

Ground rules and virtual meeting protocols

- Please place your microphone on mute, unless you are asking a question or making a comment.
- Please keep questions relevant to the agenda item being discussed.
- If there is not a break in discussion and you would like to say something, you can 'raise your hand' by typing 'question' or 'comment' in the meeting chat. Questions and comments can also be emailed to wrig@energy.wa.gov.au after the meeting.
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- Please state your name and organisation when you ask a question to assist with meeting minutes.
- If there are multiple people dialling in through a single profile, please email wrig@energy.wa.gov.au with the names of the attendees to be recorded in the minutes.
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9.30 am

Introductions
Aden Barker| ETIU

9.35 am

Joint Industry Plan – Feedback Review

Aden Barker | ETIU and Stuart Featham | AEMO

10.05 am

Joint Industry Plan – AEMO & Western Power Updates

Arthur Panggabean and Ben Brearley AEMO - Mark McKinnon WP

10.35 am

Joint Industry Plan - Updates

Aden Barker | ETIU and Stuart Featham | AEMO

10.45 am

WEM Procedures

Aden Barker | ETIU and Stuart Featham | AEMO

10.55 am

Next Steps

Aden Barker| ETIU



Session Purpose

 Review and discuss initial feedback on JIP scoping questions



Joint Industry Planning Framing questions

During the first WRIG session, the following six 'framing' questions were raised to initiate group discussion on how to build a Joint Industry Plan (JIP) for the WEM Reform Program:

- 1. What does or should the Go Live milestone define is it possible to shift from one set of market/power system arrangements to another in one interval?
- 2. What are the major changes that you will need to prepare for and/or implement (e.g. IT systems, business process, plant upgrades)?
- 3. What are the key phases or activities required to be captured in the JIP?
- 4. What are your views on the testing and trialling arrangements (e.g. scenario-based, 'parallel run')?
- 5. What regulatory considerations need to be addressed (e.g. pre-Go Live requirements to pass scenario exit criteria, post Go Live monitoring and compliance)?
- 6. What are your key dependencies and high priority information/data requirements?

The following slides summarise the key issues and responses provided to these and further queries raised at Meeting 2. We continue to seek further input from attendees on these topics to help development of the JIP.

Milestone definitions

Key Points:

- The WRIG will need to define a set of Exit Criteria for the Go-Live decisions. This will guide the transition from UAT to Go-Live and may include documentation requirements, testing acceptance etc.
- It is important for AEMO to validate participant understanding of Market Procedures/system requirements before designing their own systems.
- The 'Go Live' milestone should indicate that the **industry is ready to commence operating the new market and that all risks have been mitigated adequately**. It should denote the point at which participants' financial outcomes are determined in accordance with the new market rules.
- Considering the variety of changes that are taking place, and the interactions between many of these changes, the early development of a broad project plan, with key milestones and readiness reporting needs to be developed quickly.
- For real-time markets it will be necessary to shift from one set of market arrangements at the end of a market day to another set commencing the next day. Staging could be considered for STEM.
- A readiness reporting process should be implemented quickly with AEMO, ETIU and Market Participants to manage the preparedness. A small group representing each key sector be responsible for the final go /no-go decision.

Major changes

Key Points:

- Changes will require a different set of skills and resources compared to BAU and the regular Rule Change process so may require significant recruitment or procurement
- Testing environments being available would allow participants to continuously develop their systems. AEMO has mentioned a revision to its test environment strategy, would be useful to understand the revised approach.
- A single design document incorporating details of all the decisions made to date by the Steering Committee and EPWA would be incredibly helpful, to ensure we have the budget and expertise to stand-up a project to deliver all the necessary changes within the timeframe.
- Likely to be resource contention for expertise to deliver system changes, but we are unable to secure resources without knowing the details.
- Operating sites will need to be upgraded, requiring procurement of engineering and construction services.
- AEMO could assist by establishing a data provisioning platform for historical market data to remove the need for participants to store this data themselves.
 There could also be benefits in AEMO provisioning selected SCADA data, as a redundant source.

Phases & key activities

Key Points:

- Once draft rules are released, training for Market Participants should begin as soon as possible e.g. Sept / Oct. This training will need to evolve over time as further details become available. For example, high-level market design walk-throughs to begin, then more targeted modules when rules and systems are developed.
- A combination of classroom (where possible) and online modules would be useful.
- "Day in the Life" documents will need to be specific to facility classes given the differing obligations under the future rules. This would be a high level document outlining timeframes, requirements, and market interactions.

Testing & trial arrangements

Key Points:

- Detailed project plans (acknowledging they may change) outlining specific release dates, test requirements, Exit Criteria decision points are required. This will ensure efficient industry resource allocation. It would also be useful to have as much notice and time as possible to complete testing, documentation and education within Market Participants.
- Staging and sandpit environments should be available for key stakeholders and replicate the test/trial environments. These environments should have availability consistent with test environment.
- It would be useful to be able to **have realistic market outcomes**, using previous test data. This would improve the testing outcomes and Market Participant preparations.
- Parallel run with settlement caps is one preferred approach for testing and trialling.
- Testing and trials will need to be more tightly scripted and controlled than releases in recent times.

Regulatory considerations

Key Points:

- An amnesty period of at least 6 months is required. Any changes required from Go-Live will require time to identify, assess, develop, test, document and review. These processes are rarely straightforward and there can be lags on market, settlement and compliance information.
- AEMO should establish readiness criteria after consultation with the industry. Participants should have the sole responsibility for stating whether they meet the criteria.
- Certification:
 - Self-certification method will produce the best outcomes. The introduction of robust Exit
 Criteria for Go-Live decision making by the WRIG will feed into the self-certification. This will
 provide the WRIG with a role in change management and preparations of industry as well as
 tracking readiness.
 - Go-Live certification should only be required for entities that would put other participants at risk if they are not ready for market start. Other rule participants would self-certify.
- We would appreciate an overview of all the policy decisions made by the taskforce to-date to
 ensure that everyone has a final view on all aspects of the new market arrangements that affect our
 operating costs and likely participation in the market.
- We will need a **collaborative and robust approach to the development of all Market Procedures** to ensure they are workable for Participants as well as the administrator of the procedures and are consistent with the drafting of the rules and intended operational market design.

Key dependencies & high priority requirements

Key Points:

- The technical scope of the dispatch engine and bidding interface is number 1 priority. The remainder depends on the specifics of the. A list of all information flows in the various market processes is ultimately what is required well-ahead of market start.
- Cross-rule participant dependencies include:
 - Retail licence requirements (ERA & Ombudsman) with regards to billing accuracy and timeliness.
 - Contracts, policies, tariffs and prices in relation to access to Western Power's Network that will be in place at market start.
 - A view of the constraint equations and technical rules that will be in place at market start.
 - A view on all ancillary legislative changes e.g. customer transfer code, metering code, small use customer code, network reliability and quality of supply code
 - Engagement with Western Power for SCADA works.



Session Purpose

- Review and discuss initial feedback from the AEMO System Survey.
- Provide awareness of AEMO's program and project initiation activities.
- Update on early Western
 Power implementation activities



AEMO Systems Survey: Key messages

40 responses received: 75% from Trading / Settlements, 25% from IT.

Response Themes:

- Legacy functionality (STEM, Balancing, LFAS, Outages) usability: Generally assessed as fit for purpose but usability could be improved.
 - Generator Outage Submissions should be incorporated into a single portal with web service capability.
- Registration, RCM and User Management: Generally positive feedback on screens and workflow.
 - Registration email subscriptions and navigating change requests considered difficult to use.
- Identified importance of MPI as backup mechanism for submissions but noted better guides/documentation required.
- Web Service Submissions and report extraction is the preferred mechanism of data transfer.
- Standardisation of data provisioning mechanisms is important for participants.

Next Steps

- WRIG Systems subforum to be established, with first session to discuss detailed survey results to influence future system direction
- Future subforum sessions to be used for systems deliverable review and feedback with Market Participant representatives.

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AEMO Implementation Program Activities

AEMO have commenced initiation activities for initial projects as part of its implementation program, including:

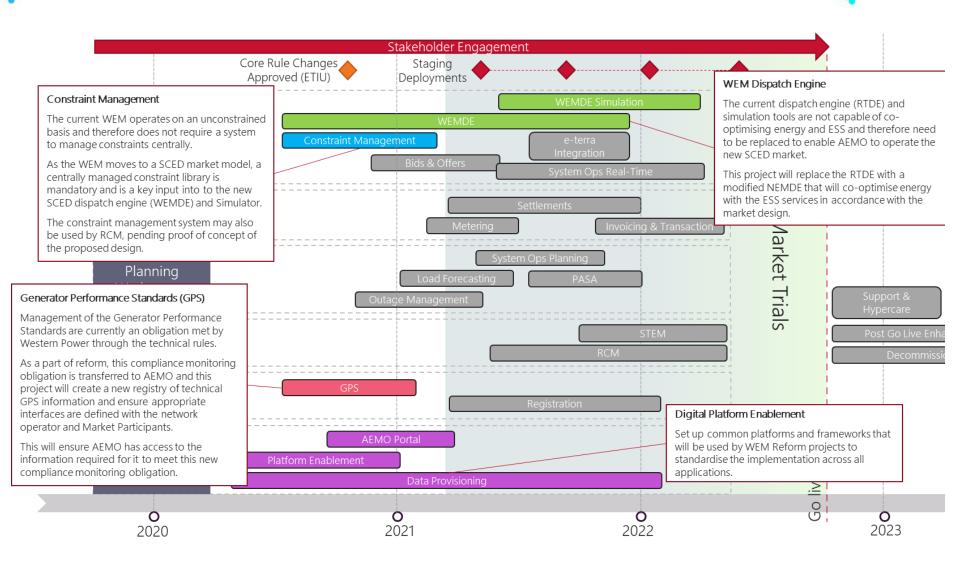
- Recruitment in progress for ~15 key roles including Project & Change Management, Engineering, Development and Testing roles.
- Procurement approach defined and under internal review
- Internal project initiation underway for first 4 projects
- Internal resource planning in progress for key business SME representatives for projects
- Program-level architecture and security design approach undergoing internal review
- Conceptual Architecture Design (CAD) process continuing in parallel to initiation and recruitment, for Generator Performance Standards (GPS) and Constraint Management projects.

AEMO Next Steps

- Formal completion of project initiation for first projects
- Finalising recruitment for Project Management roles and commencement of detailed planning
- Business SME resource planning and project allocation complete
- · Commence procurement activities.

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AEMO Implementation Projects Summary



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Western Power Activities



Market Facing

AEMO Facing

Facility Bidding & SCED

SCADA & Comms. Facilities compliance with market requirements (schedule gap analysis with WP) Effective Date: Now to late 2021

Constraint Management

Limit Advice Network information Limit Advice Market Procedures

Effective Date: Now

Constrained Access

Amended AQP and ETAC Amended connection process

Effective Date: TBC~ late 2020 pending ETIU consultation on amendments

Outage Management

Network outage requests **Equipment List** Outage Intention Plan

Effective Date: TBC

Generator Performance Standards

GPS Register GPS Model Procedure Monitoring & Compliance Effective Date: New Access offers Feb-21, Existing Generators Feb-22

Other project 'interfaces': E-Terra Integration, WEMDE, Metering, Settlements, Load Forecasting, PASA, RCM(NAQs), Registration, AEMO Portal, Data Provisioning.





Session Purpose

 Provide an update on the Reform Rule Drafting Plan



Rule drafting timeline

Work package	Prior to Apr	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan
PACKAGE 1A Governance of constraints Technical Rules change management											
PACKAGE 1B GPS into WEM Rules and monitoring											
PACKAGE 2A PSSR – Frequency operating standards, operating standards, contingency framework and technical envelope ESS framework, technical standards, acquisition and supplementary mechanism Energy/ESS scheduling and dispatch (including facility bidding)											
PACKAGE 2B GPS compliance and transitional arrangements											
PACKAGE 3 Participation and registration Settlement Operational planning (ST and MT PASA, Predispatch) Outages – Core and commissioning Compliance and monitoring framework											
PACKAGE 4 Reserve Capacity Mechanism – Prioritisation and Network Access Quantities Application and queuing policy Reserve Capacity Mechanism – Storage accreditation											
PACKAGE 5 Non-cooptimised ESS Market power mitigation PSSR – Regulatory alignment and coverage Market information											
Drafting instructions and rule drafting		Stakeholder consultation					Taskforce approval, publication of the Amending Rules and Gazettal				



WEM Procedures

3 Box Model Approach & Prioritisation

At the previous WRIG Meeting, ETIU and AEMO presented on the '3-Box' model approach to the development of/and consultation on WEM Procedures.

AEMO's initial assessment of WEM Procedures including categorisation into the three boxes has been shared and we would appreciate feedback from WRIG members.



AEMO has also commenced a process to map WEM Procedures to each of its implementation projects with plans to prioritise these documents and develop a drafting plan with key milestones included in the Joint Industry Plan.

The prioritisation process will be driven by the timing of regulatory obligations; links to long lead time activities; and AEMO's assessment of the importance of these documents in informing both its and industry's implementation activities. As such, WRIG member feedback on prioritisation and importance is also welcomed.



Next Steps

Joint Industry Plan

- Group members please continue to provide feedback to AEMO and ETIU on planning/implementation approach; phases and content; and reporting responsibilities.
- AEMO will continue to develop the JIP and with aim of presenting first 'full' iteration for review by WRIG at the August or September session.

Technical Design and User Requirements

 AEMO will initiate first WRIG sub-group to commence discussions with appropriate technical representatives on detailed survey results to influence future system direction

Procedure Development and Planning

- ETIU to work with AEMO, Western Power and ERA to finalise views on Procedures within their responsibility
- Reflect Procedure development in Joint Industry Plan