



## Minutes

<b>Meeting title</b>	Power System Security and Reliability Standards Working Group (PSSRSWG)
<b>Date</b>	25 July 2024
<b>Time</b>	1:00pm – 2:00pm
<b>Location</b>	Online, via TEAMS

<b>Attendees</b>	<b>Company</b>	<b>Comment</b>
Dora Guzeleva	Energy Policy WA (EPWA)	
James McIntosh	AEMO	Proxy for Mena Gilchrist
Toby Price	AEMO	
Hugh Ridgway	Alinta Energy	
Elizabeth Walters	Economic Regulation Authority (ERA)	
Bronwyn Gunn	EPWA	
Sanna Pember	EPWA	
Noel Schubert	Expert Consumer Panel	
Luke Skinner	Expert Consumer Panel	
Jaden Williamson	Mott MacDonald	
Geoff Glazier	Mott MacDonald	
Patrick Peake	Perth Energy	
Tessa Liddelow	Shell Energy	
Alex Garces	Synergy	Proxy for Rhiannon Bedola
Daniel Cassidy	Western Power	
Lizzie O'Brien	Western Power	Observer
Sabina Roshan	Western Power	

Item	Subject
1	<p><b>Welcome and Agenda</b></p> <p>The Chair opened the meeting at 1pm with an Acknowledgement of Country and welcomed members.</p>
2	<p><b>Meeting Apologies and Attendance</b></p> <p>The Chair noted the attendance and the apologies as listed above.</p>
3	<p><b>Competition and Consumer Law Statement</b></p> <p>The Chair noted the Competition and Consumer Law Statement circulated with the meeting agenda.</p>
4	<p><b>Updates on the Technical Working Group</b></p> <p>The Chair noted that the Technical Working Group has met on several occasions to discuss the proposed solutions to the issues identified in stage 2. She clarified that the Consultation Paper, initially scheduled for presentation to the Market Advisory Committee (MAC) on 5 September 2024, is now anticipated to be presented at the 28 November 2024 MAC meeting.</p> <p>She added that this rescheduling is due to the issues, that would need to be solved, were not known during the initial planning stages, and the technical complexity of developing solutions to the identified issues was taking longer than anticipated. EPWA has therefore decided to allocate more time to ensure thorough and accurate resolutions.</p>
5	<p><b>Stage 3 – Development of proposals</b></p> <p><b>Scope of Stage 3</b></p> <p>Ms Pember presented slides 2 - 3 – Purpose of today’s session and Agenda.  Ms Pember presented slide 4 – Stage 3 Overview.  Ms Pember presented slides 5 - 6 – The Scope of Stage 3 - Overview.  Ms Pember presented slides 8 – 9 – Issues allocated to other EPWA workstreams.</p> <p><b>Issues allocated to other EPWA workstreams</b></p> <p>Ms Pember made the following key points regarding Issue 7.</p> <ul style="list-style-type: none"> <li>• This issue has been rephrased a bit since it was initially presented to the PSSRSWG, however it remains materially the same.</li> <li>• The PSSR Standards Review is primarily focused on the standards themselves, making issue 7 better suited to be addressed by the ongoing Reserve Capacity Mechanism (RCM) evolution work.</li> <li>• There are ongoing discussions between EPWA and AEMO on how to address this issue.</li> </ul> <p>Ms Pember made the following key points regarding Issue 10.</p> <ul style="list-style-type: none"> <li>• The Non-Cooptimised Essential System Services (NCESS) framework was designed as the primary procurement framework.</li> <li>• The other alternative solutions and pathways that are available, including their removal, are better addressed by the Access Framework Review.</li> <li>• Mr Schubert asked for clarification on the alternative solutions pathway.</li> </ul> <p>Ms Gunn clarified that this entails the current parallel framework in the Electricity Networks Access Code (ENAC).</p> <ul style="list-style-type: none"> <li>• Ms Roshan clarified that this is also referred to as the Alternate Options Services (AOS).</li> </ul>

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The Chair noted that the approach has always been for all of these frameworks to be brought into the Electricity System and Market Rules (ESMR) as one procurement framework for alternative solutions. She clarified that alternative services are defined as services that are non-network solutions.

Mr Glazier added that this is a defined term in the ENAC that means non-network services.

Ms Pember presented Issue 11 – Distribution Outages Penalties.

Ms Pember presented Issue 14 – Publishing of Operating Margins.

### **Proposed Solutions to Identified Issues**

Issue 1: It is not clear how each Planning Standard should be applied, and customer value is not considered in all cases

Ms Gunn presented slide 12 – Definitions.

Ms Gunn presented slides 13-15 – Operations of Existing Standards for Western Power. She clarified that slide 15 visualises how the different planning standards interact and overlap.

Ms Gunn presented slide 16 – Discussion – Deterministic Standards.

Ms Gunn presented slide 17 – Discussion – Value of Customer Reliability (VCR).

- Mr Schubert noted that the VCR is an average or calculated value but it varies for different customers depending on their location, experiences with reliability and business need. He clarified that VCR is a tool that can be used, but it needs to be qualified how it's applied to ensure the desired outcomes from a consumer perspective.

Ms Gunn agreed, noting that this may also change across the time of day/year, and noted that this will be added to the “cons list” on slide 17.

- Mr Skinner pointed out in the chat that individuals with disabilities who depend on energy for survival or comfort will place a significantly higher value on customer reliability compared to the average person.

Ms Gunn presented slide 18 – Discussion – Outcome Standards.

- Mr Schubert noted that outcome standards, such as SAIDI and SAIFI, are averages and may not reflect the felt experience of individual customers in poor reliability areas. He added that they are designed to measure the general felt experience but may not accurately capture the reliability experiences of smaller customer groups or individuals.

Ms Gunn responded that this issue largely depends on how granular the segmentation is when setting those standards.

Mr Glazier agreed, emphasising that applying standards differentially and on a segmented basis can help achieve more accurate outcomes.

- Mr Schubert discussed the importance of operational decisions that can directly affect customer reliability. He highlighted that factors such as vegetation management, response times, and the distance of depots can significantly impact reliability. He noted that, in the past, with more decentralised resources, reliability might have been better for some customers. He asked whether the current standards are intended to capture these operational aspects.

Ms Gunn clarified that the scope of this review is to establish a minimum power system security and reliability standard and this includes setting an outcome-based standard as outlined in the upcoming slides. She added that this project will not address the operational activities of Western Power to meet this standard.

- Mr Schubert noted that, early in the project, he suggested using outage data as a key indicator for prioritising the resolution of issues causing outages. He highlighted that the outage data reflects operational practices and noted improvements since the 2021 Christmas outages, including changes made by
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Western Power following the Shepherd review. He added that the recent service standard performance report shows significant reliability improvements in some areas. Mr Schubert expressed concern that if the project does not incorporate priorities from outage data, it might miss a crucial aspect of addressing and preventing outages.

Ms Gunn acknowledged that examining outage data to address the primary causes of outages is a reasonable approach. However, she noted that this is beyond the scope of the current project, which is already complex and focused on consolidating standards into a new framework. She added that incorporating detailed operational practices for each party to meet the standard would significantly extend the project timeline. She clarified that she recognised the validity of the suggestion but noted it cannot be part of this project.

The Chair acknowledged that outages occur more frequently in the country areas. She explained that the aim is to implement an outcome-based measure that ensures the network operator meets specific benchmarks and outcomes. She added that investigating the causes of these outages is not necessary for developing the standard and that, as long as the standard guarantees that the network operator meets consumer-focused benchmarks, the project has achieved its objective.

- Mr Schubert expressed concern that, despite a long history of focusing on reliability, some critical issues remain unaddressed and that important factors affecting consumers have not received sufficient attention. He supported the objectives of this review but emphasised that addressing these overlooked issues is crucial for meeting the standards and improving outcomes for consumers. He clarified that he is not suggesting these issues be included in this project but emphasised their significance for overall reliability improvements.

The Chair suggested that it would be useful to compile a list of issues that have not yet been addressed. She noted that, while understanding the reasons behind outages could be informative for Western Power and the regulator, the primary objective of the project should be to develop a standard that effectively serves consumers. The Chair emphasised that the focus should be on creating a consumer-centric standard, with the regulator then using incentive mechanisms to ensure that the desired outputs and benchmarks are achieved.

- Mr Schubert acknowledged the project's focus and expressed a desire to explore additional measures for implementing necessary improvements. He noted that the Shepherd review led to positive changes and enhanced reliability, indicating that there are still opportunities for further improvements. He pointed out specific issues, such as vegetation management and the absence of overhead earth wires, which affect reliability, particularly in lightning-prone areas. He recognised that these issues are not part of the current project but emphasised that practical solutions must be addressed in the future. He stressed that minimum reliability standards for individual customers must be considered, and practical solutions should not be dismissed due to perceived cost or complexity.

**ACTION: Mr Schubert to provide a list of opportunities for network reliability improvements. EPWA to consider where these issues might fit in the overall work program.**

Mr Glazier highlighted that probabilistic and outcome-based standards are crucial for guiding operational responses to reliability issues. He clarified that probabilistic standards help justify investments or changes aimed at improving outcomes, whereas outcome-based standards evaluate whether these measures have been effective.

Ms Gunn presented slide 19 – Options for application of standards for Western Power.

Ms Gunn presented slide 20 – Assessment of Options.

Ms Gunn presented slide 21 – Analysis.

Ms Gunn presented slide 22 – Proposed option – summary.

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- Mr Cassidy observed that the effectiveness of outcome-based standards hinges on how well they are set. He noted that, while these standards provide a good way to assess network performance, the challenge lies in determining the appropriate levels for each metric and setting these standards too tightly or too loosely could impact their efficiency compared to deterministic standards. He emphasised the importance of finding the correct balance in setting these metrics, including how granular they are, to ensure they are both effective and cost-efficient.

Ms Gunn noted that the Technical Working group discussed the need for further examination of the specific numbers for outcome-based standards. She mentioned that there will be a process to determine these numbers every three to five years, considering various inputs and consultations. While no final decision has been made regarding the exact measures and numbers, she acknowledged the importance of the discussion and that there will be continued conversations on this matter.

- Mr Schubert highlighted that setting outcome-based standards depends heavily on customer tolerance for outages. He noted that, if customers become intolerant, they may escalate their complaints to the Minister, which can lead to political interference. This, in turn, can force Western Power to make changes, as has occurred in several regional towns over the years.

Mr Glazier pointed out that existing settings in the Network Quality and Reliability of Supply (NQRS) Code and Access Arrangement 5 (AA5) should serve as a starting point. He agreed with Mr Cassidy's observation that a framework is needed to ensure these standards evolve appropriately and the goal is to address reliability issues without making electricity unaffordable. He emphasised the importance of balancing reliability improvements with cost considerations.

Mr Gunn agreed that the existing settings in the NQRS Code and AA5 are a good starting point. However, she noted that some of these settings have previously been discussed as potentially unfit for purpose or infeasible. She clarified that before incorporating them into the ESMR, there will need to be a review to determine if they are effective and what changes might be necessary.

- Mr Cassidy noted that the transmission standards are not currently integrated with distribution standards, and that detailed work will need to be done to consider this. He also pointed out that the discussion needs to take into account market costs.

The Chair emphasised that the aim is to meet the expectations of various consumer groups. She clarified that this is the essence of an outcome-based approach, which will be influenced by what the government considers the appropriate outcomes for customers are. The Chair acknowledged Mr Cassidy's point about the focus on distribution but reinforced that the purpose of the approach is to ensure alignment with consumer expectations.

- Mr Cassidy agreed with the Chair but noted that outcome-based standards are typically used for distribution settings, particularly residential ones. He pointed out that for transmission, where multiple layers of redundancy exist due to deterministic standards, market participants are more focused on market costs and congestion. He noted that SAIDI and SAIFI might not always align with this focus. Mr Cassidy acknowledged that while deterministic standards and planning tools are used to identify net benefit investments, the approach in transmission tends to differ from a SAIFI and SAIDI-focused approach.
  - Ms Roshan added that the consideration should extend beyond just transmission or distribution, as events can impact both. She emphasised the need for a comprehensive framework for outcome-based standards that integrates with minimum standards under the ESMR and incentive-based outcomes in the Access Arrangement. She acknowledged that this is a significant piece of work that needs to be developed carefully and not merely added for the sake of
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completeness.

- Mr Schubert noted that there are now many more solutions available at the customer level, such as standalone power systems, microgrids, and batteries. He pointed out that these additional tools provide more options for addressing reliability issues.

Mr Glazier added that the outcome-based standards will exclude outages related to Under Frequency Load Shedding (UFLS) operations or generation adequacy issues. He emphasised the need to specify which elements to exclude to ensure the framework's effectiveness.

Ms Gunn agreed with this.

**Issue 9: When PSSR standards should over-ride economic efficiency tests.**

Ms Gunn presented slide 24 – Discussion and proposed solutions.

- Mr Cassidy pointed out that deterministic standards are often effective as a screening tool and typically lead to good outcomes. He questioned whether an economic and efficient test should be applied to every instance where deterministic standards are used. If this is the case, he wondered if it undermines the purpose of having deterministic standards in the first place.

Ms Gunn clarified that the intention is not to require an economic and efficient test for every application of deterministic standards. Instead, the approach aims to maintain the current practice in which deterministic standards guide network design and planning, while probabilistic planning is used when deviations from these standards are planned. The focus will be on transparency regarding these deviations, rather than requiring specific exemptions from the regulator. She added that compliance will be measured against the outcome-based standards, not the deterministic ones.

- Mr Cassidy emphasised that deviations from deterministic standards should be by exception and that this will be important in the drafting of the rules.
- Ms Roshan welcomed the idea of incorporating economic efficiency where it is both efficient and prudent. She highlighted the need to consider environmental aspects, as noted in the State Electricity Objective (SEO). She emphasised the challenge of balancing economic efficiency with strong environmental considerations.

The Chair suggested rewording the framing of this slide to align/be consistent with the SEO instead of just focusing on economic efficiency.

Ms Gunn agreed with this.

Mr Glazier explained that, while Western Power is guided by technical standards, it must also develop business cases that go beyond merely following these standards. The process requires option analysis and decision-making to ensure that all factors are considered.

The Chair emphasised that the new SEO, which includes the three key areas of focus, must guide all actions and decisions, including those made by Western Power.

Mr Glazier agreed with the Chair's point and clarified that while Western Power must still develop business cases according to standard processes, these cases should not merely justify compliance with technical standards. Instead, they must demonstrate optionality, timing, and alignment with the SEO. If the standards lead Western Power in a direction that is not suitable, the business case should be able to justify alternative approaches in line with the SEO

**Issue 2: There is not a coordinated approach to the assumptions and input used in forecasts required to apply the various PSSR standards.**

Ms Gunn presented slide 26 – Discussion and proposed solutions.

Ms Gunn mentioned that an initial meeting between EPWA, AEMO and Western Power has taken place, and further discussions will continue to determine an

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appropriate working arrangement. She clarified that EPWA wants to avoid creating a register, that would require ongoing maintenance and management.

- Mr Peake suggested that it might be appropriate for Western Power to consider different scenarios compared to generation planning. For instance, anticipating new developments like data centres could lead to varying analyses depending on the location that is assumed that may be relevant from a network perspective but not a generation adequacy perspective.
- Mr Schubert noted that past forecasters often used their initiative to gather valuable data that might not be routinely collected. He added that, for example, Mr Ross Bowden collected extensive data from ABS on appliance penetrations and other statistics from various sources. He clarified that effective forecasting relies on leveraging such detailed and unconventional data to enhance accuracy.

Ms Gunn agreed, emphasising the preference for a collaborative approach rather than a register. She explained that a working group or a similar collaborative body would be more effective than a prescriptive rule-based system, allowing for flexible and adaptive problem-solving.

The Chair noted that further work is needed from the Technical Working Group on key issues, such as system strength and equipment connections.

Ms Gunn clarified that while no PSSR Standards Working Group meetings have currently scheduled, EPWA will endeavour to schedule another meeting in the near future.

The Chair thanked the working group members for their contribution and closed the meeting at 2 pm.

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