SVG216/02 – PEG RECOMMENDATIONS: TPDS, AFYCS AND DEFAULT EACS

MEETING NAME	SVG 216

Date of meeting	5 February 2019
Paper number	216/02
Owner/author	Andy Ferreira
Purpose of paper	Decision
Classification	Public
Summary	The Profiling Expert Group (PEG) has reviewed the profiling Technical Product Deliverables (TPDs), the Average Fraction of Yearly Consumption (AFYC) and Default Estimated Annual Consumption (EAC) data. The PEG recommends that the TPDs are used in Settlement from 1 April 2019. The PEG also recommends that certain AFYCs and Default EACs are also updated in Market Domain Data (MDD) for use in Settlement from 1 April 2019.

1.   Introduction

1.1   The PEG reports to the Supplier Volume Allocation Group (SVG) on matters related to profiling, Supplier Volume Allocation (SVA) and certain Settlement parameters. The PEG periodically reviews the Settlement profiles (Technical Product Deliverables (TPDs)) which ELEXON receives from the Profile Administrator (PrA) on a bi-annual basis, before recommending to the SVG whether new TPDs should be approved and used in Settlement.

1.2   The PEG has reviewed the TPDs for the Spring, Summer and High Summer 2019 seasons. This data was pooled over three years (2016, 2017 and 2018). The PEG has also reviewed the results of the yearly recalculation of Average Fraction of Yearly Consumption (AFYC) and Default Estimated Annual Consumption (EAC) data undertaken by the Supplier Volume Allocation Agent (SVAA). This has been calculated over the period 1 November 2017 – 31 October 2018. All of the data is designed for use in Settlement from 1 April 2019.

The review process for the TPDs has been the same as that used in previous years, whereby ELEXON checks for formats and completeness and conducts an initial qualitative review. The PEG undertakes a further qualitative review before making a recommendation to the SVG.

2.   Profiling TPDs

2.1   The new TPDs are made up of:

- Regression data for the Spring, Summer and High Summer profiling seasons, based on a pooled set of the latest three years' data (2016, 2017 and 2018);

- Group Average Annual Consumption (GAAC) data calculated for the following BSC Year (1 April 2019 - 31 March 2020); and

- Default profile coefficients for use in the Half Hourly (HH) market in 2019/20.

2.2   The Autumn and Winter data is made up of a pooled set of the latest three years of data (2015/16, 2016/17 and 2017/18) which have not been updated in this set of TPDs.

ELEXON

2.3   ELEXON and the PEG have undertaken a technical review of the profiles to be used in Settlement from 1 April 2019.

Evaluation and analyses of the new dataset

2.4   The new TPDs were subjected to a number of standard ELEXON checking procedures. The data passed all tests on content and format. Some further 'qualitative' checks (e.g. negative evaluation counts at extreme Noon Effective Temperatures (NETs)) were also undertaken. The complete checklist is provided in Appendix 1 of this paper.

PEG's review

2.5   At its meeting on 14 January 2019, the PEG confirmed that the new TPDs are appropriate to use. The PEG therefore unanimously recommends that the SVG approves the new TPDs for use in Settlement from 1 April 2019.

3.   AFYC and Default EAC data

3.1   The SVAA is required to recalculate the AFYC data annually. The process recalculates the following three sets of values that are held in Market Domain Data (MDD):

- AFYC values;
- GSP Group Profile Class Average EAC values (GGPCAEACs); and
- GSP Group Profile Class Default EAC values (GGPCDEACs).

3.2   The SVG agreed the AFYC review approach, timetable and calculation period at its meeting on 2 October 2018. For more information, including explanations of the above data types, see paper SVG212/02.

3.3   At its January 2019 meeting, the PEG reviewed ELEXON's analysis of the recalculated AFYC and Default EAC data. The analysis rejected seven new GGPCDEAC values as they fell outside the tolerances on population percentage and difference percentage when compared against the previous values. The current methodology specifies that when a GGPCDEAC is rejected, its related GGPCAEACs will also be rejected.

3.4   The PEG considered that there would be more merit to accept the GGPCDEACs and their related GGPCAEACs, which are based on the most recent data, rather than keep the existing set of values. All the initially rejected GGPCDEACs were for Profile Classes 5 to 8, which have reduced population sizes following BSC Modification P272, and hence the PEG felt newer values are more reflective.

3.5   ELEXON has not reviewed the HH Default EAC values for Measurement Classes (MC) C, D, E, F and G in this round, as these were last approved by the SVG in January 2018 (see paper SVG204/02) using actual Consumption Component Class (CCC) level data. ELEXON plans to review these once every two years, with the next review planned for a year's time.

3.6   The PEG recommends to the SVG that MDD is updated with:

- All 112 GGPCDEACs; and
- 847 GGPCAEACs and their associated sets of AFYCs.

ELEXON

4.   Recommendations

4.1   We invite you to:

a) **APPROVE** the new TPDs for use in Settlement from 1 April 2019;

b) **APPROVE** that 112 GGPCDEACs, 847 GGPCDEACs and their corresponding sets of AFYCs are updated with effect from 1 April 2019;

c) **NOTE** that ELEXON will raise the necessary Change Requests to update all of these data items in MDD; and

d) **NOTE** that the SVAA systems will be updated with the new TPDs.

Appendices

Appendix 1 – Profiling TPDs checklist

For more information, please contact:

Andy Ferreira, Market Analyst

andy.ferreira@elexon.co.uk

020 7380 4321

ELEXON

SVG216/02 – PEG RECOMMENDATIONS: TPDS, AFYCS AND DEFAULT EACS

APPENDIX 1 – PROFILING TPDS CHECKLIST

Reporting period: Year 23_1 (Spring – High Summer 2019)

Period of Analysis: Spring – High Summer 2018

Period of Operational Use: Spring – High Summer 2019 (01/04/2019 – 02/09/2019)

Check	Results	Comments
Date of receipt	Friday 26 November 2018	
Data completeness (FF)	We received all expected files.	
Data format (FF)	All files in correct format. No issues.	
Data completeness (NFF) Record Count of: Regression Coefficients and GAACs	We received all expected files as shown below. Actual Expected Records 597552 597552 GSP 1400 1400 PFL 100 100 RES 2500 2500 COF 527600 527600 PER 65950 65950 ZHD 1 1 ZPT 1 1	
Data format (NFF)	Data format correct.	
SVAA Test Loading	Regression tests have loaded, but further updates are awaited.	The SVAA are still conducting the test loading.
Eval (new reg) vs GAD	No issues were identified.	
Friendly (FF) Vs Non-friendly (NFF) data comparisons	All Basic Regression Coefficients same in both files. 14 settlement period stretch for Switched Load Profile Classes 2 and 4 also match.	

ELEXON

SVG216/02 – PEG RECOMMENDATIONS: TPDS, AFYCS AND DEFAULT EACS

Check	Results				Comments
Data Analyst analysis for Y23_1 GADs	**Profile Class**	**Average Demand (kW)**	**Average Std Error**	**Precision**	
	1	0.353	0.0235	7.02%	
	2b	0.3728	0.0387	11.27%	
	3	1.3463	0.0972	7.54%	
	4b	2.096	0.1557	8.74%	
Evaluated algorithmic stretched coefficients all sum to same value per stretch	All Profile Class 2 stretches sum to the same value when evaluated. All Profile Class 4 stretches sum to the same value when evaluated.				
Group Average Annual Consumptions (GAACs)	The ratio of the GAAC average to the average PC consumption for Profile Classes 1 to 4 are all approximately 100%				PC1: 100% PC2b: 99% PC2s: 102% PC3: 99% PC4b: 98% PC4s: 99%

ELEXON