Integrated Single Electricity Market

(I-SEM)

Capacity Market Code Modifications Set 2

Decision Paper – CMC_12_18: Tolerance Class:

Annex A

SEM-18-164 (a)

19th November 2018

1. CMC_12_18 – TOLERANCE CLASS

1.1 ANNEX

1.1.1 In the T-1 Parameters Decision (SEM-18-030), the SEM Committee decided that:

"3.5.9 A voluntary decreasing tolerance (DECTOL) is to apply to generation with emission limitations or run-hour limitations (other than DSU and storage which have separate arrangements) and therefore the Capacity Market Code should be modified as soon as possible to bring this decision into effect."

1.1.2 Under the terms of the existing CMC, values of DECTOL are defined on the basis of Technology Groups (see, for example, D.3.1.3(j)).

1.1.3 Units with an emission or run-hour limitation will form a subset of the units comprised of the existing defined Technology Groups, e.g. only some Steam Turbine units will be subject to emission limits.

1.1.4 Technology Groups are also used in the Capacity Requirement and De-Rating Methodology to set forced and scheduled outage rates and, in particular, to produce reasonable average rates which are not overly skewed by one-off or infrequent outage events. Given this usage, it was undesirable to re-define the existing Technology Groups to implement the SEM Committee Decision, as this would create unwanted impacts elsewhere. The concept of the Tolerance Group was introduced to separate the definition of the groups of unit to which Increase and Decrease Tolerances apply from the other roles of Technology Groups within the CRM.

1.1.5 The precise definition of the Tolerance Groups to be used should be subject to discussion with the TSOs to minimise the cost and complexity of implementation. The two main options are given below:

➢ Tolerance Groups: Option 1

- – Emission Limited
- – Run Hours Limited
- – Unlimited

➢ Tolerance Groups: Option 2

- – Gas Turbine: Emission Limited
- – Gas Turbine: Run Hours Limited
- – Gas Turbine: Unlimited
- – Steam Turbine: Emission Limited
- – Steam Turbine: Run Hours Limited
- – Steam Turbine: Unlimited
- – Hydro
- – Pumped Storage
- – Other Storage
- – Interconnectors

– System Wide

1.1.6 The first option has the advantage that it creates the minimum number of Tolerance Groups, and it might even be desirable to merge the Emission and Run Hours Limited Groups into one.

1.1.7 The second option has the advantage each Tolerance Groups is contained within an existing Technology Group (in many cases they are the same). This may make for easier implementation given that it is more likely to work within existing data structures.

1.1.8 The final decision on the set of Tolerance Groups will be made following discussion between the RAs and TSOs during the implementation phase of the Modification.