



Ms J.J Shaw, MLA  
Chair, Economics and Industry Standing Committee  
Parliament House  
4 Harvest Road  
West Perth WA 6005

Email: [laeisc@parliament.wa.gov.au](mailto:laeisc@parliament.wa.gov.au)

Dear Ms Shaw,

**RE: NEWROC Submission to Inquiry into Microgrids and Associated Technologies**

The North Eastern Regional Organisation of Councils (NEWROC) appreciates the opportunity to submit to the Inquiry into Microgrids and Associated Technologies in Western Australia (the Inquiry).

NEWROC comprises the Local Government Authorities of Wyalkatchem, Koorda, Mt Marshall, Mukinbudin, Nungarin and Trayning. These six LGAs cover an area of just over 2 million hectares at the edge of the South West Integrated System, approximately 3+ hours' drive north east of Perth.

Within this region live 2,612 people (as at last Census) operating 455 small businesses. A reliable and cost effective supply of energy is a key requirement of small businesses and impacts regional liveability.

Located as it is on the edge of the SWIS, power is frequently unreliable and NEWROC is keenly interested in the possibilities that may be provided for more locally based power generation that may reduce the impact of failures in long transmission lines. Following discussions with Western Power NEWROC is aware that Western Power are considering solutions that may include a Microgrid solution (likely an autonomous microgrid), coupled with Stand Alone Power systems for outlying farms/businesses.

NEWROC is encouraged by this prospect however considers it is imperative that power solutions that change the current delivery method be developed in close consultation with communities. As well as issues of reliability and ongoing cost, our communities are interested in being part of the conversation on matters such as timing, type of microgrid solution, type of energy source, and ongoing management and maintenance.

In relation to the Inquiry terms of reference we comment:

**a. *The potential for Microgrids and associated technologies to contribute to the provision of affordable, secure, reliable and sustainable energy supply, in both metropolitan and regional WA***

Whilst the region is abundant in renewable energy sources that could be enlisted toward electricity generation and thus generate a sustainable energy supply, the issues of reliability, affordability and security are of great concern.

From a NEWROC perspective, any microgrids employed need to provide;

1. Improved reliability of electricity delivery to households and businesses within the NEWROC region.
2. Competitive cost structures that ensure the ongoing cost of electricity does not place NEWROC households and businesses at a competitive disadvantage compared with other regional locations.
3. An effective regional solution that has broad support from the market, and all tiers of Government.
4. Takes account of and maximises opportunities for future employment opportunities and industry growth across the NEWROC region.
5. Security of the system with 'local' service provision, allowing communities to take more responsibility for quick recovery after unexpected outages.
6. Ability to allow for the integration of smart technology, and grid expansion, to support the growth and expansion of industry.

Located as it is, far from the metropolitan region, NEWROC's experience is that it is not prioritised in the event of a failure in the delivery of electricity. The provision of secure, reliable and sustainable energy would be supported by the local delivery of maintenance services, and the provision of sufficient battery storage to allow the region to serve its critical needs.

Any progression towards Microgrids needs to ensure that the people and businesses within the catchment are not worse off. Microgrids provide an opportunity, with new technologies, to improve the outcome for regions at a potentially lower cost. They also have the potential to be "out of sight, out of mind" once established, thereby increasing the fallout from any failure to the system and the time and cost of resolution expands.

Microgrids for towns and Stand Alone Power systems for outlying premises provide an extra layer of complication and a potential for disparate outcomes across what are relatively small populations. Consultation is important so that community members have the opportunity to properly understand their likely outcomes, and have their concerns aired and answered.

We urge the Economics and Industry Standing Committee to advocate for protections for small rural and regional communities currently on the SWIS, to ensure that these communities are not isolated from the obligations to provide affordable, secure, reliable and sustainable power.

**b. *Opportunities to maximise economic and employment opportunities associated with the development of Microgrids and associated technologies, including (but not limited to):***

- a. *Development of raw material resources/primary commodities***
- b. *Research and development***
- c. *Design, engineering and construction***

- d. Advanced manufacturing**
- e. ICT**
- f. Ongoing asset operations**

The community values utilisation of renewal resources to fuel energy. Sunlight and Wind power are both utilised within the Wheatbelt region. NEWROC would encourage microgrid development to account for the local resources that may be utilised in the provision and servicing of energy. This extends beyond wind and solar to utilisation of biowaste and the potential for amalgamation of refuse disposal and energy generation.

Employing Microgrids where the energy source is one that is acceptable to the local community and solves more than one problem (where that is feasible), enhances sustainability.

Regional communities such as NEWROC are also rich in human capital. Within the Wheatbelt, in close proximity to the NEWROC region, are innovators across design, engineering and construction. Part of sustainable and secure microgrid delivery, we believe, is the transfer of knowledge around the operation of microgrids to the region, and the ability for local skills to be developed and deployed. This enhances regional security and helps to create a culture of co-responsibility and collaboration.

Regional communities also hold many generations of knowledge on local conditions and topography that can be assets to the development of a successful microgrid project.

NEWROC is encouraged by the willingness of Western Power and other Government Departments such as the Department of Primary Industry and Regional Development to engage with Local Government in a shared exchange of information focussed on the provision of reliable and cost effective electricity. We look forward to continuing to be involved, as representatives of community, in any development of future power solutions, bringing to the table local knowledge and skills to add value.

- c. Key enablers, barriers and other factors affecting Microgrid development and electricity network operations, including:**
  - a. Regulatory barriers**
  - b. Technical factors**
  - c. Workforce planning and development**
  - d. Social factors**
  - e. Electric vehicles**

NEWROC notes the complexity of regulations, structure and legislation around the energy system. We are aware of the significant number of reviews across both State and National energy bodies and note that this adds to the uncertainty in the market place and constrains Local Government Authorities in their efforts to source reliable solutions and investment partners.

An example of a relatively small matter that has impeded the ability to provide solutions to local business issues include the levels set for contestable clients, and the inability to

amalgamate different offices of the same business into a single contestable unit. This impacts the cost base of businesses looking to relocate staff throughout the region rather than in one centralised office.

Moving towards different energy solutions requires forethought in workforce planning and skills development. Within the NEWROC region, in the Shire of Koorda, several workers are currently employed on the Western Power grid. We would encourage the continuation of local skilled employees under any microgrid solution, and the development of that workforce to ensure that service provision can be seamlessly achieved.

As noted earlier within close proximity to the NEWROC region, are innovators across design, engineering and construction. We would encourage the use of local teams, as far as possible, in the construction of any microgrid system. This both enriches the regional economy, and importantly builds knowledge of the components, and understanding of what might be needed to maintain the system. Embedding this knowledge within the local region has significant implications for long term sustainability.

Of concern to NEWROC is the risk of design and implementation plans that would achieve affordable, secure, reliable and sustainable electricity, being compromised as a result of investment models that may place population numbers as a component of the capital allocation.

We would encourage the Committee to advocate for protections for rural and regional communities to ensure that the delivery of electricity is not compromised by investment hurdles that do not value the continuity of existing communities.

***d. Initiatives in other jurisdictions to facilitate the development, and maximise the value of, Microgrids and associated technologies.***

NEWROC is keenly interested to understand the experience of other rural, regional and remote communities in Microgrid implementation and ongoing use.

We are encouraged by the focus of DPIRD and Western Power on understanding and piloting different solutions prior to broadscale implementation.

Again, we advocate for consultation that provides Local Government Authorities with the understanding around options, expected outcomes, and potential problems.

NEWROC would be pleased to be involved in further discussions with the Committee in relation to this submission, or the provision of electricity to rural, regional and remote areas in general. Should you have any questions or require additional information, please contact our Executive Officer, Caroline Robinson E [REDACTED]

Yours sincerely



Cr Quentin Davies  
Chair  
NEWROC  
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