

# DWG12/01 – TIME OF USE SCALING WEIGHTS

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**MEETING NAME** Design Working Group

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**Purpose of paper** Decision

**Classification** Public

**Summary** If Ofgem's data access policy decision is that customers can opt out of having their Half Hourly (HH) Meter data used for Settlement, there is a risk that Suppliers could encourage customers with 'peaky' load to opt out of Market-wide HH Settlement (MHHS) – thereby 'gaming' against the load shapes that are applied to opted-out customers under the Target Operating Model (TOM), but which are created using the Meter data from customers who have not opted out. After discussion with DWG Workgroup 4, this paper proposes using Time of Use Scaling Weights to mitigate this risk.

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## 1. What is the issue we are looking to mitigate?

1.1 Ofgem's 'minded to' position for data access for domestic customers, as set out in its recent [consultation](#), creates an opportunity for 'gaming' by allowing customers to 'opt out' of allowing access to their HH Meter data for Settlement purposes. ELEXON's [response](#) to question three of Ofgem's consultation highlights this issue and suggests a potential mitigation as follows:

*'We are also concerned that such consumers could opt-out and the potential the option provides for gaming. There is potential for customers with peakier load to be moved to opt-out tariffs, which then are not reflective of the customer's true consumption. In the TOM design, these customers would be settled using data from the Load Shaping Service (LSS) that will use HH data from non-opted out consumers. This may not be reflective of such consumer's peak usage. This would cause an increase in GSP Group Correction at peak that would be smeared across customers groups not contributing to the issue, there by affecting cost reflectivity or reintroducing cross-subsidies across customer groups.'*

*This may be mitigated by applying an appropriate weighting in the calculations (to reflect the error certain customer groupings are causing) to ensure the corrected volume at peak is in the most part allocated to the opted out grouping'.*

1.2 This paper set out how the mitigation could be implemented if the 'opt-out' data access option becomes policy.

## 2. What is Grid Supply Point Group (GSPG) Correction?

2.1 [GSPG Group Correction](#) is the process that corrects Suppliers' allocated energy volumes to the net amount of energy entering a GSPG (GSP Group Take). GSP Group Take is the net energy measured going from/to a particular local Distribution System (i.e. a GSP Group) in a Settlement Period. Theoretically, if we were to add up all the estimated and actual Meter readings in a single GSP Group for a particular Settlement Period, then the total metered volume should equal the GSP Group Take. That is, if there was no electricity theft in a GSP Group and all the estimates (and profiling process) accurately reflected the true Meter readings. The process calculates a GSPG Correction Factor (GSPGCF) which is applied to allocated Supplier energy volumes. More detail on the GSGGCF calculation is provided in the link above.

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### 3. What are the GSPGCF Scaling Weights?

- 3.1 When calculating and applying GSPGCF, a weight is used to specify how much of the difference between GSP Group Take and allocated consumption volumes is allocated to different categories of Metering Systems. The categories are called Consumption Component Classes (CCC). The GSP Group Correction Factor calculation refers to a Scaling Weight for each CCC, which defines how much GSP Group Correction should be applied to that CCC (relative to the others). Currently, they are applied as a single value for each CCC per Settlement Period. A weight of zero means no correction is applied:

Consumption Component Class ID	Measurement Quantity ID	GSP Group Scaling Factor
12	AI (Active Import)	0
13	AI	0
17	AI	1
18	AI	1

### 4. What is the mitigation being proposed?

- 4.1 After discussion with DWG Workgroup 4 'Aggregation and Volume Allocation Services and Registration Interaction', ELEXON proposes that the Scaling Weights can be varied by Settlement Period – for example to follow a Time of Use (ToU) tariff. For example, these could be similar to the Red, Amber and Green time-band approach that is currently used for Distribution Use of System (DUoS) charging. In this example, they could be set up as follows:

Consumption Component Class ID	Measurement Quantity ID	Green weight	Amber weight	Red weight
A	AI	0	1	2
B	AI	0	0	0
C	AI	1	1	1

- 4.2 The times for each time band could be defined similar to Clock Intervals in the current Market Domain Data (MDD). The three-time band would ideally be fixed across all GSP Groups and time of year to avoid additional complexity:

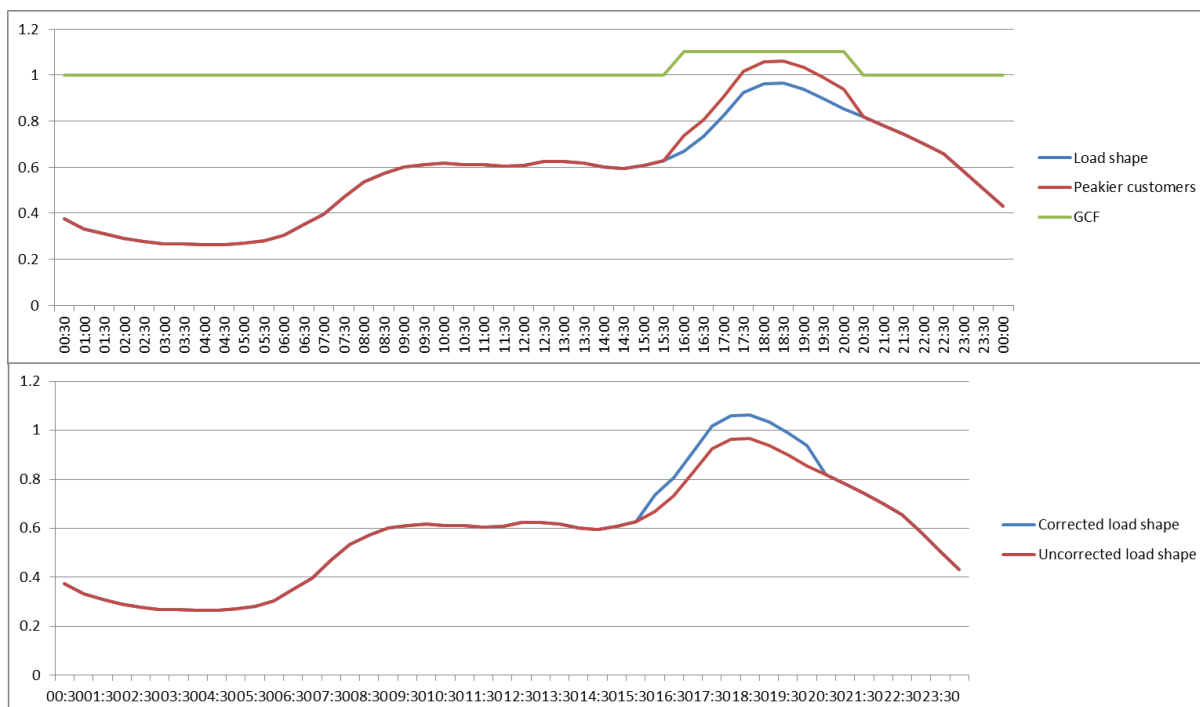
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Weight type	Day of the Week ID	Start Day	Start Month	End Day	End Month	Start Time	End Time
Green	1	1	1	31	12	00:00	07:00
Red	1	1	1	31	12	16:00	20:00
Amber	1	1	1	31	12	07:00	16:00
Amber	1	1	1	31	12	20:00	24:00

4.3 Any customers from whom HH data is not available for Settlement would be provided with their own separate set of CCC IDs and have their peak rate (Red weight) set to a relatively bigger weight at peak than non-opted-out customers. The day-time rate could also be set relative to other CCC IDs to control the amount of Group Correction allocated for times when Photo-Voltaic (PV) energy is spilled onto the system. This would remove a potential incentive to encourage customers to opt out.

## 5. How does the proposed process mitigate the risk of gaming?

5.1 If opted-out customers are 'peakier' they will cause an allocation error at peak times of energy use. This will manifest itself in the amount to be corrected at peak, and hence in the GSPGCFs. Allocating a relatively higher weight at peak to those customers would mitigate the impact of gaming, as it would undo the benefits of encouraging peakier customers to opt out.



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## 6. What other things need consideration?

6.1 Some of the customers for whom HH Meter data is not available may be those without a smart Meter, not just those who have opted out of sharing their smart Meter data. To avoid any disproportionate impacts on these non-smart Meter customers (particularly any vulnerable or fuel-poor customers in this group), we propose creating separate CCC IDs to distinguish opted-out from non-smart Meter customers. An additional reason for doing this is that it would not be possible to know whether or not the usage of non-smart Meter customers is 'peaky'. This would give the following CCCs:

- Smart Meters with Settlement Period-level data available;
- Smart Meters with Register Read data; and
- Non-smart Meters.

6.2 However, there is no obvious way to avoid impacts on vulnerable/fuel-poor customers with smart Meters who have actively opted-out of sharing their data for Settlement.

## 7. Recommendations

7.1 We invite you to:

- a) **AGREE** to use this approach within the TOM if Ofgem's policy decision is to allow customers to opt out of MHHS.

### For more information, please contact:

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