

An Introduction to AEMO's 5MS Program



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The purpose of this pack is to provide background information to those participants affected by the implementation of the Five-Minute Settlement (5MS) and Global Settlement (GS) rules. The pack is particularly directed towards small market participants who have not directly engaged with the 5MS Program so far. The pack will introduce the 5MS and GS rules and outline some key, high level information to better equip you and your organisation in preparing for and implementing the changes required.

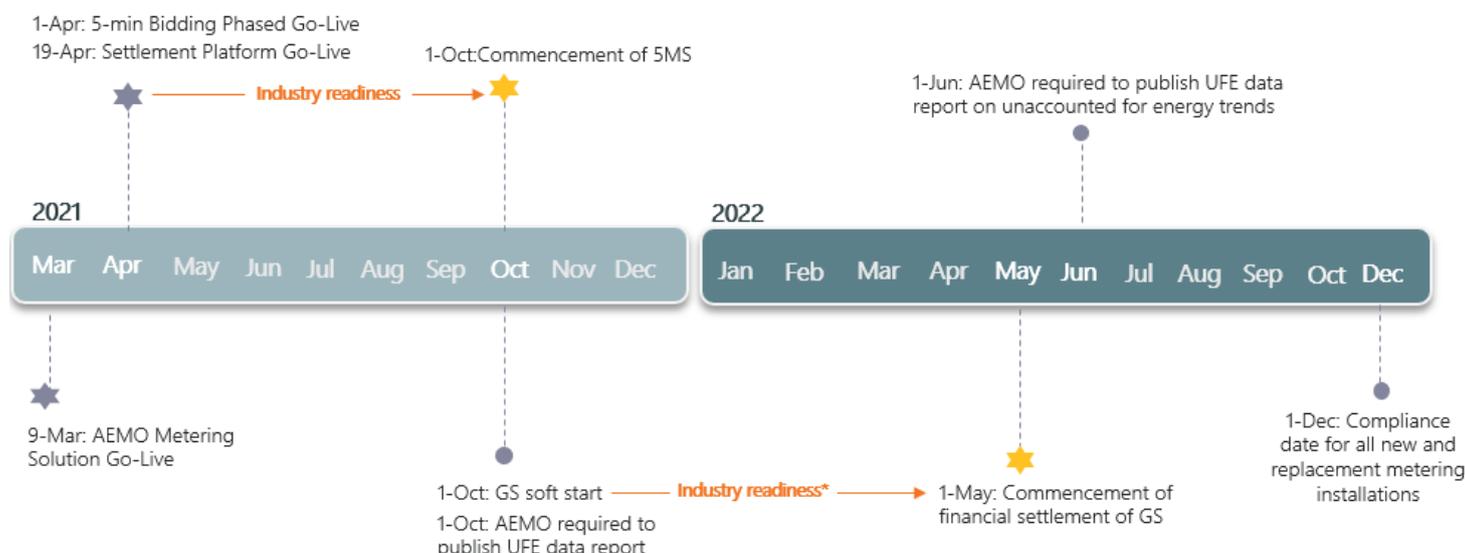
The 5MS Program is well under way and on track to complete delivery of the 5MS and GS IT technical components in Q 1 and Q2 2021. This timing will allow market participants to progress implementation preparations and system testing ahead of the new rule change commencement dates, which the [AEMC announced](#) on 9 July 2020.

The full commencement of 5MS, and the soft start of GS, will now begin on 1 October 2021, followed by the full commencement of GS on 1 May 2022 (as depicted in the timeline below).

Most market participants will be impacted in some way by these rules. Therefore, it is important that every organisation is familiar with the rules and assesses the extent to which their systems and processes will need to change in order to remain compliant. AEMO's 5MS Program, and the information contained within this pack and on the [5MS Program website](#), aims to help your organisation achieve these objectives and ensure your staff are ready for the commencement of these rules.

If you require further information or have any questions, please contact the 5MS Program team at: 5ms@aemo.com.au.

5MS & GS IT & Readiness Timeline



*Note: Industry readiness includes testing and market trials

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1. Quick Reference Q&A

Questions	5MS	GS
What is the change?	<p>A rule change has been made to change the settlement period for the electricity spot price from 30-minutes to five-minutes.</p> <p>This will align the market's price signal with the dispatch of the physical electricity system, which matches demand and supply every five-minutes.</p>	<p>A rule change has been made to change the way in which settlement of the NEM is completed for retailers.</p> <p>This rule will affect how unaccounted for energy (UFE) costs are distributed across Retailers – moving from a settlement-by-difference to a global settlement framework.</p>
When will the rule come into effect?	1 October 2021	1 May 2022. However, UFE data will be published by AEMO from 1 October 2021 to ease the transition to GS.
What are the benefits?	<ul style="list-style-type: none"> – Improved price signals for more efficient generation and use of electricity. – Improved price signals for more efficient investment in capacity and demand response technologies to balance supply and demand. – Improved bidding incentives. 	<ul style="list-style-type: none"> – Create a greater level of visibility of energy uncertainties, known as Unaccounted for Energy (UFE). – Provide a more equitable distribution of costs. – Lead to fewer settlement disputes.
Which procedures are impacted?	Approximately 70 procedures, policies and guides are affected by the 5MS and GS Rules across four functional areas. These procedures have now been updated through consultation with the industry.	

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Questions	5MS	GS
<p>How will it impact small market participants?</p>	<p>Small Retailers will need to:</p> <p><i>Metering</i></p> <ul style="list-style-type: none"> – Be able to process meter reads from Metering Data Providers (MDPs) in 5-minute granularity. This may require an update to meter data or billing systems – Ensure their Metering Coordinators (MCs) are meeting their metering compliance obligations <p><i>Settlements</i></p> <ul style="list-style-type: none"> – Support billing reconciliation using 5-minute data – Be aware that from 1 October 2021, the NEM will be settled by difference on a 5-minute basis. <p>Small Generators will need to:</p> <p><i>Metering</i></p> <ul style="list-style-type: none"> – Update their systems to receive and process metering data at 5-minute granularity, supplied by their Metering Data Provider. <p><i>Bidding</i></p> <ul style="list-style-type: none"> – Submit bids at five-minute granularity via new FTP, API in JSON Format, and through new Five-Minute Web Screens. <p>For further information refer to the Participant Implementation page on the 5MS website.</p>	<p>The <i>main</i> Global Settlement impacts will be on electricity retailers, meter data providers, distribution businesses and AEMO.</p> <p>For small Retailers and Generators, the impacts are captured below.</p> <p>Small Retailers will need to be aware that:</p> <p><i>Settlements</i></p> <ul style="list-style-type: none"> – Reporting Unaccounted for Energy (UFE) volumes will commence from 1 October 2021 but won't be financially settled (i.e. soft start). All Retailer's settlement statements will reflect this. – Global Settlement will occur 1 May 2022 and will include the financial settlement of UFE. Participants will need to factor these costs into their margin calculations. – Reallocations submitted for the period post 1 October 2021 must be at 5-minute granularity. <p>Small Generators will need to be aware that:</p> <p><i>Settlements</i></p> <ul style="list-style-type: none"> – From 1 October 2021, the NEM will be settled on a 5-minute basis. All Generators settlement statements will reflect this. – Reallocations submitted for the period post 1 October 2021 must be at 5-minute granularity. <p>For further information refer to the Participant Implementation page on the 5MS website.</p>

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Questions	5MS	GS
Who made this decision and when?	The AEMC made this decision on 28 November 2017. On 9 July, the AEMC announced it would to defer the 5MS rule commencement date by three months due to the COVID-19 pandemic.	The AEMC made this decision on 6 December 2018. On 9 July, the AEMC announced it would to defer the GS rule commencement date by three months due to the COVID-19 pandemic.
How is the change being implemented?	AEMO is responsible for implementing the Five-Minute Settlement and Global Settlement rules and has established the Five-Minute Settlement (5MS) program to manage this activity for both rules as a single integrated program. The 5MS Program is working with industry to ensure these rules are in place and participants are ready, by the rule commencement dates of 1 October 2021 for 5MS and 1 May 2022 for GS.	
More information	Refer to the 5MS Factsheet and the 5MS website .	Refer to the GS Factsheet and the 5MS website .

2. Impact to existing NEM data flows

Five-Minute Settlement rule impact:

Diagram 1 represents the high-level electricity data flows within the NEM. The arrows highlighted in yellow depict the data flows that will be impacted by the Five-Minute Settlement rule.

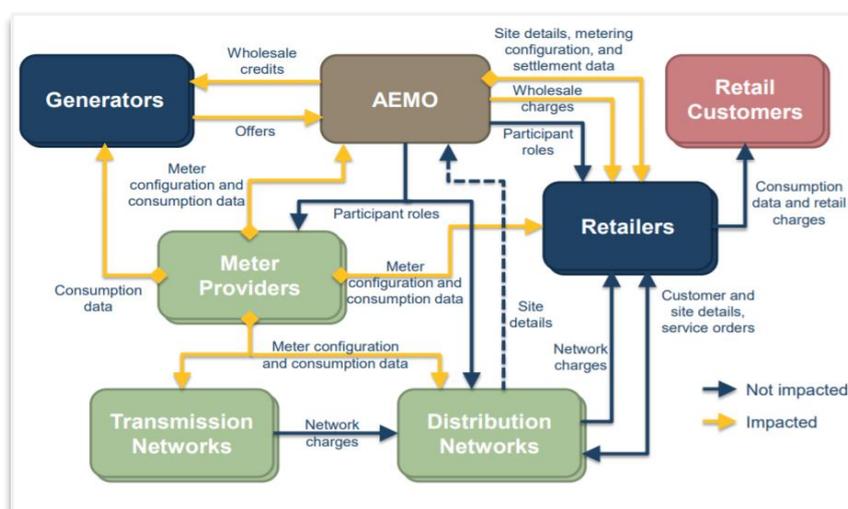


Diagram 1: 5MS impacts on existing data flows in the NEM

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Global Settlement rule impact:

Diagram 2 represents the high-level electricity data flows within the NEM. The arrows highlighted in yellow depict the data flows that will be impacted by Global Settlements.

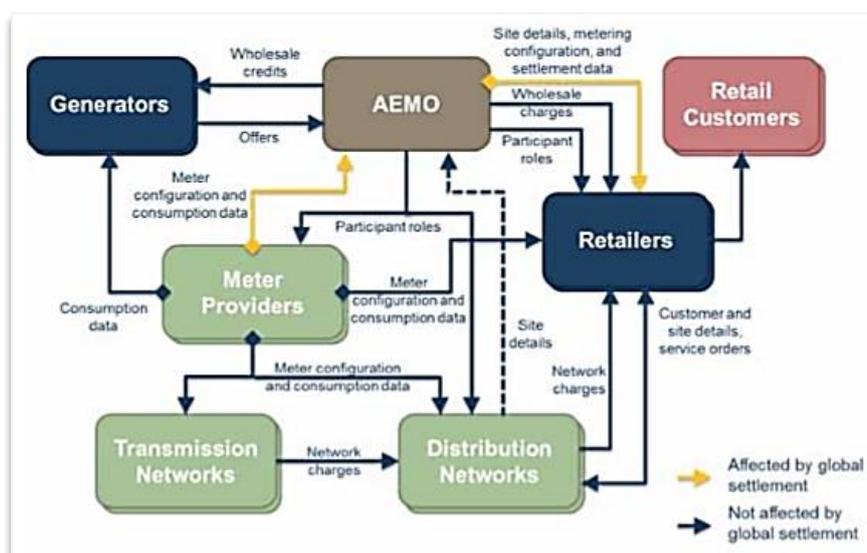


Diagram 1: GS impacts on existing data flows in the NEM

3. Industry Readiness

The 5MS Program has a workstream dedicated to industry readiness. It focuses on managing and monitoring industry readiness through consultation with NEM participants and on supporting participant testing in the AEMO environments.

The 5MS Program issues regular Industry Readiness Assessment Questionnaires to those NEM participants that have registered to receive them. Currently about 90% of the market by market share is represented by the results of the Industry Readiness Assessment.

This approach allows AEMO and the NEM participants to monitor industry readiness status and identify any common risks and issues the industry may be facing. Readiness reports are published on the [Readiness Reporting](#) page on the 5MS website.

The 5MS Program discusses readiness topics including participant testing with NEM participants through the Readiness Working Group. For further details refer to the [Industry working groups and readiness](#) webpage.

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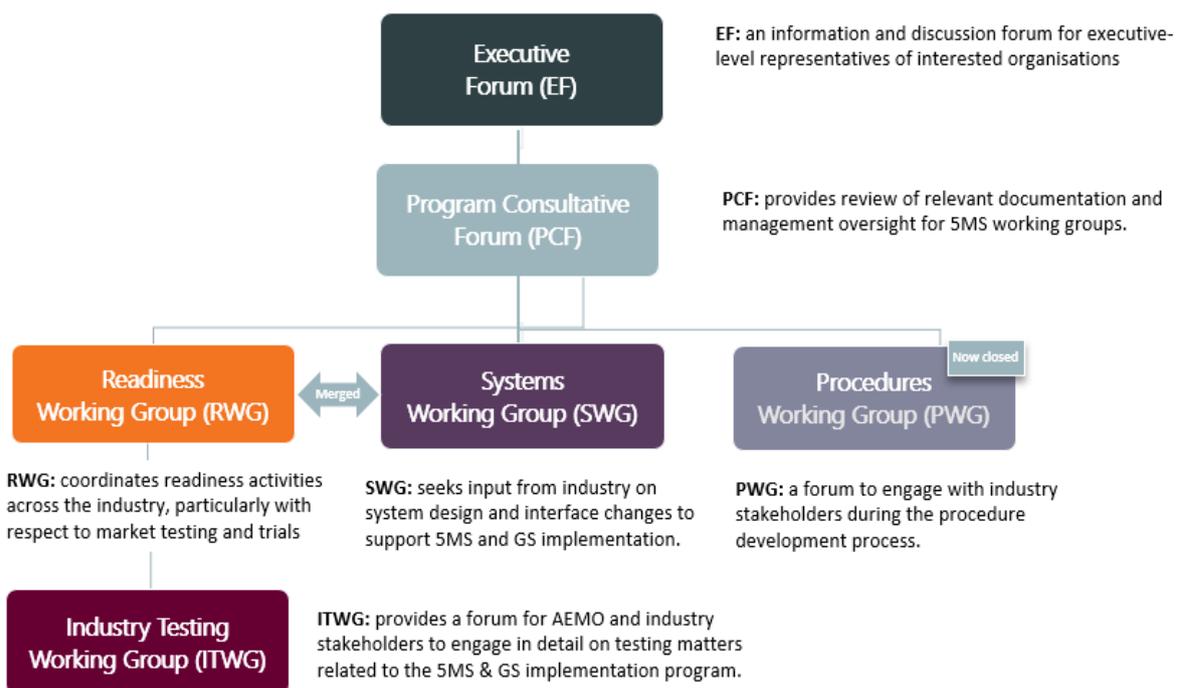
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4. How do I engage with AEMO for 5MS & GS?

The 5MS Program has a dedicated stakeholder engagement framework where each 5MS workstream is aligned to an industry working group. The industry working groups provide members with an opportunity to discuss and explore key topics and contribute feedback and ideas.

In addition, the Program holds monthly question and answer (Q&A) sessions and focus groups, allowing members to drill-down on specific topics of interest. For further details refer to the [5MS website](#).

5MS Industry Engagement Framework



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5. Glossary of key terms and abbreviations

5MS	Five Minute Settlement
GS	Global Settlement
NEM	National Electricity Market - the wholesale electricity market for Australia's eastern and south-eastern coasts of Australia.
MSATS	Market Settlement and Transfer Solution
Market Participants	Registered participants involved in the NEM process, including market generators, transmission network service providers, distribution network service providers and electricity retailers.
UFE	Unaccounted for Energy
RWG	Readiness Working Group is an industry forum focussed on readiness activities which has now merged with the Systems Working Group
SWG	Systems Working Group is an industry forum that focuses on system readiness activities and has now merged with the Readiness Working Group.
PWG	Procedures Working Group was an industry forum focussed on identifying which procedures would require updating as result of the 5MS and GS rules. Note this working group is now closed.
ITWG	Industry Testing Working Group is an industry forum focussed on IT testing activities.
PCF	Program Consultative Forum is an industry management forum that has oversight of all the 5MS working groups.