

## **AGREED PROCEDURE No. AP03**

### **NQH (Non Quarter Hour) Metered Customer Demand Reconciliation**

Agreed Procedure prepared pursuant to, and as defined in, the Trading and Settlement Code.

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## **Profiled Customer Demand Reconciliation**

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### 1 INTRODUCTION

This Agreed Procedure describes the process for the following.

- 1) Determining the cumulative kWh, in both day and night time periods, that have been mis-allocated between the total demand of a Supplier with Non-Quarter Hour (NQH) metered customers (including a GVIPP Supplier) and ESB PES as a result of determining the Supplier's customers' demands using an estimated annual consumption for each customer and applying an appropriate customer demand profile.
- 2) Determining the financial settlement required between the Supplier (other than a GVIPP Supplier) and ESB PES in respect of the day and night kWh amount.

### 2 CONVENTIONS AND ASSUMPTIONS

#### 2.1 Conventions

In this Agreed Procedure the following conventions have been adopted.

##### 2.1.1 Subscripts

The following subscripts are used:

Subscript	Meaning
C	NQH metered customer
H	Half Hour (Trading Period)
M	Month
S	Supplier with NQH metered customers
day	Day time period hours 08:00 to 23:00 hours GMT
Night	Night time period hours 23:00 to 08:00 hours GMT

##### 2.1.2 Mathematical conventions

Expression	Meaning
$10^n$	Means 10 raised to the power of n
$\Sigma_{h=\text{day}}^m$	means the sum of all day time Trading Periods (half hours) h in calendar Month m
$\Sigma_{h=\text{night}}^m$	means the sum of all night time Trading Periods (half hours) h in calendar Month m

##### 2.1.3 Payment Conventions

If a sum of money is positive, it represents a payment to the party concerned. If it is negative, it represents a payment by the party concerned.

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#### 2.1.4 Currency

All financial calculations are in Euro (€).

#### 2.1.5 Month

A Month is a calendar month.

#### 2.1.6 Meter Reading Assumptions

It shall be assumed that a meter reading taken in respect of a Supplier's NQH metered customer (or, as the case may be, a GVIPP Supplier's customer) has been made at midnight on the day on which the reading is made (i.e. at the start of the day).

### 3 VARIABLES

#### 3.1 Variables Table

In respect of the calculations described in this Agreed Procedure only, the variables defined in the following table are used.

Variable	Sub-scripts	Units	Description	Source
CCMVD	scm	kWh	Customer's Cumulative Metered Value for day time periods	Input (MRSO)
CCMVN	scm	kWh	Customer's Cumulative Metered Value for night time periods	Input (MRSO)
CCPDD	scm	kWh	Customer's Cumulative Profiled Consumption in day time periods	Input (MRSO)
CCPDN	scm	kWh	Customer's Cumulative Profiled Consumption in night time periods	Input (MRSO)
CMAMD	scm	kWh	Customer Mis-Allocated Amount for day time periods	Calc. (MRSO)
CMAMN	scm	kWh	Customer Mis-Allocated Amount for night time periods	Calc. (MRSO)
MAPD	m	€MWh	Mis-Allocation Price for day time period mis-allocated amounts	Calc. (SSA)
MAPN	m	€MWh	Mis-Allocation Price for night time period mis-allocated amounts	Calc. (SSA)
SMAMD	sm	MWh	Supplier Mis-Allocated Amount for day time periods in month m	Calc. (MRSO)
SMAMN	sm	MWh	Supplier Mis-Allocated Amount for night time periods in month m	Calc. (MRSO)
TSG	h	MWh	Total System Generation	Calc. (SSA)
TU	h	€MWh	Revised Top Up Price	Calc (SSA)

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#### 4 RESOLUTION OF MIS-ALLOCATED AMOUNTS

##### 4.1 Calculation of Mis-Allocated Amounts

###### 4.1.1 Frequency of Calculation of Mis-Allocated Amounts

The calculation of Mis-Allocated Amounts as defined in this Agreed Procedure will be carried out in respect of each month.

###### 4.1.2 Calculation of Customer Mis-Allocated Amounts

A Customer Mis-Allocated Amount for day time (CMAMD<sub>scm</sub>) and night time periods (CMAMN<sub>scm</sub>) will be calculated for each Supplier's NQH metered customer (or GVIPP Supplier's customer) in any month for which a meter reading has been made for this customer.

The Customer's Cumulative Profiled Consumption day (CCPDD<sub>scm</sub>) and night (CCPDN<sub>scm</sub>) is the total kWh of demand calculated for that customer using this customer's estimated annual consumption and the relevant profile type for all calendar days between:

- 1) 00:00 hours of the day for which a new meter reading is available and
- 2) 00:00 hours of the day on which the last preceding meter reading was made.

The Customer Mis-Allocated Amount for day time periods (CMAMD<sub>scm</sub>) for the customer c in month m will be calculated by the MRSO as follows:

- 1) If for this customer c no meter reading has been carried out in this month m then CMAMD<sub>scm</sub> = 0; else
- 2)  $CMAMD_{scm} = CCPDD_{scm} - CCMVD_{csm}$

where the Customer's Cumulative Metered Value for day time periods (CCMVD<sub>scm</sub>) is the cumulative kWh consumed by this customer between the current meter reading and the last preceding meter reading as determined from the actual meter values. The Customer Mis-Allocated Amount for night time period (CMAMN<sub>scm</sub>) for the customer c in month m will be calculated by the MRSO as follows:

- 3) If for this customer c no meter reading has been carried out in this month m then CMAMN<sub>scm</sub> = 0; else
- 4)  $CMAMN_{scm} = CCPDN_{scm} - CCMVN_{csm}$

where the Customer's Cumulative Metered Value for night time periods (CCMVN<sub>scm</sub>) is the cumulative kWh consumed by this customer between the current meter reading and the last preceding meter reading as determined from the actual meter values. Where there is a 24hr meter (i.e. metering equipment which does not separate day and night units of consumption)

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the  $CCMVD_{scm}$  and  $CCMVN_{scm}$  values shall be calculated by the MRSO by taking the actual 24hr metered consumption and employing appropriate day and night time percentages derived from the customer profile.

#### **4.1.3 Calculation of Supplier Mis-Allocated Amounts**

A Supplier Mis-Allocated Amount ( $SMAM_{sm}$ ) will be calculated by the MRSO for each Supplier with NQH metered Customers in each month  $m$  as follows:

$$SMAMD_{sm} = (\sum_c^s CMAMD_{scm}) \times 10^{-3}.$$

$$SMAMN_{sm} = (\sum_c^s CMAMN_{scm}) \times 10^{-3}.$$

#### **4.1.4 Reporting of Supplier Mis-Allocated Amounts**

The Supplier Mis-Allocated Amounts ( $SMAMD_{sm}$  and  $SMAMN_{sm}$ ) will be reported by MRSO to the SSA for every supplier in respect of each month  $m$ , as soon as reasonably practical following the end of the month. The data supplied to the SSA, for any given month, should contain information for every Supplier (even if this is a zero).

If the Supplier is a GVIPP Supplier then the Supplier Mis-Allocated Amounts for this GVIPP Supplier will be reported by the MRSO (on behalf of the SSA) to that GVIPP Supplier and ESB PES in respect each month  $m$ .

## **4.2 Mis-Allocated Amounts Settlement**

### **4.2.1 Application of Mis-Allocated Amounts Settlement**

The calculation of the Mis-Allocated Amounts Settlements (as defined in this Section 4.2) shall not be undertaken under this AP03 for any GVIPP Supplier.

### **4.2.2 Calculation of Mis-Allocation Price**

The prices at which Mis-Allocated Amounts will be settled between ESB PES and the Supplier will be the demand weighted average Top-Up Price for the day or night periods where appropriate for the month  $m$  in respect of which the Supplier Mis-Allocated Amounts have been determined. These prices, the Mis-Allocation Prices ( $MAPD_m$  and  $MAPN_m$ ) will be calculated as follows:

$$MAPD_m = [\sum_{h=day}^m (TU_h \times TSG_h)] / \sum_{h=day}^m TSG_h$$

$$MAPN_m = [\sum_{h=night}^m (TU_h \times TSG_h)] / \sum_{h=night}^m TSG_h$$

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where  $TSG_h$  is the Total System Generation and  $TU_h$  is the Top Up Price (both as defined in the Appendix 7 of the Trading and Settlement Code, the “Electricity Trading and Settlement Rules”).

#### 4.2.3 Mis-Allocated Amounts Settlement

The Mis-Allocated Amounts will be settled as follows.

Where the Supplier Mis-Allocated Amounts for day time periods ( $SMAMD_{sm}$ ) is positive then a payment is due from ESB PES to the Supplier of:  $SMAMD_{sm} \times MAPD_m$ .

Where the Supplier Mis-Allocated Amounts for day time periods ( $SMAMD_{sm}$ ) is negative then a payment is due from the Supplier to ESB PES of:  $-1 \times SMAMD_{sm} \times MAPD_m$ .

Where the Supplier Mis-Allocated Amounts for night time periods ( $SMAMN_{sm}$ ) is positive then a payment is due from ESB PES to the Supplier of:  $SMAMN_{sm} \times MAPN_m$ .

Where the Supplier Mis-Allocated Amounts for night time periods ( $SMAMN_{sm}$ ) is negative then a payment is due from the Supplier to ESB PES of:  $-1 \times SMAMN_{sm} \times MAPN_m$ .