



Level 4, 165 Adelaide Terrace, East Perth, W-Australia 6004  
Tel: (+618) 9420 0300 Fax: (+618) 9474 9900  
info@merredinenergy.com.au

30 April 2014

Attn: Group Manager, Development and Capacity  
Independent Market Operator  
PO Box 7096  
Cloisters Square, Perth, WA 6850

By email: [market.development@imowa.com.au](mailto:market.development@imowa.com.au)  
Copy to: [imo@imowa.com.au](mailto:imo@imowa.com.au)

Dear Sir

**SUBMISSION ON DRAFT RULE CHANGE REPORT RC\_2013\_20 - RESERVE CAPACITY PRICES**

Please find attached Merredin Energy's submission on the Draft Rule Change Report dated 31 March 2014 pertaining to the IMO's proposed changes to the Reserve Capacity Price.

Yours sincerely

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

Julian Widdup  
Director  
Merredin Energy

## **SUBMISSION ON DRAFT RULE CHANGE REPORT DATED 31 MARCH 2014**

### **CHANGES TO THE RESERVE CAPACITY PRICE**

---

#### **1. Introduction**

Merredin Energy is a strong supporter of the Capacity Credit regime. The WEM is dominated by Synergy and a small number of other participants. Given the composition of the market, it remains appropriate for the WEM to have a capacity market with stable policy and price frameworks. The Reserve Capacity Price should represent an economically efficient price and lead to the efficient deployment of capital and provide an efficient and appropriate financial return to generators, consistent with the market objectives.

Merredin Energy is concerned that the constant modification of the RCP methodology and process has caused this infrastructure market to be seen as high risk to investors and financiers. This has led to higher funding costs and potentially inefficient outcomes, contrary to the market objectives.

The proposed change to adopting the Lantau formula is introducing further uncertainties to an increasing risk environment. We therefore suggest the IMO delays the introduction of the proposed RCP changes.

#### **1. A Formula for Gaming the RCP**

First and most significant is that the adoption of the Lantau formula would potentially open the capacity market to manipulation and gaming. The IMO has ignored requests from Alinta Energy, Perth Energy and Synergy to defer the rule change proposal, at least until the current WEM Review undertaken by the WA Government has been completed. These requests stem from concerns that the WEM is being subject to unnecessary changes in full knowledge that a broad based review of the WEM is under way and could again change the capacity market in the very near term.

Merredin Energy supports the deferral of the RCP changes for another vital reason, that of gaming potential by large players. We call for deferral at least until the gaming concerns, discussed below, are considered and resolved appropriately.

To understand the severity of the gaming potential and the market power being granted to the largest participants, the IMO should consider the following example.

At present, the SWIS comprises 5,683MW of assigned capacity (IMO SOO 2013). The Reserve Capacity Requirement is 5,119MW, with surplus capacity of 564MW (11%).

Synergy/Verve accounts for about 3,000MW of generation capacity once Kwinana Stage C is decommissioned in late 2015. At the 2015-16 RCP of \$120k/MW, this equates to total annual capacity revenue of \$360m for Synergy. By withholding supply temporarily, through periodic mothballing of capacity for instance, Synergy (or another large generator) could use the Lantau formula to game the RCP in its favour.

Synergy could, say, reduce 10% of its capacity through mothballing of the 300MW Kemerton GTs on the relatively plausible excuse of high gas costs. The total surplus capacity in the market would reduce by 6 percentage points, from 11% to 5%. As a result, the RCP would increase by 22% (being  $6\% \times 3.75$ ). This 22% price increase equates to a new RCP of \$146k/MW under the proposed formula. Under this scenario, Synergy's total capacity revenue would be \$394m (ie, its reduced capacity of 2,700MW x \$146k). This represents a net increase of \$34m in annual capacity revenues.

Should Synergy wish to increase its capacity revenue therefore, it could do so by simply mothballing capacity temporarily.

This potential arises from the steep 3.75 price slope, as the price effect (+22%) more than offsets the quantity effect (-10%) in this example. Even greater super profits could be potentially made by also temporarily mothballing the 230MW Cockburn CCGT and other power stations.

The ability of a dominant market participant to artificially restrain supply to earn highly predictable (formula based) super profits is being offered by IMO in this administered-price framework.

We question why the IMO is supporting an arrangement that will provide dominant participants with such easy gaming powers at the expense of smaller participants and more critically consumers.

## 2. Potential Gaming Solutions

While there is uncertainty over the extent to which market power would be used to game the RCP, we propose that IMO defer the introduction of the new methodology until the Government's WEM review is completed. The WEM review is providing an opportunity for market participants to examine further the implications of the new formula as well as other options with regard making the capacity pricing regime more efficient.

Possible enhancements to the capacity market could include:

- Establishing a RCP floor
- Developing appropriate protections for independent market participants against market power gaming
- Reviewing MRCP components and the applicability of the 3.75 RCP parameter.

## 3. Need for an annual RCP Floor

Gaming aside, the application of a 3.75 slope means the RCP will be incredibly sensitive to changes in peak demand assumptions – which is IMO's domain and outside the control of generators.

Demand forecasting is inherently difficult. We have seen material year-on-year changes in forecast peak demand. For example, the 2012 SOO estimated 2013 peak demand at 4,164MW (based on 50% PoE). The following year when the IMO published the 2013 SOO, the same peak demand forecast had been revised to 3,735MW, representing a 10.3% fall.

Under the Lantau formula, all else being equal, a 10.3% change in forecast demand will reduce the RCP by a massive 39%. IMO is not accountable for its performance in demand forecasting. All the price risks as a result of wrong forecasts are borne by generators, excessively. Price variation of such magnitude would inevitably cause investors to breach debt coverage covenants in standard project finance arrangements. Such predictable risk could only lead to two possible outcomes: 1) investors refusing to invest, or 2) cost of capital going up to incorporate such volatility.

We seriously question whether this is an outcome intended or desired by IMO, market customers and generators. If not, we recommend leaving the price elasticity of excess supply unchanged at 1-to-1, or revising it well down from the proposed 3.75 parameter, to around 2, accompanied by a price floor.

Given that the maximum RCP could only be 110% of the MRCP, there is every rationale to limit the minimum to 90% of MRCP using a 2x parameter, and 1x parameter for any higher excess capacity. For instance, if excess capacity is 10%, then the first 5% would lead to a 10% fall in RCP, plus the additional 5% leading to a further 5% fall in RCP, totalling 15% fall.

This price fall quantum would be more than sufficient to deter the bravest investor from participating in new Capacity Credit certification for the Capacity Year in question. To require a more volatile outcome (such as a 39% drop in this case) is to fail totally to understand the true nature of project financing in this infrastructure market. There is no gain for anyone, least of all consumers, for a RCP regime that could so easily lead investors to breach of project finance covenants.

#### **4. Revise MRCP Asset Beta**

The 3.75 parameter used to calculate the RCP will increase the volatility of revenues for generators. If adopted, we argue that the MRCP asset beta used to derive the WACC should be adjusted significantly. For the IMO or its adviser PwC to ignore the impact of this increased volatility of revenue seems highly inappropriate.

#### **5. Revise MRCP Debt Parameters**

The increased RCP volatility will have implications for debt as noted above. The cost of debt will increase materially and lenders will need to ensure greater coverage ratios. This will mean projects have to carry less debt than otherwise. This is a real world commercial issue. Investors will be compelled to refinance a project if covenants are breached, with the cost of refinancing and debt contribution adding inexorably to cost per MW built and maintained, leading to pre-emptive under-investment in the generation market. In times of capacity need this under-investment will have serious economy wide impact should brown-outs or black-outs result.

We argue that the adoption of the Lantau formula should at least result in an immediate reduction in the Debt Ratio from 40% to 30% for MRCP calculation purposes.

#### **6. Demand Side Management (DSM)**

DSM has been the most inefficient feature of the capacity market, especially in periods like now when there is significant excess capacity as calculated by IMO. We are at a loss as to why IMO is willing to force \$60-70m of additional “capacity” cost per year onto retailers and ultimately consumers.

Adopting the Lantau formula should be effected hand-in-hand with the exclusion of DSM from the capacity market, to provide a true supply-demand position of generation capacity as defined in the Market Rules and as subjected to the Rules governing the Balancing Energy market dispatch. It is unfair and unreasonable for IMO to treat DSM preferentially while imposing additional punitive outcomes on genuine capacity investors.

#### **7. RCP for 2016-17**

In light of the above points, we consider it highly inappropriate for the IMO to apply the new RCP calculations from 2016-17, without resetting the MRCP components and dealing appropriately with DSM. We would argue IMO should:

- Re-calibrate the MRCP for the 2016-17 MRCP based on revising the Asset Beta and Debt Ratio, and clarifying the Rules surrounding DSM dispatch to make it consistent with all generation capacity; or
- Delay the implementation of the Lantau formula until such re-calibration and Rules clarification are done.

## 8. Conclusion

Merredin Energy supports the proposal by Alinta Energy, Perth Energy and Synergy to defer the Rule Change proposal in light of the Government's WEM review and the other concerns identified in this submission. The IMO expects generation investors to make long term decisions to commit to building capacity yet is taking short term, reactive actions which seem to contravene market objectives (a) and (d). In particular, market objective (d) is focused on minimising long term cost of electricity supply; it is not a short term objective.

Delaying the RCP rule changes will provide additional time for policy makers to consider and develop appropriate solutions to the concerns raised.

-----