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27 November 2013

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 2016-17 CAPACITY YEAR

Please find attached Merredin Energy's submission on the 2016-17 Maximum Reserve Capacity Price Draft Report published in November 2013.

Yours sincerely

A handwritten signature in blue ink that reads 'Julian Widdup'.

Julian Widdup
Director
Merredin Energy

SUBMISSION ON THE IMO'S DRAFT MRCP REPORT FOR 2016-17 CAPACITY YEAR

Merredin Energy is a strong supporter of the capacity credit regime. However, we consider the MRCP for 2016-17 to be materially lower than the actual costs of building and maintaining a new open cycle gas turbine power station. We would recommend that the IMO consider appropriate adjustments to the MRCP parameters to make the MRCP more reflective of the actual costs of operating, maintaining and financing a power station.

The key items where we consider the MRCP components should be revised are set out below.

Cost of Fuel

In section 5.4.4 of SKM's report, SKM reports the cost of fuel as \$21.65 / GJ and notes that "this cost includes delivery transportation but excludes excise and GST".

With the recent changes to excise rebates, power generators now pay a portion of excise. The net excise charges worn by generators should be included in the fuel cost components of the MRCP. Details of the current excise arrangements are available from the ATO:

<http://www.ato.gov.au/Business/Fuel-schemes/In-detail/Fuel-tax-credits---for-GST-registered-businesses/Calculating-and-record-keeping/Fuel-tax-credit-rates-and-eligible-fuels/>

We recommend that SKM revise the fuel costs to include the net cost of excise.

Consumption of fuel during commissioning

The 2% allowance SKM has made in its estimate for start-up costs appears to be low. As noted above, that allowance should specifically include diesel excise. We would recommend SKM confirms the number of commissioning hours used to derive the 2% and confirm whether that remains appropriate.

Merredin Energy consumed \$2m worth of diesel fuel as part of the EPC contractor's responsibilities to commission our recently developed 82MW plant. We consider that volume of fuel consumption typical for an OCGT and expect a 160MW power station to incur fuel costs of around \$4m during commissioning.

The IMO and system management would have details of the hours of 'hot commissioning' involving the dispatch of power to the grid during the commissioning of plants. There would need to be an additional allowance for cost of 'cold commissioning' to reflect the costs of running turbines but not exporting power during the early stages of commissioning. We would recommend the IMO's collection of commissioning data be used to assess the reasonableness of SKM's 2% parameter and revise it appropriately. Based on our recent experience, we are very confident that parameter is substantially understated.

Consumption of fuel during operations

In order to remain certified, power generators operating in the SWIS are required to undertake:

- IMO certification test runs twice per annum (summer and winter tests) and
- annual emission tests as part of a generator's environmental licence obligations.

The operating costs, including diesel consumption, associated with undertaking these tests should be included in the fixed O&M component of the MRCP.

Unless SKM can derive a more appropriate estimate, we suggest the IMO determines the hourly cost of these operations by reference to the Alternative Maximum STEM price.

The IMO certification tests involve:

- Engine start and run to load
- Two trading intervals at full load
- Run down to stop

Each test involves operating for at least 2 hours per annum. At the Alternative Maximum STEM price of \$500/MWh, this equates to a six monthly compliance cost of \$160,000 per annum for a 160MW generator.

Attached is a copy of the environmental licence for Merredin power station. This licence requires annual testing of the exhaust emissions from both engines as shown in Table 3.2.1 on page 8. To accomplish all of these tests each of Merredin's turbines are scheduled to run at maximum power for a period of 3.5 to 4 hours so around 70,000 to 80,000 litres of diesel is used by Merredin Energy's 82MW plant. For a 160MW plant, the 4 hours of environmental testing adds a further cost of \$320,000 per annum.

This equates to a total annual cost of \$480,000 assuming that the environmental test and an IMO certification test are run concurrently. This cost must be included in the MRCP.

Cost of complying with the balancing regime

In our previous MRCP submissions, Merredin Energy has argued that there should be a reasonable allowance for the costs of complying with the IMO's balancing regime and WEM rules. The current balancing rules place a significant administrative burden and software system requirements on generators. We are also compelled to lodge STEM submissions, resource plans, and annual capacity certification submissions.

Peaking generators are not compensated for the cost of these functions through the energy market. Balancing submissions must be lodged continuously throughout the year, regardless of whether or not a generator is dispatched. A failure to correctly lodge a submission automatically triggers capacity credit refunds. This is a real and material operating expense. Merredin Energy has previously advised the IMO it had entered into an agreement with Perth Energy to undertake those functions on our behalf and disclosed that cost.

The IMO had previously dismissed an allowance for that cost on the basis that, should Merredin Energy have greater economies of scale, we would be able to spread that overhead expense across several assets. Arguably we have obtained the scale benefits by outsourcing the balancing functions to Perth Energy who provides that service to multiple generators.

Perth Energy manages submissions for over 250MW of generation capacity for a number of clients. The costs to Perth Energy of maintaining IT systems and manning the trading desk 24/7 costs represent a significant cost, with all clients meeting a share of those costs. We accept that Perth Energy's fees incorporate a profit margin. However, in the absence of a superior and more cost effective solution, generators are compelled to meet that cost or face capacity credit refunds. Such refunds and penalties associated with non-compliance are so significant that generators cannot take any risk of breaching market rules. We dismiss any perception that this type of administrative work is simple. The reality is that the WEM operation is not a simple matter. Evidence of apparently excessive balancing costs to market participants since IMO's introduction of the new balancing regime, for instance, shows that low-cost perception is a can be a fallacy and is often matched with high-cost implementation in practice.

We encourage the IMO to independently assess the most cost effective solution for complying with the balancing regime and including that cost in the Fixed O&M component of the MRCP. In particular, we

encourage the IMO to obtain a quote from Perth Energy and any other market participants who offer that service to independent generators.

Insurance cost

Insurance costs have increased significantly over the past 12 months. We note the IMO has not been successful in obtaining updated estimates of insurance and therefore proposes to retain the insurance costs as a fixed percentage of the sum insured. This would appear a convenient argument to limit capacity price increases.

The Australian Bureau of Statistics releases detailed time series on components of the CPI. This includes the quarterly index of insurance costs in Perth. The series ID: A3602858X is a sub-series of the CPI data and shows that insurance costs in Perth increased 6.3% in nominal terms over the 12 months to end September 2013. This should be added to the IMO's 7.1% allowance for the increased in sum insured to give an aggregate 13.4% increase in insurance costs.

This time series can be obtained from ABS's CPI publication, see TABLE 11. CPI: Group, Sub-group and Expenditure Class, Index Numbers by Capital City

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6401.0Sep%202013?OpenDocument>

Asset replacement and business interruption insurance was estimated by the IMO to cost A\$708,276 per year as at 1 April 2016, calculated as 0.29% of the limit of liability at that date. Applying the CPI insurance increase of 6.3% over the past 12 months, would see the insurance parameter increase to around \$753,000 or 0.31%.

Insurance deductibles

Merredin Energy's business interruption insurance policy has a 30 day deductible period. By comparison, the IMO has priced business interruption insurance using a 60 day deductible policy.

We would encourage the IMO to consider applying a lower deductible and increase the premium. With a 60 day deductible period, a 160 MW generator could lose over \$10m in capacity credit refunds as a result of an insured outage during summer. We would argue a policy with a \$10m deductible is inappropriate for a SWIS generator. This leaves equity investors and lenders significantly exposed. Smaller exposures are typically insured. Due to the onerous nature of capacity credit refunds, we do not consider the more typical 60 day deductible periods for other industrial businesses to be a particularly useful benchmark in this instance.

We suggest the business interruption insurance premium be increased to cover a shorter deductible period.