ST PASA Replacement Project

Stakeholder Workshop – Generator Recall Process

July 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.

Agenda

This session is designed to provide stakeholders with:

- Discussion of the **business process** related to the new **Recall Time fields** in the pre-dispatch (PD) PASA and short-term (ST) PASA time frame consistent with the Updating ST PASA rule change.
- An overview of the new **NEM report** that will publish **individual unit availability** information.

‘Updating ST PASA Rule’ change

Rule change: PASA availability and Recall Time

01

Recall time to be **flexible** instead of fixed 24 hours

2

Participants to provide PASA Availability and the associated **Recall Time**

3

Range of allowable recall times to be defined in the Reliability Standard Implementation Guidelines

4

AEMO to publish on an **individual DUID** basis:

- Max Availability/UIGF
- PASA Availability and associated Recall Time

Implementation of rule change

- As per briefing on 15 April 2024, AEMO is facing delays to the STPASA Replacement project and were considering options to provide most value to stakeholders.
- As per communication sent out on 14 June 2024, AEMO will be taking the following next steps:
  - Conducting a formal procedure consultation for the current ST PASA process (plus the Recall time changes) by 30 April 2025.
  - Updating AEMO systems to allow participants to enter the Recall time information from 31 July 2025.
  - Publishing individual availability information as part of NEM Reports from 31 July 2025.

Generator Recall

Recall time (PD & ST time frame)

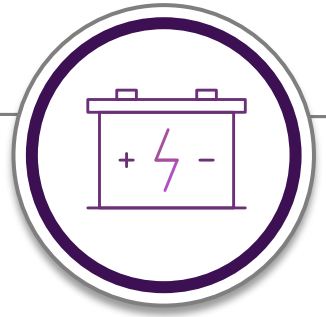
RECALL TIME

Recall time (hours) is the **notice period** required for the unit to produce the output (MW) indicated by their PASA Availability value for that Trading Interval.

This could include any **preparatory time** as well as any **ramping up time**.

ENERGY STORAGE

For energy storage systems this includes time to reach the **full storage level** required for the bid PASA Availability.



Implementation of PASA Availability & Recall Time

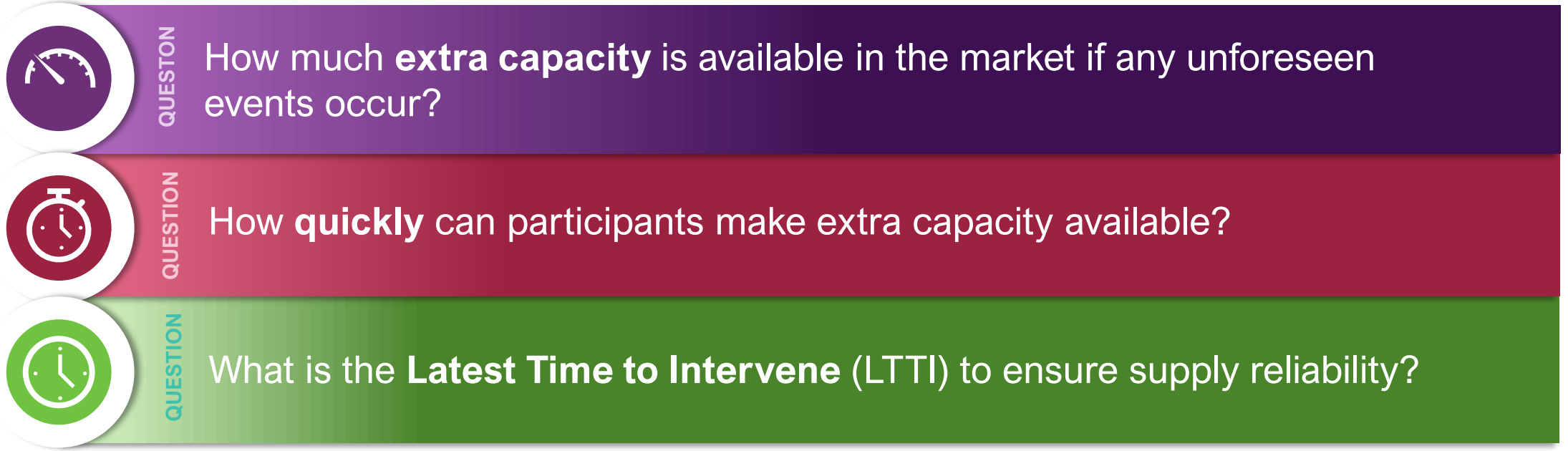
- AEMO held a workshop in April 2022, proposing a practical approach to submitting these values and received valuable feedback.
- Based on further internal and external discussions, AEMO is proposing an approach as outlined in the next slides.
- AEMO welcomes feedback on this approach by 19th July 2024 via STPASAReplacement@aemo.com.au

Use of PASA Availability and recall time

AEMO will use this information for:

- **situational awareness** purposes in the PD and ST time frame.
- making decisions regarding **intervention** in the PD time frame (replacing current Gen recall portal process).

To do this, AEMO needs to understand:



Approach to submission of recall times

PASA Availability and associated Recall Time should be supplied for each trading interval **via the normal bids**.

To assist AEMO with decision-making, there will be **three tranches** available for each interval.

Short recall capacity

Mandatory provision

The capacity* that can be made available with the shortest recall time, along with that recall time.

*The additional capacity available should be a minimum of 10MW or 2% of the registered Max Capacity of the unit

Maximum capacity

Required only if different from previous tranche

The maximum capacity that can be made available, and the notice period (recall time) required to make this extra capacity available.

LOR2/3 capacity

Optional

If LOR 2 or 3 condition is forecast, AEMO will ask participants (via **LOR2/3 market notice**) to enter PASA Availability for a particular range of trading intervals, by a **specific time**.

Participants will then submit the maximum capacity it can make available for those trading intervals and the notice period required to make this extra capacity available.

Approach to profiling of recall times

- AEMO is expecting a **practical approach** to profiling PASA Availability and Recall Time (as is done now).
- **No requirement to profile for each trading interval** within a 30–minute period.
- Update profile (e.g. **when there is a delay in returning to service from an outage**) as per current approach.

Approach to submission of recall times

BDUs are required to submit PASA Availability and Recall time for **generation** and **load** side

PASA Availability for the Load side will not be used by ST PASA initially, but this could be enabled if required for future use

Semi-scheduled units are required to submit PASA Availability and Recall time

PASA Availability of semi-scheduled units will not be used by ST PASA initially, but this could be enabled if required for future use

Removal of the current Generator Recall portal and associated processes

Generator Recall procedure will be updated to be consistent with the new approach

Range of recall time

Allowable range for ST PASA purposes to be between 0 and 168 hours (7 days)

- If the submitted Recall Time is null, value defaults to zero (immediate recall)
- Recall time does NOT need to be submitted if
  PASA Availability = Maximum Availability
  Or PASA Availability = 0 MW

Example scenarios

Scenario 1 – Simple with 2-hour recall

- 300 MW unit in service
- Availability limited to 200 MW for 6 hours with 2-hour recall
- *Only one entry to the first tranche is required, as the capacity that can be made available in the shortest recall time is equal to the maximum recallable capacity*

Comments	30 – minute interval*	Max Availability (MW)	Short recall capacity		Max Capacity		LOR2/3 Capacity	
			PASA Availability (MW)	Recall Time (hrs)	PASA Availability (MW)	Recall Time (hrs)	PASA Availability (MW)	Recall Time (hrs)
	04:30	300	300	NULL	NULL	NULL	NULL	NULL
Reduction in availability	05:00	200	300	2 hours	NULL	NULL	NULL	NULL
	05:30	200	300	2 hours	NULL	NULL	NULL	NULL
	…	200	300	2 hours	NULL	NULL	NULL	NULL
	..	200	300	2 hours	NULL	NULL	NULL	NULL
Full availability restored	10:30	300	300	NULL	NULL	NULL	NULL	NULL

* Even though the bids are submitted per TI, a 30-minute interval is shown here for simplicity

Scenario 2A – Aggregate unit

- An aggregate unit (600 MW) out of service
- One of the units (200 MW) can be made available with a 2–hour recall
- The second unit can be made available with a 5- hour recall
- The full capacity can be made available with a 3-day recall
- *The first tranche 'Short recall capacity' will show the capacity that can be made available with the shortest recall time*
- *The second tranche 'Max Capacity' will show the maximum capacity that can be made available and the associated recall time*

Comments	30 – minute interval	Max Availability (MW)	Short recall capacity		Max Capacity		LOR2/3 Capacity	
			PASA Availability (MW)	Recall Time (hrs)	PASA Availability (MW)	Recall Time (hrs)	PASA Availability (MW)	Recall Time (hrs)
Outage starts	04:30	0	200	2 hours	600	3 days	NULL	NULL
	05:00	0	200	2 hours	600	3 days	NULL	NULL
	05:30	0	200	2 hours	600	3 days	NULL	NULL
	…							

Scenario 2B – Aggregate unit (LOR2 forecast)

- At 5:30, AEMO issues a LOR2 forecast for intervals 18:00 to 20:00.
- AEMO requests participants to provide information on what capacity can be made available between these times.
- AEMO requests this information be bid in by 08:00
- *The third tranche 'LOR2/3 Capacity' will now show how much capacity that can be made available for intervals 18:00 to 20:00 and the associated recall time.*

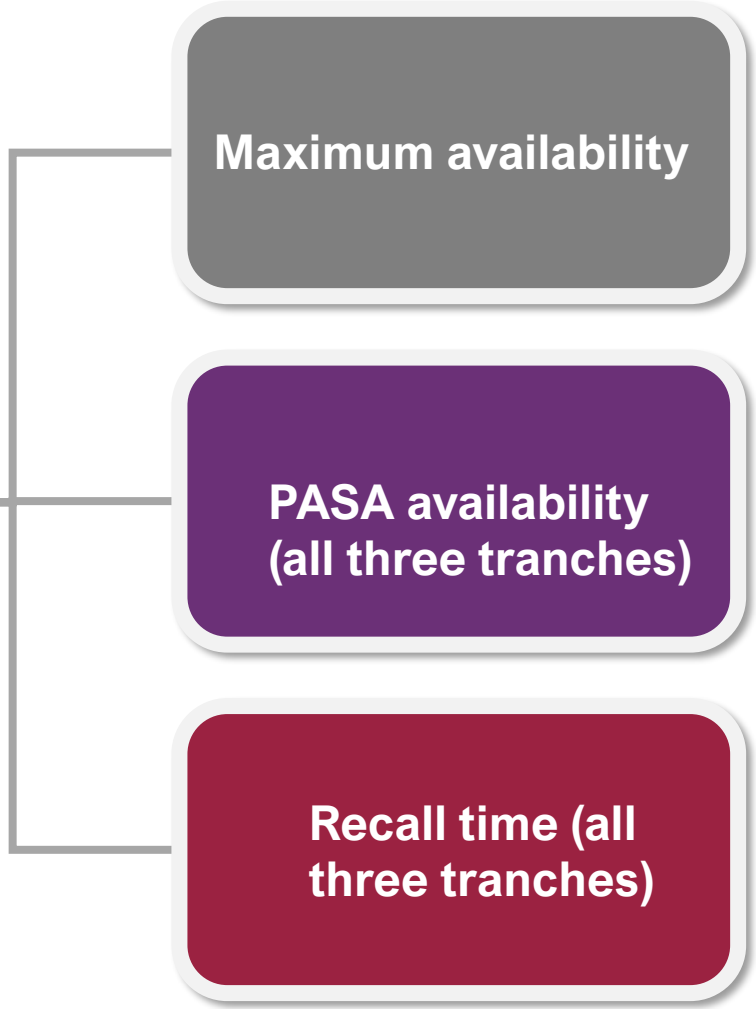
Re-bid of unit prior to 08:00

Comments	30-minute interval	Max Availability (MW)	Short recall capacity		Max Capacity		LOR2/3 Capacity	
			PASA Availability (MW)	Recall Time (hrs)	PASA Availability (MW)	Recall Time (hrs)	PASA Availability (MW)	Recall Time (hrs)
Outage starts	04:30	0	200	2 hours	600	3 days	NULL	NULL
	05:00	0	200	2 hours	600	3 days	NULL	NULL
LOR2 notice issued	05:30	0	200	2 hours	600	3 days	NULL	NULL
	…	0	200	2 hours	600	3 days	NULL	NULL
Unit rebid	08:00	0	200	2 hours	600	3 days	NULL	NULL
	…	0	200	2 hours	600	3 days	NULL	NULL
	18:00	0	200	2 hours	600	3 days	400	5 hours
	…	0	200	2 hours	600	3 days	400	5 hours
	20:00	0	200	2 hours	600	3 days	400	5 hours
	20:30	0	200	2 hours	600	3 days	NULL	NULL

Reporting Individual Availability

New rules requirements for individual availabilities

The new rules require AEMO to publish the information related to individual scheduled resources that are used in the ST PASA process. This includes:



Publication of individual availabilities

AEMO will publish this information as a NEM Report (csv format) on the AEMO website to meet the July 2025 timeline.

Interim solution only.

Publish the information from the latest bid every 30 mins (for every TI for ‘x’ number of Trading Days).

Will be published close to time PD PASA is run, but there is a risk the bid information used in PD/ST PASA will not exactly match the NEM Report.

The solution to publish bid data used in PD/ST PASA run will be implemented as part of the final solution.

The current ‘next day’ NEM Reports will also be modified to include ‘recall time’ information.

Next Steps

Next Steps

- **Stakeholder feedback** received by **19 July 2024** via STPASAReplacement@aemo.com.au.
- Based on feedback, AEMO will finalise the **business requirements by end of July 2024.**
- Delivery of these changes will be coordinated through the NEM Reform program.
- An **implementation plan** outlining the NEM Reform program schedule will be provided at the Program Consultative Forum (PCF) and Electricity Wholesale Consumer Forum (EWCF) meetings in **August 2024**.
- **Formal procedure consultation** to meet rule requirements will begin in **September 2024**.
    - AEMO will be holding an **information session** on this on **24 July 2024**.
- AEMO will continue to work on the STPASA Replacement project in parallel to these changes.