MINUTES – Energy Conversion Model (ECM) Guidelines Consultation

MEETING: Meeting with Infigen, AGL and Pacific Hydro

DATE: Thursday, 8 September 2016

TIME: 11.00am – 12.15pm

LOCATION: AEMO Melbourne Office

MEETING #: 1

ATTENDEES:

NAME	COMPANY / DEPARTMENT
Leanna Tedesco	AEMO
Clare Greenwood	AEMO
Marcelle Gannon	AEMO
Rhys Albanese	AEMO
Kong Min Yep	AGL
Rob Cabion	AGL
Saravanan Ramaiya (Sam)	AGL
Farhad Mollahagahi	AGL
Kate Summers	Pacific Hydro
Ryan Jennings	Pacific Hydro
Niva Lima	Infigen

AEMO opened the meeting and sought clarification on the two signals that were proposed in the stage 2 submissions by AGL, Infigen and Pacific Hydro. AEMO also proposed discussion on the Possible Power option.

AGL asked why AEMO are looking into high speed cut out but not high temperature cut out. AEMO replied that they are working internally to see what the issues of high temperature cut out are. AGL advised that they have been affected by it.

AEMO advised that more work needs to be done on Possible Power outside of the current ECM Guidelines consultation, in regards to how it is defined, possible impacts, other rule changes, and how AEMO's systems would capture it. AEMO noted it will look at this once the current consultation has concluded.

AGL commented that Possible Power is something they have looked into and it is not difficult for them to accurately define a Possible Power signal. The onus is on the Wind Farm to accurately reflect what can possibly be achieved.

Pacific Hydro commented that the history of Unconstrained Intermittent Generation Forecasts (UIGF) was effectively a result of the semi-scheduled generators thinking about what needs to go into dispatch. The wording of "unconstrained" effectively just meant Wind Farms could be at an unconstrained manner if the network was unconstrained.

AGL commented that AWEFS is part of a bigger system. AWEFS will be improved with the current consultation and work for the majority of Wind Farms, but not all. Some have very different attributes that AWEFS will not be able to capture. Optional Possible Power is not

necessarily something that everyone can use but there are variables that AGL see can be used to readily provide a more accurate Possible Power signal.

AEMO asked if a Wind Farm provided a Possible Power number, how AEMO would know when to use the Possible Power number instead of AWEFS number. AGL replied that each turbine gives a signal back to Possible Power.

AGL gave an example of AWEFS not being able to completely model wind speed, and said providing the two signals is a solution that can be implemented to allow greater accuracy into dispatch.

AEMO questioned what the second signal was for if one of the signals being provided is to tell AWEFS what turbines will be available in the next five minutes. Pacific Hydro explained that one signal is the unconstrained, looking at what is theoretically possible in the next dispatch interval. The other signal is the achievable power. There is an issue with the figures generating the total amount that a Wind Farm can generate, which is different to what can be generated in the next five minutes. Pacific Hydro commented that using the Achievable Power as the availability may lock the wind farm into low production, as turbines that are paused for more than 5 minutes may not come out of pause.

AEMO noted that further work needs to be done to understand how the two signals would be used within the current market systems, as availability is currently only one number, which generally becomes the dispatch level, and also the cap if a semi-dispatch interval, but if the cap is too low it may prevent the farm getting up to where it can be in 10 minutes.

AGL acknowledged that AEMO want to get the next steps right, and asked if there was anything that can be done in terms of easing costs that are being incurred at the moment.

Pacific Hydro commented that the problem is dealing with the real time five minute dispatch. The logic needs to be understood and ensure that MMS is getting the correct numbers.

AGL proposed a Possible Power signal being sent now, to get a baseline. Although at the dispatch interval level it might not be granularly correct but it could be an immediate solution.

AEMO asked what the timeframe is to employ a new SCADA signal. AGL replied that it depends on the interface. Approximately one month for Victoria.

Infigen stated they are happy with how Possible Power has been presented and it is in line with what Infigen have been discussing.

AGL asked if AEMO is comfortable with providing one signal of power, what the right definition of power to be sent is. There was discussion around UIGF replacing the AWEFS signal. It was noted that if one signal had to be chosen, the achievable power would be the most accurate, however AGL noted it would need to understand the current calculation for achievable power, as they were not sure it is exactly what is needed.

AEMO commented that it is not AEMO's role to give an industry standard definition, but that we need to ensure the information is robust enough to ensure system security. AGL acknowledged that it is not AEMO's responsibility to propose the standard definition. AGL are happy to provide one for comment.

There was discussion about high speed power and providing a separate signal. Some Wind Farms can cover a large area and at times it can be hard to identify that a high speed cut out has occurred. If Wind Farms have information about cut-out turbines, they can give a more accurate UIGF.

AGL commented that if a high wind speed cut out signal exists, then it can be put into the logic for that turbine. AGL advised that this needs to be looked into further but AGL were not keen to go down that track.

AGL queried how often in a year they experienced high speed wind cut out.

AEMO advised that for some Wind Farms it is a big issue.

AEMO requested whether Infigen, AGL and Pacific Hydro could investigate further what signal they could provide, what would be involved, how long it would take, and then report back to AEMO.