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Saturday, 27 August 2016

Clare Greenwood
Forecasting
Australian Energy Market Operator
GPO Box 2008
Melbourne VIC 3001

Submitted electronically to Op.forecasting@aemo.com.au

Dear Ms Greenwood,

RE: Draft Report and Determination: Energy Conversion Model Guidelines

AGL welcomes the opportunity to comment on the proposed Draft Report and Determination on the Wind and Solar Energy Conversion Model Guidelines (Draft Report).

AGL is a significant energy retailer in Australia with over 3.7 million electricity and gas customers. AGL has a diverse power generation portfolio of over 10,500MW including base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources including hydro, wind, solar, landfill gas and biomass.

AGL appreciates and supports AEMO's effort in improving the forecasting of wind and solar generation which will greatly enhance the participation of intermittent generators in the National Electricity Market (NEM). In particular, the provision of local plant and connection limits, and improved wind speed data that will ensure AWEFS and ASEFS can quantify the most probable plant output at any given time that reflect these site conditions.

AGL is pleased that AEMO will explore further other possible improvements identified through this consultation, which AGL fully supports.

AGL is concerned that the proposed amendments to the Energy Conversion Model Guidelines (ECM) will not include the provision of SCADA Possible Power. AGL expects that at the very least, the ECM should be amended to provide an option for plant operator to provide this data. AGL considers a Possible Power signal would provide an accurate and timely estimate of the output from the wind farm at the point of connection excluding any limitations of connection asset. It would be the best possible estimates taking into account conditions internal to the wind farm (eg. wind sector management, wind direction, wind speed cut-out etc). AGL considers that the scope of the Possible Power can be reasonably defined to ensure that it is a robust estimate of the most probable plant output for any given timeframe. AGL acknowledges that it may not be possible for all plants to provide such a value, but it should not be precluded from plants which has such a capability.

AGL provides detailed comments in an attachment to this letter.

Please contact Kong Min Yep on 03 8633 6988 or kyep@agl.com.au if there are any issues raised with regards to AGL's submission.

Yours sincerely,

Kong Min Yep
Signed on behalf of
Simon Camroux, **Manager Wholesale Markets Regulation**

Proposed SCADA Local Limit

AGL has no issues with the proposed changes and implementation and agrees with AEMO's conclusions.

AGL supports AEMO's recommendations to investigate the use of constraint equation for network constraints, bid Availabiility in NEMDE and PASA and improvement in the transparency of operation.

Change of Definition of SCADA Wind Speed

AGL has no issues with the proposed changes and agrees with AEMO's conclusions.

Optional Possible Power SCADA Signal

AGL disagrees with AEMO that SCADA Possible Power could not be included in the amendments of the ECM Guidelines.

AGL considers that at the very least, the operator should be given the option of providing the Possible Power signal to provide the best possible estimate of the forecast output for a given plant and operating condition. The plant operator has a deep understanding, knowledge and the control set up of the plant operation and environmental conditions, which could vary from plant to plant, and subject to complex changes. AGL notes the option to provide an alternative forecast by the operator was foreshadowed in AEMO's guidelines which was intended for participants to override the AWEFS forecast. AGL considers that the provision of optional Possible Power is consistent with objectives of the guidelines.

AGL agrees with AEMO that it is important to have an acceptable definition and identify the appropriate way to incorporate the use of Possible Power in AEMO's forecast. AGL and other participants have provided their initial views on the definition and application of Possible Power in previous submissions, and will outline them further in the current submission. AGL strongly supports a follow up technical session with the participants working with AEMO in finalising these details. In AGL's view, there is strong commitment from the industry including AGL, other participants and OEMs to work with AEMO to achieve an acceptable outcome.

As suggested in AGL's previous submission, the Possible Power would need to recognise it is firstly influenced by wind resource and the state of the turbines, and secondly the rate at which different plants can deliver the estimated outputs. Following discussions with other participants, AGL agrees that the optional Possible Power SCADA data may be best provided by the participants through two separate signals to AEMO. The two SCADA Possible Power signals would include the UIFG value and the achievable power that reflects the rate at which the possible power can be delivered from the plant for each five minutes interval. This will ensure that the forward 5 minutes interval forecast can adequately take into account availability of turbines to generate, any complex changes of wind conditions and varying control capability of the turbine at any given time. AGL considers that this approach will materially reduce the risk of any misalignment between the AEMO's forecast, dispatch and operating capabilities and responses of the plants.

Hence, for those plants that provide the optional Possible Power signals, AGL proposes that the values are accepted as the forecast value unless there is a well-defined criteria for AEMO to override the operator's Possible Power values.

Maximum Capacity Static Parameter

AGL agrees with AEMO's conclusion.

Slope Tracking Direction

AGL considers that the details of tracking should be provided to AEMO if applicable.

Provision of Signals for FCAS

AGL agrees with AEMO's view that wind farms can be providers of FCAS in the NEM. This is important as wind farms are escalating its share of generation portfolio in the NEM at a time when there are increasing concern on their impact on power system security and frequency control incidents.

This further reinforces the need for AEMO to allow for wind farms to provide an optional Possible Power as a key enabler for the market system to develop FCAS capability. AGL considers this an important step in ensuring that the NEM does not discriminate wind farms from participating in the FCAS market.