
**Wholesale Electricity Market
Rule Change Proposal Submission Form**

**Calculation of the Capacity Value of Intermittent Generation -
Methodology 1 (IMO) and Methodology 2 (Griffin Energy)**

RC_2010_25 & RC_2010_37

Submitted by

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Submission

1. Please provide your views on the proposal, including any objections or suggested revisions.

Collgar does not support RC_2010_25 as modified by the amendments in section 5.4 and specified in Appendix 5 of the Draft Rule Change Report Title: Calculation of the Capacity Value of Intermittent Generation - Methodology 1 (IMO) and Methodology 2 (Griffin Energy).

While Collgar understands the rationale behind the rule change it believes that the implementation of this rule change is unfairly punitive on renewable energy generators, in particular those with established facilities. Further, Collgar believes that the issue at hand (namely the ability for generators in the SWIS to meet peak demand) may be addressed through other methodology changes (e.g. the introduction of block pricing tariffs).

Collgar believes that the rule change has a good chance of leading to lower investment by the private sector into the Western Australian renewable energy landscape. This needs to be carefully considered given the forecast financial investment required for generation assets in the state in coming years. The increased regulatory risk embedded within RC_2010_25 may potentially impact

negatively on investor sentiment towards investment in renewable energy projects within WA and hence investors may consider other jurisdictions more desirable for investment.

Finally, Collgar wishes to formally state its objection to the letter posted by the IMO on its website on 13 October 2011. We believe this letter is an inaccurate reflection on actual events and our detailed response is included below.

(1) Load for Scheduled Generation (LSG)

Load for Scheduled Generation is a relatively new concept being brought into the Market Rules which discriminates against renewable generators and heavily favours scheduled and peaking generators.

The LSG methodology analyses contributions from intermittent generators based on the 12 peak 30 minute intervals drawn from separate days each year, over a 5 year period. This is an extremely narrow band of selected intervals, representing only 0.068% of the time for a single year of 17,520 intervals. For intermittent generators this is a “needle in a haystack” approach and completely ignores the contribution that renewable generators make for the remaining period. Wind farms typically have availability targets of greater than 95% (and the newer ones such as Collgar well in excess of this). Therefore this LSG methodology fails to accurately recognise the contribution made by renewable energy generators on the SWIS to overall generation supply and capacity.

Collgar points to the forecast overcapacity currently on the SWIS and forthcoming years (refer to the table below). LSG will only serve to increase this sub-economic position.

Reserve Capacity Mechanism Year	2009	2010	2011
Reserve Capacity Cycle Years	2011/2012	2012/2013	2013/2014
Reserve Capacity Requirement (MW)	5,191	5,501	5,312
Capacity Credits Assigned (MW)	5,493	5,996	6,087
Difference btw RCR and CC Assigned (MW)	302	495	775
Excess Capacity (%)	5.83%	8.99%	14.59%

(2) “U” Parameter

To Collgar’s mind, the “U” parameter in the Sapere methodology is a “balancing” factor applied to achieve a compromised result between the prior methodologies proposed.

To add to this uncertainty, from our read of the Sapere report, this parameter can seemingly be changed at whim every three years hence providing no regulatory certainty on how intermittent generation capacity will be valued.

The Sapere report justifies its use of the “U” parameter by making reference to “international standards” and “benchmarks” while failing to disclose those benchmarks and hence preventing proper analysis and scrutiny. Given the unique nature of the Western Australian energy market any such “international standards” must be disclosed to determine whether they can be applicable.

RC_2010_25 justifies the use of the “U” parameter on several occasions by stating the lack of historical data on which to base intermittent generation contribution during times of SWIS extreme peak demand.

Unless the “U” parameter is clearly transparent and can be reliably used for forecasting and modelling well into the future, Collgar believes its value as proposed in RC_2010_25 should be set to 0.001 or removed from the formula completely until such time that its relevance is necessary.

(3) Grandfathering of existing arrangements

Given the materiality that this rule change will have on existing renewable energy generators, Collgar firmly believes that existing facilities should have their existing regimes protected and grandfathered. Investments in large renewable facilities such as Collgar require significant up front capital contributions on which regulatory assumptions must be made and long term contracts must be entered into. Changes such as the one proposed can materially diminish the value of such investment which may in turn lead to lesser funds being available to maintain the asset into the future (resulting presumably in an even worse position for the market).

For existing wind farms that made their investment decision on the basis of the existing methodology, there is no protection or grandfathering of the existing regime to protect the investment nor can they now renegotiate off-take contracts to account for this.

New renewable energy generators may be able to mitigate the risk associated with this rule change via negotiation with relevant counterparties but this will likely require higher off-take prices to be negotiated which would ultimately flow through to the end user (and again reduce the attractiveness of renewable energy).

(4) Objection to IMO Extension Notice on 13 October 2011

The Sapere report ignores the contribution from Collgar on the SWIS. Given the relative size of Collgar in the SWIS, we believe any study conducted without our data cannot be representative and therefore should not be relied upon for such an important rule change.

Collgar would like to clarify information contained within the IMO’s extension notice that was published on Thursday the 13th October 2011. Given the relative size of Collgar in the SWIS, we believe any study conducted without our data cannot be representative and therefore should not be relied upon for such an important rule change.

IMO comment: *Despite the best efforts of Collgar the available data is incomplete, with a number of periods missing or containing erroneous data. The IMO notes that some of the missing periods relate to key output periods, including peak periods as follows.*

Collgar Response: **After becoming aware of the Sapere report, Collgar conducted its analysis and became aware that Collgar’s data had been ignored for the purposes of the Sapere analysis. Collgar therefore contacted the IMO on the 14th**

September to offer data to be used for analysis. The IMO response to this offer was that they had no intention of including Collgar's data or modifying the published reports. Collgar again contacted the IMO on the 26th September to provide our data so that potential impacts from Collgar on the LSG intervals could be analysed by proponents. Again the offer was declined.

The IMO then contacted Collgar on the 4th October requesting our wind data. Collgar responded on 6 October by couriering raw data to the IMO on 6th October, noting that a more "user friendly" data set (compiled at Collgar's cost) would be made available to the IMO by 13th October.

Collgar would like to note that the IMO request for wind data was only 10 days prior to the 14th October submission timeline. Given the late notice to provide the data, certain caveats were necessarily applied to the refined data set. With greater notice, Collgar would have been better positioned to provide a more refined data set with fewer caveats.

IMO comment *2006/7 hot season: entire data series missing*

Collgar Response: **Wind monitoring at site started April 2007.**

IMO Comment *2007/8 hot season: 20 days with missing data, including 3 of the days currently identified in the top 12 TI's*

Collgar Response: **20 days have missing 10 minute interval data which represents 0.46% of missing data for the 2007/2008 hot season.**
3 days have missing 10 minute interval data from the top 12 TI's which represents 0.69% of data over the top 12 TI's.

IMO Comment *2008/09 hot season: 32 days with missing data, including 4 of the days currently identified in the top 12 TI's*

Collgar Response: **32 days had missing 10 minute interval data which represents 0.88% of missing data for the 2008/2009 hot season.**
2 days have missing 10 minute interval data from the top 12 TI's which represents 0.12% of data over the top 12 TI's.

IMO Comment *2009/10 hot season: 27 days with missing data, including 2 of the days currently identified in the top 12 TI's*

Collgar Response: 27 days had missing 10 minute interval data which represents 1.17% of missing data for the 2009/2010 hot season.
2 days have missing 10 minute interval data from the top 12 TI's which represents 0.58% of data over the top 12 TI's.

IMO Comment: 2010/11 hot season (up to 7th March only): 13 days with missing data, including 2 of the days currently identified in the top 12 TI's.

Collgar Response: 13 days had missing 10 minute interval data which represents 0.22% of missing data for the 2010/2011 hot season.
2 days have missing 10 minute interval data from the top 12 TI's which represents 0.29% of data over the top 12 TI's.

2. Please provide an assessment whether the change will better facilitate the achievement of the Market Objectives.

Collgar believes that the Rule Change Proposal will not operate to better facilitate the achievement of Market Objective (c). Collgar believes the Rule Change Proposal will discriminate against renewable energy technologies, most particularly wind energy technologies.

3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

For the 2011-12 year, Collgar has been issued 90 Capacity Credits – the largest of any of the renewable energy participants in the market today. This represents a significant revenue stream for Collgar and stakeholders. Implementation of this rule change will materially reduce the number of Capacity Credits which in turn reduces the available revenue stream.

4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

NA
