
Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2011_14 Calculation of Availability Class Quantity Correction – Draft Rule Change Report

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:	17 October 2011

Submission

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

Synergy supports System Management's assessment that an inconsistency or mismatch arises between clause 4.5.12(c) in its calculation of capacity quantities required for Availability Classes 2, 3 and 4 and the availability hours listed in Appendix 3 for those Availability Classes. Specifically, Synergy agrees that as a result of determining the capacity requirement of Availability Classes 2, 3 and 4, as currently defined by clause 4.5.12(c), may result in load for a segment being short of that expected as a consequence of the application of Appendix 3. For instance, in respect of Availability Class 4, clause 4.5.12(c) determines the required capacity based on minimum availability of 48 hours which may result in the load for a segment of the Availability Curve not being fully covered on account of the Appendix 3 setting a minimum of 24 hours. Clearly this misalignment of definitions of minimum availabilities can give rise to risk that the load duration curve is not fully covered.

Synergy agrees that amendments proposed in the Draft Rule Change Report to both 4.5.12(c) and Appendix 3 in regard to the hours of availability for each Availability Class remove the misalignment and also clarify that there is no overlap in the hours of availability of each Availability Class, as is currently the case. Synergy also agrees that it is redundant to list the hours of availability for Availability Class 1 in Appendix 3 given it is not stated in clause 4.5.12(c) and that therefore reference to it can be removed in Appendix 3 from the table defining the hours of availability for each Availability Class. Synergy also supports the IMO's proposed amendment to the Appendix 3 preamble to clarify and reinforce that Availability Class 1, being generation facilities, has the highest availability requirement.

A further amendment to Appendix 3 to remove a possible ambiguity

In regard to the preamble, Synergy notes that it states that the algorithm, used to determine whether to accept capacity offers in the context of exceeding capacity requirements, allows capacity from a high Availability Class to be used for a lower Availability Class. The algorithm iterates through the four Availability Classes in ascending order (i.e. 1 through 4) and defines a set of active offers for capacity offers in a particular class to comprise all offers from that class with step 3:

- accepting offers (from the active set of offers) until the capacity requirements of the Availability Class are fully covered; and
- providing a tie-break mechanism where accepting two or more offers would result in the capacity requirement for that Availability Class being exceeded.

As offers are accepted, the algorithm mandates that they are removed from the set of active offers, leaving those yet to be accepted. This means that the algorithm allows offers yet to be accepted from a higher Availability Class to be included in the set of active offers available to meet capacity requirements of a lower Availability Class; this is consistent with the preamble.

However, Synergy notes that step 2A of the algorithm automatically accepts bilateral trade offers from operating or committed facilities¹ which are then removed from the set of active offers. This necessarily means that once an offer in an Availability Class is accepted it cannot, given it has been removed from the set of active offers, be applied to meet the capacity requirement of a lower Availability Class.

This raises an interesting point in how the Appendix 3 algorithm is applied in the context of the operational application of the preamble. While it has been acknowledged that the algorithm expressly provides that offers yet to be accepted in a higher Availability Class can constitute part of the active set of offers for a lower Availability Class, Synergy's interpretation is that once an offer has been accepted in a higher Availability Class the algorithm disallows² it from being accepted to meet the capacity requirements of a lower Availability Class. If it was allowed to be accepted in a lower Availability Class, as has been the case for a number of years, this would result in that offer being accepted twice: once in the higher and once in the lower Availability Class. The application of Synergy's interpretation of the preamble in Appendix 3 and the removal of operating and committed facilities from serving the volume of lower Availability Classes given in step 2A, is likely to have had the IMO call an auction in past reserve capacity cycles due to a shortage in one of the lower Availability Classes i.e. in 2, 3 or 4.

Synergy understands that the IMO does not interpret Appendix 3 as stated above and considers that the wording of the preamble allows capacity removed from the active set of offers for a higher Availability Class to still be used for a lower Availability Class. Synergy notes that the IMO's interpretation is a common sense response in circumstances where unless the accepted excess capacity was used for a lower Availability Class a shortfall would otherwise be declared triggering an auction even though in total the reserve capacity requirement would have been met. Calling an auction in this circumstance when no further capacity was required would result in a nonsensical auction process, according to the provisions under clause 4.15.2, making certain Availability Classes a negative value of capacity needed and other Classes a positive value.

¹ Synergy notes that step 2A accepts all bilateral trade offers without reference to the capacity requirement providing the offers are in respect of operating and committed facilities.

² That is, the accepted offers are removed from the set of active offers, thereby preventing them from being further considered by the algorithm.

If it is accepted, as suggested by Synergy, that the Appendix 3 preamble can be read in different ways and result in different outcomes i.e. a nonsensical auction is triggered meaning Appendix 3 is ambiguous, then there is merit in considering some amendments to either the preamble or the steps in the algorithm to remove the potential for a second interpretation to be made. In this regard Synergy's suggestion is for the IMO to consider amending the Appendix 3 preamble as follows:

"However the algorithms in this appendix allow capacity from an Availability Class with high availability, including capacity already accepted but in excess of that Availability Class requirement, to be used in place of capacity from an Availability Class with lower availability."

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

Synergy believes that the amendments presented in the Draft Rule Change report will allow the Market Rules to better address Market Objective (a):

to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;

by ensuring that the potential for mismatch between capacity requirements and facility availability in each Availability Class is removed and that the Appendix 3 operates in the intended way to ensure that the availability curve is covered.

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.

Synergy would not require any changes to IT or business systems, nor incur any organisational costs as a consequence of adopting the proposed change.

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

Synergy would be able to implement this rule change immediately.
