ELEXON

ANNUAL AFYC RECALCULATION AND REVIEW

Supplier Volume Allocation Group (SVG)

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Owner/author	**Andy Ferreira**	Purpose of paper	**Decision**
Classification	**Public**	Document version	**V2.0**

Summary | **This paper recommends that the Profiling Expert Group (PEG) act as a review group for this year's Average Fraction of Yearly Consumption (AFYC) recalculation. It invites the SVG to agree this along with the proposed timetable and calculation period.**

1.   Background

1.1   The Supplier Volume Allocation Agent (SVAA) is required to undertake the Average Fraction of Yearly Consumption (AFYC) recalculation annually as instructed by ELEXON.

1.2   The process recalculates three sets of values that are held in Market Domain Data (MDD). These are:

a) AFYC values;

b) GSP Group Profile Class Average Estimated Annual Consumption (GGPCAEAC) values; and

c) GSP Group Profile Class Default Estimated Annual Consumption (GGPCDEAC) values.

1.3   The AFYC review ensures that the above values are as accurate as possible by recalculating each of them based on the most recent data. Appendix 1 details these values and their uses.

1.4   Following the recalculation the new values are analysed and, if the SVG believes it is appropriate, may be updated via the MDD change process.

2.   Proposed approach and timetable

2.1   As in previous years, ELEXON recommends that the PEG[1] act as the AFYC Review Group. The PEG's role would involve agreeing a methodology for the analysis, reviewing the analysis once undertaken by ELEXON and making recommendations to the SVG on whether the values should be updated in MDD.

2.2   Our proposed timetable for the review is as follows:

Activity	Date
PEG meeting to discuss/determine appropriate methodology	November 2020
SVAA undertakes recalculation	November 2020
ELEXON analyses values and distributes to the PEG	December 2020
PEG meeting to agree recommendations to the SVG	January 2020
SVG meeting to discuss PEG recommendations	February 2021
MDD Change Request raised (if required)	After SVG meeting
Updated values go live in MDD (if appropriate) with an effective date of 1 April 2021	March 2021

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[1] The PEG is an impartial expert advisory group to the SVG on matters relating to the BSC's profiling arrangements.

2.3   The recalculation uses data over a year at the latest run type for each Settlement Day. ELEXON suggests that the recalculation period for this year should be 1 November 2019 to 31 October 2020, in line with the dates used in previous years.

3.   Recommendations

3.1   We invite the SVG to:

a) **AGREE** that the PEG acts as the AFYC Review Group;

b) **AGREE** the proposed timetable; and

c) **AGREE** the calculation period of 1 November 2019 to 31 October 2020.

Appendices

Appendix 1 – Definitions and uses of recalculated items.

For more information, please contact:

Andy Ferreira, Analyst – Settlement & Invoicing

andy.ferreira@elexon.co.uk

020 7380 4321

APPENDIX 1 – DEFINITIONS AND USES OF RECALCULATED ITEMS

Average Fractions of Yearly Consumption (AFYC)

AFYCs are the estimated average fractions of a Meter's annual energy attributed to each Time Pattern Regime (TPR). They are calculated for each GSP Group, Profile Class (PC), Standard Settlement Configuration (SSC) and TPR combination. There are three main uses of AFYCs:

● To calculate the Based Fraction and Switched Fraction for Switched Load Meters. These fractions are then used to calculate the Combined Period Profile Coefficients (CPPCs) from the Basic Period Profile Coefficients (BPPCs). The storage and base loads for Economy 7 type SSCs are joined to create a combined profile for the night register;
● To calculate the Period Profile Class Coefficients (PPCCs) from either the BPPCs or the CPPCs by dividing them by the AFYC for each register. The BPPCs and CPPCs sum to approximately one over the year. For each register the PPCCs sum to approximately one. For each Meter the PPCCs sum to the number of registers. The AFYCs are used to 'normalise' the Profile Coefficients for each Meter register. This creates intuitive Annualised Advances (AAs); and
● To calculate a Default Estimated Annual Consumption (EAC) value for a Meter register from a GGPCDEAC. The Default EAC value is split into register-based values by being multiplied by the AFYCs.

GSP Group Profile Class Average EACs (GGPCAEAC)

GGPCAEACs are calculated for each GSP Group, PC and SSC combination. These are the initial EACs that are allocated to new Metering Systems by Suppliers. They are also used on a change of SSC, PC or Measurement Class.

GSP Group Profile Class Default EACs (GGPCDEAC)

GGPCDEACs are calculated for each GSP Group and PC combination. They are used by the Data Aggregator to create Default EACs for Meter registers where there is no EAC/AA for that Metering System and where there are less than 50 Metering Systems with the same Settlement Class (i.e. Supplier, GSP Group, SSC, PC and Line Loss Factor) in the Supplier Purchase Matrix (SPM).