

NEM five-minute settlement and global settlement

5MS & GS Special Readiness Survey Results –
Delayed implementation of five minute and global settlement

24 July 2020

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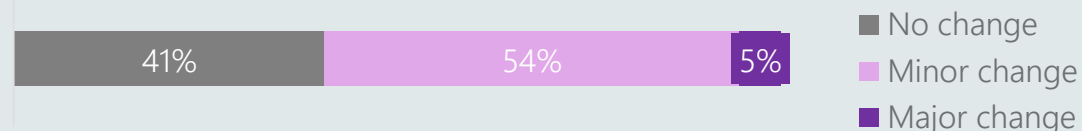
Background and context

- On 9 July 2020, the AEMC determined that the commencement of the 5MS rule and GS rule should be delayed by 3 months, so that they commence on 1 October 2021 and 1 May 2022 respectively.¹
- The 5MS GS Special Readiness Survey was released on 10 July 2020 to understand impacts to participants associated with the final determination and final rule.
- Members of the 5MS and GS Program Consultative Forum (PCF) and Readiness Working Group (RWG) were invited to respond to the survey from Friday 10 July 2020 to Friday 17 July 2020. The survey results were circulated to the PCF and RWG on 24 July 2020, and discussed at the Executive Forum on Thursday 30 July 2020.
- This report presents key findings and considerations developed after an analysis of received survey responses. It provides a snapshot of participant and industry impacts based on the reported results of those organisations.

Key findings

Figure 1: Participant impacts from delayed implementation of five minute and global settlement

To what extent has your organisation's delivery of 5MS and GS changed as a result of the AEMC's decision to defer the rule commencement dates by 3 months?



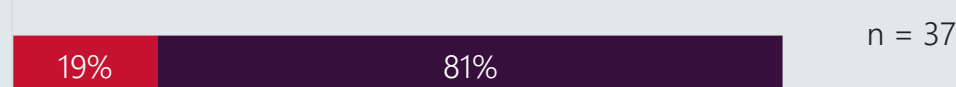
Has your organisation previously decided to defer its project resources or activities in anticipation of the rule change determination?



Considering your organisation's 5MS project current status, is your organisation on track to deliver against the new commencement dates?



If your organisation's delivery of 5MS and GS has been impacted by the AEMC decision, is there any additional support that AEMO can provide to help mitigate this impact?



n = 37

Observations:

- One in three respondents (35%) decided to defer their project resources or activities in anticipation of the determination.
- All respondents, including those who deferred projects noted that they are on track to deliver against the new commencement dates.
- Participants are focused on re-mobilisation and re-planning activities, with a majority (81%) not requiring any additional support from AEMO. Suggestions of additional support include providing more flexibility around participant engagement and transition activities.
- Only 5% of respondents were making major changes to their program in response to the rule change determination. Approximately half (54%) had minor changes to their program, with 41% not making any changes to their program.

Survey participation rate

- There was a strong survey response rate and coverage across most participant types. This provides reasonable assurance that the results are likely reflective of the overall industry position.
- A total of 37 organisations representing 79 participant types responded, with industry coverage ranging from 85% to 100% for all participant types except TNSPs.
- TNSPs were underrepresented in the survey, with 3 out of 6 not providing a response to the survey.

Figure 2: Survey respondents by participant type (%)

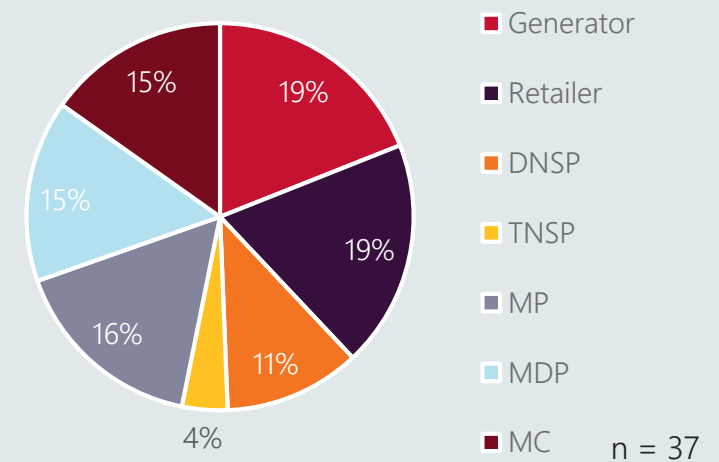


Table 1: Industry coverage by participant type (%)

Industry coverage		
Participant type	% Industry coverage	Industry coverage methodology
Generator	91.4%	Generator respondents' capacity / NEM capacity
Retailer	94.6%	Retailer respondents' settlement vol. / NEM vol.
MP	99.8%	MP respondents' total type 1-4 NMIs/ total type 1-4 NMIs
MDP	99.8%	MDP respondents' total type 1-4 NMIs/ total type 1-4 NMIs
MC	85.4%	MC respondents' total type 1-4 NMIs/ total type 1-4 NMIs
DNSP	90%	Number of DNSP survey respondents / Total DNSPs
TNSP	50%	Number of TNSP survey respondents / Total TNSPs

Results - Summary of responses, by participant type (1)

Table 2: Summary of responses (i)

Participant type	Total respondents	Extent of that 5MS and GS delivery has changed as a result of rule determination			Deferred resources or activities before rule change		Delivery against new commencement dates		Suggestion of additional support from AEMO	
		No change to program	Minor change to program	Major change to program	Deferred	Not deferred	On track	Not on track	Yes	No
Generator	15	7	8	0	4	11	15	0	2	13
Retailer	15	6	9	0	6	9	15	0	4	11
DNSP	9	2	6	1	4	5	9	0	2	7
TNSP	3	2	0	1	1	2	3	0	1	2
MP	13	5	6	2	5	8	13	0	3	10
MDP	12	4	6	2	5	7	12	0	3	9
MC	12	5	5	2	5	7	12	0	4	8
All participants*	79	31	40	8	30	49	79	0	19	60
All organisations*	37	15	20	2	13	24	37	0	7	30

*Each organisation may represent multiple participant types (e.g. generator and retailer)

Results - Summary of responses, by participant type (2)

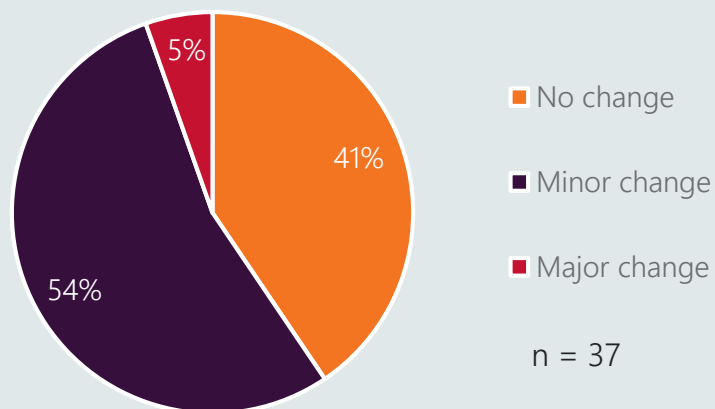
Table 3: Summary of responses (ii)

Participant type	Total respondents	Intention to deliver or receive metering data in sub-multiples of trading interval		Capability to aggregate metering data (e.g. 5 to 30 or 15-minute intervals)		Commencement of type 4 and 4A metering transition activities before 1 Oct 2021		Commencement of bidding during transition period (1 Apr 2021 to 1 Oct 2021)	
		Yes	No	Yes	No	Yes	No	Yes	No
Generator	15	-	-	-	-	-	-	13	2
Retailer	15	2	13	-	-	-	-	-	-
DNSP	9	2	7	-	-	-	-	-	-
TNSP	3	1	2	-	-	-	-	-	-
MP	13	-	-	-	-	4	9	-	-
MDP	12	3	9	5	7	4	8	-	-
MC	12	-	-	-	-	3	9	-	-
All participants*	79	8	31	5	7	11	26	13	2
All organisations*	37	6	25	5	7	4	10	13	2

*Each organisation may represent multiple participant types (e.g. generator and retailer)

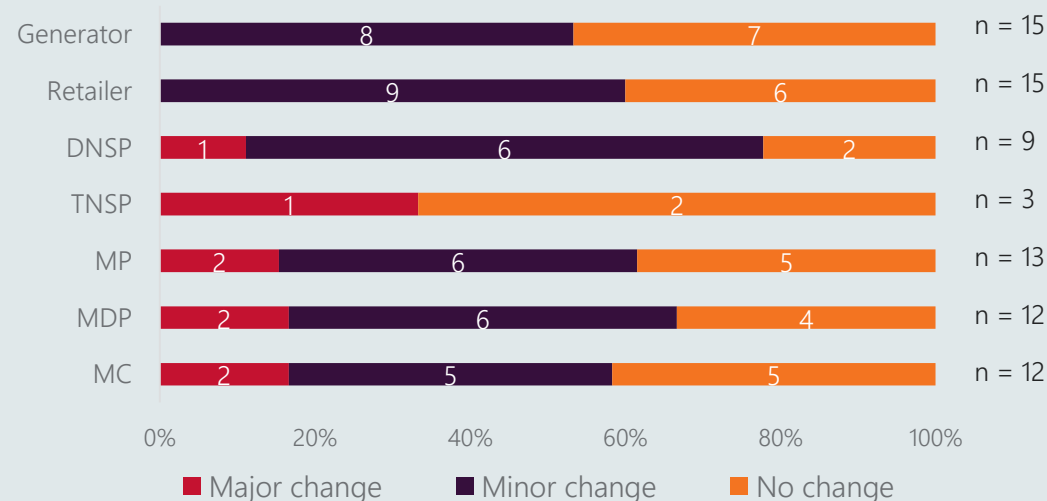
Extent of impact of rule change and determination

Figure 3: To what extent has your organisation's delivery of 5MS and GS changed as a result of the AEMC's decision to defer the rule commencement dates by 3 months?



	#	%
No change	15	41%
Minor change	20	54%
Major change	2	5%
Total	37	100%

Figure 4: To what extent has your organisation's delivery of 5MS and GS changed as a result of the AEMC's decision to defer the rule commencement dates by 3 months? (By participant type)



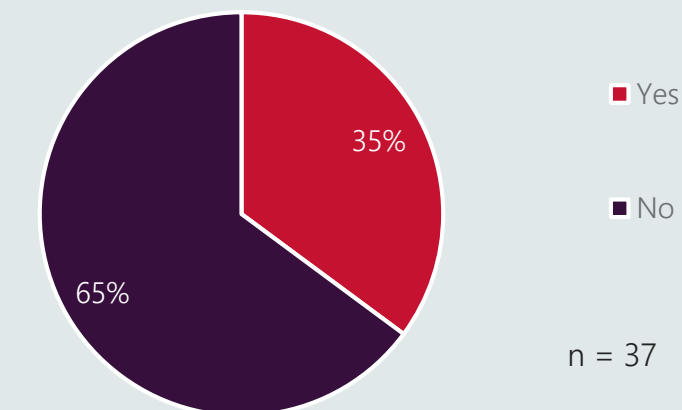
	Generator	Retailer	DNSP	TNSP	MP	MDP	MC
No change	0	0	1	1	2	2	2
Minor change	8	9	6	0	6	6	5
Major change	7	6	2	2	5	4	5

Observations:

- Only 5% of respondents were making major changes to their program in response to the rule change determination. Approximately half (54%) had minor changes to their program, with 41% not making any changes to their program.
- Participants making minor changes to their programs noted adjustments to their project schedule in line with the new delivery dates and industry testing timeframes.
- Two organisations representing DNSP, TNSP, MP, MDP and MC participant types reported major changes to their program. Both organisations noted significant impacts to business operations due to COVID-19 and are currently re-planning and assessing their programs.

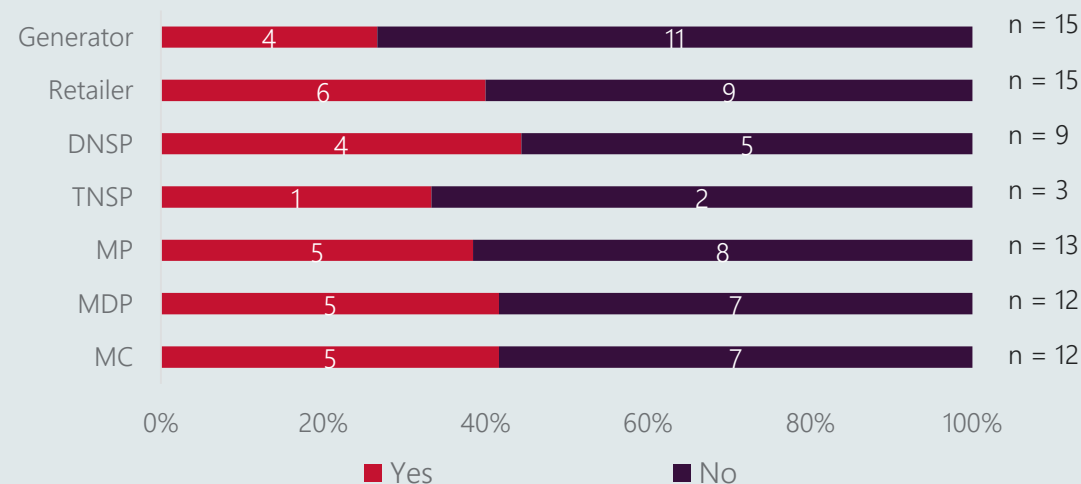
Project deferral before rule change determination

Figure 5: Has your organisation previously decided to defer its project resources or activities in anticipation of the rule change determination?



	#	%
Yes	13	35%
No	24	65%
Total	37	100%

Figure 6: Has your organisation previously decided to defer its project resources or activities in anticipation of the rule change determination? (By participant type)



	Generator	Retailer	DNSP	TNSP	MP	MDP	MC
Yes – Deferred	4	6	4	1	5	5	5
No – Not deferred	11	9	5	2	8	7	7

Observations:

- One in three respondents (35%) decided to defer their project resources or activities in anticipation of the determination, this proportion was consistent across all participant types. These respondents noted that are now re-assigning and establishing resources to ramp up their 5MS programs, along with re-engagement of vendors in some cases.
- It is likely that organisations that deferred project resources or activities are underrepresented in the survey, presuming that they are less likely to provide a response due to reduced engagement with the AEMO 5MS program.
- Three organisations mentioned that they re-prioritised 5MS program resources to manage the impacts of COVID-19, and have noted re-planning activities based on new timeframes.

Additional support from AEMO

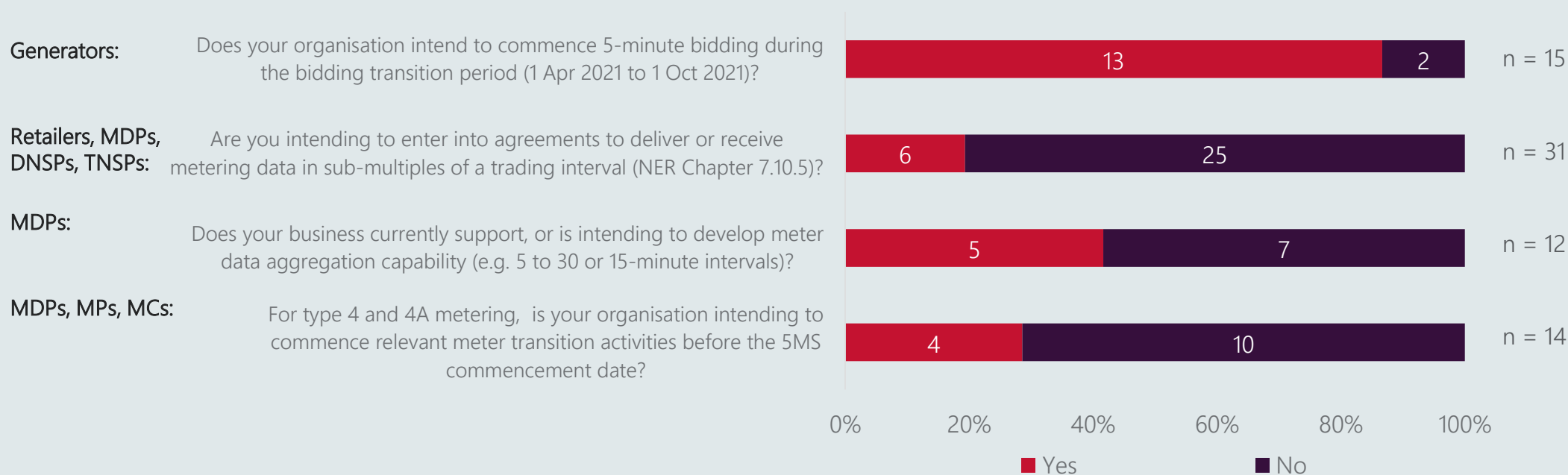
- Seven organisations provided suggestions for AEMO to provide additional support to participants. Table 4 below summarizes the requested areas for participant support, and AEMO's approach in response.

Table 4: Suggestions of additional support from AEMO

Area for Participant Support	Approach
<ul style="list-style-type: none"> Finalisation of Metering Transition Plan in line with new commencement dates 	<ul style="list-style-type: none"> Identified as priority by AEMO and currently underway, with discussion at Transition Focus Group planned on 29 July 2020
<ul style="list-style-type: none"> Streamlining of industry meetings 	<ul style="list-style-type: none"> Future RWGs and SWGs will be combined
<ul style="list-style-type: none"> Guidance on flexibility in Metering Transition Activity completion 	<ul style="list-style-type: none"> AEMO to follow up with participant individually
<ul style="list-style-type: none"> Management of overlapping programs (e.g. Wholesale Demand Response) 	<ul style="list-style-type: none"> AEMO is working with participants to develop a regulatory roadmap
<ul style="list-style-type: none"> Additional test environments (e.g. 2nd pre-prod) 	<ul style="list-style-type: none"> AEMO is currently considering the expansion of functionalities in the staging environment
<ul style="list-style-type: none"> Validation of Participant architecture and regulatory obligations 	<ul style="list-style-type: none"> AEMO to follow up with participant individually
<ul style="list-style-type: none"> Confirm Reaccreditation roadmap timings for impacted participant 	<ul style="list-style-type: none"> AEMO to follow up with participant individually
<ul style="list-style-type: none"> Data migration assistance for metering transition activities 	<ul style="list-style-type: none"> AEMO to follow up with participant individually
<ul style="list-style-type: none"> Flexibility on regulatory requirements 	<ul style="list-style-type: none"> AEMO to follow up with participant individually

Participant transition activities

Figure 7: Participant transition activities



Observations:

- 13 out of 15 generators (87%) responded that they intend to commence 5-minute bidding during the bidding transition period.
- Six out of 31 (19%) organisations representing Retailers, MDPs, DNSPs and TNSPs intend to enter into agreements to deliver or receive metering data in sub-multiples of a trading interval. All respondents that noted timeframes for these agreements reported delivery and receipt of sub-multiples within 6 months of 5MS commencement.
- Five out of 12 (42%) MDPs currently support or intend to develop meter data aggregation capability.
- Four out of 14 MDPs, MPs and MCs intend to commence meter transition activities for type 4 and 4A meters before the 5MS commencement date. Out of the four MDPs, three intend to have metering data aggregation as a component of their operations.

Survey respondents – By organisation

- Thank you to the following organisations that submitted a survey response:

Table 5: Survey respondents by organisation

Survey respondents			
ActewAGL Retail	Endeavour Energy	Jemena	Shell Energy Australia
AGL	Energex and Ergon Energy	Macquarie Bank Limited	Snowy Hydro
APA	EnergyAustralia	Metering Dynamics	Stanwell
Arrow Energy	ENGIE	Mondo	TasNetworks
Aurora Energy	ERM Power	Neoen	Telstra
AusNet Services	Essential Energy	Origin Energy	TransGrid
CitiPower Powercor United Energy	Evoenergy	PLUS ES	Vector Metering
CS Energy	Flow Power	Powermetric	
Delta Electricity	Hydro Tasmania	Red Energy and Lumo Energy	
EEQ - Ergon Energy Retail	Intellihub	SA Power Networks	

Survey respondents – By participant type

Table 6: Survey respondents by participant type

Generators	Retailers	DNSPs	TNSPs	MPs	MDPs	MCs
AGL	ActewAGL Retail	AusNet Services	AusNet Services	AusNet Services	AusNet Services	AusNet Services
APA	AGL	CitiPower Powercor United Energy	TasNetworks	Endeavour Energy	Endeavour Energy	Endeavour Energy
Arrow Energy	Aurora Energy	Endeavour Energy	TransGrid	Energex and Ergon Energy	Energex and Ergon Energy	Intellihub
CS Energy	CS Energy	Energex and Ergon Energy		Essential Energy	Essential Energy	Jemena
Delta Electricity	Delta Electricity	Essential Energy		Intellihub	Intellihub	Metering Dynamics
EnergyAustralia	EEQ - Ergon Energy Retail	Evoenergy		Jemena	Jemena	Mondo
ENGIE	EnergyAustralia	Jemena		Metering Dynamics	Metering Dynamics	Origin Energy
ERM Power	ENGIE	SAPN		Mondo	Mondo	PLUS ES
Hydro Tasmania	ERM Power	TasNetworks		PLUS ES	PLUS ES	Powermetric
Neoen	Flow Power			Powermetric	Powermetric	TasNetworks
Origin Energy	Hydro Tasmania			TasNetworks	TasNetworks	TransGrid
Shell Energy Australia	Macquarie Bank			TransGrid	Vector Metering	Vector Metering
SNOWY HYDRO	Origin Energy			Vector Metering		
Stanwell	Red Energy and Lumo Energy					
Telstra	Stanwell					