

Consumer Forum

February 2023





We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture.

We pay respect to their Elders past, present and emerging.



Agenda (all times AEDT)

10:00am (10 mins)	Welcome and Acknowledgement of Country	Kirstan Wilding
10:10am (25 mins)	NEM 2025 update	Chris Muffett
10:35am (10 mins)	Update on compensation for the NEM wholesale market suspension	Chris Muffett
10:45am (20 mins)	NEM 2025 fee recovery consultation	Kevin Ly
11:05am (45 mins)	Consumer Risk Preferences in the Integrated System Plan	Rodney Jose, Deloitte
11:50am (10 mins)	Revenue Methodology for Victoria's Electricity Transmission System	Judd Johnston
12:00am	Other Business & Close	Kirstan Wilding



Welcome

Kirstan Wilding



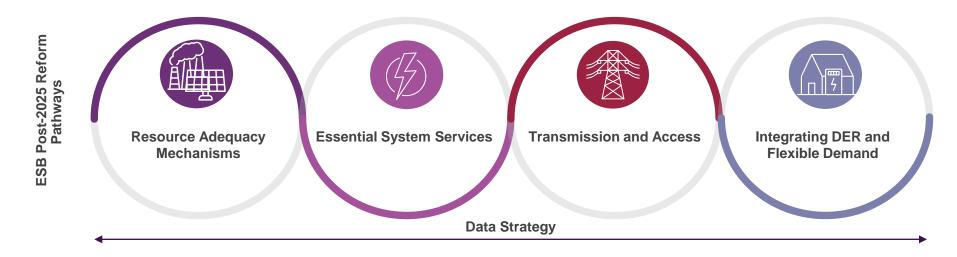
NEM 2025 update

Chris Muffett

Context



- The Energy Security Board (ESB) was tasked by the energy ministers to advise on design changes required in the National Electricity Market (NEM) as it transitions from largely coal fired generation to more variable renewable generation.
- The ESB provided its final advice to National Cabinet on 27 July 2021, with work grouped into four interrelated reform pathways:



- National Cabinet approved the Post-2025 reform recommendations on 29 October 2021.
- Energy Ministers agreed several actions at their June and August 2022 meetings regarding recent market volatility, NEM2025 reforms as well as gas market reforms.
- The capacity mechanism and the congestion management mechanism, both part of the NEM2025 wholesale market reform package, are also priorities for ministers.





Pathway	Description	Initiatives
Resource Adequacy Mechanisms	Investment in the right mix of resources (generation, storage and demand response) in place prior to anticipated plant closures, and that plant exit does not cause significant price or reliability shocks to consumers through the transition	 Increased Medium Term Projected Assessment of System Adequacy (MT PASA) Information Capacity Mechanism
Essential System Services	The resources and services are available to manage the complexity of dispatch and to deliver a secure supply to customers	 Fast Frequency Response Mandatory Primary Frequency Response Operating Reserve Market System Strength (Planning)* Operational Security Mechanism
Transmission & Access	The network meets future needs, renewable energy zones, and there is a targeted set of investments that can deliver the energy transition at lower cost	Congestion Management Model
Integrating DER & Flexible Demand	New opportunities are created for consumers to receive and use energy, and are rewarded for doing so flexibly	 Integrating Energy Storage Flexible Trading Arrangements (Model 2) Scheduled Lite Dynamic Operating Envelopes Distribution Local Network Services Turn-up Services Distributed Energy Resources (DER) Data Hub & Registry Services DER Operational Tools
Data Strategy	A framework is established with new guiding policy principles, build capability, forward planning and adaptability and address priority data gaps	 Data Services Electric Vehicle (EV) Charging Standing Data Register Bill Transparency Network Transparency





- In addition to the Post-2025 reform initiatives, AEMO has identified a further set of initiatives linked to efficient implementation of the reform program.
- Each initiative represents either a foundational investment in an AEMO legacy system or a more strategic investment as part of AEMO's wider digital program of work aimed at ensuring AEMO and industry participants' IT systems are fit for purpose to meet the needs of the transition and beyond.

Pathway	Description	Initiatives		
AEMO Foundational	Foundational dependency work to deliver an uplift to base capability on which reforms are dependent	 Identity Access Management Industry Data Exchange Supervisory control and data acquisition (SCADA) Lite 		
AEMO Strategic	Strategic dependency work to effectively futureproof capabilities and scalability of systems thereby avoiding investment in systems that will become end-of-life shortly after the reforms take effect	 Portal Consolidation Consolidation of Market Standing Data Repositories (CoMaStR) Dispatch Target State Bids / Offers Target State Constraints Target State FRC Target State 		

Program Update



Key Focus Areas

- **Program Definition**: Planning and definition work to set out program for delivery continues.
- Program Delivery (Inflight projects): Delivery of the projects which have rule dates in the coming 12 months, bundled into 3 key releases, March, May and Oct 2023.
- Business case work: Feasibility and analysis work for the completion of a business case for our next tranche of work.

Status

			Release	e Dates			Impacted
Initiatives	Mar-23	May-23	Aug-23 (TBC)	Oct-23	Jun-24	Jun-25	Stakeholders
Integrating Energy Storage Systems [Initial]	Go Live						Market Small Generation Aggregators
Integrating Energy Storage Systems [ADC]			Go Live				Aggregate systems
Integrating Energy Storage Systems [Final]					Go Live		IRPs, NSPs, vendors, Metering Service Providers, FRMPs
SAPS, CDR, B2B v3.8, (MSDR release TBC)	SAPS MSRP Registration	Go Live					DNSP, Retailers, MP/MDP
Fast Frequency Response			Dispatch & Reg	Go Live			Generators, Market Customers
Increased MT PASA Information				Go Live			Scheduled Generators
Frequency Performance Payments						Go Live	Generators, Market Customers

Forums Update



Channel	Current focus	Next meeting
NEM2025 Reform Delivery Collaborative Workshop	The RDC collaborative workshop will focus on updating the NEM Reform implementation roadmap.	8 February 2023
NEM2025 Electricity Wholesale Consultative Forum (EWCF)	The EWCF has established its Terms of Reference and an initial way of working on NEM2025 wholesale related procedure consultations for inflight reform initiatives.	22 February 2023
NEM2025 Industry Testing Working Group (ITWG)	ITWG is planning testing approach to support March and May implementations. ITWG will support regular Q&A sessions during Industry Test periods.	23 February 2023
Electricity Retail Consultative Forum (ERCF)	Currently undertaking pre-consultation on the Integrating Energy Storage Systems (IESS) changes prior to formal consultation commencing in March. This Forum maintains a watching brief on NEM2025 Program initiatives associated with metering and retail procedural impacts.	23 February 2023
NEM2025 Implementation Forum	 Timeline and implementation focus on In-flight for 2023 and 2024, with coordination of readiness activities and technical deliverables highlighted. Implementation Forum is open to Vendors representing participants. 	28 February 2023
NEM2025 Executive Forum	Participant nominations	To be established in Q2 2023

For description and meeting papers for each of the forums, please refer to the <u>NEM2025 program</u> website.





	February							٨	\arc	h			
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23	24	25	26	27	28	29	21	22	23	24	25	26	27
30							28	29	30	31			

Legend					
Program forums					
NEM 2025 Program Consultativ e Forum					
Reform Deliv ery Committee					
Refrom Deliv ery Committee - Collab W.					
Implementation Forum					
Electricity Wholesale Consultativ e Forum					
Electricity Retail Consultativ e Forum					
Industry Testing Working Group					
AEMO Consumer Forum					
All Stakeholder NEM Reform briefing					
Inititiative specific meetings					
IESS Settlements stakeholder information session (TBC					
IESS BDU stakeholder information session (TBC)					
SAPS & May Release Technical Specification Q&A					
Reliability Forecasting consultation workshop					
Other					
National Public Holiday					
State/Territory Public Holiday					

Update on compensation for wholesale market suspension







Update on compensation for wholesale market suspension

- Background: The NEM was impacted by a series of conditions between 12 and 23 June 2022 triggering administered pricing, market suspension, and multiple market interventions.
- AEMO has now finalised compensation processes for Reliability and Emergency Reserve Trader (RERT), directions and suspension pricing.
- AEMC is continuing to assess compensation claims from participants who incurred losses (direct and opportunity) during administered pricing.



Summary of compensation recovery amounts (as at Feb 2023)

Recovery region	Qld	NSW	Vic	SA	Tas
Directions (finalised)	\$9.1m	\$5.0m	\$3.3m	\$0.9m	-
Administered Pricing (claims awarded so far)	\$6.3m	\$10.7m	-	\$27k	-
Market Suspension (finalised)	\$25.6m	\$37.9m	\$24.7m	\$6.7m	-
RERT (finalised)	\$3.8m	\$78.4m	-	-	-
Intervention Pricing (finalised)		N	o costs recove	ered	

Notes:

- The majority of these costs are recovered from Market Customers (retailers and wholesale customers), with approx. \$9.6m of direction compensation costs being shared between Market Customers and Market Generators
- Retailers would typically seek to recover the costs from customers, either through direct pass through (mainly with larger customers) or through subsequent tariff changes





- Information on the June 2022 event, including compensation updates:
 - https://aemo.com.au/en/energy-systems/electricity/national-electricitymarket-nem/nem-events-and-reports
- Power system operating incident reports
- RERT
- Frequency reports
- Lack of Reserve Framework reports
- Administered pricing compensation claims

NEM 2025 Fee recovery consultation



Kevin Ly

NEM 2025 Fee recovery consultation



- The NEM 2025 Reform Program was determined a declared NEM project on 29 September 2022, after a consultation process.
- AEMO is now consulting on the structure of Participant Fees to recover costs for the NEM 2025 Reform Program.
- Consultation Paper and Engagement Plan published on 3 February 2023.
- Consultation applies to:
 - The structure of fees
 - The Registered Participants to be charged
 - The start date for recovery and the period/s over which recovery will occur
- Any structure determined must, to the extent practicable, be consistent with the fee principles in clause 2.11.1 of the National Electricity Rules (NER).
- Stakeholder input sought on two options presented.

NEM 2025 Fee recovery consultation



Two options for fee recovery presented in the Consultation Paper

Example	Description	Indicative assessment against Fee Principles and the NEO						
1. Use existing Participant fees structures such as the core NEM fee and/or DER program fee and/or Electricity Retail Markets	es structures such as e core NEM fee and/or ER program fee and/or ER program fee and/or ER program fee and/or each of the pathways' objectives, or using a						ees structures such as he core NEM fee and/or DER program fee and/or DER program fee and/or Program pathways to one or more of AEMO's existing Participant fees based on each of the pathways' objectives, or using a	Simplicity
fee	2025 Reform Program applied to one or more existing fee Attributions of allocated costs to Registered	Reflective of involvement						
	Participants would be as per the existing Participant fee that is applied to the Reform pathway Existing fee metrics for Registered	Not unreasonably discriminate						
	Participant categories would apply Existing Participant fees to apply to the NEM 2025 Reform Program for the remainder of the current Participant fee period, i.e. until 30 June 2026	Recovery of AEMO's budgeted requirements on a specified basis						
	ponos, <u>es.</u> una so sano 2020	NEO						
2. A separate NEM 2025 Reform Program fee	A new Participant fee structure to apply to the whole NEM 2025 Reform Program Requires determining the relevant	Simplicity						
	Registered Participant/s to recover costs from as well as the attribution to be allocated to each Registered Participant Requires determining the relevant fee		from as well as the attribution to be allocated to each Registered Participant Requires determining the relevant fee	Reflective of involvement				
Participa • The new	metric to apply to each of the Registered Participants The new Participant fee structure to apply until the end of the current Participant fee	Not unreasonably discriminate						
	period (and which could then be determined to continue the separate fee)	Recovery of AEMO's budgeted requirements on a specified basis						
		NEO						

NEM 2025 Fee recovery consultation



Consultation timeline

Milestone	Date		
Submission closing date for this Consultation Paper	Friday 3 March 2023		
Publication of Draft Report	Wednesday 17 May 2023		
Submission closing date for Draft Report	Wednesday 14 June 2023		
Publication of Final Report	Wednesday 23 August 2023		
Fee structure commencement	To be determined from this consultation		

- AEMO's engagement plan outlines the communication methods proposed throughout the consultation process. We welcome input on the engagement plan as well as the consultation paper.
- As part of our engagement, we will establish a NEM2025 Participant Fee Consultative Committee (PFCC) an Expression of Interest (EOI) and Terms of Reference (ToR) will be released in February calling for nominations from stakeholders to be a part of the PFCC.

Consumer Risk Preferences in the Integrated System Plan

AEMO AUSTRALIAN ENERGY MARKET OPERATOR

Deloitte

Rodney Jose & Deloitte



Agenda

AEMO

- Setting the scene
- Project overview
- Literature review: Key themes and findings
- Methodology overview & key considerations
- Next steps





Setting the scene



Setting the scene

Deloitte are conducting a project on consumer risk preferences, willingness to pay and affordability in the electricity market along with AEMO and the ISP Consumer Panel, which will form part of the 2024 Integrated System Plan (ISP)

• AEMO publish the ISP at least every two years. The ISP is a whole-of-system plan that provides an integrated roadmap for the development of the National Electricity Market (NEM) over the next two decades and beyond.

Energy Market

- Rising energy costs
- Grid augmentation
- Decommissioning of coal plants
- Pathway to net zero
- Increasing volatility

Energy Trilemma







Reliability

Sustainability

- Key attributes within the energy market
- Whilst, previous ISPs have looked at reliability and sustainability and affordability, the impact on consumers of this prioritisation is not yet fully understood
- AEMO have commissioned this project to extend the 2024 ISP's scope to cover consumer risk preferences

Consumer Risk

- Consumer risk in the energy market is unknown, unmeasured and unquantified to date
- This project seeks to contribute to quantifying consumer risk preferences through deliberative consumer engagement

Section 2



Project Overview

Projected timeline



Jan 23

Research and methodology

Apr 23

- Consumer survey
- Consumer focus groups end
- Industrial engagement starts

Jun 23

Consumer risk preferences value - draft report

Mar 23

- Consumer engagement begins
- Consumer focus groups start

May 23

Findings analysis

Jul 23

Consumer risk preferences value - final report

^{*} Indicative dates, to be confirmed in consultation with relevant stakeholders.



Section 3

Literature review: Key themes and findings



Defining consumer risk preferences

• In the wake of a volatile and uncertain energy future, electricity bill uncertainty is an important aspect of this project, which seeks to understand consumer risk preferences in the context of electricity bills

Risk is the "effect of <u>uncertainty</u> on <u>objectives</u>" (Australian Standard AS/NZS ISO 31000). As mentioned earlier, AEMO are extending their scope in the 2024 ISP to expand considerations of consumer risk (the Energy Trilemma). Particularly, this project seeks to understand consumer risk preferences in the context of the uncertainty around energy affordability (e.g. as it relates to contributing to costs today that relate to future network expansion).



Consumer Behaviour



Passive or active risk management



Cognitive bias



Willingness-to-pay



Knowledge of sector (e.g. energy)

Time/capacity to evaluate



Applying consumer risk preference

A number of economic and energy market attributes shape consumer risk preference. This
work seeks better understand and quantify how consumer risk is considered in energy market
planning.

We have set out key risks to consumers both within the electricity market and the wider economy below.

The wider economy



Political e.g. policy



Wars and natural disasters



Inflation



Interest rates



State of the economy

Electricity market



Energy bills



Electricity fuel prices









Key themes from initial literature review

• From our initial literature review, we have identified the following key topics, which will feed into the methodology.

As mentioned earlier consumer risk in the energy market is unknown, unmeasured and unquantified to date. This is echoed in findings from the literature review, highlighting the importance of this project and what it seeks to do. Energy market reports and submissions will be foundational.

Energy Volatility



- Price volatility
- Electricity fuel prices
- Renewables
- Risk
- Cost
- Service volatility
- Frequency volatility
- Service outages
- Network vulnerabilities

Key Topics under exploration

Energy Network



- Costs
- Increasing electrification
- Speed of development
- Technologies
- Network vulnerabilities

Wider Economy



- Increasing cost of living
- State of the economy
- Interest rates
- Government policy
- Revealed consumer risk preferences in other markets



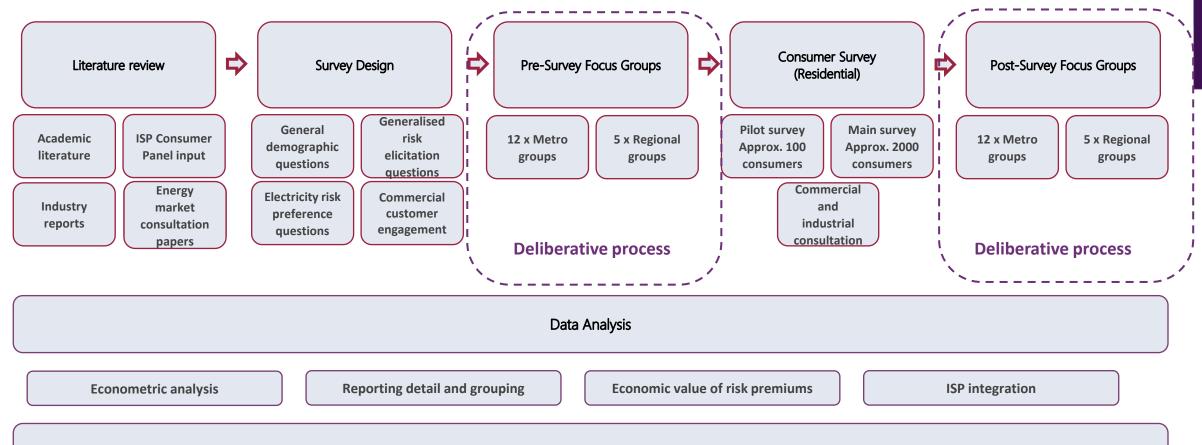


Methodology overview & key considerations



Overview of proposed methodology

• In line with emerging energy market precedent, we are undertaking a <u>deliberative process</u> to unpack the genuine experiences of consumers and inform the framework for evaluating consumer risk



Section 5



Next steps



What happens next

• This project seeks to obtain a quantitative value that will contribute to defining consumer risk preferences in 2024 ISP and we invite consumers to be part of this process.



- We are inviting <u>consumers part of the</u>

 <u>NEM</u> to be part of the consumer
 engagement process.
- We are also seeking Expression of Interest from any <u>commercial &</u> <u>industrial consumers</u> who may be interested in participating in our industrial engagement.
- If interested or for any other further questions or comments on this project, please contact our Stakeholder Team at stakeholderrelations@aemo.com.au



Revenue Methodology for Victoria's Electricity Transmission System

Judd Johnstor



Revenue Methodology Consultation

- The consultation to update the Revenue Methodology for Victoria's Electricity Transmission System is currently seeking submissions.
- The matter for consultation is the revision to the Revenue Methodology, in addition to the 21 October 2021 rules change amendment with regards to System Strength.
- AEMO published the initial consultation notice on 16 February 2023. Please visit AEMO's website to access consultation information.
- Submissions are welcome until 2 March 2023, via email to Judd.Johnston@aemo.com.au.



Other business & close

Kirstan Wilding



For more information visit

aemo.com.au