



Economic Regulation Authority
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To whom it may Concern

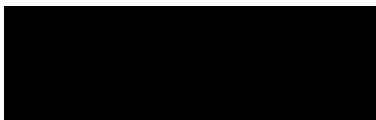
The Australian Microgrid Centre of Excellence ("AMCoE") is pleased to provide comment on the ERA's Proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27 Issues paper ("Issues Paper").

AMCoE is a not for profit Association incorporated in Western Australia in 2020 and our mission is to develop and promote Australian-based industry focused on microgrid technologies and solutions that support both grid-islandable and remote installations. We are a consumer-focused, Australian-led organisation with a membership that spans all microgrid related technical and commercial capabilities.

AMCoE is responding to the questions raised by the ERA in the Issues Paper that relate directly to the implementation of Microgrids in the Western Power network / geographic footprint.

If you have any questions, please feel free to contact me on my email below.

Regards



Liz Aitken
Policy Committee Lead
Australian Microgrid Centre of Excellence





MICROGRID RELEVANT ISSUES PAPER QUESTIONS

QUESTION 2: ARE UNCERTAINTIES ABOUT THE FUTURE OF THE ELECTRICITY SYSTEM GIVING RISE TO A RISK THAT WESTERN POWER'S NETWORK STRATEGY AND TRANSFORMATION INITIATIVES COULD RESULT IN EXPENDITURE/ASSETS THAT ARE NOT REQUIRED OR NOT FIT FOR PURPOSE?

It is questionable whether the number of SPS systems being proposed for this Access Arrangement Period represent value for money to WA consumers. The development of microgrids proper would unlock economies of scale when compared to the large number of SPS systems being proposed in locations adjacent on the grid. It is unclear how Western Power is planning the actual transition to a hybrid network in regional areas in WA.

What is unclear from AA5 documentation, or even from the Network Opportunity Map published November 2021, what efforts Western Power are currently undertaking to address Voltage and Frequency related blackouts in the wheatbelt and other areas of SWIS. Voltage dropout could be solved with the implementation of microgrids that commence with grid stabilisation modules to which renewable energy, a battery and island mode could be added over time, resulting in the resolution of many (or all) of the current outages.

A clear transition plan to a Hybrid Network, including the associated regulatory amendments to enable microgrid implementation, is critical to understanding whether Western Power's current proposals represent value for money. The lack of evidence to the contrary, the lack of holistic economy-wide modelling published and the lack of a clear plan by Western Power to manage this transition should give the ERA sufficient pause to approve this spending until such time as the benefits are able to be demonstrated.

Independent observers of the network, such as AMCoE, and even participants in the network, such as consumers or regional towns, are unable to undertake modelling that would demonstrate that Western Power's proposed expenditure would be fit for purpose and not create a series of stranded assets. This is due to Western Power not being required to make load flow data available to undertake such studies. The lack of transparency on behalf of Western Power creates a vacuum regarding the validity or economic viability of any decisions that Western Power undertakes with regard to the uses of SPS' vs other forms of reliability and affordability management.



QUESTION 3: THE ERA IS SEEKING STAKEHOLDER VIEWS ON WESTERN POWER'S PROPOSED APPROACHES TO ADDRESSING CLIMATE CHANGE DURING AA5

AMCoE concurs with Western Power that the transition to a modular grid will improve the resilience of regional communities. There is however, no plan for this transition in the Access Arrangement, and as stated previously, no indication of whether this does, or even may, represent value for money to the Regional consumer.

Using "climate change" as the basis for this transition is not demonstrated in the proposal. AMCoE would expect that both strategic and detailed modelling would have been undertaken by Western Power, and form part of the published Access Arrangement Application. This would enable network users to understand the scenarios associated with the speed of a transition to the hybrid model if climate change were the principal driver of the transition to a modular grid.

The aforementioned lack of published modelling combined with no proposed changes to the measurement of reliability service standard benchmarks for this AA period further entrenches the view that the use of climate change as a justification for transition to a modular grid is convenient rather than a real driver for change.

QUESTION 5: THE ERA IS INTERESTED IN STAKEHOLDER FEEDBACK ON WHETHER THE REVISED ACCESS ARRANGEMENT SHOULD INCORPORATE MEASURES FOCUSED ON RELIABILITY PERFORMANCE IN SPECIFIC AREAS OF THE NETWORK WHERE RELIABILITY IS BELOW OR TRACKING BELOW THE BENCHMARK.

The lack of data and information transparency regarding network performance in regional areas of WA is of considerable concern to the AMCoE Board and members.

There is an absolute lack of transparency by Western Power about regional reliability—even when communities directly request information regarding network performance to their town or area it is not forthcoming. This obstructs customers and communities from sourcing solutions to their problems in a timely manner, and results in their reliability issues continuing until such time as Western Power choose to address the issue, if Western Power choose to address the issue at all.

There is a lack of accountability on Western Power as a result of the averaging for Rural long and short. Community leaders in regional WA do not believe that the benchmarks are being achieved, and do not understand how Western Power are able to receive



“bonuses” when the reliability to their town or area is so poor. The implementation of the constrained dispatch market in October 2023 will exasperate this issue further.

Now is the appropriate time for the Western power benchmarks to at least reflect the network constraints that will impact generation dispatch and the market as a whole. It is fitting that with the change in market design that the network providers service standard benchmarks also be changed to reflect the same.

AMCoE proposes that the rural benchmarks be split and averaged based on network constraints that are identified through the (approved) Constraint Development procedure. This would mean for example, that benchmarks for all load behind the Merredin constraints be calculated separately from benchmarks for the Geraldton or Albany areas.

This will create some signals for appropriate microgrid and SPS positioning to the market, albeit well after the fact. To address the lack of transparency associated with Western Power’s reliability performance in regional areas, AMCoE also suggests that the ERA undertake annual reviews of benchmark performance data and publish the findings.