

# Voluntarily Scheduled Resources Incentive Mechanism (VIM) - IPRR



Pre-consultation focus group

4 March 2025



# 1. Welcome

Ulrika Lindholm (AEMO)

**We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.**

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country; and hope that our work can benefit both people and Country.

**'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan**

AEMO Group is proud to have delivered its first Reconciliation Action Plan in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate our ongoing journey towards reconciliation - a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.

Read our  
RAP



# General Housekeeping



1. Please mute your microphone when not speaking.



2. We look forward to your feedback and questions. Questions are welcome throughout the session, either in the chat or by raising a virtual hand.



3. We will be using the Microsoft Polls app in today's session, responding is optional, fully anonymous and visible to all attendees on the call via the chat.

4. In attending this meeting, you are expected to:

- Contribute constructively.
- Be respectful, both on the call and in the chat.

Participants are asked to familiarise themselves with AEMO's [Competition Law Meeting Protocol](#) as outlined in on the following page and at AEMO's website.

# AEMO Competition Law - Meeting Protocol



AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO, all participants agree to adhere to the CCA at all times and to comply with appropriate protocols where required to do so.

AEMO has developed meeting protocols to support compliance with the CCA in working groups and other forums with energy stakeholders. Before attending, participants should confirm the application of the appropriate meeting protocol.

Please visit: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups>

# IPRR reform to date



The IPRR high-level implementation assessment (HLIA) provides an indicative and preliminary view to participants on how the IPRR rule may be implemented by AEMO.

For more information visit:



[nemreform@aemo.com.au](mailto:nemreform@aemo.com.au)



[AEMO | NEM Reform | IPRR](#)



[AEMC | IPRR rule development](#)

# Agenda

#	Time (AEDT)	Topic	Presenters
1	10:00 – 10:05am	<b>Welcome</b>	Ulrika Lindholm
2	10:05 – 10:10am	<b>Objective of the session</b>	Ulrika Lindholm
3	10:10 – 10:20am	<b>Context: Integrating price responsive resources rule</b>	Emily Brodie
4	10:20 – 10:40am	<b>Overview: VSR Incentive Mechanism</b> - Purpose, objectives and features	Gareth Morrah
5	10:40 – 11:00am	<b>Key issues for consultation</b> - Early view for discussion	Gareth Morrah
6	11:00 – 11:25am	<b>Q&amp;A &amp; polls</b>	Ulrika Lindholm
7	11:25 – 11:30am	<b>Next Steps</b>	Ulrika Lindholm
	11:30am	<b>Close</b>	

## Prereading:

- [AEMC Final Rule: Integrating Price Responsive Resources into the NEM \(IPRR\)](#)
- [AEMO's v1.0 IPRR High Level Impact Assessment](#)
- [AEMO's VSR Guidelines consultation](#)
- [AEMO's IPRR Project Webpage: Integrating Price Responsive Resources into the NEM \(IPRR\)](#)

Appendix A	<b>Glossary</b>
Appendix B	<b>Useful Links</b>



*"Please note that this meeting will be recorded by AEMO and may be accessed and used by AEMO for the purpose of compiling minutes. By attending the meeting, you consent to AEMO recording the meeting and using the record for this purpose. No other recording of the meeting is permitted"*

# 2. Objective of the session

Ulrika Lindholm (AEMO)



# Objectives of today's session



1.

**Provide an understanding of  
Voluntarily Scheduled Resources  
(VSR) Incentive Mechanism  
and procedure**



2.

**Identify and discuss key issues to  
be considered for the VIM  
procedure**



3.

**Invite participation in this  
VIM procedure  
consultation process**

# Starting the conversation

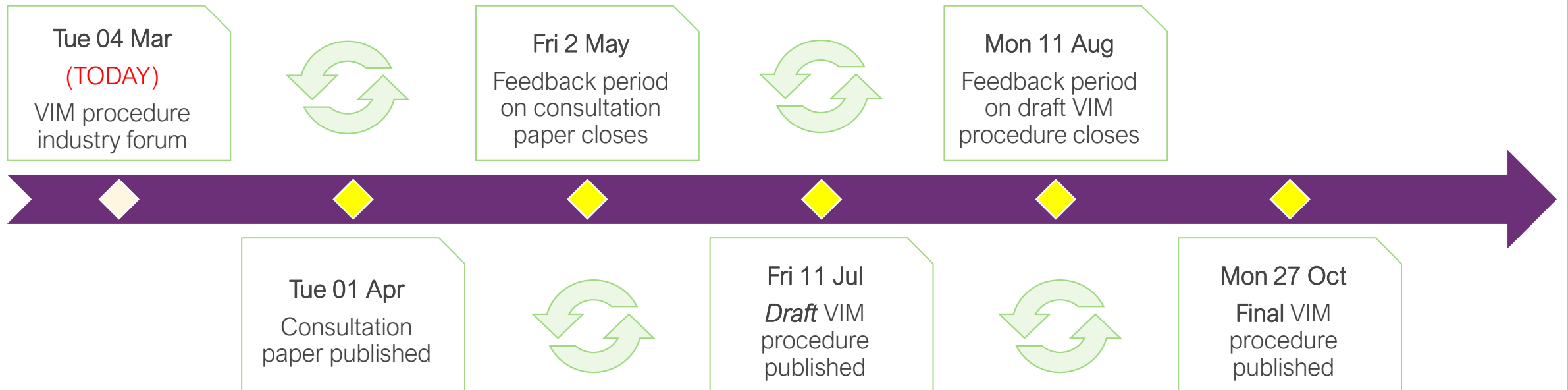
How the VSR Incentive Mechanism (VIM) could operate

- We want to hear from our stakeholders over the coming months about what the issues are and what the solutions could be.
- Today's session is focused on **setting the context** and **identifying issues**. We'll delve into solutions as we move through the engagement process.

How AEMO and stakeholders should collaborate on developing the VIM Procedure

- We suggest ongoing discussions with stakeholders in formats that suit e.g. 1:1's or potentially working group sessions.

## VIM PROCEDURE: 2025 INDICATIVE INDUSTRY ENGAGEMENT TIMELINE



# Engagement approach - VIM Procedure

To encourage the adoption of IPRR, AEMO aims to involve industry stakeholders broadly and transparently, while ensuring neutrality and focus on the development of the VIM Procedure.

## Proposed engagement principles:

- Raise awareness and understanding of IPRR reform
- Focus on supporting this procedure development, and separate to the tender process or collaboration on IPRR more broadly
- Transparency and equal access to information for all stakeholders

AEMO is seeking input into this collaboration approach. Have we missed anything? Do you have a view on the appropriate approach and timing for engagement?

## Indicative approach:



Supported by transparent regular communications and publicly available material via AEMO website

# 3. Context:

## Integrating Price Responsive Resources rule

Emily Brodie (AEMO)

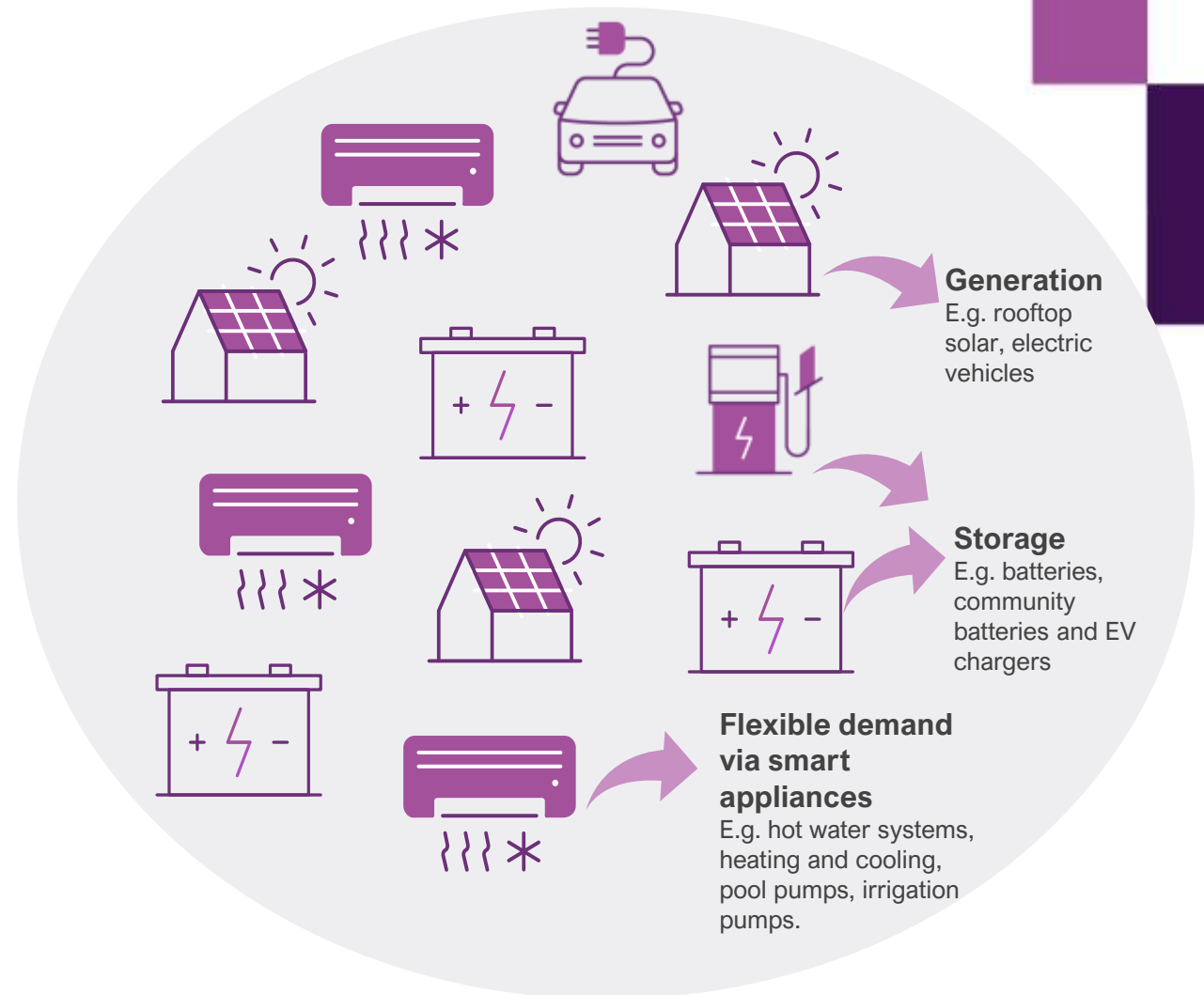
# What is a 'price responsive' resource?

For IPRR, the term *unscheduled price-responsive resource* refers to a resource which meets the following criteria:

- ✓ It is currently not scheduled through the NEM dispatch process, and
- ✓ It does or could respond (individually or as part of an aggregation) to market price signals.

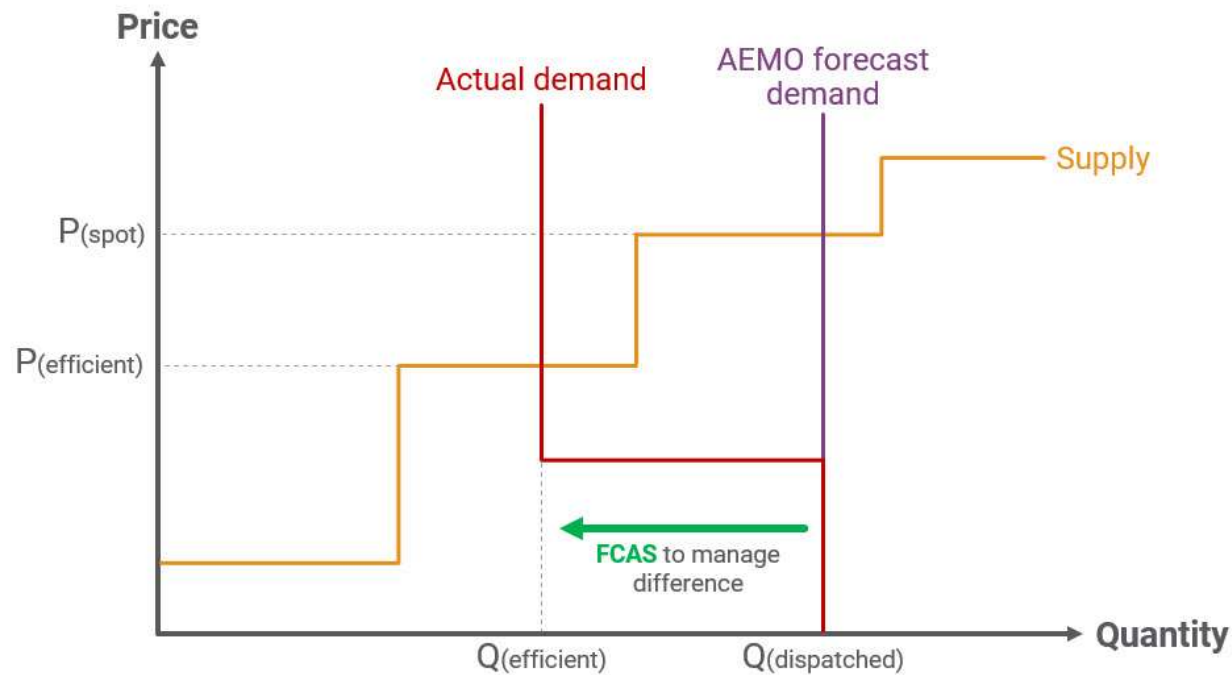
## Includes a wide range of resources:

- Small-medium sized assets across renewable generation, storage and flexible demand
- Owned by residential, commercial and industrial consumers, therefore including both Consumer Energy Resources (CER) *and* Distributed Energy Resources (DER).
- Often coordinated by an aggregator, such as a VPP or retailer, on behalf of the consumer.
- Unable to participate in some services that are available to scheduled resources (e.g. regulation FCAS), which limits the value that customers can receive for their CER.



# Problem: Existing arrangements don't integrate these resources in the NEM

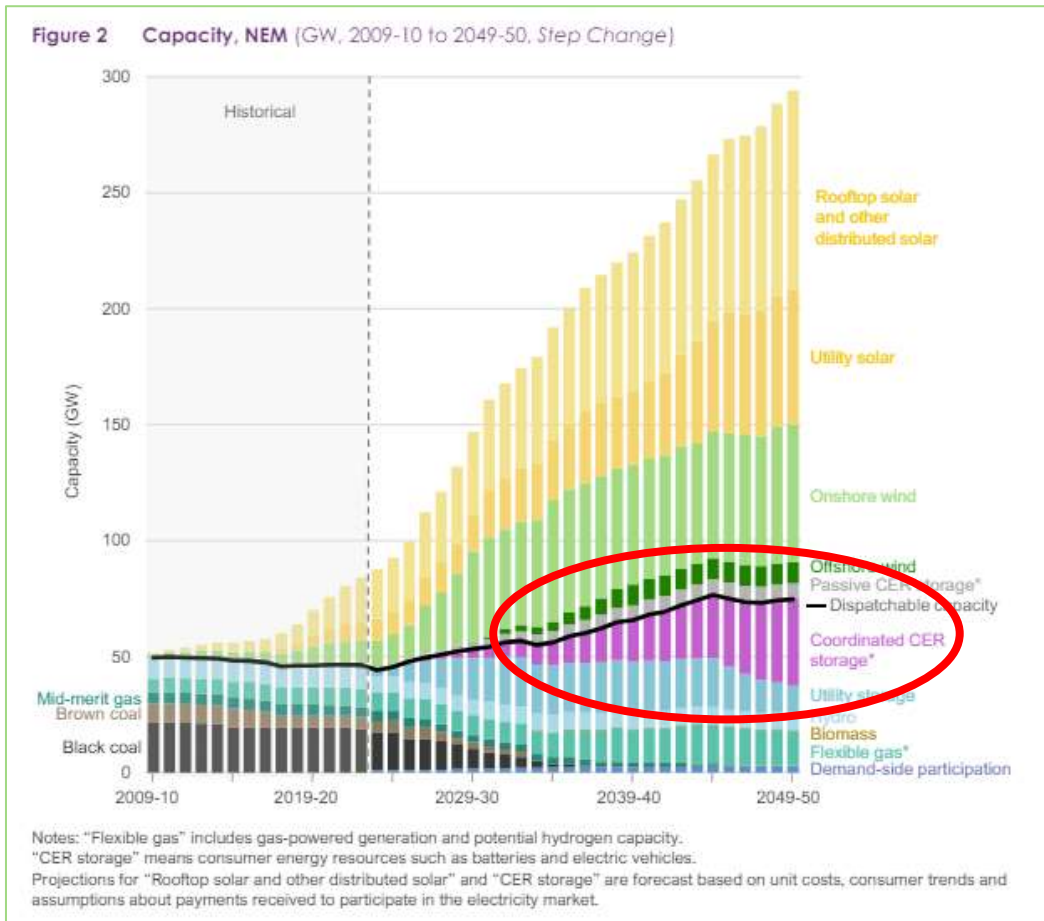
INACCURATE DEMAND FORECASTS => INEFFICIENCIES & COSTS



REFERENCE: AEMC, [IPRR final determination](#) p.12.

- Small distributed resources cannot participate in central dispatch easily i.e. can't access the full market (energy and FCAS)
- Price is not an input into demand forecasting
- This results in:
  - Higher spot prices ( $P(s)$ )
  - Higher generation costs
  - Potentially use of higher emitting generation
  - To balance the system, increased use of FCAS and potentially emergency reliability measures
- Over time these inefficiencies may lead to additional market entry, at a material cost.

# Why is the IPRR initiative important?



- Forecast rapid growth in unscheduled price responsive resources is expected.
- These resources are already being aggregated and operated dynamically to respond to NEM price signals.
- Without effective coordination of consumer batteries, around \$4.1 billion of additional grid-scale investment would be needed, increasing the costs that are reflected in consumer bills.

# IPRR rule refresher

Three components to rule, each with new supporting document

## 1. Dispatch mode

- **Problem:** Small distributed resources cannot participate in central dispatch easily.
- **Solution:** New **VOLUNTARY** “Dispatch mode” to integrate presently unscheduled price-responsive energy resources into NEM scheduling processes.

### → VSR GUIDELINES

Establishes the technical and operational characteristics of VSRs.

## 2. Incentive framework

- **Problem:** Being scheduled does not always provide the scheduled participant with benefits.
- **Solution:** New time-limited incentive mechanism (tenders) to encourage participation in dispatch mode. Up to \$50m, with potential top ups from external bodies.

### → VIM PROCEDURE

Specifies a range of matters to support operation of the VIM, including “participation payments”.

## 3. AEMO monitoring & reporting framework

- **Problem:** Price sensitivity is not currently used by AEMO as an input for demand forecasting.
- **Solution:** New framework to understand and manage the impact of unscheduled price-responsive energy resources on operational demand forecasting processes and market outcomes.

### → AEMO PRICE RESPONSIVE REPORTING GUIDELINES

How AEMO will meet its annual and quarterly reporting obligations.

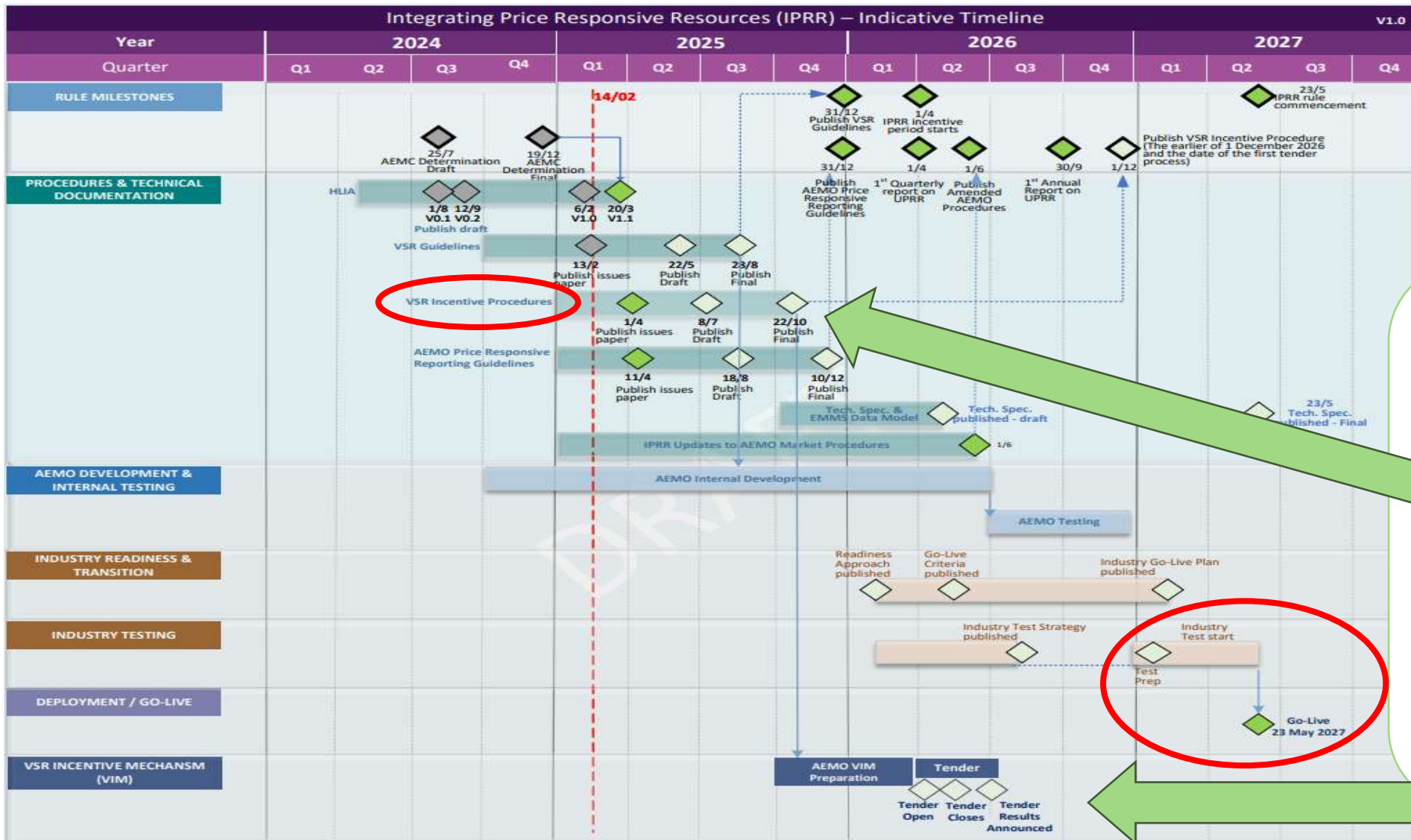


# Key terms to support today's discussion

TERM	MEANING
Voluntarily Scheduled Resource (VSR)	An aggregation of price responsive resources that can be scheduled and dispatched in the NEM
Voluntarily Scheduled Resource Provider (VSRP)	The operator of a VSR
Dispatch mode	The new voluntary framework set up by the IPRR rule to allow VSRs to participate in the NEM
VSR participation modes	<ul style="list-style-type: none"> <li>• <b>ACTIVE</b> – full VSR participation in dispatch mode</li> <li>• <b>INACTIVE</b> – partial VSR opt out of dispatch mode</li> <li>• <b>HIBERNATED</b> – full VSR opt out of dispatch mode (available for a minimum of 30 days to a maximum of 18 months)</li> </ul>

For more information visit:	<a href="mailto:nemreform@aemo.com.au">nemreform@aemo.com.au</a>	<a href="#">AEMO   NEM Reform   IPRR</a>	<a href="#">AEMC   IPRR rule development</a>
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# IPRR *indicative* timeline



**IMPLEMENTATION APPROACH:**  
 Adapted to dates in final rule.  
 Develop VIM Procedure earlier than required so that:

- PARTICIPANTS** can have early certainty of payments and can develop their systems / processes in time for industry testing and the start of dispatch mode.
- AEMO** can manage the VIM dependency to Settlements system development.

# 4. Overview: VSR Incentive Mechanism (VIM)

Gareth Morrah (AEMO)

# VSR Incentive Mechanism (VIM): High-Level Summary



- Today’s pre-consultation with stakeholders is about identifying and discussing the key issues for the VIM procedure.
- The consultation process is important because the procedure will set out the rights and obligations to participate in the VIM.

# VSR Incentive Mechanism: Key Features

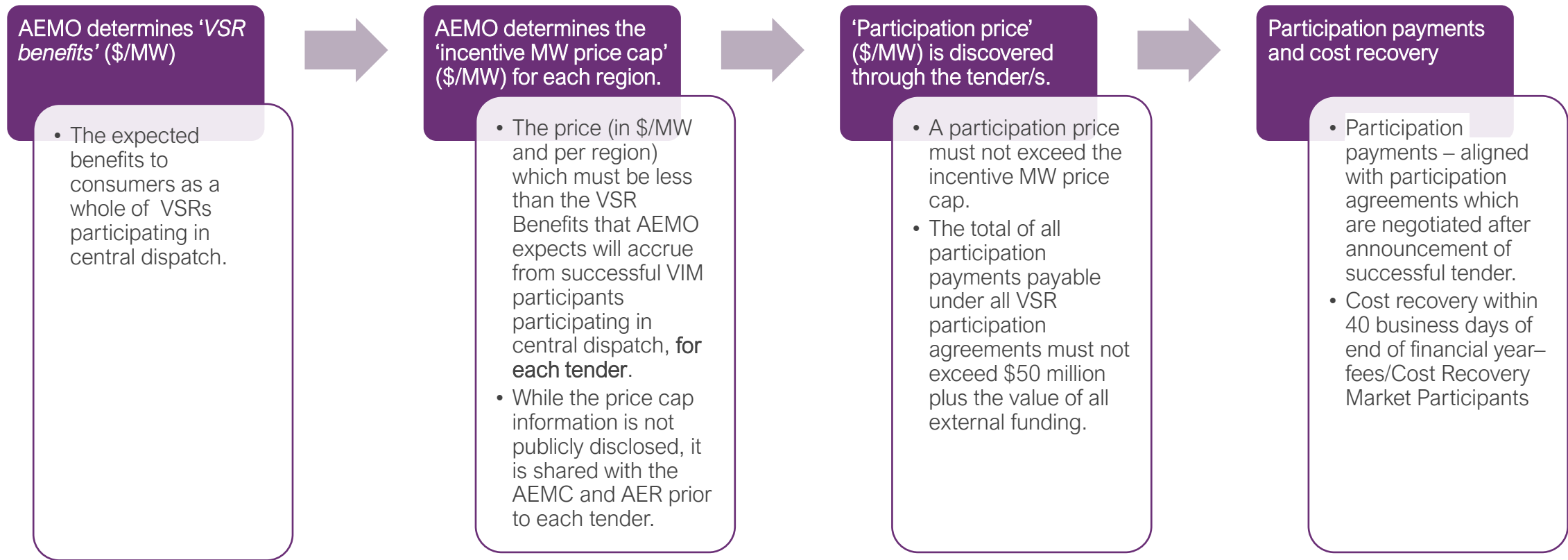
The Voluntarily Scheduled Resource Incentive Mechanism (VIM) was established by the [IPRR rule](#) (NER 3.10B).

MANDATORY
• AEMO will operate the incentive mechanism.
• The objective of the VIM is to increase dispatch mode participation in the long run, at the lowest cost.
• Minimum two tender processes between 1 April 2026 & 31 December 2031.
• A per MW price cap.
• The VIM will be capped to \$50m, but external funding can also be used in addition to this amount.
• Resources will only be eligible for one contract for one to three years.
• VSRPs must meet requirements set out in the participation agreements.
• Participation payments will be recovered from Cost Recovery Market Participants and administrative fees from Registered Participants.
• AEMO will publish a report annually and at the end of the incentive period.
• Operational details will be determined through AEMO procedures

DISCRETIONARY
• VSRP/Prospective VSRP participation in the VIM is voluntary
• Some flexibility for AEMO in drafting the procedure in consultation with stakeholders.
• Within the incentive period there are choices around: <ul style="list-style-type: none"> <li>• Running more than two tenders</li> <li>• Timing of tenders</li> </ul>
• AEMO to determine a way of calculating the price cap in line with a formula in the rule.
• Participation payment timetable.

**DISCUSSION WITH STAKEHOLDERS:**  
 AEMO’s early views on how it might run the VIM, including approach to procurement strategy.

# Participation payments and cost recovery



# Purpose of the VIM procedure

- Operational details of the VIM will be determined through AEMO procedures.
- **VSR incentive objective:** to maximise VSR benefits in the long run by incentivising participation while minimising cost.
- The rule requires AEMO to consider the “VIM Principles” when developing the procedure (3.10B.2(d)).
- The VIM should achieve the objective taking into consideration:
  - Relative availability of voluntarily scheduled resources:
    - expected capacity factor, and
    - planned hibernation notices.
  - How much the VSR will vary its output or consumption with spot prices.
  - Benefits of having a diversity of resources and providers participating in dispatch.



# 5. Key issues for consultation

Gareth Morrah (AEMO)



# VIM Procedure discussion

- The next few slides cover key matters for the VIM Procedure that AEMO is interested in receiving your feedback on.
- It is a list of topics or requirements that AEMO is intending to include in the draft procedure.
- This initial feedback will help AEMO develop the issues paper and will better inform the consultation process.
- AEMO is interested in your feedback, prior to commencement of consultation, of items that you consider should be addressed in the procedure.

1: Establishing VIM Sourcing Strategy



2: VIM Tender

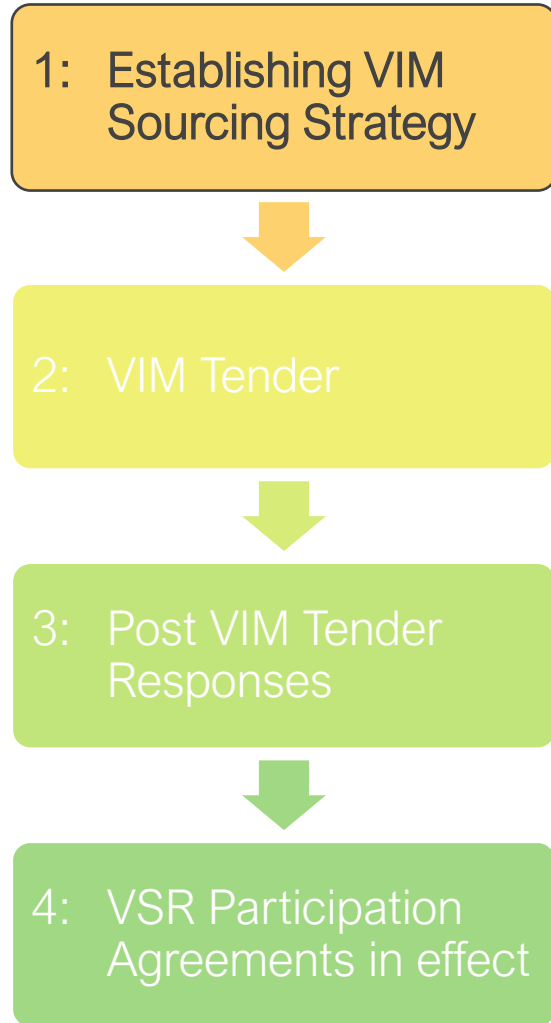


3: Post VIM Tender Responses



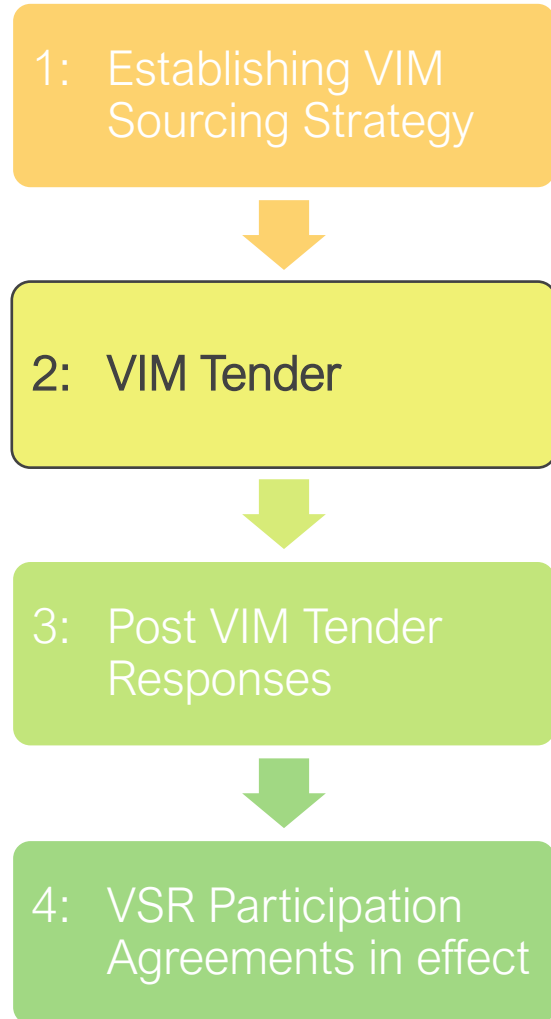
4: VSR Participation Agreements in effect

# VIM Procedure proposed approach (1)



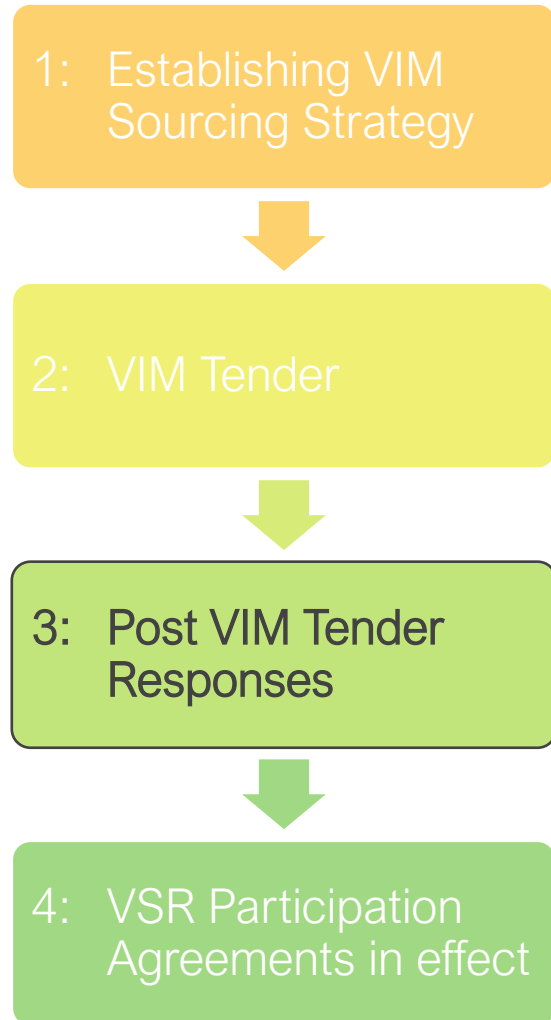
- AEMO to determine the MW price cap and notify AER and AEMC
- AEMO to provide a market notice of upcoming tender which will include:
  - Pre-tender Notice and proposed sourcing strategy
  - Specification of Need
  - Qualification criteria to participate
  - Indicative procurement timetable.

# VIM Procedure proposed approach (2)



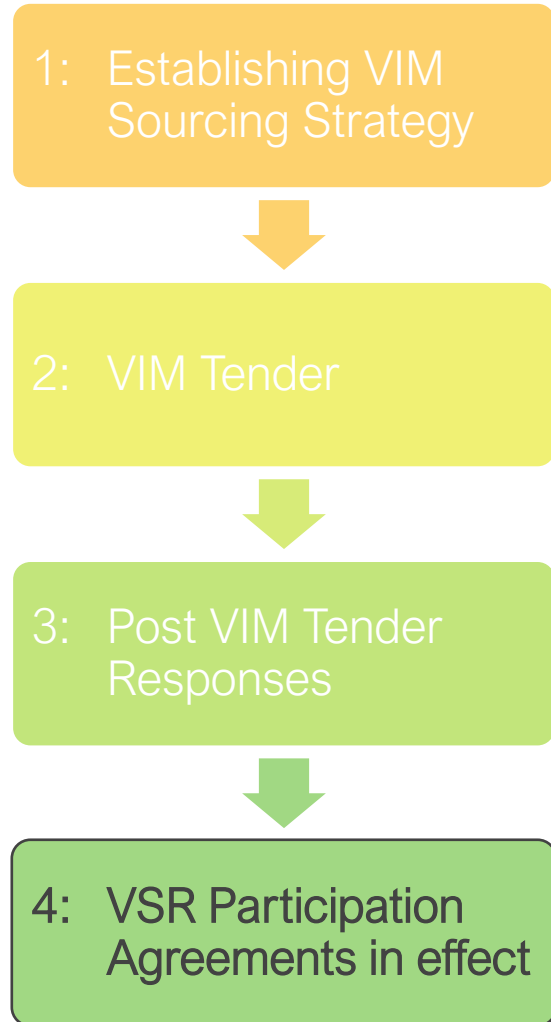
- Minimum notice period for the Market Approach i.e., Request for Tender (RFT)
- VIM Tender comprised of:
  - Background and Terms of Tender (bid rules)
  - Key tender dates and contact details
  - Specification of Requirements
  - Draft VSR Participation Agreement
  - Tender Response Schedules.
- Probity and Confidentiality provisions apply
- Communications must be in writing and only with Contact Person
- Rules around time extensions for tenderers
- Standard AEMO procurement processes would be applied
- All parties that participated in the tender will be notified in writing of the outcome
- Final VSR Participation Agreements treated as *commercial-in-confidence*.

# VIM Procedure proposed approach (3)



- Evaluation of tender responses in accordance with approved evaluation methodology. Assessment criteria.
- The short-listed tenderers will be required to negotiate and agree a VSR Participation Agreement which includes:
  - Resources
  - Performance criteria
  - Pricing
  - Participation in dispatch requirements
  - Term of contract (1-3 years)
  - Termination rights
  - Requirements for any external funding
- All tender responses will be treated as *commercial-in-confidence*, including the outcome
- Agreement will have termination provisions.

# VIM Procedure proposed approach (4)



- Successful tenderers must be ready and able to participate in dispatch mode at commencement of a VSR Participation Agreement
- Eligibility to participate
- Successful tenderers operate VSR/s in dispatch mode, complying with VSR Guidelines and any other obligations for services provided
- Timetable for payments
- **AEMO to report:**
  - Aggregate of payments made under VSR Participation Agreements
  - Summary of outcomes
  - Description of learnings and insights gained from VIM
  - Analysis of prices paid under VSRP Agreements
  - Analysis of participating resources
  - Any other information considered relevant.

# 6. Q&A

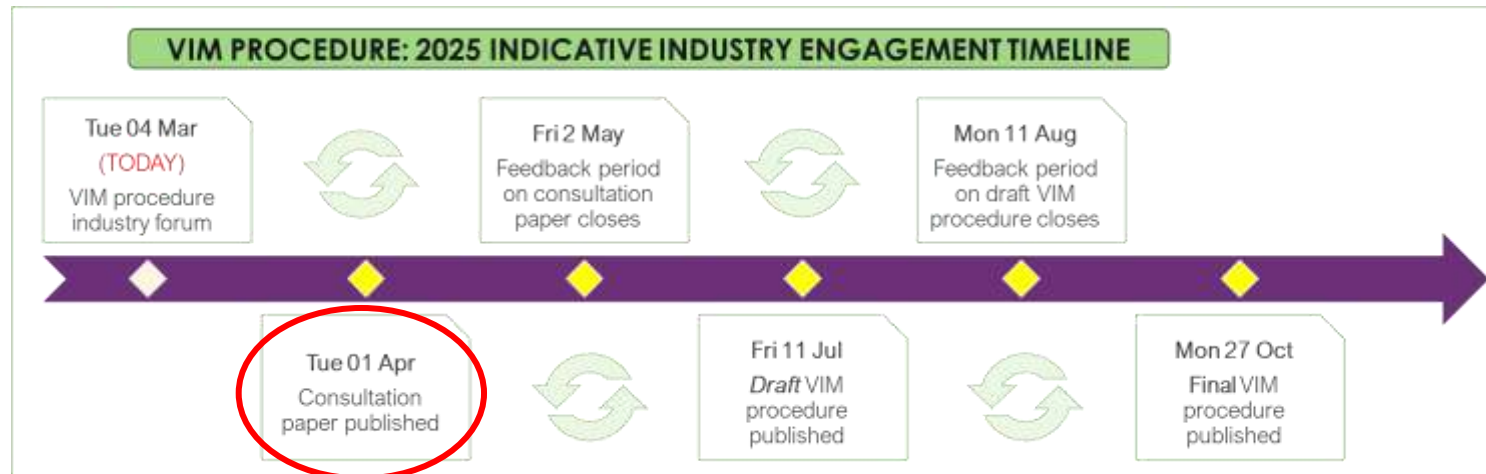
Ulrika Lindholm (AEMO)

# VIM Procedure: Issues Paper

What are the issues/items that you would like addressed in the Issues Paper?

Examples:

- How much time do participants require from successful tender to participating in dispatch?
- What gaps do you see in the key VIM procedure matters identified above?




# 7. Next Steps

Ulrika Lindholm (AEMO)



# NEM Reform Program Engagement

Forums	Forum focus 	Cadence	Approach
Executive Forum	Program overview and status update	3 per Year	Nomination
Reform Delivery Committee (RDC)	Long term implementation planning perspective	Quarterly	Nomination
Program Consultative Forum (PCF)	Inflight initiatives status & co-ordination	Monthly	Open
Implementation Forum	Implementation of reforms	Monthly	Open
Electricity Wholesale (EWCF) & Electricity Retail (ERCF) Consultative Forums	Procedures working groups	Monthly	Open
Industry Testing Working Group	Testing	Monthly	Open
Working Groups	Inflight	As appropriate	As appropriate



To learn more, please visit:

- [AEMO | NEM Reform Program Forums](#)
- [AEMO | NEM Reform Program Initiatives](#)
- [AEMO | Industry Meetings Calendar](#)
- or contact the program at [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au).

Subscribe to the NEM Reform Newsletter [here](#)

Focus / working groups for inflight initiatives include:

- Initiative working groups
- Market Integration Technology Enhancement WG (IDX/IDAM/PC)
- Industry Testing Working Group (ITWG) – IT technical implementations

# Next steps

STAGE	DATES	RESPONSIBLE
Final rule determination	Thu 19 Dec 2024	AEMC
Publish final High Level Implementation Assessment (HLIA) for comment	Thu 06 Feb 2025	AEMO
Feedback period on HLIA closes	Thu 27 Feb 2025	Industry to provide feedback
Publish final v1.1 HLIA	Thu 20 Mar 2025	AEMO
Publish Vim Procedure consultation paper	Tues 1 Apr 2025	AEMO
Feedback period on VIM consultation paper closes	Fri 2 May 2025	Industry to provide feedback
Draft report published, including draft Guidelines	Fri 11 July 2025	AEMO
Feedback period on draft report closes	Mon 11 Aug 2025	Industry to provide feedback
Final report and Guidelines published	Mon 27 Oct 2025	AEMO

## AEMO invites feedback on the matters for consultation and proposed collaboration approach.

- Please provide your feedback via [nemreform@aemo.com.au](mailto:nemreform@aemo.com.au)
- Your feedback is essential. This presentation, the [IPRR HLIA](#), AEMO's [VSR Guidelines consultation](#) and the [IPRR final determination](#) outline key areas for industry to consider.
- Feedback will inform the consultation paper where appropriate.



For more information visit



• [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au)



[AEMO | NEM Reform initiatives | IPRR](#)

# Appendix A –Glossary

# Glossary



TERM	DEFINITION
<b>AEMC</b>	Australian Energy Market Commission
<b>AEMO</b>	Australian Energy Market Operator
<b>AER</b>	Australian Energy Regulator
<b>API</b>	Application Programming Interface
<b>B2B</b>	Business to business
<b>B2M</b>	Business to market
<b>BDU</b>	Bidirectional Unit
<b>CER</b>	Consumer Energy Resources
<b>CRMP</b>	Cost recovery market participant
<b>DER</b>	Distributed energy resources
<b>DNSP</b>	Distribution network service provider
<b>DRSP</b>	Demand response service provider
<b>DSP</b>	Demand side participation
<b>DUID</b>	Dispatchable unit ID

TERM	DEFINITION
<b>EV</b>	Electric vehicle
<b>FCAS</b>	Frequency control ancillary service
<b>FEL</b>	Flexible export limit
<b>FRMP</b>	Financially responsible market participant
<b>HLIA</b>	High level implementation assessment
<b>IDAM</b>	Identity access and management
<b>IDX</b>	Industry data exchange
<b>IPRR</b>	Integrating price responsive resources
<b>IRP</b>	Integrated resource provider
<b>ISP</b>	Integrated system plan
<b>NEM</b>	National electricity market
<b>NEMDE</b>	National electricity market dispatch engine
<b>NEO</b>	National electricity objective
<b>NER</b>	National electricity rules

TERM	DEFINITION
<b>NMI</b>	National metering identifier
<b>NSP</b>	Network service provider
<b>PASA</b>	Projected assessment of system adequacy
<b>PMS</b>	Portfolio management system
<b>PoL</b>	Predictability of load
<b>RDC</b>	Reform Delivery Committee
<b>SCADA</b>	Supervisory control and data acquisition
<b>VIM</b>	Voluntarily scheduled resource incentive mechanism
<b>V2G</b>	Vehicle-to-grid
<b>VPP</b>	Virtual Power Plants
<b>VSR</b>	Voluntarily scheduled resource
<b>VSRP</b>	Voluntarily scheduled resource provider
<b>VSRPA</b>	Voluntary Scheduled Reserve Participant Agreement
<b>WDRM</b>	Wholesale Demand Response Mechanism

# Appendix B – Useful links

# Useful Links

- AEMC consultation: <https://www.aemc.gov.au/rule-changes/integrating-price-responsive-resources-nem>
- AEMO IPRR HLIA: <https://aemo.com.au/initiatives/major-programs/nem-reform-program/nem-reform-program-initiatives/integrating-price-responsive-resources-into-the-nem>
- VSR Guidelines: <https://aemo.com.au/consultations/current-and-closed-consultations/voluntarily-scheduled-resources-guidelines-consultation>
- AEMO procurement example: <https://aemo.com.au/energy-systems/electricity/emergency-management/reliability-and-emergency-reserve-trader-rert/rert-tendering>
- Comments or questions can be directed to: [nemreform@aemo.com.au](mailto:nemreform@aemo.com.au)