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

**RC_2010_25 Calculation of the Capacity Value of Intermittent
Generation – Methodology 1 (IMO)**

Submitted by

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Submission

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

The issue of calculating, and placing a capacity value on, the contribution of intermittent generation (IG) to system security has proven to be a complex one with widely divergent views on the appropriate methodology to determine that.

The Renewable Energy Working Group (REWG) was established by the IMO to canvass a number of matters related to IG, one of which was, via Work Package 2, the valuation of capacity. The initially proposed methodology was not accepted, primarily due to concerns about some associated assumptions and the lack of relevant data. Two other proposals were subsequently tabled, followed by a revision to the initially proposed methodology.

The REWG was unable, despite lengthy deliberation, to reach agreement on the implementation of any of the proposed methodologies. It was left to the IMO to determine an appropriate course of action, and it has chosen to proceed with this Rule Change proposal. An alternative Rule Change proposal, primarily based on the revised initial methodology, has also been submitted by Griffin Energy. Verve Energy does not support that Rule Change proposal as it appears to not satisfy concerns that have been raised by System Management.

The underlying tenet seems to be System Management's concern that the current valuation methodology does not satisfactorily reflect the contribution of IG to system security at times

when it matters most. System Management understandably takes what could be seen by some as a conservative view on how that contribution should be determined and, in the method it proposed, sought to use a very limited number of system peak Trading Intervals. In the strictest sense, this would appear to be appropriate. However, the level of volatility associated with this method was of concern to the REWG and it appears necessary to choose a methodology that resolves that issue while remaining acceptable to System Management by not assessing IG performance over an excessive number of Trading Intervals, which would mask performance at critical times. The method now adopted by the IMO in this Rule Change Proposal is intended to achieve that outcome.

In assessing the proposed Rule Change, there has been significant concern expressed in some quarters about the use of Load for Scheduled Generation (LSG) in the determination of the Trading Intervals of highest system security importance. Its use has been promoted in the Rule Change Proposal as accounting for increased penetration of IG and promoting diversity of technology. The former is true to the extent that it removes the influence of IG and allows the identification of which days scheduled generation was most required. However it has been argued that, in doing so, it unfairly discounts the contribution IG may have made on those peak days and that this will become a more significant issue with increasing IG penetration. An extreme example tendered is that, if all generation on the system was IG, it would then not be possible to choose any Trading Intervals in which to assess the IG contribution. This is seen as a serious mathematical flaw in the methodology that will manifest itself in direct relation to the level of IG penetration. In addition, it could be argued that applying a PoE factor after the discount already associated with the use of LSG, is akin to a double contingency, further eroding what may be considered to be the contribution of IG in meeting system peaks.

Another interesting issue is that it appears to be increasingly expressed that, due to the influence of other policy settings (eg legislated renewable energy target), the relationship between IG capacity payment and IG penetration is tenuous. That is, it could be found that the outcome of this Rule Change process may have no influence on how much IG is established in the future. This means that the focus should clearly be on implementing a valuation methodology that accurately determines the extent to which installed IG can be relied upon in relation to system security so that, regardless of the level of IG penetration, System Management is able to identify whether it has a system security issue and flag the need for additional scheduled generation.

The need to act here is largely governed by the extent to which System Management's expressed concerns are considered to have veracity. Under the circumstances, and given the inability of the REWG to resolve the matter itself, even after lengthy deliberation, it is reasonable for the IMO to make a determination which will resolve the matter. It is also understood that System Management is prepared to accept the IMO's proposed solution. Given that it is the primary protagonist here, that should have some bearing on the outcome. However, if the IMO elects to adopt its proposed Rule change, it should be on the premise that:

- it is intended to resolve an immediate issue;
- concerns have been identified with the valuation method that will manifest in the longer term with increasing IG penetration; and
- the suitability of the chosen methodology will be revisited, at the appropriate time, in that context.

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

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.

N/A

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

N/A