

MINUTES

MEETING: ST PASA Replacement Project - Workshop #5 – Published Information
DATE: Friday, 26 August 2022
TIME: 10:00am-12:00pm AEST
LOCATION: Microsoft Teams Meeting only
TELECONFERENCE DETAILS: **Join on your computer or mobile app**
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[+61 2 8318 0090,521870915#](tel:+61283180090521870915) Australia, Sydney
Phone Conference ID: 521 870 915#

EXTERNAL ATTENDEES:

ORGANISATION REPRESENTED
AEMC
Amber Electric
CS Energy
Department of Environment, Land, Water and Planning, VIC Govt.
Energy Australia
Global ROAM
Loy Yang B
Origin
Overwatch Energy
Queensland Electricity Users Network
Shell Energy
Snowy Hydro
Stanwell

Agenda:

Time	Agenda item	Responsible
10:00 am – 10:10 am	Welcome and Introductions	Paul Johnson Chair
10:10 am – 10:20 am	Published Information – Inputs	Dalibor Balicevic AEMO – OPERATIONS
10:20 am – 10:30 am	Published Information - Outputs	Dalibor Balicevic AEMO - OPERATIONS
10:30 am – 10:40 am	Content of Market Notices	Dalibor Balicevic AEMO - OPERATIONS
10:40 am – 11:00 am	PASA Information Visualisation	Dalibor Balicevic AEMO - OPERATIONS
11:00 am – 11:30 am	Q & A (Published Information Feedback)	Dalibor Balicevic AEMO - OPERATIONS
11:30 am – 12:00 pm	Next Steps, Project timeline	Dalibor Balicevic 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.

AEMO advised that:

- Today's presentation is about information to be made publicly available via the new ST PASA system.
- The work being presented today has not been finalised yet. This is AEMO's proposal being shared with external stakeholders.
- AEMO is seeking feedback on information presented in the slide pack.

Item #2: Published Information - Inputs – Dalibor Balicevic (AEMO)

Slide 3 from the slide pack was discussed. This slide included input information that is new and not currently published as well as highlighting where AEMO is adapting a new approach compared to the current system and NER definitions that may have changed.

- Energy Australia raised a question: would actual nodal loads be published?
 - AEMO responded that actuals will be published the next day.

- Shell raised a question whether uncertainty margins will be published on a regional or nodal basis.
 - AEMO responded that it will investigate the possibility of publishing uncertainty margins on both a regional and nodal basis.

Item #3: Published Information - Outputs – Dalibor Balicevic (AEMO)

Slide 4 from the slide pack was discussed. This slide included output information that is new and not currently published as well as NER definitions that may have changed.

- Shell sought clarification on definition of branches
 - AEMO responded branches were transmission lines
 - QEUN requested for a specific example of a branch and if this was about customers directly connected to a transmission line
 - AEMO responded that this is for the transmission network only and physical nodes connected to the transmission network.
- Energy Australia encouraged publication of both UIGF and maximum technical capacity of the semi-scheduled units. This would provide transparency on semi-scheduled limits/outages which is important given the increasing capacity from these sources.
 - AEMO responded this is currently published retrospectively and another project is looking at publishing real time measured SCADA availability on each wind and solar farm. Publication of prospective upper MW limit and turbine/inverter availability data is a new request that will need to be investigated.
 - AEMO clarified that it is unable to identify which version of the submitted upper MW limit and turbine/inverter availability data was used by AWEFS and ASEFS to produce the UIGFs input to a particular PASA run.
- QEUN raised a question asking how this would work for renewable generation that is connected to distribution network, not transmission network. i.e. not all DUIDs are directly connected to the transmission network
 - AEMO advised that branches are transmission lines that are within AEMO operational oversight. Distribution connected generation would be modelled at the closest transmission node (i.e. the unit output is reflected at the nearest transmission node). Some parts of distribution network may be modelled but as simplified (bundled) representation.
- Shell raised a question that, given the purpose of the RSIG is to operationalise the reliability standard which is based on unserved energy due to supply reliability shortfall excluding the impact of intra-regional network constraints, would the inclusion of network constraints in PASA and reporting of shortfalls be inconsistent with this objective. Interrupted supply would be included in reporting as a transmission issue not a reliability issue.
 - AEMO responded that, in using our backcasting system to develop the appropriate Uncertainty Margins (via selection of Confidence Levels), the impact of network constraints will be investigated.
 - Shell raised this concern to ensure AEMO did not implement reserve levels in the new PASA that went beyond that required to meet the definitions of unserved energy and supply reliability in the reliability standard.

- Shell raised a question on whether LOR will be reported on a regional or nodal basis and if these will be defined correctly
 - AEMO responded that it will investigate reporting both regional and nodal LORs
 - AEMO added that further discussions can continue offline to discuss definitions under the rules and how AEMO's proposal is aligning to those definitions

Item #4 – Content of Market Notices – Dalibor Balicevic (AEMO)

Slide 5 from the slide pack was discussed. This slide highlighted that there will be minimal changes to the content of Market Notices.

- Shell and Energy Australia requested that more information be included in the LOR Market Notices including identification of the system security issue e.g., the credible contingency causing the issue, the size of the contingency etc. This will provide information to allow participants to make decisions in both short and long term to ensure the issue doesn't occur again.
 - AEMO explained that providing all these details will make the Market Notices very long especially since there could be a few contingencies causing the same issue. The detailed information will be provided to the market via other avenues.
 - AEMO uses a number of pre-determined templates for Market Notices in order to provide quick and consistent information to the market. Developing a customised notice for each alternative may not be very efficient.
 - AEMO will investigate further on how it can provide more transparency in the Market Notices without making them too long.
 - AEMO also explained that the full list of contingency definitions is proposed to be published, with a sub-set of only the most significant contingencies used in the PASA runs.

Item #5: PASA Information Visualisation – Dalibor Balicevic (AEMO)

Slides 6 to 9 from the slide pack were discussed. These slides included examples of how the information could be displayed and what information could be displayed.

Key discussion points were:

- QEUN commended AEMO on colour coding LORs and including them on AEMO's website as per QEUN's proposed suggestions.
- Energy Australia raised a question about whether branches and nodes will be reconcilable with the entities in the NETWORK_SUBSTATION_DETAIL/ NETWORK_EQUIPMENT_DETAIL table (Indexes: SUBSTATIONID,

EQUIPMENTTYPE, EQUIPMENTID) given that connection point IDs are not easily reconcilable with TNIs

- AEMO confirmed that the branches and nodes on displays will be reconcilable with the entities in these tables, which are based on the descriptors in the EMS database used for the new PASA
- QEUN raised concerns with AEMO publishing the heat map on AEMO's public website. There may be small customers (like farmers) viewing and making decisions based on information they don't understand
 - AEMO responded that the feedback from the stakeholders has been to provide more transparency of information and will need to balance this need of greater transparency with the risk of it being misinterpreted.
 - AEMO will think further about its target audience and the best method to reach its audience.
- Shell raised a question about how often the maps will be updated particularly with regards to transmission issues. Preference is for the maps to be as close to real time as possible.
 - AEMO advised that it is investigating the possibility of updating the map after each ST PASA run. AEMO will also explore the option of updating the map as close to real time as possible.
- OverWatch Energy raised a question about whether or not some of the mapping layers could be made available for download to integrate into internal systems.
 - AEMO responded this is not currently a requirement but will be taken into consideration.
- Origin Energy raised a question about whether the mapping was publicly available.
 - AEMO responded the mapping was for illustration purposes only for this workshop and are exploring how this information can be made available publicly.
- QEUN raised a question on whether AEMO is able to track traffic accessing LOR notices on their website to ascertain non-market participants viewing notices to determine what is happening in the grid.
 - AEMO responded that it can determine the number of times information on the website was accessed but is unable to identify who accessed the information.
 - QEUN commented more information can be provided if LOR information could be filtered by jurisdiction.
 - CS Energy agreed with QEUN regarding regional filtering of notices.
 - AEMO noted this suggestion
- Energy Australia raised a question about whether AEMO would be applying uncertainty margins for all regions in a run
 - AEMO responded the new solution will be solving for the whole NEM, not solving per region.
 - Energy Australia sought further clarification on whether AEMO was assessing uncertainty margins on a nodal basis and adding up uncertainty measures for each node in the region or scaling down the regional uncertainty margins to the nodal uncertainty margin.
 - AEMO responded it was the latter and had been discussed in the previous workshop.

- Shell commented there was still a lack of understanding on uncertainty measures regarding the new solution and suggested another workshop once modelling/Backcasting is completed.
 - AEMO responded that all questions and concerns have been noted and discussions and workshops will continue as the project evolves.
- Shell requested that confidence level results be provided all the way down to 50%, as 50% is statistically the neutral outcome and anything above 50% is implementing a bias
 - AEMO responded this request will be noted.
- CS Energy endorsed all the comments made and commented obvious approach is to continue informing participants.

Item #6: Q&A (Published Information Feedback) – Dalibor Balicevic (AEMO)

Slide 10 from the slide pack was discussed. Participants were asked if they had any further feedback regarding the new approach with maps and visualisation aids and if these would be beneficial.

- QEUN raised a question about whether the jurisdictional system security coordinator (JSSC) in each region will be receiving colour coded notices (traffic lights)
 - AEMO responded there are processes in place to discuss reliability issues with the JSSCs and these processes will continue. These currently include reports/information being provided for jurisdictional representatives.
- QEUN raised a further question about how the information was being deciphered, as the JSSC would potentially need to ask for voluntary load reduction.
 - AEMO responded there is a separate process to share information with JSSCs, etc in each of the regions and JSSCs also have access to market notices and other public information.
- QEUN raised a further concern about JSSCs ability to potentially solicit a response from consumers who are not market participants.
- QEUN further commented that soliciting a response from consumers may reduce the cost of RERT and directions and today's discussion is only about market participant responses.
 - CS Energy responded that QEUN could be referring to concept of DER which is a very immature process at the moment.
 - CS Energy raised the question of whether the DER process will be incorporated into PASA
 - AEMO responded that the only DER response that will be dispatched in PASA is wholesale demand response. Other DER response is currently not in scope but will be considered in the future as these processes evolve.

Item #7: Next Steps/ Project Timeline – Dalibor Balicevic (AEMO)

Slides 12 to 13 from the slide pack were discussed. These slides provided commencement dates for the first and second formal procedure consultations with informal workshops and

updates to continue in-between the procedure consultations. These slides also provided a high-level project timeline with go live date of July 2025.

Key discussion points were:

- QEUN commented that the go live date of July 2025 is too late, as load shedding will be happening on numerous occasions before the go live date. Time will be required to complete market research to gauge how consumers (not market participants) will respond to the traffic lights and the colours should be trialled now.
 - AEMO responded July 2025 is for the whole project and the new methodology regarding providing LOR on nodal level and July 2025 is the earliest this can be delivered.
 - QEUN raised a query if this could be done on a regional reference node first to consumers.
 - AEMO responded this will need to be discussed internally and will be around visualisation of the current results as the new system will only be available from July 2025.

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

- Energy Australia commented that as discussed in the previous workshop session, and acknowledging that the new ST PASA process is different, it would be nice to have some kind of MAXSPARE CAPACITY measure.
 - AEMO responded by thanking Energy Australia for sending their email and that internal discussions are ongoing about how this can be achieved. AEMO commented further discussions may be required to understand how the spare capacity is used by participants.
 - Shell sought clarification if all participants could be included in the discussion
 - AEMO responded with yes.
- CS Energy raised a question whether the new PASA will make it easy to identify the regional benefit of intervention.
 - AEMO responded that yes it will be provided to the exact location in the region where the benefit will be utilised.
- Shell commented the concept of the map was liked and would encourage further discussion and conversation on the concept.
- AEMO thanked all participants and requested for further feedback and comments to be emailed to STPASARreplacement@aemo.com.au.