Independent Market Operator

MRCPWG

Agenda

Meeting No.	5
Location:	IMO Board Room, Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date:	Wednesday, 15 September 2010
Time:	Commencing at 3.00 to 5.00pm

Item	Subject	Responsible	Time
1.	**WELCOME AND APOLOGIES / ATTENDANCE**	**Chair**	5 min
2.	**MINUTES OF PREVIOUS MEETING**	**Chair**	5 min
3.	**ACTIONS ARISING**	**Chair**	5 min
4.	**REVIEW OF MRCP COMPONENTS**	**IMO**	60 min
5.	**GENERAL BUSINESS**	**IMO**	5 min
6.	**NEXT MEETING** Wednesday 29 September 2010 (3:00-5:00pm)	**Chair**	5 min

Independent Market Operator

MRCPWG

Minutes

Meeting No.	4
Location:	IMO Board Room Level 3, Governor Stirling Building, 197 St Georges Terrace, Perth
Date:	Monday 23 August 2010
Time:	Commencing at 12:00 to 2:00pm

Attendees	
Troy Forward	IMO (Chair)
Monica Tedeschi	IMO (Minutes)
Greg Ruthven	IMO
Corey Dykstra	Market Customer
John Rhodes	Market Customer (proxy)
Neil Hay	System Management
Patrick Peake	Market Generator
Shane Cremin	Market Generator
Brad Huppatz	Market Generator
Pablo Campillos	DSM Aggregator
Nenad Ninkov	New Investor
Neil Gibbney	Western Power
Chris Brown	Economic Regulation Authority (ERA) (Observer)
Apologies	
Steve Gould	Market Customer
Stephen MacLean	Synergy
Ben Williams	IMO

Item	Subject	Action
1.	**WELCOME AND APOLOGIES / ATTENDANCE** The Chair opened the 4th meeting of the Maximum Reserve Capacity Price (MRCP) Working Group (Working Group) at 12:10pm. Apologies were received from: • Steve Gould – Market Customer; • Stephen MacLean – Synergy; and • Ben Williams- IMO.	

Item	Subject	Action
	The following other attendees were noted: • John Rhodes (Proxy for Stephen MacLean).	
2.	**MINUTES OF PREVIOUS MEETING** The minutes of the 3rd MRCP Working Group meeting, held 2 July 2010, were circulated prior to the meeting. There were no amendments to the minutes and the Working Group agreed to publish them as final. *Action Point: The IMO to publish Meeting 3 minutes on the website as final.*	**IMO**
3	**ACTION POINTS** The actions arising were either complete or on the meeting agenda. The following exceptions were noted: Action Item 5 – The amendment to the MRCP Market Procedure is now in the Procedure Change Process. Public consultation closes on 6 September 2010. Action Item 12 – The IMO will close this item in the MRCPWG update to MAC in the next meeting. *Action Point: The IMO to update the MRCPWG Action Point register as follows:* • *Item 5- now completed; and* • *Item 12- the IMO to report to MAC in the next meeting on the 8 September.*	**IMO**
3a	**SCOPE OF WORKS: CALCULATION METHODOLOGY TO BE APPLIED IN DETERMINING DEEP CONNECTION COSTS** The IMO provided the updated scope of work documents for the review of deep connection costs to members prior to the meeting. The following points were raised by members: • Mr Ruthven thanked those Working Group members who provided comments. The majority of comments have been incorporated into the scope of work document. Several comments had highlighted that much of the work had been done by Allen Consulting Group (ACG) before. Consequently, the scope had been reduced to only review aspects of the methodology where a recognised change in the regulatory space has occurred that would impact on the advice provided in the last ACG review. • Mr Gibbney noted that the consultant may want to ensure that the proposed methodology for the deep connection costs is consistent with the market objectives. Currently the Market Rules don't explain how to work out MRCP or what it should achieve. The Chair stated it was reasonable to suggest that the solution should not be inconsistent with the market objectives. • The Chair stated the issue seems to be background information and the Consultant will need to read the procedure, regulations and other documents as part of the	

Item	Subject	Action
	project. • Mr Gibbney noted that the Consultant needs a purpose prior to trying to determine the parameters. *Action Point: The IMO to consider a briefing session on scope of works with IMO or Working Group with the Consultant if required.* • Mr Dykstra noted that the Working Group should rank the bullet points in the third paragraph under the scope of work in order of priority to understand which take precedence. *Action Point- The IMO to rank the bullet points by regulatory instrument.* • A high level discussion around the Reserve Capacity Mechanism occurred where the Chair noted this was beyond mandate of this Working Group and concerns would be noted at MAC. • Mr Dykstra questioned the accuracy of the second paragraph of each scope of work document, particularly the statement that "The purpose of the MRCP is to incentivise an investor…" While the MRCP underpins the Reserve Capacity Mechanism, the purpose of the MRCP is not stated in the Market Rules. Mr Dykstra suggested that the MRCP estimates the reasonable cost of building and connecting an OCGT. • Mr Ninkov added that price is not the only incentive. The Chair agreed that it is only one element. • Mr Campillos noted that it was more appropriate to describe the process of the MRCP rather than the purpose. *Action Point: The IMO to amend paragraph 2 in both scopes of work to "The Reserve Capacity Mechanism is designed to incentivise the provision of a sufficient amount of reliable capacity within the SWIS. The MRCP is one of the elements of this mechanism which estimates the annualised cost of building a 160 MW OCGT that is entered into the RC Auction"* • The Chair noted that the Working Group had previously accepted that the assumption of MRCP was based on an auction occurring and considers this could be a problem. • Mr Campillos noted that going to auction is a potential choice as there is an incentive to secure a higher price. He suggested that there were risks in each of the options and that a benchmark in assessing projects could be: 1. Declare intent to bilaterally trade capacity and free uncertainty around price. 2. Sign a bilateral contract where volumes and price are locked in but potentially forgo profits if the	**IMO** **IMO** **IMO**

Item	Subject	Action
	MRCP increases. 3. Offer capacity into the auction and risk losing out for 12 months. *Action Point: The IMO to issue the review of deep connection costs scope of work document for tender.*	**IMO**
3b	**SCOPE OF WORKS: CALCULATION METHODOLOGY TO BE APPLIED IN DETERMINING THE WEIGHTED AVERAGE COST OF CAPITAL** The IMO provided the updated scope of work documents for the review of the WACC methodology to members prior to the meeting. The following points were raised by members: • Mr Campillos suggested changing bullet point two on page 3 under the heading: In conducting this assessment the Consultant will be required to: "provide a recommendation detailing if any of the parameters should ~~include a risk margin to incorporate the risk~~ change in the case that…" • Mr Dykstra suggested removing the second paragraph on "Purpose of MRCP" in the scope of work document. • The second paragraph is to be revised as minuted in item 3a above. *Action Point: The IMO to change bullet point two under the heading "In conducting this assessment the Consultant will be required to" as shown above and change paragraph on "Purpose of MRCP" as minuted in item 3a. Then issue the WACC scope of work document for tender.*	**IMO**
3c	**APPENDIX 3: GAS TURBINE PRICES** • The Chair thanked Mr Peake for providing the gas turbine prices. It was noted that the IMO had plotted these prices and provided the graphs to members prior to the meeting. Red lines had been drawn on the graphs to indicate the typical range of annual intrinsic growth, between approximately 120kW and 190kW. It was noted that the price per KW trend within that range was generally flat. • The Chair questioned if there is any reason to change the power station capacity from 160MW or whether we cost up multiple units to make up 160MW. • Mr Dkystra asked when the last 160MW unit was installed. Mr Rhodes noted that Newgen Neerabup was the last 160MW unit. • Mr Huppatz noted that 100MW was a standard size and that Alinta Wagerup was similar to Newgen Neerabup. Mr Peake noted that Verve's plants are not peaking facilities and will be used for balancing so are not directly	

Item	Subject	Action
	comparable. • Mr Cremin noted that GE Frame 6 generators are common at the moment and second hand units can vary in price. In the future the trend may go back to 160MW units. Furthermore, zero deep connection costs were previously applied for 160MW units but this now occurs for 9.9MW units, thus these are continually changing. *Agreed Outcome: The Power Station Capacity to remain at 160MW in total.* • The Chair questioned if there was a material difference in cost to Western Power between two 80MW units or four 40MW units? Mr Cremin noted that there aren't a lot of areas to put multiple units with similar connection costs. Mr Peake agreed. • Mr Campillos noted the installation of an additional 160MW on the grid would require system upgrades. • Mr Gibbney questioned if you would really expect it to be cost efficient for four 40MW or two 80MW units? Economies of scale exist for a large plant rather than smaller units. Smaller units cost more on whole. • Mr Gibbney noted that Western Power would need to discuss with the ERA the New Facility Investment Test (NFIT) and its interpretation out of this Working Group. Mr Cremin noted the consultant would be used for the methodology of NFIT. *Action Point: Western Power to advise Working Group on:* • *Is there currently capacity on the SWIN for adding a total of 160MW of plant to the network, either in a single unit or a combination of units (e.g. 2 x 80 MW, 4 x 40MW)?* • *In future, is it likely to be lower cost to add 160 MW of plant as a single unit (or at a single site), or might costs be lower for adding to amount of capacity at different site?*	**Western Power**
4	**REVIEW OF MRCP COMPONENTS** The Working Group continued to discuss the components of the MRCP. ***Power Station – Type*** • It was questioned whether the OCGT power station should include inlet coolers. • Mr Rhodes noted that from a commercial perspective there is incremental cost but potential increase in capacity with inlet coolers. • Mr Cremin noted that in terms of the Reserve Capacity market, it was worth adding coolers to gain the extra Capacity Credits. He also questioned which cooling would be chosen in the review.	

Item	Subject	Action
	Agreed Outcome: The Power Station type costing for the inclusion of inlet coolers. ***Power Station – Fuel type*** • Mr Ruthven noted that the current methodology assumes liquid-fuelling plant but dual fuel was an option due to security reasons. • Mr Peake commented that resupply of fuel isn't an issue and that dual fuel is unlikely to be appropriate in this instance. • The Chair noted that there are other review mechanisms for assessing dual fuel incentives. *Agreed Outcome: The Power Station fuel type to be distillate.* ***Power Station – Capacity Factor*** • It was stated that Operation and Maintenance is included in the 2% capacity factor. *Agreed Outcome: The Power Station Capacity Factor to be 2% with no change in the current methodology.* ***Liquid fuel storage and handling facilities*** • It was noted that the Market Rules require 14 hours availability of distillate fuel. The Market Procedure currently requires on-site storage for 24 hours of operation with an allowance for helping the tank half full at all times (i.e. 12 hours of operation). It was noted that it's potentially inconsistent with the Market Rules. • Mr Cremin noted that it took 10 to 12 hours to refill the fuel storage. *Agreed Outcome: The liquid fuel storage and handling facilities component to remain the current specifications of 14 hours.* ***Fixed O & M*** • Mr Cremin noted that last years' report by SKM provided an increase by 104% because metering/controlling costs where omitted in the previous report. • All members agreed that the current methodology was appropriate. *Agreed Outcome: The fixed O & M component to remain the current methodology.* ***Land- source of valuation*** • Mr Ruthven noted that Landcorp was approached by the IMO but advised that Landgate is the appropriate body to provide land valuations. The Working Group agreed to retain Landgate as the valuer. *Agreed Outcome: The land valuer to be Landgate.*	

Item	Subject	Action
	Land- location • Mr Ruthven noted there were currently 6 sites listed in the Market Procedure. • Mr Cremin questioned whether other sites could be considered where appropriate. • The Chair proposed that Western Power confirm the 6 sites each year and notify the IMO if there are any other potential sites to be considered. *Agreed Outcome: The land location to be the current list; and the Market Procedure for the Determination of the Maximum Reserve Capacity Price to include that Western Power will confirm 6 sites every year and notify the IMO of any other potential sites to be considered and the associated costs.* ***Land- size*** • Mr Peake commented that most sites are 3 ha or just above. • Mr Rhodes noted that Pinjar has a large buffer zone requirement. • Mr Cremin noted that the Environmental Protection Authority (EPA) generally requires a 3km buffer for OCGT's. A Market Participant would typically not need to purchase the extra land for the buffer zone. In particular most of the land sites are in an Industrial precinct that provides the required buffer. *Agreed Outcome: The land- size component to be 3 ha with no buffer zone; contingent on the land being in an Industrial Precinct.*	
5	**GENERAL BUSINESS** There was no general business raised.	
6	**NEXT MEETING** The next Working Group meeting is currently scheduled to be held Wednesday 15 September 2010 (3:00-5:00pm).	
7	**CLOSED:** The Chair declared the meeting closed at 2.10 pm.	

Agenda Item 3: MRCPWG - Action Points

Legend:

Unshaded	Unshaded action points are still being progressed.
Shaded	Shaded action points are actions that have been completed

#	Meeting Arising	Responsibility	Action	Status/Progress
5	Meeting 1	IMO	The IMO to amend Market Procedure for determining the MRCP to reinstate the 2009 MRCP Major Component values.	Completed. The consultation period for the proposed revised Market Procedure (PC_2010_04) closed on 6 September 2010. The IMO is currently preparing its Procedure Change Report.
12	Meeting 2	IMO	The IMO to provide back to the MAC for consideration the Working Group's suggestion that a review of the assumption that an auction is held for the purposes of the determination of the WACC be included in the Market Rules Evolution Plan.	Completed. The IMO reported on this recommendation to the MAC at its 8 September 2010 meeting.
28	Meeting 4	IMO	The IMO to publish the minutes of Meeting 3 on the website as final.	Completed.
29	Meeting 4	IMO	The IMO to consider a briefing session on scope of works with IMO or Working Group with the Consultant if required.	Pending appointment of a Consultant.
30	Meeting 4	IMO	The IMO to rank the bullet points by regulatory instrument in the Scope of Work for deep connection costs.	Completed.

#	Meeting Arising	Responsibility	Action	Status/Progress
31	Meeting 4	IMO	The IMO to amend paragraph two in both Scopes of Work to "The Reserve Capacity Mechanism is designed to incentivise the provision of a sufficient amount of reliable capacity within the SWIS. The MRCP is one of the elements of this mechanism which estimates the annualised cost of building a 160 MW OCGT that is entered into the RC Auction"	Completed.
32	Meeting 4	IMO	The IMO to issue the review on deep connection costs scope of work document for tender.	
33	Meeting 4	IMO	The IMO to change bullet point two on page 3 under the heading: In conducting this assessment the Consultant will be required to: "provide a recommendation detailing if any of the parameters should include a risk margin to incorporate the risk change in the case that…"and change paragraph on "Purpose of MRCP" as shown in item 31 above. Then issue the WACC scope of work document for tender.	Completed.
34	Meeting 4	Western Power	Western Power to advise Working Group on: • Is there currently capacity on the SWIN for adding a total of 160MW of plant to the network, either in a single unit or a combination of units (e.g. 2 x 80 MW, 4 x 40MW)? • In future, is it likely to be lower cost to add 160 MW of plant as a single unit (or at a single site), or might costs be lower for adding to amount of capacity at different site?	

Agenda Item 4: Review of MRCP Components

At the 31 May 2010 Maximum Reserve Capacity Price (MRCP) Working Group (MRCPWG) meeting it was agreed that the current construct of the MRCP remains fit for purpose.

The IMO proposed that members begin reviewing the components of the MRCP at the 22 June 2010 meeting, as outlined in sections 1.5 to 1.13 of the Market Procedure for Determination of the MRCP. It was agreed that the remainder of outstanding issues would be covered during subsequent meetings.

The components for further discussion by the Working Group are listed below (Table 1), along with information to guide the MRCPWG's decision-making process. Those components requiring the advice of an external Consultant are presented in Table 2. The components which have been previously discussed and agreed by MRCPWG are noted in Table 3.

TABLE 1: COMPONENTS TO BE FURTHER DISCUSSED

Component	Options	Market Procedure Reference	Comments
Power station – type	• OCGT, low NOx burners • Other	Sections 1.5 to 1.7	Costing to include inlet coolers.
Power station – capacity	• 160 MW • 40 MW • Another value linked to forecast demand growth	Section 1.5	Agreed on 160 MW as a total.
Location	• Optimisation of land & connection costs • Rural construction uplift	Section 1.8	
Margin M (legal, insurance, financing, environmental approval costs)	• Current methodology • Alternative methodology	Section 1.12	Noting that inclusion of inlet coolers will impact on summer de-rating factor
Contingency margin	• Factor of 0.15 • Alternative value	Section 1.12	
WACC - basis	• Auction and Long-Term Special Price Arrangement • Alternative basis	Section 1.13	To be discussed at MAC meeting on the 8 September.

TABLE 2: COMPONENTS FOR WHICH ADVICE WILL BE SOUGHT FROM AN EXTERNAL CONSULTANT

Component	Options	Market Procedure Reference	Comments
Transmission connection – location	• Linked to land valuation locations • Alternative location(s)	Section 1.8	
Transmission connection – other elements	• Capital Contribution Policy • Tariffs	Section 1.8	
Margin M (legal, insurance, financing, environmental approval costs)	• Removal of debt/equity issuance costs (include as part of WACC)	Section 1.12	
Weighted Average Cost of Capital (WACC) – period from auction to payment stream	• 2 years • Split over multiple years • Alternative	Section 1.13.2	
WACC – determination of Minor and Major components, review schedule	• Current methodology • Alternative methodology	Section 1.13	
WACC – basic calculation method	• Current methodology (CAPM, pre-tax, Officer WACC method) • Alternative	Section 1.13.7	
WACC – equation	• Current equation • Alternative equation	Section 1.13.8	

TABLE 3: COMPONENTS AGREED BY MRCPWG

Component	Agreed option	Market Procedure Reference	Comments
Power station – fuel type	Distillate only	Section 1.5	
Power station – capacity factor	2%	Section 1.5	
Liquid fuel storage and handling facilities	Current specifications	Section 1.9	Updates to the MRCP Market Procedure will be required to refer to clause 4.11.1 (a). This will ensure consistency with the requirement for 14 hours of primary fuel a day (during peak demand times) when facilities are being certified by the IMO.
Transmission connection – source of valuation	Western Power	Section 1.8	
Fixed O&M	Current methodology	Section 1.10	
Land – source of valuation	Landgate	Section 1.11	
Land – location	Current list	Section 1.11	Market Procedure to include flexibility to consider alternative sites.
Land – size	3 ha (buffer zone)	Section 1.11	Contingent on land being in an industrial precinct
WACC - source	Determined by IMO	Section 1.13.4	