

Audrey Zibelman CEO AEMO

By email ISP@aemo.com.au

28 February 2018

Dear Ms Zibelman,

Marjorie Black House 47 King William Road Unley SA 5061

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RE: AEMO ISP

SACOSS is the peak body for the community services sector in South Australia, with a long-standing interest in the efficient delivery of essential services. We thank AEMO for the opportunity to comment on the AEMO Integrated System Plan. SACOSS's comments below are predominately high-level statements, as the specific questions noted in the consultation paper are largely directed to participants.

SACOSS tentatively supports the general intent of the ISP, acknowledging that the perceived benefits, if achieved, would be a positive market development.

We completely agree with the following statements:

- [a] number of power system technical requirements must be maintained in order to maintain a reliable and secure energy supply;
- Generation and transmission development is no longer being driven by maximum demand growth; and
- "The ISP must consider the transformation occurring at the consumer end of the energy supply chain", and what impact this transformation will have (and are having) on large-scale development of generation and transmission.

Whilst supporting many aspects, SACOSS is concerned in a number of areas:

- Whilst identifying and mapping prospective renewable energy zones (REZs) across the NEM is important, this identification must occur with a maintenance of economic chronology, meaning the development of one REZ / transmission corridor will impact the economic development of the next REZ, and so on.
- The development of methodology improvements to address the challenges of modelling variable generation is highly valuable, especially the operation of storage technologies and generation diversity between regions as noted above. SACOSS has a strong focus in understanding battery technology developments, particularly in South Australia.
- We note "the intent to capture diverse renewable generation profiles from across the NEM may reduce
 the need for other types of development, thereby minimising the overall cost of the system for
 consumers", as long as the "other types of development" includes potentially delaying additional REZ /
 transmission corridors and not just other forms of complimentary technology.
- Obtaining granular data, from our understanding, means running the models at 5min modelling levels
 to ensure system security, ramp rates and renewable generation variability at both residential and
 utility-scale is captured, as has occurred with the NREL studies in the USA¹. AEMO should be aiming for
 this level of understanding rather than block models and indicative renewable energy profiles.

https://www.youtube.com/watch?v=tvn5ZdFTQOI&list=PLmIn8Hncs7bEI4P8z6-KCliwbYrwANv4p

We note the work that was completed by the AEMC on the Reliability Standards in August 2016, which identified that new and more sophisticated modelling techniques will be required in the future to take account of all the additional factors now affecting reliability, especially the focus on weather as an input².

We look forward to continuing to be involved in the assessment and we thank you in advance for consideration of our comments.

If you have any questions relating to the above, please contact SACOSS Senior Policy Officer, Jo De Silva on (08) 8305 4211 or via jo@sacoss.org.au.

Yours sincerely,

Ross Womersley Executive Director

AEMC Assessment of Approach to Market Modelling, Oakley Greenwood (2016), Appendix A