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19 December 2012

Attn: Mr Greg Ruthven Manager, System Capacity Independent Market Operator PO Box 7096 Cloisters Square, Perth, WA 6850

By email: imo@imowa.com.au

Dear Sir

SUBMISSION ON THE IMO'S DRAFT MRCP REPORT FOR 2015-16 CAPACITY YEAR

Merredin Energy is a participant in the South West Interconnected System and owner of the 82MW peaking generation plant recently constructed in Merredin, WA. We welcome the opportunity to provide the attached submission on the Independent Market Operator's Draft Report on the 2015-16 Maximum Reserve Capacity Price published in November 2012.

Yours sincerely

Julian Widdup

Director



SUBMISSION ON THE IMO'S DRAFT MRCP REPORT FOR 2014-15 CAPACITY YEAR

MRCP Review Process

Merredin Energy considered the MRCP for 2014-15 to be materially lower than the actual costs of building a new open cycle gas turbine power station. We were therefore surprised to see the 2015-16 MRCP has fallen a further 3.9% from the previous result.

Merredin Energy is concerned that the continued downward revisions to the MRCP may be a policy response to a preconceived view that the reserve capacity price is too high. The MRCP should not be used to limit new capacity and we note the IMO does not have a stated policy objective to limit excess capacity.

We recognise that sustained over supply of generation capacity results in economic inefficiencies. The Merredin Energy plant was constructed in response to the high demand forecasts contained in previous Statements of Opportunities and the previously MRCP levels (which had made the project economic). The excess supply, which is currently depressing the RCP, is having an adverse effect on Merredin Energy and other generators.

The volume of excess capacity is being compounded by demand side management (DSM). DSM should not be seen as a substitute for peaking capacity. The development of the Merredin power station has added permanent capacity. DSM is not permanent. Participants can opt in and out of the scheme. Furthermore, DSM is not subject to the same testing or dispatch regime or refund penalties and should not receive the Reserve Capacity Price. Generators' reserve capacity revenues are being inappropriately discounted due to the surplus capacity associated with the large degree of DSM registered in the market. While there is a place for DSM in the WEM, we call on the IMO and the RCP Working Group to immediately address the adverse impact and disadvantages borne by generators. At a minimum, DSM should be tested regularly and subject to refunds.

MRCP 15% discount

Merredin Energy encourages the IMO to remove the 15% discount to the MRCP. We believe a review of that parameter would have been more important than several of the other parameters that were recently reviewed.

Merredin Energy recognises the importance and benefit of having the Reserve Capacity Mechanism Working Group consider this issue and we understand the need for the Working Group's decisions to feed into the IMO's rule change proposals. However, our previous experience with making submissions as part of the MRCP public consultation process is that our comments often get little traction. We are always disappointed when the IMO's final report makes reference to previous decisions of a working group, particularly when the working group had not convened to consider the specific comments contained in the public submissions. This was a major shortcoming of the previous MRCP review process completed in 2011. Such a process significantly undermines the usefulness of the public consultation process and should be improved.

We also remain concerned around the delayed timeframe for removing of the 15% MRCP discount factor and recommend the IMO seeks to fast track the removal of that factor.

WACC

The WACC for the 2015-16 MRCP is too low. In our previous MRCP submissions to the IMO, Merredin Energy argued that the inflation, asset beta, equity market risk premium and debt issuance costs were inappropriate (with solid reasoning and evidence).



The IMO has reviewed only some of the existing WACC parameters, such as the gamma. It is poor public policy for the IMO to make judgement calls on which parameters to review and when. Best practice would see the IMO publish guidelines on that point. This would reduce the subjectivity present in the application of the current market procedures.

We note PwC's advice to the IMO dated 19 October 2012 titled *Re: Summary of regulatory decisions related to Reserve Capacity Price* discussed the equity market risk premium. Professor Robert Officer was quoted by PwC in that report, where Officer had made some good points in relation to the EMRP. We understand from PwC's correspondence that it agrees with Officer's stated position, particularly in respect of the risk free rate and EMRP needing to be set using consistent timeframes (either point in time or 'normalised levels'). Contrary to that advice, the current approach is uses inconsistent time periods, with normalised betas and EMRPs but a point in time parameter for the risk free rate. We suggest a review of the asset beta and EMRP is warranted immediately and prior to finalising the 2015-16 MRCP, particularly as the risk free methodology can not be changed barring an amendment to the market procedures.

Given PwC's advice, who were engaged as an expert adviser to the IMO, the IMO should be duty bound to consider and act on that advice of 19 October. Such action should result in a higher and more appropriate EMRP. The recent academic paper *Adjusting the Market Risk Premium to Reflect the Global Financial Crisis* by Bishop, Fitzsimmons and Officer published in FINSIA's Journal of Applied Finance JASSA Issue 1 2011 found the market risk premium to be 9.7% based on the prevailing market volatility at the time of publication. Recognising the movement in markets since that date, an EMRP around 7% would be realistic today.

We consider that financiers will be continue to be concerned by the volatility of MRCP changes and this will, in turn, increase the cost of funding. This volatility should feed into the asset beta and the WACC. We note that no justification for retaining an asset beta of 0.5 has been provided. This number was based on dated historical data that is unreflective of the risks associated with constructing and operating a WEM peaking generation plant. We suggest an asset beta should be at least 0.6 based on the analysis presented in our previous submissions to the IMO.

The expected rate of inflation (parameter (i)) should be derived from the difference in nominal and inflation linked bond yields published by the RBA, rather than taking a single one year projection of 3.25% and nine years of 2.5% which is largely an arbitrary assumption. The IMO's existing methodology is inconsistent with the market procedure as the RBA has not published specific inflation forecasts out to 2022. Using RBA published bond yield data for bonds maturing in 2022, without interpretation or extrapolation, would be consistent with the market procedures and give a more sensible expected inflation result. Based on RBA published bond yield data (as underpinned in Graph 5.9 of the RBA's Statement on Monetary Policy November 2012), long term expected inflation (parameter (i)) should be 2.1%. The RBA inflation linked bond data can be sourced from the following link:

http://www.rba.gov.au/statistics/tables/xls/f02dhist.xls?accessed=2012-12-19-16-46-21

Fixed Fuel Costs

In order to achieve practical completion and reserve capacity certification, a new power generator needs to complete successfully a series of commissioning tests to meet System Management requirements. This include 'cold commissioning' prior to the connection to the Western Power network and 'hot commissioning' which involves the dispatch of power to the grid.

Merredin Energy consumed \$2m worth of diesel fuel to comply with the minimum Western Power testing requirements for commissioning our 82MW plant. For a 160MW power station, the fuel costs would have totalled \$4m.



As a result of the IMO's capacity credit timetable, the majority of our commissioning had to be undertaken during the months of August and September, when energy prices are typically low. Merredin Energy earned a negligible \$27,000 in STEM revenues from the generation of power during hot commissioning over the 2012 winter/spring period. The net fuel costs associated with commissioning had been ignored by SKM in its estimate of fixed fuel.

The fixed fuel costs should increase by \$4.0m for the notional 160MW power station.

General Operation and Maintenance Costs

SKM has significantly underestimated the general operation and maintenance costs.

Merredin Energy has recently entered into an O&M agreement and a separate energy dispatch services agreement. The cost of the energy dispatch services is a fixed annual fee of \$200,000 regardless of the GWhs generated.

The costs of the energy dispatch services have been completely ignored by SKM. The services are necessary in order to comply with the new balancing market regime including lodging all STEM and balancing bids, commissioning, testing, outage and other notices.

We have engaged Perth Energy to provide energy dispatch services and understand it is the only business that provides such services to independent generators. Accordingly, the fixed O&M costs in the MRCP must be increased by \$200,000. If the IMO is minded to continue ignoring those costs, we call on the IMO to make that service available to generators free of charge.

We note very little supporting information has been provided by SKM on the O&M components generally. We consider the general O&M costs including the allocations to plant operator labour and corporate overheads to be substantially understated. It might be useful for a further analysis of the O&M costs be undertaken prior to setting the final MRCP. It would also be useful for SKM to consider the costs associated with staying abreast of and complying with changes to the WEM procedures in the O&M costs.

O&M Consent Parameter

SKM estimated the annual costs of EPA charges and emissions tests to total only \$32,000. We would certainly welcome the opportunity for SKM to complete that work for Merredin at a fixed fee of that amount!

The cost of burning diesel for compliance tests should be included in the consent costs. Expected STEM revenues earned from the testing regime could be netted off the costs, although those revenues are likely to be negligible (as discussed above in relation to the commissioning costs). The consent cost parameter should also include the costs associated with maintaining and renewing generation licences and compliance with the Clean Energy Act (Cth) which is a recent additional obligation placed on generators.

Construction insurance

SKM's estimate of construction insurance costs has not been updated and remains inadequate at 0.4%. The IMO, in its report on annual insurance costs, noted insurance premiums had increased 22.5%. It is disappointing that had not identified by SKM as an issue prior to its report having been released. It may be sensible for construction insurance costs to be separately estimated as a MRCP parameter rather than being assessed by SKM and rolled into the M factor.



The construction insurance costs need to be amended to reflect current market rates. Furthermore, the extent of cover needs to be analysed and disclosed. Importantly, because of the capacity credit refund regime, construction insurance needs to cover consequential losses of 24 months for capacity credits refund liabilities (consistent with the approach applied to operational business interruption insurance) to cover loss events during construction that lead to subsequent capacity credit refunds.

Merredin Energy had to take out the following insurance cover during construction:

- Construction Material Damage
- Construction Advanced Business Interruption
- Construction Liability (General and Products Liability)
- Construction Marine Cargo & Marine Advanced Business Interruption
- Directors and Officers Liability Cover

Merredin Energy's insurance premiums totalled \$600,000 in our first year of construction. This represented around 0.8% of the EPC contract sum, prior to the 22.5% increase in premiums recently experienced. Based on our calculations, the insurance margin should be at least 1.0%.

We recommend that the IMO undertakes further work to ensure the insurance component of the Margin is set at a sensible level prior to finalising the 2015-16 MRCP.

Annual Insurance Costs

We consider the IMO's allowance for annual insurance costs insufficient.

Merredin Energy recently placed asset replacement and business interruption insurance with Chartis. As part of that process, Chartis required that we commission a site survey annually. Chartis quoted \$20,000 cost of the initial survey it was to conduct, with the survey cost charged to Merredin Energy. While that is only a modest cost in the scheme of insurance, we recommend the costs of annual insurance surveys be incorporated in the MRCP. Such a cost is necessary in order to achieve competitive premiums and we note the IMO's proposed rates appear very competitive!

The sums insured are not specifically identified but can be inferred. For asset replacement and business interruption insurance the sum insured should be increased to include:

- \$743,800 worth of liquid fuel stored on site. Stored fuel is a valuable commodity and in the event of a total loss, the insurer should be expected to meet the cost of refilling tanks. We remain perplexed as to why any owner of a power station would elect to exclude that from the sum insured.
- Following a total loss event and the rebuild of the plant, further commissioning and testing work would need to be undertaken. The costs of burning diesel to complete the commissioning work would ordinarily be borne by the insurer and therefore needs to be included in the sum insured. Based on Merredin Energy's recent commissioning experience (discussed earlier in this submission) we calculate the increase to the sum insured to be \$4.0m for this item.
- The costs of debris removal and decontamination expenses should also be included in the sum insured.

Merredin Energy's business interruption insurance policy has a 30 day deductible period. We would encourage the IMO to consider applying a lower deductible and increase the premium. If the IMO remains minded to maintain a 60 day deductible period (or \$4.3m), we would argue it is duty bound to include an allowance for the costs of forced outage refunds to reflect the cost of this self insurance. We would suggest a forced outage of two months for each 30 years of operations (i.e. an average cost of \$143,000 pa or 0.06% of the business interruption sum insured).



Any prudent owner of a power station should also maintain minimum workers compensation cover and pollution liability insurance. Pollution liability insurance covers the risks associated with the gradual leakage of diesel from the storage tanks and is essential for a power station owner with 815kL of diesel continually stored on site. These risks can lead to material financial losses and are not covered by standard asset replacement or business interruption insurance. The premia associated with these policies is should be added to the annual insurance costs.
