

ST PASA Replacement Project

Stakeholder Workshop #5 –
Published Information
Aug 2022

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Agenda

- Published PASA Information
 - Inputs
 - Outputs
 - Content of Market Notices
- PASA Information Visualisation & Feedback
- Next Steps
- Project timeline
- Glossary

Published Information - Inputs

- Scheduled Resources Available Capacity[!], PASA Availability[#] and Recall Time^{*#} (DUID^{*})
 - Scheduled Generating Units
 - Semi-Scheduled Generating Units (Available Capacity only)
 - Scheduled Loads
 - Bidirectional Units ^{*#}
 - MNSPs
 - WDRs
- Load Forecasts
 - 50% POE (Node Level) ^{*}
 - 10%, 50% and 90% POE (Regional Level)
- Uncertainty Margins (Scheduled Resources and Loads) ^{*}
- Contingency List (after each EMS DB update) ^{*}

* New Information

New NER Definition

! For semi-scheduled, Available Capacity and UIGF

Published Information - Outputs

- Dispatched MW (Nodes / Branches) *
- Deficit MW (Nodes) *
- Branches *
 - Marginal Value (p.u.)
 - Violation MW
 - Status (In Service/Out of Service) (impact on LOR condition) *
- Constraint Solution (Inter and Intra Regional)
 - Constraint ID
 - RHS Value (MW)
 - Marginal Value (p.u.)
 - Violation Degree (MW)
- Forecast Reserve Condition *

* New Information

New NER Definition

Content of Market Notices

- PASA Run Date / Time
- Forecast Reserve Condition *
- Affected Region
- Interval Date / Time
- Maximum Deficit (MW) *
 - Region
 - Nodes
- Latest Time to Intervene

* New Information

Information Visualisation – Region Summary

Summary of the Latest PASA Results for 7 Days ahead:

- Date and Time of PASA Publication
- Forecast Reserve Condition (**Green**, **Yellow**, **Orange**, **Red**)
- Generation Availability
- Load Forecast
- Deficit

Region Summary – Example

AEMO DATA DASHBOARD

Dispatch Overview		Price and Demand		Fuel Mix		Average Price		7-Day Outlook	
⚡ 7-DAY OUTLOOK 📄 ?									
Region	Date	22-Jul-22	23-Jul-22	24-Jul-22	25-Jul-22	26-Jul-22	27-Jul-22	28-Jul-22	
NSW1	Net Interchange	-2514	-1828	-2375	-2306	-2236	-2254	-2260	
NSW1	Scheduled Capacity	10955	11841	11706	11553	12444	12408	12529	
NSW1	Scheduled Demand	11249	10272	10177	10977	11319	11300	11336	
NSW1	Scheduled Reserve	2219	3398	3904	2882	3361	3362	3453	
NSW1	Trading Interval	18:30	18:30	18:30	18:30	18:30	18:30	18:30	
QLD1	Net Interchange	-259	-315	-311	-285	-297	-294	-265	
QLD1	Scheduled Capacity	8211	7547	7610	8173	7871	8146	8215	
QLD1	Scheduled Demand	7670	6991	7072	7511	7314	7618	7636	
QLD1	Scheduled Reserve	800	871	849	947	854	822	845	
QLD1	Trading Interval	18:30	18:30	18:30	18:30	18:30	19:00	19:00	
SA1	Net Interchange	-743	-188	-748	-453	-734	-820	-820	
SA1	Scheduled Capacity	2851	2085	3151	3285	2561	2323	2367	
SA1	Scheduled Demand	2028	1802	1748	2157	2200	2187	2109	
SA1	Scheduled Reserve	1566	471	2151	1581	1096	956	1078	
SA1	Trading Interval	19:00	19:30	19:00	19:00	19:30	19:30	19:30	
TAS1	Net Interchange	-478	-478	-478	-478	-478	-478	-478	
TAS1	Scheduled Capacity	2220	2367	2241	2149	2127	1959	2271	
TAS1	Scheduled Demand	1533	1433	1453	1494	1533	1556	1545	
TAS1	Scheduled Reserve	1165	1412	1266	1133	1072	881	1204	
TAS1	Trading Interval	08:30	18:30	18:30	08:30	18:30	08:30	18:30	
VIC1	Net Interchange	-1683	-1778	-2427	-2183	-1368	-1300	-1308	
VIC1	Scheduled Capacity	9167	8157	8279	7947	8636	8262	8290	
VIC1	Scheduled Demand	7251	6512	6142	7063	7150	7088	7106	
VIC1	Scheduled Reserve	3599	3423	4563	3067	2855	2473	2492	
VIC1	Trading Interval	08:30	18:30	18:30	18:30	18:30	18:30	18:30	

NEM Map – Display Layers

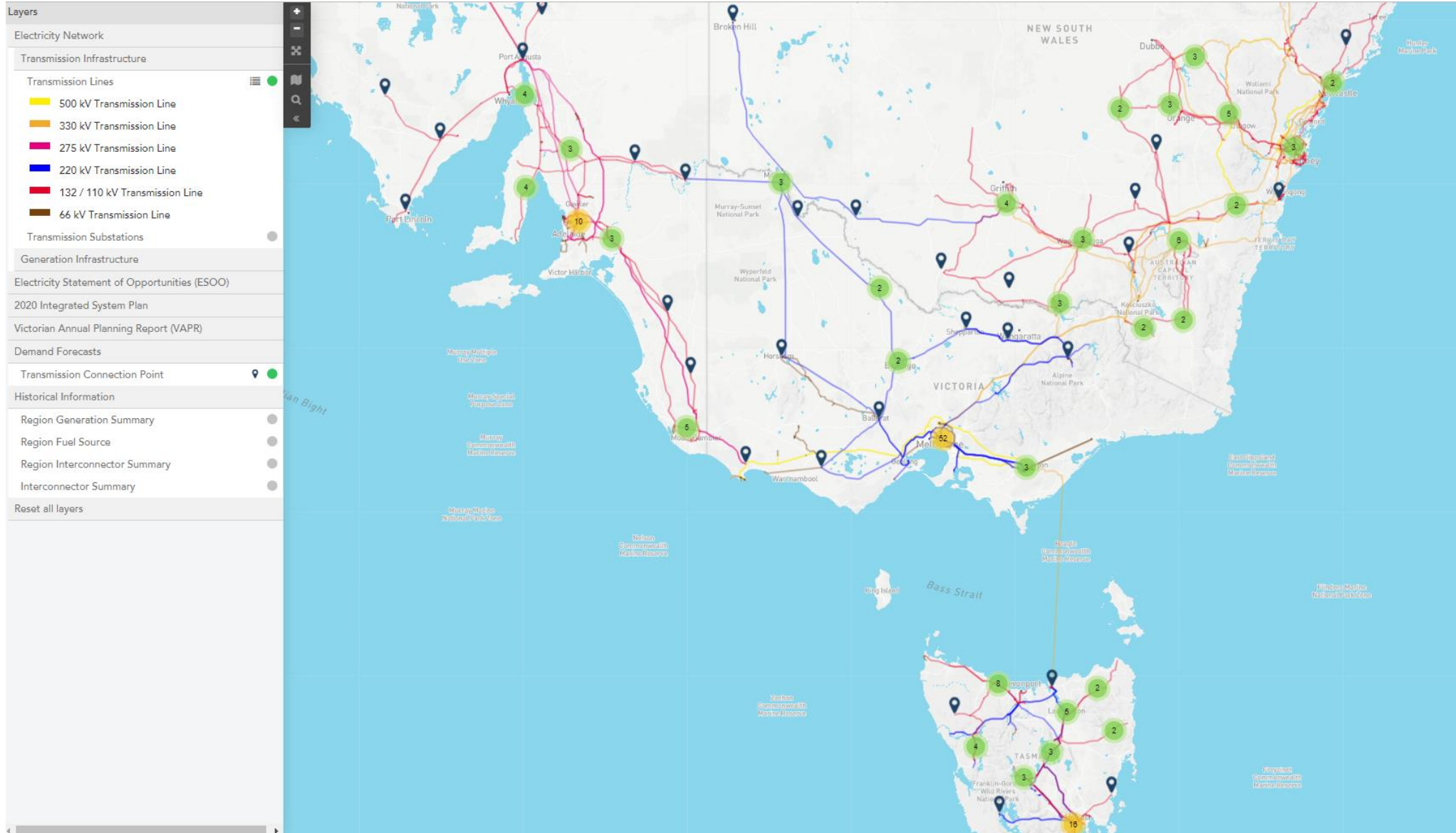
- Load Nodes
- Generator Nodes
- Branches
- Deficit (Nodes)
- Marginal Value (Branches and Nodes)
- Out of Service Plant
- Constrained Plant
- Islands

Note: Marginal Value = Normalised Market Value (p.u.)



Source: [AEMO Interactive Map](#)

NEM Map - Nodes



Information Visualisation - Feedback



- How do you use published information?
- How do you visualise information?
 - AEMO Dashboard
 - AEMO Markets Portal
 - In-house Applications
- Any other suggestions for our consideration (subject to cost, delivery and functionality considerations)?

Workshop Timetable

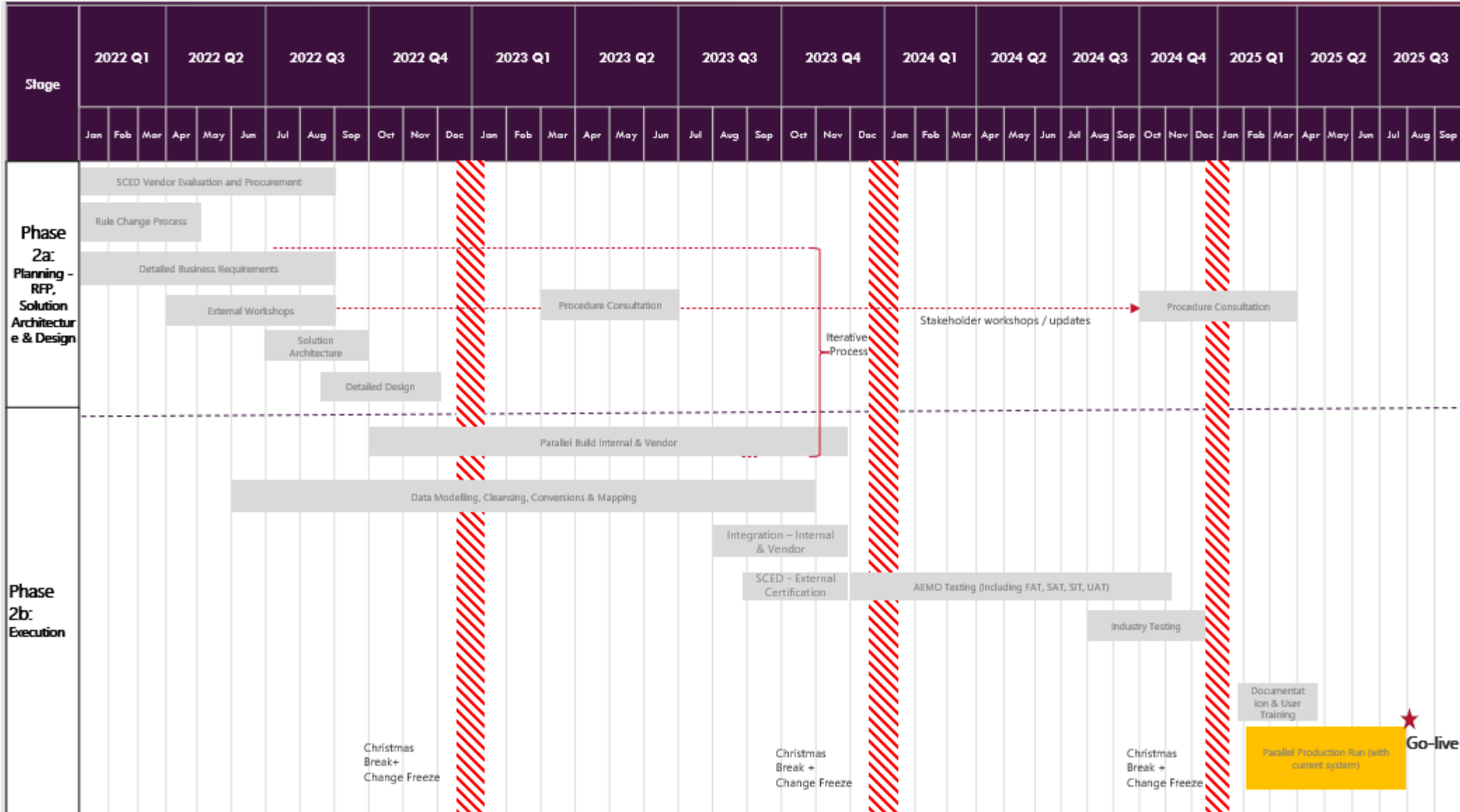
Workshop	Topic	Proposed Date
1	Generator Recall Process – current and future	Thursday 7 April 2022
2	Overview of the new process	Thursday 19 May 2022
3	Rescheduled - PASA Run types	Thursday 4 Aug 2022
4	Demand Forecast, Uncertainty Margin and Confidence Levels	Thursday 21 July 2022
5	Information to be made publicly available	Friday 26 August 2022

A series of stakeholder workshops to work through key technical concepts in detail is now complete.

Business Requirements – Stakeholder Consultation

- Detailed business requirements are now being developed
- Formal procedure consultation to commence once the key technical concepts have been addressed.
 - First Consultation (commence Mar 2023) :
 - Reliability Standard Implementation Guidelines (RSIG)
 - ST PASA Process description (*the ST PASA procedure*)
 - Second Consultation (commence Oct 2024)
 - Reserve Level Declaration Guidelines (RLDG)
 - Spot Market Timetable (for frequency of PASA runs)
- Informal workshops and updates will continue in-between.
- Providing feedback: STPASARreplacement@aemo.com.au

High Level Project Time-line



Glossary

Term	Definition
LCR	Largest Credible Risk
LOR	Lack of reserve
PASA	Projected assessment of system adequacy
PD	Pre-dispatch time frame
POE	Probability of exceedance. A 50% PoE load forecast is one which will be exceeded 50% of the time
ST	Short term time frame
UIGF	Unconstrained Intermittent Generation Forecast