

# 5MS/ GS Readiness Working Group #1

Thursday 27<sup>th</sup> June, 2019

## **AEMO Offices:**

Level 9, 99 Gawler Place, Adelaide

Level 10, 10 Eagle Street, Brisbane

Level 22, 530 Collins Street, Melbourne

Level 2, 20 Bond Street, Sydney

**PLEASE NOTE THIS MEETING WILL BE RECORDED FOR THE PURPOSE OF  
PREPARING MINUTES**

# Agenda

NO	TIME	AGENDA ITEM	RESPONSIBLE
<b>Preliminary matters</b>			
1	10:00am – 10:15am	Welcome, introduction and apologies	Greg Minney (AEMO)
2	10:15am – 10:25am	5MS & GS Recap	Emily Brodie (AEMO)
<b>Readiness Framework</b>			
3	10:25am – 10:45am	5MS/GS Readiness workstream objectives and scope	Greg Minney (AEMO)
4	10:45am – 10:55am	Readiness working group purpose and scope	Emily Brodie (AEMO)
5	10:55am – 11:10am	Readiness working group operations	Emily Brodie (AEMO)
6	11:10am – 11:25am	Readiness working group engagement	Blaine Miner (AEMO)
BREAK 11:25am – 11:35am			
<b>Matters for discussion</b>			
7	11:35am – 11:55am	Applying the framework	Greg Minney (AEMO)
8	11:55am – 12:15pm	Market readiness strategy	Emily Brodie (AEMO)
9	12:15pm – 12:35pm	Interim readiness reporting	Greg Minney (AEMO)
10	12:35pm – 12:40pm	Forward meeting plan	Greg Minney (AEMO)
11	12:40pm – 1:00pm	General questions	Greg Minney (AEMO)

# Welcome and Introductions

Greg Minney

# 5MS & GS Readiness Team

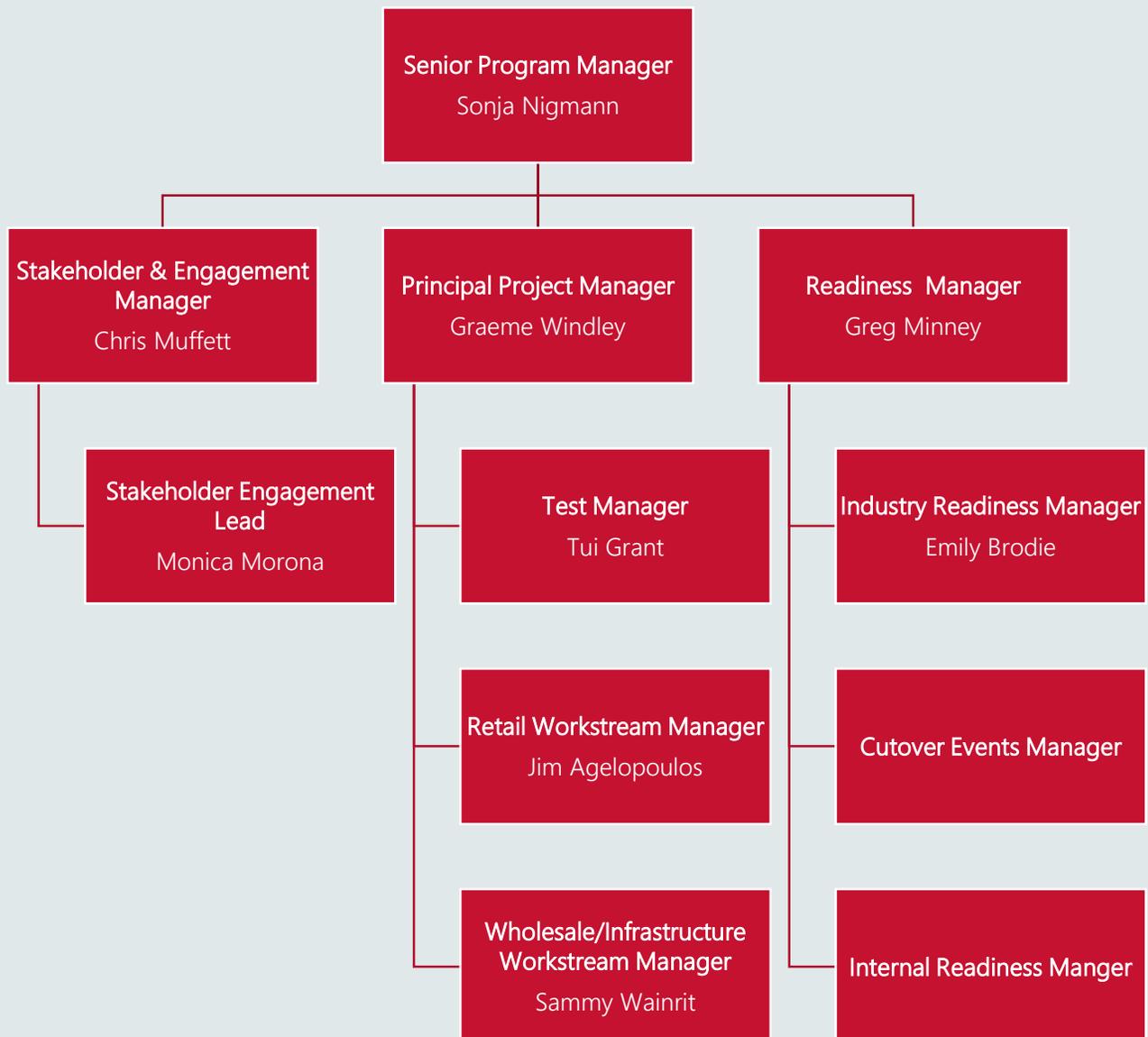
Readiness Manager –  
Greg Minney

Industry Readiness Manager –  
Emily Brodie

- Transitioning from Procedures Manager

Testing Manager –  
Tui Grant

Recruiting Underway:  
Cutover Events Manager  
Internal Readiness Manager



# 5MS & GS Recap

Emily Brodie

# AEMO's 5MS/GS program

- AEMO is working with industry to implement changes arising from the *five-minute settlement* (5MS) and *global settlement* (GS) rule changes.



- RWG is part of the readiness workstream under AEMO's 5MS/GS program. It helps to coordinate 5MS/GS readiness activities across the industry.
- Further details on purpose, scope and operation of RWG are detailed in the upcoming agenda items.

# 5MS and GS implementation overview

## AEMC - 5MS Consultation (2016-17)

- Sun Metals submitted Rule Change in Dec 2015
- Series of consultations by AEMC with stakeholders through 2016/17
- AEMO noted implementation complexity and desirability of transition approach

## AEMC - 5MS Final Determination (Nov 2017)

- Policy work complete, stakeholder views considered, definition of change is clear
- Focus moves to execution
- AEMO established 5MS Project, allocated resourcing and initial funding
- Stakeholder forums defined and established
- Implementation options assessment commenced

## AEMO Execution (2018-today)

- **Global Settlement final determination** - December 2018
- Stakeholder forums up and running
- AEMO program scoped and on track
- Procedures development and consultation well underway: more than 80% of formal, rules-based consultation work is complete

# Readiness Workstream Scope and Objectives

Greg Minney

# 5MS/GS Market Readiness Framework

Objective and  
scope

Market readiness  
strategy

Detailed market  
readiness plans

AEMO and industry engagement

5MS/GS implementation and readiness activities

Readiness reporting and management

# Market Readiness Objective

- The objective of the market readiness workstream is to facilitate uninterrupted market operations for AEMO and NEM participants across the “go-live” dates for both 5MS and GS
- All Participants and AEMO are responsible for their own organisation’s readiness
- Customer side impacts will only be considered if they could potentially impact market operations

# Work Stream Scope

AEMO's role	Scope
Facilitation	Market and industry testing
Co-ordination	Transition and Cutover planning and execution
	Metering Accreditation updates
Oversight	Market Readiness Strategy
	Readiness Reporting
	Readiness Risk Management

- Workstream has both an AEMO and Participant orientation, ensuring that at go-live:
  - AEMO business functions can successfully support market operations
  - Market participants can successfully support market operations

# 5MS/GS Market Readiness Workstream Scope

## Readiness Reporting and Management

- Establishment of objective readiness criteria, with regular reporting by impacted participants
- Analysis and assessment of reported results
- Proactive responses to identified issues
- Readiness issue and risk assessments, including recommended contingency options
- Escalation of issues as required

## Industry Testing and Market Trials

- Planning, execution and management of Market / Industry test activities
- Environment support and availability
- Capability release and timing

## Transition and Cutover

- Establishment of Market Transition Strategy which details the steps, activities and responsibilities in moving from current state to future state
- Planning and monitoring of participant and AEMO transition activities (link to readiness criteria)
- Systems cutover planning and execution - including industry co-ordination

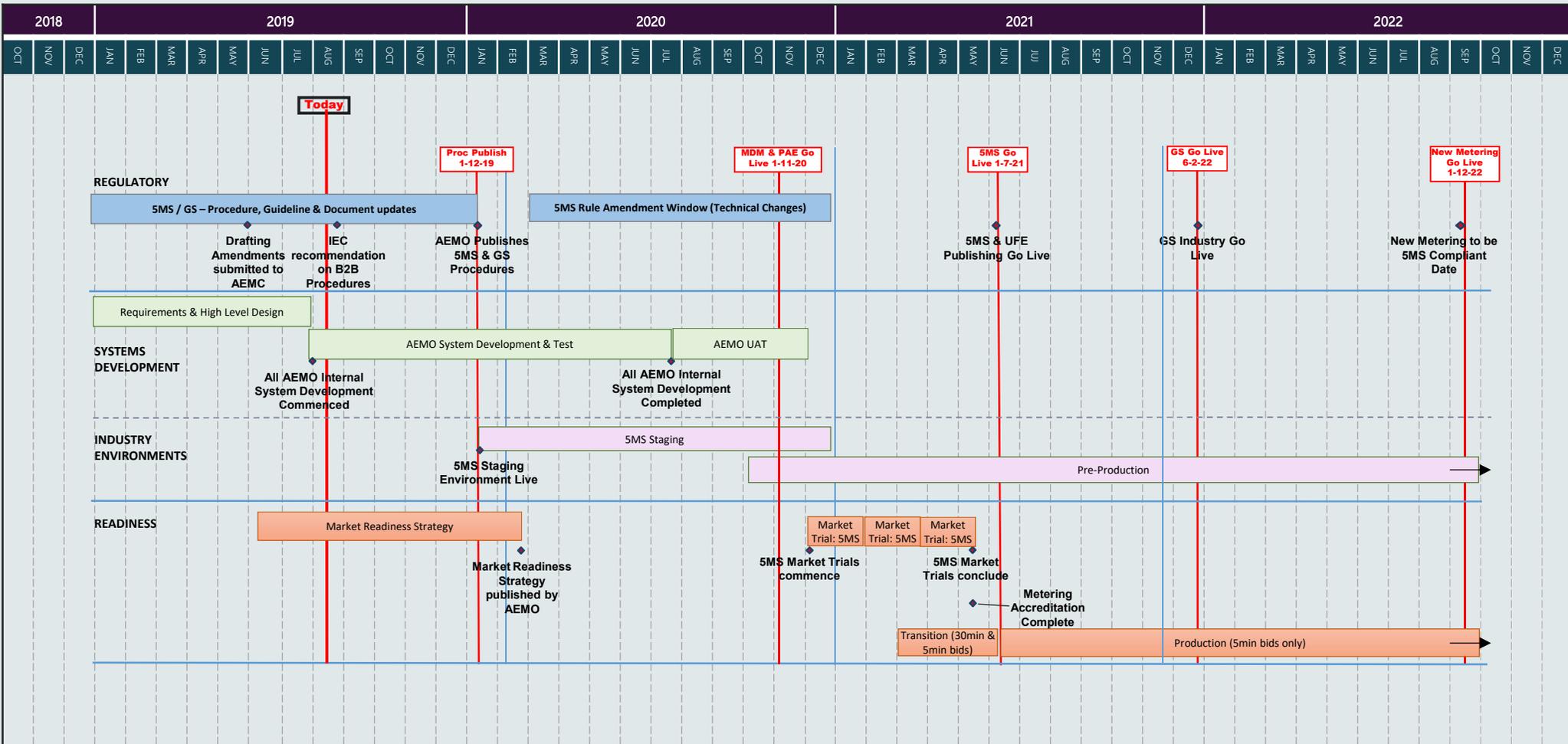
## Metering Accreditation Updates

- Identification of timing and scope of accreditation requirements
- Accreditation Update approach
- Monitor accreditation progress against agreed timeframes

# What's NOT in scope for the Readiness Workstream

- Resolution of technical solution definitions and procedural issues
  - Focus is on the readiness impact and ensuring the appropriate groups are engaged in developing appropriate resolutions
- Making participants take part in readiness activities, such as readiness reporting and market trials
- Approving changes to key milestones/deliverables, including date changes
  - The Readiness Workstream/RWG will make recommendations to the EF/PCF, based on Readiness based assessments, for their consideration

# 5MS Program Timeline – Level 1 Milestones



Timeframe for readiness activities

- Definition
- Execution
- Management

# RWG purpose and scope

Emily Brodie

# RWG purpose

- Main stakeholder forum for direct industry input into the planning and execution of readiness activities
- The RWG will:
  - Bring to the table individual participant views and issues
  - Help coordinate, assist and prepare for the transition and cutover to 5MS and GS
  - Engage with and provide expertise to AEMO on 5MS and GS market readiness activities
- Engaging early and often in the 5MS/GS market readiness work will ensure the timely identification of any potential *readiness* issues, including potential resolution options

# RWG scope

## IN SCOPE

Provides market readiness advice to other 5MS/GS forums

Contributes to the development of key market readiness strategies and plans

Contributes to the coordination of market readiness activities, as set out in market readiness plans

Identifies market readiness issues and risks

Raises readiness issues and risks to AEMO or the appropriate 5MS/GS forum for resolution or monitoring

Reviews periodic reports on the progress of market readiness activities for the whole industry and identifies potential system risks/concerns

## OUT OF SCOPE

Decision making

Developing technical and procedural solutions outside the direct responsibility of the RWG

# Readiness Working Group Logistics

Emily Brodie

# RWG Membership

- RWG members are expected to:
  - Have a thorough understanding of:
    - The 5MS and GS rules
    - Their organisations 5MS/GS development and implementation programs
  - Have authority to:
    - Consider RWG matters and provide official views and commitments on behalf of their business
    - Commit and mobilise internal resources to progress readiness deliverables in accordance with the market readiness plans
  - Have the availability to consistently attend, and actively participate in, working group and focus group meetings and activities
  - Provide information on RWG processes and outcomes back into their business

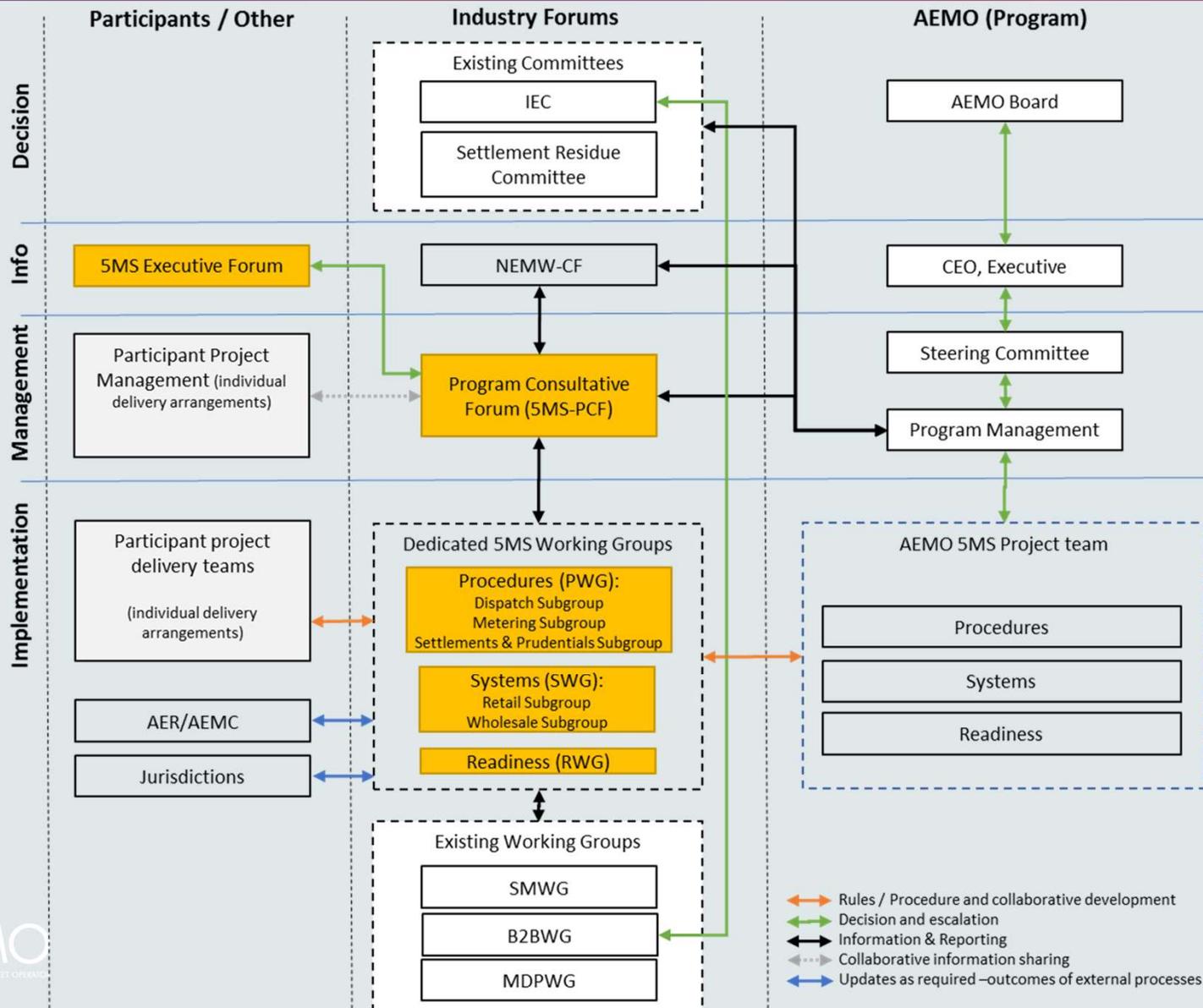
# How will the RWG Operate?

- RWG will meet monthly:
  - ~3 hour meeting
  - Video conference in Brisbane, Sydney, Melbourne and Adelaide
  - Webex video or tele-conference
  - Preference for attendance in person at an AEMO office
- AEMO will endeavour to distribute:
  - Meeting packs 1 week prior to meetings
  - Meeting notes and actions 1 week following meetings
- Outcomes of AEMO and participant actions are to be reported to the following meeting where practicable
- RWG is not a decision-making group – escalation of any contentious matters will be via AEMO's program and the Executive Forum

# Readiness Working Group Engagement

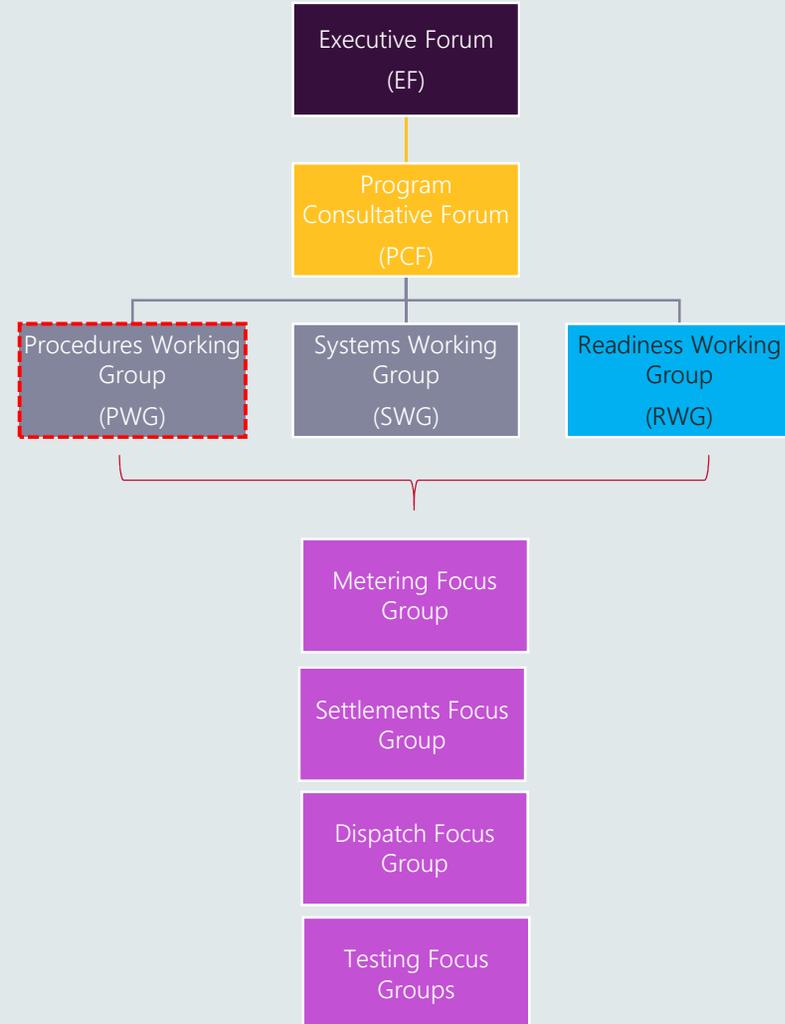
Blaine Miner

# Refresher: 5MS and GS industry engagement overview



# RWG Engagement

- PCF
  - Monitor & report on milestone progress
  - Escalate issues
  - Provide advice
  - Respond to actions and questions
- PWG & SWG
  - Exchange information
  - Assign and complete actions
  - Manage areas of cross-dependency
- Focus Groups
  - Assign actions & deliverables
  - Receive content, analysis and/or recommendations



# Focus Groups and Logs

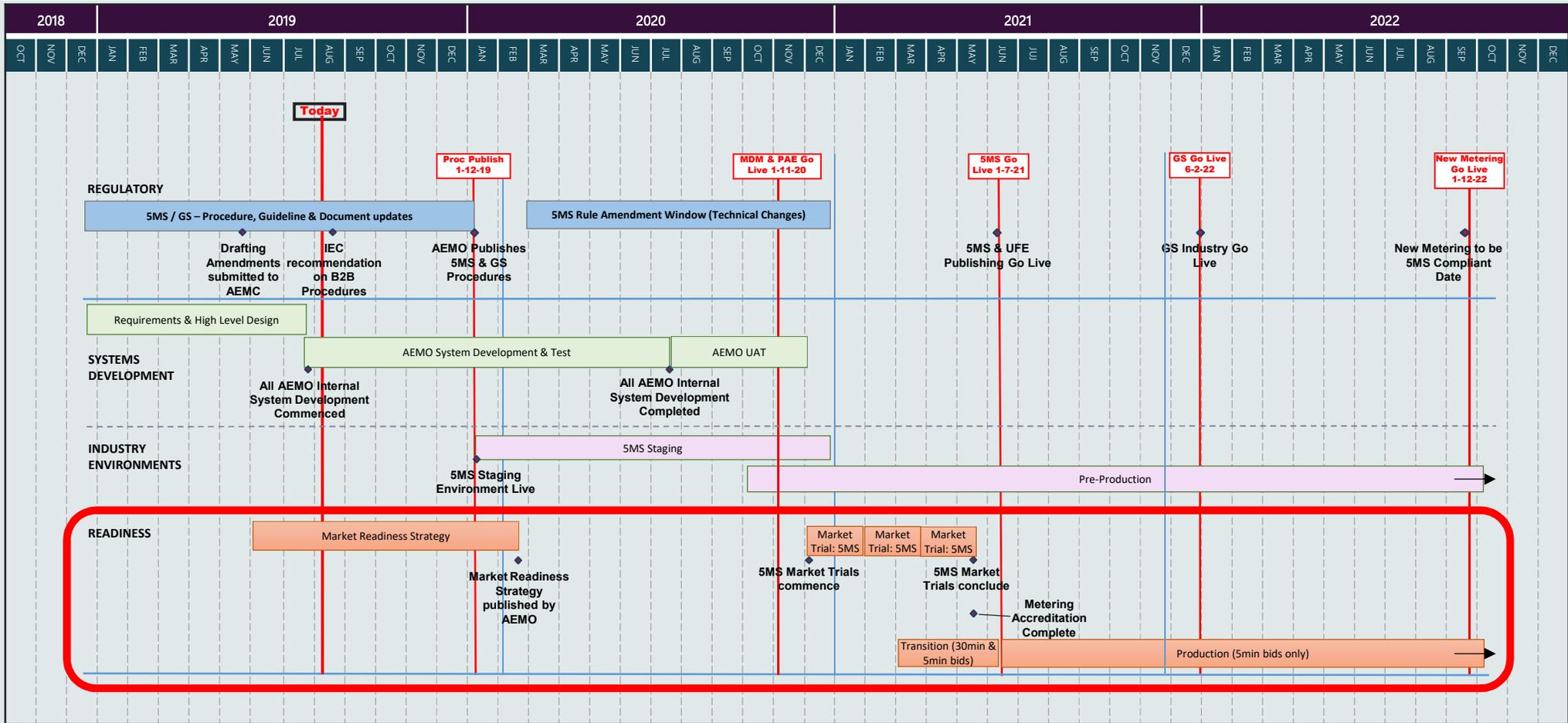
- Focus Groups will be formed/engaged as required
  - E.g. Testing Working Group and Cutover focus group
  - May consist of RWG, PWG and SWG members
    - Where cross-dependencies have been identified
- Logs
  - As the RWG considers different Readiness items, including strategies and plans, associated risks, issues and actions/activities will be captured, assigned and completed
    - This may involve assigning items to other WGs and FGs and receiving items from other WGs and FGs

Break

# Applying the framework

Greg Minney

# 5MS Program Timeline – Level 1 Milestones



# Applying the Framework

Examples	Potential Market Operation Impact?	Within Readiness Scope?
Retailers saying that Readiness is at risk because Retailers need 6-12mths to price in UFE charges into their customer products	No	No
Distributors stating they will not be able to populate MSATS tables with the data required to appropriately allocate non-contestable unmetered loads from 1 July 2021	Yes	Yes
Some type 1,2,3 and subset of type 4 meters not being compliant from 1 July 2021	Yes	Yes
A particular Retailer not being able to validate settlement charges from 1 July 2021	No	No
Insufficient participants being ready for Market Trials	Yes	Yes
Exit criteria not being achieved as a part of Market Trials	Yes	Yes
Subset of Retailers not being able to process 5-min metering data from 1 July 2021	No	No
Readiness at risk due to the introduction of new AEMC Rules	Dependent on impact assessment	Dependent on impact assessment

# Worked example

## Readiness Scenario:

'Some Type 1,2,3, 4 meters will not be compliant on 1 July 2021'

- AEMO and RWG will understand materiality through participant readiness reporting
- AEMO and RWG to assess impact against readiness objective i.e. scale of issue, impact to settlement accuracy, timeframe for remedy, number of participants affected (may require AEMO or MFG input to assess)
- AEMO and RWG to develop/understand potential contingency approaches (may require AEMO/ MFG input)
- AEMO and RWG to escalate if appropriate along with recommended course of action

# Market Readiness Strategy

Emily Brodie

# What is the market readiness strategy?

- Overarching strategy for delivering 5MS/GS market readiness
- Part of the market readiness framework
- Supported by more detailed plans

# 5MS/GS Market Readiness Strategy: Purpose

- The Market readiness strategy sets out the approach for:
  - Managing
  - Coordinating
  - Informing
  - Monitoring and
  - Reporting on

both AEMO's and NEM participants' operational preparedness for 5MS and GS. It particularly relates to the business process and IT system changes necessary for a smooth transition to the new market arrangements.

# 5MS/GS Market Readiness Strategy: Scope

	Market readiness strategy proposed scope
Where are we now?	Provides 5MS/GS context and changes
Where do we need to be?	Defines market readiness with respect to 5MS/GS
	Establishes market readiness principles for 5MS/GS
How will market readiness be progressed and achieved?	Sets out AEMO's approach to managing market readiness
	Details the components of the market readiness program
	Presents key documents to support implementation of market readiness components
	Sets out market readiness strategy implementation

# Defining market readiness for 5MS and GS

## *DRAFT definition:*

- Market readiness represents the successful implementation by AEMO and NEM participants of all necessary activities required for a seamless change to:
  - 5MS on 1 July 2021
  - UFE reporting from 1 July 2021
  - GS on 6 February 2022
- Market readiness applies to the 5MS/GS readiness of the NEM rather than to each individual participant's own readiness.

# Draft market readiness principles

- Joint commitment to readiness for 'go-live'
- Collaborative approach to market readiness
- Each party is responsible for their own readiness
- Communicate readiness issues and risks as early as possible, in writing
- True and honest readiness reporting
- Appropriate handling of confidential and commercially sensitive information by AEMO
- AEMO explains the basis for readiness decisions to NEM participants

# AEMO's proposed approach to managing 5MS/GS market readiness

- AEMO's overall approach to 5MS and GS market readiness is that it will:
  - Be consultative
  - Provide transparent information
  - Support industry testing and market trials
  - Perform industry readiness monitoring and reporting

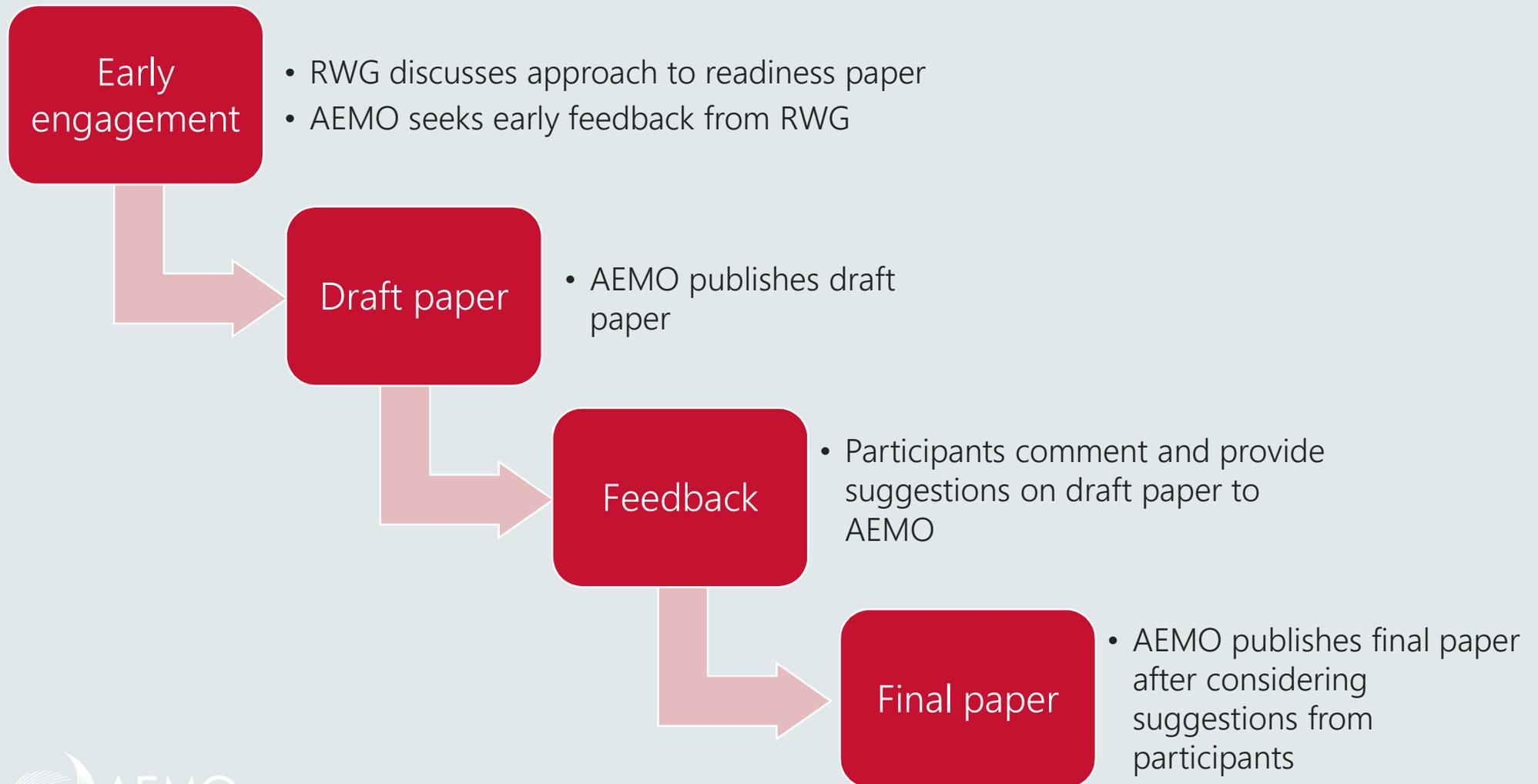
# Market readiness components

- AEMO and industry readiness planning
- Readiness reporting and management
- Industry testing and market trials
- Industry transition and cutover
- Metering accreditation updates

# Key readiness documents



# Approach to developing market readiness documents



# Indicative timelines

NOTE: Deliverable dates are currently draft/proposed dates

Item	Engagement Commences	Draft Paper Released	Final Paper Released
Market Readiness Strategy	June 19	30 August 19	29 Nov 19
Industry Test Strategy	June 19	30 August 19	31 Oct 19
Transition & Go-Live Strategy	July 19	30 Sept 19	31 Jan 20
Market Trial Strategy	August 19	29 Nov 19	28 Feb 20
Metering Service Provider Accreditation Update Plan	August 19	29 Nov 19	31 Mar 20
Industry Readiness Reporting Plan	Sept 19	29 Nov 19	31 Jan 20

# Interim Readiness Reporting

Greg Minney

# Context and objective

- PCF requested AEMO to consider Interim Readiness Reporting to:
  - baseline the general level of participant preparedness
  - occur from now until Feb 2020
- Objectives:
  - to provide a consolidated view of current industry preparedness
  - to identify emerging risks across participant categories
- Full readiness reporting is planned to commence from Feb 2020

# Proposed approach to interim readiness reporting (draft attached)

- High level questions to be answered in Y/N/ N/A format with inclusion of estimated timeframe to address in the case of "N" response
- Organisations to submit a separate response for each participant type they represent in the market
- AEMO to consolidate, *anonymise* responses and present analysis at a future RWG/PCF:
  - Current level of preparedness
  - Key risks and concerns
  - Market participants can compare their level of progress to others in same segment
- Interim reporting repeated bi-monthly until full readiness reporting implemented
- Questions to be refined progressively based on consolidated responses from participants
- Reporting request will be sent to the RWG representative

# Interim Readiness Reporting Questionnaire – Draft

## Participant Name

**Participant type:** Generator / Retailer/ LNSP/ MDP/ MC

Area	Readiness Criteria	Response	Planned timeframe	Reasoning
<b>Governance</b>	Participant understanding of scope and timing of 5MS and GS Rule changes Rule Impact Assessment completed Board/ Executive Management Awareness Project Funding Determined and Committed	Y/ N/ N/a	Date or TBC	
<b>Project Establishment</b>	Project Delivery Structure Established Project Management and Executive Sponsorship Established Project Delivery Timeline Established Progress Tracking in place Commercial Activities defined and included in project			
<b>IT Delivery</b>	IT Delivery Approach Established Scope of Required IT Change established IT Delivery Project Mobilised Vendor Upgrade Releases Identified and Planned			
<b>Business Process</b>	Business Process Impact Assessed Impact of Market Procedure changes assessed Impacted non-market business changes assessed			
<b>Market Readiness</b>	Intention to Participate in Market trials Market trial period incorporated in project delivery timelines			
<b>Overall Summary</b>	Based on your current status and plans, what level of confidence do you have that your organisation will be ready for 5MS and GS market start	H/M/L		

**Key Delivery Risks** *summary of key participant delivery risks*

# Forward Meeting Plan

Greg Minney

# Upcoming meetings

Meetings and forum dates:

<http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement>



Forums/Working Groups
Executive (EF)
Program Consult. (PCF)
Procedures (PWG)
Systems (SWG)
Readiness (RWG)

Focus Groups
Dispatch
Metering
Settlements
Reconciliation
Other
Information Sessions

National Public Holiday
State Public Holiday

# Upcoming RWG Meetings – Content and Discussion Items

- Seeking feedback for proposed content/topic areas

Meeting Date	Meeting	Proposed Content	Deliverables for Consultation	Deliverables Finalised	Deliverables Date
26 July	RWG #2	<ul style="list-style-type: none"> <li>• Market Readiness Strategy Input Deliverables / Timing Feedback</li> <li>• Transition Principles and Approach Input</li> <li>• Testing Phases and Approach</li> <li>• Interim Readiness Reporting Approach</li> </ul>	Market Readiness Strategy		30/08/2019
27 Aug	RWG #3	<ul style="list-style-type: none"> <li>• Feedback on Transition Principles / Timing</li> <li>• Market Trial Strategy Input</li> <li>• Interim Readiness Reporting approach / criteria / timing</li> </ul>	Industry Test Strategy  Transition and Go-Live Strategy		2/9/2019  27/09/2019
24 Sept	RWG #4	<ul style="list-style-type: none"> <li>• Principles for Industry Readiness Reporting</li> <li>• Initial Issues and Risks Workshop</li> </ul>		Industry Test Strategy	30/10/2019

# General Questions

Greg Minney

