

ST PASA Replacement Project

Stakeholder Update
April 2024



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

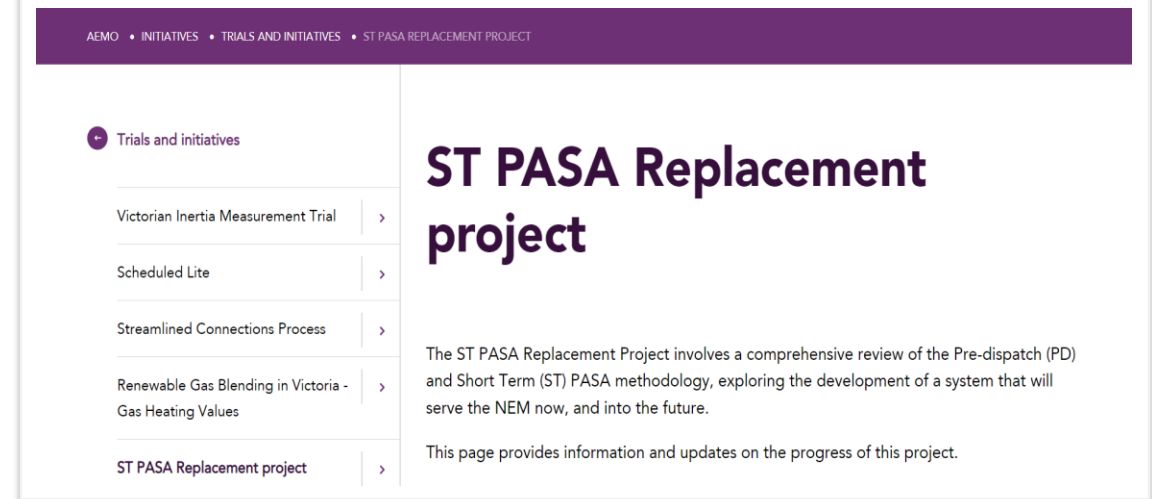
We pay respect to Elders past and present.

Aim of this session

This session is designed to provide stakeholders with:

- An update on the **progress of the ST PASA Replacement project.**
- Information on how AEMO will be **engaging with stakeholders** on the progress of the project.
- Discussion of **options related to the rule change and consultation process.**

Previous stakeholder updates and workshop information can be found on the [AEMO Website](#):



AEMO • INITIATIVES • TRIALS AND INITIATIVES • ST PASA REPLACEMENT PROJECT

Trials and initiatives

- Victorian Inertia Measurement Trial >
- Scheduled Lite >
- Streamlined Connections Process >
- Renewable Gas Blending in Victoria - Gas Heating Values >
- ST PASA Replacement project >

ST PASA Replacement project

The ST PASA Replacement Project involves a comprehensive review of the Pre-dispatch (PD) and Short Term (ST) PASA methodology, exploring the development of a system that will serve the NEM now, and into the future.

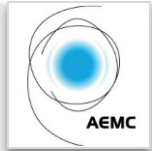
This page provides information and updates on the progress of this project.

Progress of project



Project progress to date – Planning Phase

Planning Phase of the project was completed in November 2022.



5 MAY 2022

AEMC published final rule change

The rule change will be effective on 31 July 2025.



MAR - JUL 2022

Stakeholder workshops held

Workshops were held to gather solution requirements.



SEPT 2022

Detailed functional requirements draft finalised

- Incorporating stakeholder feedback.
- Decision to procure/develop the ST PASA engine using external vendors and develop the other IT framework/functionality within AEMO.



OCT 2022

GE contract signed

The contract with GE for delivery of the PASA engine was signed.

Project progress to date – Execution Phase

Execution Phase commenced in November 2022.



Detailed **business requirements of the new system have been drafted** and continue to be fine-tuned.



Detailed **solution design workshops are being held with GE** on the design of the new PASA engine:

- GE has provided an out-of-the-box solution system for AEMO's initial testing.
- GE now working on designing and developing the second iteration (for NEM purposes).



Detailed **architecture solution has been designed for Integration Phase 1.**



Design workshops of the **new ST PASA application and system being developed internally:**

- Some of the development, detailed design and functional testing work have been completed as part of Integration Phase 1.

Project progress to date – Execution Phase, cont'd

Execution Phase commenced in November 2022.



Extensive design and development work is being carried out on **mapping network data with market data**.

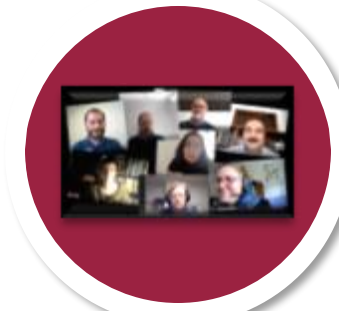


Design and development of models to produce **Uncertainty Margins for generation and load** is progressing.



Design and development of **models to disaggregate forecasts to nodal level** is progressing.

In progress - PASA Engine design



AEMO project team is working closely with GE to develop the new PASA engine.

GE is developing the system over three phases.

- Detailed functional and IT design requirements to be refined as the system is developed.

AEMO will undertake workshops with stakeholders to demonstrate functionality as it is developed.

- To be scheduled based on suitable results being received that can be shared with stakeholders.

Feedback will be incorporated into refining the detailed requirements.

Project challenges to date – Execution Phase



- Go-live for new PASA was **targeted** to coincide with effective date of the ‘Updating Short Term PASA’ rule change (**31 July 2025**).
- The project is facing challenges to meet this.
 - Challenges in sharing data with third party vendors due to **amendments in SOCI Act**.
 - The development of ST PASA software, for NEM purposes, has caused **unexpected challenges for our third-party supplier**.
 - **Data mapping of network data with market data** has proved to be a bigger challenge than anticipated.

Challenges due to SOCI Act

The AEMO project team has experienced challenges responding to the changes required by the SOCI Act.

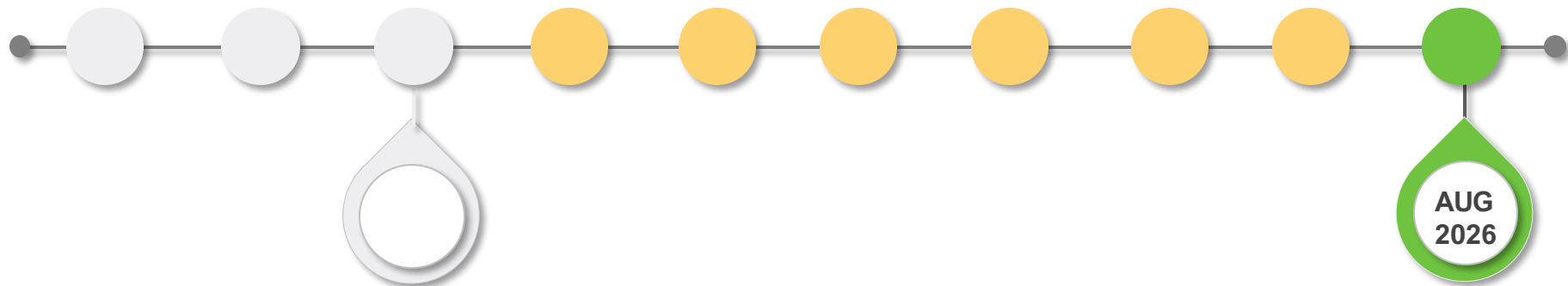


Impact on project

This project is an important initiative for AEMO. We are working through how we can minimise impacts on the timeline, resourcing, and budget.

However, the project challenges have caused significant delays and have put the project go-live date at risk. At this stage, we are targeting August 2026 to implement the new ST PASA system.

AEMO is proposing some **options related to delivery of the project and the ‘Updating Short Term PASA’ rule change that will provide continuing value to stakeholders in a timely manner.**



Providing timely benefits to stakeholders



Providing benefits to stakeholders

AEMO is committed to provide **benefits to stakeholders in a timely manner.**

During the rule change process, two of the areas that were identified as providing major benefits to the stakeholders were:

01

Submission of 'real' recall times.



02

Publication of individual unit availabilities.



AEMO is proposing to implement these upgrades prior to the full implementation of the new ST PASA system.

Recall time

The new rules require participants to submit PASA availability and the associated recall time, and for AEMO to publish this data.

A [Generator recall workshop](#) was held in April 2022 to work through the details of how this process would work which was followed up with detailed examples.

Outcome

Recall time to be submitted as part of bids process for each trading interval.

Outcome

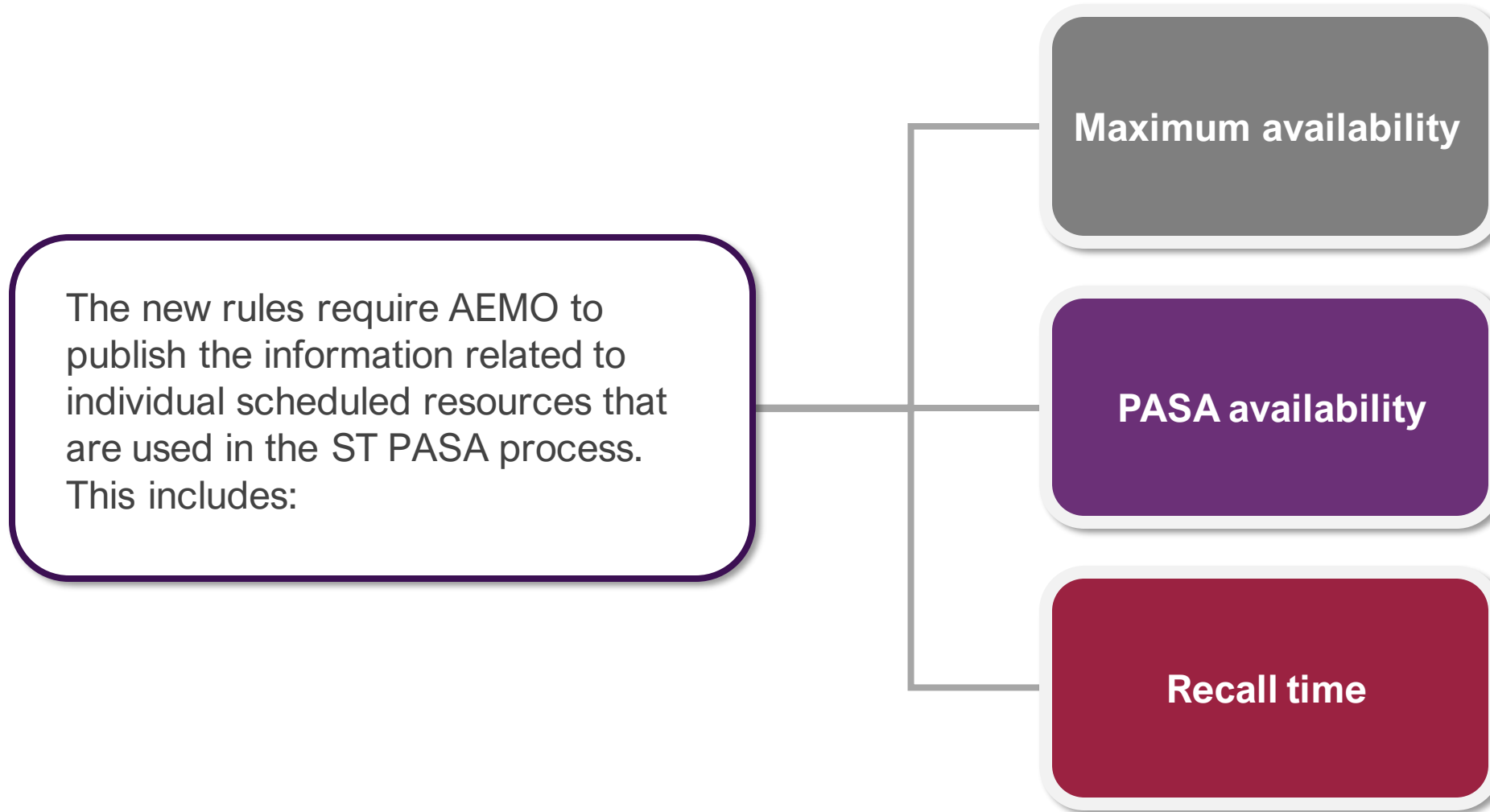
Removal of the Generator Recall portal and associated processes.

AEMO is proposing to enable the functionality, to enter this information in the bid interface, to meet the July 2025 timeline.

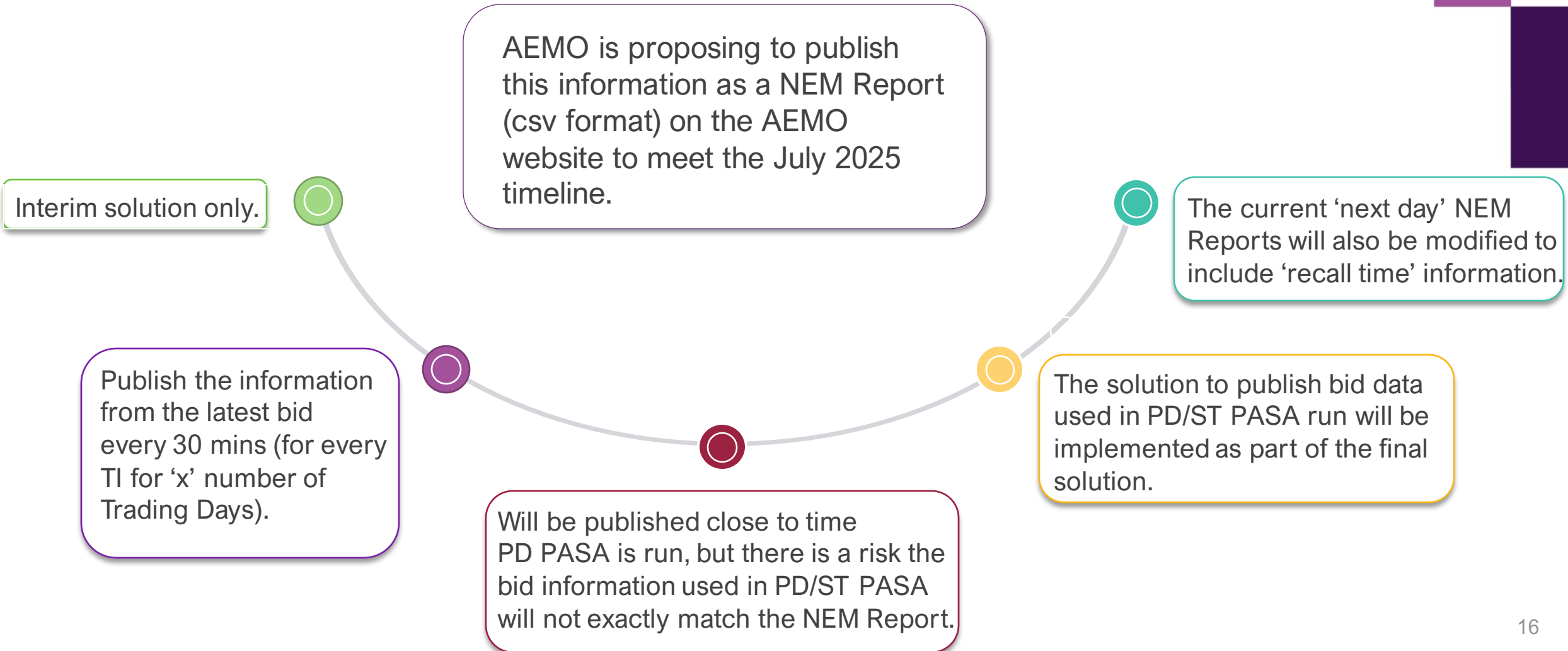
A follow-up workshop to be held in **Q2/3 2024** *.

*Quarters based on calendar year.

New rules requirements for individual availabilities



Publication of individual availabilities



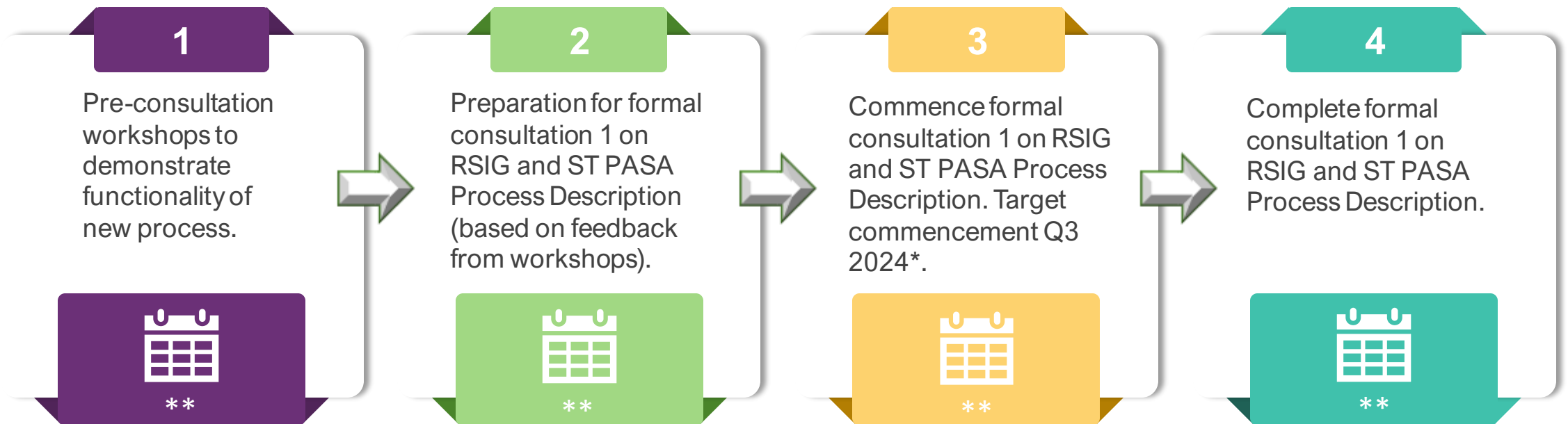
Formal Procedure Consultations



PASA Engine design – Consultation 1

Once the AEMO project team has finalised requirements and design based on stakeholder feedback (in workshops), the formal rules-based consultation will commence.

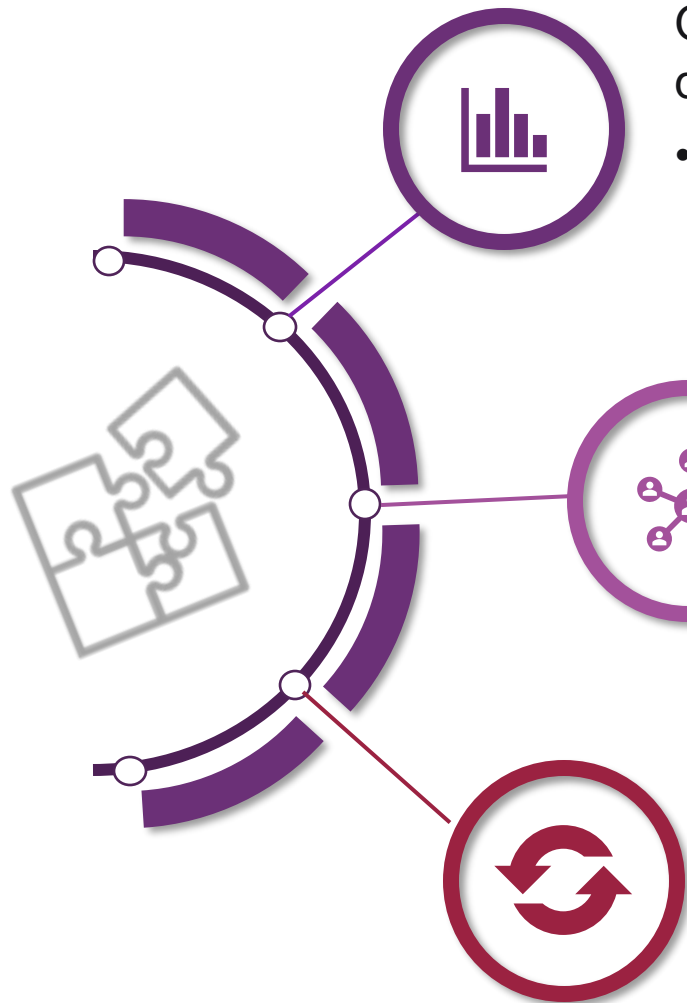
This consultation will include the Reliability Standard Implementation Guidelines (RSIG) and ST PASA Process Description.



*Quarters based on calendar year.

**Dependent on delivery of acceptable solution by third-party provider.

Uncertainty Margins



Once the PASA engine design has been finalised and developed, AEMO will be commencing **back-casting exercises**.

- To investigate impact of various levels of Uncertainty Margins (UMs) in declaring LOR levels.

AEMO will hold pre-consultation workshops to **demonstrate the results**.

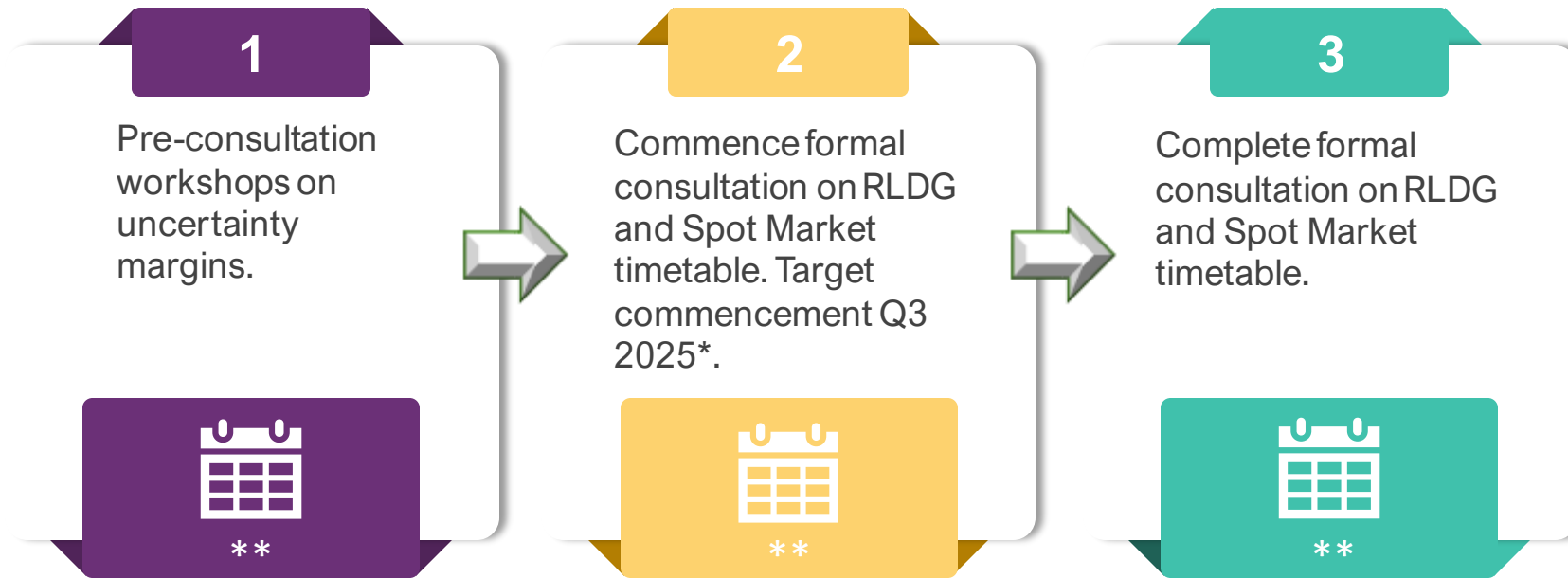
- Scheduled based on suitable results being received that can be shared with stakeholders.

Feedback from these workshops will be used to **refine the Uncertainty Margins**.

Uncertainty Margins – Consultation 2

Formal Rules based consultation will commence once the AEMO’s project team is close to completing the back-casting exercise.

- This consultation will include the Reserve Level Declaration Guidelines (RLDG) and Spot Market timetable.



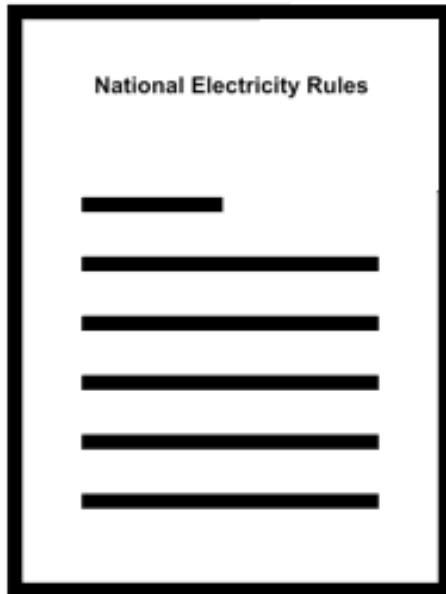
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Impact on ST PASA Rule change and Proposed Options



ST PASA Rule Change



The delays in the project will have an impact on 'Updating Short Term PASA' Rule change:

- AEMO must develop and publish ST PASA procedures by **30 April 2025**. AEMO is required to comply with the Formal Rules based consultation procedures.
- New rules become effective **31 July 2025**.

Options related to project delivery and rule change

AEMO is proposing three options for project delivery.

AEMO is seeking feedback and a preference from stakeholders by **30 April 2024**.

01

02

03

Option 1 - staged approach 1

Prior to Apr 2025	Prior to Jul 2025	Post- July 2025	Comments
<ul style="list-style-type: none"> Continue development of the new system and pre-consultation stakeholder workshops. Begin formal consultation process. 	<ul style="list-style-type: none"> Implement <i>submission of recall time and publication of individual availability information*</i>. 	<ul style="list-style-type: none"> Complete formal Procedure consultations. Go-live with the new ST PASA system (target Aug 2026). 	<ul style="list-style-type: none"> Provides benefits to stakeholders at an earlier stage. Will require a rule change to update the effective dates of consultations and final solution delivery. Participants may need to make changes to their systems for implementation of recall times.

* This work will be incorporated with the changes being made for the Enhanced Reserve Information (ERI) project. Timelines for this are still being developed.

Option 2 - staged approach 2

Prior to Apr 2025	Prior to Jul 2025	Post- July 2025	Comments
<ul style="list-style-type: none"> Continue development of the new system and pre-consultation stakeholder workshops. Complete formal consultation on procedures to reflect the changes being done prior to Jul 2025 (<i>current ST PASA system plus recall time</i>). Begin formal consultation process on other changes (<i>new ST PASA system</i>). 	<ul style="list-style-type: none"> Implement <i>submission of recall time and publication of individual availability information*</i>. 	<ul style="list-style-type: none"> Complete formal Procedure consultations. Go-live with the new ST PASA system (target Aug 2026). 	<ul style="list-style-type: none"> Provide benefits to stakeholders at an earlier stage. The timing of the two consultations may overlap and this may be inefficient for AEMO and stakeholders. Does not require rule change but will be subject to support from stakeholders. Participants may need to make changes to their systems for implementation of recall times.

* This work will be incorporated with the changes being made for the Enhanced Reserve Information (ERI) project. Timelines for this are still being developed

Option 3 – one drop

Prior to Apr 2025	Prior to Jul 2025	Post- July 2025	Comments
<ul style="list-style-type: none">• Continue development of the new system and pre-consultation stakeholder workshops.• Begin formal consultation process.	<ul style="list-style-type: none">• Continue development of system and formal stakeholder consultations.	<ul style="list-style-type: none">• Complete formal Procedure consultations.• Go-live with the new ST PASA system (target Aug 2026).	<ul style="list-style-type: none">• Stakeholders must wait longer to get any benefit from changes to the system.• Will require a rule change to update the effective dates of consultations and final solution delivery.

Next steps

- Stakeholders to provide feedback on preferred option in relation to rule change to AEMO by **30 April 2024**.
 - Any questions/feedback can be sent to STPASARreplacement@aemo.com.au.
- AEMO will continue to **update stakeholders** on the progress of the project.
- Provide a **timeline** for workshops and formal consultation(s) in **Q2/3 2024***.
- AEMO will hold **workshops on recall time** in **Q2/3 2024***.