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To Power and Water Corporation,

Proa Analytics thanks Power and Water Corporation for the opportunity to comment and to also provide relevant data to this consultation process.

Proa Analytics is an Australian solar forecasting company, offering commercial state-of-the-art solar forecasting services for large scale solar farm and rooftop PV generation, combining satellite, skycam, live data and numerical forecasts.

Capacity Forecasting requirements

We believe that the revised capacity forecasting requirements specified by PWC are significantly clearer than the original version and that accurate solar forecasts will help solar farms to minimise the size of any required battery or other compensating method. We note that even perfect forecasts will not remove the need for such dispatchable compensating technology. To take an example from the GPS Consultation Paper, under the solar generation in figure 3.1 on page 24 (reproduced below), the solar generation varies from 90% output to 18% within a five minute period. Even with perfect forecasts the solar farm would need to either curtail generation or use storage to meet the GPS requirements under these conditions.

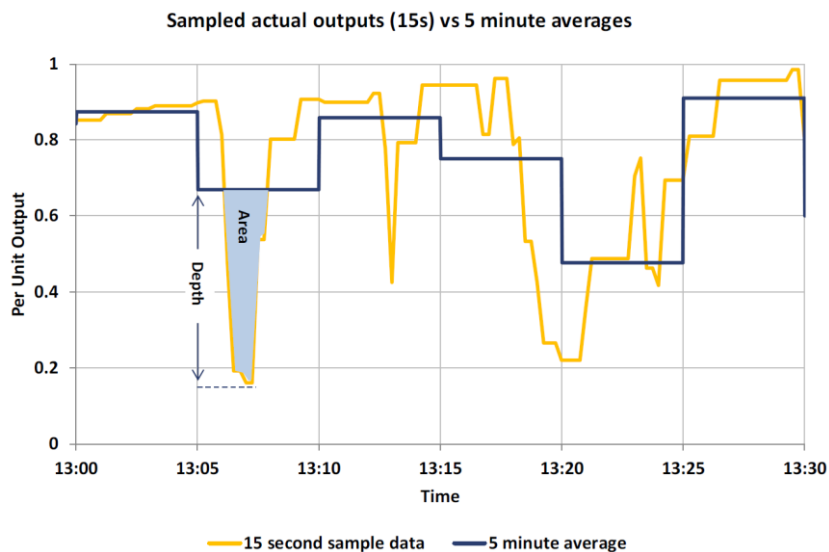


Figure 1: Example of solar generation from PWC GPS Consultation Paper (Source: PWC)

Proa Analytics agrees that power systems of the size of the NT would certainly need greater reliability requirements than a system such as the NEM. As solar forecasters, we would not seek to comment



on the reliability requirements calculated by PWC, other than to note we believe that commercially available state-of-the art forecasts will substantially assist generators to meet such requirements.

Rooftop PV forecasting

Although many obligations such as capacity forecasts primarily affect large scale solar, the GPS and many stakeholders such as Territory Generation noted the importance of rooftop PV forecasting. As a provider of state-of-the art rooftop solar forecasts, we note such significant improvements in commercial solar forecasts of rooftop PV generation are now available, and combining forecasts from multiple technologies and/or providers can substantially improve accuracy for minimal cost.

It may also be of value to increase the number of monitored rooftop PV systems in the NT networks. The costs, performance, and real time availability of such services has also increased in recent years. For example, Proa Analytics has partnered with Solar Analytics to incorporate live rooftop PV generation from a several hundred of their monitored systems in the SWIS into Proa's rooftop PV forecasts both commercial providers of such monitoring services in Australia. Our analysis shows that this live data from a moderate number of representative systems can substantially improve "nowcasting" visibility and forecasting accuracy. The benefits of such monitoring, when combined with forecasting, would substantially outweigh costs as additional rooftop PV capacity is installed.

Regards,

A handwritten signature in black ink that reads "Matthew J".

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