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RE: Changes to Reserve Level Declaration Guidelines

About Shell Energy in Australia

Shell Energy is Shell's renewables and energy solutions business in Australia, helping its customers to decarbonise and reduce their environmental footprint. Shell Energy delivers business energy solutions and innovation across a portfolio of electricity, gas, environmental products and energy productivity for commercial and industrial customers, while our residential energy retailing business Powershop, acquired in 2022, serves households and small business customers in Australia.

As the second largest electricity provider to commercial and industrial businesses in Australia[1], Shell Energy offers integrated solutions and market-leading[2] customer satisfaction, built on industry expertise and personalised relationships. The company's generation assets include 662 megawatts of gas-fired peaking power stations in Western Australia and Queensland, supporting the transition to renewables, and the 120 megawatt Gangarri solar energy development in Queensland. Shell Energy also operates the 60MW Riverina Storage System 1 in NSW. Shell Energy Australia Pty Ltd and its subsidiaries trade as Shell Energy, while Powershop Australia Pty Ltd trades as Powershop. Further information about Shell Energy and our operations can be found on our website here.

General Comments

Shell Energy supports the efforts being made by AEMO to produce more reliable forecasts of the timing and magnitude of low reserve conditions. We support the implementation of a Forecast Uncertainty Measure (FUM) that considers the variation of conditions by time of day. We consider that further improvements in accuracy may be obtained by also explicitly considering monthly and seasonal factors in the proposed Quantile Regression model. These additional considerations take note of the seasonal variation of some renewable production facilities and would allow the model to capture more accurately the expected variation appropriate to the time period being considered.

To enable participants to understand the impact of seasonality on the FUM, we encourage AEMO to produce a new version of Figure 1 from the consultation document ("figure 1 Mean FUM value (in MW) across all NEM regions by hour of the day in 2023") for each season of the year as well as by time of day.

In addition, Shell Energy considers that the current use of a 95% confidence factor in the FUM calculation is highly conservative. This approach is equivalent to a 5% Probability of Exceedance approach which heavily over-weights model components that may lead to outcomes such as high demand versus forecasts or low generation output versus forecasts. At the same time the 95% confidence factor under-weights outcomes aligned to low demand versus forecasts and higher generation output versus forecasts.

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[1] By load, based on Shell Energy analysis of publicly available data.

[2] Utility Market Intelligence (UMI) survey of large commercial and industrial electricity customers of major electricity retailers, including ERM Power (now known as Shell Energy) by independent research company NTF Group in 2011-2021.

Shell Energy's view is that it would be more appropriate to consider under-forecast parameters and over-forecast parameters equally in line with the normal requirements set out in the ST PASA rules (3.7.3(h)) which requires use of the most probable or 50% POE values. Using a 50% confidence factor in the calculation of the FUM would see under and over outcomes vs forecasts treated equally.

Our primary concern is that the current very high level of false-positive LOR notices are creating the perception that the NEM has lower reliability than is truly the case. In addition, the pre-activation or activation of longer lead time RERT or IRR contracts based on these false-positive forecast LOR declarations could be inefficient and costly for consumers. We believe that reducing the number of false-positives through a more balanced approach to the confidence interval used in the FUM methodology would greatly benefit the efficiency of the market.

For any questions about the issues raised in this submission, please contact Peter Wormald (peter.wormald@shellenergy.com.au)

Yours sincerely

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