



17 January 2012

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Dear Greg,

Re: Draft Report Maximum Reserve Capacity Price for 2014/15 Capacity Year

Thank you for the opportunity to review and provide comment on the Draft Report for the 2014/15 Maximum Reserve Capacity Price ("Draft Report").

The Draft Report proposes a Maximum Reserve Capacity Price (MRCP) of \$166,100 per MW per year, a 31% decrease from the previous \$240,600 determined for the 2011 Reserve Capacity Cycle. This significant reduction is the result of annual variation in input parameters combined with methodology changes arising from the recent MRCP procedure review. The IMO has argued that the revised Market Procedure will better achieve Market Objective (a) by promoting economic efficiency through greater alignment of the MRCP with real-world costs. The MRCP objective is to reflect the marginal cost of providing additional Reserve Capacity, in each Capacity Year. ERM believes that the proposed 2014/15 MRCP does not reflect real-world costs, and as such will have a detrimental effect on attracting new capital investment. Such an impact goes against Market Objective (b), by restricting the efficient entry of new participants.

As a broad proposition, ERM concurs that by reflecting costs accurately, greater economic efficiency is likely to be promoted in the market. However, on review of the IMO's Draft Report, ERM considers that the alignment of the MRCP with real-world costs is deficient in the following areas:

- i. Weighted Average Cost of Capital (WACC);
- ii. Network Access Charges; and
- iii. Insurance Costs.

Weighted Average Cost of Capital (reference Draft Report 3.8.3)

A major contributor to the reduction of the MRCP is a lower WACC. ERM is of the opinion that the WACC as currently applied is below acceptable returns required to attract investment in an OCGT in the WEM. Components used in the calculation of the WACC are reviewed on either an annual or five-yearly basis. It is here that there is a clear disconnect between the treatment of the costs of debt and equity, specifically in the determination of the debt risk premium (DRP) and market risk premium (MRP). The fundamental flaw in IMO's WACC determination is the use of short-term debt costs with long-term equity market risk premiums. To be put on an equal footing with the cost of debt, to combine like-with-like, one must consider a spot cost of equity, as

opposed to the long-run, historical average value currently in place. Alternatively, long-run average risk free rate and DRP could be applied in place of the current spot values.

The DRP is reviewed on an annual basis, determined from observed yields of corporate bonds. In the most recent review the DRP was reduced by 1%, along with a 1.35% reduction in the risk-free rate, reflecting the decrease in bond yields, as market volatility has led investors to lower risk investments which are well documented in the Draft Report 3.6 Table 1. IMO also notes that the reduced bond yields are driven by market volatility, or perhaps more simply, an increase in market risk or increased market risk premium. IMO has not considered an appropriate market risk premium and as a consequence the WACC determined by IMO is low and not reflective of real-world costs.

The MRP on the other hand is reviewed only every five years, as part of the market procedure review. In the most recent review, completed in October 2011, PwC recommended a *“value of the MRP of 6.0 per cent taking into account an emerging regulatory position for a reversion to a long-standing position of adopting an MRP of 6.0 per cent after contemplating a higher value of 6.5 per cent for a period during and after the global financial crisis”*. This represents no change from the previous value, and under the current procedure locks this value in for the next five years. The cost of equity is calculated using the CAPM, adding the risk-free rate (annually determined using spot bond rates, currently set to 4.25%) to a factor (0.83) of the MRP. This use of a spot Nominal Risk Free Rate of 4.25% (when on average it sits at around 6%, what you see in most other regulatory determinations) contrasts with an historical average as the input to the market risk premium. While in the past this difference has not had a significant impact, the current economic environment post-GFC has highlighted the shortcomings in this methodology.

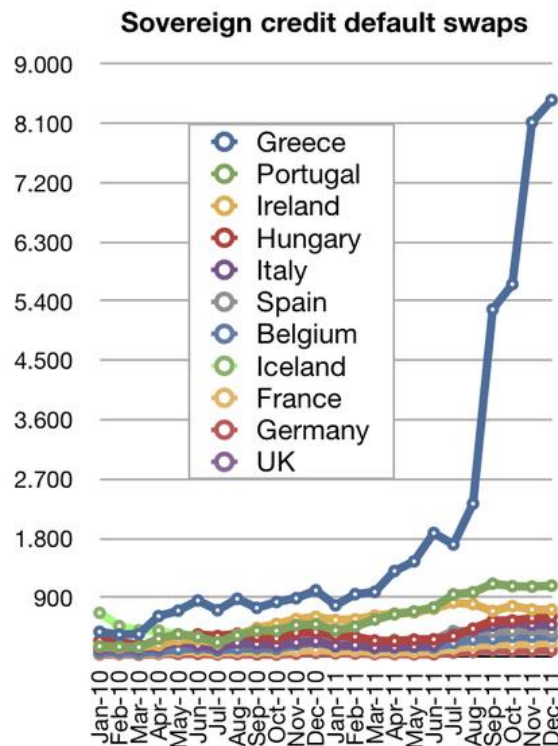
To illustrate, the current WACC parameters yield a cost of debt which is greater than the cost of equity. While current market conditions support a reduction in cost of debt, the same conditions would imply the cost of equity and in particular the MRP is substantially up. In submissions to the procedure change this point was raised by several other market participants – in response *“The IMO notes that the higher debt funding costs in the current economic environment have resulted in the cost of debt being calculated as being higher than the cost of equity”*. This statement appears counterintuitive, as the cost of debt, as calculated for the WACC, has actually decreased. Furthermore, the current cost of equity component of the WACC around 11% seems out of touch with real-world expectations. This outcome is clearly not reflective of real-world costs.

The consultation carried out in relation to October 2011 MRCP Procedure Change Report highlighted issues where IMO driven outcomes provide for volatility of MRCP. Consequences of this volatility include the probable reduction in preparedness of customers to bilaterally contract for capacity credits and risk premiums required by investors and financiers to address WEM regulatory risk and project returns volatility. It is widely understood that using a cost of equity derived from an historical long-term average MRP under current economic conditions will not provide the opportunity cost equity investors will expect and therefore its use runs the risk of underinvestment. These issues are at odds with market objectives, particularly:

- a. to promote the economically efficient supply of electricity and electricity related services in the South West interconnected system;
- b. to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- d. to minimise the long-term cost of electricity supplied to customers from the South West interconnected system;

Furthermore, the timing of the escalation of the European financial situation was emerging, but not yet known, at the time of the consultation in relation October 2011 MRCP Procedure Change Report. This is demonstrated by the credit default swap for the Eurozone shown below. It is not conceivable that the effect on the market was

known by the broader market at the time of the procedure change consultation. In addition, this broader market has continued as demonstrated by the reduction in sovereign credit ratings for 9 Eurozone countries on 16 January 2012.



Source: Bloomberg

Whilst it is acknowledged that AER made regulatory determinations during 2009 using a MRP increased from a long-run average of 6% to 6.5%, it should be noted that this 50 basis point adjustment was not based on any calculations or modeling. Rather, the AER selected an estimate of 6.5% “having regard to the desirability of regulatory certainty and stability”.

It is clear from any recent trend data of implied volatility (eg Bloomberg Australia Volatility Index, Option on ASX200, or other), market conditions are quite removed from mean/average/normal behaviour, and given the current volatile conditions, the MRP applied in the WACC calculation should be adjusted accordingly. ERM believes that use of any of the recognised methodologies for estimating MRP on the basis of current market volatility will outturn an MRP greater than 9.5%.

Therefore, ERM recommends that IMO either:

- i. Review and adjust its determination of WACC on the basis of recent market volatility and a recognised MRP estimating methodology; or
- ii. Revert to the 2013/14 WACC of 8.65%.

Network Access Charges (reference Draft Report 3.8.3)

ERM notes that in order to calculate the generator network access costs (GTUOS) for 2014, the IMO has utilised an escalation factor of 4.9% on the July 2011 charges. This methodology is stated to be in line with escalation used for the transmission connection cost. This escalation appears to be materially below that forecast by Western Power in their proposed revised access arrangement for the five year period 1 July 2012 to 30 June

2017 (AA3). In their submission to the ERA, Western Power has proposed substantial increases in the order of CPI plus 16.4% for the first year and CPI plus 11% for the remaining years. This represents an above 70% escalation in real terms and follows an escalation in the order of 40% from AA2.

A very important point to note when evaluating the escalation factor of GTUOS, is the developer's risk. Considering that generators have no ability to negotiate fix price terms with Western Power and cannot pass these regulated cost increases through to the IMO under the auction process, a prudent developer would have no option but to include a very high risk premium to the network access charges. It is unquestionable that the escalation factor used by the IMO in the calculation of the MRCP does not reflect this high level of price risk.

Considering both the material actual GTUOS increases seen from AA2, the proposed AA3 increases and the upstream parking of unhedged regulated network charges, the IMO must review the escalation proposed in the draft report. ERM recommends escalation in the order of the compounding effect of the likely determination by the ERA for AA3 and the likely escalation above CPI for the years beyond 2017 that fall within the Reserve Capacity Auction supply period (10 years).

Insurance Costs (reference Draft Report 3.8.4)

ERM has reviewed the proposed insurance costs and is of the view that the annual insurance premium is understated by approximately \$1,000/MW/year. Typically a project financed development has minimal discretion in the structure of the operations insurance with the finance agreement specifying the level of cover required. This will typically consider the cost of replacement of the asset and business interruption insurance to allow the project to continue to satisfy its obligations following the loss event and during a minimum two year rebuild period.

The property damage portion of the operations insurance must include demolition costs and professional fees for the redevelopment of the project following a material loss event. This cost does not appear to have been included in the IMO's estimates.

Business Interruption insurance must include the increased cost of working associated with payment of capacity credit refunds to the IMO and the purchase of replacement power for the 160MW OCGT (2% capacity factor MRCP CI2.1.1(d)), both covering a two year redevelopment period. The following table provides a breakdown of likely project declared values and insurance premiums based on the IMO's advised annual premium rate of 0.23%.

Industrial Special Risk Insurance Premium			
	Declared Value	\$('000)	Comment
Property Damage	Demolition Costs	10,000	Estimate total
	Professional Fees	10,000	Estimate total
	Power Station Capital Cost	141,867	as per draft MRCP
	Sub-total	161,867	
Business Interruption	Reserve Capacity Refunds	45,179	2 Year Capacity Refund
	Replacement Power (2% ACF)	5,606	2 Year Energy Purchase
	Sub-total	50,786	
	Total Declared Value	212,652	Total Industrial Special Risk
	Base Premium (based on 0.23% rate)	489	annual
	Terrorism Levy (2%)	10	annual
	Stamp Duty (10%)	50	annual
	Total ISR Annual Premium	549	annual

Public Liability	Liability Insurance	120	annual
	Grand Total Insurance Premium	669	annual
	MRCP Insurance Costs	4,190.29	(\$/MW/Year)

In addition to the insurance premium costs, insurance policies typically have at best a 45 day deductible period during which the project is self insured. Based on the exposure to reserve capacity refunds and replacement power, it is estimated that the cost associated with this working capital is in the order of \$100k per year and has not been considered by the IMO as a cost to the theoretical 160MW OCGT project.

General Comments on MRCP Procedure

ERM acknowledges that some of the above issues were raised and responded to during the PC_2011_06 procedure change process. However, ERM believes that these issues could not be adequately responded too without a proper analysis of the impact of the proposed changes on the final MRCP. This was deemed to be out of the scope of the procedure change consultations, as was any discussion of impact on the default Reserve Capacity Price. Instead, IMO responses indicated the opportunity to comment on the MRCP following the publication of the Draft Report. While this does provide for stakeholder feedback on the determined MRCP following the procedure change, there appears little scope to amend and adjust components set as part of the procedure change, now that the full impact can be appreciated.

Conclusion

The MRCP determines the absolute limit of the reserve capacity price, and as such should not represent an average cost, but rather reflect the real-world costs of providing additional generation, in the timeframe of the reserve capacity cycle. It appears clear that such a significant reduction in the MRCP will have a detrimental impact on the efficient entry on new generation, contrary to market objective (b). As such the IMO must bring the MRCP more in-line with real-world costs, which at present would require the initiation of a procedure change, to make necessary adjustments, now that the full impact of the previous procedure change can be appreciated.

Should you have any queries, please do not hesitate to contact me on (08) 9481 1108.

Yours sincerely,

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