

**ANNEX S-3: SUPPLIER VOLUME ALLOCATION RULES FOR MIGRATED MHHS
METERING SYSTEMS**

SUMMARY PAGE

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**ANNEX S-3: SUPPLIER VOLUME ALLOCATION RULES FOR MIGRATED MHHS
METERING SYSTEMS**

1. GENERAL

1.1 Introduction

1.1.1 This Annex S-3 forms a part of Section S.

1.1.2 This Annex S-3 sets out the basis upon which quantities of Active Energy associated with SVA Metering Systems and Asset Metering Systems that have been Migrated to Market-wide Half-Hourly Settlement are determined and allocated to Supplier BM Units, Suppliers and Secondary BM Units for the purposes of Settlement, including rules in respect of:

- (a) Supplier Meter Registration Services;
- (b) Data Collection and Provision;
- (c) Determination of Load Shape Data;
- (d) Determination of BM Unit's Period Level Consumption
- (e) Volume Allocation Data input;
- (f) Volume Allocation;
- (g) GSP Group Correction;
- (h) Supplier Quarterly Volume Reports;
- (i) Volume Allocation Runs;
- (j) Trading Disputes; and
- (k) Delays and Failures.

1.1.3 This Annex S-3 also sets out the basis upon which quantities of Active Energy associated with SVA Metering Systems are determined and allocated to Supplier BM Units and Suppliers for other purposes, including rules in respect of:

- (a) determination of BM Unit Allocated Demand Volumes and Secondary BM Unit Demand Volumes;
- (b) determination of aggregated Non-Final Demand Metering System Metered Consumption; and
- (c) determination of Period BM Unit Non Chargeable Demand.

1.2 Interpretation

1.2.1 In this Annex S-3:

- (a) references to Metering Systems are to SVA Metering Systems, except where they are Asset Metering Systems, (and references to Metering System Numbers and Asset Metering System Numbers shall be construed accordingly);
- (b) references to paragraphs are to paragraphs of this Annex S-3, unless otherwise expressly stated.

2. THE SUPPLIER METER REGISTRATION SERVICES

2.1 Provision of data

- 2.1.1 Each Supplier shall ensure that, in respect of each of the Metering Systems for which it is responsible, data is supplied to the SMRA for the relevant GSP Group pursuant to this paragraph 2 by itself and/or its agents which is complete and accurate in all material respects, valid and timely.
- 2.1.2 Each SMRA shall use its reasonable endeavours to procure the provision to it by the SVAA of such data as are specified in BSCP706 ‘Supplier Meter Registration Service for Migrated MHHS Metering Systems’ as being provided to such SMRA by the SVAA together with the Settlement Days from which such data are to be effective from the SVAA.
- 2.1.3 The SVAA shall notify the data referred to in paragraph 2.1.2 promptly to the SMRA in accordance with BSCP703 and the SMRA shall ensure that processes are put in place which are designed to ensure that such data is input promptly into its Supplier Meter Registration Service system.
- 2.1.4 Each SMRA shall make and maintain arrangements with those Distribution System Operators whose Distribution Systems have a connected Metering System for which Metering System the SMRA is required to store information in its Supplier Meter Registration Service system.
- 2.1.5 The purpose of the arrangements referred to in paragraph 2.1.4 shall be to provide for the transfer of such data as are specified in BSCP706 as being provided by the Distribution System Operators to such SMRA in respect of each such Metering System.
- 2.1.6 Distribution System Operators shall notify such data promptly to such SMRA and such SMRA shall ensure that processes are put in place which are designed to ensure that such data are promptly input into its Supplier Meter Registration Service system in accordance with BSCP706.
- 2.1.7 Each SMRA shall make and maintain arrangements with all those Suppliers who are responsible for Metering Systems, details of which are required to be maintained by the SMRA in its Supplier Meter Registration Service system.
- 2.1.8 The purpose of the arrangements referred to in paragraph 2.1.7 shall be to provide for the transfer of such data as are specified in BSCP706 as being provided by such Supplier to such SMRA together with the Settlement Days on which such data are to be effective from each such Supplier and in respect of each such Metering System.
- 2.1.9 Each such Supplier shall notify such data promptly to such SMRA and such SMRA shall ensure that processes are put in place which are designed to ensure that such data are input promptly into the Supplier Meter Registration Service system.

- 2.1.10 Each SMRA shall ensure that processes are put in place which are designed to ensure that the data received by it pursuant to this paragraph 2 are validated and complete in accordance with BSCP706 and that the SMRS identifies the Supplier that is (pursuant to the REC) responsible for each Metering System for which such SMRA has a requirement to store information in its Supplier Meter Registration Service system.
- 2.1.11 Each SMRA shall:
- (a) supply such data as are specified in BSCP706 as being provided by such SMRA to a Data Service Provider, together with the Settlement Days on which such data are to be effective, from such SMRA's Supplier Meter Registration Service system to the relevant Data Service Provider on initial allocation of such data, on any change of such data and on request from the relevant Data Service Provider;
 - (b) supply such data in respect of each Metering System for which such SMRA is required to store information in its Supplier Meter Registration Service system and for which such Data Service Provider, as the case may be, is responsible;
 - (c) supply such data as are specified in BSCP703 as being provided by such SMRA to the SVAA, together with the Settlement Days on which such data are to be effective, from such SMRA's Supplier Meter Registration Service system to the SVAA on initial allocation of such data and on any change of such data.
- 2.1.12 In respect of each Metering System for which a SMRA is required to store information in its Supplier Meter Registration Service system, the SMRA shall supply to the persons specified in BSCP706 (together with the Settlement Days on which such data are to be effective) such data as are specified in BSCP706 in the following circumstances:
- (a) on the change of Supplier; and
 - (b) on deactivation of the registration of such Metering System in CSS.
- 2.1.13 In respect of each Settlement Day, for each BM Unit for which such data is received the SAA shall send to the SVAA the Replacement Reserve Bid Data in respect of each Quarter Hour period within each Replacement Reserve Auction Period within such Settlement Day.

3. DATA COLLECTION AND PROVISION

3.1 Supplier's responsibility for the collection and provision of UTC Period Level Consumption data

3.1.1 Subject to paragraph 3.1.2, each Supplier shall ensure that UTC Period Level Consumption data is collected and provided for each UTC Period "j" of each UTC Day "D" to the SVAA pursuant to this paragraph 3, in respect of all of such Supplier's Metering Systems.

3.1.2 If:

- (a) a SVA Generator provides Export Active Energy through a SVA Metering System and such Export Active Energy is allocated between two or more Suppliers, and/or
- (b) a SVA Customer consumes Import Active Energy through a SVA Metering System and such Import Active Energy is allocated between two or more Suppliers,

each such Supplier shall ensure that UTC Period Level Consumption data for each UTC Period of each UTC Day shall be made available to the SVAA pursuant to this paragraph 3 in respect of all of such Supplier's Metering System Numbers associated with such Metering Systems.

- 3.1.3 Each Supplier shall ensure that all the UTC Period Level Consumption data which it is required to make available to the SVAA pursuant to paragraphs 3.1.1 or 3.1.2 shall be collected and processed in accordance with the provisions of this paragraph 3.

3.2 Responsibility for the collection of half hourly data for Asset Metering Systems

- 3.2.1 Each Virtual Lead Party and Supplier shall ensure that consumption figures for each Settlement Period of each Settlement Day are made available to the SVAA pursuant to this paragraph 3, in respect of all Asset Metering Systems that such Virtual Lead Party or Supplier is the Registrant of.

3.3 Metered Data

- 3.3.1 In this Annex S-3 "**Metered Data**" shall mean only Metered Data in respect of

- (a) Metering Systems or Asset Metering Systems data collected by:
 - (i) automatic/remote means; or
 - (ii) site meter reading; and
- (b) Unmetered Supplies.

- 3.3.2 Data relating to Unmetered Supplies shall be collected pursuant to BSCP700 and processed in the same way as other UTC Period Level Consumption data.

3.4 UTC Period Level Consumption Data Collection

- 3.4.1 Paragraph 3.4.2 and paragraph 3.4.3 shall apply in respect of each Metering System, other than a Metering System through which a SVA Generator provides Export Active Energy or a SVA Customer consumes Import Active Energy and such Export Active Energy or Import Active Energy (as the case may be) is allocated between a Primary Supplier and the associated Secondary Supplier(s), in which case the provisions of paragraph 3.4.5 shall apply.

- 3.4.2 Each Supplier shall ensure that each of its Data Service Providers shall in respect of such Supplier's Metering Systems, other than those to which the provisions of paragraph 3.4.5 apply, for which such Data Service Provider is responsible:

- (a) collect the Metered Data in accordance with BSCP701, BSCP702 or, as the case may be, BSCP700;
- (b) check the Metered Data and provide reports in accordance with BSCP701, BSCP702 or, as the case may be, BSCP700;
- (c) update standing data entries it holds when provided by the relevant Supplier or, as the case may be, the SVAA, and update the Meter Technical Details (in accordance with BSCP701 or BSCP702) to take account of new or revised information as provided by the relevant Meter Operator Agent;

- (e) save in the case of an Unmetered Supply, carry out meter advance reading and reconcile the actual meter advance with synthesised meter advance derived from the UTC Period Level Consumption data collected from the Metering System;
- (f) process the Supplier's Metered Data and provide the resulting UTC Period Level Consumption data ($UTCP_{IHNDj}$) to the SVAA, Supplier and where appropriate the relevant Distribution System Operator.

3.4.3 Each Virtual Lead Party and Supplier shall ensure that each of its Data Service Providers shall in respect of Asset Metering Systems for which such Data Service Provider or Half Hourly Data Collector is responsible:

- (a) collect the Metered Data in accordance with BSCP603
- (b) check the Metered Data and provide reports in accordance with BSCP603
- (c) enter the Asset Meter Register Consumption ($AMRC_{Kj}$) into the relevant data collection system;
- (d) update standing data entries and update the Meter Technical Details (in accordance with BSCP603) to take account of new or revised information as provided by the relevant Meter Operator Agent;
- (e) carry out meter advance reading and reconcile the actual meter advance with synthesised meter advance derived from the Asset Meter Register Consumption input to the relevant data collection system;
- (f) process the Asset Meter Register Consumption in accordance with BSCP603 and provide the resulting Asset Metering System Metered Consumption ($AMMC_{Kj}$) to SVAA in accordance with BSCP603.
- (g) provide the Asset Metering System Metered Consumption report to the relevant Virtual Lead Party or Supplier.

3.4.4 Paragraph 3.4.5 shall apply in respect only of each Metering Systems through which:

- (a) a SVA Generator provides Export Active Energy and such Export Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s); or
- (b) a SVA Customer consumes Import Active Energy and such Import Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s).

3.4.5 Where this paragraph 3.4.5 applies:

- (a) the relevant Primary Supplier and the associated Secondary Supplier(s) shall appoint the same Data Service Provider to be responsible for such Metering System;
- (b) the Primary Supplier shall provide an initial Allocation Schedule in respect of such Metering System to such Data Service Provider or Half Hourly Data Collector and the associated Secondary Supplier(s) pursuant to BSCP550;
- (c) the Primary Supplier shall provide any subsequent Allocation Schedules in respect of such Metering System to such Data Service Provider or Half Hourly Data Collector and to the associated Secondary Supplier(s) pursuant to BSCP550;

- (d) each such Primary Supplier and the associated Secondary Supplier(s) shall ensure that their Data Service Provider or Half Hourly Data Collector shall in respect of each such Metering System for which such Data Service Provider or Half Hourly Data Collector is responsible:
- (i) collect the Metered Data in accordance with BSCP550;
 - (ii) check the Metered Data and provide reports in accordance with BSCP550;
 - (iii) enter the Supplier's UTC Period Level Consumption data ($UTCP_{ZKj}$) into the relevant data collection system (where for such Metering System, and such consumption the subscript "Z" shall denote both the Primary Supplier "Z1" and each associated Secondary Supplier "Zn" responsible for such Metering System);
 - (iv) check for consistency of standing data entries provided by the Primary Supplier and the associated Secondary Supplier(s) responsible for such Metering System, resolve inconsistencies with such Suppliers and, when consistent, update such standing data entries or, if such inconsistencies cannot be resolved pursuant to BSCP550, carry out the relevant default procedures in accordance with such BSC Procedure;
 - (v) update standing data entries provided by the SVAA; and update the Meter Technical Details to take account of new or revised information as provided by the relevant Meter Operator Agent;
 - (vi) carry out meter advance reading and reconcile the actual meter advance with synthesised meter advance derived from the UTC Period Level Consumption data input to the relevant data collection system;
 - (vii) process the UTC Period Level Consumption data ($UTCP_{ZKj}$) employing the Allocation Schedule in respect of such Metering System for the relevant UTC Period and UTC Day (but disregarding, in respect of such UTC Period, any Allocation Schedule to the extent that it was submitted after Gate Closure for that UTC Period) and provide the resulting UTC Period Level Consumption data ($UTCP_{ZKj}$) in respect of the Primary Supplier and the associated Secondary Supplier(s) to the SVAA;
 - (viii) provide the Supplier's UTC Period Level Consumption report (which, in the event of a dispute related to the Metered Data in respect of such Metering System, shall include the Shared Suppliers' UTC Period Level Consumption in respect of such Metering System and each UTC Period of the relevant UTC Day) in respect of the Primary Supplier to the Primary Supplier responsible for such Metering System and the relevant Distribution System Operator; and
 - (ix) provide the Supplier's UTC Period Level Consumption report (which, in the event of a dispute related to the Metered Data in respect of such Metering System, shall include the Shared UTC Period Level Consumption data in respect of such Metering System and each Settlement Period of the relevant Settlement Day) in respect of each Secondary Supplier to the relevant Secondary Supplier responsible for

such Metering System and where appropriate the relevant Distribution System Operator.

- 3.4.5 For the avoidance of doubt, each Secondary Supplier shall be bound, for the purposes of the Code, by the Allocation Schedule submitted from time to time by the Primary Supplier in accordance with BSCP550 and no dispute may be raised under the Code as to the accuracy or completeness of an Allocation Schedule submitted in accordance with BSCP550 (but without prejudice to any rights which the Secondary Supplier(s) may have under any other agreement with the Primary Supplier in respect thereof).

3.5 Determination of Load Shape Data

- 3.5.1 The SVAA shall ensure that the Load Shaping Service when selecting data for a UTC Day only selects data that has a Settlement Period Quality Indicator which is deemed to be actual UTC Period Level Consumption data and is valid period data retrieved directly from the Metering System in accordance with BSCP703.

- 3.5.2 The SVAA shall ensure that the Load Shaping Service uses the Registration Data, together with the Load Shape Categories from Industry Standing Data to allocate each Metering System "K" to a Load Shape Category so the number of Metering Systems with UTC Period Level Consumption data in each Load Shape Category for each UTC Period. For the UTC Day "D" and each UTC Period "j", and Load Shape Category "C" the Load Shaping Service must count the number of Metering System "K" with actual UTC Period Level Consumption data (UTCP_{KDjC}) data as follows:

$$LSCCOUNT_{DjC} = \text{Count of UTCP}_{KDjC} \text{ across Metering Systems "K"}$$

- 3.5.3 Where pursuant to paragraph 3.5.2 the LSCCOUNT_{DjC} is less than the De-minimis Data Count value set out in Industry Standing Data, the SVAA shall ensure that the Load Shaping Service sets the Load Shape (LSPV_{DjC}) to the Default Load Shape (DLSPV_{DjC}) as follows:

$$LSPV_{DjC} = DLSPV_{DjC}$$

- 3.5.4 Where pursuant to paragraph 3.5.3 a Load Shape Period Value (LSPV_{DjC}) has been set to the Default Load Shape (DLSPV_{DjC}), and the Load Shape Category "C" is in the Smart Segment, the SVAA shall ensure that the Load Shaping Service shall determine default Load Shape for that UTC Period averaging UTC Period Level Consumption data over all GSP Groups that have the same remaining Load Shape Category characteristics. For the UTC Day "D" and each UTC Period "j" and Load Shape Category "C" average the actual UTC Period Level Consumption data (LSPV_{DjC}) with actual ("A" Flagged) for the set of all GSP Groups "H". The Default Load Shape (DLSPV_{DjC}) shall be calculated as follows:

$$DLSPV_{DjC} = (\sum_{HK} UTCP_{KHCDj}) / LSCCOUNTN_{DjC}$$

Where LSCCOUNTN_{DjC} = Count of UTCP_{KHCDj} across all Metering Systems "K" and GSP Groups "H" that have the same Load Shape characteristics other than the GSP Group identifier.

And Where the GSP Group "Set" "H" is all the GSP Groups and Load Shape Category "C" has the same identifiers other than the GSP Group Identifier. The DLSPV_{DjC} shall be "D" Flagged for that UTC Period "j".

If the De-minimis Data Count value for the defaulted Load Shape Category is still not met then the Back-stop calculation set out below paragraph 3.5.5 shall be applied.

3.5.5 This paragraph 3.5.5 applies where pursuant to paragraph 3.5.4 the $LSCCOUNTN_{DjC}$ is still not met or where the Load Shape Category "C" to be defaulted to the Default Load Shape ($DLSPV_{DjC}$) is in the Advanced Segment or Unmetered Market Segment. The SVAA shall ensure that the Load Shaping Service shall determine the Default Load Shape ($DLSPV_{DjC}$). For the UTC Day "D" and each UTC Period "j" and Load Shape Category "C" where $LSCCOUNTN_{DjC}$ is below the De-minimis Data Count value or zero the Load Shaping Service shall set the Default Load Shape Period Values ($DLSPV_{DjC}$) as follows:

$$DLSPV_{DjC} = LSPV_{XjC}$$

where "X" is the previous UTC Day with the same day type as UTC Day "D" as defined in the Master Settlement Timetable. The defaulted UTC Periods shall be "E" Flagged for each UTC Period "j".

3.5.6 Where no data exists for at least one UTC Period for previous UTC Day "X" with the same Day Type as the UTC Day being processed, the SVAA shall ensure the Load Shaping Service determines the Default Load Shape value for Load Shape Category "C" for all UTC Periods associated to the UTC Day as follows:

$$DLSPV_{DjC} = 1$$

The defaulted UTC Periods shall be "B" Flagged for each UTC Period "j".

3.5.7 The SVAA shall ensure the Load Shaping Service determines the Load Shape Period Value ($LSPV_{DjC}$) for each UTC Period "j" and Load Shape Category "C" as follows:

$$LSPV_{DjC} = (\sum_K UTCP_{KCDj}) / LSCCOUNTN_{DjC}$$

Where $UTCP_{KCDj}$ is the actual UTC Period Level Consumption submitted by the Data Service Providers.

The $LSPV_{DjC}$ shall be "A" Flagged for the UTC Period "j".

The Load Shape Data for the UTC Day "D" will be the $LSPV_{DjC}$ and any $DLSPV_{Dj}$ values calculated for each Load Shape Category "C".

3.5.8 The SVAA shall ensure the Load Shaping Service determines the Load Shape Total Data (LS_TOT_{DC}) for the UTC Day "D" and Load Shape Category "C" by summing the Load Shape Period Values ($LSPV_{DjC}$) including any Default Load Shape Period Values ($DLSPV_{DjC}$) as follows:

$$LS_TOT_{DC} = \sum_i LSPV_{DjC}$$

3.5.9 The SVAA shall ensure the Load Shaping Service determines the Load Shape Off-peak total (LS_OFF_{DC}) for the UTC Day "D" and Load Shape Category "C" by summing the Load Shape Period Values ($LSPV_{DjC}$) including any Default Load Shape Period Values ($DLSPV_{DjC}$) as follows:

$$LS_OFF_{DC} = \sum_i LSPV_{DjC}$$

where, for the purposes of paragraph 3.5.9, "j" is UTC Periods that are within the off-peak period as defined for the Load Shape Capacity "C" in the Load Shape Category Table in Industry Standing Data.

- 3.5.10 The SVAA shall ensure the Load Shaping Service determines the Load Shape Peak total (LS_PEAK_{DC}) for the UTC Day "D" and Load Shape Category "C" by differencing the Load Shape Total Data (LS_TOT_{DC}) and Load Shape Off-peak total (LS_OFF_{DC}) as follows:

$$LS_PEAK_{DC} = LS_TOT_{DC} - LS_OFF_{DC}$$

- 3.5.11 The SVAA shall ensure the Load Shaping Service determines the Load Shape Rolling 7 Day total (LS_ROLL_TOT_{DC}) for the UTC Day "D" and Load Shape Category "C" by summing the Load Shape Total Data (LS_TOT_{VC}) across 7 day as follows:

$$LS_ROLL_TOT_{DC} = \sum_{V=D-6}^D LS_TOT_{VC}$$

Where "V" is a UTC Day equivalent "D" - 6 Days.

- 3.5.12 The SVAA shall ensure the Load Shaping Service determines the Load Shape Rolling 7 Day Rolling Off-peak total (LS_ROLL_OFF_{DC}) for the UTC Day "D" and Load Shape Category "C" by summing the Load Shape Off-peak total (LS_OFF_{XC}) across 7 days as follows:

$$LS_ROLL_OFF_{DC} = \sum_{X=D-6}^D LS_OFF_{XC}$$

Where "X" is a UTC Day equivalent "D"- 6 Days

- 3.5.13 The SVAA shall ensure the Load Shaping Service determines the Load Shape Rolling 7 Day Rolling Peak total (LS_ROLL_PEAK_{DC}) for the UTC Day "D" and Load Shape Category "C" by summing the Load Shape Peak total (LS_PEAK_{XC}) across 7 days as follows:

$$LS_ROLL_PEAK_{DC} = \sum_{X=D-6}^D LS_PEAK_{XC}$$

Where "X" is a UTC Day equivalent "D"- 6 Days

- 3.5.14 The SVAA shall ensure the Load Shaping Service determines the Load Shape Rolling Annual Total (LS_ROLL_ANN_TOT_{DC}) for the UTC Day "D" and Load Shape Category "C" by summing Load Shape Total Data (LS_TOT_{VC}) across 365 days as follows:

$$LS_ROLL_ANN_TOT_{DC} = \sum_{V=D-364}^D LS_TOT_{VC}$$

Where "V" is a UTC Day equivalent "D"- 364 Days

- 3.5.15 This paragraph 3.5.15 applies where less than 365 days of Load Shape Total Data (LS_TOT_{DC}) are available for the determination in paragraph 3.5.14. The SVAA shall ensure the Load Shaping Service determines Load Shape Rolling Annual Total (LS_ROLL_ANN_TOT_{DC}) for the UTC Day "D" and Load Shape Category "C" as follows:

$$LS_ROLL_ANN_TOT_{DC} = \sum_P LS_TOT_{DC} / \text{Count}(LS_TOT_{PC}) * 365$$

Where "P" is the period for which Load Shape Total Data (LS_TOT_{DC}) are available.

- 3.5.16 The SVAA shall ensure the Load Shaping Service validates all the data determined in accordance with paragraph 3.5 as specified in BSCP703.

- 3.5.17 The SVAA shall ensure the Load Shaping Service provides the Load Shape Data determined in accordance with paragraph 3.4 to the Market-wide Data Service and publishes the data to Market Participants in accordance with BSCP703 and to the timescales in BSCP01.

3.6 Determination of Supplier's Metered Consumption and/or Asset Meter Register Virtual Lead Party's Consumption

- 3.6.1 Each Supplier shall ensure that the Supplier's UTC Period Level Consumption data (UTCP_{ZKj}) for each Settlement Register "J" within such Supplier's Metering System and Unmetered Supply System "K" for such Supplier "Z" shall be collected by the relevant Data Service Provider or Half Hourly Data Collector.
- 3.6.2 In the case of an Asset Metering System, the Virtual Lead Party or Supplier that is the Registrant for such Asset Metering System shall ensure that the relevant Half Hourly Data Collector shall for each Settlement Period "j", ensure that the Asset Meter Register Consumption (AMRC_{Kj}), for each Settlement Register "J", within such Asset Metering System "K", shall be collected by the relevant Half Hourly Data Collector.
- 3.6.3 In the case of a Metering System through which:
- (a) a SVA Generator provides Export Active Energy and such Export Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s), or
 - (b) a SVA Customer consumes Import Active Energy and such Import Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s).

the relevant Primary Supplier and the associated Secondary Supplier(s) shall ensure that the Supplier's Meter Register Consumption shall be so collected and the subscript "Z" shall be construed as set out in paragraph 3.4.5.

- 3.6.4 Save where paragraph 3.6.6 or 3.6.9 applies, each Supplier shall ensure that the Supplier's Metering System Metered Consumption (SMMC_{ZKj}) for each such Supplier's Metering System "K" for such Supplier "Z" shall be determined by the relevant Half Hourly Data Collector according to the following formula and shall be provided to the SVAA:

$$SMMC_{ZKj} = \sum^K_J UTCP_{ZKj}.$$

Where UTC Period Level Consumption data (UTCP_{ZKj}) related to the Settlement Register "J" within such Supplier's Metering System.

- 3.6.5 Each Virtual Lead Party and Supplier shall ensure that the Asset Metering System Metered Consumption (AMMC_{Kj}) for each Asset Metering System "K" shall be determined by the relevant Half Hourly Data Collector according to the following formula and shall be provided to SVAA:

$$AMMC_{Kj} = \sum^K_J AMRC_{Kj}.$$

- 3.6.6 The provisions of paragraph 3.6.7 apply in the case of a Metering System:

- (a) through which:
 - (i) a SVA Generator provides Export Active Energy and such Export Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s); or
 - (ii) a SVA Customer consumes Import Active Energy and such Import Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s); and
- (b) for which the relevant Half Hourly Data Collector is appointed to be responsible for such Metering System has not identified or, if it has identified, has resolved, any inconsistencies in notifications from the Primary Supplier and the associated

Secondary Supplier(s) responsible for such Metering System pursuant to BSCP550; and

- (c) for which the Primary Supplier has provided the relevant Allocation Schedule for the Settlement Period being processed to such Half Hourly Data Collector pursuant to such BSC Procedure and no later than Gate Closure for that Settlement Period.

3.6.7 In the case of a Metering System to which this paragraph applies, the Primary Supplier and the associated Secondary Supplier(s) responsible for such Metering System shall ensure that the relevant Half Hourly Data Collector shall for each Settlement Period "j":

- (a) determine the Shared Suppliers' Metering System Metered Consumption ($SHMMC_{ZKj}$) for such Metering System "K" according to the following formula:

$$SHMMC_{ZKj} = \sum^K J UTCP_{ZKj}$$

where the subscript "Z" shall be construed as set out in paragraph 3.4.5;

- (b) determine the Primary Supplier's Metering System Metered Consumption ($PSMMC_{Z1K1j}$) for such Primary Supplier "Z1" for the relevant Primary Metering System Number "K1" which is associated with such Metering System "K" employing the relevant Allocation Schedule associated with such Metering System and Settlement Day submitted in accordance with BSCP550 and no later than Gate Closure for the relevant Settlement Period, as:

- (i) if a percentage fraction is specified in such Allocation Schedule to be employed for the relevant Settlement Period, such percentage fraction of the Shared Suppliers' Metering System Metered Consumption; or
- (ii) if an amount of energy is specified in such Allocation Schedule to be employed by way of capped block for the relevant Settlement Period, the lesser of such amount and the Shared Suppliers' Metering System Metered Consumption; or
- (iii) if an amount of energy is specified in such Allocation Schedule to be employed by way of fixed block for the relevant Settlement Period and the Primary Supplier is identified as the fixed supplier, such amount of energy or, where such amount exceeds the Relevant Capacity Limit, the amount of energy determined for the equivalent Settlement Period in the preceding Settlement Day; or
- (iv) if an amount of energy is specified in such Allocation Schedule to be employed by way of multiple fixed block for the relevant Settlement Period and the Primary Supplier is identified as a fixed supplier, the amount of energy allocated to the Primary Supplier or, where the total amount of energy specified in such Allocation Schedule for all Suppliers identified as fixed suppliers exceeds the Relevant Capacity Limit (in accordance with BSCP550), the amount of energy determined in respect of the Primary Supplier for the equivalent Settlement Period in the preceding Settlement Day; or
- (v) if an amount of energy is specified in such Allocation Schedule to be employed by way of fixed block for the relevant Settlement Period and the Primary Supplier is identified as the variable supplier, the amount by which the Shared Suppliers' Metering System Metered

Consumption exceeds the amount of energy allocated to the associated Secondary Supplier and, if no such excess, zero; or

- (vi) if an amount of energy is specified in such Allocation Schedule to be employed by way of multiple fixed block for the relevant Settlement Period and the Primary Supplier is identified as the variable supplier, the amount by which the Shared Suppliers' Metering System Metered Consumption exceeds the total amount of energy allocated to all the associated Secondary Suppliers and, if no such excess, zero;

(c) where applicable, determine the Primary Supplier's Metering System Metered Consumption ($PSMMC_{Z1.K1.1j}$) for such Primary Supplier "Z1" for the relevant Primary Metering System Number "K1.1" which is associated with such Metering System "K" employing the relevant Allocation Schedule associated with such Metering System and Settlement Day submitted in accordance with BSCP550 and no later than Gate Closure for the relevant Settlement Period, as:

- (i) if an amount of energy is specified in such Allocation Schedule to be employed by way of fixed block for the relevant Settlement Period and the Primary Supplier is identified as the variable supplier, the amount by which the Shared Suppliers' Metering System Metered Consumption falls short of the amount of energy allocated to the associated Secondary Supplier and, if no such shortfall, zero; or
- (ii) if an amount of energy is specified in such Allocation Schedule to be employed by way of multiple fixed block for the relevant Settlement Period and the Primary Supplier is identified as the variable supplier, the amount by which the Shared Suppliers' Metering System Metered Consumption falls short of the total amount of energy allocated to all the associated Secondary Suppliers and, if no such shortfall, zero;

(d) determine each Secondary Supplier's Metering System Metered Consumption ($SSMMC_{ZnKnj}$) for such Secondary Supplier "Zn" for the relevant Secondary Metering System Number "Kn" which is associated with such Metering System "K" employing the relevant Allocation Schedule associated with such Metering System and Settlement Day submitted in accordance with BSCP550 and no later than Gate Closure for the relevant Settlement Period, as:

- (i) where paragraph (b)(i) or (b)(ii) above apply in respect of the Primary Supplier:

$$SSMMC_{ZnKnj} = \max ((SHMMC_{ZKj} - PSMMC_{Z1K1j}), 0);$$

where $PSMMC_{Z1K1j}$ is the Primary Supplier's Metering System Metered Consumption associated with such Metering System "K" determined pursuant to paragraph (b)(i) or (b)(ii) as applicable;

- (ii) if an amount of energy is specified in such Allocation Schedule to be employed by way of fixed block for the relevant Settlement Period and the Secondary Supplier is identified as the fixed supplier, such amount of energy or, where such amount exceeds the Relevant Capacity Limit, the amount of energy specified for the equivalent Settlement Period in the preceding Settlement Day; or
- (iii) if an amount of energy is specified in such Allocation Schedule to be employed by way of multiple fixed block for the relevant Settlement

Period and the Secondary Supplier is identified as a fixed supplier, the amount of energy allocated to the Secondary Supplier or, where the total amount of energy specified in such Allocation Schedule for all Suppliers identified as fixed suppliers exceeds, the amount of energy allocated to the Secondary Supplier for the equivalent Settlement Period in the preceding Settlement Day; or

- (iv) if an amount of energy is specified in such Allocation Schedule to be employed by way of fixed block for the relevant Settlement Period and the Secondary Supplier is identified as the variable supplier, the amount by which the Shared Suppliers' Metering System Metered Consumption exceeds the amount of energy allocated to the Primary Supplier and, if no such excess, zero; or
- (v) if an amount of energy is specified in such Allocation Schedule to be employed by way of multiple fixed block for the relevant Settlement Period and the Secondary Supplier is identified as the variable supplier, the amount by which the Shared Suppliers' Metering System Metered Consumption exceeds the total amount of energy allocated to the Primary Supplier and all the other associated Secondary Suppliers and, if no such excess, zero;

(e) where applicable, determine each Secondary Supplier's Metering System Metered Consumption ($SSMMC_{Zn.1Kn.1j}$) for such Secondary Supplier "Zn" for the relevant Secondary Metering System Number "Kn.1" which is associated with such Metering System "K" employing the relevant Allocation Schedule associated with such Metering System and Settlement Day submitted in accordance with BSCP550 and no later than Gate Closure for the relevant Settlement Period, as:

- (i) if an amount of energy is specified in such Allocation Schedule to be employed by way of fixed block for the relevant Settlement Period and the Secondary Supplier is identified as the variable supplier, the amount by which the Shared Suppliers' Metering System Metered Consumption falls short of the amount of energy allocated to the Primary Supplier identified as the fixed supplier and, if no such shortfall, zero; or
- (ii) if an amount of energy is specified in such Allocation Schedule to be employed by way of multiple fixed block for the relevant Settlement Period and the Secondary Supplier is identified as a variable supplier, the amount by which the Shared Suppliers' Metering System Metered Consumption falls short of the total amount of energy allocated to the Primary Supplier and all other Secondary Suppliers identified as fixed suppliers and, if no such shortfall, zero;

(f) determine the Supplier's Metering System Metered Consumption ($SMMC_{ZKj}$) in respect of the Primary Supplier as:

(i) where $PSMMC_{Z1.1K1.1j}$ has a non-zero value:

$$SMMC_{ZKj} = PSMMC_{Z1.1K1.1j}$$

(ii) otherwise:

$$SMMC_{ZKj} = PSMMC_{Z1K1j}$$

and provide such Supplier's Metering System Metered Consumption to the relevant Half Hourly Data Collector appointed by the Primary Supplier to be responsible for such Metering System against the related Primary Metering System Number where the values of "Z" and "K" are those values applicable to such Primary Supplier and such Primary Metering System Number respectively; and

(g) determine the Supplier's Metering System Metered Consumption ($SMMC_{ZKj}$) in respect of each Secondary Supplier as:

(i) where $SSMMC_{Zn.1Kn.1j}$ has a non-zero value:

$$SMMC_{ZKj} = SSMMC_{Zn.1Kn.1j}$$

(ii) otherwise:

$$SMMC_{ZKj} = SSMMC_{ZnKnj}$$

and provide such Supplier's Metering System Metered Consumption to the SVAA.

3.6.8 Paragraph 3.6.9 applies:

(a) in the case of a Metering System through which:

(i) a SVA Generator provides Export Active Energy and such Export Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s); or

(ii) a SVA Customer consumes Import Active Energy and such Import Active Energy is allocated between a Primary Supplier and the associated Secondary Supplier(s); and

(b) (in either case) either:

(i) the relevant Data Service Provider appointed to be responsible for such Metering System has identified and has not resolved inconsistencies in notifications from the Primary Supplier and the associated Secondary Supplier(s) responsible for such Metering System pursuant to BSCP550; or

(ii) the Primary Supplier has not provided the relevant Allocation Schedule for the Settlement Period being processed to such Data Service Provider pursuant to BSCP550 and no later than Gate Closure for the relevant Settlement Period.

3.6.9 Where this paragraph 3.6.9 applies, the Primary Supplier and the associated Secondary Supplier(s) responsible for such Metering System shall ensure that the relevant Data Service Provider shall take such actions as are specified in BSCP550 to be taken by such Data Service Provider in such circumstances.

3.7 Determination of BM Unit's Period Level Consumption

- 3.7.1 The provisions of paragraphs 3.7.2 to 3.7.5 (inclusive) shall apply in the case of a GSP Group "H" where the Market-wide Data Service is to aggregate energy values per Supplier BM Unit in accordance with Section S6.
- 3.7.2 The SVAA shall ensure that the Market-wide Data Service shall in respect of each Supplier's Metering Systems in respect of a particular Settlement Day:
- (a) receive UTC Period Level Consumption data from the relevant Data Service Providers;
 - (b) undertake checks and provide reports in accordance with BSCP703;
 - (c) update standing data entries;
 - (d) update the Line Loss Factor data provided by BSCCo pursuant to BSCP128 and other data supplied by the SMRA;
 - (e) convert all aggregated Metered Data into MWh;
 - (f) provide either:
 - (i) Supplier's Metered Consumption (Losses) ($SMCL_{HZaNj}$) and Supplier's Metered Consumption (SMC_{HZaNj}) data in accordance with paragraphs 3.8.1 to 3.8.5; or
 - (ii) BM Unit's Period Level Consumption Losses ($BMPCL_{iHNDj}$) and BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) data to the Volume Allocation Service.
 - (g) provide data to the relevant Supplier in accordance with BSCP703; and
 - (h) where applicable the SVAA shall calculate the Allocated Supplier's Metering System Metered Consumption ($ASMMC_{HZNLKj}$).
- 3.7.3 The SVAA shall ensure that the Market-wide Data Service shall determine the BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) by assigning a BM Unit "i" and Consumption Component Class "N" to the Supplier's Settlement Period Consumption (SPC_{KDj}) provided by the Data Service Provider most recently appointed by such Supplier to be responsible for the relevant Metering System "K", where the BM Unit "i" shall be:
- (a) the Additional BM Unit "i" notified by the Supplier to the SVAA for the Metering System "K"; or
 - (b) if no such notification has been made, the BM Unit "i" which is the Base BM Unit for the Supplier "Z" and GSP Group "H" to which the Metering System "K" is assigned.
- 3.7.4 For the purposes of paragraph 3.7.3 and any subsequent processing of BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) and data derived from such processing pursuant to the Supplier Volume Allocation Rules the term "**Metering System**" shall be construed to include Primary Metering System Numbers and Secondary Metering System Numbers as if such Primary Metering System Numbers and Secondary Metering System Numbers represented physical metering systems.

- 3.7.5 The SVAA shall ensure the Market-wide Data Service defaults data for Energised Metering Systems with missing data. Where there is an Energised Metering System "K" as identified in the Registration Data and where "C" is the Load Shape Category (LSC) associated with the Registration Data for the Metering System and where Settlement Period Consumption (SPC_{Kj}) has not been received from the appointed Data Service Provider the data shall be defaulted as follows and flagged as set out in BSCP703:

If Active Import (AI):

$$SPC_{Kj} = LSC_{Cj}$$

If Active Export (AE):

$$SPC_{Kj} = 0$$

- 3.7.6 The SVAA shall ensure that the BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) within each Supplier BM Unit "i" of such Supplier shall be determined by the Market-wide Data Service according to the following formula and shall be provided to the Volume Allocation Service:

$$BMPC_{iHNDj} = \sum_K SPC_{iHNKDj}$$

The SVAA shall ensure the Market-wide Data Service also records the Count of BM Unit's Period Level Consumption ($CBMPC_{iHNDj}$) used in the calculation:

$CBMPC_{iHNDj}$ = Count of SPC_{iHNKDj} where the Metering System is Energised or De-Energised with data that is non zero.

- 3.7.7 The SVAA shall ensure that, for each BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) value determined pursuant to [paragraph 3.7.6](#), one or more values of BM Unit's Period Level Consumption Losses ($BMPCL_{iHNDj}$) within Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses), within each Supplier BM Unit "i" of such Supplier for a particular Line Loss Factor Id "L" shall be determined by the Market-wide Data Service according to the following formula and shall be provided to the Volume Allocation Service:

$$BMPCL_{iHNDj} = \sum^{XL}_K ((LLF_{LDj} - 1) * SPC_{iHXLKDj})$$

where "X" is the Consumption Component Class (not for line losses) associated with the Consumption Component Class "N" for which the value of $BMPCL_{iHNDj}$ is to be determined.

- 3.7.8 The Market-wide Data Service must convert the output to Mega Watt hours (MWh) and round to six decimal places.

3.8 Determination of Supplier’s Metering System Metered Consumption

3.8.1 The provisions of paragraphs 3.8.1 to 3.8.5 (inclusive) shall apply in the case of a GSP Group "H" where the SVAA is not aggregating energy values per Supplier BM Unit in accordance with paragraph 3.7.2 to paragraph 3.7.5.

3.8.2 For each Supplier, the SVAA shall determine the Allocated Supplier’s Metering System Metered Consumption (ASMMC_{HZNLKj}) by assigning a GSP Group "H", Line Loss Factor Id "L", and Consumption Component Class "N" to the Supplier’s Metering System Metered Consumption provided, pursuant to paragraph 3.6.4, 3.6.5 or, as the case may be, 3.6.7, by the Data Service Provider appointed by such Supplier to be responsible for the relevant Metering System "K" for the relevant Settlement Day.

3.8.3 For the purposes of paragraph 3.8.2 and any subsequent processing of Supplier’s Metering System Metered Consumption and data derived from such processing pursuant to the Supplier Volume Allocation Rules the term "**Metering System**" shall be construed to include Primary Metering System Numbers and Secondary Metering System Numbers as if such Primary Metering System Numbers and Secondary Metering System Numbers represented physical metering systems.

3.8.4 In respect of the Supplier’s Metered Consumption (SMC_{HZNj}) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) within Supplier "Z" for a particular GSP Group "H", Line Loss Factor Id "L" shall be determined by the SVAA according to the following formula and shall be provided to the Volume Allocation Service:

$$SMC_{HZNj} = \sum^{N}_{LK} ASMMC_{HZNLKj}$$

3.8.5 In respect of the Supplier’s Metered Consumption (SMC_{HZNLj}) value determined pursuant to paragraph 3.8.4 for a Supplier, one or more values of Supplier’s Metered Consumption (Losses) (SMCL_{HZNLj}) for a Supplier, within Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses), within such Supplier "Z" for a particular GSP Group "H", Line Loss Factor Id "L" shall be determined by the SVAA according to the following formula and shall be provided to the Volume Allocation Service:

$$SMCL_{HZNLj} = \sum^{(vv)L}_{K} ((LLF_{Lj} - 1) * ASMMC_{HZNLKj})$$

where "(vv)" is the Consumption Component Class (not for line losses) associated with the Consumption Component Class "N" for which the value of SMCL_{HZNLj} is to be determined.

3.9 Aggregation for DUoS Report calculations by the Market-Wide Data Service

3.9.1 The provisions of paragraphs 3.9.2 to 3.9.6 (inclusive) shall apply in the case of a GSP Group "H" where the Market-wide Data Service is to aggregate energy values for each DUoS Tariff.

3.9.2 The SVAA shall ensure all calculations are undertaken using Settlement Period Consumption (SPC_{HKDj}). Calculations are undertaken at Supplier Id or Embedded LDSO Id rather than BM Unit Id level.

3.9.3 The provisions of paragraphs 3.9.4 to 3.9.7 shall apply where, in respect of a Metering System where the Registration Data for the Settlement Day indicates that the Connection Type is ‘W’ (Whole Current). 3.9.4 The SVAA shall ensure that the Market-wide Data Service shall determine the Total Uncorrected Consumption (TUV_{HTZDj}) for each Supplier "Z" and for each DUoS Tariff Id "T" using the Supplier's Settlement Period

Consumption (SPC_{KDj}) provided by the Data Service Provider most recently appointed by such Supplier to be responsible for the relevant Metering System "K", as follows:

$$TUV_{HTZDj} = \sum_K SPC_{HTZKDj}$$

- 3.9.5 The SVAA shall ensure that the Market-wide Data Service shall determine the count of the the Supplier's Settlement Period Consumption (SPC_{HTZKDj}) used in the calculation for Energised and De-Energised Metering Suytems (Total Number Energised Metering Systems ($TNEM_{HTZDj}$) and Total Number De-Energised Metering Systems ($TNDM_{HTZDj}$) :

$$TNEM_{HTZDj} = \text{Count of } SPC_{HTZKDj}$$

where the Metering System is Energised.

$$TNDM_{HTZDj} = \text{Count of } SPC_{HTZKDj}$$

where the Metering System is De-Energised where data is flagged as actual data.

- 3.9.6 The SVAA shall ensure that the Market-wide Data Service shall determine the daily total volumes (Daily total volume based on Actual Data ($DTVA_{HTZD}$) and Daily total volume based on Estimated Data ($DTVE_{HTZD}$) as follows:

$$DTVA_{HTZD} = \sum_j \sum_K SPC_{HTZKDj}$$

where the Settlement Period Quality Indicator for the Settlement Period Consumption indicates the Consumption data is actual data.

and

$$DTVE_{HTZD} = \sum_j \sum_K SPC_{HTZKDj}$$

where the Settlement Period Quality Indicator for the SPC data indicates the Consumption data is estimated.

- 3.9.7 The SVAA shall ensure that the Market-wide Data Service shall determine the Embedded Total Uncorrected Volume ($ETUV_{HTEDj}$) for each Embedded Network Id "E" and for each DUoS Tariff Id "T" using the Supplier's Settlement Period Consumption (SPC_{KDj}) provided by the Data Service Provider most recently appointed by such Supplier to be responsible for the relevant Metering System "K", as follows:

$$ETUV_{HTED} = \sum_K SPC_{HTEKDj}$$

- 3.9.8 The SVAA shall ensure that the Market-wide Data Service shall determine the daily total volumes (Daily total volume based on Actual Data ($DTVA_{HTED}$) and Daily total volume based on Estimated Data ($DTVE_{HTED}$) for each Embedded Network Id "and for each DUoS Tariff Id "T" using the Supplier's Settlement Period Consumption (SPC_{KDj}) provided by the Data Service Provider most recently appointed by such Supplier to be responsible for the relevant Metering System "K", as follows:

$$DTVA_{HTED} = \sum_j \sum_K SPC_{HTEKDj}$$

where the Settlement Period Quality Indicator (SPQI) for the Settlement Period Consumption indicates the Consumption data is actual data.

and

$$DTVE_{HTED} = \sum_j \sum_K SPC_{HTEKDj}$$

where the Settlement Period Quality Indicator for the Settlement Period Consumption indicates the Consumption data is estimated.

3.10 Estimation of BM Unit’s Demand Disconnection Volumes

3.10.1 The provisions of paragraphs 3.10.2 to 3.10.9 (inclusive) shall apply in the case of a GSP Group "H" where the Market-wide Data Service is to aggregate energy values per Supplier BM Unit in accordance with Section S6, and shall only apply to Demand Disconnection Impacted Settlement Periods.

3.10.2 For each disconnected Metering System "K" notified by the LDSO that is in the Advanced Segment the SVAA shall ensure that the Market-wide Data Service shall determine the Advanced Demand Disconnection Volume ($ADDV_{ikHNLdj}$) within Consumption Component Class 'N' (which Consumption Component Class shall not be a Consumption Component Class for line losses), within each Supplier BM Unit "i" for a particular Line Loss Factor Identifier (LLF Id) "L" as follows:

$$ADDV_{ikHNLdj} = \max(0, SPC_{ikHNLEj} - SPC_{ikHNLdj} - NonBM_{ikHNLdj})$$

where:

$SPC_{ikHNLEj}$ is the actual, estimated or load shaped consumption or export in Demand Disconnection Impacted Settlement Period(s) in normal conditions on the Reference Day 'E' as directed to the Market-wide Data Service;

$SPC_{ikHNLdj}$ is the actual, estimated or load shaped Advanced Metering System Metered consumption or Export during the Demand Disconnection Impacted Settlement Period(s);

$NonBM_{ikHNLdj}$ is the estimated Non-BM STOR Instruction Volume anticipated to have been delivered during the Demand Disconnection Impacted Settlement Period(s).

3.10.3 For each disconnected Metering Systems "K" notified by the LDSO that is in the Advanced Market Segment the SVAA shall ensure the Market-wide Data Service shall determine Supplier’s Advanced Demand Disconnection Volume ($SADDV_{iHNDj}$) within Consumption Component Class 'N' (which Consumption Component Class shall be a Consumption Component Class not for line losses), within each Supplier BM Unit "i" for a particular Line Loss Factor Identifier (LLF Id) "L" as follows:

$$SADDV_{iHNDj} = \sum_K ADDV_{ikHNDj}$$

3.10.4 For each disconnected Metering Systems "K" notified by the LDSO that is in the Advanced Market Segment the SVAA shall ensure the Market-wide Data Service shall determine Supplier’s Advanced Demand Disconnection Volume Losses ($SADDVL_{iHNDj}$) within Consumption Component Class 'N' (which Consumption Component Class shall be a Consumption Component Class for line losses), within each Supplier BM Unit "i" for a particular Line Loss Factor Identifier (LLF Id) "L" as follows:

$$SADDVL_{iHNDj} = \sum_{KL}^X ((LLF_{Lj} - 1) * ADDV_{ikHXLdj})$$

where 'X' is the Consumption Component Class (not for line losses) associated with the Consumption Component Class 'N' for which the value of $SADDVL_{iHNDj}$ is to be determined.

3.10.5 For each BM Unit "i" the Market-wide Data Service shall provide the Volume Allocation Service with the $SADDV_{iHNDj}$ and $SADDVL_{iHNDj}$ volumes for each of the Settlement Periods impacted by the Demand Disconnection Event:

- 3.10.6 For each disconnected Metering Systems "K" notified by the LDSO that is in the Smart or unmetered Market Segments the SVAA shall ensure the Market-wide Data Service shall determine BMU Demand Disconnection Volume ($BMDDV_{ikHNLdj}$) within Consumption Component Class 'N' (which Consumption Component Class shall not be a Consumption Component Class for line losses), within each Supplier BM Unit "i" in accordance with the following formula:

$$BMDDV_{ikHNLdj} = \max (0, SPC_{ikHNLEj} - SPC_{ikHNLdj})$$

where:

$SPC_{ikHNLEj}$ is the actual, estimated or load shape consumption or Export in disconnection impacted Settlement Period(s) in normal conditions on the Reference Day 'E' as directed to the Market-wide Data Service;

$SPC_{ikHNLdj}$ is the smart or Unmetered Metering System Metered consumption or Export during the Demand Control Impacted Settlement Period;

- 3.10.7 For each disconnected Metering Systems "K" notified by the LDSO that is in the Smart or Unmetered Market Segments the SVAA shall ensure the Market-wide Data Service shall determine Supplier's BM Demand Disconnection Volume ($BMDDV_{iHNDj}$) within Consumption Component Class 'N' (which Consumption Component Class shall be a Consumption Component Class not for line losses), within each Supplier BM Unit "i" of such Supplier for a particular Line Loss Factor Identifier (LLF Id) "L" as follows:

$$BMDDV_{iHNDj} = \sum_K BMDDV_{ikHNLdj}$$

- 3.10.8 For each disconnected Metering Systems "K" notified by the LDSO that is in the Smart or Unmetered Market Segments the SVAA shall ensure the Market-wide Data Service shall determine BMU Demand Disconnection Volume Losses ($BMDDVL_{iHNDj}$) within Consumption Component Class 'N' (which Consumption Component Class shall be a Consumption Component Class for line losses), within each Supplier BM Unit "i" of such Supplier for a particular Line Loss Factor Identifier (LLF Id) "L" as follows:

$$BMDDVL_{iHNDj} = \sum_{LK} ((LLF_{Lj} - 1) * BMDDV_{ikHXLdj})$$

where 'X' is the Consumption Component Class (not for line losses) associated with the Consumption Component Class 'N' for which the value of $BMDDVL_{iHNDj}$ is to be determined.

- 3.10.9 For each BM Unit "i" the Market-wide Data Service shall provide the Volume Allocation Service with the $BMDDV_{iHNDj}$ and $BMDDVL_{iHNDj}$ volumes for each of the Settlement Periods impacted by the Demand Disconnection Event:

3.11 Determination of Allocated Metering System Metered Consumption

- 3.11.1 The provisions of paragraphs 3.11.2 to 3.11.3 (inclusive) shall apply in the case of a GSP Group "H" where the Market-wide Data Service is to provide energy values for each:

- (a) relevant SVA Metering System in accordance with Section S10.5; or
- (b) Metering System on the SVA Non-Final Demand Facilities Register in accordance with paragraph 12; or
- (c) SVA Metering System on the Metering System and Asset Metering System Register in accordance with Section S2.13.

- 3.11.2 The SVAA shall determine the Allocated Metering System Metered Consumption ($AVMMC_{HZaNLKj}$) by assigning a Supplier BM Unit "i", GSP Group "H", Consumption Component Class "N" and Line Loss Factor Identifier "L" to the Supplier's Settlement Period Consumption provided by the Data Service Provider most recently appointed by such Supplier to be responsible for the relevant Metering System "K".
- 3.11.3 SVAA shall determine the Allocated Asset Metering System Metered Consumption ($AAVMMC_{HNLKj}$) by assigning a, GSP Group "H", Consumption Component Class "N" and Line Loss Factor Identifier "L" to the Asset Metering System Metered Consumption provided, pursuant to paragraph 3.6.5 by the Half Hourly Data Collector most recently appointed by such Virtual Lead Party to be responsible for the relevant Asset Metering System "K". The Consumption Component Class "N" and Line Loss Identifier "L" will be assigned by SVAA according to BSCP602.
- 3.11.4 For the purposes of paragraph 3.11.2 and any subsequent processing of Allocated Metering System Metered Consumption and data derived from such processing pursuant to the Supplier Volume Allocation Rules the term "**Metering System**" shall be construed to include Primary Metering System Numbers and Secondary Metering System Numbers as if such Primary Metering System Numbers and Secondary Metering System Numbers represented physical metering systems.

3.12 Determination of Metering System Delivered Volumes

- 3.12.1 The provisions of this paragraph 3.12 shall apply where:
- (a) the relevant Party is to provide MSID Pair Delivered Volume ($MPDV_j$) per MSID Pair and/or AMSID Pair Delivered Volume ($AMPDV_j$) per AMSID Pair that is not identified as Inactive in accordance with Section S11; or
 - (b) the SVAA is to determine MSID Pair Delivered Volume ($MPDV_j$) per MSID Pair and/or AMSID Pair Delivered Volume ($AMPDV_j$) per MSID Pair in accordance with Section 3.11.

- 3.12.3 For each value of AMPDV_j provided by a Virtual Lead Party in accordance with Section S11 or determined by SVAA in accordance with paragraph 3.12.1, SVAA shall determine a value of MSID Pair Delivered Volume (MPDV_j) adjusted to take account of losses between the AMSID Pair and Associated MSID Pairs.

$$\text{MPDV}_j = \text{AMPDV}_j * (\text{LLF}_{\text{AMSID}} / \text{LLF}_{\text{MSID}})$$

Where:

LLF_{AMSID}* is Line Loss Factor for a given Settlement Period in a given Settlement Day based on LLFC allocated to an AMSID Pair by SVAA.

LLF_{MSID}* is a Line Loss Factor for a given Settlement Period in a given Settlement Day based on LLFC allocated to a MSID Pair.

- 3.12.4 For each Settlement Period and MSID Pair, SVAA shall determine the Total MSID Pair Delivered Volume (TMPDV_j) in accordance with the formula

$$\text{TMPDV}_j = \sum \text{MPDV}_j$$

where \sum is the summation of MSID Pair Delivered Volumes (MPDV_j) calculated by SVAA in accordance with paragraph 3.12.3, 3.13.2 or 3.13.6 and/or provided by Virtual Lead Parties in accordance with Section S11 for that Settlement Period and MSID Pair.

- 3.12.5 For values of MSID Pair Delivered Volume (MPDV_j) provided by the NETSO in accordance with Section S11, the Total MSID Pair Delivered Volume (TMPDV_j) shall be determined by SVAA as:

$$\text{TMPDV}_j = \text{MPDV}_j$$

- 3.12.6 For each Settlement Period and for each relevant Metering System per Settlement Run, the SVAA shall determine the Total Metering System Delivered Volume (TQVMD_{Kj}) from the Total MSID Pair Delivered Volume (TMPDV_j) relating to such MSID Pair and the Metering System Metered Consumption (VMMC_{HZaNLKji}) for the relevant Metering Systems.

- 3.12.7 If TMPDV_j is greater than or equal to zero the following formulae shall apply:

- (a) for the Export MSID in the MSID Pair:

$$\text{TQVMD}_{Kj} = \text{MIN}(\text{TMPDV}_j, \text{VMMC}_{\text{HZaNLKji}}); \text{ and}$$

- (b) for the Import MSID in the MSID Pair:

$$\text{TQVMD}_{Kj} = \text{TMPDV}_j - \text{QVMD}_{\text{Export}}$$

where QVMD_{Export} is the value of TQVMD_{Kj} allocated to the Export MSID in accordance with paragraph (a), or zero if there is no Export MSID in the MSID Pair.

3.12.8 If $TMPDV_j$ is less than zero the following formulae shall apply:

(a) for the Import MSID in the MSID Pair, subject to (c):

$$TQVMD_{Kj} = - \text{MIN}(-TMPDV_j, VMMC_{HZaNLKji});$$

(b) for the Export MSID in the MSID Pair:

$$TQVMD_{Kj} = MPDV_j - QVMD_{Import}$$

where $QVMD_{Import}$ is the value of $TQVMD_{Kj}$ allocated to the Import MSID in accordance with paragraph (a); and

(c) if $TMPDV < -VMMC_{HZaNLKji}$ and there is no Export MSID in the MSID Pair then for the Import MSID:

$$TQVMD_{Kj} = 0$$

and the SVAA shall inform the relevant Party and BSCCo that the MSID Pair Delivered Volume could not be allocated to MSIDs.

3.12.9 For each Settlement Period and relevant Metering System, SVAA shall determine a value of Metering System Delivered Volume ($QVMD_{Kj}$) corresponding to each value of $MPDV_j$ that was calculated by SVAA in accordance with [paragraph 3.12.3](#), 3.13.2 or [3.13.6](#) and/or provided by Virtual Lead Parties in accordance with [Section S11](#) for that Settlement Period and MSID Pair:

$$QVMD_{Kj} = TQVMD_{Kj} * MPDV_j / \sum MPDV_j$$

where \sum is the summation of MSID Pair Delivered Volumes ($MPDV_j$) calculated by SVAA in accordance with [paragraph 3.12.1](#) and/or provided by Virtual Lead Parties in accordance with [Section S11](#) for that Settlement Period and MSID Pair.

3.12.10 In relation to values of MSID Pair Delivered Volume ($MPDV_j$) provided by the NETSO in accordance with [Section S11](#), the Metering System Delivered Volume ($QVMD_{Kj}$) shall be determined by SVAA as:

$$QVMD_{Kj} = TQVMD_{Kj}$$

3.12.11 For the purposes of [paragraph 3.12.2](#) and any subsequent processing of Metering System Delivered Volumes and data derived from such processing pursuant to the Supplier Volume Allocation Rules the term "**Metering System**" shall be construed to include Primary Metering System Numbers and Secondary Metering System Numbers as if such Primary Metering System Numbers and Secondary Metering System Numbers represented physical metering systems.

3.13 Calculate Period BM Unit Non Chargeable Demand

3.13.1 For each Allocated Metering System Metered Consumption ($AVMMC_{HZLKji}$) value for an Import Metering System "K" in that EMR AMSID Declaration "D" SVAA shall determine the Metering System Non-Chargeable Consumption ($NCMC_{iNLKj}$) and Metering System Non-Chargeable Losses ($NCML_{iNLKj}$) for each Import Metering System "K" included in the Declaration and each Settlement Period j, as follows:

$$NCMC_{iNLKj} = AVMMC_{HZNLKji} / 1000$$

$$NCML_{iNKj} = NCMC_{i(vv)LKj} * (LLF_{Lj} - 1)$$

where "(vv)" is the Consumption Component Class (not for line losses) associated with the Consumption Component Class "N" for which the value of $NCML_{iNKj}$ is to be determined.

3.13.2 For each EMR AMSID Declaration "D" the SVAA shall determine the Metering System Non-Chargeable Consumption ($NCMC_{iNLKj}$) and Metering System Non-Chargeable Losses ($NCML_{iNLKj}$) for each Import Metering System "K" included in that EMRS AMSID Declaration and each Settlement Period j, as follows:

- (a) determine the AMSID Declaration Boundary Point Import ($ADBPI_{Di}$) as follows:

$$ADBPI_{Di} = \sum_K (AVMMC_{HZaNLKji} * LLF_{Lj} / 1000)$$

where \sum_K denotes the summation over all Import Metering Systems "K" associated with the EMR AMSID Declaration "D";

- (b) determine the AMSID Declaration Boundary Point Export ($ADBPE_{Di}$) as follows:

$$ADBPE_{Di} = \sum_K (AVMMC_{HZaNLKji} * LLF_{Lj} / 1000)$$

where \sum_K denotes the summation over all Export Metering Systems "K" associated with the EMR AMSID Declaration "D";

- (c) determine the AMSID Declaration Storage Import ($ADSI_{Di}$) as follows:

$$ADSI_{Di} = \sum_K (AAVMMC_{HNLKj} * LLF_{Lj} / 1000)$$

where \sum_K denotes the summation over all Import Asset Metering Systems "K" associated with Storage in the EMR AMSID Declaration "D";

- (d) determine the AMSID Declaration Storage Export ($ADSE_{Di}$) as follows:

$$ADSE_{Di} = \sum_K (AAVMMC_{HNLKj} * LLF_{Lj} / 1000)$$

where \sum_K denotes the summation over all Export Asset Metering Systems "K" associated with Storage in the EMR AMSID Declaration "D";

- (e) determine the AMSID Declaration Generation Import ($ADGI_{Di}$) as follows:

$$ADGI_{Di} = \sum_K (AAVMMC_{HNLKj} * LLF_{Lj} / 1000)$$

where \sum_K denotes the summation over all Import Asset Metering Systems "K" associated with Licensed Generation in the EMR AMSID Declaration "D";

- (f) determine the AMSID Declaration Generation Export ($ADGE_{Di}$) as follows:

$$ADGE_{Di} = \sum_K (AAVMMC_{HNLKj} * LLF_{Lj} / 1000)$$

where \sum_K denotes the summation over all Export Asset Metering Systems "K" associated with Licensed Generation in the EMR AMSID Declaration "D";

- (g) in accordance with the On-Site Energy Allocation Methodology, determine the AMSID Declaration Non-Chargeable Proportion ($ADNCP_{Dj}$), which is a number between 0.0 and 1.0 inclusive representing the proportion of Boundary Point Imports to the Import Metering Systems included in the EMR AMSID Declaration "D" that are deemed Non-Chargeable in that Settlement Period;

- (h) for each Import Metering System "K" included in the EMR AMSID Declaration, determine the Metering System Non-Chargeable Consumption ($NCMC_{iNLKj}$) as follows:

$$NCMC_{iNLKj} = ADNCP_{Dj} * AVMMC_{HZaNLKji} / 1000$$

- (i) for each Import Metering System "K" included in the Declaration, calculate the Metering System Non-Chargeable Losses ($NCML_{iNLKj}$) in accordance with the following formula:

$$NCML_{iNLKj} = NCMC_{i(vv)LKj} * (LLF_{Lj} - 1)$$

where "(vv)" is the Consumption Component Class (not for line losses) associated with the Consumption Component Class "N" for which the value of $NCML_{iNLKj}$ is to be determined.

- 3.13.3 The SVAA shall determine the Non-Chargeable Consumption (Non Losses) (NCC_{inj}) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Supplier BM Unit "i" according to the following formula:

$$NCC_{inj} = \sum_{LK} NCMC_{iNLKj}$$

where Metering System Non-Chargeable Consumption ($NCMC_{iNLKj}$) is determined pursuant to paragraphs 3.11.1 and 3.11.2(h).

- 3.13.4 The SVAA shall determine the Non-Chargeable Consumption (Losses) ($NCCLOSS_{inj}$) within Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses) for each Supplier BM Unit "i" according to the following formula:

$$NCCLOSS_{inj} = \sum_{LK} NCML_{iNLKj}$$

where Metering System Non-Chargeable Losses ($NCML_{iNLKj}$) are determined pursuant to paragraphs 3.11.1 and 3.11.2(i).

- 3.13.5 The SVAA shall determine the Non-Chargeable Corrected Component ($NCCORC_{inj}$) for each Consumption Component Class "N" within Supplier BM Unit "i" according to the following formula:

$$NCCORC_{inj} = (NCC_{inj} + NCCLOSS_{inj}) * (1 + (CF_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and CF_{Hj} is the value of GSP Group Correction Factor determined pursuant to paragraph 6.2 for the GSP Group "H" associated with the Supplier BM Unit "i".

- 3.13.6 The Period BM Unit Non Chargeable Demand ($NCBMUD_{ij}$) shall be determined by the SVAA by aggregating the Non-Chargeable Corrected Components ($NCCORC_{inj}$) for each Supplier BM Unit "i" and Settlement Period "j":

$$NCBMUD_{ij} = \sum_N NCCORC_{inj}$$

3.14 On-Site Energy Allocation Methodology

- 3.14.1 The Panel shall establish, and have in force at all times thereafter, a document containing detailed requirements for estimating the proportion of Import for Metering Systems contained in an EMR AMSID Declaration that was used by Licensed Generation (including Licensed Storage) (the "On-Site Energy Allocation Methodology Document").

- 3.14.2 The Panel may review the On-Site Energy Allocation Methodology Document from time to time, and make such revisions as it considers necessary.
- 3.14.3 BSCCo shall ensure that a copy of the On-Site Energy Allocation Methodology Document (as revised from time to time) is sent to each Party and the SVAA.

3.15 Determination of Annual Consumption for Metering Systems

- 3.15.1 The SVAA shall ensure that the Market-wide Data Service determines an Annual Consumption (ANN_CON_{KY}) for each Metering System "K" on a monthly schedule for Energised Metering Systems as defined in the Registration data in each case in accordance with paragraph 3.15.2 to paragraph 3.15.4. De-Energised Metering Systems will be exempt from this process and will retain the last calculated Annual Consumption value.
- 3.15.2 Where 365 consecutive days of UTC Period Level Consumption data (UTCP) are available, the SVAA shall ensure the Market-wide Data Service the an Annual Consumption (ANN_CON_{KY}) for each Metering System "K" as follows:

$$ANN_CON_{KY} = \sum_{U=D-364}^D UTCP_{kDj}$$

where "U" is a UTC Day and where "D" = is a UTC Day at least 7 days prior to the calculation date to "D" = UTC Day "D" – 364 days.

- 3.15.3 Where fewer than 365 days of UTC Period Level Consumption data (UTCP) are available, the SVAA shall ensure that the Market-wide Data Service determines the Annual Consumption (ANN_CON_{KY}) for each Metering System "K" as follows:

$$ANN_CON_{KY} = (\sum^D_P UTCP_{kDj}) / ((\sum^D_P LS_TOT_{DC}) / LS_ROLL_ANN_TOT_{DC})$$

where "P" is the period for which UTC Day where data is available;

"LS_TOT_{DC}" is the Load Shape Total Data determined pursuant to paragraph 3.5.8;

"LS_ROLL_ANN_TOT_{DC}" is the Load Shape Rolling Annual Total determined pursuant to paragraph 3.5.14 or paragraph 3.4.15 for Load Shape Category "C"

- 3.15.4 The SVAA shall ensure that the Market-wide Data Service determine the Annual Consumption (ANN_CON_{KY}) for each Metering System "K" where estimated UTC Period Level Consumption data (UTCP_{Dj}) is unavailable or there is a new connection for a period of "P" days using Load Shape Category "C" associated with that Metering System as follows:

$$ANN_CON_{KY} = LS_ROLL_ANN_TOT_{YC}$$

Where LS_ROLL_ANN_TOT_{YC} is the latest available value LS_ROLL_ANN_TOT_{DC} value determined in pursuant to paragraph 3.5.14 or paragraph 3.4.15 for Load Shape Category "C".

- 3.15.5 The SVAA shall ensure that the Market-wide Data Service sets the Annual Consumption Quality Indicator for each Annual Consumption (ANN_CON_{KY}) in accordance with BSCP703.
- 3.15.6 The SVAA shall ensure that the Market-wide Data Service sets the Annual Consumption Effective From Date (EFD) as the date when the latest Annual Consumption (ANN_CON_{KY}) has been determined.
- 3.15.7 The SVAA shall ensure that the Market-wide Data Service provides the Annual Consumption (ANN_CON_{KY}) to Market Participants in accordance with BSCP703.

4. SUPPLIER VOLUME ALLOCATION DATA INPUT

4.1 Supplier Volume Allocation Standing Data

4.1.1 Each Supplier shall from time to time notify such data items as are specified in BSCP509 as being provided by such Supplier to the SVAA, to the SVAA, and the SVAA shall ensure that processes are put in place which ensure that such data are input promptly into the Volume Allocation System.

4.1.2 Each Supplier shall supply such data as are specified in BSCP507 as being provided by such Supplier to the SVAA together with the dates of the first and, as the case may be, the last Settlement Days on which such data are to be effective to the SVAA, and the SVAA shall ensure that processes are put in place which ensure that such data are input promptly into the Volume Allocation System.

4.1.3 With the exception of Line Loss Factor data which shall be notified in accordance with BSCP128, each Distribution System Operator shall from time to time notify such data as are specified in BSCP507 and BSCP509 as being provided by such Distribution System Operator to the SVAA, to the SVAA, and the SVAA shall ensure that processes are put in place which ensure that such data are input promptly into the Supplier Volume Allocation System.

4.1.4 The SVAA shall ensure the processes are put in place which ensure that details of:

- (a) the Base BM Unit "i"; and
- (b) any Additional BM Unit "i"

for each Supplier "Z" within each GSP Group "H" received from time to time from the CRA are input into the Volume Allocation System in accordance with BSCP509.

4.1.5 In respect of all data referred to in this paragraph 4.1 which a Party and BSC Agents are required to notify to the SVAA or which the SVAA is required to procure, the relevant Party or BSC Agents or, as the case may be, the SVAA, shall ensure:

- (a) that all such data is complete and accurate in all material respects;
- (b) that any change to all or any of such data is notified promptly to the SVAA; and
- (c) any such changed data is consistent with all such data which has not been changed.

and the SVAA shall amend the data input into the Volume Allocation System to reflect any such changes notified to it.

4.1.6 References in the Supplier Volume Allocation Rules to standing data are to such standing data notified in respect of Supplier Volume Allocation for the time being and from time to time pursuant to the Supplier Volume Allocation Rules.

4.1.7 The SVAA shall promptly notify all persons involved in Supplier Volume Allocation entitled to receive such data of amendments to standing data used in Supplier Volume Allocation.

4.2 Supplier Volume Allocation Periodic Data

4.2.1 The SVAA shall ensure that processes are put in place which ensure that the GSP Group Take (GSPGT_{Hj}) data notified to it by the CDCA pursuant to Section R5.7 are promptly input into the Volume Allocation System.

4.2.2 The SVAA shall ensure that processes are put in place which ensure that the following data from time to time supplied to it pursuant to paragraphs 3.7 and 3.8 are promptly input into the Volume Allocation System:

- (a) Supplier's Metered Consumption - SMC_{HZNLj} ;
- (b) Supplier's Metered Consumption (Losses) - $SMCL_{HZNLj}$;
- (c) BM Unit's Period Level Consumption - $BMPC_{iHNDj}$; and
- (d) BM Unit's Period Level Consumption Losses - $BMPCL_{iHNDj}$;

4.3 Reconciliation Allocation Data Input

- 4.3.1 For any Reconciliation Volume Allocation Run for a Settlement Day, each Supplier shall ensure that, in respect of data which are then currently available but which were not previously available for use in the immediately preceding Initial Volume Allocation Run or Reconciliation Volume Allocation Run, as the case may be, use the immediately preceding Initial Volume Allocation Run or Reconciliation Volume Allocation Run data, as the case may be, its Data Service Providers for that Settlement Day shall provide Supplier's UTC Period Level Consumption data to the SVAA in respect of the relevant Metering Systems.
- 4.3.2 The SVAA shall ensure that processes are put in place which ensure that the data from time to time supplied to it pursuant to paragraph 4.3.1 are promptly input into the Volume Allocation System.

5. VOLUME ALLOCATION

5.1 Determination of Settlement Period Consumption (Non Losses)

5.1.1 For each Supplier's Period Consumption (SPC_{HZNLj}) value provided pursuant to paragraph 3.7.3, the SVAA shall determine the BM Unit's Metered Consumption ($BMPC_{iHNj}$) by assigning the Supplier's Metered Consumption value to the BM Unit "i" which is the Base BM Unit for the Supplier "Z" and GSP Group "H" to which the value of Supplier's Settlement Period Consumption applies.

5.1.1A For each Supplier's Advanced Demand Disconnection Volume ($ADDV_{ikHNLdj}$) or BM Demand Disconnection Volume ($BMDDV_{iHNDj}$) value provided pursuant to paragraph 3.10.2 or 3.10.6, the SVAA shall determine the Total BM Disconnection Volume ($TBMDDV_{iHNj}$) by assigning the Supplier's Demand Disconnection Volume value to the BM Unit "i" which is the Base BM Unit for the Supplier "Z" and GSP Group "H" to which the value of Supplier's Demand Disconnection Volume applies.

5.1.1B For each Allocated Metering System Metered Consumption ($AVMMC_{HZaNLKji}$) value provided pursuant to paragraph 3.11.2, the SVAA shall determine the Metering System Metered Consumption ($VMMC_{HZaNLKji}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) within Supplier BM Unit "i" for such Supplier "Z" for a particular GSP Group "H", Metering System "K" according to the following formula:

$$VMMC_{HZNLKji} = AVMMC_{HZNLKji} / 1000$$

5.1.1BA For each Allocated Asset Metering System Metered Consumption ($AAVMMC_{HNLKj}$) value provided pursuant to paragraph 3.11.3 the SVAA shall determine the Asset Metering System Metered Consumption ($VMMC_{HNLKj}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for a particular GSP Group "H", Metering System "K" according to the following formula:

$$VMMC_{HNLKj} = AAVMMC_{HNLKj} / 1000$$

5.1.1C For each Metering System Metered Consumption ($VMMC_{HZaNLKji}$) value associated with a Secondary BM Unit in the SVA Metering System Register, determined pursuant to paragraph 5.1.1B, and each Asset Metering System Metered Consumption ($VMMC_{HNLKj}$) value determined pursuant to paragraph 5.1.1BA, excluding any Metering System "K" that is within an MSID Pair or AMSID Pair identified as Inactive the SVAA shall determine the Secondary BM Unit Metered Consumption ($VBMMC_{i2aNLKji}$) from Supplier Metering Systems and Secondary BM Unit Metered Consumption ($VBMMC_{i2NLKj}$) from Asset Metering Systems by assigning the Metering System Metered Consumption value to the relevant Secondary BM Unit "i2" as allocated by the Virtual Lead Party and recorded in the SVA Metering System Register in accordance with Sections S10.2 and BSCP602, and to a Consumption Component Class 'N' determined as follows:

- (a) if the Metering System or Asset Metering System K has been allocated to the Secondary BM Unit for purposes of Asset Differencing in accordance with paragraph 10.1.3(h)(iii) or 10.1A.2(e)(i) of Section S:

- (i) if the Net Differencing Volume $VNDK_j$ is greater than or equal to zero, Consumption Component Class N' shall be the Import Consumption Component Class associated with Consumption Component Class N; and
- (ii) if the Net Differencing Volume $VNDK_j$ is less than zero, Consumption Component Class N' shall be the Export Consumption Component Class associated with Consumption Component Class N;

where SVAA shall determine the Net Differencing Volume ($VNDK_j$) as:

$$VNDK_j = \sum_N \sum_{\text{Associated}_K} (VMMC_{\text{HaNLKji}} - VMMC_{\text{HNLKj}})$$

and $\sum_{\text{Associated}_K}$ means the summation over all Metering Systems and Asset Metering Systems that are related for purposes of differencing to Metering System or Asset Metering System K (in accordance with paragraph 5.1.1CA)

- (b) otherwise, Consumption Component Class N' shall be the same as Consumption Component Class N.

5.1.1CA For purposes of paragraphs 5.1.1C, the Metering Systems and Asset Metering Systems related for purposes of differencing to a Metering System or Asset Metering System K shall be determined as follows:

- (a) in relation to an Asset Metering System K in an AMSID Pair:
 - (i) the Metering Systems in any Associated MSID Pairs allocated to a Secondary BM Unit for purposes of Asset Differencing; and
 - (ii) any Asset Metering Systems that are related for purposes of differencing to the Metering Systems in paragraph (a)(i);
- (b) in relation to a Metering System K in an MSID Pair:
 - (i) the Asset Metering Systems in any AMSID Pairs allocated to a Secondary BM Unit for purposes of Asset Differencing for which the MSID Pair is an Associated MSID Pair; and
 - (ii) any Metering Systems that are related for purposes of differencing to the Asset Metering Systems in paragraph (b)(i).

5.1.1D For each Metering System Delivered Volume ($QVMD_{Kj}$) value associated with a Secondary BM Unit in the SVA Metering System Register, determined pursuant to paragraph 3.12, the SVAA shall determine the Secondary BM Unit Delivered Volume ($QVBMD_{i2NLKji}$) by assigning the Metering System Delivered Volume value to the relevant Secondary BM Unit "i2" as allocated by the Virtual Lead Party in accordance with Section S10.2, S10.2A, and BSCP602, Supplier BM Unit "i", Line Loss Factor Class "L" and Consumption Component Class "N".

5.1.1E For each Metering System Delivered Volume ($QVMD_{Kj}$) value for a Metering System associated with the NETSO in the SVA Metering System Register and determined pursuant to paragraph 3.12, the SVAA shall determine the ABSVD BM Unit Delivered Volume ($AQVMD_{iNLKj}$) by assigning the Metering System Delivered Volume value to the relevant Supplier BM Unit "i" as recorded in the SVA Metering System Register, Line Loss Factor Class "L" and Consumption Component Class "N".

- 5.1.1F Pursuant to paragraph 3.11.2, for each Allocated Metering System Metered Consumption ($AVMMC_{HZNLKji}$) value for a Metering System in the SVA Non-Final Demand Facilities Register, the SVAA shall determine the Non-Final Demand Metering System Metered Consumption ($SVMMC_{HZNLKji}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) within Supplier BM Unit "i" for such Supplier "Z" for a particular GSP Group "H", Metering System "K" according to the following formula:

$$SVMMC_{HZNLKji} = AVMMC_{HZNLKji} / 1000$$

- 5.1.2 The SVAA shall ensure that the Volume Allocation Service determines the Half Hourly Consumption (Non Losses) (C_{iNj}) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Supplier BM Unit "i" according to the following formula:

$$C_{iNj} = BMPC_{iHNj}$$

where BM Unit's Period Level Consumption ($BMPC_{iHNDj}$) are determined pursuant to paragraphs 3.7.6 and 5.1.1.

- 5.1.3 For each Demand Control Impacted Settlement Period the SVAA shall ensure that the Volume Allocation Service determines the Total BM Disconnection Volume ($TBMDDV_{iHNj}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Supplier BM Unit "i" according to the following formula:

$$TBMDDV_{iHNj} = SADDV_{iHNj} + BMDDV_{iHNj}$$

where Total BM Disconnection Volume ($TBMDDV_{iHNj}$) are determined pursuant to paragraphs 5.1.3 and 5.1.1A.

- 5.1.4 The SVAA shall determine the Secondary Half Hourly Consumption (Non Losses) (V_{i2Nj}) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Secondary BM Unit "i2" according to the following formula:

$$V_{i2Nj} = \sum_K VBMMC_{i2NLKji} + \sum_K^{NonDiff} VBMMC_{i2NLKj} - \sum_K^{Diff} VBMMC_{i2NLKj}$$

where Secondary BM Unit Metered Consumption ($VBMMC_{i2NLKji}$) is derived from Supplier Metering Systems allocated to the Secondary BM Unit including those selected for Asset Differencing in accordance with Section S10.2A and is determined pursuant to paragraph 5.1.1C;

- 5.1.4A Secondary BM Unit Metered Consumption ($VBMMC_{i2NLKj}$) is derived from Asset Metering Systems and is determined pursuant to paragraph 5.1.1C. Metered Consumption from those Asset Metering Systems which are selected for Asset Differencing (Diff) in accordance with Section S10.2A are deducted from $VBMMC_{i2NLKj}$.

The SVAA shall provide the relevant Virtual Lead Party, as recorded in the SVA Metering System Register, with the Secondary Half Hourly Consumption (Non Losses) (V_{i2Nj}) for each Metering System "K" in the relevant Secondary BM Unit "i2" for each Settlement Period "j" for each Volume Allocation Run, where received.

- 5.1.5 The SVAA shall determine the Secondary Half Hourly Delivered (Non Losses) (VD_{i2NKji}) within Consumption Component Class "N" (which Consumption Component Class shall not

be a Consumption Component Class for line losses) for each Metering System "K" for each Secondary BM Unit "i2" and Supplier BM unit "i" according to the following formula:

$$VD_{i2NKji} = QVBMD_{i2NLKji}$$

where Secondary BM Unit Metered Consumption ($QVBMD_{i2NLKji}$) is determined pursuant to paragraph 5.1.1D.

- 5.1.6 The SVAA shall determine the MSID ABSVD (Non Losses) ($MSABSVD_{iNKj}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Metering System "K" for each Supplier BM unit "i" according to the following formula:

$$MSABSVD_{iNKj} = AQVMD_{iNLKj}$$

where ABSVD BM Unit Metered Consumption ($AQVMD_{iNLKj}$) is determined pursuant to paragraph 5.1.1C.

- 5.1.7 The SVAA shall provide the relevant Supplier, as recorded in the SVA Metering System Register, with the Secondary Half Hourly Delivered (Non Losses) (VD_{i2NKji}) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Metering System "K" for each Secondary BM Unit "i2" and Supplier BM unit "i" for each Volume Allocation Run where Customer Consent Flag status, as recorded in the SVA Metering System Register, has been marked as TRUE.

- 5.1.8 The SVAA shall provide the relevant Supplier, as recorded in the SVA Metering System Register, with the MSID ABSVD (Non Losses) ($MSABSVD_{iNKj}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Metering System "K" for each Supplier BM unit "i" for each Volume Allocation Run where Customer Consent Flag status, as recorded in the SVA Metering System Register, has been marked as TRUE.

5.2 Determination of Half Hourly Consumption (Losses) by Supplier

- 5.2.1 For each Supplier's Metered Consumption (Losses) ($SMCL_{HZNLj}$) value:

(a) provided pursuant to paragraph 3.8.5, the SVAA shall determine the BM Unit's Metered Consumption (Losses) ($BMPCL_{iHNj}$) by assigning the Supplier's Metered Consumption (Losses) value to the BM Unit "i" which is the Base BM Unit for the Supplier "Z" and GSP Group "H" to which the value of Supplier's Metered Consumption (Losses) applies; and

(b) for BM Unit's Metered Consumption (Losses) ($BMPCL_{iHNj}$) values provided pursuant to paragraph 3.7.7, the SVAA shall determine Half Hourly Consumption (Losses) ($CLOSS_{iNj}$) within Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses) for each Supplier BM Unit "i" according to the following formula:

$$CLOSS_{iNj} = BMPCL_{iHNj}$$

where BM Unit's Metered Consumption (Losses) ($BMPCL_{iHNj}$) are determined pursuant to paragraphs 3.7.7.

- 5.2.1A For each Demand Control Impacted Settlement Period the SVAA shall ensure that the Volume Allocation Service determines the Half Hourly Disconnection (Losses) ($DLOSS_{iNj}$) within Consumption Component Class "N" (which Consumption Component Class shall be

a Consumption Component Class for line losses) for each Supplier BM Unit "i" according to the following formula:

$$DLOSS_{iNj} = SADDVL_{iHNj} + BMDDVL_{iHNj}$$

where the Supplier's Advanced Demand Disconnection Volume Losses (SADDVL_{iHNDj}) and BM Unit's Metered Consumption (Losses) (BMDDVL_{iNj}) and are determined pursuant to paragraphs 3.10.4 and 3.10.8.

- 5.2.3 The SVAA shall determine the Secondary Half Hourly Consumption (Losses) (VLOSS_{i2Nj}) within Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses) for each Secondary BM Unit "i2" according to the following formula:

$$VLOSS_{i2Nj} = \sum^{(vv)}_{LK} ((LLF_{Lj} - 1) * VBMMC_{i2aNLKji}) + \sum^{(vv)}_{LK} ((LLF_{Lj} - 1) * VBMMC_{i2NLKj}^{NonDiff}) - \sum^{(vv)}_{LK} ((LLF_{Lj} - 1) * VBMMC_{i2NLKj}^{Diff})$$

Where;

Secondary BM Unit Metered Consumption (VBMMC_{i2aNLKji}) is derived from Supplier Metering Systems allocated to the Secondary BM Unit including those selected for Asset Differencing and is determined pursuant to paragraph 5.1.1C;

Secondary BM Unit Metered Consumption (VBMMC_{i2NLKj}) is derived from Asset Metering Systems and is determined pursuant to paragraph 5.1.1C, and is then further split into those Asset Metering Systems which are selected for Asset Differencing (^{Diff}) when allocated to the Secondary BM Unit, and those Asset Metering Systems which are not selected for Asset Differencing (^{Non Diff}), and "(vv)" is the Consumption Component Class (not for line losses) associated with the Consumption Component Class "N" for which the value of VLOSS_{i2Nj} is to be determined.

The SVAA shall provide the relevant Virtual Lead Party, as recorded in the SVA Metering System Register, with the Secondary Half Hourly Consumption (Losses) (VLOSS_{i2Nj}) for each Metering System "K" in the relevant Secondary BM Unit "i2" for each Settlement Period "j" for each Volume Allocation Run, where received.

- 5.2.4 The SVAA shall determine the Secondary Half Hourly Delivered (Losses) (VDLOSS_{i2NKji}) within Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses) for each Metering System "K" for each Secondary BM Unit "i2" and Supplier BM Unit "i" according to the following formula:

$$VDLOSS_{i2NKji} = \sum^{(vv)}_{LK} ((LLF_{Lj} - 1) * QVBMD_{i2NLKji})$$

where Secondary BM Unit Delivered Volume (QVBMD_{i2NLKji}) is determined pursuant to paragraph 5.1.1D and "(vv)" is the Consumption Component Class (not for line losses) associated with the Consumption Component Class "N" for which the value of VDLOSS_{i2NKji} is to be determined.

- 5.2.5 The SVAA shall determine the MSID ABSVD (Losses) (MSABSVDL_{iNKj}) within Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses) for each Metering System "K" for each Supplier BM Unit "i" according to the following formula:

$$MSABSVDL_{iNKj} = (\sum^{(vv)}_{L} ((LLF_{Lj} - 1) * \sum^{(vv)}_{PR} AQVMD_{iNLKj}))$$

where ABSVD BM Unit Delivered Volume ($AQVMD_{iNk_j}$) is determined pursuant to paragraph 5.1.1C and "(vv)" is the Consumption Component Class (not for line losses) associated with the Consumption Component Class "N" for which the value of $MSABSVDL_{iNk_j}$ is to be determined.

5.2.6 The SVAA shall provide the relevant Supplier, as recorded in the SVA Metering System Register, with the Secondary Half Hourly Delivered (Losses) ($VDLOSS_{i2Nk_{ji}}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Metering System "K" for each Secondary BM Unit "i2" and Supplier BM unit "i" for each Volume Allocation Run where Customer Consent Flag status, as recorded in the SVA Metering System Register, has been marked as TRUE.

5.2.7 The SVAA shall provide the relevant Supplier, as recorded in the SVA Metering System Register, with the MSID ABSVD (Losses) ($MSABSVDL_{iNk_j}$) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses) for each Metering System "K" for each Supplier BM unit "i" for each Volume Allocation Run where Customer Consent Flag status, as recorded in the SVA Metering System Register, has been marked as TRUE.

5.3 Determination of Settlement Expected Volumes

5.3.1 The SVAA shall for each Settlement Period "j" determine in accordance with the Baseline Methodology specified by the Lead Party in accordance with paragraph S10.1.3A and/or S10.1A.2A:

- (a) the MSID Baseline Value (MBV_{KiL_j}) for each SVA Metering System "K" in a Baselined MSID Pair:
- (b) the AMSID Baseline Value (AMB_{KiL_j}) for each Asset Metering System "K" in a Baselined AMSID Pair: and
- (c) the Net Differencing Baseline Value ($NDBV_{ij}$) for each set of SVA Metering Systems and Asset Metering Systems that are related to each other for purposes of differencing in accordance with paragraph 5.1.1CA.

5.3.2 For each MSID Baseline Value (MBV_{KiL_j}) determined in accordance with paragraph 5.3.1(a), the SVAA shall determine the MSID Baseline Losses (MBL_{KiL_j}) in accordance with the following formula:

$$MBL_{KiL_j} = (LLF_{L_j} - 1) * MBV_{KiL_j}$$

5.3.2A For each AMSID Baseline Value (AMB_{KiL_j}) determined in accordance with paragraph 5.3.1(b), the SVAA shall determine the AMSID Baseline Losses ($AMBL_{KiL_j}$) in accordance with the following formula:

$$AMBL_{KiL_j} = (LLF_{L_j} - 1) * AMB_{KiL_j}$$

5.3.3 For each Baselined BM Unit "i" and Settlement Period "j", the SVAA shall:

- (a) exclude any Metering System "K" that is within an MSID Pair identified as Inactive; and
- (b) determine the Baselined Expected Volume (BEV_{ij}) in accordance with the following formula:

$$BEV_{ij} = \sum_K (MBV_{KiL_j} + MBL_{KiL_j}) + \sum_K^{NonDiff} (AMB_{KiL_j} + AMBL_{KiL_j}) -$$

$$\Sigma_K^{\text{Diff}} (\text{AMBV}_{\text{KiLj}} + \text{AMBL}_{\text{KiLj}})$$

5.3.4 For each Baseline BM Unit “i” and Settlement Period “j”, the SVAA shall determine the Party Submitted Expected Volume (PSEV_{ij}) as the Submitted Expected Volume submitted by the Lead Party and validated by the SVAA in accordance with Section S13. Where no such value was submitted and validated:

- (a) if all the MSID Pairs and/or AMSID Pairs within the Baseline BM Unit are Baseline MSID Pairs and/or AMSID Pairs, SVAA shall determine the Party Submitted Expected Volume (PSEV_{ij}) to be zero; and
- (b) otherwise, SVAA shall not determine a value of Party Submitted Expected Volume (PSEV_{ij}).

5.3.5 For each Party Submitted Expected Volume (PSEV_{ij}) value determined in accordance with paragraph 5.3.4, the SVAA shall determine the Settlement Expected Volume (SEV_{ij}) in accordance with the following formula:

$$\text{SEV}_{ij} = \text{BEV}_{ij} + \text{PSEV}_{ij}$$

5.3.6 The SVAA shall provide the SAA with the Settlement Expected Volume (SEV_{ij}) for each Baseline BM Unit “i” for each Settlement Period “j” for each Volume Allocation Run. Where no such value was determined in accordance with paragraph 5.3.5, the SVAA shall not provide a value to SAA.

6. GSP GROUP CORRECTION

6.1 Determination of GSP Group Half Hourly Consumption

6.1.1 The GSP Group Half Hourly Consumption (GC_{HNj}) for each Consumption Component Class “N” within GSP Group “H” shall be determined by the SVAA according to the following formula:

$$\text{GC}_{\text{HNj}} = \Sigma^{\text{H}_i} \text{C}_{\text{in}_j} + \Sigma^{\text{H}_i} \text{CLOSS}_{\text{in}_j}$$

where Half Hourly Consumption (Non Losses) (C_{in_j}) and Half Hourly Consumption (Losses) (CLOSS_{in_j}) are calculated pursuant to paragraphs 5.1 and 5.2.

6.2 Determination of GSP Group Correction Factor

6.2.1 The SVAA shall ensure GSP Group Correction Factors for Active Import (GCFI_{Hj}) and Active Export (GCFE_{Hj}) shall be determined by the Volume Allocation Service for each GSP Group “H” using the GSP Group Take (GSPGT_{Hj}) provided by the CDCA and the GSP Group Half Hourly Consumption (GC_{HNj}) for each Consumption Component Class “N” within GSP Group ‘H’ in accordance with the following formulae::

- (a) calculate the Unallocated Demand (UH_j) as follows:

$$\text{UH}_j = \text{GSPGT}_{\text{HDj}} - \Sigma_{\text{N}} \text{GCH}_{\text{Nj}}$$

- (b) calculate the Weighted Import (WI_{Hj}) as follows:

$$\text{WI}_{\text{Hj}} = \Sigma^{\text{AI}}_{\text{N}} \text{GC}_{\text{HNj}} * \text{WT}_{\text{N}}$$

Where:

WT_N is the scaling weight for each Consumption Component Class “N” that is for Active Import (AI).

(c) calculate the Weighted Export (WE_{Hj}) as follows:

$$WE_{Hj} = \sum^{AE}_N GC_{HNj} * WT_N$$

Where:

WT_N is the scaling weight for each Consumption Component Class "N" that is for Active Export (AE).

(d) calculate the Active Import (AI) share of Unallocated Demand (UI_{Hj}) as follows:

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

(e) calculate the AE share of Unallocated Demand (UE_{Hj}) as follows:

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

(f) calculate the Group Correction Factor Import ($GCFI_{Hj}$) as follows:

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

(g) calculate the Group Correction Factor Export ($GCFE_{Hj}$) as follows:

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

6.2.3 The SVAA shall ensure that the Volume Allocation Service provides the GSP Group Factors ($GCFI_{HDj}$ and $GCFE_{HDj}$) to other BSC Systems for other Settlement calculations.

6.3 Determination of Corrected Component

6.3.1 The Corrected Component ($CORC_{iNj}$) for each Consumption Component Class "N" within Supplier BM Unit "i" shall be determined by the SVAA according to the following formulae:

(a) for Active Import Consumption Component Classes:

$$CORC_{iNj} = (C_{iNj} + CLOSS_{iNj}) * (1 + (GCFI_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFI_{HDj}$ is the value of GSP Group Correction Factor for Active Import Consumption Component Classes for the GSP Group "H" associated with the BM Unit 'i'.

(c) for Active Export Consumption Component Classes:

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

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFE_{HDj}$ is the value of GSP Group Correction Factor for Active Export Consumption Component Classes for the GSP Group 'H' associated with the BM Unit 'i'.

6.3.2 The Corrected Disconnection Component ($CORDC_{iNj}$) for each Consumption Component Class "N" within Supplier BM Unit "i" shall be determined by the SVAA according to the following formula:

(a) for Active Import Consumption Component Classes:

$$CORDC_{iNj} = (C_{iNj} + DLOSS_{iNj}) * (1 + (GCFI_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFI_{Hj}$ is the value of GSP Group Correction Factor for Active Import Consumption Component Classes for the GSP Group "H" determined pursuant to paragraph 6.2 associated with the BM Unit 'i'.

(b) for Active Export Consumption Component Classes:

$$CORDC_{iNj} = (C_{iNj} + DLOSS_{iNj}) * (1 + (GCFE_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFE_{Hj}$ is the value of GSP Group Correction Factor for Active Export Consumption Component Classes for the GSP Group 'H' determined pursuant to paragraph 6.2 associated with the BM Unit 'i'.

6.3.3 The SVAA shall provide the SAA with the Corrected Component ($CORC_{iNj}$) for each Consumption Component Class "N" for each Supplier BM Unit "i" for each Settlement Period "j" for each Volume Allocation Run.

6.3.4 The Secondary Corrected Component ($VCORC_{i2Nj}$) for each Consumption Component Class "N" within Secondary BM Unit "i2" shall be determined by the SVAA according to the following formulae:

(a) for Active Import Consumption Component Classes:

$$VCORC_{i2Nj} = (V_{i2Nj} + VLOSS_{i2Nj}) * (1 + (GCFI_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFI_{Hj}$ is the value of GSP Group Correction Factor for Active Import Consumption Component Classes for the GSP Group "H" determined pursuant to paragraph 6.2 associated with the BM Unit 'i2'.

(b) for Active Export Consumption Component Classes:

$$VCORC_{i2Nj} = (V_{i2Nj} + VLOSS_{i2Nj}) * (1 + (GCFE_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFE_{Hj}$ is the value of GSP Group Correction Factor for Active Export Consumption Component Classes for the GSP Group 'H' associated with the BM Unit 'i' determined pursuant to paragraph 6.2 for the GSP Group "H" associated with the Secondary BM Unit "i2".

6.3.5 The Corrected MSID ABSVD Component ($CORABSVDC_{iNKj}$) for each Consumption Component Class "N" within Supplier BM Unit shall be determined by the SVAA according to the following formulae:

(a) For Active Import Consumption Component Classes:

$$CORABSVDC_{iNKj} = (MSABSVD_{iNKj} + MSABSVDL_{iNKj}) * (1 + (GCFI_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFI_{Hj}$ is the value of GSP Group Correction Factor for Active Import Consumption Component Classes for the GSP Group "H" determined pursuant to paragraph 6.2 associated with the BM Unit "i".

(b) for Active Export Consumption Component Classes:

$$CORABSVDC_{iNKj} = (MSABSVD_{iNKj} + MSABSVDL_{iNKj}) * (1 + (GCFE_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFE_{Hj}$ is the value of GSP Group Correction Factor for Active Export Consumption Component Classes for the GSP Group 'H' determined pursuant to paragraph 6.2 associated with the BM Unit "i".

- 6.3.6 The Secondary Corrected Delivered Component ($VCORDC_{i2NKji}$) for each Consumption Component Class "N" within Metering System "K" within Secondary BM Unit "i2" and Supplier BM Unit "i" shall be determined by the SVAA according to the following formula:

For Active Import Consumption Component Classes:

$$VCORDC_{i2NKji} = (VD_{i2NKji} + VDLOSS_{i2NKji}) * (1 + (GCFI_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFI_{Hj}$ is the value of GSP Group Correction Factor for Active Import Consumption Component Classes for the GSP Group "H" determined pursuant to paragraph 6.2 associated with the BM Unit "i2".

For Active Export Consumption Component Classes:

$$VCORDC_{i2NKji} = (VD_{i2NKji} + VDLOSS_{i2NKji}) * (1 + (GCFE_{Hj} - 1) * WT_N)$$

where WT_N is the associated GSP Group Correction Scaling Weight and $GCFE_{Hj}$ is the value of GSP Group Correction Factor for Active Export Consumption Component Classes for the GSP Group 'H' associated with the BM Unit 'i' determined pursuant to paragraph 6.2 for the GSP Group "H" associated with the Secondary BM Unit "i2".

6.4 Determination of Supplier Deemed Take

- 6.4.1 The Supplier Deemed Take (SDT_{HZj}) shall be determined by the SVAA according to the following formula:

$$SDT_{HZj} = \Sigma^{HZ}_i (\Sigma_N CORC_{iNj})$$

6.5 Determination of BM Unit Allocated Demand Volume

- 6.6.1 In respect of each Supplier BM Unit "i", the SVAA shall determine the BM Unit Allocated Demand Volume ($BMUADV_{ij}$) for each Settlement Period "j" according the following formula:

$$BMUADV_{ij} = \Sigma_N CORC_{iNj}$$

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

- 6.6.2 In respect of each Supplier BM Unit "i", the SVAA shall determine the BM Unit Allocated Demand Disconnection Volume ($BMUADDV_{ij}$) for each Settlement Period "j" according the following formula:

$$BMUADDV_{ij} = \Sigma_N CORDC_{iNj}$$

- 6.6.3 In respect of each Secondary BM Unit "i2", the SVAA shall determine the Secondary BM Unit Demand Volume ($VBMUDV_{i2j}$) for each Settlement Period "j" according the following formula:

$$VBMUDV_{i2j} = \Sigma_N VCORC_{i2Nj}$$

where Σ_N is the summation over all Consumption Component Classes for SVA Metering Systems and Asset Metering Systems in Secondary BM Units.

- 6.6.4 In respect of each Secondary BM Unit "i2" and Supplier BM Unit "i", the SVAA shall determine the Secondary BM Unit Supplier Delivered Volume (VBMUSDV_{i2ji}) for each Settlement Period "j" according the following formula:

$$VBMUSDV_{i2ji} = \sum_{i \in K} \sum_N VCORDC_{i2NKji}$$

where \sum_N is the summation over all Consumption Component Classes in a given Metering System and $\sum_{i \in K}$ is the summation over all SVA Metering Systems allocated to Supplier BM Unit "i".

- 6.6.5 In respect of each Supplier BM Unit "i", the SVAA shall determine the Supplier BM Unit Non BM ABSVD (SNBABSVD_{ij}) for each Settlement Period "j" according the following formula:

$$SNBABSVD_{ij} = \sum_N CORABSVD_{iNKj}$$

- 6.6.6 The SVAA shall provide the SAA with the BM Unit Allocated Demand Volume (BMUADV_{ij}) and the BM Unit Allocated Demand Disconnection Volume (BMUADDV_{ij}) for each Supplier BM Unit "i" for each Settlement Period "j" for each Volume Allocation Run.

- 6.6.7 The SVAA shall provide the SAA with the Period BM Unit Non Chargeable Demand (NCBMUD_{ij}) for each Supplier BM Unit "i" for each Settlement Period "j" for each Volume Allocation Run.

- 6.6.8 The SVAA shall provide the SAA with the Secondary BM Unit Demand Volume (VBMUDV_{i2j}) for each Secondary BM Unit "i2" for each Settlement Period "j" for each Volume Allocation Run.

- 6.6.9 The SVAA shall provide the SAA with the Secondary BM Unit Supplier Delivered Volume (VBMUSDV_{i2ji}) for each Secondary BM Unit "i2" and Supplier BM Unit "I" for each Settlement Period "j" for each Volume Allocation Run.

- 6.6.10 Where the SVAA has determined non zero Supplier BM Unit Non BM ABSVD (SNBABSVD_{ij}), the SVAA shall provide such data to the SAA for each BM Unit "i" for each Settlement Period "j" for each Volume Allocation Run.

6.7 Determination of Supplier Cap Take

- 6.7.1 The Supplier Cap Take (SCT_{HZj}) shall be determined by the SVAA according to the following formula:

$$SCT_{HZj} = \max (\sum^{HZ}_i \sum_{N(AI)} CORC_{iNj}, 0)$$

7 SUPPLIER QUARTERLY VOLUME REPORT

7.1 Determination of the Supplier Quarterly Volume Report

- 7.1.1 The Quarterly Supplier Energy Volume (CORC_{ZqG}) for each Supplier Volume Reporting Group "G" in calendar quarter "q" shall be determined as:

$$\sum^{ZqG}_{iNPj} CORC_{iNj}$$

over the relevant Consumption Component Classes for each of Supplier Volume Reporting Groups for each Supplier "Z".

- 7.1.2 The Quarterly Metering Systems by Supplier (NM_{ZqG}) for each Supplier "Z" in Supplier Volume Reporting Group "G" in calendar quarter "q" shall be determined by the calculation:

$$\Sigma^{ZqG}_{Hd} NM_{ZHGD} / d(q)$$

where NM_{ZHGD} is the total number of Metering Systems registered to Supplier "Z" in Supplier Volume Reporting Group "G" on day "d", summed over all GSP Groups and all days in calendar quarter "q", and $d(q)$ is the number of days in calendar quarter "q".

8. VOLUME ALLOCATION RUNS

8.1 Supplier Volume Allocation Runs

- 8.1.1 For each Settlement Period in any Settlement Day and for each Supplier BM Unit, the SVAA shall determine or re-determine the BM Unit Allocated Demand Volumes and provide the same to the SAA and to each other person entitled thereto in accordance with BSCP703:

- (a) on each occasion on which an Interim Information Volume Allocation Run, Initial Volume Allocation Run or a Timetabled Reconciliation Volume Allocation Run is required in relation to that Settlement Day, in accordance with the Settlement Calendar; and
- (b) on each occasion on which a Post Final Volume Allocation Run is required by the Panel in accordance with the timetable specified by the Panel in accordance with Section W4.2.3.

- 8.1.2 For each Volume Allocation Run the SVAA shall use the relevant value of GSP Group Take ($GSPGT_{Hj}$) which is derived from the corresponding Volume Allocation Run provided by the CDCA in accordance with Section R5.7.

8.2 Adjustment of BM Unit Allocated Demand Volumes

- 8.2.1 The SVAA shall carry out Reconciliation Volume Allocation Runs for each Settlement Day in accordance with the provisions of this paragraph 8.2.
- 8.2.2 The SVAA shall recalculate the Supplier Deemed pursuant to the requirements of the Supplier Volume Allocation Rules but in each case using the then current values of the Supplier Volume Allocation variables required in respect of such Settlement Day.
- 8.2.3 The SVAA shall recalculate the BM Unit Allocated Demand Volumes pursuant to paragraph 6.6 employing the then current values of the data pursuant to the Supplier Volume Allocation Rules or re-determined pursuant to paragraph 8.2.2.

9. TRADING DISPUTES

9.1 Provision of Information

- 9.1.1 Subject to any obligations of confidentiality, the SVAA shall give BSCCo, any other Party or any other BSC Agent which raises a Trading Dispute pursuant to Section W all such explanations, documents, data and information relating to Supplier Volume Allocation as may be required for the purposes of resolving such Dispute.

9.2 Rectification of Errors

- 9.2.1 The provisions of Section U2.5 and U2.6, and the provisions of Section W1.7, shall apply in relation to the rectification (or otherwise) of errors in relation to Supplier Volume Allocation.

10. DELAYS AND FAILURES

10.1 Aggregated Half Hourly Consumption Data

10.1.1 The provisions of paragraph 10.1.2 apply if, for any reason, on or before such time as may be specified in BSCP703 for this purpose any of the variables referred to in paragraphs 3.7 shall not have been determined in respect of the relevant Settlement Period by the operation of half hourly data aggregation in accordance with this Annex S-3.

10.1.2 Where this paragraph 10.1.2 applies:

- (a) the SVAA shall take such actions as are specified in BSCP703 to ascertain the values of the variables referred to in paragraphs 3.7 from the Market-wide Data Service and/or Supplier;
- (b) if all attempts to ascertain such values fail, the SVAA shall derive the missing variables from the data for the previous run in respect of that Settlement Day, provided that:
 - (i) if this is the Initial Volume Allocation Run or the data for the previous run is not available for any other reason, data for the Settlement Day that most nearly corresponds to the characteristics of the Settlement Day for which variables are to be determined shall be used; and
 - (ii) in the case where there is no such identifiable Settlement Day, the SVAA shall carry out the Volume Allocation Run or, as the case may, the Reconciliation Volume Allocation Run without the missing half hourly data.

10.1.3 The provisions of paragraph 10.1.4 apply if, for any reason, on or before such time as may be specified in BSCP703 for this purpose any of the variables referred to in paragraph 3.7 shall not have been determined in respect of the relevant Settlement Period by the operation of half hourly data aggregation in accordance with this Annex S-3.

10.1.4 Where this paragraph 10.1.4 applies:

- (a) the SVAA shall take such actions as are specified in BSCP703 to ascertain the values of the variables referred to in paragraph 3.7 from the Market-wide Data Service;
- (b) if all attempts to ascertain such values fail, the SVAA shall derive the missing variables from the data for the previous run in respect of that Settlement Day, provided that if this is the Initial Volume Allocation Run or the data for the previous run is not available for any other reason, the SVAA shall carry out the Volume Allocation Run or, as the case may, the Reconciliation Volume Allocation Run without the missing half hourly data.

10.1.5 The provisions of paragraph 10.1.6 apply if, for any reason, on or before such time as may be specified in BSCP602 for this purpose any of the variables referred to in paragraph 3.11 shall not have been determined in respect of the relevant Settlement Period by the operation of half hourly data aggregation in accordance with this Annex S-3.

10.1.6 Where this paragraph 10.1.6 applies:

- (a) the SVAA shall take such actions as are specified in BSCP602 to ascertain the values of the variables referred to in paragraph 3.11 from the relevant Virtual Lead Party;

- (b) if all attempts to ascertain such values fail, the SVAA shall carry out the Volume Allocation Run or, as the case may, the Reconciliation Volume Allocation Run without the missing half hourly data.

10.2 BM Unit Allocated Demand Volumes, DUoS Report and TUoS Report

- 10.2.1 The provisions of paragraph 10.2.2 apply if, for any reason, the operation of the Supplier Volume Allocation System fails to determine BM Unit Allocated Demand Volumes, the DUoS Report or the TUoS Report in respect of any Settlement Period or, as the case may, Settlement Day before the expiry of such time as may be specified in BSCP703 for this purpose.
- 10.2.2 Where this paragraph 10.2.2 applies, unless the SVAA rectifies the failure so as to permit the operation of the Supplier Volume Allocation System to determine BM Unit Allocated Demand Volumes, the DUoS Report or, as the case may be, the TUoS Report on or before the Settlement Day immediately following the relevant Settlement Day specified for this purpose, BSCCo shall determine the Supplier Deemed Take and the BM Unit Allocated Demand Volumes for the relevant Settlement Periods, using where practicable any relevant data determined or supplied pursuant to this Annex S-2 that is available to enable calculation of the Supplier Deemed Take and the BM Unit Allocated Demand Volume amount in respect of any individual Supplier.
- 10.2.3 Where paragraph 10.2.2 applies the SVAA shall send the values of BM Unit Allocated Demand Volumes for each Settlement Period determined pursuant to paragraph 10.2.2 to the SAA in accordance with paragraph 6.6.6.

10.3 Obligation to assist

- 10.3.1 Each Supplier shall provide all such advice and assistance as BSCCo or the SVAA may reasonably require to permit the determination of the variables in accordance with paragraphs 10.1.2 and 10.2.2.

11. DETERMINATION OF PERIOD BM UNIT GROSS NON-FINAL DEMAND FOR SVA NON-FINAL DEMAND FACILITIES

11.1 General

- 11.1.1 This paragraph 11 describes the processes and calculations needed to provide certain data to the NETSO for the purpose of calculating Transmission Network Use of System Charges and Balancing Services Use of System Charges relating to the operation by the NETSO of the Transmission System. For the avoidance of doubt, such data are not used for the purposes of calculating Trading Charges.

11.2 Non-Final Demand Declarations

- 11.2.1 Where a Supplier intends to register a Metering System on the SVA Non-Final Demand Facilities Register, it shall submit a Non-Final Demand Declaration on behalf of the relevant SVA Non-Final Demand Facility Operator to the SVAA in accordance with BSCP602, and shall keep the SVAA informed of any amendments or updates to that Non-Final Demand Declaration made by the SVA Non-Final Demand Facility Operator.
- 11.2.2 Each SVA Non-Final Demand Facility Operator who is a BSC Party acknowledges and agrees that:
 - (a) the information contained in any Non-Final Demand Declaration submitted to the SVAA 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 Non-Final Demand Declaration of any amendments or updates to the Non-Final Demand Declaration.

11.3 Suppliers' Responsibilities

11.3.1 Subject to paragraph 11.3.2, each Supplier shall ensure that Metered Data for each Settlement Period of each Settlement Day are made available to the SVAA pursuant to this paragraph 11.3, in respect of all of such Supplier's Metering Systems which are listed on the SVA Non-Final Demand Facilities Register and subject to half hourly metering.

11.3.2 If:

- (a) a SVA Generator provides Export Active Energy through a SVA Metering System and such Export Active Energy is allocated between two or more Suppliers; and/or
- (b) a SVA Customer consumes Import Active Energy through a SVA Metering System and such Import Active Energy is allocated between two or more Suppliers,

each such Supplier shall ensure that Metered Data for each Settlement Period of each Settlement Day shall be made available to the SVAA pursuant to this paragraph 11.3 in respect of all of such Supplier's Metering System Numbers associated with Metering Systems which are listed on the SVA Non-Final Demand Facilities Register and subject to half hourly metering.

11.3.3 For the purposes of paragraph 11.3, Metered Data shall not include Unmetered Supplies.

11.4 SVAA Aggregation Responsibilities

11.4.1 The SVAA shall ensure that the Market-wide Data Service shall in respect of each Supplier's Metering Systems listed on the SVA Non-Final Demand Facilities Register and in respect of a particular Settlement Day:

- (a) access the SVA Storage Facilities Register for all Metering Systems, and for each BM Unit B, and GSP Group;
- (b) receive UTC Period Level Consumption data ($UTCP_{iHNDj}$) from the relevant Data Service Providers; and
- (c) undertake checks and provide reports in accordance with BSCP703.

11.4.2 In respect of Metering Systems relating to SVA Non-Final Demand Facilities, for any Reconciliation Volume Allocation Run for a Settlement Day, the SVAA shall ensure that:

- (a) in respect of data which are then currently available but which were not previously available for use in the immediately preceding Initial Volume Allocation Run or Reconciliation Volume Allocation Run, as the case may be;
- (b) the Market-wide Data Service shall, for that Settlement Day, provide to the SVAA in the case of a GSP Group "H", the Storage Metering System Metered Consumption ($SVMMC_{iHNLKDj}$) and Storage Consumption (Losses) ($SCLOSS_{iNDj}$) data, pursuant to paragraph 11.4.1 which data shall incorporate any revised data made available.

- 11.4.3 For Settlement Period Consumption ($SPC_{iHNLKDj}$) values for a Metering Systems "K" in the SVA Storage Facilities Register, the Market-wide Data Service shall determine the Storage Consumption (Non Losses) (SC_{iNDj}) within Consumption Component Class "X" (which Consumption Component Class shall not be a Consumption Component Class for line losses) within BM Unit "i" for such Metering System "K" for a particular GSP Group "H", according to the following formula:

$$SVMMC_{iHXLKDj} = SPC_{iHXLKDj}$$

- 11.4.4 The Market-wide Data Service shall determine the Storage Consumption (Non Losses) (SC_{iNDj}) within Consumption Component Class "N" (which Consumption Component Class shall not be a Consumption Component Class for line losses or for active export) for each BM Unit "i" according to the following formula:

$$SC_{iNDj} = \sum_{LHK} SVMMC_{iHNLKDj}$$

- 11.4.5 The Market-wide Data Service shall determine the Storage Consumption (Losses) ($SCLOSS_{iNDj}$) 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:

$$SCLOSS_{iNDj} = \sum_{LK} ((LLFL_{Dj} - 1) * SVMMC_{iHXLKDj})$$

where "X" is the Consumption Component Class (not for line losses or active export) associated with the Consumption Component Class "N" for which the value of $SCLOSS_{iNDj}$ is to be determined.

- 11.4.6 The Storage Consumption (Non Losses) (SC_{iNDj}) and Storage Consumption (Losses) ($SCLOSS_{iNDj}$) shall be provided to the Volume Allocation Service in accordance with the Master Settlement Timetable.

- 11.4.7 The SVAA shall ensure that the Volume Allocation Service determines the Storage Corrected Component ($SCORC_{iNDj}$) for each Consumption Component Class "N" within Supplier BM Unit 'i' shall be determined by the Volume Allocation Service according to the following formula:

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

where WTN 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".

- 11.4.8 The Period BM Unit Gross Storage Demand ($SDBMU_{imDj}$) shall be determined by the Volume Allocation Service 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.

- 11.4.9 The Volume Allocation Service shall provide to the SAA the Period BM Unit Gross Storage Demand ($SDBMU_{imDj}$).

11.5 Supplier Volume Allocation Runs

11.5.1 For each Settlement Period in any Settlement Day and for each Supplier BM Unit, the SVAA shall determine or re-determine the Period BM Unit Gross Non-Final Demand and provide the same to NETSO in accordance with BSCP602:

- (a) on each occasion on which an Interim Information Volume Allocation Run, Initial Volume Allocation Run or a Timetabled Reconciliation Volume Allocation Run is required in relation to that Settlement Day, in accordance with the Settlement Calendar; and
- (b) on each occasion on which a Post Final Volume Allocation Run is required by the Panel in accordance with the timetable specified by the Panel in accordance with Section W4.2.3.

11.6 General Responsibilities in respect of SVA Non-Final Demand Facilities

11.6.1 In respect of SVA Non-Final Demand Facilities, and in each case in accordance with BSCP602, the SVAA shall:

- (a) validate Non-Final Demand Declarations submitted by Suppliers pursuant to paragraph 11.2.1;
- (b) register any SVA Non-Final Demand Facilities that are subject to a valid Non-Final Demand Declaration;
- (c) undertake monthly validity checks of SVA Non-Final Demand Facilities;
- (d) provide reports and information to BSCCo including submissions and validations made pursuant to this paragraph 11 and associated calculations and data; and
- (e) maintain and publish a record of all SVA Non-Final Demand Facilities that have a current and valid Non-Final Demand Declaration.

11.6.2 In respect of SVA Non-Final Demand Facilities, and in each case in accordance with BSCP602, BSCCo shall:

- (a) undertake analysis of the reports and data provided to it by the SVAA under paragraph 11.6.1(d) and investigate, including seeking representations from the relevant Supplier and SVA Non-Final Demand Facility Operator, whether there is any evidence suggesting that a Non-Final Demand Declaration is no longer valid either in its entirety or in respect of any Metering System to which that Non-Final Demand Declaration relates;
- (b) having regard to any representations made under paragraph 11.6.2(a), report its findings from any analysis undertaken under paragraph 11.6.2(a) to the Panel; and
- (c) provide to NETSO such data as NETSO may request in relation to SVA Non-Final Demand Facilities as is reasonably necessary to enable it to achieve assurance that TNUOS and/or BSUOS charges are calculated accurately.

11.6.3 BSCCo shall undertake the analysis and investigations referred to in paragraph 11.6.2(a) following receipt of a report from the SVAA pursuant to paragraph 11.6.1(c) or otherwise where notified by the Panel, a Party, SVA Non-Final Demand Facility Operator or interested persons pursuant to BSCP602.

11.7 Powers of the Panel

- 11.7.1 In order to provide assurance that the provisions of this paragraph 11 have been complied with including with respect to the validity of Non-Final Demand Declarations and the accuracy and completeness of data and information submitted pursuant to this paragraph 11, the Panel shall be entitled to:
- (a) receive such reports, information and data as it considers reasonably necessary; and
 - (b) require BSCCo to undertake analysis or investigations of such reports, information and data pursuant to paragraph 11.7.2.
- 11.7.2 Following a report by BSCCo under paragraph 11.7.2(b), the Panel may require Metering System(s) to be excluded from a Non-Final Demand Declaration or a Non-Final Demand Declaration to be invalidated in its entirety in which case:
- (a) the SVAA shall amend the SVA Non-Final Demand Facilities Register accordingly; and
 - (b) for the purposes of the calculations undertaken by the SVAA under this paragraph 11, a reference to SVA Non-Final Demand Facilities shall be deemed to exclude such Metering Systems as from such date determined by the Panel.

12 DETERMINATION OF PERIOD BM UNIT NON CHARGEABLE DEMAND FOR EMR MSID DELARATIONS AND FOR EMR AMSID DELARATIONS

12.1 General

- 12.1.1 This paragraph 12 describes the processes and calculations needed to provide Period BM Unit Non Chargeable Demand data to the SAA for the purposes of calculating TLM-Adjusted BM Unit Chargeable Demand. For the avoidance of doubt, such data are not used for the purposes of calculating Trading Charges.

12.2 Declarations

- 12.2.1 Where a Supplier intends to register Metering Systems and, where applicable, Asset Metering Systems, on the SVA Metering System and Asset Metering System Register for the purposes of calculating Period BM Unit Non Chargeable Demand, it shall submit a EMR Declaration, which may be either:

- (a) an EMR MSID Declaration containing one or more Metering System Numbers; or
- (b) an EMR AMSID Declaration containing one or more MSID Pairs and one or more AMSID Pairs,

to the SVAA in accordance with BSCP602, and shall keep the SVAA informed of any amendments or updates to that EMR Declaration.

12.3 Suppliers' Responsibilities

- 12.3.1 Subject to paragraph 12.3.2, each Supplier shall ensure that Metered Data for each Settlement Period of each Settlement Day are made available to the SVAA pursuant to this paragraph 14.3, in respect of all of such Supplier's Metering System Numbers and Asset Metering System Numbers which are listed on the SVA Metering System and Asset Metering System Register and subject to half hourly metering.

- 12.3.2 If a Generator or Storage Facility consumes Import Active Energy through a SVA Metering System and such Import Active Energy is allocated between two or more Suppliers, each such Supplier shall ensure that Metered Data for each Settlement Period of each Settlement Day shall be made available to the SVAA pursuant to this paragraph 12.3 in respect of all of such Supplier's Metering System Numbers associated with Metering Systems which are listed on the SVA Storage Facilities Register and subject to half hourly metering.

12.4 SVAA Aggregation Responsibilities

- 12.4.1 In respect of each Supplier's Metering Systems listed on the SVA Metering System and Asset Metering System Register as part of an EMR Declaration of a particular Settlement Day the SVAA shall ensure that the Market-wide Data Service shall:

- (a) receive UTC Period Level Consumption data ($UTCP_{iHNDj}$) from the relevant Data Service Providers;
- (b) undertake checks and provide reports in accordance with BSCP703; and
- (c) provide to the SVAA the Supplier's Settlement Period Consumption (SPC_{KDj}) for each Volume Allocation Run.

- 12.4.2 Each Supplier shall ensure that each of its Advanced Data Service Providers shall in respect of that Supplier's Asset Metering Systems listed on the SVA Metering System and Asset Metering System Register as part of an EMR Declaration for which that Advanced Data Service Provider is responsible and in respect of a particular Settlement Day:

- (a) collect or, where such has been appointed by the Supplier, receive from the relevant Asset Metering Half Hourly Data Collector half hourly Asset Metering System Metered Consumption;
- (b) undertake checks and provide reports in accordance with BSCP603; and
- (c) provide to the SVAA the Actual half hourly Asset Metering System Metered Consumption data for the Initial Settlement Volume Allocation Run where available, otherwise Estimated half hourly Asset Metering System Metered Consumption data;
- (d) where Estimated half hourly Asset Metering System Metered Consumption data has been provided for an Asset Metering System Number to the SVAA pursuant to (c), the Advanced Data Service Provider shall be required to provide, where available, actual data for that Asset Metering System Number for the next Volume Allocation Run; and
- (e) where actual half hourly Asset Metering System Metered Consumption data has been provided for an Asset Metering System Number to the SVAA pursuant to (c) or (d), the Advanced Data Service Provider shall not be required to provide such data for any subsequent Volume Allocation Run;

12.5 SVAA Responsibilities

- 12.5.1 The SVAA shall determine the Period BM Unit Non Chargeable Demand in respect of an EMR Declaration as set out in paragraph 3.13.

12.6 General Responsibilities in respect of EMR Declarations

- 12.6.1 In respect of an EMR Declaration, and in each case in accordance with BSCP703, the SVAA shall:

- (a) validate each EMR Declaration submitted by a Supplier pursuant to paragraph 12.2;
- (b) register all details submitted in a valid EMR Declaration in the SVA Metering System and Asset Metering System Register;
- (c) undertake regular validity checks of the details submitted in each valid EMR Declaration;
- (d) provide reports and information to BSCCo including submissions and validations made pursuant to this paragraph 12 and associated calculations and data; and
- (e) maintain and publish a record of all Generation and SVA Storage Facilities that have been included in a valid EMR Declaration.

12.6.2 In respect of Generation and SVA Storage Facilities, BSCCo shall:

- (a) undertake analysis of the reports and data provided to it by the SVAA under paragraph 12.6.1(d) and investigate, including seeking representations from the relevant Supplier, Generation Licensee whether there is any evidence suggesting that a EMR Declaration is no longer valid either in its entirety or in respect of any Metering System to which that EMR Declaration relates; and
- (b) having regard to any representations made under paragraph 12.6.2(a), report its findings from any analysis undertaken under paragraph 12.6.2(a) to the Panel.

12.6.3 BSCCo shall undertake the analysis and investigations referred to in paragraph 12.6.2(a) following receipt of a report from the SVAA pursuant to paragraph 12.6.1(c) or otherwise where notified by the Panel, a Party or interested persons pursuant to BSCP703.

12.7 Powers of the Panel

12.7.1 In order to provide assurance that the provisions of this paragraph 14 have been complied with including with respect to the validity of Declarations and the accuracy and completeness of data and information submitted pursuant to this paragraph 14, the Panel shall be entitled to:

- (a) receive such reports, information and data as it considers reasonably necessary; and
- (b) require BSCCo to undertake analysis or investigations of such reports, information and data pursuant to paragraph 12.6.2.

12.7.2 Following a report by BSCCo under paragraph 12.6.2(b), the Panel may require Metering System(s) to be excluded from an EMR Declaration or an EMR Declaration to be invalidated in its entirety in which case:

- (a) the SVAA shall amend the SVA Metering System and Asset Metering System Register accordingly; and
- (b) for the purposes of the calculations undertaken by the SVAA under this paragraph 14, a reference to a EMR Declaration shall be deemed to exclude such Metering Systems as from such date determined by the Panel.