

Revised Recommendation to Panel on GSP Group Correction Scaling Weights

Meeting Name Supplier Volume Allocation Group

Meeting Date 3 December 2013

Purpose of paper For Decision

Summary

ELEXON presented the SVG's recommended GSP Group Correction Scaling Weight changes to the BSC Panel on 14 November 2013. The Panel deferred its decision pending our confirmation that applying the Scaling Weights to Half Hourly (HH) Export would have no unintended consequences. We have considered further the correction mechanism and the BSC rules, and have identified that there is a potential issue with the correction of both Non Half Hourly (NHH) and HH Export volumes as set out in this paper. We invite the SVG to make a revised recommendation to the Panel in line with our proposed way forward. This is that the Panel should approve the revised Scaling Weights originally recommended by the SVG for implementation from 1 April 2014, but that all of these Scaling Weights (for both NHH and HH Metered Volumes and losses) should be applied only to Import and not to Export. We also invite the SVG to recommend that ELEXON raises a Standing Issue to consider changing the BSC's rules for applying GSP Group Correction to Export.

1. Background to SVG's Original Recommendations

- 1.1 Grid Supply Point (GSP) Group Correction is the mechanism that adjusts Suppliers' Metered Volumes in each GSP Group so that they, in aggregate, match the GSP Group Take. GSP Group Correction is not applied to all Supplier consumption. The mechanism accounts for error in Metered Volumes¹ and is applied to those types of consumption deemed to be the source of this error. Originally, GSP Group Correction was applied only to Non Half Hourly (NHH) consumption. Following industry consultation the SVG recommended, and the BSC Panel agreed, that it should also be applied to Half Hourly (HH) losses from 1 April 2013. The SVG and the Panel also agreed that correction should be applied to HH Metered Volumes from 2014 subject to a review of GSP Group Correction Scaling Weights in 2013.
- 1.2 In July 2013 we presented our proposed changes to the Scaling Weights to the SVG (paper [150/04](#)), who agreed to issue these for [industry consultation](#). The consultation included proposed revised Scaling Weights for NHH losses, NHH Metered Volumes and HH losses, based on our latest quantification of error in these areas. The consultation also proposed to apply Scaling Weights to HH Metered Volumes for the first time (again based on our quantification of the level of error), and one of the consultation questions was whether the Scaling Weights should be applied to both HH Import and Export Metered Volumes.

¹ Supplier BM Unit Metered Volumes include both metered and unmetered consumption.

- 1.3 We presented the consultation responses to the SVG at its meeting on 5 November 2013 (paper [153/05](#)). At this meeting the SVG made the following recommendations to the Panel, in line with the majority view of respondents and ELEXON's recommendations:

The SVG:

- a) **CONSIDERED** the consultation responses received;
- b) **AGREED** the following recommendations to the BSC Panel:
 - i) **RECOMMENDED** that the Scaling Weights should be set to:
 - 1.0 for NHH metered;
 - 2.25 for NHH line losses;
 - 0.94 for HH line losses; and
 - 0.10 for HH metered;
 - ii) **RECOMMENDED** that the Scaling Weight changes should be effective from 1 April 2014; and
 - iii) **RECOMMENDED** that the Scaling Weights should be reviewed one year after implementation and at least once every two years thereafter.

2. BSC Panel's Discussion of SVG's Recommendations

- 2.1 The Panel considered the SVG's recommendations at its meeting on 14 November 2013 (paper [218/09](#)). The Panel sought clarification on two points of detail relating to the impact of the revised Scaling Weights. The first was regarding the treatment of Export in the GSP Group Correction mechanism and the second was the materiality of the change.² The Panel deferred its decisions pending ELEXON's further clarification in these areas.
- 2.2 Following the meeting, we have undertaken further analysis and believe that the way in which the GSP Group Correction Factor calculation treats Export warrants consideration of a change to the BSC. We invite the SVG to consider this issue, our findings and our proposed way forward.

3. The Issue

- 3.1 The GSP Group Correction Factor calculation is specified in paragraph 9.2 of [BSC Section S, Annex S-2](#). GSP Group Correction is the mechanism that allocates the total error in each GSP Group between Suppliers. Its principal purpose is to allocate the difference in energy (i.e. either missing or too much

² ELEXON will discuss the materiality of applying GSP Group Correction to HH Metered Volumes in more detail with the Panel Member concerned. We provided materiality analysis to the SVG in paper [153/05](#), which also formed an attachment to the Panel paper.

energy) for a particular Settlement Period between the aggregate of all the estimated and actual Meter readings for a GSP Group and the GSP Group Take.

- 3.2 In the Supplier Volume Allocation Agent (SVAA) system, the calculation takes account of whether the Consumption Component Class³ (CCC) to be corrected is Import or Export. The effect of this correction mechanism is to correct Import and Export CCCs in opposing directions instead of correcting them in a way in which they would work together sympathetically to perform the correction. This results in 'competing corrections' of Import and Export, as Export nets from Import.
- 3.3 This issue applies to the correction for both Metered Volumes and losses. It already occurs in the NHH market, although the NHH Export volumes are small compared to NHH Import and the impact is therefore minimal. It also already occurs in the HH market for HH losses, but the effect is minimal. Because of the higher volume of HH Export, applying the proposed Scaling Weight to HH Metered Volumes would increase this 'competing correction' effect such that there is the potential for perverse outcomes.
- 3.4 In an extreme scenario where there is little NHH energy, and where HH Import and HH Export volumes are of similar sizes, the calculation could lead to some perverse results. The effect can be seen in the simplified example given in Table 1 below. To correct a volume error of 5 MWh, the calculation moves the HH volume by 100 MWh in opposite directions:

Table 1 – Simplified, extreme example

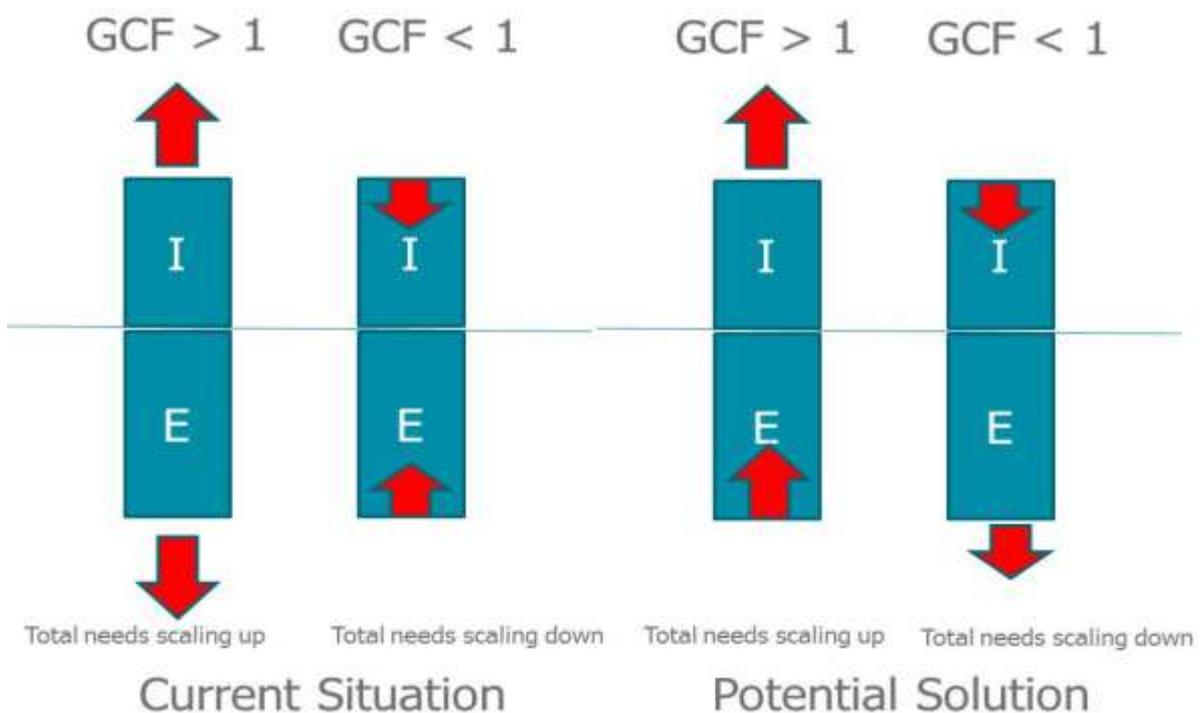
	MWh	Scaling Weight	Weighted	After Correction (MWh)	Volume Corrected (MWh)
Group Take	10				
Deemed Take					
NHH Import	5	1	5	10	5
NHH Export	0	1	0	0	0
HH Import	1000	0.1	100	1100	100
HH Export	-1000	0.1	-100	-1100	-100
Total Deemed Take	5				
Volume to Correct	5				
Sum Weighted			5		
Group Correction Factor	2				
Corrected Deemed Take				10	

³ A subdivision of a Supplier Deemed Take by consumption characteristics (e.g. HH/NHH, Import/Export, Metered/Unmetered).

3.5 The probability of this disproportionate scenario occurring is very low at present and in the near future, since there are still significant levels of NHH Import. However, in principle, this 'competing effect' requires resolution. We believe that this defect within the BSC should be removed so that both parts of the calculation work together sympathetically to assign the difference in energy between the aggregated Meter readings and the GSP Group Take.

3.6 Figure 1 below shows the issue and our proposed solution for rectifying this in the BSC.

Figure 1 – Simplified diagram of issue and proposed solution



4. Proposed Way Forward

4.1 Rectifying the 'competing correction' effect in the BSC would require a Modification Proposal and changes to the SVAA system. We invite the SVG to recommend to the Panel that ELEXON raises a Standing Issue to consider further our proposed change to the BSC's correction of Export.

4.2 The Panel has deferred its decisions on the Scaling Weights pending further clarification. While a Modification is being considered and progressed, there are a number of options for applying GSP Group Correction in the interim. Table 2 shows the main three options: further variants could be created by combining different options.

Table 2 – Options for way forward

Option	Description	For	Against
1	Leave all of the existing Scaling Weights unchanged at their 2013 values for 2014 (i.e. reject all of the revised proposed Scaling Weights).	Impact is minimal. Uncertainty over appropriate Export correction mechanism (and therefore revised Scaling Weight values) pending change to BSC's calculation.	GSP Group correction would not be applied to HH Metered Volumes. Scaling Weights for NHH losses, NHH Metered Volumes & HH losses would not be based on latest quantification of error. Therefore retains existing cross-subsidies and is not a reflective allocation of error to its origins.
2	Approve all the revised Scaling Weights for implementation from 1 April 2014, and apply them to both Import and Export as originally recommended by the SVG.	Achieves more reflective allocation of error to its origins based on latest quantification, and in line with SVG's and Panel's original intention. Effect of 'competing correction' is low in short-term and Scaling Weights will be reviewed again in a year's time.	Applies an incorrect (in principle) correction mechanism to HH Export Metered Volumes. Retains an incorrect (in principle) correction mechanism for NHH Export Metered Volumes, NHH Export losses and HH Export losses.
3	Approve all the revised Scaling Weights for implementation from 1 April 2014, but apply them all to Import only and not to Export. Does not change the proposed values, just the CCCs to which these values are applied.	Achieves more reflective allocation of error to Import (based on latest quantification) than existing Scaling Weights. Removes the 'competing correction' problem in the current application of GSP Group Correction to NHH Export Metered Volumes, NHH Export losses and HH Export losses.	Retains cross-subsidy between Import and Export.

4.3 We believe that Option 3 (of approving all the revised Scaling Weight values but only applying them all to Import and not Export) is the most appropriate. It still represents a more reflective allocation of error to its origins than the existing Scaling Weights, reducing any cross-subsidy between different classes of Supplier (and hence customer). This is in line with the principle previously agreed by the SVG and the Panel, and is based on the latest quantification of HH error. While it retains some element of cross-subsidy between Import and Export, it avoids the possibility of any perverse effects of scaling Export volumes (NHH and HH).

Under Option 3, the proposed Scaling Weight values for the four different consumption types would still be those recommended originally by the SVG (as shown in Table 3 below). Any Export CCCs would have a '0' value for their Scaling Weight (and would in effect be removed from the scaling calculation) so as not to apply GSP Group Correction to any (NHH or HH) Export Metered Volumes or losses.

Table 3 – Proposed Revised Scaling Weights

GSP Group Correction Scaling Weights		
Consumption Type	Current Weights (Effective from 1 April 2013)	Proposed Weights for Implementation from 1 April 2014
NHH Import Metered Volumes (CCCs 17, 18, 19,)	1.0	1.00
NHH Import Losses (CCCs 20, 21, 22)	2.3	2.25
HH Import Metered Volumes (CCCs 1, 2, 9, 10, 23, 28)	0	0.10
HH Import Losses (CCCs 3, 4, 5, 11, 12, 13, 25, 26, 30, 31)	1.0	0.94

4.4 We invite the SVG to recommend this approach to the Panel. We have not proposed a further consultation, as the previous one included a question on whether correction should apply equally to Import and Export. The SVG may wish to consider if there is the need for a further industry consultation on the revised application of the Scaling Weights.

5. Recommendations

5.1 ELEXON invites the SVG to:

- a) **NOTE** that the BSC Panel deferred its decisions on the Scaling Weights pending further clarification by ELEXON;
- b) **CONSIDER** the issue of 'competing correction' in applying GSP Group Correction to both Import and Export Metered Volumes;
- c) **RECOMMEND** to the Panel that ELEXON raises a Standing Issue to consider a change to the BSC's correction of Export error;

- d) **RECOMMEND** to the Panel that, from 1 April 2014, GSP Group Correction should not be applied to any Export Metered Volumes or losses (whether NHH or HH);
- e) **RECOMMEND** to the Panel that the GSP Group Correction Scaling Weights for Import should be set to:
- 1.0 for NHH Import Metered Volumes;
 - 2.25 for NHH Import line losses;
 - 0.94 for HH Import line losses; and
 - 0.10 for HH Import Metered Volumes.
- f) **RECOMMEND** to the Panel that the Scaling Weight changes for Import should be effective from 1 April 2014; and
- g) **RECOMMEND** to the Panel that all the Scaling Weights should be reviewed one year after implementation and at least once every two years thereafter.

Appendices:

None

Attachments:

None

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