25 February 2019
Repower Alice Springs

the PWC Market Operator
market.operator@powerwater.com.au

RE: Submission to the Market Operator Consultation Paper

To whom it may concern,

Thank you for allowing the consumers of Alice Springs electricity network the ability to comment on possible changes regarding the Generator Performance Standards (GPS) and Market Operations (MO).

Repower Alice Springs is a consumer group and advocacy group aiming to expedite the transition of the Alice Springs electricity generation capacity to 100% solar PV by 2030.

We generally welcome this review of electricity Market operations and generating standards, particularly the refocus on consumer experience and customer service.

Having limited resources and technical knowledge we limit our submission to outcomes of the standard and not the technical means to carry out the outcomes.

Firstly, there is a general undertaking to provide a reliable electricity supply to customers at all times. This is assumed to mean that when the clouds pass over solar PV systems there will be enough mechanical capacity to quickly take up this capacity. We believe this is very short sighted and very limited in its purpose as the more likely situation will be that the mechanical generators will fail more often as the temperatures increase e.g. the recent IPCC report suggests there may be as many as 300 days where the maximum temperature exceeds 40 degrees in Darwin, by 2050. The mechanical generators tend to be much larger than a single solar PV panel, and hence its failure will have much higher consequences and the re-establishing of power is much more onerous on the network resources. In fact, the customer experience will require the generator reliability standard to be much higher about 35 degrees, as beyond this commerce will significantly reduce.

We seek clarification regarding the method in which the MO is able to determine the total instantaneous electrical load on the network. It is stated that mechanical generation rolling stock (or an unspecified alternative) be maintained at all times to account for reduction in generation (particularly solar PV generation due to clouds). However, there is currently no way for the network operator to determine with any certainty how much solar PV is being generated as the highly distributed generation is mostly being consumed onsite. Hence, we believe this part of the standard is not achievable without the introduction of smart metering capable of reporting instantaneous information to the network operator to be included in the forecast formula. Any introduction of the standard as it currently stands will only increase the unnecessary costs to customers.

We welcome the idea of a grandfather clause in the GPS for existing generators, where most of the mechanical generators across the Northern Territory will not be required to meet the new standard of reliability and performance. This is fair as the existing contracts have used significant resources to undertake Power Purchase Agreements, however, it would be uncompetitive and unfair to allow them to earn income at the same rate as newer, more modern and cheaper competitors. and hence, we

recommend that any generators operating under a grandfather clause for this standard should not have access to the full value of the instantaneous wholesale price of electricity and should not be automatically approved to provide generations capacity when load forecasting changes, if there is a fully compliant generation competitor.

Lastly, the GPS seems to have entirely missed the ability of emerging technologies to enter the competitive space. Just as a means of example are the two emerging technologies of electric cars and blockchain. Neither of which have advanced to the point of being able to provide generation support in the electricity network, however, both are actively pursuing this purpose. It is our belief that electric cars will have significant impact on the electricity grid in Alice Springs inside of the 5 years that this planning is proposing and shows great promise in being able to provide energy storage, energy time shifting, network managed tasks and scheduled load balancing.

Should there be any questions, clarification and comments about the attached, please do not hesitate to contact Tim Brand at repoweralicesprings@gmail.com

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