CUSC - SECTION 14

**CHARGING METHODOLOGIES**

**Annual Load Factor (ALF)**

1. The ALF for each individual Power Station is calculated using the relevant TEC (MW) and corresponding output data. Where output data is not available for a Power Station, including for new Power Stations and emerging Power Station technologies, generic data for the appropriate generation plant type will be used.

1. For a given **Financial Year** “t” the Power Station ALF will be based on information from the previous five **Financial Years**, calculated for each **Financial Year** as set out below.



Where:

For calculation of ALF relating to an **Electricity Generation Facility** that is not an **Electricity Storage Facility:**

GMWhp is the maximum of FPN or actual metered output in a Settlement Period related to the Power Station TEC (MW); and

TECp is the TEC (MW) applicable to that Power Station for that Settlement Period including any STTEC and LDTEC, accounting for any trading of TEC.

For calculation of the ALF relating to an **Electricity Storage Facility** only:

GMWhp is the actual metered net output in a **Settlement Period** related to the power station TEC (MW). For the avoidance of doubt, where the actual metered net output across all **Settlement Periods** in a **Financial Year** is negative, this shall be taken to be 0; and

TECp is the TEC (MW) applicable to that **Power Station** for that **Settlement Period** including any STTEC and LDTEC, accounting for any trading of **TEC**.

A single technology **Power Station** will use the formula above to

calculate the **Power Station** ALF. For a multi technology **Power Station** (as 14.15.7) where appropriate metering arrangements are in place, an ALF will be calculated for each technology type, including for an **Electricity Storage Facility** as above. Note that the sum of GMWh for a multi technology **Power Station** across all technology types will equal the total GMWh for the **Power Station**.

Where:

A denotes each technology type within a **Power Station**

GMWhAp is the maximum of FPN or actual metered output in a **Settlement Period** related to the **BM Unit** associated with MTPSTECA

1. For single technology **Power Stations**, the appropriate output (FPN; or actual metered output; or actual metered net output) figure is derived from **BM Unit** data available to **The Company** and relates to the total TEC of the Power Station. For multiple technology **Power Stations**, the appropriate output (FPN or actual metered) figure is derived from **BM Unit** data available to **The Company** and associated with MTPSTECA.
2. Once all five **Financial Year** ALFs have been calculated for the individual Power Station they are compared, and the highest and lowest figures are discarded. The final ALF, to be used for transmission charging purposes, is calculated as the average of the remaining three ALFs.
3. In the event that only four **Financial Years** of complete output (FPN; or actual metered output; or actual metered net output) data are available for an individual Power Station then the higher three **Financial Years** ALF would be used in the calculation of the final ALF. In the event that only three **Financial Years** of complete output (FPN or actual metered) data are available then these three **Financial Years** would be used.
4. Due to the aggregation of output (FPN; or actual metered output; or actual metered net output) data for dispersed generation (e.g. cascade hydro schemes), where a single generator BMU consists of geographically separated power stations, the ALF would be calculated based on the total output of the BMU and the overall TEC of those Power Stations.
5. In the event that there are not three full **Financial Years** of an individual power station’s output available, missing output (FPN; or actual metered output; or actual metered net output) data would be replaced by generic data for that generation plant type to ensure three **Financial Years** of information are available for the Power Station. The derivation of the generic data is described in paragraphs 14.15.111-14.15.114.
6. Users will receive draft ALFs before 25th December of the **Financial Year** (t-1) for the **Financial Year** (t) and will have a period of 15 **Business Days**
7. from date of publishing to notify **The Company** of any errors. Failure to agree changes relating to errors will be treated as a charging dispute under the CUSC.
8. The ALFs used in the setting of final tariffs will be published in the annual Statement of Use of System Charges. Changes to ALFs after this publication will not result in changes to published tariffs (e.g. following dispute resolution).

**Derivation of Generic ALFs**

1. The generic ALF is derived from the average annual output of the ten most recently commissioned GB generation of a particular generation plant type that have at least five **Financial Years**’ data, using an identical methodology to that used for the Power Station specific calculation described above. Where less than ten GB generators of a particular generation plant type exist, then data from all existing generators of that particular generation plant type will be used. Example generation plant type categories are listed below;

|  |
| --- |
| **Fuel Type** |
| Biomass |
| Coal |
| Gas |
| Hydro |
| Nuclear (by reactor type) |
| Oil & OCGTs |
| Pumped Storage |
| Onshore Wind |
| Offshore Wind |
| CHP |

1. **The Company** will keep these categories under review and update as necessary. Where within a category there is a significant locational difference consideration will be given to zonal generic factors. The factors used will be published in the Statement of Use of System Charges and will be reviewed annually.
2. If a User can demonstrate that the generation plant type of a Power Station has changed, consideration will be given to the use of relevant generic ALF information in the calculation of their charges until sufficient specific data is available.
3. For new and emerging generation plant types, where insufficient data is available to allow a generic ALF to be developed, **The Company** will use the best information available e.g. from manufactuers and data from use of similar technologies outside GB. The factor will be agreed with the relevant Generator. In the event of a disagreement the standard provisions for dispute in the CUSC will apply.

## 