MHHS PROGRAMME
Industry-led, Elexon facilitated

Volume Allocation Service: Methodology Statement

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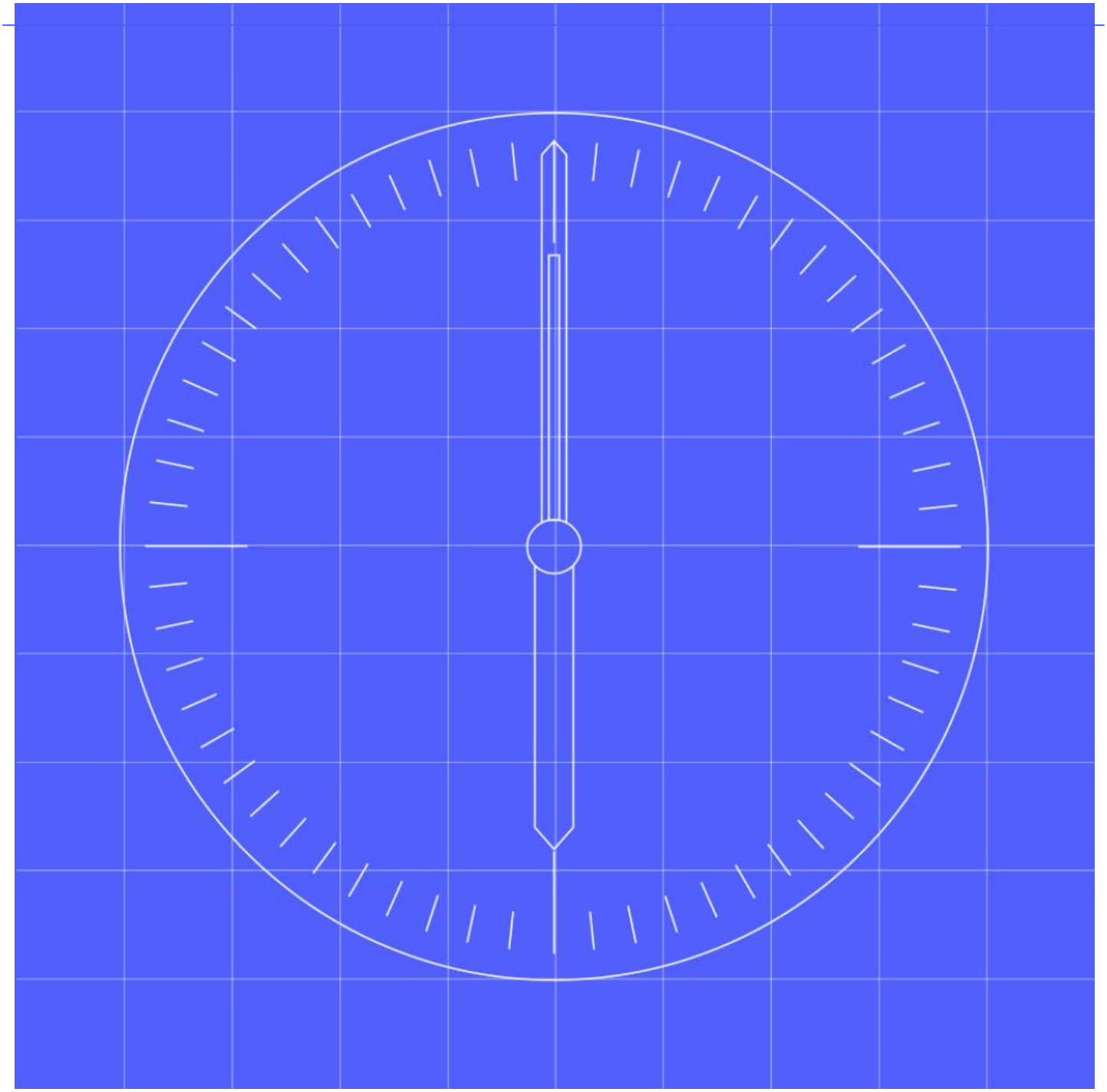

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Section A Background

1.1 This document sets out the requirements for the Volume Allocation Service (VAS). It sets out the processes for accessing and validation of input data from Market-wide Data Service (MDS) and the Central Data Collection Agent (CDCA). It also describes the processing of the Uncorrected BM Unit's Period Level Consumption ($BMPC_{iHNDj}$). It also sets out the process for correcting the out turn allocations so that the total of the BMU volumes (in a GSP Group) matches the Grid Supply Point Group Take (GSPGT). The document also identifies how the outputs of VAS are validated and provided to the Settlements Administration Agent (SAA) for use in the Imbalance Settlement calculations.

1.2 Calculations shall be undertaken by BMU Id. The Supplier is also known as the Balancing Responsible Party (BRP) and is interchangeable in this document.

1.3 The following processes are covered in this document:

- Accessing and maintaining the VAS Timetable;
- Inputting configurable parameters, such as tolerances/thresholds for validation;
- Accessing Uncorrected BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) within Consumption Component Class (CCC) 'N' data by Balancing Mechanism Unit (BMU) from the Market-wide Data Service (MDS);
- Accessing the of Uncorrected BM Unit's Period Level Consumption Losses ($BMPCL_{iHNDj}$) within Consumption Component Class 'N' data by Balancing Mechanism Unit (BMU) from MDS;
- Accessing Industry Standing Data held by the VAS;
- Validating the MDS data and producing exception reports;
- Accessing GSP Group Take Data from the Central Data Collection Agent (CDCA);
- Validating the CDCA data and producing exception reports;
- Calculating the Suppliers Settlement Period Consumption (Non-losses) (C_{iNDj});
- Calculating the Suppliers Settlement Period Consumption (Losses) ($CLOSS_{iNDj}$);
- Determination of GSP Group Settlement Period Consumption (GC_{HNDj});
- Calculating the Grid Supply Point Group Correction Factors (GSPGCF);
- Determining the Corrected Component ($CORC_{iNDj}$) for each CCC;
- Validating the out-turn calculations;
- Supplier Deemed Take (SDT_{HZDj});
- Determination of BM Unit Allocated Demand Volume ($BMUADV_{iDj)}$); and
- Determination of Period BMU Gross Demand for SVA Storage Facilities ($SDBMU_{imDj}$).

1.4 The term Settlement Period Consumption refers to consumption or export data that is of Settlement Period Duration. VAS must have flexibility as to the duration of a Settlement Period. The VAS must be able to process varying durations of a Settlement Period. The Settlement Period Duration will not change in a Settlement Day. All services should, where possible, build in the ability to configure the Settlement Period Duration during their solution design, in order to support any future move to a different Settlement Period Duration,

Section B General Requirements

Identifiers used in this Method Statement:

2.1 The following Identifiers are used in this document:

Identifier	Data item
D	Settlement Day
j	Settlement Period
i	BMU Unit (base or additional)
k	Metering Point Administration Number (MPAN)
H	GSP Group

Identifier	Data item
N	Consumption Component Class
Z	Supplier (BRP)

2.2 The calculations will be undertaken for Settlement Day 'D' and within each GSP Group 'H' unless otherwise specified. Settlement Days are processed in Clock Time.

2.3 The VAS must have processes such that the most recent details applicable to the Settlement Day of:

a) the Base BM Unit 'i'; and

b) Additional BM Unit 'i'

for each Supplier 'Z' within each GSP Group 'H' contained within ISD are input into VAS in accordance with [BSCP509]. MPAN/ ABMU mapping data shall be accessed by the VAS to identify MPANs allocated to ABMUs.

2.4 In respect of all data which the MDS is required to notify to the VAS, the VAS shall ensure:

a) that all such data is complete and accurate in all material respects; and

b) any such changed data is consistent with all such data which has not been changed and the VAS shall amend the data input into VAS to reflect any such changes notified to it.

2.5 The VAS shall ensure that processes are put in place such that the following data supplied to the VAS following an MDS Run are promptly input into VAS and are the most recent applicable to the Settlement Day:

a) BM Unit's Period Level Consumption - $BMPC_{iHNDj}$; and

b) BM Unit's Period Level Consumption (Losses) – $BMPCL_{iHNDj.}$

Configurable System Parameters

2.6 The VAS shall be able to configure and use the following Thresholds and Tolerances:

Configurable Parameter	Description
MDS Threshold	The difference between the incoming MDS data and the comparator data for a previous date
MDS Count Threshold	The difference in the MPAN count between the incoming MDS data and the comparator data for a previous date
CDCA Threshold	The difference between the incoming CDCA data and the comparator data for a previous date
GCF Tolerance	The calculated GSP Group Correction Factors lie within an acceptable range
Uncorrected Volume Tolerance	The calculated difference between the GSP Group Take and the Uncorrected Volume is within an acceptable range

Section C Volume Allocation Methods

3. Accessing the Master Settlement Timetable

3.1 The VAS must be able to access from ISD, store and publish the Master Settlement Timetable as agreed from time to time by the BSC Panel. The VAS must be able to undertake Volume Allocation Runs (VARs) in accordance with the Master Settlement Timetable.

4. Inputting configurable parameters- for validation

3.2 The VAS must be able to configure input parameters, such as tolerances and thresholds identified for use both in the input and out-turn validation processes.

5. Accessing Uncorrected BM Unit's Period Level Consumption ($BMPC_{iHNDj}$)

3.3 The VAS must be able to access the Uncorrected BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) in a timely manner following each MDS Run as defined in the Master Settlement Timetable.

6. Accessing the of Uncorrected BM Unit's Period Level Consumption Losses ($BMPCL_{iHNDj}$)

3.4 The VAS must be able to access the Uncorrected BM Unit's Period Level Consumption Losses ($BMPCL_{iHNDj}$) in a timely manner following each MDS Run as defined in the Master Settlement Timetable.

7. VAS Accesses the Industry Standing Data

3.5 The VAS must access the ISD. The ISD contains the MHHS CCC definitions and the associated Scaling Weights as well as BMU allocation to BRPs (Suppliers). The initial set of CCCs and Scaling Weights are shown in Appendix 1.

8. Validating the MDS data and producing exception reports

Stage 1 Validation

3.6 The VAS must validate the aggregated data provided by the MDS. The incoming data will be validated to ensure:

a) The data is not missing;

b) The data has the correct number of Settlement Periods;

c) The data is for a valid GSP Group(s);

d) The data contains no duplicated Supplier/ BMU / GSP Group / Consumption Component Class combinations; and

e) The MDS run data is not null for a GSP Group.

3.7 If any of the data fails Stage 1 Validation checks the VAS shall provide an exception report to the MDS.

Stage 2 Validation

3.8 The VAS will validate the BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) as follows:

3.9 For data submitted for use in the II or SF Volume Allocation Run, the comparator data will be the most recently submitted data for the most recent SF Volume Allocation Run for the previous Settlement Day with the same Day Type as defined in ISD. For data submitted for use in the R1 Volume Allocation Run or later, the comparator data will be the data used for the same Settlement Day for the previous Volume Allocation Run.

3.10 The following validation checks will be made on the incoming data:

a) The total consumption volume will be aggregated across all Consumption Component Classes where the Consumption Component Indicator is ‘C’ across all Settlement Periods. This will be compared to the equivalent total from the comparator data and the difference calculated; and

b) The total MSID count will be aggregated across all Consumption Component Classes where the Consumption Component Indicator is ‘C’ across all entries for Settlement Period 1 only. This will be compared to the equivalent total from the comparator data and the difference calculated.

3.11 If the difference between the incoming data and the comparator data for either check breaches a threshold determined by BSCCo, the incoming data will be identified by VAS. VAS will notify the MDS of data potentially containing an error. The MDS will be required to investigate the data and confirm to the VAS whether the data is correct and should be used in the Volume Allocation Run or whether it is incorrect and should be rejected.

3.12 If following the validation checks and exception report still no data available from MDS the VAS shall notify BSCCo. BSCCo shall identify the appropriate default data to be used in the calculation. Substituted data must be reported to Market Participants

9. Accessing GSP Group Take Data from the Central Data Collection Agent (CDCA)

3.13 The VAS shall ensure that processes are put in place which ensure that the GSP Group Take ($GSPGT_{HDj}$) data notified to it by the CDCA is input into VAS in a timely manner following each CDCA Run.

3.14 For each Volume Allocation Run, the VAS shall use the most recent value of GSP Group Take ($GSPGT_{HDj}$) provided by the CDCA.

10. Validating the CDCA data and producing exception reports

3.15 The VAS must validate the GSP Group Take ($GSPGT_{HDj}$) accessed from CDCA as follows:

GSP Group Take Data Validation

Stage 1 Validation

3.16 The VAS must ensure incoming GSP Group Take data is validated. Therefore, the validation check on the incoming GSP Group Take data should include the following:

a) The data is from the correct source, i.e. CDCA;

b) The data has the correct number of Settlement Periods; and

c) The data is for the correct GSP Group(s).

Stage 2 Validation

3.17 For data submitted for use in the II or SF Volume Allocation Run, the comparator data will be the most recently submitted data for the most recent SF Volume Allocation Run for the previous Settlement Day with the same Day Type as defined in ISD. For data submitted for use in the R1 Volume Allocation Run or later, the comparator data will be the data used for the same Settlement Day for the previous Volume Allocation Run.

3.18 The following validation checks will be made on the incoming data:

3.19 The GSP Group Take for each GSP Group will be compared to the equivalent total from the comparator data and the difference calculated.

3.20 If the difference between the incoming data and the comparator data breaches a threshold determined by BSCCo, the incoming data will be identified by VAS. The VAS will notify the CDCA of data potentially containing an error. The CDCA will be required to investigate the data and confirm to the VAS whether the data is correct and should be used in the Volume Allocation Run or whether it is incorrect and should be rejected. The BSC Panel will be asked to direct the appropriate action by either the CDCA or the VAS. Substituted data must be reported to Market Participants.

11. Calculating the Suppliers Settlement Period Consumption (Non-losses) (C_{iNDj})

3.21 The VAS shall determine the Half Hourly Consumption (Non Losses) (C_{iNDj}) for each GSPG 'H' within Consumption Component Class 'N' (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each BM Unit 'i' according to the following formula:

$C_{iNDj} = BMPC_{iHNDj}$

where BM Unit's Metered Consumption ($BMPC_{iHNDj}$) are the values provided by the MDS for the Settlement Day and Settlement Run Type being processed.

12. Calculating the Suppliers Settlement Period Consumption (Losses) ($CLOSS_{iNDj}$)

3.22 The VAS shall determine the Half Hourly Consumption (Losses) ($CLOSS_{iNDj}$) for each GSPG 'H' within Consumption Component Class 'N' (which Consumption Component Class shall be a Consumption Component Class for line losses) for each BM Unit 'i' according to the following formula:

$CLOSS_{iNDj} = BMPCL_{iHNDj}$

where BM Unit's Metered Consumption (Losses) ($BMPCL_{iHNDj}$) are the values provided by the MDS for the Settlement Day and Settlement Run Type being processed.

13. Determination of GSP Group Settlement Period Consumption

3.23 The GSP Group Half Hourly Consumption (GC_{HNDj}) for each Consumption Component Class 'N' within GSP Group 'H' shall be determined by the VAS according to the following formula:

$GC_{HNDj} = \sum_i^H C_{iNDj} + \sum_i^H CLOSS_{iNDj}$

14. Calculating the Grid Supply Point Group Correction Factors (GSPGCF)

3.24 The VAS shall calculate GSP Group Correction Factors for Active Import ($GCFI_{HDj}$) and Active Export ($GCFE_{HDj}$) separately within each GSP Group 'H' using the GSP Group Take ($GSPGT_{HDj}$) provided by the CDCA and the GSP Group Half Hourly Consumption (GC_{HNDj}) for each Consumption Component Class 'N' within GSP Group 'H' as follows:

Step 1. Calculate the Unallocated Demand (U_{HDj}) as follows:

$U_{HDj} = GSPGT_{HDj} - \sum_N GC_{HNDj}$

Step 2. Calculate the Weighted Import (WI_{Hj}) as follows:

$WI_{HDj} = \sum^{AI}{}_N GC_{HNDj} * WT_N$

Where:

WT_N is the scaling weight for each CCC that is for Active Import (AI)

Step 3. Calculate the Weighted Export (WE_{Hj}) as follows:

$WE_{HDj} = \sum^{AE}{}_N GC_{HNDj} * WT_N$

Where:

WT_N is the scaling weight for each CCC that is for Active Export (AE)

Step 4. Calculate the AI share of Unallocated Demand (UI_{HDj}) as follows:

$UI_{HDj} = U_{HDj} * WI_{HDj}/(WI_{HDj} + WE_{HDj})$

Step 5. Calculate the AE share of Unallocated Demand (UE_{HDj}) as follows:

$UE_{HDj} = U_{HDj} * WE_{HDj}/(WI_{HDj} + WE_{HDj})$

Step 6. Calculate the Group Correction Factor Import ($GCFI_{HDj}$) as follows:

$GCFI_{HDj} = 1 + UI_{HDj}/ WI_{HDj}$

Step 7. Calculate the Group Correction Factor Export ($GCFE_{HDj}$) as follows:

$GCFE_{HDj} = 1 + UE_{HDj}/ (-1 * WE_{HDj})$

3.25 The VAS must provide the GSP Group Factors ($GCFI_{HDj}$ and $GCFE_{HDj}$) to Other BSC Systems for other Settlement calculations (e.g. Wider Access).

15. Determination of Corrected Component

3.26 The VAS shall determine the Corrected Component ($CORC_{iNDj}$) for each GSP Group 'H' and for each Consumption Component Class 'N' within BM Unit 'i' according to the following formula:

For Active Import CCC IDs:

$CORC_{iNDj} = (C_{iNDj} + CLOSS_{iNDj}) * (1 + (GCFI_{HDj} - 1) * WT_N)$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFI_{HDj}$ is the value of GSP Group Correction Factor for AI CCC IDs for the GSP Group 'H' associated with the BM Unit 'i'.

For Active Export CCC IDs:

$CORC_{iNDj} = (C_{iNDj} + CLOSS_{iNDj}) * (1 + (GCFE_{HDj} - 1) * WT_N)$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFE_{HDj}$ is the value of GSP Group Correction Factor for AE CCC IDs for the GSP Group 'H' associated with the BM Unit 'i'.

16. Validating the out-turn calculations

3.27 The VAS will further validate the data calculated in the Volume Allocation Runs during the Volume Allocation Run, as follows:

Validate Stage 1 – GSP Group Correction Factors

The VAS shall validate that the calculated GSP Group Correction Factors ($GCFI_{HDj}$ and $GCFE_{HDj}$) lie within an acceptable range determined by BSCCo. If any value lies outside this range, the Volume Allocation Run will be aborted and the cause of the breach investigated. If unresolved, VAS will send BSCCo appropriate data for analysis before confirming with BSCCo if the VAR can be completed.

Validate Stage 2 – Validate GSP Group Take and GSP Group Consumption Volumes

The VAS shall validate the aggregated total consumption volume per GSP Group per Settlement Period.

The VAS will calculate the difference between the GSP Group Take and the Uncorrected Volume (U_{HDj}) calculated as the sum of the uncorrected Consumption Component Classes for all BM Units within the GSP Group. If the differences lie outside an acceptable range determined by BSCCo the Volume Allocation Run will be aborted and the cause of the breach investigated. If unresolved the VAS will send BSCCo appropriate data for analysis and the VAR will be completed. BSCCo will analyse any unresolved issues and attempt to get any data issues resolved by the next available Settlement Volume Allocation Run or refer the issue as a Trading Dispute.

17. VAS Estimates where Initial VAR incomplete

3.28 In the event that the VAS is unable to complete an Initial VAR, the VAS shall provide default data, by BM Unit, to the Settlement Administration Agent without fail for every occasion that an Initial VAR is required by the Funds Administration Agent Calendar. To estimate the data, the VAS shall estimate in energy terms, by BM Unit, the total value of the BMU Allocated Demand Volume ($BMUADV_{iDj}$) in each half hour, between BM Units in the same proportion as occurred in the last Initial VAR for a Settlement Day for which the same day type.

18. Determination of Supplier Deemed Take (SDT_{HZDj})

3.29 For each Supplier 'Z' the Supplier Deemed Take (SDT_{HZDj}) for each GSPG 'H' shall be determined by the VAS according to the following formula:

$SDT_{HZDj} = \sum_{i}^{HZ} (\sum_N CORC_{iNDj})$

Where data is summed over all Consumption Component Classes 'N', where, in such summation, values associated with Consumption Component Classes associated with Third Party Generating Plant (AE) comprised in MPANs shall be subtracted and values associated with all other Consumption Component Classes shall be added.

19. Determination of BM Unit Allocated Demand Volume ($BMUADV_{iDj}$)

3.30 In respect of each BM Unit 'i', the VAS shall determine the BM Unit Allocated Demand Volume ($BMUADV_{iDj}$) for each GSP group 'H' for each Settlement Period 'j' according the following formula:

$BMUADV_{iDj} = \sum_N CORC_{iNDj}$

Where data is summed over all Consumption Component Classes 'N' where, in such summation, values associated with Consumption Component Classes associated with Third Party Generating Plant (AE) comprised in MPANs shall be subtracted and values associated with all other Consumption Component Classes shall be added.

3.31 The VAS shall provide the SAA with the BM Unit Allocated Demand Volume ($BMUADV_{iDj)}$ for each Supplier BM Unit 'i' for each Settlement Period 'j' for each Volume Allocation Run.

20. Determination of Period BMU SVA Gross Demand

3.32 For each Supplier, BM Unit and each Settlement Period in the Settlement Day the VAS shall calculate the Period BM Unit SVA Gross Demand ($PBMUGDi_{Dj}$) as the sum of Corrected Supplier Consumption and Corrected Line Loss Components recorded for Active Import (AI) Component Classes according to the following formula:

$PBMUGDi_{Dj} = \sum_N CORC_{iNDj}$

Where the Consumption Component Classes 'N' are associated with Active Import.

3.33 The VAS shall provide the SAA with the Period BMU SVA Gross Demand ($PBMUGDi_{Dj}$) for each Supplier BM Unit 'i' for each Settlement Period 'j' for each Volume Allocation Run.

21. Determination of Period BMU Gross Demand for SVA Storage Facilities

General

3.34 This section describes the VAS calculations needed to provide certain data to the ESO for the purpose of calculating Transmission Network Use of System Charges and Balancing Services Use of System Charges relating to the operation by the ESO of the Transmission System. For the avoidance of doubt, such data are not used for the purposes of calculating Trading Charges.

Declarations

3.35 BSCCo shall provide to VAS, the SVA Storage Facilities Register for all MPANs 'k' for each BMU 'i' and GSP Group 'H'.

3.36 Where a Supplier intends to register a MPAN on the SVA Storage Facilities Register, it shall submit a Declaration on behalf of the relevant SVA Storage Facility Operator to the VAS in accordance with [BSCP602], and shall keep the VAS informed of any amendments or updates to that Declaration made by the SVA Storage Facility Operator.

3.37 Each SVA Storage Facility Operator who is a BSC Party acknowledges and agrees that:

a) the information contained in any Declaration submitted to the VAS on their behalf is accurate and complete in all material respects; and

b) they will promptly notify the Supplier(s) who is the Registrant of the Metering System(s) on the Declaration of any amendments or updates to the Declaration.

3.38 Following transition the aggregated SVA Storage Facilities Register data by BMU Id will be provided by the MDS.

Suppliers' Responsibilities

3.39 Each such Supplier shall ensure that UTC Period Level data (UTCP) for each Settlement Period of each Settlement Day are made available to the MDS in respect of all of such Supplier's MPANs which are listed on the SVA Storage Facilities Register and subject to half hourly metering as part of the day to day MHHS processes.

If:

a) a VAS Generator provides Export Active Energy through a MPAN and such Export Active Energy is allocated between two or more Suppliers; and/or

b) a Storage Site consumes Import Active Energy through a MPAN and such Import Active Energy is allocated between two or more Suppliers; and

c) each such Supplier shall ensure that Metered Data for each Settlement Period of each Settlement Day shall be made available to the MDS in respect of all of such Supplier's MPAN associated with Metering Systems which are listed on the SVA Storage Facilities Register and subject to half hourly metering.

These requirements shall not include metered data for Unmetered Supplies.

VAS Responsibilities

3.40 The MDS shall provide the VAS with the Storage Consumption (Non Losses (SC_{iNDj}) and Storage Consumption (Losses) ($SCLOSS_{iNDj}$) shall be provided to the VAS in accordance with the Master Settlement Timetable.

3.41 The VAS shall calculate the Storage Corrected Component ($SCORC_{iNDj}$) for each Consumption Component Class 'N' within Supplier BM Unit 'i' shall be determined by the VAS according to the following formula:

Import CCC IDs:

$$SCORC_{iNDj} = (SC_{iNDj} + SCLOSS_{iNDj}) * (1 + (GCFI_{HDj} - 1) * WT_{N})$$

where WT_N is the associated GSP Group Correction Scaling Weight and GCFI is the value of GSP Group Correction Factor for Import CCC 'N' within GSP Group 'H' associated with the Supplier BM Unit 'i'.

3.42 The Period BM Unit Gross Storage Demand ($SDBMU_{imDj}$) shall be determined by the VAS by aggregating the Storage Corrected Components ($SCORC_{iNDj}$) for each Supplier BM Unit 'i', CCC Grouping 'm' and Settlement Period 'j':

$$SDBMU_{imDj} = \sum SCORC_{iNDj}$$

Where CCC Grouping 'm' is the ESO required grouping of CCC IDs for use in calculating Transmission Network Use of System Charges and Balancing Services Use of System Charges.

3.43 VAS shall provide to the SAA the Period BM Unit Gross Storage Demand ($SDBMU_{imDj}$).

Appendix 1: ISD Reference table (for illustrative purposes)

The ISD contains the MHHS CCC definitions and the associated Scaling Weights for use in the VAS calculations. The MHHS CCC IDs and Scaling Weights are configurable and may be amended from time to time as directed by the BSC Panel. The initial set of CCCs and Scaling Weights are shown below.

CCC ID	Segment Indicator	Measurement Quantity	Consumption Component Indicator	Connection Type Indicator	**Settlement Period Quality Indicator**	Scaling Weight
100	U	AI	C	W	A	1.2
101	U	AI	L	W	A	1.4
102	U	AE	C	W	A	1.2
103	U	AE	L	W	A	1.4
104	U	AI	C	W	E, ZE	1.4
105	U	AI	L	W	E, ZE	1.4
106	U	AE	C	W	E, ZE	1.4
107	U	AE	L	W	E, ZE	1.4
108	S	AI	C	W	A	1
109	S	AI	L	W	A	1.4
110	S	AE	C	W	A	1
111	S	AE	L	W	A	1.4
112	S	AI	C	W	E0, E1, E2, E3 and E6	1.2
113	S	AI	C	W	E4, E5 and E7	1.4
114	S	AI	C	W	E8, E9, ZE2, ZE3	1.6
115	S	AI	L	W	E0, E1, E2, E3 and E6	1.4
116	S	AI	L	W	E4, E5 and E7	1.4
117	S	AI	L	W	E8, E9, ZE2, ZE3	1.4
118	S	AE	C	W	E0,E1, E2, E3, E6 and ZE1, ZE2, ZE3	1.2
119	S	AE	L	W	E0, E1, E2, E3, E6 and ZE1, ZE2, ZE3	1.4
120	A	AI	C	W	A, A1, A2, A3	1
121	A	AI	L	W	A, A1, A2, A3	1.4
122	A	AE	C	W	A, A1, A2, A3	1
123	A	AE	L	W	A, A1, A2, A3	1.4
124	A	AI	C	C	A, A1, A2, A3	0.8
125	A	AI	L	C	A, A1, A2, A3	1.2
126	A	AE	C	C	A, A1, A2, A3	0.8
127	A	AE	L	C	A, A1, A2, A3	1.2
128	A	AI	C	H	A, A1, A2, A3	0.4
129	A	AI	L	H	A, A1, A2, A3	0.8
130	A	AE	C	H	A, A1, A2, A3	0.4
131	A	AE	L	H	A, A1, A2, A3	0.8
132	A	AI	C	E	A, A1, A2, A3	0
133	A	AI	L	E	A, A1, A2, A3	0.4
134	A	AE	C	E	A, A1, A2, A3	0
135	A	AE	L	E	A, A1, A2, A3	0.4
136	A	AI	C	W	EA1, EA2, EA3, EA4 ,EA5, E2 and E3	1.2
137	A	AI	C	W	EA7, EA8 , EA9, E4,E6 and E6	1.4

CCC ID	Segment Indicator	Measurement Quantity	Consumption Component Indicator	Connection Type Indicator	**Settlement Period Quality Indicator**	Scaling Weight
138	A	AI	C	W	EA6, EA10, EA11 , EA12,EA13, E7, E8, E9, E10	1.6
139	A	AI	L	W	EA1, EA2, EA3, EA4, EA5, E2 and E3	1.4
140	A	AI	L	W	EA7, EA8,EA9, E4, E5 and E6	1.4
141	A	AI	L	W	EA6, EA10, EA11 ,EA12, EA13, E7,E8,E9 and E10	1.4
142	A	AE	C	W	AAE1, AAE2	1.2
143	A	AE	C	W	AAE3	1.4
144	A	AE	C	W	EAE1, EAE2 and EAE3	1.6
145	A	AE	L	W	AAE1, AAE2	1.4
146	A	AE	L	W	AAE3	1.4
147	A	AE	L	W	EAE1, EAE2 and EAE3	1.4
148	A	AI	C	C	EA1, EA2, EA3, EA4 and EA5	1
149	A	AI	C	C	EA7, EA8 and EA9	1.2
150	A	AI	C	C	EA6, EA10, EA11, EA12 and EA13	1.4
151	A	AI	L	C	EA1, EA2, EA3, EA4 and EA5	1.2
152	A	AI	L	C	EA7, EA8 and EA9	1.2
153	A	AI	L	C	EA6, EA10, EA11 ,EA12 and EA13	1.2
154	A	AE	C	C	AAE1, AAE2	1
155	A	AE	C	C	AAE3	1.2
156	A	AE	C	C	EAE1, EAE2 and EAE3	1.4
157	A	AE	L	C	AAE1, AAE2	1.2
158	A	AE	L	C	AAE3	1.2
159	A	AE	L	C	EAE1, EAE2 and EAE3	1.2
160	A	AI	C	H	EA1, EA2, EA3, EA4 and EA5	0.6
161	A	AI	C	H	EA7, EA8 and EA9	0.8
162	A	AI	C	H	EA6, EA10, EA11 , EA12 and EA13	1
163	A	AI	L	H	EA1, EA2, EA3, EA4 and EA5	0.8
164	A	AI	L	H	EA7, EA8 and EA9	0.8
165	A	AI	L	H	EA6, EA10, EA11 , EA12 and EA13	0.8
166	A	AE	C	H	AAE1, AAE2	0.6
167	A	AE	C	H	AAE3	0.8
168	A	AE	C	H	EAE1, EAE2 and EAE3	1
169	A	AE	L	H	AAE1, AAE2	0.8

CCC ID	Segment Indicator	Measurement Quantity	Consumption Component Indicator	Connection Type Indicator	**Settlement Period Quality Indicator**	Scaling Weight
170	A	AE	L	H	AAE3	0.8
171	A	AE	L	H	EAE1, EAE2 and EAE3	0.8
172	A	AI	C	E	EA1, EA2, EA3, EA4 and EA5	0.2
173	A	AI	C	E	EA7, EA8 and EA9	0.4
174	A	AI	C	E	EA6, EA10, EA11 ,EA12 and EA13	0.6
175	A	AI	L	E	EA1, EA2, EA3, EA4 and EA5	0.4
176	A	AI	L	E	EA7, EA8 and EA9	0.4
177	A	AI	L	E	EA6, EA10, EA11 ,EA12 and EA13	0.4
178	A	AE	C	E	AAE1, AAE2	0.2
179	A	AE	C	E	AAE3	0.4
180	A	AE	C	E	EAE1, EAE2 and EAE3	0.6
181	A	AE	L	E	AAE1, AAE2	0.4
182	A	AE	L	E	AAE3	0.4
183	A	AE	L	E	EAE1, EAE2 and EAE3	0.4