

5MS & GS Readiness Working Group #5

Tuesday 22th October, 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
Preliminary matters			
1	10:00am – 10:10am	Welcome, introduction and apologies	Greg Minney
2	10:10am – 10:15am	Notes, actions and feedback from previous meeting	Greg Minney
Matters for noting			
3	10:15am – 10:25am	Staging environment update	Tui Grant
4	10:25am – 10:30am	Workstream update: <ul style="list-style-type: none">• Market readiness strategy update and timelines• Focus group meetings update• PCF requests of the RWG	Emily Brodie Greg Minney
Matters for discussion			
5	10:30am – 10:40am	Debrief on Transition Focus Group meetings	Blaine Miner
6	10:40am – 10:50am	Industry readiness – Stakeholder engagement	Greg Minney
7	10:50am – 11:20am	Industry readiness reporting plan – Proposed approach	Austin Tan
BREAK 11:20am – 11:30am			
8	11:30am – 11:45am	MSP accreditation update plan – Proposed approach	Craig Shelley
9	11:45am – 12:30pm	Contingency planning	Greg Minney
Other business			
10	12:30pm – 12:45pm	Forward meeting plan and general questions	Greg Minney

Notes, actions and feedback from previous meeting

Greg Minney

Responses to RWG meeting actions (1)

#	Topic	Action	Response
4.2.1	Reconciliation support workshop	AEMO to consider combining the Settlement Managers Working Group with the reconciliation support workshop.	Content and volume of reconciliation support workshop is suitable for meeting via VC and webex, and is set for 18 November (a month after the SMWG).
4.4.1	Readiness reporting	AEMO to provide more information on how readiness reporting can be 'actionable'.	To be discussed in this meeting (RWG#5)
4.5.1	Contingency arrangements	AEMO to consider including a 'shadow box' (or similar indication) for contingency arrangements on the transition gantt chart.	To be discussed in this RWG #5
4.5.2	Contingency arrangements	AEMO to consider scheduling arrangements for developing agreed contingency scenarios and incorporation into transition plans	To be discussed in this RWG #5

Responses to RWG meeting actions (2)

#	Topic	Action	Response
4.6.1	Readiness risks	AEMO to consider proposing a new risk in the Industry Risk Register to manage any risks arising from transitional requirements not defined in procedures.	See 4.6.4 below
4.6.2	B2B working group	AEMO to include B2B working group debriefs on the RWG forward agenda when appropriate.	Agreed, included in planning
4.6.3	Metering transition	AEMO to confirm rule requirements relating to 5 minute metering data (delivery and reception) pre 1 July 2021.	In progress
4.6.4	Readiness risks	AEMO to propose a new risk in the Industry Risk Register to manage risk arising from the ambiguity of 5 minute responsibilities pre-1 July 2021.	Has been raised as a risk to the Industry Risk Register

Staging environment update

Tui Grant

Reallocations verification in Staging

- Reallocations will be available on the 1st of November.
- 5MS will perform basic shakeout of the environment prior to this date to confirm access.
- Release notes will be available the morning of the 1st detailing the known defects (if any) of the release.

Access to Staging – Accounts/Certificates

- Access will be available from 1st November
- URM accounts have been copied from Preprod
 - AEMO recommends Staging URM account passwords are reset by participants
- Staging FTP accounts must be requested from the AEMO Support Hub
- Staging API access must be requested from the AEMO Support Hub (this includes certificates)

Access to Staging - Addresses

Staging Available Components from 1 Nov 2019	Address	MarketNet/Internet
AEMO Web Portal Menu Page	https://menu.5ms.staging.test.marketnet.net.au	MarketNet
MSATS Web Portal/ URM	https://msats.5ms.staging.test.marketnet.net.au	MarketNet
EMMS Web Portal / Reallocations Web UI	https://portal.5ms.staging.test.marketnet.net.au	MarketNet
API Gateway / external Reallocation APIs access	https://apis.5ms.staging.test.aemo.com.au	Internet
API Portal	https://staging.apiportal.aemo.com.au	Internet
FTP	146.178.211.226 - (MSATS) 146.178.211.26) - (MMS)	MarketNet

Access to Staging

- AEMO will publish an information pack on the 5MS webpage including these details

Providing Feedback

- Questions regarding the program will continue to be directed to the 5MS mailbox and will be addressed as per the current process.
- 5MS Staging support questions received in the 5MS mailbox will be transferred to the support queue for resolution.
- Questions related to 5MS staging can be directed to the AEMO Support Desk.
- The support desk will log all calls received and assigned to them 5MS program support queue.
- The program will be actively monitoring the queue and respond to all tickets.

Workstream update

Emily Brodie and Greg Minney

Draft market readiness strategy – overall responses

- Feedback received from 10 stakeholders
- Strategy requires further explanation and/ clarification of how market readiness components are dealt with in the various strategies and plans.
- Proposed changes or clarifications resulting from feedback will be discussed in this RWG #5, particularly for:
 - Contingency planning and governance
 - Readiness reporting and risks
 - MSP accreditation updates

Draft market readiness strategy – detailed responses

Chapter		Key feedback
2	Context	Clarification required on: <ul style="list-style-type: none">• difference between UFE 'soft start' and GS start• UFE reconciliation reporting vs UFE trends reporting
3	Framework	<ul style="list-style-type: none">• Four respondents noted that the system changes listed were AEMO-centric and that participants' system changes need to be reflected in this section• Clarification of role of NCULs
4	Strategy	Two additional principles suggested: <ul style="list-style-type: none">• a principle that supports the last part of the market readiness objective, which is "...while facilitating the uninterrupted and reliable operation of the NEM"• <i>Participants will work towards finding transition solutions to achieving objectives by the due dates even if not mandated by the rules.</i> Five clarifications suggested around how the market readiness components are described
5	Implementation	Several suggestions for: <ul style="list-style-type: none">• clarification in the text• additional information/clarification of the timeline• clarification of the RWG's role

Readiness papers - timelines

Item	RWG engagement	Draft paper	Consultation	Comments due	Final paper*
Market readiness strategy	Jun-19	30-Aug	3 weeks	20-Sep	30-Oct
Industry test and market trial strategy	Jul-19	30-Sep	4 weeks	28-Oct	29-Nov
Transition and go-live strategy	Jul-19	30-Sep	4 weeks	28-Oct	29-Nov
Industry readiness reporting plan	Sep-19	31-Oct	3 weeks	21-Nov	13-Dec
Metering service provider accreditation update plan	Oct-19	29-Nov	over summer	31-Jan-20	13-Mar-20

*The “final paper” dates have been endorsed by the PCF as level 2 program milestones and will be reflected in the next PCF meeting pack

Focus group meetings

Past meetings

- **Transition focus group #2**
 - Monday, 23 September, Sydney
 - Focussed on developing the metering transition plan (MTP)
- **Transition focus group #3**
 - Friday, 18 October
 - Webex
 - Resolving outstanding items in the metering transition plan, particularly timing

Upcoming meetings

- **Reconciliation support workshop #2**
 - Monday, 18 November
 - AEMO offices and Webex
 - To provide in-depth information on UFE reconciliation

PCF requests of the RWG

1. Establish impact assessments and mitigations for the readiness risks raised to the Industry Risk Register
 - Will address as component of Proposed Risk workshop
2. Agree approach for consideration of cutover and market rollback
 - Included as discussion in this RWG Pack

Debrief on Transition Focus Group meetings

Blaine Miner

Debrief on Transition Focus Group meetings

- Three meetings have been held:
 - #1 – 30 Aug (Melbourne face-to-face)
 - Provided objectives, purpose, transition context and introduced the Metering and Metering Data Transition Plan (MTP) framework
 - #2 – 23 Sept (Sydney face-to-face)
 - Focused on the initial validation and population of the MTP content
 - #3 – 18 Oct (WebEx)
 - Progressed the MTP initial draft
- To discuss at this RWG #5 (noting that this pack was distributed prior to TFG #3)
 - Outstanding TFG actions, issues and risks
 - Next steps
 - Ongoing engagement

Industry readiness – Stakeholder engagement

Greg Minney

Proposed RWG engagement on readiness topics

- Key areas need to be developed in depth
 - Defining contingency scenarios and planning responses (as per this pack)
 - Industry readiness risks and issues
- Propose that the RWG schedule an out of session meeting to focus on risk and issue rating and development of agreed mitigation actions,
- Provide updates to RWG for endorsement of position
- Discussion:
 - Timing - initial sessions, follow up
 - Duration -
 - Format – Face to Face, Video Conference
 - Attendees - Open Invite, participant representation
 - Pre-meeting material – AEMO to provide risk matrix and proposed mitigations ahead of session, participants to evaluate inherent and mitigated risk level, effectiveness of proposed mitigations

Proposed Engagement Readiness Topics

- Strategy has flagged specialist input required to develop testing and cutover plans for:
 - Reallocations
 - B2M APIs
- **Industry testing focus group**
 - Timing is dependent on Industry Testing Strategy feedback
 - Reallocations release recommendation for Industry Test
 - Support by AEMO, but no formalised cross participant test planning/ execution
 - B2M API release recommendation for Invitation Industry Test
 - Support by AEMO, participants to indicate readiness to participate
- **Cutover focus group**
 - Late November 2019 (call for nominations early November)
 - Location/format TBC (dependent on nominees)
 - Industry cutover planning – impacts and timing of initial releases dependent on uptake
 - Current position that AEMO will take capability live independent of participant deployment activity
- **Discussion :**
 - Timing requirements for focus group establishment in light of participant delivery approaches and uptake plans

5MS/GS Industry readiness reporting plan – Proposed approach

Austin Tan

Industry readiness reporting plan – Proposed objective (recap)

Proposed 5MS/GS market readiness objective

Implement all preparatory activities required for successful 5MS and GS commencements and the IT system go-lives supporting them, while facilitating the uninterrupted and reliable operation of the NEM.

Proposed 5MS/GS industry readiness reporting objective

To facilitate readiness reporting throughout the implementation phase of the 5MS/GS program so that AEMO, NEM participants and other interested stakeholders have an accurate assessment of industry's readiness for the various 5MS and GS system "go-lives", transitional activities and commencements.

Market Readiness Criteria

- Assessing market readiness involves tracking industry's progress towards successful 5MS and GS commencements.
- AEMO also proposes tracking the system go-lives relevant to 5MS/GS implementation e.g. 5-min reallocations
- Readiness reporting will track industry's progress through a set of defined market readiness criteria. These include:
 1. General program criteria (applies to all participant types)
 2. Specific readiness criteria (only relevant to some participant types).

Criteria type	Comments	Indicative examples of criteria
General Criteria	<ul style="list-style-type: none"> • Tracks general level of progress of an organisation's program establishment. • Similar to questions in Interim Readiness Reporting • More relevant early in readiness reporting • Same criteria applies to all participant types 	<ul style="list-style-type: none"> • Extent of project plan development • Extent that project team is resourced
Specific Criteria	<ul style="list-style-type: none"> • Tracks progress towards fulfilling a specific requirement for market commencement • More relevant as market commencement approaches • Different criteria for each participant type, depending on the how each participant is affected by 5MS & GS 	<ul style="list-style-type: none"> • Generators ability to submit 5-min bids • MDPs' responsibility to ensure that type 1, 2 and 3 metering installations record and provide 5-min data.

Reporting criteria - Power of Choice vs 5MS/GS

- Different approach to 5MS/GS readiness reporting as compared with Power of Choice:
 - Significantly fewer questions that are more targeted to *overall* market readiness requirements rather than the incremental steps required to achieve market readiness requirements:
 - Each organisation has its own program but the same overall 5MS/GS obligations
 - Reduces reporting effort
 - Tailored to each participant type based on market readiness requirements
 - Readiness reporting plan, including the readiness criteria, will be reviewed periodically

Power of Choice – Example criteria	5MS & GS – Example criteria
<ul style="list-style-type: none"> • Updated, validated and approved business processes in place • Successfully validated critical business processes during industry testing • Process work arounds in place for any issues identified during industry testing • Operational roles specified, assigned to staff and training delivered 	<ul style="list-style-type: none"> • Generators ability to submit 5 minute bids • Generators ability to receive and reconcile 5-min settlements data • Generators ability to support 5 minute reallocations

5MS/GS Market Readiness Criteria – General criteria

Participant type	General Criteria (Examples)	Comments
All participant types	<ol style="list-style-type: none"> 1. Readiness of project plans, governance and resources <ol style="list-style-type: none"> a. Project funding secured b. Project plan established c. Project governance established d. Project team onboarded e. Agreements with counterparties finalised e.g. vendors, other participants 	<ul style="list-style-type: none"> • This set of criteria shows the industry's level of establishment of 5MS & GS programs. Helps AEMO and the RWG identify risks and issues for each participant type • Likely to become less relevant as participant programs progress from discovery to implementation stage. • Relevant to every 5MS and GS program e.g. every 5MS & GS program will report on a set of general readiness criteria • Questions are similar to Interim Readiness Reporting <p>Discussion</p> <ul style="list-style-type: none"> • What are some other criteria that should be surveyed? • Should there be separate reporting for 5MS and GS? • Given that there are two market commencement dates (1 July 2021, 6 Feb 2022), when date does the industry expect 100% completion?



5MS/GS Market Readiness Criteria – Specific criteria (1)

Participant type	Specific Criteria (Examples)	Comments
AEMO	<p>Market commencement requirements</p> <ul style="list-style-type: none"> • Support 5-min bids and offers <ul style="list-style-type: none"> • Changes to dispatch interfaces • Bidding transition • Support 5-min settlement <ul style="list-style-type: none"> • Changes to settlement calculation • MDM platform supporting 5 minute data delivery and 5-min profiling • Settlement platform to produce 5-min format invoices to support reconciliation • Support UFE publication (from 1 July 2021) <ul style="list-style-type: none"> • Support meter data processing for GS • Support UFE calculation and publication • Support Global Settlement (From 6 Feb 2022) <ul style="list-style-type: none"> • Switching Local Retailer field to "GLOPOOL" to support financial settlement of UFE <p>Additional capabilities</p> <ul style="list-style-type: none"> • Support 5-min reallocations • Introduction of B2M APIs 	<ul style="list-style-type: none"> • Reporting criteria will be aligned to AEMO program updates at the PCF level • Draft criteria will be available for comment in the readiness reporting plan

5MS/GS Market Readiness Criteria – Specific criteria (2)

Participant type	Specific Criteria (Examples)	Comments
Retailers	Additional capabilities <ul style="list-style-type: none"> • Receive and reconcile 5-min settlements data • Receive and reconcile UFE allocation data (from 6 Feb 2022) • Support 5-min reallocations (if relevant) 	<ul style="list-style-type: none"> • Industry will report on progress, status and expected completion date for each criteria • Criteria for each participant type is different based on how they are affected by 5MS and GS • Draft criteria will be available for comment in the readiness reporting plan
Generators	Market commencement requirements <ul style="list-style-type: none"> • Submit 5-min bids Additional capabilities <ul style="list-style-type: none"> • Receive and reconcile 5-min settlements data • Support 5-min reallocations (if relevant) 	
Distribution Network Service Provider	Market commencement requirements <ul style="list-style-type: none"> • Ensure that type 7 unmetered loads are calculated on a 5-min basis • Support MDPs including non-contestable unmetered loads in MSATs (so that these loads can be excluded from UFE calculations) • Ensure that cross-boundary meters are updated in MSATs (to support UFE calculation) • NMI reclassifications 	

5MS/GS Market Readiness Criteria – Specific criteria (3)

Participant type	Specific Criteria (Examples)	Comments
<p>Metering Data Providers (MDPs) / Metering Providers (MPs)</p>	<p>Market commencement requirements</p> <ul style="list-style-type: none"> • Ensure Relevant meters are producing and communicating 5-min data by 1 July 2021: <ul style="list-style-type: none"> ○ Type 1-3 meters ○ Subset of type 4 meters - TNI, Market Generator or SGA, Cross Boundary meters, Type 7 metering installations • Ensure New and replacement Type 4, 4A, VIC AMI and SAMPLE meters are producing and communicating 5-min data by 1 December 2022. • Ensure Non-contestable unmetered loads are producing 5-min data by [date tbc via TFG] • Deliver Tier 1 basic metering data to AEMO from 1 July 2021 • Ensure meter data delivery to AEMO for all interval meters is in MDFF by 1 July 2021 • Ensure meter data delivery to AEMO is at register level if applicable by 1 July 2021 <ul style="list-style-type: none"> • For discussion - Should readiness reporting include this criteria? • Ensure datastream type codes associated with VIC TOUS are updated by 1 July 2021 • Ensure new NMI classification codes (BULK, NCUL, DWHOLESALE, NREG, XBOUNDARY, GENERATR, WHOLESAL) are updated in MSATs by 1 July 2021 • Complete necessary MP/ MDP accreditation updates in-line with metering transition plan and accreditation update plan. 	<ul style="list-style-type: none"> • Industry will report on progress, status and expected completion date for each criteria • Each criteria is linked to activities defined in the Metering Transition Plan • Transition Focus Group to advise the <i>transition</i> due dates of some criteria (as distinct from the dates that are NER obligations) • Draft criteria will be available for comment in the readiness reporting plan



Metrics to score criteria

Participants will be asked to provide information for each criteria following the below metrics:

- Progression(%)
 - Progression towards completion will be tracked in 10% increments
 - Scale to guide level of progression will be provided for each criteria, and will be available for comment in the reporting plan
- Status (On track, At risk, Late)
- Expected completion date
- If any support from AEMO is required

If any criteria is 'at risk' or 'late', the following information is also required:

- Explanation of variance in status / explanation of change in schedule
- Mitigation actions

Reporting Template Example – Specific criteria

Options – (On track, At risk, Late)

Relevant if criteria is "late" or "at risk"

Participant type	Criteria (Examples)	Progress against schedule (%)	Status	Expected completion date	Explanation of variance/ reason for change in completion date	Mitigating actions	Any additional AEMO support needed?
Generator	• Submit 5 minute bids in new bidding system	60%	On track	1/5/2021	<i>Provide explanation for every criteria rated "at risk" or "late", or if there has been a change in completion date</i>	<i>List mitigating actions to return activity to schedule</i>	<i>List if any additional support from AEMO is required, even if activity is within schedule</i>
	• Receive and reconcile 5 minute settlements data						
	• Support 5 minute reallocations (if relevant)						

- Activities to consider (Indicative only)**
- Impact assessments completed, project team mobilised
 - Business requirements in progress
 - Business requirements completed,
 - System design and development in progress
 - System design and development completed,
 - Internal testing in progress
 - Engagement with AEMO staging environment,
 - New business processes documented
 - Recruitment or training underway
 - Industry testing and market trials completed

Readiness reporting process

Key dates and milestones

- Readiness reporting is scheduled to commence in February 2020
- Schedule to publish last readiness reporting survey results end of May 2021
- The readiness reporting plan will include the full schedule of readiness reporting dates
- Periodic revisions of the readiness reporting plan will also be defined in the schedule

Frequency and timing

- **For discussion:** Proposing quarterly reporting until mid-2020, then every 2 months until market commencement
- Survey will be released on a Wednesday, participants will be given until the following Friday to submit results (7 business days)
- AEMO will aim to publish reporting results within 7 business days

Input format

- SurveyMonkey (Excel template provided for internal workings)
 - SurveyMonkey will have in-built logic to only present questions relevant for each participant type

Market readiness report

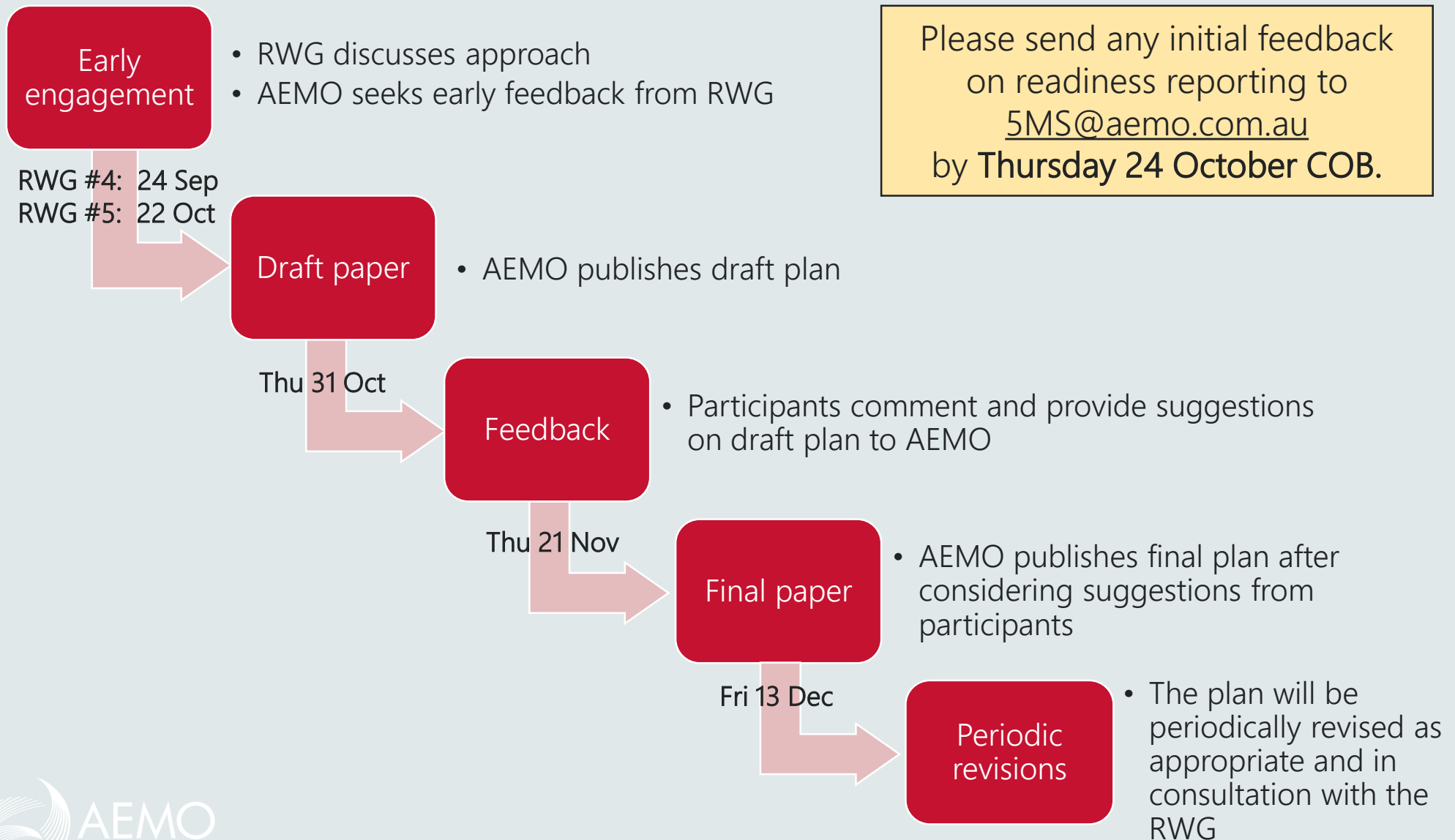
AEMO will present the survey results in a market readiness report. The following information will be included:

1. Overall project status and risk rating.
2. Number of open risks and issues.
3. Aggregated readiness (status and progress) for participant group
 - Unweighted, and weighted results will be presented
 - Weighting methodologies will be detailed in *draft* reporting plan for comment

The market readiness report will also include an analysis of the following information:

1. Actual and potential readiness gaps
2. Remedial action being taken to address these gaps
3. Risks to market operation if the gap is not remedied
4. Potential mitigation of these risks.

Developing the Industry readiness reporting plan



BREAK

MSP accreditation update plan – Proposed approach

Craig Shelley

Scope

- Applies to MPs and MDPs where they have a change to:
 - Processes or
 - Systems
- MDP & MP SLP Requirement:
 - AEMO may require an MDP to review its accreditation and subsequently apply for re-accreditation including:
 - (c) subsequent to changes to the NER, applicable procedures under the NER, or *service level procedures*. This is likely to apply in instances where changes to the NER have been made or new versions of the *metrology procedure* have been issued that require significant functional system, process or procedural changes to be made by MDPs;
 - (d) This will apply where significant changes or upgrades to an MDP's existing systems, *telecommunications network* or a system platform change to any part of the *metering data service database*. The MDP must apply and be re-accredited prior to implementing the changes into its production environment and accepting or transmitting any *market* transactions in accordance with the Qualification Procedure

Principles

1. AEMO's BAU accreditation processes will be used
 - See: <https://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Accreditation-and-Registration>
2. Participants to be proactive, open, honest and timely in:
 - Establishing with AEMO whether there is a need for an accreditation update
 - Undertaking the necessary steps for if an accreditation update is required
3. AEMO will facilitate, to extent possible, the scheduling of accreditation updates in accordance with the established queuing policy
 - Queuing policy is set out in section 3.5 of the *Qualification procedure: metering providers, metering data providers & embedded network managers*

5MS/GS accreditation update approach

For discussion

Steps		MP or MDP	AEMO	Indicative timing
1	Review changes	<ul style="list-style-type: none"> Assess level of change required for people, process and systems to facilitate 5MS/GS implementation 		now to Jun 2020
2	Pre-application meeting	<ul style="list-style-type: none"> Meet with AEMO to confirm scope/scale of change 	<ul style="list-style-type: none"> Meet with MP/MDP Seek information on scope/scale of change 	
3	Assess whether accreditation update is needed		<ul style="list-style-type: none"> Assess whether accreditation update is needed Assess timing of accreditation updates against MP/MDPs metering transition plans (incl. systems development) 	
4	Accreditation update process See: Qualification procedure: metering providers, metering data providers & embedded network managers	<ul style="list-style-type: none"> If needed, apply for accreditation update in accordance with procedure Respond to any queries by AEMO 	<ul style="list-style-type: none"> Process accreditation updates in accordance with procedure (incl. queuing policy) 	now to Jun 2021

Developing the Metering accreditation update plan



Contingency Planning Approach

Greg Minney

Refresher from RWG#4: Contingency management - definition and objective

Definition:

“Contingency planning involves defining action steps to be taken if an identified risk event should occur.” – *Project Management Institute*

Objective:

To implement a contingency approach that:

- *is able to be activated if an identified risk occurs*
- *supports successful 5MS and GS commencements*
- *supports the 5MS/GS readiness objective*

Proposed contingency planning scope

In scope:

- Development of a **5MS/GS Industry contingency plan** underpinned by:
 - System implementation contingencies e.g. system rollback, staged deployments
 - Non-system contingencies e.g. interim operational processes, metering substitutions availability
 - Applicability of BAU processes to address identified 5MS scenarios , e.g. settlement revisions
- Confirmation of position re Market Rollback post 1/7/21. Going in position is that under the NER the market must operate on a 5 minute basis from 1/7/21, with operational procedures to manage issues encountered.
- Interactions between the Industry contingency plan and:
 - Transition and Cutover Plans
 - Readiness reporting

Out of scope:

- Commercial issues that do not affect 5MS/GS implementation*
- NER compliance matters that are the responsibility of individual market participants or AEMO*
- Operational or BAU issues that do not affect 5MS/GS commencements or system' go-lives*

Proposed contingency planning principles and objectives

1. NEM participants and AEMO:
 - a) Will have a collaborative approach to contingency planning
 - b) Will adopt and follow the 5MS/GS Industry Contingency Plan
 - c) Are responsible for developing their own internal contingency plans that have regard to the key activities and dates set out in the Industry Contingency Plan
 - d) Must continue to fulfil all regulatory and compliance obligations during transition and system cutover periods
 - e) Are to communicate contingency issues as early as possible in writing.
2. The industry implementation approach will be based on a 'fix-on-fail/roll-forward' objective. AEMO and participants will commit to cutting over and avoiding system rollbacks by addressing any problems as and when they arise.
3. Contingency decisions will have regard to:
 - a) The materiality and impact on the reliable operation of the NEM
 - b) Impact on the ability to meet mandated responsibilities
 - c) The suitability of contingency plans to mitigate the event from an overall market perspective

Proposed contingency planning approach (1)

- AEMO to provide participants with a strawperson list of contingency scenarios required for the 5MS and GS commencements and systems go-lives
- RWG and/or specialised focus group/s to develop and finalise the contingency scenarios, along with associated:
 - Triggers
 - Dependencies
 - Mitigating actions
 - Timing
 - Communication approach
 - Responsibilities
- AEMO will use the contingency scenarios and responses as the basis of the 5MS/GS Industry Contingency Plan that will be published and maintained on the 5MS/GS website.
- Agreed contingency scenarios will be incorporated into relevant transition and cutover plans
- Industry contingency planning does not remove the need for individual participants to develop and maintain their own internal contingency plans.

Example Scenarios

Scenario description	In Scope of Contingency Plan
MDM platform fails production validation go live validations	Yes
Failure of settlement runs post implementation of MDM platform	Yes
5 minute bids not accepted bidding platform upgrade	Yes
Settlement invoice not produced post 5 minute market start	Yes
Individual participant bidding upgrade fails	No
Miscalculations e.g. of dispatch information	Yes
Failure in AEMO Bidding / Dispatch systems	Yes
Wholesale meters for single TNI have not been upgraded to 5MS delivery by transition completion date	Yes
Dispatch platform cutover event will not complete in timeframe defined in cutover plan	Yes
Major operational event (e.g. load shedding) at time of scheduled system deployment	Yes

Proposed contingency planning approach (2)

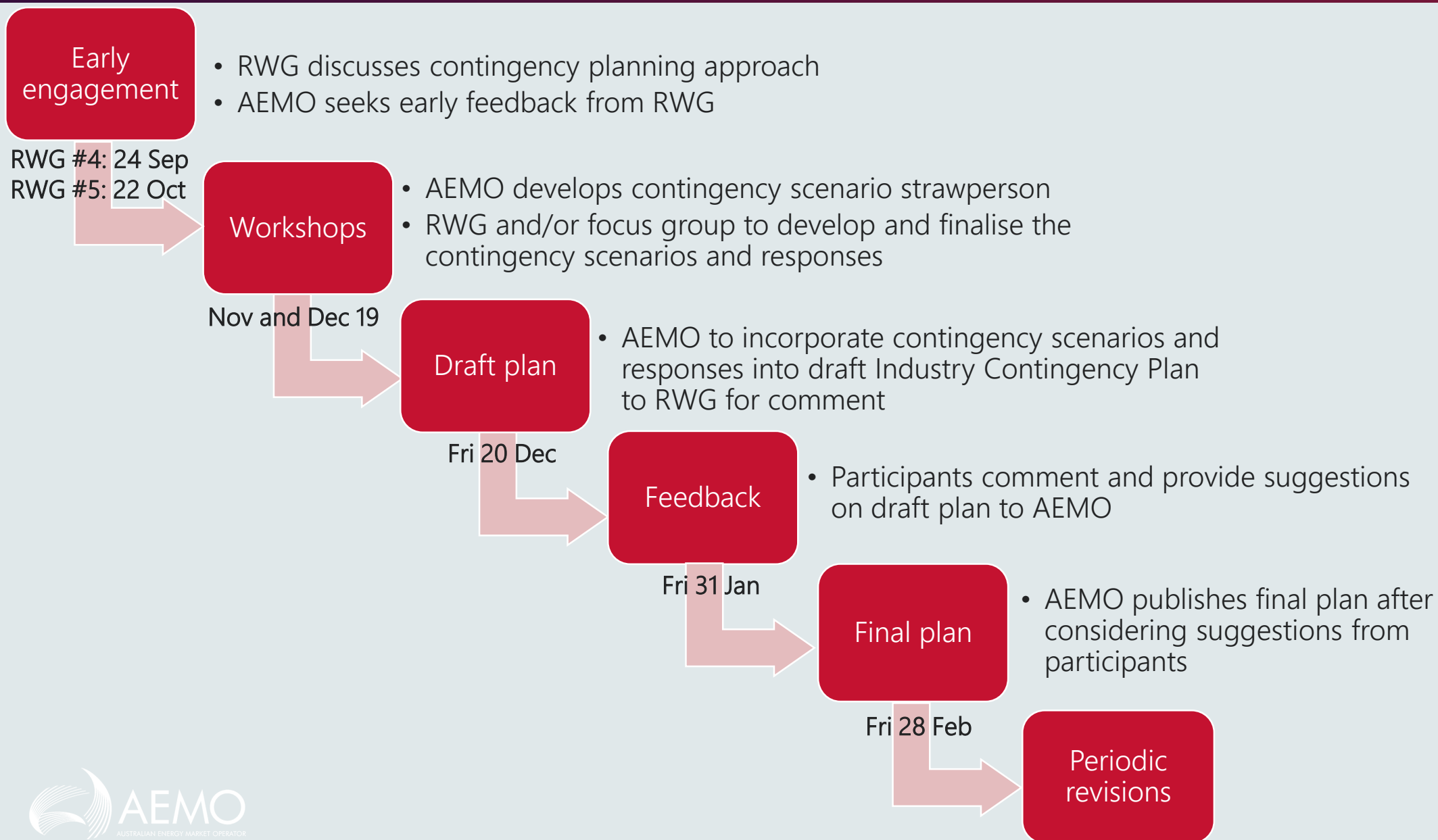
Proposed contingency scenario planning format:

Scenario	Likelihood (H/M/L)	Impact (H/M/L)	Priority (H/M/L)	Area (e.g. metering, dispatch, settlement, other)	Trigger	Actions	Timing	Decision criteria	Reporting mechanism	Responsibilities

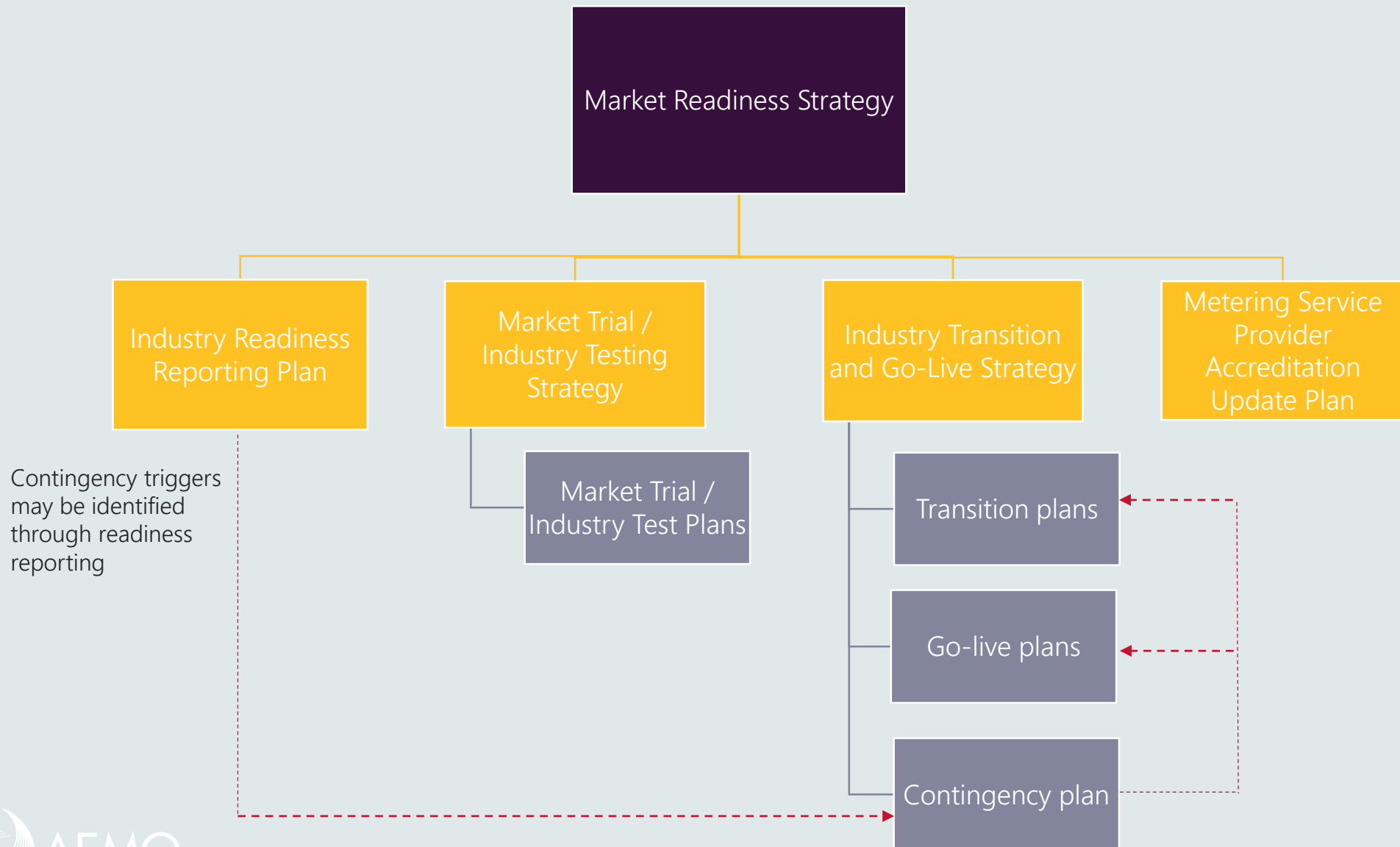
AEMO invites RWG comment:

- Suitability of the overarching approach to contingency planning?
- Should contingency planning be via dedicated focus group/s or out-of-session RWG meetings?
- How should contingency planning workshops be structured? e.g. RWG to agree broad scenarios followed up by specialist focus groups (metering, settlements, dispatch) to develop the details?
- Approach to refinement and update of contingency plans: should there be a series of iterations planned as implementation issues and risks are identified?

Developing the Industry contingency plan



Integrating the Industry contingency plan into the Market readiness strategy



Forward meeting plan

Greg Minney

Upcoming RWG meetings: Proposed content

- Seeking feedback for proposed content/topic areas

Meeting Date	Meeting	Proposed Content
Fri, 15 Nov 19	RWG#6	<ul style="list-style-type: none">• RWG feedback on<ul style="list-style-type: none">– Industry testing and market trials strategy– Transition and go-live strategy• Update from B2B working group meeting
Tue, 10 Dec 19	RWG#7	<ul style="list-style-type: none">• Interim readiness reporting - round #3 results• RWG feedback on readiness reporting plan• Readiness issues and risks session

Upcoming meetings

Meetings and forum dates:

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

NOVEMBER

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

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

Focus Groups
Dispatch
Metering
Settlements
Reconciliation
Transition
Other
Information Sessions

National Public Holiday
State Public Holiday

Current as at 15-10-2019

General questions

Greg Minney

Appendix

Background to staging environment

Background – 5MS Staging Environment

What is the Purpose of the 5MS Staging Environment?

- Assist participants building and testing their 5MS-related system changes.
- Provide test environment for participants' 5MS system testing:
 - enable participants to test their interfaces with AEMO, and
 - assist their development by being able to access early versions of screens, reports etc.
- Supports AEMO in assessing product quality before it is released into pre-PROD & Market Trials.

What Functions will be Available in Staging?

- Releases of various functions are scheduled from November 2019 to July 2020.
- Relevant RM reports:
 - Will be provided in 5MS format throughout Q2 & Q3 2020.
 - Participants can request, via the 5MS Mailbox, reports that they would like to receive as early as possible. AEMO will consider what is feasible with respect to internal development constraints.

Background – 5MS Staging Environment

Expectation Setting:

- Staging is *not*
 - A Market Trial environment. There will be no co-ordination of Settlement Runs, Testing, Market Simulations, 7Day Pre-Dispatch, etc.
 - The Market Trial approach and timing will be communicated with the Readiness approach.
 - An end-to-End environment i.e. meter data information submitted won't be reflected in a Settlement Run.
 - A place to deploy functions that are not impacted by 5MS.
- Performance is not guaranteed.
- Defects can be raised, will be triaged and fixes scheduled into AEMO's 5MS development work. There are no SLAs for updating software in Staging.
- Input data (i.e. SCADA, demand forecasts) is likely to be static.

Access & Support

- Participants arrange access to Staging by contacting AEMO Support Hub (5MS resolver group has been established in Service Now).
- We encourage Participants to log defects via the AEMO Support Hub process too.

