

MAC Renewable Energy Generation Working Group Minutes - Meeting 1

Thursday 3 April 2008, 2 – 3.30pm
ERIU conference room, level 8, 197 St Georges Terrace

ATTENDEES	ORGANISATION
Tony Stewart (Chair)	OOE
Patrick Peake	IMO
Shane Cremin	Griffin
Steve Gould	Landfill Gas & Power
Jenni Conroy	Synergy
Kristian Myhre	Alinta
Phil Kelloway	Western Power
Wendy Ng	Verve Energy
Karhi Mahalingham	Synergy
Taron Brearley	OOE
Brooke Eddington (Minutes)	OOE
APOLOGIES	ORGANISATION
Jason Banks	OOE

Item	Subject	MINUTES
1	Welcome and introductions	The meeting commenced at 2.08pm. Apologies and introductions.
2	Work plan	<p>The Chair gave a brief background on the purpose of establishing the working group.</p> <p>The Chair noted that while the working group was focussed on issues with implications for the market rules, there was scope in the TOR for the working group to refer other issues identified through this process to MAC or they may be raised by individual members with the OOE outside of this forum.</p> <p><i>ACTION: Synergy to provide paper on non market issues to OOE.</i></p> <p>The tightness of the timelines in the work plan and the possible need for more meetings was discussed. The Chair explained that the important outcome was that industry would be aware that this process was underway.</p> <p><i>ACTION: The work plan was agreed.</i></p> <p>Members discussed some issues relating to the current market structure and whether it is sufficient to deal with the issues under discussion – particularly having separate energy and capacity markets, no competitive balancing mechanism and the STEM. The Chair noted that it wasn't the intention to look at fundamental changes to the market. IMO stated that, as changing the market structure may take up to 4 years, there may be potential to present a suitable case for why change may be beneficial, and the earlier it is on the table, the better.</p>
3	Key issues	The meeting noted that the issues outlined in the meeting paper were raised in various submissions received by the Office of Energy during consultation on a scheme to achieve the State Government's renewable

energy targets.

Members were advised that a summary and all submissions received via the process would be made publicly available soon.

ACTION: OOE to circulate pertinent papers to working group

Discussion of issues in OOE paper:

Reserve capacity mechanism

- The reserve capacity contribution for wind may be overstated by the current capacity credit allocation method. This situation and/or changes to the current market rules will both impact on investment in new wind developments in WA.
- The geographical distribution of wind generation could influence the aggregate contribution to system security.
- Two methods for determining intermittent generation capacity are being looked at by the IMO. The current method one uses average generation over the whole of the past three years A proposed option uses the average generation over the top 250 demand periods from the past three years.
- Members noted the value in adopting an approach that is consistent for all future intermittent and dispatchable generation and with the broader objectives of the reserve capacity mechanism.
- Changing the capacity credit allocation method will have financial implications for existing wind farms. Members noted that transitional arrangements for existing generators relating to changes to the market rules would be determined at a later stage.

ACTION:

- ***Members agreed further analysis needs to be undertaken on this issue.***
- ***OOE to investigate capacity credit allocation options in light of the contribution to reserve capacity mechanism objectives and implications for wind farm viability using available data.***

Ancillary services

- The timelines for bidding into the WA market, with a particular focus on whether a shorter time frame could allow corrections based on weather conditions, predicted changes to load and/or generating plant.
- A 'sliding scale' is used for capacity price. Mandating renewables will increase over supply. This will be exacerbated by any additional dispatchable capacity required to support increased intermittent generation and will decrease the value of capacity credits. This has financial implications for incumbent generators.
- Better forecasting can provide greater security by helping determine plant choice when turning down plant overnight, and may improve the ability to choose the most appropriate generation facilities for backup.
- A wind forecasting system is currently being developed for the NEM which may be made available for use in WA. Western Power is currently looking at the SCADA requirements for this and is looking at establishing a short term project to move ahead of the NEM process. They expect that they will have forecasts for the three large wind farms on the SWIS by the end of the year.
- It is important to use 'realistic' assumptions/scenarios when determining ancillary service needs, rather than one that is unlikely to actually occur (ie all wind goes out at once).

		<ul style="list-style-type: none"> • A study on ancillary service charges was undertaken by Western Power some years ago. • Factoring in the weather impact on load can also assist with determining the balancing requirements. • Members noted wind output data is now available from the existing wind farms in WA which may be used in estimating impacts of further penetration. There may also be wind monitoring information available from project proponents and Western Power/Verve to use in looking at location diversity in various scenarios. • Members noted that ancillary service charges for intermittent generators should reflect the additional costs imposed on the market/system. It is unclear whether current charges reflect this. <p>ACTION:</p> <ul style="list-style-type: none"> • Members agreed analysis required on ancillary service demand and associated costs for wind farm growth scenarios, and implications for other generators. • Western Power noted limited resources available to progress the issue. • OOE and WP to meet to develop proposal and determine way to progress work on the issue. <p>Low load overnight</p> <ul style="list-style-type: none"> • The problem for system security is the point at which the last generator to be turned down or off leads to a possible problem for system security the next day. Availability of gas may be an issue if coal is turned off and the worst case is that liquid fuel is required which is much higher cost. • A process is underway to resolve issues relating to the determination of 'short run marginal cost' between IMO and ERA. The impact of better forecasting on generator's decision-making may reduce the likelihood of system security issues arising. • EPA pollution restrictions may reduce the flexibility of operation of thermal plant – lower capacities, lower efficiency may lead to more pollution. • The carbon intensity of the whole system will be influenced by what types of generation are running and the efficiencies they are running at, particularly taking load following for wind into account. • Members noted that the STEM price may drop to a point where wind would turn off overnight voluntarily. <p>ACTION:</p> <ul style="list-style-type: none"> • Members agreed modelling the implications for market participants of increasing wind penetration on the system at times of low load, and evaluation of the prospects for negative pricing, the likelihood of system over-ride and impacts on greenhouse gas emissions would be useful. • Western Power noted limited resources available to progress the issue. • OOE and WP to meet to develop proposal and determine way to progress work on the issue.
4	Next steps	ACTION: OOE to meet with IMO & Western Power to determine proposals and confirm meeting timelines.
5	Next meeting	Scheduled for Thursday 8 th May 2008
6	Close	The meeting was closed at 3.42pm