
Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2010_25 & RC_200_37 Calculation of the Capacity Value of Intermittent Generation

Submitted by

Name:	John Rhodes
Phone:	6212 1138
Fax:	
Email:	John.Rhodes@synergy.net.au
Organisation:	Synergy
Address:	228 Adelaide Terrace Perth 6000
Date submitted:	30 November 2011

Submission

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

Synergy is not surprised that the IMO has, for the first time, requested a third round of public comment on what has turned out to be a complex Rule Change Proposal. RC_2010_25 and RC_2010_37 have been ground breaking rule change proposals in every way and have tested both the rule change process and all our minds, if not our patience.

Previous Comments

Synergy raised in its second submission a number of issues not all of which have been addressed by the IMO in its 21 November 2011 *'further consultation on the rule change proposal'*.

Synergy is still concerned that the IMO has not adequately responded to the grandfathering issue but hopes that a comprehensive discussion of this issue, especially in respect of addressing a perceived increase in sovereign risk that investors may attach to this market as a result on this rule change progressing, will be present in the final report.

Synergy is still concerned regarding the lack of visibility of the arrival of the Collgar Wind Farm (Collgar) on the capacity credits to be allocated under the Proposed Rule Change to existing facilities. Collgar itself may now have sufficient information from the Proposed Rule Change draft report to be able to determine its own capacity credited position but Synergy

notes that its arrival and hence impact on other Market Participants under the Rule Change Proposal cannot be readily or easily determined by those others even with the extra information made available.

Accordingly, in Synergy's view, it is still appropriate that the relevant Market Participants be advised of the impact of the new 206 MW facility on their respective capacity positions before considering this approach further. It is, though, noted that the arrangement to separate the calculations for existing and new facilities will not result in an immediate impact on existing facilities but will be factored in over a five year period. It needs to be remembered that new arrivals will ultimately impact existing facilities after year four and that the full impact of Collgar, given it is already here, is likely to be experienced in a shorter timeframe.

Load for Scheduled Generation (LSG) and Market Comments

The responses from the second round of public comment were uniform in questioning the merit of using LSG. Synergy's own comments suggested that LSG as a method to reward diversity can do the exact opposite in that it rewards correlation with LSG peak intervals. However, a facility that performs best at system peak but not as well at LSG peak is showing diversity but suffers under LSG. In this regard the method is counter intuitive. It also relies upon accepting the view that the worth of intermittent generation can only be determined by the size of the task it leaves to conventional generation, and the market does not yet appear to have been fully persuaded of the merits of this view.

Even so, the underlying concern expressed in many of the submissions was that under the LSG methodology the capacity value for a facility will be impacted by the performance of others; independence is therefore ultimately lost under LSG. This dependency on other facilities, in our view, is what the market most dislikes about the use of LSG as it introduces an uncontrollable and potentially indeterminate risk to capacity credit valuations. The factoring over five years for new facilities is a reassuring step, but allows existing facilities to impact upon each other immediately and new facilities progressively in the future.

Inclusion of 'U' Factor and Market Comments

Synergy is also concerned that the market's apparent dissatisfaction with the proposed 'U' factor will not be resolved by the IMO's latest proposal. A review of the previous submissions shows a fairly uniform view that it should be removed and not simply reformed or constrained in an arbitrary way. The extra explanation is of help but, one suspects given the general market view, does not justify its continuance. Synergy's previous submission suggested that the IMO should *'seek a more rigorous assessment of the relationship between IGF output and temperature, possibly by engaging a suitably qualified consultant with local experience in this field'*. Undertaking this step is still Synergy's preferred approach given it is too large a change to accept based upon a single source. By engaging a second locally qualified opinion would, irrespective of the conclusions reached, provide the required level of diligence.

On reading the consultant's extra explanation it still appears to be a brave conclusion that a negative relationship between temperature and IGF output is confirmed given the few data

points at 41 degrees and an understanding that based on too few data points, averages are speculative and not conclusive¹.

As described in Appendix 1 the chosen approach to determine a 'U' factor "was a best-effort estimate". The IMO may therefore consider it is addressing participants' concerns and so is trying to reach a reasonable outcome by providing more details of the analysis. There is no doubt that this is the IMO's intention but from participants' perspective the inclusion of the 'U' factor adds complexity and removes certainty.

A Question of Timing

Synergy's final point is a restatement from its previous submission.

Given the commencement of a Reserve Capacity Mechanism review, it may be considered untimely to implement RC_210_25, RC_2010_37 or any variant until issues such as excess capacity and surety of a sensible capacity mix have been addressed. Although this particular discussion in respect of intermittent generation capacity valuations has lasted three and a half years, given excess capacity now exceeds the credited capacity of wind and aslo the IMO board's RCM consultant's comments about integrating all components of the RCM, a hasty conclusion to this issue is not required.

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

Please refer to previous submission.

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.

Please refer to previous submission.

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

Please refer to previous submission.

¹ Note: The final average calculation resulting in the 63 MW value is not an average but a weighted average given a greater weighting to the 41 degree values than the 40 or 39 degree values by virtue of the few values available at 41 degrees. A true average of the three temperatures would produce a higher value than 63 MW.