

Reform Delivery Committee

July 2022



1. Welcome





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.





AEM

Please note that this meeting will be recorded for the purpose of compiling minutes.



2. Review of Action Items



Action items from prior meetings

Item #	Action	Responsibility	Status
5.1	Continuation of 4.1. Further exploration of opportunities and constraints with alternative roadmap formats	AEMO	In progress. Pending establishment of NEM2025 program PMO and project management tools to use.
5.2	Continuation of 4.2. Participant Impact Assessment	Committee members	All impact assessment received except from CEC. Closed.
5.3	Continuation of 4.3. Consider strategic issues in regulatory planning including regulatory timing change control process	AEMO, AEMC, ESB, AER	In progress. Postponed to August RDC meeting.
5.4	Continuation of 4.4. AEMO to discuss Roadmap interactions with reform implementation requirements from the NSW Roadmap with AEMO Services	AEMO	In progress. AEMO is following up with AEMO Services and NSW Government with preliminary impact assessment under way. Update to be provided at August RDC meeting.
5.5	New permanent members to be nominated by ENA (2) and AEC (1)	ENA, AEC	Closed. Welcome to new AEC rep Liz Gharghori from AGL.
5.6	AEMO perform second review of business case cost estimates in comparison to costs of recent reform implementations	AEMO	Closed. Discussed on item 3 of the agenda.
5.7	AEMO to define the Stage Gate approval process and the role of the PCF, EF and RDC in that process.	AEMO	Closed. Discussed on item 3 of the agenda.
5.8	AEMO to come back to the Committee with a revised consultation timeline for the business case	AEMO	Closed. Revised timeline was shared with the RDC on 22 June.



3. Business case

Discussion of proposed governance processes, key themes from stakeholder feedback and pathway recommendation

Topics to cover

3.1 Governance

RDC role varies depending on the stage of the process

- 3.1.1 Preceding the Stage Gate Process Managing Change and New Initiatives
 - Regulatory/Policy Initiatives where Final Determinations not yet made
- 3.1.2 Stage Gate process
 - Regulatory initiatives where Final Determinations made
 - AEMO strategic/foundation Initiatives
- 3.1.3 Plan Prioritisation

3.2 Business Case Feedback

3.2.1 Costs

3.2.2 Deliverability Risks

3.2.3 Other Reforms

3.2.4 Legacy Systems

3.3 Pathway Recommendation



3.1.1 Preceding the Stage Gate Process - Managing Change and New Initiatives

Key themes in feedback

• At the last RDC meeting, members raised the question what process / steps are to be taken in the event there is a material change in an initiative impacting its implementation and the roadmap

AEMO Response

- Material changes include new initiatives, policy/rules scope changes and/or timeline changes. Objective is to inform decision-makers of implementation impacts and provide advice on implementation approach/solutions.
- This process proposes a change management and impact assessment processes and template. Standing quarterly review process by RDC suggested.
- All changes assessed against a Baseline: Roadmap, Initiative Briefs, Cost estimate, Participant
 Impact Assessment
 CHANGE MANAGEMENT & IMPACT ASSESSMENT PROCESS

CHANGE MANAGEMENT AND IMPACT ASSESSMENT

DATE:	
NEM2025 INITIATIVE:	
SUBJECT:	
COMPLETED BY	

DATE

his Change Management and Impact Assessment provides a means for identification and documentation o otential implementation impacts associated with changes to key reform initiatives captured as part of the IEM2025 Reform Program and documented in the Regulatory & NEM2025 Implementation Roadmap

EM2025 Reform Program and documented in the Regulatory & NEM2025 Implementation Roadmap							
MPACT ASSESSMENT							
Question / Assessment	Response / Description						
What is the nature of the change?							
When is the change to come into effect?							
What are the impacts to AEMO?							
What are the impacts to Participants?							
What are the impacts to Consumers?							
RDC Advice & Conclusions							
AEMC Advice & Conclusions							
AER Advice & Conclusions							
ECOMMENDATIONS							
CHANGE REQUIRED TO ROADMAP	YES NO						
CHANGE TO BE MADE							
IMPLICATION OF CHANGE							
APPROVED BY							





RDC member feedback on Stage Gate process

Key themes in feedback – Stage Gate approval

- A stage gate approval process was generally considered an appropriate governance approach given the breadth of program and the various stages in which individual initiatives are at in their development
- However, stakeholders raised a number of questions / concerns in relation to the approval process itself including:
 - What is the role of the RDC in the process?
 - What is being approved? and
 - Who has decision making responsibilities?
- One feedback stated the stage gate approach does not give industry opportunity to challenge or reduce the cost or scope of the work package
- Stakeholders flagged a preference to be more involved in the decisionmaking process for scope, investments and financial oversight
 - This extended to the provision of voting rights to RDC/Executive Forum for expenditure related to AEMO Strategic / Foundational initiatives

Key themes in feedback – Initial Business Case Approval

- Stakeholders raised concerns that AEMO was seeking approval to implement all initiatives documented within the business case as part of Stage Gate 1
- Stakeholders did not support this approach noting:
 - Many of these reforms are uncertain in their policy design
 - Potential for specific reforms to proceed at all or in the form in which they are currently proposed
 - Benefits form some reforms have not been clearly articulated
- Stakeholders suggested stage gate 1 should be broken into more stages



3.1.2 Stage Gate process - Outline

- · Business case estimates set out a funding envelope
 - Required for a holistic view and to help identify a preferred implementation pathway
 - Does not represent a funding commitment request
 - AEMO funding will be committed through a progressive draw-down process
 - Change to the funding envelope is inevitable as the NEM2025 reform and policy scope changes.
 - Change management mechanism required, as set out on the previous slide, to inform decision-makers of implementation impacts and provide advice on implementation approach/solutions.
- Stage Gate process
 - Regulatory / policy reform initiatives are mandatory once a Final Determination (or equivalent legal obligation) is made
 - Cost/benefit completed by the rule/policy-maker and precedes the Final Determination. Prior to the Final Determination, RDC input has a key role to inform implementation approach/timing as set out on the previous slide.
 - At the time of Final Determination, the Rules decision becomes an obligation for all relevant parties and the objective becomes effective mobilisation and delivery. The Stage Gate process takes effect and is focused on effective mobilisation and delivery.
 - AEMO strategic/pre-requisite initiatives require a different Stage Gate process
 - Cost/benefit and industry consultation is required
 - A proposed process is set out on the subsequent slide
 - Initiatives that have industry-wide impact but are not led by AEMO may require a refined process to co-ordinate all parties



Proposed stage gate process for AEMO Strategic/Foundation Initiatives

- Initiatives in this category include:
 - Identity & Data bundle
 - Dispatch Target State
 - FRC Target State
- This process provides for engagement with industry stakeholders, via the PCF, to confirm critical elements of the initiatives including:
 - High Level Design (HLD), Detailed Design (DD) or Scope
 - Implementation Plan and Impact Assessment (cost/benefit)
- Having completed this engagement, AEMO would seek RDC advice in relation to whether/when and how the initiative proceeds
- AEMO's objective is for the RDC to operate as a collaborative forum on implementation, and therefore a consensus position will be sought
- RDC views will inform the AEMO internal governance process



STAGE GATE PROCESS



Stage Gate Proposal – Initial Plan

Initial plan – flexibility to manage changes in timing will be required

Stage Gate	Name	Comment	Timing
-	Initial Business Case	 Presents holistic view and sets out overall budgetary envelope No funding commitment Used to inform decision around Strategic vs Reg-Led Pathway 	3Q2022
1	Immediate Reforms	 Mandatory Initiatives for 2022 Rules Determinations IESS, FFR, MT-PASA, PFR and OSM RDC role: Rules development: advice on implementation approach/timing for overall roadmap RDC role: Implementation mobilisation advice once Final Determination made 	3Q2022
2	Capacity Market & Congestion Management model	 Stage Gate 2A: Capacity Mechanism Stage Gate 2B: Congestion Management Model Separated due to possible different policy timelines for each initiative, and likely short timeframes for CM. RDC role: Policy development: advice on implementation approach/timing for overall roadmap RDC role: Final Determination (or equivalent): Implementation mobilisation advice 	Subject to Policy- makers timing
3	Strategic & Foundation Pre- Requisites	 Stage Gate 3A: Identity & Data bundle: IDA, IDX (noting pre-existing participant consultation should be leveraged), CoMASTR and Portal Consolidation Stage Gate 3B: Dispatch Bundle (including dispatch, constraints and bids/offers target state) Stage Gate 3C: FRC target state Integrated design, plan and cost/benefit to be prepared, industry engagement to be conducted RDC role: Advisory on whether/when and how the initiative proceeds 	1Q2023 3Q2022 1Q2023



Stage Gate Proposal – Initial Plan

Stage Gate	Name	Comment	Timing
4	DER Flexible Demand & Marketplace	 Stage Gate 4: Turn-up services, DOEs, DER Data Hub & Registry services, Distribution/local network services and potentially DER Operational Tools Scope is subject to change once Policy/Trials complete (impacting budget, timeline and responsibilities). Co-ordinated approach with DNSPs may be valuable, to ensure roles are clear and scope for each role is defined RDC role Policy development: advice on implementation approach/timing for overall roadmap RDC role Final Determination (or equivalent): Implementation mobilisation advice 	Indicative Mid-2023, subject to trials & policy development
5	Next Reforms	 Mandatory initiatives for 2023 Rules Determinations FTA2, Scheduled Lite & SCADA Lite, OR RDC role Policy development: advice on implementation approach/timing for overall roadmap RDC role Final Determination (or equivalent): Implementation mobilisation advice 	Indicative mid/late 2023, subject to Rules timing
6	Data Strategy	 Data Services, Bill Transparency, Electric Vehicles, Network Visibility RDC once high-level Policy work complete: advice on implementation approach/timing for overall roadmap RDC role Final Determination (or equivalent): Implementation mobilisation advice 	Indicative Mid-2023 (subject to policy development)



3.1.3 NEM2025 implementation plan prioritisation

Key themes in feedback

- It has been suggested the NEM2025 Program be paused due in part to one or all of the following matters:
 - Recent market events and the challenges facing participants at this time
 - Pending decisions on high impact reforms including Capacity Mechanism and Congestion Management Model
 - Significant uncertainty in scope and/or those initiatives that remain subject of trials, AEMC rule change processes
 - Further interrogation of AEMO strategic and foundational initiatives

- At a macro level AEMO is guided by Ministerial communique of 8 June, indicating:
 - Capacity Mechanism prioritisation
 - No other changes to overall NEM2025 reform priorities flagged
- Other initiatives under the ESS pathway remain the subject of AEMC rule change processes and the timing set by the AEMC.
- AEMO is not aware of any proposed changes to the policy development / trials under the Integrated DER and Flexible Demand pathway.
- If the intent of the feedback is to seek a pause on the overall reform program, then the RDC is not the right forum to make any such recommendations. However, it is the right forum to inform implementation timing at the initiative level based on the NEM2025 Implementation Roadmap and implementation considerations.
- The general theme of uncertainty is noted. Change Management process and Stage Gate process as outlined on the previous slides will support managing this uncertainty.



3.2.1 Business Case Feedback – Cost Estimates

Key themes in feedback

- Stakeholders acknowledged the NEM2025 Program will require significant funding to implement and stressed the importance that expenditure is prudent and efficient, recognising that costs will be ultimately met by electricity users
- Stakeholders noted the costs in the business case do not reflect the overall costs for the market and limited to AEMO only
- Stakeholders emphasised the importance of completing a CBA prior to implementing AEMO's own strategic / foundation initiatives
- Stakeholders raised concerns the cost estimates may understate the actual costs of eventual programme delivery particularly in light of:
 - Inflation, a tight labour market and disrupted supply chains,
 - Doubts a 30% contingency was sufficient or correct
 - Recent comparators including 5MS
- Stakeholders noted the need for caution in the allocation of costs as AEMO fees given the different risks to recovery across the supply chain

- Propose to increase the contingency window to +/-40% on the following basis:
 - · Responding to participant feedback and concerns
 - Recognising degree of uncertainty in a number of initiatives which are still in policy or rules development
 - Recognising rising costs and a tight labour market
 - Recognising learnings from 5MS in relation to costs for major reform projects.
- AEMO notes the following in relation to the cost estimates:
 - Costs have been assessed on the basis of the known scope of initiatives
 - Uncertainty in scope is covered by providing for a wider contingency window to the overall program
 - There is no basis to artificially inflate the costs of initiatives or the program as a whole beyond the contingency
 - AEMO proposal is to present the estimates as a range: estimates mid-point to high-point
 - Change inevitable as scope changes through policy/rules process. Managed through change management process.
- Cost estimating process now undertaken twice, with similar results
 - Late-2021, undertaken by AEMO staff with independent EY review for "reasonableness"
 - Early-2022, led by EY as part of the Business Case process and using EY methodology and projects database, with process to reconcile against AEMO project experiences
 - Note these are both top-down estimating processes



3.2.2 Deliverability risks with the NEM2025 Program

Key themes in feedback

- Stakeholders expressed concerns regarding the deliverability risks associated with the NEM2025 Program suggesting:
 - Challenges with the availability of resources to undertake all the projects identified, particularly as AEMO and stakeholders draw from the same pool
 - Risk in delivery supersedes the benefits in the current environment of tight labour market and disrupted supply chains
 - Timeframes are too compressed and likely not achievable
 - Inclusion of AEMO IT projects concurrently presents further challenges and strain on resource availability
 - Risks of delivery need to be covered more in the business case
- Stakeholders did acknowledge / welcomed the shift to a batched approach to reform implementation provided this approach is supported with strong governance frameworks

- AEMO agree with stakeholders that there are a number of program risks and delivery challenges that need to be managed over the life of the NEM2025 program
- Both pathway options create significant demands upon AEMO and industry for delivery that will need to be managed accordingly
- AEMO have expanded on these risks in the business case and will develop and maintain a risk register (covering deliverability and other risks) using AEMO's EMP approach
- RDC will play a key role in this process through understanding impacts, grouping, sequencing and prioritisation of initiatives
- The stage gate approval process also intends to manage uncertainty by establishing check-points



3.2.3 Other reforms – Capacity Mechanism and Congestion Management Model

Key themes in feedback

- Stakeholders raised concerns about continuing with the NEM2025 Implementation Roadmap when high impact reforms such as CM and CMM have not been agreed on
- Stakeholders suggest CM and CMM should be costed as early as possible
- Stakeholders noted the need to identify any foundational system changes that would be prudent/efficient to make in stage gate 1 to support a potential CM

- AEMO has included the capacity mechanism and congestion management model into version 2 of the roadmap
 - Placeholders to be updated as further information on design / scope becomes available
 - A specific stage gate has also been proposed to cover these initiatives
- AEMO note the CM is now seen as more of a priority following Minister's meeting in June
 - Implementation impacts are being considered as the ESB progress through their detailed design of the mechanism
 - Indicative dates require a decision by Q2 2023 with readiness for first auction to be conducted July 2024
 - AEMO action to define an implementation planning timeline and bring to future RDC for discussion
- Order of magnitude costing underway for Capacity Mechanism



3.2.4 Clarification regarding legacy systems

Key themes in feedback

 Stakeholders sought clarification on which AEMO legacy systems are proposed for replacement under the Business Case

- Significant recent internal AEMO effort undertaken on reviewing current state architecture and defining future state architecture.
- AEMO's IT architecture team is looking to brief stakeholders on their findings and approach, during August. Specific time and forum to be determined.
- Potential replacement of legacy systems (e.g. Dispatch target state, FRC target state) will be subject to the Stage Gate approval process, stakeholders will have the opportunity to understand the specifics through this process



3.3 Pathway Recommendation

For the NEM2025 Implementation Pathway, AEMO recommends:

- A Hybrid Pathway complemented by a stage gate process is proposed
- The Regulatory-Led Pathway is proposed as an MVP (Minimum Viable Product), ensuring mandatory reforms are delivered in a timely way
- The NEM2025 budget envelope includes the full scope of the Strategic Pathway, but draw-down/commitment is subject to a
 progressive commitment process informed by Regulatory Determinations and the Stage Gate process
- The stage-gate process is undertaken for all Initiatives that are part of NEM2025 scope, to manage uncertainty and provide for appropriate implementation disciplines. The Stage Gate process for AEMO strategic/foundation initiatives will include cost benefit analysis and industry consultation.
- The Implementation Pathway is managed by appropriate supporting processes:
 - NEM2025 Implementation Roadmap is managed through a Change Management process, to manage and advise on impacts of new initiatives being added to the reform scope or changes in scope/timing of existing proposed initiatives
 - An agreed Stage Gate process for AEMO strategic/foundation initiatives and project mobilisation for reform initiatives

Request of the RDC

That the RDC support the adoption of the Hybrid Pathway as a baseline plan for the implementation of NEM2025 initiatives which will be supported by a:

- change management process to manage and advise on impacts of new initiatives being added to the reform scope or changes in scope/timing of existing proposed initiatives
- stage gate approach which includes a cost/benefit analysis and industry consultation for AEMO strategic/foundation initiatives
- progressive investment commitment process and draw down of funds that will be informed by Regulatory Determinations and the Stage Gate process.

Next Steps

- Release updated Business Case and consolidated Implementation Roadmap to industry stakeholders
- Brief industry and consumer groups
 - Conduct Regulatory Implementation Roadmap forum to review consolidated roadmap
 - Stand-up the NEM2025 PCF
 - AEMO Consumer Forum
- Watching brief on CM/CMM policy developments for Stage Gate approvals



4. Roadmap Issues

Discussion of matters that may have implications for the Roadmap

AEMO

IESS & FTA Model 2

Key Policy development and design Initiation, including high-level pre-execution design Committed solution delivery	Proof of concept trial Detailed pre-execution design Indicative Solution delivery	Rules development Rules develop	AEMO scoping process AEMO Procedure/Guideline developmen Production roll Out	t
Committed effective date	Proposed effective date	 Estimated effective date 		
Stage gate checkpoint	Grouped release			
Updates / Callouts + Initiative updated since last version Initiatives will be delivered incrementally An effective date for transition to target stage for the NEM that NEM2025 Reform Pathways	t will be determined in collaboration with	Participants		
Resource Adequacy Mechanisms and Ageing Thermal Generatio		es, Scheduling and Ahead Mechanisms	Data Strategy	NEM2025 Program dependency
NEM2025 Reform Pathways		es, Scheduling and Ahead Mechanisms	Data Strategy AEMO Strategic / Foundational Pre-requisite	NEM2025 Program dependency
Hard design				

			20	22			20	23			20		
Code	Reform Initiative												
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PHASE 1													
Immediate	Reform Initiatives												
	Efficient management of system strength on the power system				•	•							
FFR	Frequency control - Fast Frequency Response		: :		MASS								
MTP	Increased MT PASA information								•				
IES	Integrating Energy Storage						$ \longrightarrow $				•		
				1									
FTA2	Flexible trading arrangements model 2									-	── → ◆		
													23



PFR Incentive Arrangements

			2	022			20	23		2024				2025			
Code	Reform Initiative	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PHASE 1 Immediate	Reform Initiatives Efficient management of system strength on the power system																
550					MASS												
FFR	Frequency control - Fast Frequency Response																
MTP	Increased MT PASA information										-						
IES	Integrating Energy Storage										•						
FTA2	Flexible trading arrangements model 2									₩₩₩ ←	▰	Γ					
PHASE 2						,					-	┦┊╎					
Foundation	al - Access and Identity			/													
PC	Portal Consolidation							← →	N								
CMSTR2	CoMaStR Phase 2					<u> </u>		← 111 →									
IDAM	Identity and access management					<u> </u>		← - - 						On-bo	arding and	transition	lan (includ
IDX	ESB Industry Data Exchange			Integrated	design		grated de	sign							Ĭ		
Reform - Scl	neduled Lite			┝┶┶╁	- + ` + '	<u> </u>	grated de	⊢⊢⊢′									
SCDL	SCADA Lite						•	┍									
SL	Scheduled lite - Assumes a single rule change for both models							⊇ () ←				╞	● ●			←	♦ First re
Foundation	al - Operational & System Tools					Indicat	ive range f	or increme	ntal delive	ry; use cas	es deliver	ed with ref	orms as requ	uired			
BRE	Business Rules Engine															5	
PHASE 3																	
Next ESS Rej	form Initiatives			Integrated	scoping	Integrated	design										
PFR	Primary Frequency Response Incentive Arrangements				<+-G					i i		*		┣┿┥◆			
	*ST PASA is not delivered by the NEM2025 Program but is prposed to be deliver	ed as part	of an integ	rated delive	ry project	with ESS re	forms										
STP	ST PASA - Replacement project and methodology update	-												┣┿┥Щ		•	
OSM	Operational Security Mechanism		-							←							
ROR	Ramping/operating reserves									\circ		<					
СМ	Capacity Mechanism						Indicative	: Subject to	final desig	n recomm	endation	s from ongo	oing policy co	onsulation	by the ESB		Subject to
CMM	Congestion Management Model						Indicative	: Subject to	final desig	n recomm	endation	s from ongo	oing policy co	onsulation	by the ESB		Subject to
				NLLI	-↓↓1	+ + -	-+-/										

5. Plan for Q3





Publication process and plan for Q3

JULY 2022	AUGUST 2022	SEPTEMBER 2022	BEYOND
 RDC feedback on the Business Case Publication of NEM2025 Declared Project Draft Determination and Report RDC mthly meeting (today) 	 Business case finalised and published Publication of version 2 of the NEM2025 Implement ation Roadmap Integrated with Regulatory Implementation Roadmap RDC mthly meeting Discussion of strategic issues related to NEM 2025 Reform Implementation (e.g. effective go-live dates) Nominations and first PCF meeting 	 RDC meeting to be confirmed – aiming for quarterly cadence Publication of NEM2025 Declared Project Final Determination and Report Indicative commencement of Stage 2 NEM2025 Declared Project Cost Recovery Consultation AEMO Consumer Forum Regulatory Implementation Roadmap forum (indicative) 	 RDC meeting to be confirmed – aiming for quarterly cadence



6. Other business

Q3 2022 RDC Survey results

Please rate how satisfied you are with the Reform Delivery Committee





7. Thanks and close



For more information visit

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