



An appropriate citation for this paper is: Power System Security and Reliability Standards Project Scope

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2. Background and work completed to date

2.1 Energy Transformation Strategy Stage 1

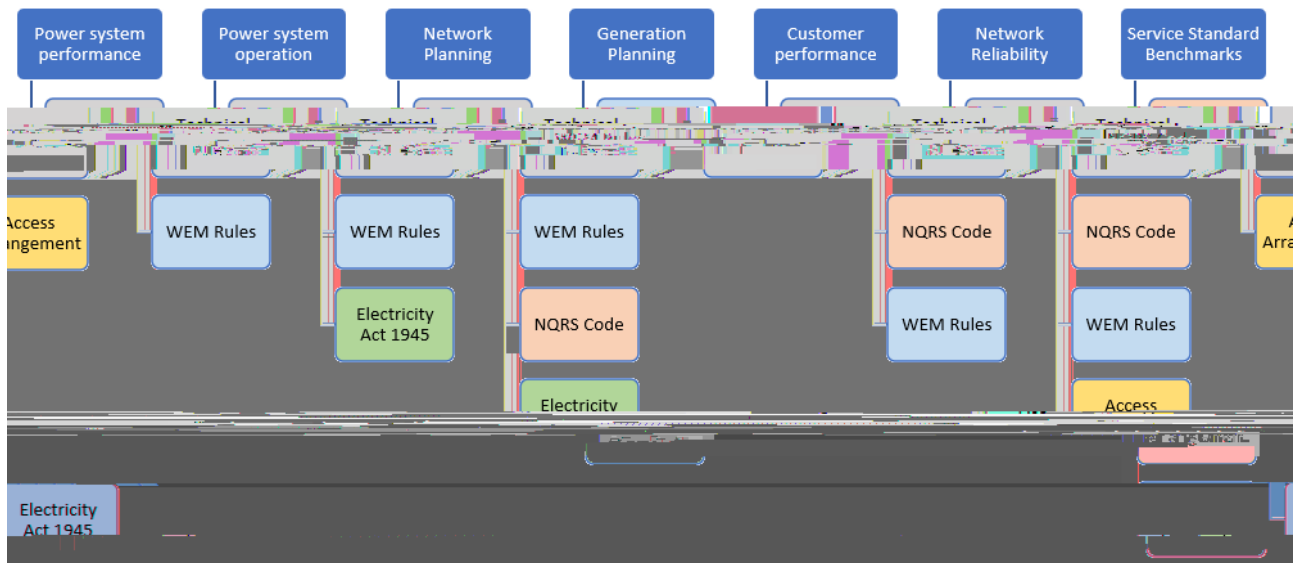
As part of the work under the Energy Transformation Strategy Stage 1, the Taskforce identified several issues in relation to the PSSR standards and their governance framework. These issues centred around the roles and responsibilities of Western Power and the Australian Energy Market Operator (AEMO) that needed to be addressed as a matter of urgency to ensure the effective management of the SWIS. These issues were addressed to the extent possible

The Bill introduces a range of new definitions, however there are a few key ones related to the PSSR Standards project. These include:

Reliability, in relation to the supply of electricity or the operation of an electricity system, means the ability of the electricity system to maintain or supply a consistent delivery of electricity to customers; and

Security, in relation to the supply of electricity or the operation of an electricity system,

Figure 2: Instruments governing power system security and reliability in the SWIS



The first step in the analysis will be to undertake a comprehensive assessment of the various PSSR related provisions in each of the above regulatory instruments. This should include identifying:

- the relevant standards;
- their governance arrangements (i.e. how are they set and/or changed);
- the role of AEMO and Western Power in implementing each standard across planning and operational timeframes; and
- the monitoring, compliance and enforcement framework.

3.2 Stage 2 - Gap analysis

The next stage in the process will be to determine if existing standards are effective to ensure power system security and reliability can be maintained as the energy transition continues.

The following issues with the current PSSR standards will be covered by the analysis.

- “ The current standards do not provide an overarching minimum standard for reliability and security that captures all electricity production and network requirements, and that balances the competing objectives of energy trilemma . sustainability, affordability and reliability.
- “ Some standards are no longer fit-for-purpose to meet the fast, emerging changes to the power system characterised by inter-related risk factors such as frequent changes in weather patterns, changing consumption profiles, and decentralised production of electricity. For example, there is no universal set of metrics with associated targets, incentives, and reporting to account for both generation and network operations, particularly where they are inter-dependent.
- “ There is overlap in standards between instruments, for example between the NQRS and Access Arrangement.
- “ The current PSSR standards support direct connection of energy producing systems to the transmission network in a way that facilitates WEM participation, however the framework for connecting to the distribution network in a way that facilitates market participation (which is required to enable the energy transition to DER and to support the potential role of the Distribution System Operator (DSO)), requires enhancement.

Consideration will need to be given to

- the gaps, overlaps and inconsistencies in the existing standards and their governance arrangements;

the transparency and technical oversight of the PSSR standards; and
the suitability of each of the standards

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- “ A timelier and coordinated evolution of the PSSR standards, ensuring that the interests of energy consumers are protected and advanced.
 - “ Standards and rules that are simpler and easier to navigate, streamlining entry requirements and reducing compliance costs for participants, making it easier to engage with the framework, participate in the market and to innovate for the benefit of consumers.

3.3.1 Transitional arrangements

4. Stakeholder consultation

Successful completion of this project will require extensive consultation, with all key stakeholders, and importantly with AEMO and Western Power, who will be responsible for managing the power system within the single end

Stage	Examples AEMO/Western Power input at each stage
	Provide input on appropriate governance arrangements; and Provide input on monitoring, compliance and enforcement proposals
Stage 4	Provide input on detailed design matters; and Together with EPWA, develop and review draft amending rules.

4.3 Public consultation

A formal, public consultation paper will be released at the end of Stage 3, followed by an Information Paper with the final design proposals and responses to submissions. There will be public consultation on the draft amending rules at the end of Stage 4.

5. Project schedule

The project schedule is detailed in Table 1 below.

Table 2: Project Schedule

Tasks/Milestones	Timing
Project establishment	
Consult with Western Power and AEMO on Scope of Work	September 2023
Internal approval of Scope of work	October 2023
Engage a consultant(s) to assist with the review	November 2023

