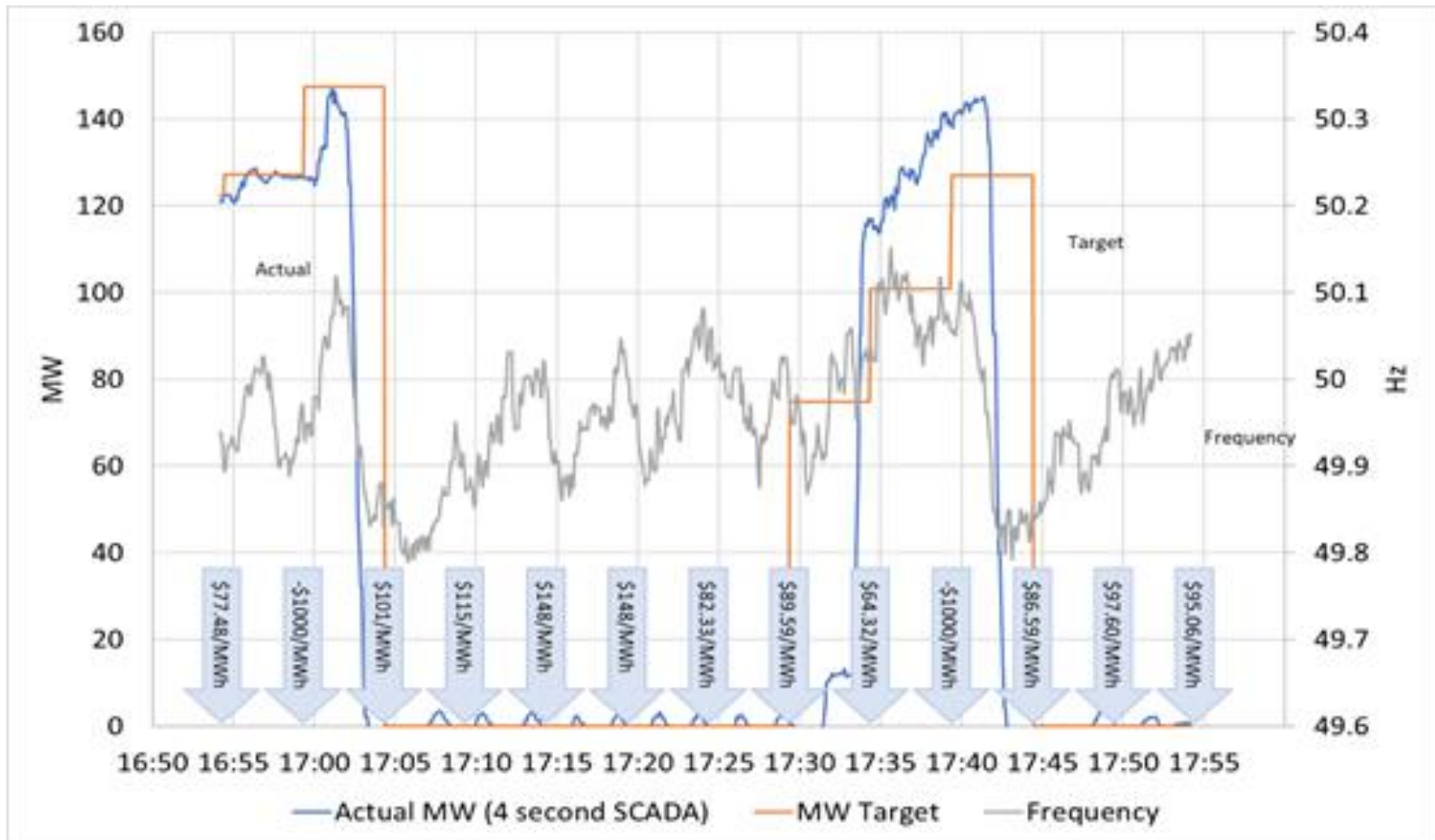
What is the issue?

- Current obligations
 - Stay below a semi dispatch cap in a semi dispatch interval
- AEMO not certain of response
 - NEMDE balances forecast demand against forecast generator performance (targets)
 - If that performance doesn't occur then
 - Contributes to poor frequency performance
 - Consumes more FCAS
 - Poorer price forecasts
 - Power system uncertainty

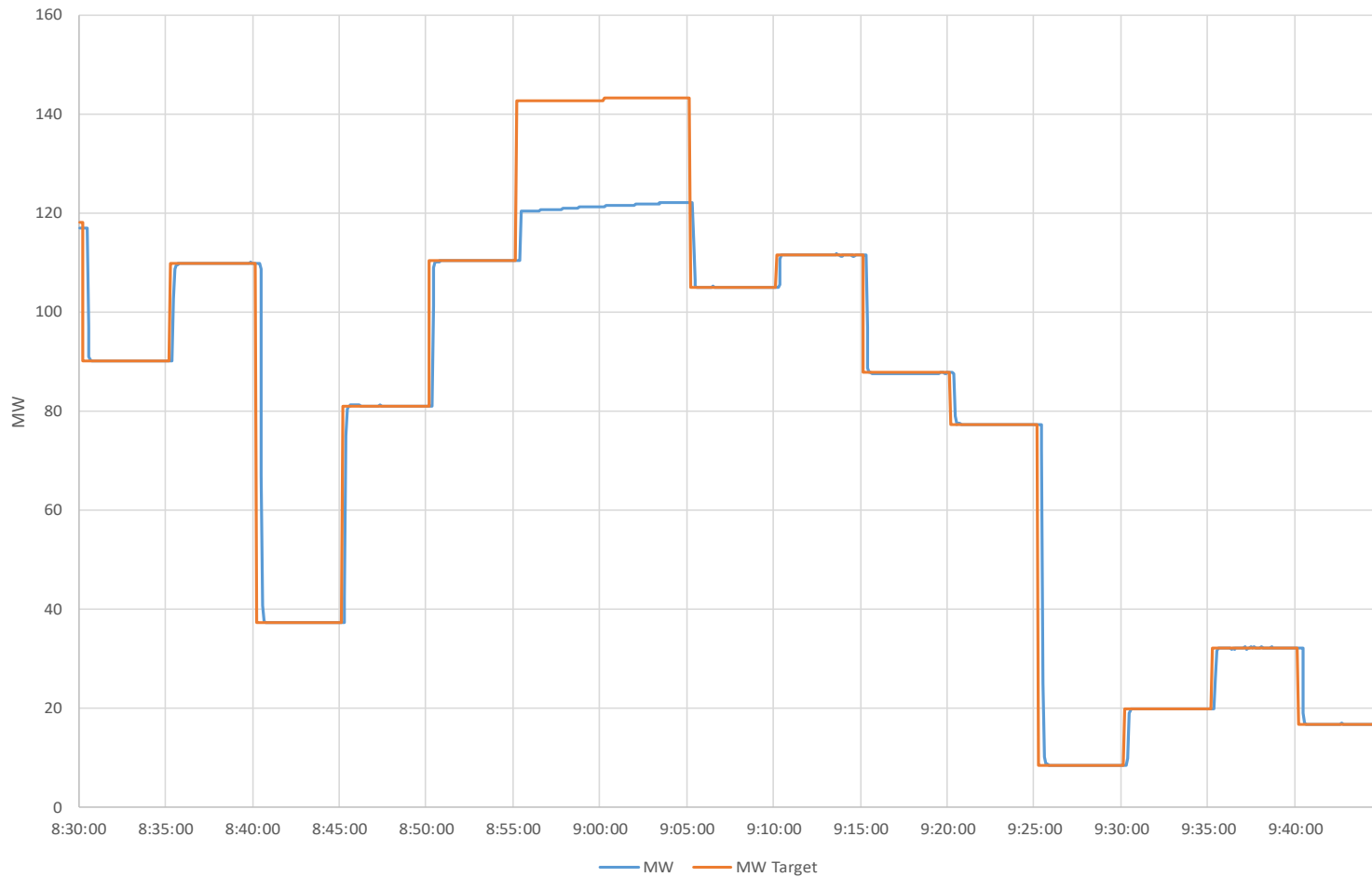
What is the issue?

- Not about forcing semi scheduled generators to
 - Operate in negative prices
 - Operate when they don't want to
 - Operate beyond the resource availability
- It is about confidence in
 - pre-dispatch, dispatch and price forecasts
 - power system security
 - long term certainty and development

Example 1: Negative price response



Example 2: High ramp rate output changes



The problem to be addressed

2008

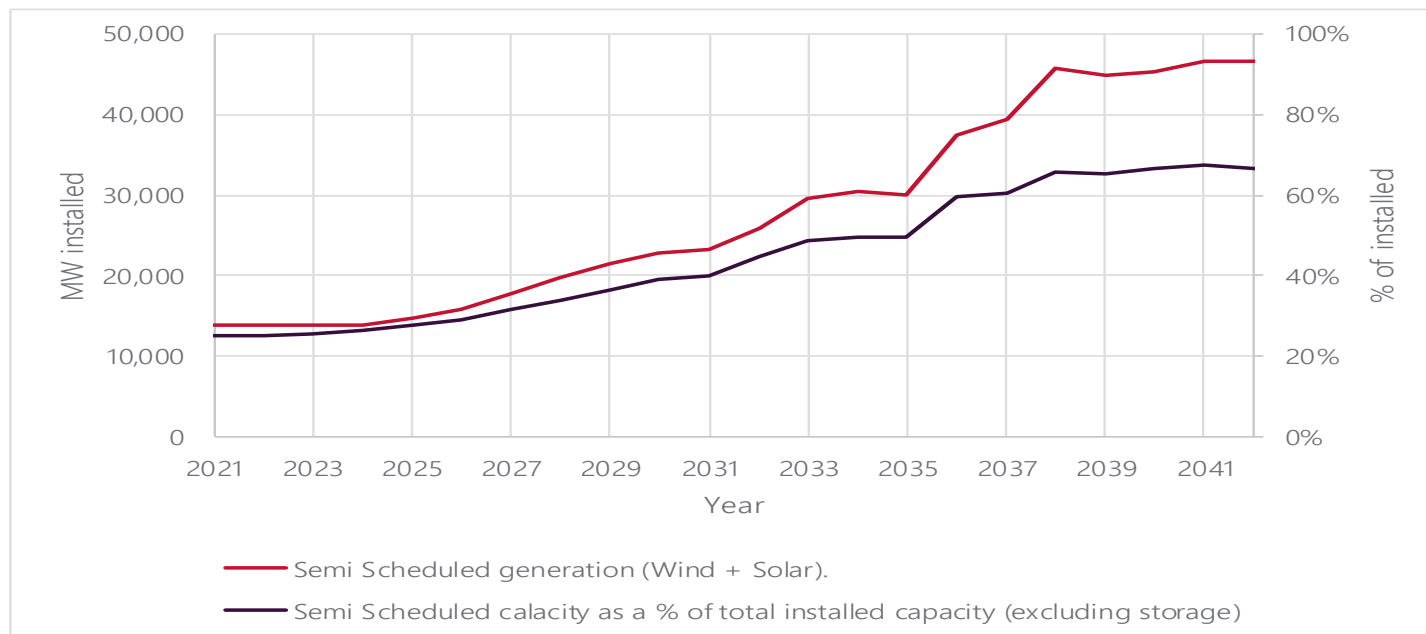
- Semi scheduled category created
- Not many plant installed in the NEM
- Less stringent obligations

Now

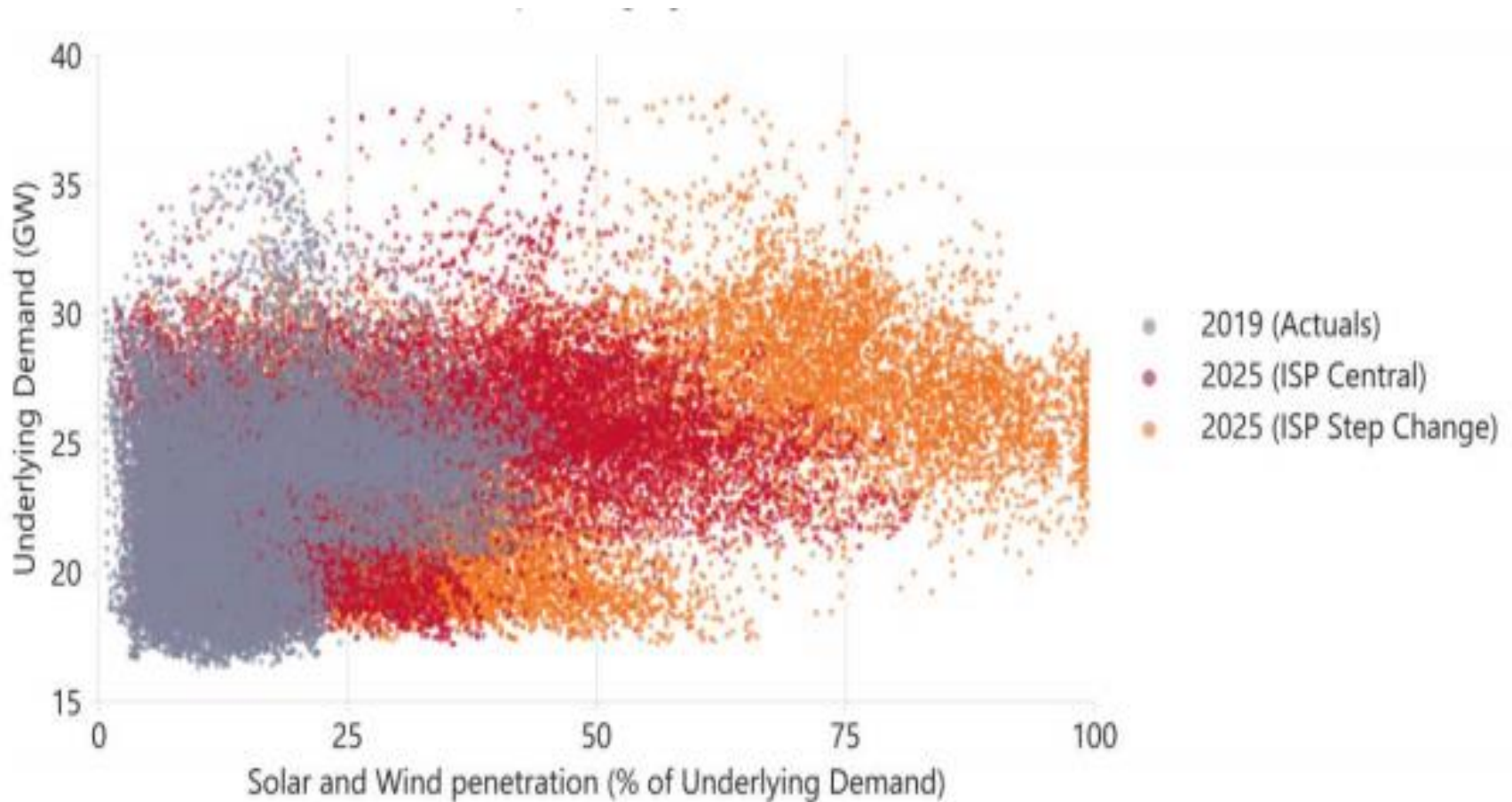
- Over 8,700 MW installed in the NEM and rising
- Forecast to be dominant form of generation in to the future
- Still same less stringent obligations

Forecast growth

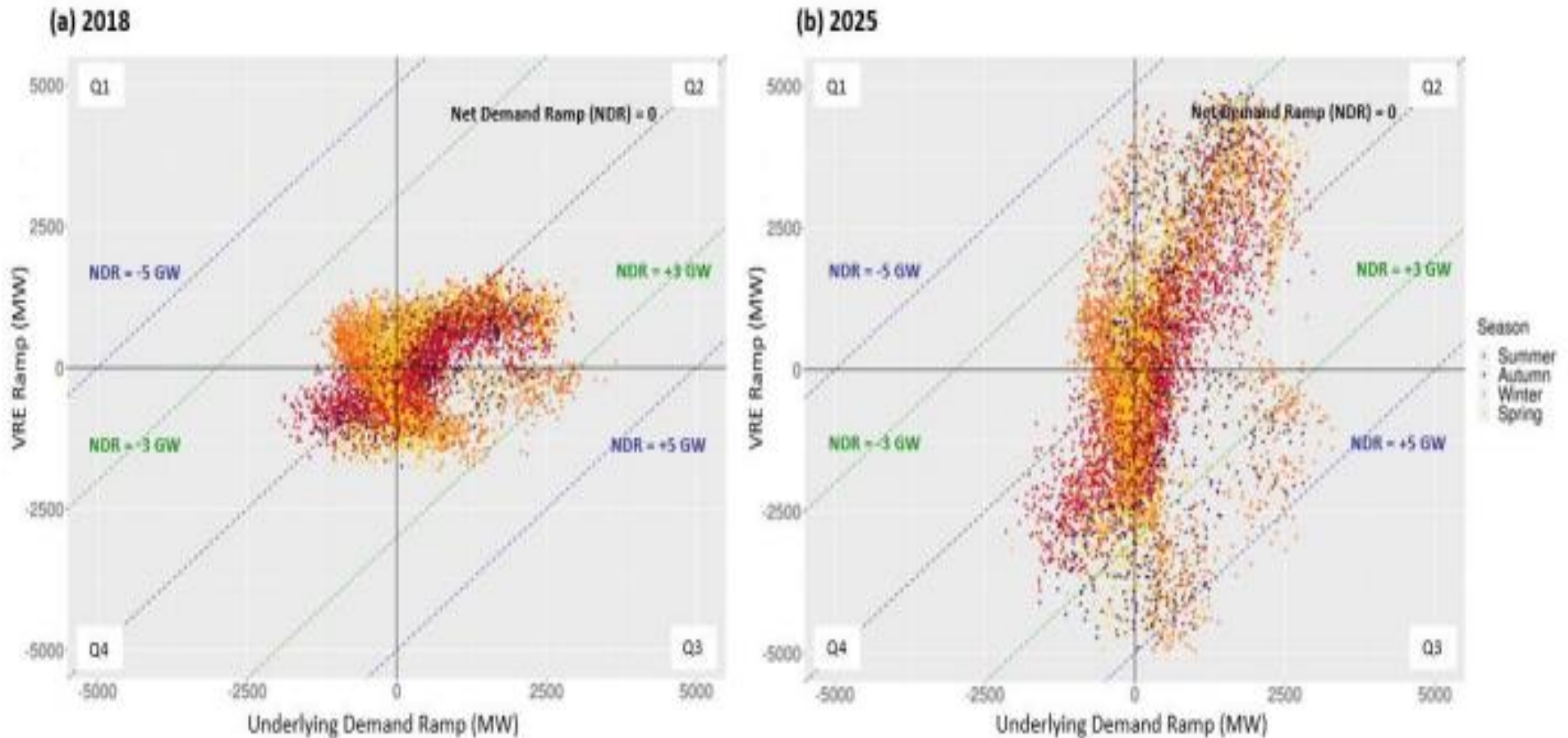
- Renewable energy projects dominate development
- AEMO studies show integration challenges



Instantaneous penetration of wind and solar generation, actual in 2019 and forecast for 2025 under ISP Central and Step Change generation builds



Changes in 1-hour underlying demand and VRE



RC1: SSGens following dispatch targets

– non preferred options I

- Causer Pays Factors
 - increase economic incentives to make it more costly to deviate from targets
 - 28 day averaging blunts effectiveness
 - Signal not insignificant but not closely correlated
- Registration requirements
 - prohibit the installation or use of either systems or procedures that allow for, or automate, a reaction to price that does not match their target

RC1: SSGens following dispatch targets

– non preferred options II

- Amend existing arrangements
 - for SSGens to :
 - Follow an Energy Target instead of MW
 - accommodates variations in resource within 5-minute intervals.
 - megawatt target from AWEFS/ASEFS or self forecast converted to MWh.
 - Causer pays would be challenging and SGen targets not the same as SSGen targets
 - Operate as an inflexible generator
 - advise AEMO of a fixed MW dispatch level
 - don't set price but follow their target
 - some constraint precedent rules would need changing

RC1: SSGens following dispatch targets – preferred options considered I

- Amend existing arrangements for SSGens.
 - remove semi scheduled dispatch interval and cap
 - dispatch instructions are to be followed by the participants subject to the availability of their dependent resource.
 - NER cl 4.9.8 – follow dispatch instructions unless
 - Injure people or damage plant or
 - Providing other system services
- And add
- Loss of Resource

RC1: SSGens following dispatch targets

– preferred options considered II

- Remove the SSGen classification.
 - Dramatic change to the rules
 - many clauses to be addressed
 - SSGens are treated the same as SGENs
 - Need careful consideration of resource implications
 - Differentiating between compliance and conformance
 - Amend 4.9.8 the same way

RC 2: Better information provision

- Will depend on the 1st rule change
- Could be addressed by changes to AEMO operational and forecasting procedures
- Not seeking to be fast tracked

Discussion and Questions

Contact us

- Questions and submissions should be sent electronically to wholesaleperformance@aer.gov.au.