

Proposal for a Capacity Market Rules Change



Making a positive difference
for energy consumers

Reference number (to be completed by
Ofgem): CP291

Name of Organisation(s) / individual(s):
ENGIE

Date Submitted:
17/10/2017

Type of Change:

- Amendment
- Addition
- Revoke
- Substitution

If applicable, whether you are aware of an alternative proposal already submitted which this proposal relates to:

[Click here to enter text.](#)

Proposal summary (short summary, suitable for published description on our website)

Treatment of Auxiliary/station load

What the proposal relates to and if applicable, what current provision of Rules the proposal relates to (please state provision number):

Rule 8.6 doesn't make clear how any Auxiliary Load is netted off the CMU output, when the Auxiliary Load is a separate BM Unit (or proportion of one).

Description of the issue that the change proposal seeks to address:

The Capacity Market Regulations make it clear that the net output of a CMU is to include any Auxiliary Load where it defines:

“net output”, in relation to a generating CMU or a generating unit, means the amount of electricity produced by the CMU or unit minus its auxiliary load.

Regulation 39 then uses the term E_{ij} to refer to the net output and states that it is determined under the capacity market rules (i.e. this rule 8.6).

EMR Settlements has indeed asked all capacity providers to define aggregation rules which do include an apportionment of any auxiliary/station load BM Unit amongst any relevant generating units and therefore CMUs.

However rule 8.6 doesn't make it clear how any Auxiliary Load is netted off the CMU output, when the Auxiliary Load is a separate BM Unit (or proportion of one). It may even be interpreted in ways such that capacity provided may depend on whether or not the station is set up such that the station load is a separate BM unit – this is best explained in an example:

- Suppose that a station is a single generating unit (GU) and a station load (SL). The generating unit is expected to generate 100MWh, and the station load to consume 5MWh, giving an expected net

output of 95MWh. We will consider the cases where there are no BOAs/QAS/RBS and the actual generation from GU is 90/100/110 MWh and the SL is the expected 5MWh.

- In the case of separate BM units, the operator will submit the FPN of 100MWh for GU and zero for the SL (no requirement to submit FPNs for SL). The Metered Volume (8.6.1 (b) (i)) **should** include both meters and so will take the values of 85/95/105 MWh. QME is (8.6.1 (b) (ii)) is simply the FPN for GU and so is 100MWh. This then gives the delivered capacity as the minimum of (i) and (ii) which is 85/95/100 MWh for the three generation levels.
- In the alternative case where there is a single BM unit which includes both GU and SL, the operator will submit an FPN of 95MWh as this is the expected net metering. So in this case the Metered Volume is again 85/95/105 MWh, but QME is 95 MWh, which then gives a delivered capacity of 85/95/95 MWh.
- So we can see that in the case of the separate BM units, over-delivery at GU (when it generates 110MWh) has allowed the delivered capacity to take a larger value than had it been a single BM Unit.

A similar issue could occur when a CMU includes multiple generating BMUs – should over-delivery at one BMU be allowed to offset under-delivery at another?

These differences do not seem equitable. A potential solution would be to take the lower of the metered volume and QME for each BM unit and then aggregate these lower values. This approach is consistent with the intention of capping the output at QME (and thus not allowing any benefit to be obtained by running above the expected level and so not allowing breach of the Grid Code to give a benefit).

If applicable, please state the proposed revised drafting (*please highlight the change*):

If the treatment of Auxiliary load and the capping at QME are to be made clearer and equitable, then 8.6.1(b) should become the following. Note also that this suggestion builds on that suggested **in ENGIE rule change CMP xxx (reference our submission rule change 2)**:

(b) if the Generating CMU is connected to the GB Transmission System, the aggregate for each BM Unit “k” (including the relevant proportions of any Auxiliary Load BM Units) comprised in that Generating CMU “i” of the lower of:

- (i) the Metered Volume in MWh to three decimal places of BM Unit “k”; and
- (ii) QME_{kj} (as defined in Rule 8.5.2(a)) for BM Unit “k”;

Analysis and evidence on the impact on industry and/or consumers including any risks to note when making the revision - including, any potential implications for industry codes:

This will address the inequity identified and clarify the treatment of auxiliary load.

Details of Proposer (*please include name, telephone number, email and organisation*):

Mark Edwards, 01352 705288
Mark.edwards@engie.com
ENGIE