



Minutes

Meeting Title:	Power System Security and Reliability Standards Working Group (PSSRSWG)
Date:	29 February 2024
Time:	1:00pm to 2:25pm
Location:	Microsoft TEAMS

Attendees	Company	Comment
Dora Guzeleva	Chair, Energy Policy WA	
Toby Price	AEMO	Joined 2.07pm
Mena Gilchrist	AEMO	
Aditi Varma	ERA	
Tessa Liddelow	Shell Energy	Joined 1.10pm
Rhiannon Bedola	Synergy	
Noel Schubert	WA Expert Consumer Panel	
Luke Skinner	WA Expert Consumer Panel	
Daniel Cassidy	Western Power	
Sabina Roshan	Western Power	
Bronwyn Gunn	Energy Policy WA	
Sanna Pember	Energy Policy WA	
Stephanie Hemsley	Energy Policy WA	
Ashwin Maharaj	Mott MacDonald	Until 2.06pm
Tyson Vaughan	Mott MacDonald	
Ed Chan	Mott MacDonald	
Jaden Williamson	Merz	
Geoff Glazier	Merz	
Apologies	From	Comment
Hugh Ridgway	Alinta Energy	
Patrick Peake	Perth Energy	
Robert Ceic	Mott MacDonald	
Analena Gilhome	Mott MacDonald	

Item	Subject
1	<p>Welcome and Agenda</p> <p>The Chair opened the meeting at 1:00pm with an Acknowledgement of Country and welcomed members.</p>
2	<p>Meeting Attendance</p> <p>The Chair noted the attendance and apologies as listed above.</p>
3	<p>Competition and Consumer Law Statement</p> <p>The Chair noted the Competition and Consumer Law obligations circulated with the meeting agenda.</p>
4	<p>Updates on the Technical Working Group</p> <p>The Chair noted that the Technical Working Group has met twice since the last PSSRWG meeting (on 7 and 21 February 2024). She added that the meeting on 7 February focused on reaching an agreement on the final proposal for the stage 1 package (the PSSR Analysis Workbook), while the meeting on 21 February commenced discussions regarding high level gaps for stage 2.</p>
5	<p>Stage 1 – Framework</p> <p>The Chair noted that:</p> <ul style="list-style-type: none"> the PSSRSWG members have received the PSSR Analysis Workbook, detailing the exciting PSSR Standards and related mechanisms; and the Market Advisory Committee (MAC) members will be updated on the activities of the PSSRSWG at the 21 March MAC meeting. <p>Mr Glazier outlined the purpose of today’s meeting (slide 2).</p> <p>Mr Glazier presented the work of the PSSR Analysis Workbook (slide 5).</p> <p>Mr Glazier presented a high-level summary of the stage 1 review (slide 6), noting that the results outlined in the slide will inform the work under stage 2 (gap analysis) as it demonstrates whether there are appropriate mechanisms in place and if there are contradictions.</p> <p>Mr Glazier presented the review of the PSSR Standards contained in the Wholesale Electricity Market (WEM) Procedures (slide 7).</p> <ul style="list-style-type: none"> Mr Schubert asked whether a review of any of Western Power’s internal procedures and policies should be included, as these also may affect security and reliability. He gave the example of the policy not to patrol power lines during high fire danger periods and noted that the outcome of this could be higher levels of outages. <p>The Chair clarified that internal procedures are out of scope, as these should be aligned with higher level instruments.</p> <p>Mr Glazier agreed with the Chair and referred to the content of the third dot point on slide 7, noting that requirements and policies in place to meet the standards may evolve in response to new emerging technologies.</p> <ul style="list-style-type: none"> Mr Schubert raised a point about outages, highlighting that the majority are due to network issues (planned or unplanned). He questioned whether focusing on the main causes of network outages could inform regulatory actions and improve customer experience.

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	<p>Mr Glazier acknowledged Mr Schubert's point, noting that the Electricity Industry (Network Quality and Reliability of Supply) Code 2005 (NQRS Code) and Electricity Networks Access Code (ENAC) contain reporting requirements.</p> <ul style="list-style-type: none"> Mr Schubert noted that, in his view, the current reporting may not capture detailed insights due to averaging / grouping of customers, etc. He proposed conducting a more in-depth analysis of data to uncover additional factors contributing to outages. <p>Mr Glazier acknowledged Mr Schubert's point, and the importance of recognising when standards aren't being met as this project progresses.</p> <ul style="list-style-type: none"> Mr Schubert agreed and suggested an assessment of the standards that aren't being met could be used to prioritise tasks moving forward. <p>Mr Glazier clarified that this matter will be raised at the next Technical Working Group meeting, particularly with Western Power, to further explore what data sets could provide the most insights.</p> <p>Mr Glazier presented the outcome of the additional procedures review (slide 8). He noted that, except for number 2, each of the items identified is secondary to a primary standard.</p>
<p>6</p>	<p>Stage 2 – Gap Analysis</p> <p>Mr Glazier presented the initial discussion on high-level gaps (slide 9) and discussed the role of the PSSRSWG for this stage of the work (slide 10).</p> <p>Mr Glazier presented the high-level gaps identified in the initial assessment (slide 11).</p> <p>Mr Glazier presented Gap 1.1 – Different Infrastructure Planning Standards (slide 12). He noted that:</p> <ul style="list-style-type: none"> different planning standards work in different environments and across time, and that in and of itself this is not an issue, but it is not clear how each should be applied. there are customer experience, reliability standards in the Access Code AA5 and the NQRS Code, as well as deterministic standards in the Technical Rules, and it is not clear how each of these apply to the analysis about the infrastructure that needs to be installed and how it should be operated. there is no consideration given to willingness to pay under the 0.0002% standard on the supply side. <ul style="list-style-type: none"> Ms Roshan noted that Western Power's planning is focused on growth on a deterministic basis, and then it is typically justified by a value of lost load if the investment wasn't made. Mr Cassidy noted that value of lost load is usually compared against the 'do nothing' scenario to support decision making. <p>Mr Glazier acknowledged this, but noted that this decision making drives the investment that results in the reliability and security outcomes, and therefore is part of the standard.</p> <ul style="list-style-type: none"> Mr Cassidy agreed that this helped decision makers to understand if the investment was a good decision and that the calculations can become quite complex, which means that Western Power may fall back on deterministic standards. <p>The Chair noted the timeframes under which decisions are being made may influence whether a deterministic or probabilistic approach is better.</p> <ul style="list-style-type: none"> Mr Cassidy agreed. Ms Varma asked what 'no specific penalties for not implementing investment to meet design' meant.

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Mr Glazier noted that section 2.5 of the Technical Rules states that the network must be designed in a certain way, and there are a range of other clauses that set out how the network should be implemented and operated. This allows Western Power the flexibility to not build in accordance with the deterministic standards if the situation calls for it. There are, however, financial implications of not meeting standards (SAIDA, SAIFI and CAIDI).

- Ms Roshan noted that there are financial incentives to provide higher levels of reliability, and penalties for not meeting the minimum. She noted that the service standard benchmarks are based on industry practice and an outcome of building and maintaining the network well. She noted there is no penalty for anything under the Technical Rules, and in any case this would be inappropriate as Western Power should be assessing whether each investment is prudent and efficient, and the exemption framework was put in place for that.
- Ms Varma agreed with Ms Roshan. She asked how regional reliability will be considered.

Mr Glazier noted that the specific provisions that relate to regional customers in the NQRS Code and AA5 act as a backstop for these very high cost of provision to customers, as the N-1 and unserved energy approaches can result in high cost of supply with customers getting a lower reliability outcome.

The Chair noted that regional reliability was discussed at the last Technical Working Group meeting, that it is in scope and that the outcome of this project should be a single minimum standard across the whole network.

- Ms Gilchrist queried whether any penalties to Western Power would flow through to network users.

The Chair noted that this project is concerned with a minimum standard, and that it is the role of the regulator to determine incentives and penalties relative to that standard. Western Power is a regulated monopoly with a regulated rate of return, so it is not necessary for those charges to end up with network users.

Mr Glazier stated that penalties related to the service standards don't increase the total required revenue and as such wouldn't flow back to network users.

- Mr Schubert noted that there are non-network alternatives for investment to meet standards as well.

The Chair agreed.

- Ms Roshan asked whether the regional reliability standards would be considered as a specific gap, noting Western Power is preparing for its next access arrangement.

Mr Glazier clarified there are some other gaps that pick this up, but noted that he would come back to it at the end if it hasn't been covered. He added that the statements in this slide aren't indicative of desired outcomes, just reflective of the status quo.

Mr Glazier noted there was significant time and effort put into an exemption for Meadow Springs, and perhaps there is a need to minimise the administrative process, provide clarity to the responsible parties and streamline processes to achieve sensible outcomes so that there doesn't need to be a long process every time investment is delayed where it is prudent to do so.

Mr Glazier presented gap B.1 – application of the Technical Rules to PSSR investment and operation (slide 13).

Mr Glazier presented gap 2.1 – no obligation on the network to ride through system disturbances (slide 14). He noted that network technology has changed from when the network was first built, and this may not have necessarily been a problem in the past but may be now.

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	<ul style="list-style-type: none"> Ms Varma asked whether this was in relation to frequency only, or voltage as well. <p>Mr Glazier clarified that there are a series of defined system disturbances for which generators must maintain continuous, uninterrupted operation and Western Power is not required to meet the same obligations.</p> <ul style="list-style-type: none"> Ms Roshan noted that the protection mechanisms exist for the safety of people, assets and the environment as well. <p>Mr Glazier noted that the same applies for generators, and there is always a trade-off between the protection of devices and ride-through requirements.</p> <ul style="list-style-type: none"> Ms Roshan agreed but noted that this should be subject to safety of people and loss of life. <p>Mr Glazier noted that safety and prevention of loss of life applies equally for generators.</p> <p>The Chair noted that the WEM Rules require generators to follow AEMO's instructions, unless doing so endangers safety.</p> <ul style="list-style-type: none"> Mrs Bedola agreed with having a caveat for safety. <p>Mr Glazier noted Ms Roshan's concerns and concluded that this is a gap, but the solution can be explored in the next stage of work.</p> <p>Mr Glazier presented Gap 3 – requirements, ongoing testing and implications of non-conformance across similar users (slide 15). He noted that there could be identical generators connected to the transmission and distribution network but that they have different requirements and compliance frameworks.</p> <ul style="list-style-type: none"> Mrs Bedola asked whether there was an expectation that there would be a GPS negotiation process for distribution connected generators. <p>The Chair noted that transmission and distribution connection processes will be bought together, and that it makes sense that exemptions would be considered for each. She added that the division between transmission and distribution is notional.</p> <p>Mr Glazier noted that there has always been negotiation under the Technical Rules, and this work has not been specifically considering existing generators but rather looking at the regulatory framework as it exists now. The aim of this project is to have a logical approach to how facilities are treated, and for the differences in the way facilities are treated to be grounded in the impact they have on PSSR and other practical limitations.</p> <p>Mr Glazier presented gap A.2 – requirements on energy storage (slide 16) and noted the need here was to consolidate information.</p> <p>Mr Glazier presented the gaps to be discussed at future meetings (slide 17). He noted that not all the gaps will be captured in discussion with the PSSRSWG, and that many of the gaps have been considered in Western Power's Technical Rules submission that has been in the public domain.</p> <ul style="list-style-type: none"> Ms Varma asked whether the definition of inertia would be revised to ensure it captures synthetic inertia from inverter-based resources. <p>The Chair noted that one of the key outputs of this stage of the project would be a full set of uniform definitions for PSSR related matters.</p> <ul style="list-style-type: none"> Mr Schubert noted he would like to see more explicit reference to the use of outage evidence to identify the gaps. He noted that a number of the recommendations in the Independent Review into the Christmas 2021 Outages (Shepherd Review) related to outage problems, and asked what role this would play in this project. <p>The Chair noted that this project is seeking to establish a best-practice minimum standard for the end to end system, and that it is the role of regulator to ensure that standard is met. She noted that the second layer of this project is the governance framework, and</p>

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this should look at the compliance of Western Power and AEMO and the role of the Economic Regulation Authority in ensuring compliance. From there, incentive mechanisms can be used.

Mr Glazier noted that the gap analysis has been carried out by looking at existing standards, with reference to the regulatory instruments. He asked if Mr Schubert was looking to find out if the standards as they exist are not delivering for customers.

The Chair noted that the standard will need to consider all three arms of the new State Electricity Objective (sustainability, cost and reliability/security). Once there is a standard that ticks those boxes, there needs to be a governance framework that supports that being met. She added that there may be evidence that standards may not be currently met, but the purpose of this project is to create a clear standard with a strong governance framework.

- Mr Schubert agreed, but noted that customer experience needs to be in the center and the evidence is in the outage data and the consequences of outages, and that this ought to be feeding back into prioritisation for this project.
- Ms Roshan noted that, with regard to the Christmas outages, Western Power has identified a number of feeders that require reinforcement and that it is looking into the regional reliability requirement.

The Chair noted that the goal should be to have a standard that is not reactive to events.

- Mr Schubert noted that it would be useful to consider what changes in AA5 are in response to the Shepherd Review .

Mr Glazier returned to Slide 12 and noted that in the standard development, it will be recognised that there needs to be a backstop mechanism for high-cost customers, but that ideally that will not be varied over time. He added that EPWA will look at the learnings from the Shepherd review to inform the analysis.

The Chair noted that the access arrangement should be examined, including the changes under AA5, and anything that is a standard should be brought into scope and improved if necessary.

The Chair asked if members were happy with the content of slide 17.

- Ms Roshan noted that reliability requirements for the network should be added.

Mr Glazier noted that EPWA would work on gap 1.1 and look at the definition of inertia.

The Chair noted that the NQRS and AA5 should be added to slide 17 as an additional point.

- Ms Roshan asked whether forecasting needed to be examined and, in particular, when and how different forecasts should be used. She noted that the last WEM Electricity Statement of Opportunities (ESOO) had certain assumptions about block loads for hydrogen, while the network planning did not account for this. She stated that the parameters and principles for long-term and medium-term planning should be set out clearly.

The Chair agreed and noted that some consistency is required for forecasting across similar timeframes.

Mr Glazier noted that another gap would be created around forecasting.

- Mr Price supported Ms Roshan's suggestion, noting the uplift in interactions between Western Power and AEMO for this year's Transmission System Plan (TSP) and ES00. He added that it would also be beneficial to reflect on the Rules with regards to the Whole of System Plan (WOSP), TSP and ES00.

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	<p>Mr Glazier clarified that the gap would outline that the forecasts are on a different basis, and the lack of clarity on how forecasts should be established.</p> <p>The Chair highlighted the need for aligning the forecasts, noting networks are increasingly able to use non-network solutions as a substitute for network investment.</p> <p>Mr Glazier clarified that networks need more locational data for forecasting, hence the forecasts are different. However, they should be made on the same basis and assumptions.</p> <ul style="list-style-type: none"> Ms Varma noted that participants should be able to continue to raise gaps as the work continues. <p>Mr Glazier noted that the project needed to progress to options analysis soon, but gaps could continue to be added for now.</p> <ul style="list-style-type: none"> Mr Cassidy asked if the PSSRSWG will discuss the changes to the Technical Rules proposed by Western Power, not covered by the gaps outlined in today's session. <p>Mr Glazier clarified that the PSSR Analysis Workbook contains all the PSSR related issues outlined in Western Power's Technical Rules submission to the ERA, with a link to the gap summary. He noted that not all the gaps will be captured in discussion with the PSSRSWG, inviting members to highlight gaps to be tabled for further discussions.</p> <ul style="list-style-type: none"> Mr Cassidy noted that the largest loss of infeed issue in the Technical Rules Submission was the most controversial and should be discussed in more detail. <p>Mr Glazier agreed to update Mr Cassidy once EPWA has categorised this into one of the main gaps.</p> <p>The Chair invited members to provide any final comments or ask any additional questions.</p>
7	<p>General Business</p> <p>No general business was discussed.</p>
8	<p>Next Steps</p> <p>The Chair noted that EPWA will update the PSSR Standards Working Group members on the date for the next working group meeting shortly.</p>

The meeting closed at 2:25pm