

MINUTES

MEETING: ST PASA Replacement Project Workshop #3 – PASA Run Types
 DATE: Thursday, 4 August 2022
 TIME: 10:00am-12:00pm AEST
 LOCATION: Microsoft Teams Meeting only
 TELECONFERENCE DETAILS: **Join on your computer or mobile app**
[Click here to join the meeting](#)
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 aemo-au@m.webex.com
 Video Conference ID: 135 727 162 5
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Or call in (audio only)
[+61 2 8318 0090,,521870915#](#) Australia, Sydney
 Phone Conference ID: 521 870 915#

EXTERNAL ATTENDEES:

ORGANISATION REPRESENTED
AEMC
Amber Electric
AusNet Services
CS Energy
Department of Environment, Land, Water and Planning (DELWP)
Energy Australia
Hydro Tasmania
Iberdrola
IES
Intergen
Minter Ellison
Origin Energy
Powercor
RM Hedge

Agenda:

No.	Time	Agenda item	Responsible
1.	10:00 AM – 10:05 AM	Welcome and Introductions	Paul Johnson Chair
2.	10:05 AM – 10:10 AM	Background of ST PASA Replacement Project	Shivani Mathur AEMO - OPERATIONS

3.	10:10 AM – 10:20 AM	Determination of Reliability	Shivani Mathur AEMO - OPERATIONS
4.	10:20 AM – 11:00 AM	Determination of LOR levels	Shivani Mathur AEMO - OPERATIONS
5.	11:10 AM – 11:15 AM	Other runs	Shivani Mathur AEMO - OPERATIONS
6.	11:15 AM – 11:25 AM	Frequency of LOR runs	Shivani Mathur AEMO - OPERATIONS
7.	11:25 AM – 11:30 AM	Next Steps, Project timeline	Shivani Mathur AEMO - OPERATIONS
8.	11:30 AM – 12:00 PM	Q & A (any further feedback)	Shivani Mathur AEMO - OPERATIONS

Item #1: Welcome and Introduction – Chair – Paul Johnson (AEMO)

The chair welcomed and informed the attendees that:

- Notes will be taken, and a summary circulated after the session.
- Participants are not permitted to record the meeting. Unauthorised recording is likely to break a number of state and federal laws.

Item #2: Background of ST PASA Replacement Project – Shivani Mathur (AEMO)

Slides 4 to 6 from the slide pack were discussed. These slides included progress of the project to date and an update on stakeholder consultation for business requirements.

- No questions were raised relating to this topic.

Item #3: Determination of Reliability – Shivani Mathur (AEMO)

Slides 8 and 9 from the slide pack were discussed. These slides included a comparison of the proposed system to the current ST PASA system.

- No questions were raised relating to this topic.

Item #4 – Determination of LOR Levels – Shivani Mathur (AEMO)

Slides 11 to 17 from the slide pack were discussed. These slides included an overview of the three levels of LOR proposed for the new system and compared current LOR levels in current ST PASA system to proposed LOR levels in the proposed system. These slides also highlighted the differences of the runs.

Key discussion points were:

- CS Energy sought clarification on slide 12 for conditions of current LOR1 levels

- AEMO responded the N-1 constraints are already taking into account network contingencies and then we are looking at a trip of the largest and second largest generator.
- AEMO explained that similar to the current process followed for LOR 2 and 3 conditions, AEMO may intervene in the market if there is not enough market response after flagging LOR Orange or Red conditions.
- CS Energy raised a question relating to slide 13 if RAS schemes will be taken into account during these run
 - AEMO confirmed RAS schemes will be taken into account.
- Energy Australia sought clarification on slide 16 that uncertainty margins for each run is published for participants to reconcile deficits or view surplus.
 - AEMO responded we will publish uncertainty margin and 50 POE demand, but concept of surplus is different in new ST PASA system. These runs won't be maximising reserve but meeting the supply demand balance (factoring in uncertainty)
 - Energy Australia commented being provided with surplus measures would be useful when looking at opportunistic outages.
 - AEMO responded the warning run would inform participants that the power system is approaching a reserve shortfall condition, and network congestion information will be published to inform participants of the impact of outages on those reserve shortfalls.
 - Published PASA availability will further inform participants on the location and amount of additional recallable capacity reserves.
 - AEMO requested Energy Australia to send email to STPASARepacement@aemo.com.au articulating their concerns.
 - Energy Australia sought clarification on how the current ST PASA considers regions:
 - AEMO responded that the current ST PASA considers each region in turn and aims to maximise supply in that region after meeting the supply/demand balance in other regions. This is not reflective of how decisions are made in real time

Item #5: Other Runs – Shivani Mathur (AEMO)

Slides 19 to 21 from the slide pack were discussed. These slides included discussion on the types of runs and objectives of these runs, including information on the conditions that could activate these runs.

Stakeholders were asked if they would consider the 'PASA Availability Recall' Run (on slide 19) useful for their decision making.

- Energy Australia sought clarification that no uncertainty margins would apply to PASA Availability used in that run
 - AEMO clarified that no uncertainty margins would apply to the extra capacity provided by PASA Availability, but uncertainty margins would apply to the bid Max Availability.
- CS Energy responded that the 'PASA Availability Recall' run looks beneficial and provides transparency and they would be very supportive so long as it is understood what the run represents.
- Energy Australia commented on LOR notices issued in the past few weeks which haven't eventuated. This run would provide more information to participants about total capacity available.
- Energy Australia asked whether AEMO would report "actual" reserve shortfalls in addition to the forecast reserve shortfall from ST PASA
 - AEMO advised this information would be useful internally and has been included in our requirements. It is important to note that even this information will be a 'forecast' and not an 'actual' as some inputs used will be a forecast for 5 mins ahead. Once we have the SCED engine running we will be able to ascertain how/if it is feasible to perform an 'actual' reserve shortfall run within 5 minutes, before we commit to providing this information to the market.

Item #6: Frequency of LOR Runs – Shivani Mathur (AEMO)

Slide 23 from the slide pack was discussed. This slide included information on how the frequency of the runs would be determined by the time taken for the new ST PASA to run. More information of timing to be shared once AEMO commences development of the SCED and the overall ST PASA system

Key discussion points were:

- Energy Australia requested that if the runs for latter horizons will not be run as frequently, they would still like to see the bid Availability information updated more frequently.
 - AEMO advised the raw bid Availability for the next 7 days can be published every half hour or every hour, adding this would not necessarily be tied to each SCED run.

Item #7: Next Steps/ Project Timeline – Shivani Mathur (AEMO)

Slides 25 to 26 from the slide pack were discussed. These slides included information on the upcoming workshop to discuss data to be published after each run of ST PASA and further workshops to discuss some of the topics using examples. These slides also provided a high-level project timeline which included formal procedure consultation to commence next year while the project team work on the detail design with go-live date of July 2025.

Key discussion points were:

- Energy Australia asked a question on slide 26 if the modelling required for determining uncertainty margin, discussed in the last workshop, would be covered in the external workshop procedure consultation phase, scheduled for mid-next year in the timeline.
 - AEMO responded internal discussions are ongoing about the best way to proceed to provide best value for stakeholders as well as meeting AEMO's timelines. Based on feedback from last workshop, AEMO would be looking to provide uncertainty data after the backcasting work to determine confidence levels is completed in mid to late 2024.

Item #8: Q&A / Other Feedback – Shivani Mathur (AEMO)

- Energy Australia asked whether the system AEMO chooses to proceed with might be the existing ST PASA system with some augmentations and not an entirely new system
 - AEMO responded that a Request for Proposal has been submitted for vendors to develop and deliver a solution that is flexible and works for any future changes.
- CS Energy commented that FCAS should have similar position to energy and asked about how co-optimisation with energy will work with proposed methodology, and if this extends to essential system services will the ST PASA engine be able to accommodate.
 - AEMO responded that essential system services will likely be modelled in ST PASA in the form of constraints (e.g., for managing system strength) rather than attempting to co-optimize with energy