

NEM2025 Implementation Forum

Meeting #8 28 February 2023





1. Welcome



We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture.

We pay respect to their Elders past, present and emerging.

Agenda



| # | Time | Topic | Presenter(s) | |
|---|------------------------|---|---|---------------------------|
| 1 | 10:00 – 10:05am (AEDT) | Welcome | Greg Minney | i |
| 2 | 10:05 – 10:10am | Actions & Feedback from Previous Meeting | Greg Minney | |
| 3 | 10:10 – 10:20am | 2023 Release Summary | Greg Minney | |
| 4 | 10:20 – 10:40am | March 2023 Release Progress Update Go-live plan Go-live criteria Assessment (including AEMO readiness) SGA Comms for Go-Live | Greg Minney Chris Fleming Greg Minney Ulrika Lindholm / Emily Brodie | Ap Co |
| 5 | 10:40 – 11:20am | May 2023 Release Progress and Deliverable update Last Customer Change Date Deployment Go Live plan Planning Industry Testing Go-Live Criteria and approach | Jim Agelopoulos Justin Stute Chris Fleming Tui Grant Greg Minney | ex "F th re |
| 6 | 11:20 – 11:40am | August - October 2023 Release FFR - Milestones and Readiness Approach MT PASA - Milestones and Readiness Approach ADC - Approach / milestones | Greg Minney | by pi co By m |
| 7 | 11:40 – 11:50am | June 2024 Release • Progress Update • IESS Readiness Approach | Emily Brodie | re m th |
| 8 | 11:50 – 11:55am | Upcoming Engagements | Ulrika Lindholm | pı re |
| 9 | 11:55 – 12:00am | General Questions & Other Business | Greg Minney | m pe |

Appendix A:
Competition law
meeting protocol and
AEMO forum
expectations

Please note that nis meeting will be ecorded by AEMO ind may be ccessed and used y AEMO for the ourpose of compiling minutes. y attending the neeting, you consent to AEMO ecording the neeting and using ne record for this urpose. No other ecording of the neeting is permitted"



2. Actions & Feedback from Previous Meeting

Actions



(Ref: Item = Meeting number/Agenda item number/Ref)

| # | Topic | Action | Responsible |
|-------|--|---|------------------------------|
| 6.3.1 | CDR API Statistics | AEMO to establish if we can / then provide update on CDR volumes (API requests) back to Implementation forum | AEMO - Ongoing |
| 7.3.1 | API Implementation | Mark Riley (AGL) to email NEM2025 inbox with any concerns or suggestions regarding API implementation. AEMO to discuss further with IT Support and identify if there are any underlying concerns that could impact further developments that AEMO would be looking to put in place. | AGL have provided background |
| 7.3.2 | EMMS 5.2 Data Model Release | AEMO to confirm at the next meeting timing and scope of the EMMS 5.2 data model release. | AEMO |
| 7.3.3 | Dispatch Procedure ADC | AEMO to confirm the approach and timing for introducing ADC at next Implementation Forum. | AEMO |
| 7.5.1 | MSATS | AEMO to confirm with members when the guide to MSATS will be updated for the May release. | AEMO |
| 7.5.2 | Metering Exemptions | AEMO to confirm the planned release date for metering exemption package of changes, including arrangements for Industry testing. | AEMO |
| 7.6.1 | SAPS & May Release Technical Specification Q&A | Participants to forward requests for Q&A topics for February Workshop via the | |

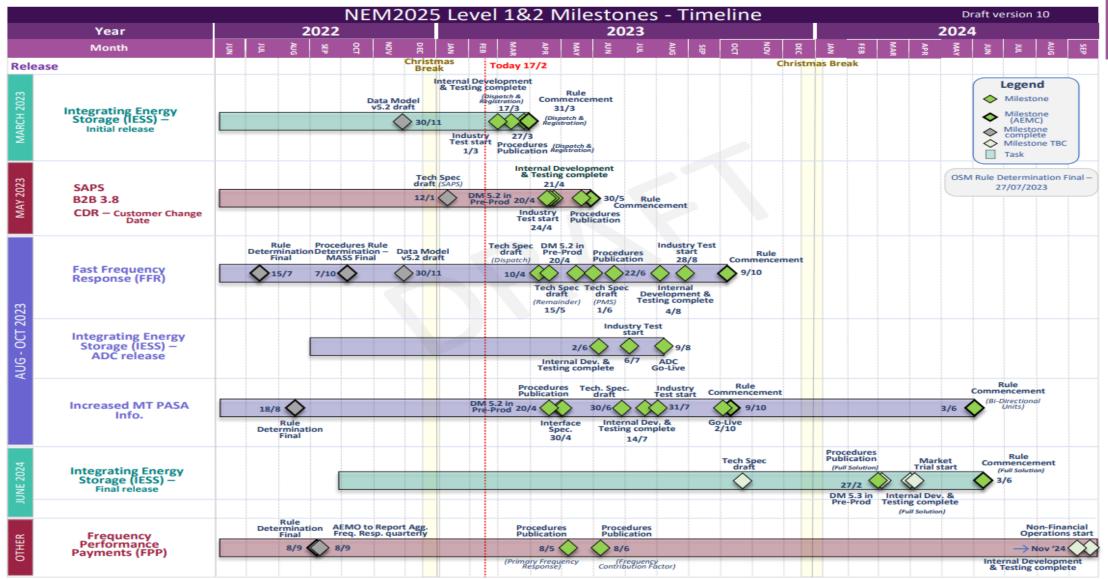
The latest meeting minutes and materials are available on the <u>Implementation Forum</u> webpage.



3. 2023 Release Summary



Release Summary milestones

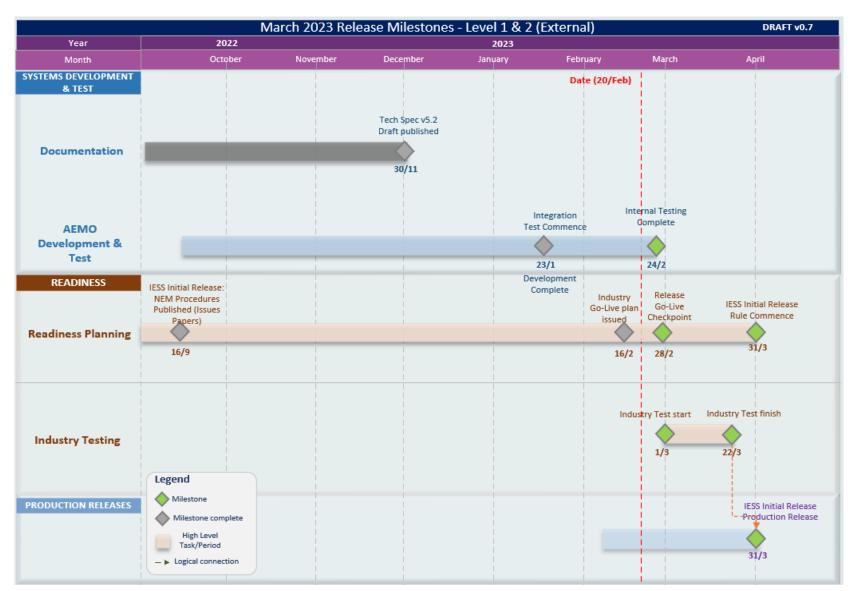




4. March 2023 Release



Milestone Review



March Summary

- AEMO Testing on track for pre-prod deployment 1/3
- AEMO Business preparations on track to support:
 - Registration of MSGA's to provide FCAS from 31/3
 - Availability of registration guidelines for MSRP from 31/3 and registration submission from 17th April
- Industry Go-live plan issued 16th Feb
- Go-live checkpoint conducted





INDUSTRY CHECKPOINT PURPOSE:

To provide assurance of implementation/rule commencement preparations ahead of the industry test period, allowing time for finalising AEMO's and participants' business preparations.

| INITI | ATIVE | IESS (31 Mar 2023): Market Small Generation Aggregators (MSGAs) can participate in contingency FCAS markets | |
|-------------|--|--|--|
| CRIT | CRITERIA DESCRIPTION STATUS: ON-TRACK FOR RULE O | | STATUS: ON-TRACK FOR RULE COMMENCEMENT |
| | Go-live criteria | AEMO solution tested in line with requirements for enabling MSGAs to apply for and participate in contingency FCAS markets. AEMO business ready to support registration and management. | ✓ All UAT tests passed ✓ No outstanding defects ✓ One remaining regression test remains in progress. Will be completed in the week beginning 27 Feb ✓ Solution endorsed for pre-production release ✓ All business readiness preparations are completed or on target for completion for 31 Mar 2023. |
| | Participant readiness criteria | Optional adoption for MSGAs i.e. participant readiness activity is not a pre-requisite for go-live/rule commencement. | n/a |
| CONTINGENCY | | Defer MSGA registration for FCAS provision until go-live criteria are met. | No current indication that contingency will be needed. |





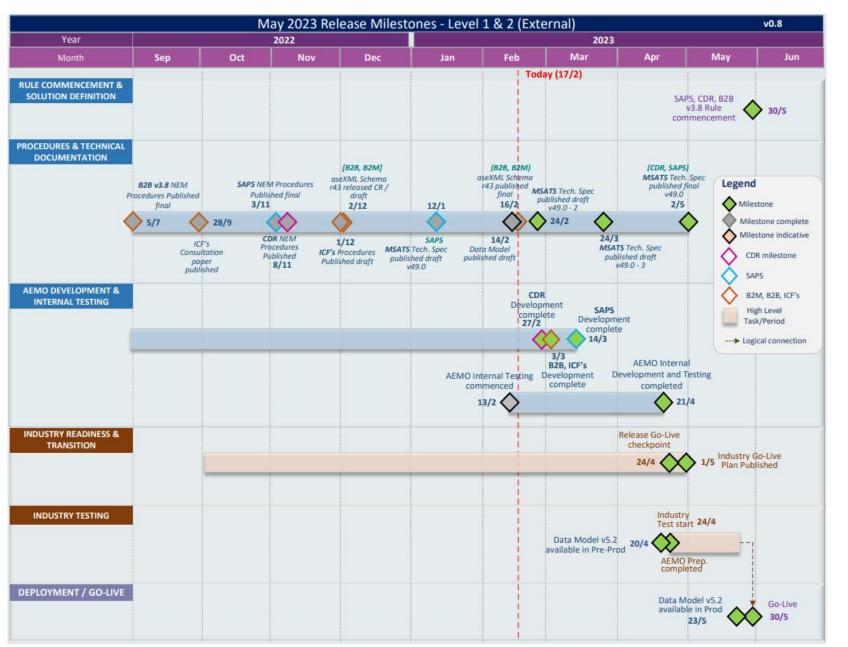
| # | AEMO actions | Industry impacts and actions | Planned Time (Market Time) | Communication Channel |
|---|--|--|-------------------------------|--|
| 1 | AEMO will implement changes to its registration system in the pre-production environment | No action required, there is no Industry testing for the IESS application process. | 01 Mar 2023 | n/a |
| 2 | AEMO will implement changes to its registration system in production | Refer Task #3 | Prior to 31 Mar 2023 | n/a |
| 3 | AEMO notifies SGA Participants via email when Registrations open | SGAs are advised that registrations have opened. | 31 Mar 2023 | Email to NEM2025 Implementation Forum members and SGAs. A notification will be posted on the <u>IESS project website</u>. |
| 4 | "AEMO Communications" e-newsletter article | All recipients of e-newsletter advised that registrations have opened | 06 Apr 2023 | Email |
| 5 | AEMO to facilitate IESS industry Q&A session if there is sufficient demand from Participants | | April 2023 (date TBC) | NEM2025 Implementation Forum |



5. May 2023 Release

Milestone Review





Release Commentary

- SAPS component of May release remains under schedule pressure
- aseXML r43 schema has been formally approved and published on the AEMO website.
- Implementation of Metering Exemption has been rescheduled to August 2023 TBC.
- Update to the MSATS v49.0 tech spec draft published W/B 27/2/23.
- ITWG meeting 23/2 with focus on the scope of Industry/Invitation testing for May release
- Updated EMMS Data model v5.2 specification released
- AEMO development is nearing completion and Integration testing has commenced however there is still some pressures being managed in relation to SAPS components. The release remains on track for May delivery.





| Deliverable | Content | Status | Initial Release | Final Release |
|---------------------------------------|--|-------------------|------------------------|------------------|
| | B2B v3.8 & Other ICFs (MSATS Release 49.0) | | | |
| MSATS Technical Specification (v49.0) | Describes the projects and enhancements planned by AEMO from a participant perspective and includes the related changes to participants' IT systems | Initial published | 12-Jan-23 27-Feb-23 | 02-May-23 |
| B2M Mapping to aseXML | New guide detailing the mapping between the MSATS B2M procedures and the aseXML schema. A draft document was distributed B2M Mapping to aseXML in early December for participant review. | Initial published | 05-Dec-22 | 02-May-23 |
| aseXML schema (r43) | The aseXML r43 schema will be the current XML version for B2B and B2M following the May 2023 Release. The changes in r43 include: B2M updates supporting Stand alone Power Systems, Consumer Data Right and Retail ICFs, while the B2B changes include a new transaction type for Shared Fuse One Way Notifications. | Final published | 02-Dec-22 | 16-Feb-23 |



Data Model Review – EMMS 5.2

- EMMS Data Model changes support a number of NEM Reform and BAU Initiatives
- It is AEMO's intent to minimise the number of data model releases whilst supporting data availability in line with initiative go-lives
- Release 5.2 supports:
 - ADC Previously live March 23, currently rescheduled
 - FFR Go-Live October 23
 - SAPS Settlement updates, Go-Live 30 May 23
- AEMO updated the scope of Data Model 5.2 to include support for the Increased MT PASA changes Go-live October 23
- Release Data to Pre-prod/ Prod will be in line with support for SAPS (May 23) as first initiative now impacted
 - 14 Feb 23 Draft Technical Specification 5.2 V2.0 released 14 Feb
 - 20 April 23 Preproduction
 - 23 May 23 Production
- Confirmation of timing and updated milestones will be incorporated into initiative schedules for all impacted initiatives

Consumer Data Right – Last Customer Change Date



LCCD edge case risk update

- AEMO has been asked by a sub set of industry to further consider the potential implications to the edge case risk raised at the last ERCF meeting associated to the incorrect maintenance of the LCCD field.
- The edge case relates to the LCCD field being populated but not maintained during the compliance holiday period because of the staggered obligations for initial retailers and tranche 3 retailers from the 30th May to the 1st November 2023

Current Status

- AEMO is awaiting further analysis from the proponents regarding the likelihood and consequence of this risk
- AEMO is considering potential options should the risk be deemed material



SAPS Invitation Testing

Only two participants have expressed interest in testing SAPS functionality ahead of the May go live. I will be organising meetings with these participants and share the plan in the up coming ITWG meetings.

- AGL
- Ausgrid



Suggested Testing for the March 2023 Release.

Request for interested parties for the invitation testing of SAPS was requested by 15th Feb to allow for planning and preparation

Q&A sessions will be held during the Pre Production testing period to support any participants testing and requiring assistance and track the invitation testing progress

Invitation Testing

| Suggested Tests | Participants |
|---|--------------------|
| Invitation for interested parties to very SAPS set up | MSRP/FRMP/L NSP |
| Verify additional validations to CR's as part of SAPS | LNSP/FRMP |
| Settlement run for SAPS (if interest is high enough) | LNSP/FRMP/M SRP |

Industry Testing

| Suggested Tests | Participants |
|--|---------------------|
| C1 updates – additional tables available for participants | ALL |
| B2B Schema r43 | ALL |
| B2M Schema r43 | ALL |
| 'House Number To Suffix' is a part of the Australian structured address standards. | ALL |
| Updating Network Tariff for a Greenfield NMI | ALL |
| Allow ENMs visibility to parent NMI standing data | ALL |
| Extend the current 130 business day limitation on NMID3 requests. | ALL |
| New field and CR 5056/5057 – Last consumer change date (LCCD) | FRMP |
| Verify changes to child NMI standing data | ALL |
| Change to CR3101 to validate greenfield site network tariff code | LNSP |
| Verify NMI discovery change to type 3 discovery (130 business days) | FRMPS |
| Verify additional validations to CR's as part of SAPS | LNSP/FRMP |
| Data Model changes | |

May Go Live Plan



AEMO has commenced work on the May Release Go-Live Plan. A draft of the plan will be released to the Implementation Forum for review on 5th April. Key points to note from the Go-Live Plan are:

- May release includes aseXML r43 schema, which is a B2B and B2M release
- Settlements changes for this release will be implemented in production on Thursday 25 May 2023
- MSATS changes will be implemented on Sunday 28 May 2023
- Procedures for the May release take effect on 30 May 2023



Go Live Criteria Management - May – proposed criteria

Purpose to provide assurance of preparations for implementation / rule commencement out from Industry Test – allow time for finalising business preparations

| Initiative | Criteria | Participant Readiness | Checkpoint- Prior to Industry Test period | Contingency |
|------------|---|--|---|---|
| SAPS | Solution supports SAPS processing and no regression to current NEM settlement process, (Disclosure of Defects to be addressed in Industry Test Period) AEMO Business Ready to Support | Optional adoption, no pre- requisite participant activity | End April | AEMO to defer SAPS initiation until criteria met – AEMO rules non compliance |
| CDR (LCCD) | AEMO Solution Tested to procedures (Disclosure of Defects to be addressed in Industry Test Period) | No pre-requisite participant activity. November23 procedural obligation (in discussion) | End April | Potential Phased implementation- AEMO procedural non-compliance |
| B2B 3.8 | AEMO Solution Tested to procedures (Disclosure of Defects to be addressed in Industry Test Period) | Individual Participant readiness to meet procedural requirements. Individual Participant readiness will not impact go live | End April | Extension of current (manual) workaround process AEMO procedural non-compliance |

^{*} non-delivery of individual components of May release, potential to result in deferral of entire release



6. August – October 2023 Release





Three major deployments included in this release:

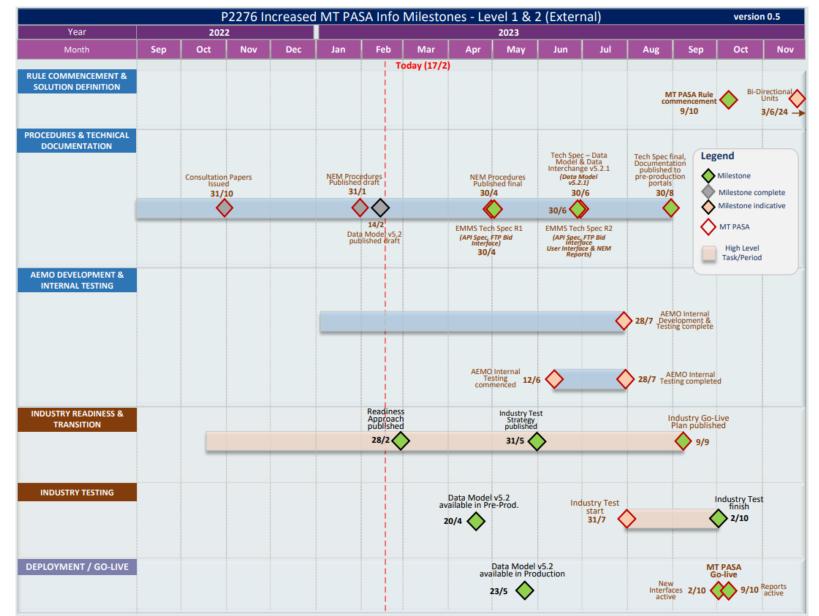
- 1. Increased MT PASA information (2 October and 9 October)
- 2. Fast Frequency Response (9 August and 9 October)
- 3. IESS Aggregated Dispatch Conformance (9 August)



Increased MT PASA Information

MT PASA Milestones and progress





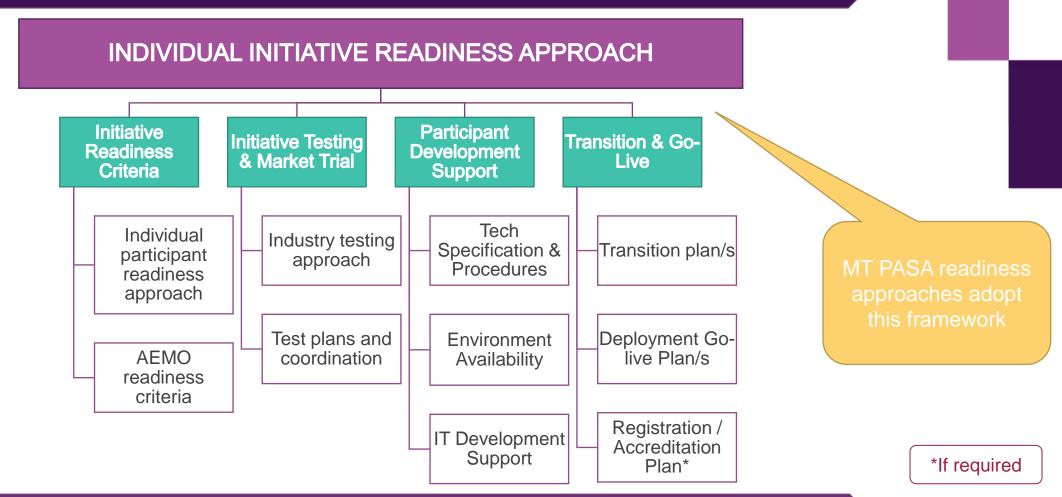
Release Commentary

- Procedures consultation on track for draft to be issued 31/1
- AEMO IT Design and development in progress
- Readiness Approach provided in this agenda
- EMMS Data Model updated to include MT PASA reporting information
- Technical Specifications in progress and on –track

Industry Implementation Approach – MT PASA



NEM REFORM READINESS STRATEGY (ALL INITIATIVES)



RISK & CONTINGENCY MANAGEMENT

Initiative Readiness Criteria - MT PASA



Go Live Criteria Management summarises the criteria for decision making on readiness for the initiative to go-live in line with rule commencement timeframes and the efficient operation of the NEM and approach for the initiative

| Readiness Component | Proposed Initiative Approach | Rationale |
|--------------------------------|---|---|
| Go-Live Criteria | MT PASA go-Live criteria will reflect Technical Readiness for go-Live and AEMO preparedness to accept updated availability and recall information. Impacted participant readiness will not be considered as criteria for go-live but as individual compliance factor | |
| Criteria Components | Initiative Readiness components will consist of: Solution Readiness: Market System Changes required to meet initiative requirements AEMO Business Readiness: AEMO business operations and IT Support prepared to operate enhancements from production Deployment Participant Readiness: Impacted participant readiness to provide increased MT PASA information is a participant compliance requirement and will not prevent initiative go-live | Ability for AEMO to receive and process updated information is required for successful implementation of rule |
| Go-live Decision Management | Initiative go-live to be made on recommendation of AEMO Program on the basis of evaluation against agreed criteria components | |
| Industry Notification | Decision Milestone to be established for communication of AEMO readiness to deploy and accept information – in line with commencement of Industry Test Period. Progress to be managed via ongoing progress / milestone reporting including deployment for Industry Testing | To be included in project schedules, with Industry communication approach to be determined during execution phase |



Initiative Readiness Reporting

Initiative Readiness Reporting outlines the form of participant readiness reporting required to meet go-live criteria decisions, and provide industry wide view on the progress towards implementation for AEMO and Industry. The approach considers whether the initiative requires formalised participant readiness reporting to be implemented

| Readiness Component | Proposed Initiative Approach | Rationale |
|--|--|---|
| Formal Participant Readiness Surveys and Reporting | Formal participant reporting of readiness not required for Initiative | Impact is to a defined group of participants, with individual participant readiness not impacting other participants preparations |
| AEMO progress reporting | MT PASA progress reporting against defined L1/L2 milestones as component of PCF and Implementation Forum reporting. This will include reporting against the agreed readiness criteria and checkpoint establishment prior to go-live | |





Outlines the expected approach to the conduct of Industry testing, providing and view on release based industry testing requirements. This approach to be validated with industry as part the Industry Test Strategy development

| Readiness Component | Proposed Initiative Approach | Rationale |
|---|--|---|
| Industry Test Approach | Industry Test Approach to be agreed with participants as component of October Release, with engagement on the scope and timing via ITWG from May Testing Approach for MT PASA will follow and Industry Test approach, where participants will be able to exercise their selected population approach (including API delivery), in line with their own timeframes. No coordinated industry test scenarios are required | Participants can verify success of their changes without reliance on other participant responses – NEM reports available to all |
| Release Testing Requirements / Considerations | MT PASA Industry Testing will overlap with Industry Test planning and execution for ADC , FFR and potentially Metering Exemptions, with overall co-ordination performed at a release level | |





Outlines the Initiative approach to the provision of technical and functional support for participants in their implementation of PASA initiative. Approach is guided by the initiative impact assessment view on scale of change and spread across participant categories

| Readiness Component | Proposed Approach | Rationale |
|--|--|-----------|
| Update Market Procedures and Guidelines | Identified Procedures / guidelines / registration processes updated for new service, published in line with agreed milestones | |
| Update Technical Documentation (Specs, User Guides, FAQ) | Identified External guidelines and technical specs updates published in line with agreed milestones | |
| Update Data Model | Data model updates included in release 5.2, published in line with agreed milestones | |
| Update and agree external Report Formats, web Pages, etc | Consistent with procedures with Specifications available in timeframe to support participant development | |
| Provide Technical Implementation Support | Q&A, response to NEM2025 mailbox query, no specific focus groups to be established, technical support also available via MSUG | |
| Provide Impacted Participant support | $Q@A, Address\ specific\ questions\ on\ specs\ ,\ service\ introduction\ ,\ process\ and\ eligibility\ -\ AEMO\ to\ support\ via\ Implementation\ Forum\ with\ specific\ briefing\ sessions\ if\ sufficient\ demand$ | |





Initiative approach to the activities required to transition into operation. Both a longer term (transition) and cutover view are included to manage the scope and timing of required transitional activity

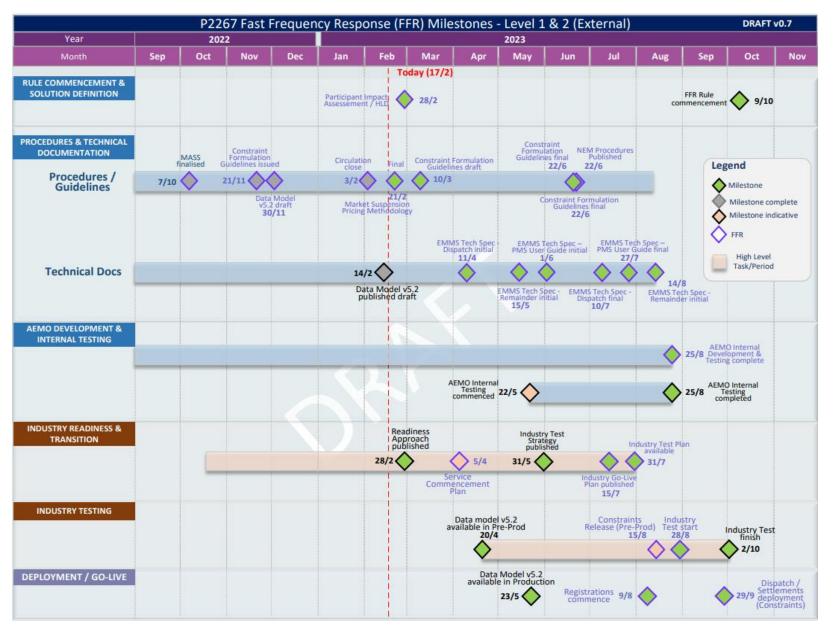
| Readiness Component | Proposed Approach | Rationale |
|--|--|---|
| Transition Planning and Management | Rule provides for the population of recall times / unit status for planned outages 36 months from 9 th October commencement Capability to provide increased information will be deployed from 1 October to support participant update of required information. Reporting of increased MT PASA information will commence from the 9 th October | Procedures support requirement "from 9th Oct" - software implementation in advance will support participant population ahead of 9th October - and reduce "bow wave" of updates for participants |
| Go-Live (Cutover) Planning and Communication | Industry Go-Live Plan will be produced to align participant and AEMO deployment activities in line with agreed deployment dates | |
| Industry Post Go_live Support | Project support for hyper-care/ post go live support Principle to leverage normal business support processes where possible supplemented where required to assist immediate industry issues. This may include post go-live Q&A, Issue management sessions, | Consistent with project implementation scope, API support requirements will be dependent on uptake from participants |



Fast Frequency Response

FFR Milestones and progress





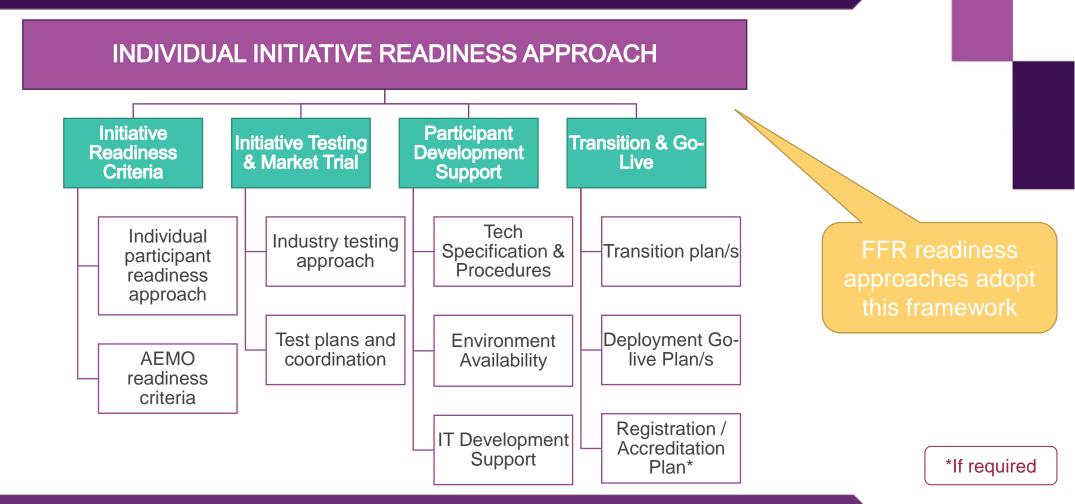
Release Commentary

- FFR Changes included in MMS 5.2 data model specification
- Readiness Approach for FFR to be provided for Implementation forum
- Service Commencement plan to provide outline of approach to operational implementation of new service
- Technical Specs for Bidding System updates to support FFR due 11/4
- AEMO develop commenced
- FFR will involve multiple deployments to enable progressive uptake of data and support participant registration and offers ahead of 9th Oct Rule Commencement

Industry Implementation Approach – FFR



NEM REFORM READINESS STRATEGY (ALL INITIATIVES)



RISK & CONTINGENCY MANAGEMENT

Go-live Criteria Management



Go Live Criteria Management summarises the criteria for decision making on readiness for the initiative to go-live in line with rule commencement timeframes and the efficient operation of the NEM and approach for the initiative

| Readiness Component | Proposed Initiative Approach | Rationale |
|-----------------------------|---|---|
| Go-Live Criteria | FFR go-Live criteria will reflect Technical Readiness for go-Live and readiness for service introduction | |
| Criteria Components | Technical Initiative Readiness components will consist of Solution Readiness: System Changes required to meet initiative requirements and ongoing stability of existing settlements processes AEMO Business Readiness: Procedures and business operations in place AEMO IT Support Readiness: IT operational support for solution in place Participant Readiness: As an optional service, no pre-requisite participant activity as dependency for technical initiative readiness Market Readiness For Service commencement: to be evaluated based on number of participants registered to provide service, offers in place, assessment of service requirements for market operation. | Technical Capability may be available, but given the optionality of service uptake, Very Fast Services may not be viable at rule commencement |
| Go-live Decision Management | Decision Milestone to be established for communication of: Technical Go-Live – Decision point for proceed decision based on criteria evaluation, at least 1 month prior to rule commencement Service Commencement: Decision point for service commencement in line with "Predispatch" evaluation. Notification to Industry Via Market Notice | |





Initiative Readiness Reporting outlines the form of participant readiness reporting required to meet go-live criteria decisions, and provide industry wide view on the progress towards implementation for AEMO and Industry. The approach considers whether the initiative requires formalised participant readiness reporting to be implemented

| Readiness Component | Proposed Initiative Approach | Rationale |
|--|--|--|
| Formal Participant Readiness Surveys and Reporting | FFR will not require formalised participant readiness reporting, in line with Participant readiness Criteria FFR will utilise Registration data and pre-dispatch information as indication of participant intention and readiness to commence offering Very Fast FCAS | FFR is optional service for participant offering. There are no mandatory participant transition, preparation activities that if not performed will impact technical readiness for market or other participants |
| AEMO progress reporting | FFR progress reporting against defined L1/L2 milestones as component of PCF and Implementation Forum reporting. Includes milestones at risk and impact on Go-Live Decisions | FFR will implement NEM Reform framework for progress reporting |





Outlines the expected approach to the conduct of Industry testing, providing and view on release based industry testing requirements. This approach to be validated with industry as part the Industry Test Strategy development

| Readiness Component | Proposed Initiative Approach | Rationale |
|------------------------------|--|-----------|
| Industry Test Approach | Industry Test Approach to be agreed with participants as component of October Release. Industry support to include extended availability of release in Pre-Prod Environment, settlement runs to be scheduled allow participant verification of end to end processes including settlement statement verification | |
| Release Testing Requirements | FFR currently scheduled to go-live in similar timeframe to MT PASA, with which it will share data model updates, and 5 MLP update (ICF060) where end to end industry testing will require scheduling and support of settlement runs to support participant verification | |





Outlines the Initiative approach to the provision of technical and functional support for participants in their implementation of FFR initiative. Approach is guided by the initiative impact assessments view on scale of change and spread across participant categories

| Readiness Component | Proposed Approach |
|--|---|
| Update Market Procedures and Guidelines | Identified Procedures / guidelines / registration processes updated for new service, published in line with agreed milestones |
| Update Technical Documentation (Specs, User Guides, FAQ) | Identified External guidelines and technical specs updates published in line with agreed milestones. |
| Update Data Model / AseXML Schema | Data model updates included in release 5.2, published in-line with agreed milestones |
| Update and agree external Report Formats, web Pages, etc | Consistent with procedures and reports published as component of Technical Specifications |
| Provide Participant Education (Q&A, Training Course Update, Implementation Advice) | Scheduling and requirements to be discussed at Implementation Forum MSUG sessions to support Technical Specification updates |
| Provide Impacted Participant support | Participant specific support via NEM2025@AEMO.com.au for responses to specific questions |





Initiative approach to the activities required to transition into operation. Both a longer term (transition) and cutover view are included to manage the scope and timing of required transitional activity

| Readiness Component | Proposed Approach | Rationale |
|--|---|--|
| Transition Planning and Management | AEMO will produce a Service Commencement Plan to communicate the decision points and activities (both AEMO and Participant) relating to the service commencement decisions. Transition activities will address the approach to registration updates for Fast FCAS participants, with consideration given to enabling Industry testing activities. Initial FCAS Service registration and participant technical capability assessment for the provision of Very Fast and other FCAS services will be considered as normal business operation. | Key aspect of participant preparation is to guide AEMO decision on market readiness to commence new FCAS services and alignment of registered participants |
| Go-Live (Cutover) Planning and Communication | Go-Live plans will cover key cutover timeframes, communications and (where required) participant co-ordinated activity to be incorporated. Phased deployment of capability is planned to support registration availability, dispatch data accumulation and bidding commencement prior to rule commencement dates. | To reflect release strategy and timing once determined |
| Industry Post Go_live Support | Project support for hyper-care/ post go live support Principle to leverage normal business support processes where possible supplemented where required to assist immediate industry issues. This may include post go-live Q&A, Issue management sessions, | Consistent with project implementation scope |



IESS – Aggregated Dispatch Conformance





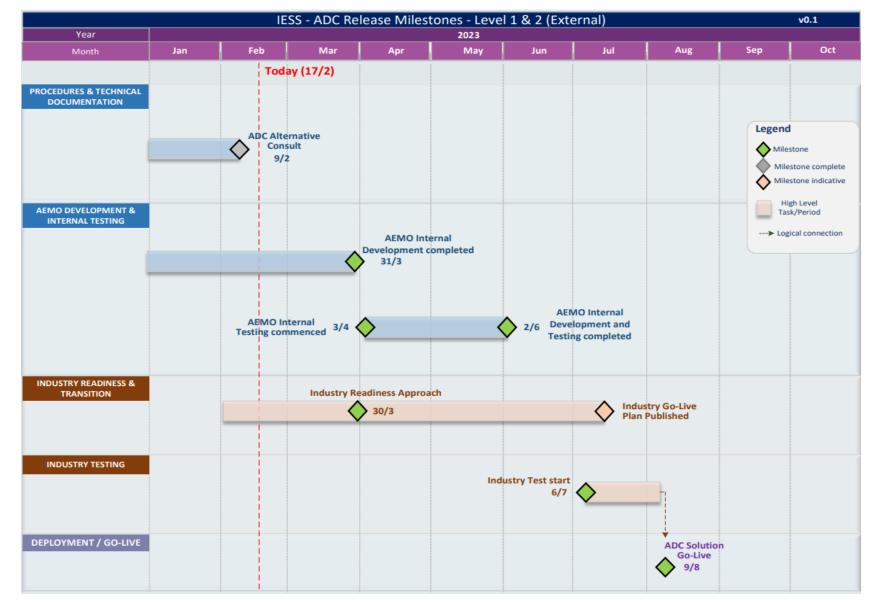
- IESS Rule introduces Aggregate Dispatch Conformance (ADC) for participants with aggregate systems
 - e.g. solar farm plus BESS behind same connection point
- These participants will be able to use ADC to firm the output of variable renewable energy resources (subject to some exceptions)
- A stakeholder proposed an alternative ADC solution sometime after the first ADC consultation had been completed. AEMO assessed the alternative ADC design proposal as:
 - being feasible to implement and a better solution that will result in more participants using ADC
 - appropriate to implement as soon as possible, but that it would necessarily be later than the NER effective date (31 March 2023).

Establishing optimal ADC delivery date

- Confirming that ADC will be released on 09 Aug 2023, aligning with the FFR project's registration commencement and provision of bids in advance of rule commencement. This timing provides implementation efficiencies for AEMO and participants.
- AER/AEMC have been informed
- Dispatch procedure has been reconsulted Final procedure published Fri 10 Feb.

IESS (ADC) milestones and progress





Release Commentary

- Dispatch Procedure consultation completed
- AEMO IT Design and development in progress
- Draft Readiness Approach provided in this agenda
- No further changes to market interface required for ADC implementation
- Industry Testing and go-live approaches to be defined and milestones confirmed

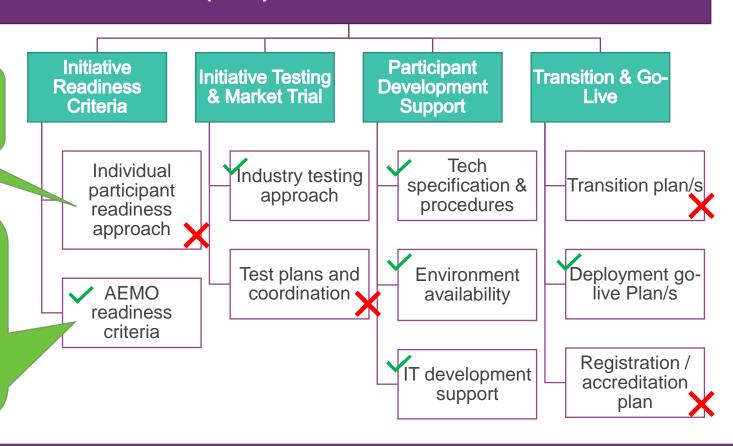
Industry implementation approach: IESS (ADC) Aug 2023



IESS (ADC) READINESS APPROACH

Individual participant (or participant category) readiness is **NOT** a dependency for go-live.

- **AEMO Market systems** updated and tested
- AEMO business needs to be ready to operate
- AEMO IT support needs to be in place
- Individual participant (or participant category) readiness is not a dependency for go-live.





RISK & CONTINGENCY MANAGEMENT 🗸

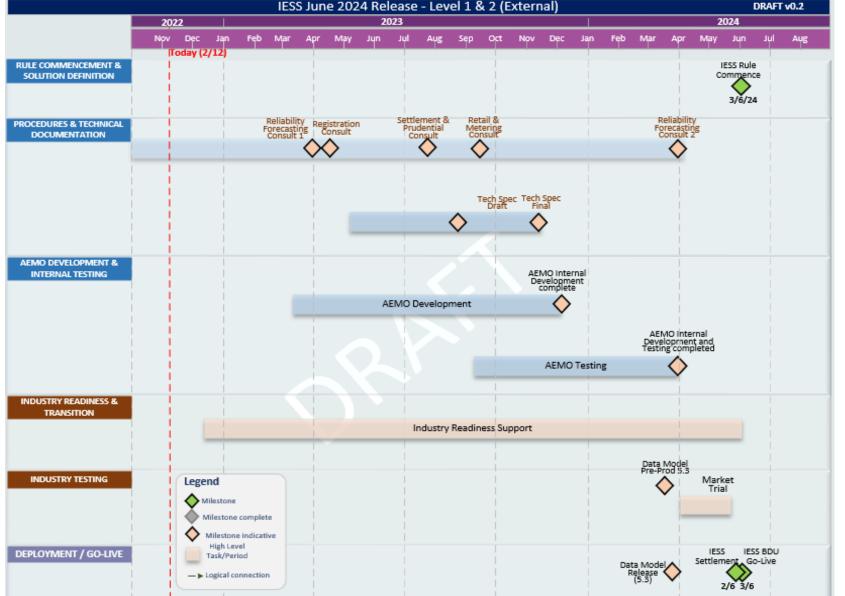




7. June 2024 Release

June 2024 - IESS Final Release





Release Commentary

- Procedures consultation proceeding through EWCF/ ERCF
- Draft Development and Technical documentation milestones will be expanded and confirmed
- Industry Readiness Support milestones expanded on basis of Readiness Approach (in this agenda)
- Market Trial Testing and golive approaches to be defined and milestones confirmed



Context: IESS has several releases

| DATE | RELEASE | AFFECTED PARTICIPANTS (INDICATIVE) | HIGH LEVEL SCOPE** |
|---------------|---|--|--|
| 31 Mar 2023 | FCAS option for Small Generation Aggregators (SGAs) | • SGAs | SGAs can choose to start participating in contingency FCAS markets |
| 09 Aug 2023 | Aggregate dispatch conformance (ADC) | Aggregate system operatorsDevelopersControl system vendors | Aggregate system operators can choose between individual or aggregated dispatch conformance • Aggregate system ~ grid-scale, behind the connection point e.g. solar farm plus BESS. |
| 02 Jun 2024** | Non-energy cost recovery (NECR) changes | Most participants (excluding metering service providers, network service providers, embedded network managers) | Settlement based on gross energy amounts affects: Non-energy cost recovery, including scheduled load carve outs UFE calculations Embedded networks |
| 03 Jun 2024 | Introducing: Integrated Resource Provider (IRP) category Bi-directional Unit (BDU) classification & bidding | BDU participantsSGAs | Market registration changes: IRPs introduced, alongside new classification and exemption criteria Existing BDU participants (generator/customer) transition to IRPs SGAs become IRPs BDUs introduced Ancillary service loads (ASL) and relevant generating units become ancillary service units (ASU) |
| | d the AEMC to consider shifting to a Sunday. Rule change rec | | 2. Bidding changes: One bid form for BDU energy One bid form for BDU FCAS ** AEMO's systems an processes must be rea |

for all releases **



Summary of proposed approach to IESS industry readiness – June 2024

| RELEASE | APPROACH |
|--|--|
| Initial release 31 Mar 23 | Optional for SGA participants. No additional industry readiness support above BAU* |
| ADC release 09 Aug 23 | Optional for aggregate system participants. No additional industry readiness support above BAU* |
| Final releases 02 Jun 24** & 03 Jun 24 | Appropriate to develop IESS industry readiness approach , in consultation with the industry, including transition, go-live and testing/trial plans. |

*These IESS releases do not require cross-industry coordination:

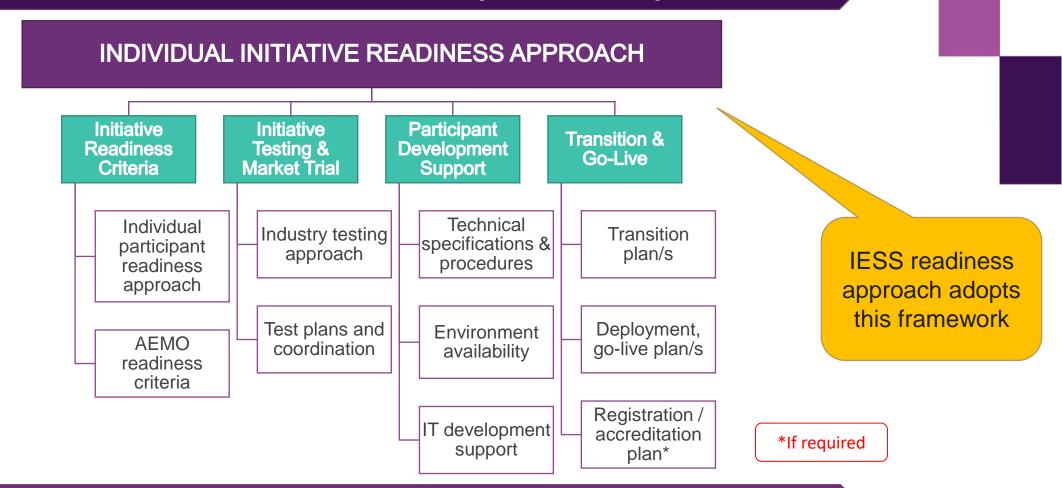
- Optional participation, only AEMO needs to be ready and will report against readiness milestones
- A go-live plan and BAU processes (including supporting documentation and access to Pre-Production as appropriate) will be in place for:
 - SGAs participating in FCAS
 - Aggregate systems opting for ADC
- AEMO's Support Hub is available for participants 24/7

^{**} Date subject to rule change request

Context: NEM2025 program industry strategy



NEM REFORM READINESS STRATEGY (ALL INITIATIVES)



RISK & CONTINGENCY MANAGEMENT

INITIATIVE READINESS REPORTING & GO-LIVE CRITERIA MANAGEMENT





- iess reddiness chiefic

IESS Readiness Criteria Individual participant readiness approach **AEMO** readiness criteria

For IESS to go-live:

- AEMO needs to design, build & test its solution/s
- AEMO business needs to be ready to operate
- AEMO IT support needs to be in place
- Individual participant (or participant category) readiness is not a dependency for go-live.
 - For the uninterrupted and reliable operation of the NEM, only AEMO needs to be ready for the June 2024 release/s
 - However participants will likely need to make timely system/process changes in managing their operations and also compliance with the IESS rule.

These criteria will be more fully defined and form the basis of go-live criteria management.





IESS testing and market trial

Industry testing approach

Test/trial plans and coordination

Early thinking on IESS testing/trial approach includes:

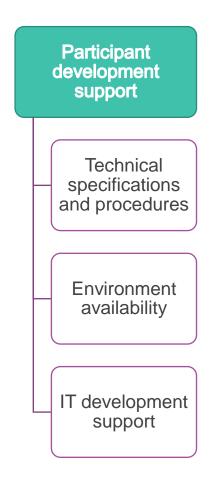
- pre-production will be available for industry testing
- appropriate to hold market trial (scope TBD) given scale of changes across participant categories and settlement impacts

Market trial scoping and planning will occur in:

- consultation with participants
- alignment with the project schedule



Elements of proposed IESS readiness approach - IESS participant development support



- Key procedure changes required for retail, bidding, dispatch, settlements and prudentials. These procedure consultations have been planned
- EMMS and MSATS tech specs/data models will need updates in time for participants to make their system changes
- Development support activities will be discussed in Implementation Forum e.g. information or Q&A sessions etc



Elements of proposed IESS readiness approach - IESS transition and go-live

IESS transition & go-live

Transition plans

Deployment / go-live plans

Registration / accreditation plan

Transition plans will be needed for:

- Reclassifying SGAs and Generators/Customers with BDUs to IRP registration category
- Reclassifying relevant loads and generators to "ancillary service units"
- Transitioning participants with existing (pre-December 2021) BDUs to 'single DUID' bidding and dispatch
- AEMO to transition existing NMI Classification Codes where a new code needs to apply.
 - NSPs will not have an obligation to transition NMI Classification Codes
 - However, ongoing from June 2024 nonregistered NMI Classification Codes [LARGE, SMALL & NREG] will be applied by the NSP to create NMIs. AEMO will then apply the new NMI Classification Code once an installation is registered

Deployment / go-live plans will be needed for:

- Introducing new NMI classification codes
- Data model changes
- Post-December
- Bidding format changes
- Alignment of participant and AEMO system deployments

Registration / accreditation plans

- Registration changes relate to reclassifying some participants to IRP category. This will be addressed through transition plans (above)
- IESS does not introduce or trigger any additional accreditation requirements



Elements of proposed IESS readiness approach - IESS readiness reporting etc

IESS READINESS REPORTING & GO-LIVE CRITERIA
MANAGEMENT

Market readiness activities are intended to:

- 1) address readiness challenges and support the prudent implementation of NEM changes
- 2) safeguard the integrity of NEM processes across the various IT system go-lives or market starts, given the market's size, value, complexity and need for continuous operation.

Readiness reporting is used when there is a need for AEMO and industry to have an accurate assessment of industry's readiness for:

- system deployments,
- transitional activities, and/or
- rule commencements.

Propose that <u>participant</u> readiness reporting is not needed. For the uninterrupted and reliable operation of the NEM, only AEMO needs to be ready for:

- 02 Jun 2024 NECR changes AEMO will deploy system changes to adjust settlement reports
- 03 Jun 2024 registration and dispatch changes AEMO will deploy system and process changes to introduce IRP registration category and BDU classification & bidding.

While participants will likely need to make timely system/process changes in managing their operations and also compliance with the IESS rule, AEMO does not propose to monitor participant readiness.

AEMO will report to industry:

- Progress against agreed milestones
- Checkpoints on go-live criteria in the lead-up to implementation.





- What are your views on the readiness approach?
- What else should AEMO consider?
- How much time do you need to adapt your systems and processes?
- Aside from the technical specification, what other information or support would you like from AEMO?

Please provide initial feedback (including seeking any clarification) by Fri 17 March 2023

• Please note that feedback on readiness approach continues to be welcomed anytime and will be actively sought in the development of readiness plans.



8. Upcoming Engagements





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| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

| | | | April | | | |
|----|----|----|-------|----|----|----|
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| Legend |
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| Program forums |
| NEM2025 Program Consultative Forum |
| Reform Delivery Committee |
| Refrom Delivery Committee - Collab W. |
| Implementation Forum |
| Electricity Wholesale Consultative Forum |
| Electricity Retail Consultative Forum |
| Industry Testing Working Group |
| AEMO Consumer Forum |

To learn more about these events, please visit AEMO's lndustry meeting calendar or contact the program at NEM2025@aemo.com.au.



9. General Questions & Other Business



NEM2025@aemo.com.au



AEMO | Implementation Forum





Appendix A: Competition law meeting protocol



AEMO Competition Law - Meeting Protocol

AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

Participants in AEMO discussions **must**:

- Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
- Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
- Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

Participants in AEMO meetings **must not** discuss or agree on the following topics:

- Which customers they will supply or market to
- The price or other terms at which Participants will supply
- Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
- Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
- Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.



For more information visit

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