Introduction

1.1 Scope and Purpose of the Procedure

This BSC Procedure defines the processes that the Non-Half Hourly Data Collector (NHHDC) shall use to carry out the collection and processing of Metered Data for Non-Half Hourly (NHH) SVA Metering Systems.Trading shall be on the basis of SVA Metering Systems with each SVA Metering System being assigned a unique Metering System Identifier (MSID). Settlement of all NHH SVA Metering Systems shall be performed on the basis of profiled Annualised Advances (AAs) (excluding unmetered supplies) and Estimated Annual Consumptions (EACs).

Where there is to be a change in any NHH Supplier Agent (bulk change of agent) such that the number of SVA Metering Systems affected exceeds a threshold set by the BSC Panel, a bulk change of agent application will be submitted for approval in accordance with BSCP513. Following such approval and where the NHHDC is impacted, this BSC Procedure will be used to process the bulk change of agent.
There are two main areas of functionality:

(i) data retrieval and data processing.
The data retrieval process involves retrieving Meter register readings[1] for NHH SVA Metering Systems and passing them on for use in data processing. The data processing involves validating Meter register readings which are used to derive Meter advances.

The NHHDC shall be responsible for collecting the Meter readings, either remotely or locally, of the Import and Export MSID(s) for which it is assigned. The NHHDC shall inform the Licensed Distribution System Operator (LDSO) of the collection rota that it maintains. The NHHDC shall inform the Supplier, Meter Operator Agent (MOA) and LDSO of suspected faults found during the collection.

The NHHDC shall treat Import and Export MSIDs the same except for the re-calculation of Load Factors and the identification of 100kW+ demand processes which apply to Import MSIDs only.

The Effective From Date for a Meter Advance Period shall be set to the date of the first meter reading and the Effective To Date for a meter advance period shall be set to the day before the date of the next meter reading.

~~These~~ Meter advances are used to calculate AAs and EACs and are also stored for audit purposes. For each Meter advance, values are calculated for each Settlement register from the associated Meter

[1] Meter readings is a more generic requirement that includes Maximum Demand Indicators and other reading information that is not covered by the term Meter register reading. Only Meter register readings are required for Settlement purposes. Other readings may be required by Suppliers, LDSOs, NHHDCs and MOAs.

registers. In most cases, the Settlement register shall take the advance of the corresponding Meter register. The exception to this is where single phase Meters are being used to measure a polyphase supply and registers on those Meters have the same register periods; this can be treated as a single SVA Metering System (MS). All registers for concurrent periods shall be summed and treated as a single register for the polyphase supply. Another exception is a Meter which has one or more switched registers which collectively are not active all the time. A Settlement register is required for the periods of time in which the individual switched registers are not active. The value for this register is derived by differencing.

The NHHDC shall be responsible for taking action to correct incorrectly mapped registers on SVA multi-rate Meters.

Each year in February for all non-domestic MSIDs where a Maximum Demand is recorded, the NHHDC shall in accordance with BSC Procedure BSCP516, identify and calculate the annual Load Factor, and the Profile Class applicable to that Load Factor. The NHHDC shall then inform the Supplier of the required Profile Class change where the calculation shows that the Profile Class has changed.

(ii) Cealculation of AAs and EACs.[2]

The NHHDC passes:

a) the MAPs for each SVA MS
b) the active registration details during the MAP and
c) a Meter advance and previous EAC for each Settlement register

to the AA/EAC calculation process. The registration details include MSID, GSP Group, Profile Class, Standard Settlement Configuration (SSC), the effective from and to Settlement dates and also the Time Pattern Regime (TPR) details for each Settlement register.

The Supplier Volume Allocation System (SVAS) provides a Daily Profile Coefficient for each valid combination of GSP Group, Profile Class, SSC and TPR. Two values are then calculated from this data, the AA and EAC.

This BSC Procedure focuses on the interfaces between the NHHDC and other Agencies seen from the perspective of the NHHDC.

This BSC Procedure, in respect of Unmetered Supplies, only covers the obligations of the NHHDC and the Non-Half Hourly Data Aggregator (NHHDA) regarding Unmetered Supplies Operator (UMSO) provided EACs; all other Unmetered Supplies requirements are covered in BSCP520.

[2] The NHHDC system will manage both positive and negative AA/EAC values.

1.1.2 NHHDC BSC requirement specifications

This BSCP has been produced in accordance with the provisions of the Balancing and Settlement Code (the Code). ~~, and i~~In particular the provisions of Annex S-2 'Supplier Volume Allocation Rules' section 4.3 'NHHDC' are considered below including but not necessarily limited to:.

- For each Metering System that the NHHDC is responsible for, the NHHDC will:

4.3 Collect the Metered Data (in accordance with this BSCP);
4.3 Check the Metered Data and provide reports (in accordance with this BSCP);
4.3 Enter the Metered Data in kWh into the relevant data collection system and calculate Meter Advance values for each Settlement Register;
4.3 receive Daily Profile Coefficients from the SVAA;
4.3 Investigate inconsistencies in EAC/AA data as provided by the NHHDA, MOA or Supplier;
4.3 Update standing entries and Meter Technical Details to take account of new information;
4.3 Determine EAC and AA data;
4.3 Provide AA data including their Effective From and To Settlement dates, EAC data including their Effective From Settlement date and Metering system details to the NHHDA;
4.3 Provide validated Metered Data and Metering System Reports to the Supplier and LDSO;
4.3 Calculate a Meter Advance or Deemed Meter Advance values for each Settlement Register, in accordance with Annex S-2 of the BSC and this BSCP).

- For a change of Supplier, the old Supplier and old NHHDC shall provide historical data as required by the BSC Annex S-2 and this BSCP to the new Supplier and new NHHDC.

- For Unmetered Supplies which are not subject to Equivalent Metering, the NHHDC shall set values of EAC to be defined in the relevant UMS (Unmetered Supply), pass such values unadjusted to the NHHDA responsible for such Unmetered Supply, together with the Effective from Settlement Dates of the EAC.

- When advised by a Supplier that a site is Long Term Vacant site, calculate a Metered Advance or Deemed Meter Advance and an EAC for each Settlement Register and thereafter replace the EAC with an EAC of zero value. When a site can no longer be treated as Long Term Vacant, calculate Metered Advance, a Deemed Meter Advance and an EAC for each Settlement Register and use these to replace the zero value EAC for future calculations.

In the event of an inconsistency between the provisions of this BSCP and the Code, the provisions of the Code shall prevail.

1.2 Main Users of Procedure and their Responsibilities

This BSC Procedure should be used by Suppliers and their agent(s) (including MOAs, NHHDAs and NHHDCs), the Supplier Volume Allocation Agent (SVAA), and each LDSO).

The NHHDC shall use systems and processes ~~so~~ approved in accordance with BSCP537 which are ~~to be~~ capable of processing the following:

- Positive and negative Meter advances;
- Positive and negative EACs and AAs;
- Positive and negative Daily profile coefficients.

These systems and processes must comply with all other applicable requirements set out in the Code, the Supplier Volume Allocation Rules, the Party Service Line (PSL) and its appendices and the relevant BSC Procedures.

The NHHDC shall provide data for any adjustments toVolume Allocation Runs required in accordance with BSCP11

1.2.1 Non Half Hourly Data Collector Responsibilities

The appointment of a NHHDC in SMRS by ~~the~~ Associated Supplier to a SVA MS is effective from a specified calendar day. From that calendar day onwards the NHHDC is responsible for all Settlement Days (SDs) within the period of its Associated Supplier's registration, until superseded by a new NHHDC, providing there is no Change of Measurement Class (CoMC) from Non-Half Hourly (NHH) to Half Hourly (HH) metering or vice versa. If there is a CoMC, there will be no transfer in responsibility or historic data from the old NHHDC to the new HHDC or vice versa.

The NHHDC shall record all meter readings collected or received for each SVA Metering System (relating to Import consumption and/or Export generation) for which it is responsible. Such meter readings may be:-

a. Collected as a regular schedule read;
b. Collected when a meter reading is obtained outside the collection schedule agreed by its Associated Supplier;

c. Collected by an outgoing Non Half Hourly Data Collector and passed to the incoming Non Half Hourly Data Collector as the change of Supplier meter reading;

d. Received when Customer own meter readings are provided by its Associated Supplier or Customer;

e. Received when prepayment meter readings are provided by its Associated Supplier;

f. Deemed readings established on appropriate occasions;

g. Received when initial or final readings are provided by the Associated Meter Operator Agent or related LDSO;

h. Received when final readings are provided by the incoming NHHDC on a change of Supplier; and

i. Received when estimates of a change of Supplier read generated by the old Supplier are provided by its Associated Supplier.

The NHHDC shall ensure that, for each SVA Metering System for which it is responsible, the metering data for Settlement and for use by the LDSO is retrieved from the SVA Metering System, and is validated, processed and transmitted to its Associated NHHDA and the relevant LDSO, in each case using systems and processes so approved in accordance with BSCP537 and in time for the related Final Reconciliation Volume Allocation Run.

These systems and processes must comply with all other applicable requirements set out in the Code, the Supplier Volume Allocation Rules, the PSL and the BSC Procedures.

1.2.2 Service Availability

The NHHDC shall ensure that all the services described in this BSC Procedure are performed in accordance with Good Industry Practice and, in particular but without limitation, both in such a manner and within such time period as will allow its Associated Supplier to fulfil its obligations as a Supplier under the Code in accordance with the SVAA Calendar.

1.2.3 Technical Architecture

The software, proposed hardware and interfaces of the NHHDC's system must be compatible with the 1998 Technical Architecture policy.

1.2.4 On expiry or termination of NHHDC's appointment.

On expiry or termination of the NHHDC's appointment, and upon request, the old NHHDC shall transfer sufficient data and other information to the new NHHDC to carry out its functions. The requirements for this are set out in Appendix 4.8 - Historical Data Requirements.

Following de-appointment by the Associated Supplier, the old NHHDC shall retain the responsibility for instruction files sent to the Associated NHHDA until all outstanding instructions have been processed correctly. Additionally the old NHHDCs obligations under PSL100 Section 10.2 -10.3 shall survive.

On expiry of or termination of the NHHDC's appointment as a result of a Half Hourly Data Collector (HHDC) being appointed, the NHHDC shall not transfer historical data to the new HHDC.

1.2.5 Access Control and Data Security

Controls shall exist to ensure that the data held by the NHHDC remains confidential. This means that access to the data should only be permitted for people whose job responsibilities include the operation or support of NHH data collection. The NHHDC will record all the information it collects or receives.

The NHHDC may only adjust Meter register readings considered to be in error, in the circumstances set out in Appendix 4.6 - Manual Adjustment of Meter Reading(s).

Where the same Metering Equipment (ME) is being utilised for the measurement of the Import Active Energy for more than one MSID at a site, the Supplier(s) shall ensure that the same MOA is appointed for all of the MSIDs involved to comply with the requirements of the Code. Similarly, where a common Outstation is being utilised for the Import Active Energy for more than MSID, the Supplier(s) shall ensure that the same NHHDC is appointed for all of MSIDs involved. These obligations shall be fulfilled by mutual agreement between the Suppliers involved.

1.2.6 Estimated Annual Consumption/Annualised Advance controls

1) The process of loading Daily Profile Coefficients must ensure that initial sets of Daily Profile Coefficients are loaded in date sequence and without gaps. Revised sets of Daily Profile Coefficients will not be subject to this control as they are only produced in the event of an error in the initial set.

2) The system operated by the Non Half Hourly Data Collector must be capable of checking the record count and sum values provided on the input files from the Supplier Volume Allocation Agent to ensure that data has been received correctly and accurately.

3) The system operated by the Non Half Hourly Data Collector must not allow Daily Profile Coefficients to be modified, other than by the Receive Daily Profiles process.

4) An enquiry screen will be provided to allow the Non Half Hourly Data Collector to check the latest Settlement Date for which Daily Profile Coefficients have been loaded.

5) The Estimated Annual Consumption/Annualised Advance calculation processes must ensure that the number of Estimated Annual Consumptions/Annualised Advances or Deemed meter advances calculated in a given run is equal to the number of requests received less the number of requests rejected owing to errors.

6) A count of the Annualised Advances calculated using each set of Daily Profile Coefficients must be maintained. Whenever a set of Daily Profile Coefficients is loaded, the system must report the number of Annualised Advances calculated using the previous set of Daily Profile Coefficients for the same Settlement Date. This will allow the Non Half Hourly Data Collector to check that the correct number of meter advances are re-submitted.

7) The system must provide record count and check sum values on output files to the Non Half Hourly Data Aggregator, to allow the Non Half Hourly Data Aggregator to check that data has been received correctly and accurately.

1.3 No changes

1.4 No changes

1.5 No changes

1.6 No changes

1.6.1 No changes

1.6.2 Definitions

Full definitions of the above acronyms are, where appropriate, included in the Balancing and Settlement Code.

Deemed Meter Reading	A Meter reading calculated by adding or subtracting a Deemed Meter Advance from a Meter register reading.
Supplier Agreed Reading	A Meter reading which is agreed between the new Supplier and the old Supplier in accordance with Annex S-2 4.2.1(c)(i) of the Code, and in the specific circumstances when a CoS (Change of Supplier) Reading has not been obtained at least 30WD after the CoS but no more than 12 months after the CoS (i.e. not a disputed read or an old Supplier Estimated read).
Point of Sale Reading	A Meter reading obtained by the new Supplier during the period between the customer entering into the contract and the start of the CoS meter reading window.
Last Valid EAC	defined in section 4.5
Crystallised Period	defined in section 4.14
Error Freezing Reading	defined in section 4.14
Fluid Period	defined in section 4.14
Realistic Reading	defined in section 4.14
RF Window	defined in section 4.14

2. No changes

3.1 MARKET DATA ACTIVITIES.

3.1.1 SVAA Data.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.1.1.1	If required.	Request MDD.	NHHDC.	SVAA.	NHHDC Id.	Electronic or other method, as agreed.
3.1.1.2	When published by SVAA or within 1WD of request from NHHDC.	Send MDD.	SVAA.	NHHDC.	D0227 BSCCo Market Domain Data File. D0269 Market Domain Data Complete Set. D0270 Market Domain Data Incremental Set. P0190 GSP Group Profile Class Tolerances.	Electronic or other method, as agreed. Manual Process.
3.1.1.3	Within 4 working hours of receipt of MDD.	Send acknowledgement that data has been received.	NHHDC.	SVAA.	P0024 Acknowledgement.	Electronic or other method, as agreed.
3.1.1.4	As and when needed	Record and use MDD as is considered appropriate by the Panel (having regard to the NHHDC's functions) and in particular, use only MDD for those items in relation to which there is a Market Domain Data entry.	NHHDC.			Internal Process.
3.1.1.~~4~~5	If file not readable and / or incomplete.	Send notification and await receipt of MDD.	NHHDC.	SVAA.	P0035 Invalid Data.	Electronic or other method, as agreed.
3.1.1.~~5~~6	After receiving notification.	Send corrected MDD. Return to 3.1.1.2.	SVAA.	NHHDC.	Refer to 3.1.1.2 for data flows.	Electronic or other method, as agreed.
3.1.1.~~7~~6	As soon as possible after data in correct format.	Update database.	NHHDC.			Internal Process.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.1.1.8	On receipt of new Market Domain Data.	Ensure that all MDD affecting the accuracy of Settlement which is manually entered by the NHHDC is validated against the source data supplied by the SVAA, before the data is recorded and used.	NHHDC			
3.11.9	In the event of a dispute.	In the event of any dispute as to whether an item of Market Domain Data is appropriate or, as the case may be, affects the accuracy of Settlement, the decision of the Panel shall be conclusive.				

3.1.2 Process Daily Profile Coefficients received from SVAA.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.1.2.1	On demand when appointed to SVA MS.	Request and record relevant Daily Profile Coefficients in accordance with BSCP508.	NHHDC.	SVAA.	P0040 Request Daily Profile Coefficient Data.	Electronic Interface.
3.1.2.2	a) After Profile Production Run - by 5:00pm on SD+1 or b) Re-submit or withdraw profiles already sent or c) Upon request from NHHDC via 3.1.2.1.	Send accepted Daily Profile Coefficients, for the Settlement Day(s)[3] for one or more GSP Group(s). The data flows produced and sent will contain data which is a number of days in arrears of the Settlement Day to which they relate.	SVAA.	NHHDC. Supplier.	D0029 Standard Settlement Configuration Report. D0018 Daily Profile Data Report. D0029 Standard Settlement Configuration Report. P0043 Teleswitch Report.	Electronic Interface.
3.1.2.3	If required.	Request Standing Profile Data Report	NHHDC, Supplier	SVAA		Manual Process.
3.1.2.4	Following 3.1.2.4	Send Standing Profile Data Report by manual method.	SVAA	NHHDC, Supplier	D0028 Standing Profile Data Report	Manual Process

[3] Normally a single file (type 1 file) will be loaded for each Settlement Day, which will invalidate any previous data for that Settlement Date. However, the AA/EAC system will also support the loading of files for up to 2 years (type 2 file), in order to allow for the NHHDC being appointed to a SVA MS in another GSP Group, which will not invalidate any previous data.

3.2 REGISTRATION ACTIVITIES.

3.2.1 Supplier requests New Connection - Metered Supply.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.1.1	On appointment of a new NHHDC	Send notification of appointment and associated Agent details to the NHHDC.	Supplier[4].	NHHDC.	D0148 Notification of Change to Other Parties. D0155 Notification of New Meter Operator or Data Collector Appointment and Terms. D0302 Notification of Customer Details	Electronic or other method, as agreed.
3.2.1.2	On appointment of a new NHHDC	Validate details of each SVA Metering System against MDD supplied by the SVAA.	NHHDC			Internal Process.
3.2.1.32	Within 10WD of completion of Meter installation.	Send NHH Metered Data, including MTD, energisation status and initial Meter register reading, where obtained.	MOA.[5]	NHHDC. NHHDC, Supplier, LDSO.	D0010 Meter Readings. D0149 Notification of Mapping Details. D0150 Non Half Hourly Meter Technical Details.	Electronic or other method, as agreed.
3.2.1.43	Within 5 WD of receipt of D0150 from the MOA	Send SVA Metering System details, including initial (class average) EAC to the NHHDC.	Supplier	NHHDC	D0052 Affirmation of Metering System Settlement Details. D0205 Update Registration Details See Appendix 4.12 – Usage and Validation of Affirmation of Metering System Settlement Details (D0052) Flow.	Electronic or other method, as agreed.

[4] The Supplier will state the class and type of SVA MS required and the data collection period for each SVA MS. The NHHDC shall immediately notify the Supplier if these details are not sufficient to collect metering data.

[5] Whenever installing new, replacement and re-configured NHH meters or carrying out work requiring the re-registration of the metering system, the MOA shall ensure that the meter registers are clearly identified and that the Meter Register ID (J0010) used in all relevant DTN data flows (e.g. D0149 and D0150) clearly identifies the registers on the metering asset read. See PSL110 sections 1.4.2 and 1.5.1 for details.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.1.~~5~~4	On receipt of D0052 and D0150	Validate D0052. Check for discrepancies between the Metering System Settlement Details provided by the Supplier and the Meter Technical Details provided by the MOA.	NHHDC		See Appendix 4.12 – Usage and Validation of Affirmation of Metering System Settlement Details (D0052) Flow	Internal
3.2.1.~~6~~5	If D0052 invalid	Send notification of invalid Metering System Settlement details to Supplier	NHHDC	Supplier	D0310 Notification of Failure to Load or Receive Metering System Settlement Details[6]	Electronic or other method, as agreed.
3.2.1.~~7~~6	On receipt of D0310	Supplier should resolve the problem by re-sending or revising the D0052 as required or by instructing the MOA to re-send the D0150.	Supplier	NHHDC	D0052 Affirmation of Metering System Settlement Details. D0205 Update Registration Details As required	Electronic or other method, as agreed.
3.2.1.~~8~~7	On receipt of valid D0052	Send the initial (class average) EAC for each Settlement register of the SVA MS to the NHHDA. Process EAC/AA data in accordance with section 3.5.	NHHDC.	NHHDA.	D0019 Metering System EAC/AA Data.	Electronic or other method, as agreed.
3.2.1.~~9~~8		Process and validate Meter register reading.	NHHDC.		Appendix 4.2 - Validate Meter Data, Appendix 4.6 – Manual Adjustment of Meter Reading(s).	Internal Process.
3.2.1.10~~9~~	If invalid Meter register reading.	Produce and send Invalid Data Report.	NHHDC.	Supplier, LDSO.	D0010 Meter Readings.	Electronic or other method, as agreed.
3.2.1.~~10~~11	If valid Meter register reading.	Produce and send Valid Data Report.	NHHDC.	Supplier, LDSO.	D0010 Meter Readings.	Electronic or other method, as agreed.

[6] Manual rejection solutions agreed by both the Supplier and NHHDC may be used in place of the D0310 flow

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.1.~~11~~12	If required and no valid Meter register reading received within 10WD of the installation of the Meter	Request initial Meter register reading	NHHDC	MOA, Supplier		Post / Fax / Email
3.2.1.~~1~~132	Within 10WD of 3.2.1.11	Send initial Meter register reading	MOA, Supplier	NHHDC[7]	D0010 Meter Readings	Electronic or other method, as agreed
3.2.1.~~1~~143	If required and at least 10WD after 3.2.1.11 and by 10WD before the Final Reconciliation Run for the relevant Settlement Date, if no valid initial Meter register reading has been received	Deem initial Meter reading in accordance with Appendix 4.5 and calculate associated EAC / AA(s)	NHHDC		Appendix 4.5 – Deemed Meter Advance Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Internal Process
3.2.1.~~14~~15	Following 3.2.1.13	Send Deemed Meter Reading	NHHDC	Supplier, LDSO	D0010 Meter Readings	Electronic or other method as agreed

3.2.2 – No changes

[7] If more that one Meter register reading is provided, the NHHDC shall process and use the first reading provided.

3.2.3 Change of NHHDC for an existing SVA Metering System not concurrent with a Change of Supplier[8].

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.3.1	By 12WD prior to effective date of DC appointment.	Send notification of appointment.	Supplier.	New NHHDC.	D0155 Notification of New Meter Operator or Data Collector Appointment and Terms.	Electronic or other method, as agreed.
3.2.3.2	By 7WD prior to effective date of DC appointment.	Send confirmation of appointment acceptance.	New NHHDC.	Supplier.	D0011 Agreement of Contractual Terms.	Electronic or other method, as agreed.
3.2.3.3	By 5WD prior to effective date of DC appointment.	Send associated Agent details.	Supplier[9].	New NHHDC, MOA	D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details	Electronic or other method, as agreed.
3.2.3.4	By 3WD prior to effective date of DC appointment.	Send notification of de-appointment.	Supplier.	Old NHHDC[10].	D0151 Termination of Appointment or Contract by Supplier.	Electronic or other method, as agreed.
3.2.3.5	Between –7WD and the de-appointment date.	Send request to provide Meter register reading and associated AA/EAC history to new NHHDC.	Supplier.	Old NHHDC.	D0170 Request Metering System Related Details.	Electronic or other method, as agreed.

[8] Where a bulk change of agent is being initiated, BSCP513 must have been completed prior to triggering this process.
[9] The Supplier will inform the MOA that the NHHDC has been appointed, via D0148 Notification of Change to Other Parties, and this notification will take place prior to step 3.2.3.4.
[10] The old NHHDC will retain responsibility for the MSID until all instructions generated have been accepted and applied by the NHHDA.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.3.6	Within 5WD of de-appointment[11].	Send Meter register reading and associated AA/EAC history[12]. In addition, if an actual or customer Meter register reading(s) is obtained by 8WDs (i.e. profile coefficients have been received) before the appointment date change, then this reading(s) will be validated and processed prior to it being sent to the new NHHDC. If an actual or customer Meter register reading(s) is obtained but less than 8WDs before the appointment date change, then this reading(s) will, wherever possible, be validated and sent to the new NHHDC.	Old NHHDC.	New NHHDC.	Appendix 4.8 – Historical Data Requirements. D0010 Meter Readings. D0152 Metering System EAC/AA Historical Data.	Electronic or other method, as agreed.
3.2.3.7	Within 1WD of 3.2.3.6.	If Meter register reading and associated AA/EAC history not received as expected, request this data.	New NHHDC.	Supplier[13] or old NHHDC.	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
3.2.3.8	Within 1WD of 3.2.3.7.	Send Meter register reading and associated AA/EAC history.	Old NHHDC or Supplier[14].	New NHHDC.	Appendix 4.8 – Historical Data Requirements. D0010 Meter Readings. D0152 Metering System EAC/AA Historical Data.	Electronic or other method, as agreed.

[11] The old NHHDC will send the meter register reading and associated EAC/AA history on request via a D0170, irrespective of whether a 'Termination of Appointment or Contract by Supplier' (D0151) flow has been received from the Supplier. Where no D0151 flow has been received, the de-appointment date can be derived from the 'Date Action Required By' (J0028) data item on the D0170 flow.

[12] If the old NHHDC receives Meter register reading(s) from the MOA after history has been passed to the new NHHDC, then the old NHHDC will manually inform the MOA that the Meter register reading(s) will need to be sent by the MOA to the new NHHDC.

[13] The Supplier will provide this data either directly or via the old NHHDC.

[14] The Supplier will provide this data either directly or via the old NHHDC. The Old NHHDC will provide this data when requested by the new NHHDC and is not dependent on receipt of notification of de-appointment

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.3.9	If further meter readings are received by the old NHHDC after historical information has been transferred to the new NHHDC	Inform the Associated MOA that the meter readings should be sent to the new NHHDC	Old NHHDC	Associated MOA		Electronic or other method, as agreed.
3.2.3.10~~9~~	If required	Request SVA MS data	NHHDC	Supplier	D0170 Request for Metering System Related Details	Electronic or other method, as agreed
3.2.3.11~~0~~	Only following 3.2.3.9 or if concurrent change of MS Settlement Details	The Supplier will provide this data to the new NHHDC via the D0052 Affirmation of SVA MS Settlement Details.	Supplier	New NHHDC	D0052 Affirmation of Metering Settlement Details D0205 Update Registration Details See also Appendix 4.12 - Usage and Validation of Affirmation of Metering System Settlement Details (D0052) flow.	Electronic or other method, as agreed
3.2.3.12~~1~~	Following request from Supplier and within 10WD of effective date of DC appointment.	Send current MTD. Send details of any current faults.	MOA.	New NHHDC.	D0149 Notification of Mapping Details. D0150 Non Half Hourly Meter Technical Details. D0002 Fault Resolution Report or Request for Decision on Further Action	Electronic or other method, as agreed.
3.2.3.13~~2~~	Within 1WD of 3.2.3.9.	If MTD not received as expected, request this data.	New NHHDC.	MOA.	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
3.2.3.14~~3~~	Within 1WD of 3.2.3.10 request from new NHHDC.	Send current MTD.	MOA.	New NHHDC.	D0149 Notification of Mapping Details. D0150 Non Half Hourly Meter Technical Details.	Electronic or other method, as agreed.
3.2.3.15~~4~~	As soon as practical.	Confirm inclusion of SVA MS in Meter register reading schedule.	New NHHDC.	Supplier, LDSO.	D0012 Confirmation of the Inclusion of the Metering Point in the Reading Schedules.	Electronic or other method, as agreed.

3.2.4 – No changes

3.2.5 – No changes

3.2.2 Change of Supplier for an existing SVA Metering System.[15]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.1	By SSD.	Send appointment details to the new NHHDC, including the details of the old Supplier's Agents.	New Supplier.	New NHHDC.	D0148 Notification of Change to Other Parties. D0155 Notification of New Meter Operator or Data Collector Appointment and Terms.	Electronic or other method, as agreed.
3.2.6.2	By SSD	The new NHHDC will confirm appointment with the new Supplier. If the new NHHDC is the same as the old NHHDC, then proceed to 3.2.6.8.	New NHHDC.	New Supplier.	D0011 Agreement of Contractual Terms.	Electronic or other method, as agreed.
3.2.6.3	If concurrent change of MS Settlement Details	The Supplier will provide this data to the NHHDC .	New Supplier	New NHHDC	D0052 Affirmation of Metering Settlement Details D0205 Update Registration Details - See also Appendix 4.12 - Usage and Validation of Affirmation of Metering System Settlement Details (D0052) flow.	Electronic or other method, as agreed

[15] Refer to Appendix 4.4 - – Change of Supplier Activities.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.4	If applicable, once registration notification received.	Send request to old NHHDC to send Meter register reading and associated EAC.	New NHHDC.	Old NHHDC.	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.
3.2.6.5	If applicable, prior to SSD+8[16].	Send Meter register reading and associated EAC. In addition, if the old NHHDC obtains an actual or a customer Meter register reading before the SSD, then ensure this reading(s) will be validated and processed prior to it being sent to the new NHHDC. Send the revised Meter register reading history to the new NHHDC. [17]	Old NHHDC.	New NHHDC.	Appendix 4.8 – Historical Data Requirements. D0010 Meter Readings. D0152 Metering System EAC/AA Historical Data.	Electronic or other method, as agreed.
3.2.6.6	Once appointed to SVA MS by new Supplier.	Send the MTD to the new NHHDC.	MOA.	New NHHDC.	D0149 Notification of Mapping Details. D0150 Non Half Hourly Meter Technical Details.	Electronic or other method, as agreed.

[16] The old NHHDC will send the meter register reading and associated EAC/AA history on request via a D0170, irrespective of whether a 'Termination of Appointment or Contract by Supplier' (D0151) flow has been received from the Supplier. Where no D0151 flow has been received, the Supply Start Date can be derived from the 'Date Action Required By' (J0028) data item on the D0170 flow.

[17] The old NHHDC should always send the latest valid set of Meter readings, together with the EAC value(s) calculated from those Meter reading(s).

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.7	In time to achieve a read within SSD-5 and SSD+5.	Where desired by both Suppliers, for the purposes of correcting an erroneous registration, both Suppliers shall agree a Meter register reading equivalent to a 1kWh advance, since the erroneous registration, and provide the Meter register reading via 3.2.6.8 below.	New Supplier / Old Supplier.	Old Supplier / New Supplier.		Manual Process.
3.2.6.8	In time to achieve a read within SSD-5 and SSD+5.	Where actual Meter register reading required: Send request to obtain an actual Meter register reading. The new NHHDC will obtain a Meter register reading where instructed by the new Supplier[18]. Otherwise: Provide the customer Meter register reading (which may include a PoS reading or an old Supplier Estimated reading)[19]. The MOA may send a Meter register reading to the new NHHDC.	New Supplier. New NHHDC. New Supplier. MOA.	New NHHDC. New NHHDC. New NHHDC.	D0072 Instruction to Obtain Change of Supplier Reading. D0071 Customer Own Reading or Supplier Estimate Reading on Change of Supplier. D0010 Meter Readings.	Electronic or other method, as agreed. Internal Process. Electronic or other method, as agreed.
3.2.6.9	By SSD+8 and once profile coefficients received.	Select the CoS reading. Process and validate the Meter register reading, using the historic data provided by old NHHDC, where applicable (from 3.2.6.5) and the MTD provided by the MOA (from 3.2.6.6).	New NHHDC.		Appendix 4.2 - Validate Meter Data, Appendix 4.4 -Change of Supplier Activities,, Appendix 4.6 – Manual Adjustment of Meter Reading(s).	Internal Process.

[18] The CoS reading is assumed to be correct by the Old Supplier, until the Old Supplier disputes the CoS reading.

[19] An old Supplier Estimated reading may not be provided by the new Supplier to the new NHHDC earlier than SSD+5.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.10	If invalid Meter register reading obtained within SSD-5 and SSD+5 window.	Produce and send an Invalid Data Report[20].	New NHHDC.	New Supplier, LDSO, Old NHHDC, if applicable.	D0086 Notification of Change of Supplier Readings[21].	Electronic or other method, as agreed.
3.2.6.11	Where the Supplier ceases to be responsible at the same time as the NHHDC is also ceasing to trade.	Prepare and maintain plans that will enable the Panel to fulfil the obligations of the Supplier under the Code.	Old NHHDC	Panel	Plans should detail how the NHHDC will upon termination or expiry; make arrangements for the immediate transfer of data and other information to the Panel.	Electronic or other method, as agreed.
3.2.6.12 ~~1~~	On receipt of Invalid Data Report.	Send a request to the new NHHDC to provide a Meter register reading to replace the invalid one already received. The new NHHDC will collect a Meter register reading, based on the request from the new Supplier. Return to 3.2.6.9.	New Supplier. New NHHDC.	New NHHDC.	D0072 Instruction to Obtain Change of Supplier Reading.	Electronic or other method, as agreed. Internal Process.
3.2.6.13 ~~2~~	If valid Meter register reading obtained within SSD-5 and SSD+5 window. For prepayment Metering Systems refer to Appendix 4.11 - Prepayment Meters	Produce and send Valid Data Report.	New NHHDC.	New Supplier, LDSO. Old NHHDC, if applicable.	D0010 Meter Readings[22]. D0086 Notification of Change of Supplier Readings[23]. D0086 Notification of Change of Supplier Readings. Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Electronic or other method, as agreed.

[20] If there are other non-CoS readings dated after the new NHHDC appointment, which have been validated and are invalid, the new NHHDC will send the invalid Meter register reading(s) via the D0010 Meter Readings data flow. The "Reading Type" will not be flagged as "A – Actual Change of Supplier Read".

[21] This data flow is used for both valid and invalid readings produced from the Change of Supplier process.

[22] This includes all Meter register readings successfully validated during the CoS process, including the CoS reading (with the CoS "Reading Date & Time" set to the actual date of the CoS reading as opposed to SSD).

[23] This data flow only includes the CoS reading. The "Reading Date & Time" will be set to Effective from Settlement Date {REGI}.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.14 ~~3~~	a) If valid Meter register reading obtained outside SSD-5 and SSD+5 window but before SSD+8 and no valid Old Supplier Estimated reading was received between SSD+5 and SSD+8; or b) If no valid Meter register reading obtained by SSD+8 and no valid Old Supplier Estimated reading was received between SSD+5 and SSD+8.	Calculate a Deemed Meter Reading for the SSD using: • the MTD provided by the MOA (via 3.2.6.5), • the PoS reading if appropriate (refer to Appendix 4.4.3) and • if a coincident Change of Supplier and Change of Data Collector, the historical data provided by the old NHHDC (via 3.2.6.4)[24]. Send this Deemed Meter change of Supplier reading.	New NHHDC. New NHHDC.	New Supplier, LDSO, Old NHHDC, if applicable.	Appendix 4.5 – Deemed Meter Advance. D0086 Notification of Change of Supplier Readings. Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Internal Process. Electronic or other method, as agreed.
3.2.6.15 ~~4~~	Following 3.2.6.13	Send this Deemed change of Supplier reading	Old NHHDC	Old Supplier	D0086 Notification of Change of Supplier Readings	Electronic or other method, as agreed

[24] Where a deemed reading is to be generated for a coincident Change of Supplier and Change of Data Collector, this deemed reading must be calculated using the historical data provided from the old NHHDC provided this is available and / or the PoS reading.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.~~15~~ 16	If no Meter reading history provided by the old NHHDC by SSD+8 or Meter reading history received but NHHDC not able to load it after making reasonable endeavours to do so.	Request Meter reading history	New NHHDC	Old NHHDC		Post / Fax / Email or other method as agreed.
3.2.6.17 ~~6~~	Within 10WD of 3.2.6.15	Send Meter reading history	Old NHHDC	New NHHDC	D0010 Meter Readings D0152 Metering System EAC/AA Historical Data	Electronic or other method, as agreed
3.2.6.18 ~~7~~	If 3.2.6.16 has not taken place and at least 10WD after 3.2.6.15	New NHHDC may request Metering System Related Details	New NHHDC	New Supplier	D0170 Request for Metering System Related Details[25]	Electronic or other method, as agreed.
3.2.6.19 ~~8~~	Within 5WD of 3.2.6.17.	Send the EAC Details and Last Actual or Customer Register Reading (if available)[26]	New Supplier[27]	New NHHDC	D0311 Notification of Old Supplier Information (NOSI) Flow	Electronic or other method, as agreed.
3.2.6.20 ~~19~~	When Meter reading history is provided, if a CoS reading is available	Select the CoS reading. Process and validate the Meter register reading, using the historic data provided by old NHHDC or the new Supplier and the MTD provided by the MOA (from 3.2.6.6). Calculate associated EAC / AA(s)	New NHHDC		Appendix 4.2 - Validate Meter Data, Appendix 4.4 -Change of Supplier Activities, Appendix 4.6 – Manual Adjustment of Meter Reading(s). Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Internal Process

[25] The NHHDC should clearly indicate in the D0170 that a D0311 is expected in return.
[26] The NOSI flow may contain the Old Supplier's Last EAC Details and / or the Last Actual or Customer Register reading. If the NOSI flow contains an Old Supplier's Estimated CoS Reading this must not be used by the new NHHDC.
[27] For domestic premises only, the new Supplier will forward the NOSI flow received from the old Supplier, which may or may not contain the EAC Details and Last Actual or Customer Register Reading. If the old Supplier failed to provide a NOSI flow, the new Supplier should indicate this by sending an 'empty' NOSI flow.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.~~20~~21	If invalid Meter register reading obtained within SSD-5 and SSD+5 window.	Produce and send an Invalid Data Report[28].	New NHHDC.	New Supplier, LDSO, Old NHHDC, if applicable.	D0086 Notification of Change of Supplier Readings[29].	Electronic or other method, as agreed.
3.2.6.2~~1~~	If valid Meter register reading obtained within SSD-5 and SSD+5 window. For prepayment Metering Systems refer to Appendix 4.11 - Prepayment Meters	Produce and send Valid Data Report.	New NHHDC.	New Supplier, LDSO. Old NHHDC, if applicable.	D0010 Meter Readings[30]. D0086 Notification of Change of Supplier Readings[31]. D0086 Notification of Change of Supplier Readings. Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Electronic or other method, as agreed.
3.2.6.2~~2~~3	When Meter reading history is provided, if a CoS reading is not available	Deem Meter reading in accordance with Appendix 4.5 and calculate associated EAC / AA(s)	New NHHDC		Appendix 4.5 – Deemed Meter Advance, Appendix 4.6 - Manual Adjustment of Meter Reading(s) Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Internal Process
3.2.6.2~~3~~4	Following 3.2.6.22	Send resulting change of Supplier Meter Reading	New NHHDC	New Supplier, LDSO	D0086 Notification of Change of Supplier Readings.	Electronic or other method as agreed

[28] If there are other non-CoS readings dated after the new NHHDC appointment, which have been validated and are invalid, the new NHHDC will send the invalid Meter register reading(s) via the D0010 Meter Readings data flow. The "Reading Type" will not be flagged as "A – Actual Change of Supplier Read".

[29] This data flow is used for both valid and invalid readings produced from the Change of Supplier process.

[30] This includes all Meter register readings successfully validated during the CoS process, including the CoS reading (with the CoS "Reading Date & Time" set to the actual date of the CoS reading as opposed to SSD).

[31] This data flow only includes the CoS reading. The "Reading Date & Time" will be set to SSD.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.25 ~~4~~	If appropriate and at least 30WD after the CoS but no more than 12 months after CoS.	Send SAR.[33]	New Supplier	New NHHDC	D0300 Disputed Readings or Missing Readings on Change of Supplier	Electronic or other method, as agreed.
3.2.6.26 ~~5~~	Following 3.2.6.24 and when Meter reading history and MTDs are available.	Validate SAR.	New NHHDC		Appendix 4.2 - Validate Meter Data, Appendix 4.4 -Change of Supplier Activities.	Internal Process
3.2.6.27 ~~6~~	Following 3.2.6.25 and if SAR is valid.	Send validated SAR.	New NHHDC	New Supplier, LDSO, old NHHDC if applicable.	D0086 Notification of Change of Supplier Readings.	Electronic or other method, as agreed.
3.2.6.28 ~~7~~	Following 3.2.6.26	Send validated SAR.	Old NHHDC	Old Supplier	D0086 Notification of Change of Supplier Readings.	Electronic or other method, as agreed.
3.2.6.29 ~~8~~	Following 3.2.6.25 and if SAR is invalid.	Inform of invalid SAR. Go back to step 3.2.6.13, if appropriate.	New NHHDC	New Supplier	D0300 Disputed Readings or Missing Readings on Change of Supplier	Electronic or other method, as agreed.
3.2.6.30 ~~29~~	At least 20WD after 3.2.6.15 and no more than 12 months after 3.2.6.15, if no Meter reading history or reading have been received and if no valid reading obtained in 3.2.6.24-.3.2.6.28	Obtain Meter register reading, deem initial Meter reading in accordance with Appendix 4.5 and calculate associated EAC / AA(s)	New NHHDC		Appendix 4.5 – Deemed Meter Advance Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Internal Process

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.31~~0~~	Once Deemed Meter Reading has been calculated and in sufficient time to enable the reading to be included in the Initial Settlement Run relating to the last Settlement Day for which the old Supplier is responsible.	Send this change of Supplier Deemed Meter Reading.	New NHHDC.	New Supplier, LDSO, Old NHHDC, if applicable.	D0086 Notification of Change of Supplier Readings. Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Electronic or other method as agreed
3.2.6.32~~1~~	Following 3.2.6.31~~0~~	Send change of Supplier Deemed Meter Reading	Old NHHDC	Old Supplier	D0086 Notification of Change of Supplier Readings	Electronic or other method as agreed.
3.2.6.33	Where old Supplier disputes a change in Supplier meter reading.	Obtain an actual Meter reading from site and use this to calculate a new Deemed read for the relevant Supplier start date in time for inclusion in the Final Reconciliation Volume Allocation Run.[37]	New NHHDC	New Supplier Old Supplier Old NHHDC	D0086 Notification of Change of Supplier Readings	Electronic or other method as agreed.

[37] Both the incoming and outgoing NHHDC shall process this read in time for the Final Reconciliation Volume Allocation Run for the Supplier Start date or the Settlement Day before Supplier Start Date respectively

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.34 ~~2~~	No later than 12 months after SSD, if the new Supplier wants to dispute the CoS reading prior to the Final Volume Allocation Run[32].	Disagree reading and: a) Provide an actual or customer Meter register reading. b) Agree this Meter register reading with the old Supplier[33]. c) Send the agreed Meter register reading to the new NHHDC. Refer to 3.2.6.35.	New Supplier. New Supplier. New Supplier.	Old Supplier[33]. Old Supplier. New NHHDC.	D0300 Disputed Readings or Missing Readings on Change of Supplier[33]. D0300 Disputed Readings or Missing Readings on Change of Supplier. D0300 Disputed Readings or Missing Readings on Change of Supplier.	Manual Process.
3.2.6.35 ~~3~~	No later than 12 months after SSD if the old Supplier wants to dispute the CoS reading prior to the Final Volume Allocation Run[32].	Disagree reading and: a) Send a request to the new Supplier to provide an actual Meter register reading or; (If option (a) selected, refer to 3.2.6.35.) b) Provide an actual or customer Meter register reading or c) Agree an alternative Meter register reading, to be used as the CoS reading, with the new Supplier[33]. d) Send the agreed Meter register reading to the new NHHDC. (If option b) or c) and d) selected, refer to 3.2.6.32.)	Old Supplier. Old Supplier. Old Supplier. New Supplier.	New Supplier. New Supplier[33]. New Supplier. New NHHDC.	D0300 Disputed Readings or Missing Readings on Change of Supplier. D0300Disputed Readings or Missing Readings on Change of Supplier[33]. D0300 Disputed Readings or Missing Readings on Change of Supplier D0300 Disputed Readings or Missing Readings on Change of Supplier	Manual Process.
3.2.6.36 ~~4~~	On receipt of request from old Supplier.	Send request to new NHHDC to obtain a Meter register reading.	New Supplier.	New NHHDC.	D0072 Instruction to Obtain Change of Supplier Reading.	Electronic or other method, as agreed.

[32] The Supplier may choose to raise a dispute where, in the Supplier's view, there is difference of more than 250kWh from the original CoS reading.
[33] Refer to MRA Agreed Procedure 08 'The Procedure for Agreement of Change of Supplier Readings and Resolution of Disputed Change of Supplier Readings'

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.2.6.37 ~~5~~	When Meter register reading has been agreed between Suppliers and is outside previous timescales but in time for the Final Volume Allocation Run.	Process and validate Meter register reading.	New NHHDC.		Appendix 4.2 - Validate Meter Data, Appendix 4.4 - Change of Supplier Activities; Appendix 4.6 – Manual Adjustment of Meter Reading(s).	Internal Process.
		a) If valid, produce and send a Valid Data Report. Calculate a deemed Meter register reading [34] [35] for the CoS date and send.	New NHHDC.		Appendix 4.5 – Deemed Meter Advance Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier [36].	Internal Process.
			New NHHDC.	New Supplier, LDSO, Old NHHDC[37], if applicable.	D0086 Notification of Change of Supplier Readings. Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier	Electronic or other method, as agreed.
		b) If invalid, produce and send an Invalid Data Report. Return to 3.2.6.26 or 3.2.6.27.	New NHHDC.	New Supplier, LDSO, Old NHHDC, if applicable.	D0086 Notification of Change of Supplier Readings [38].	
3.2.6.38 ~~6~~	Following 3.2.6.35	Send change of Supplier Deemed Meter Reading	Old NHHDC	Old Supplier	D0086 Notification of Change of Supplier Readings	Electronic or other method as agreed.

[34] As a result of agreeing a revised CoS reading, the new NHHDC will withdraw the original CoS reading.
[35] If there is a difference between the original CoS Meter reading, deemed to SSD, and the proposed replacement CoS reading of less than 250 kWh, the NHHDC will accept the originally proposed CoS reading for use in Settlements.
[36] Revised AA/EAC values will be calculated as a result of amending the CoS reading.
[37] Upon receipt of the revised CoS reading, the old NHHDC will replace the previous CoS reading with the deemed CoS reading.
[38] This data flow is used for both valid and invalid readings produced from the Change of Supplier process.

3.2.7 – No changes

3.3 METERING ACTIVITIES.

3.3.1 Coincident Change of Supplier and Measurement Class from a Non Half Hourly to a Half Hourly SVA Metering System [39]

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.3.1.1	Prior to CoMC date change.	Send notification of termination of appointment.	Old Supplier[40].	NHHDC.	D0151 Termination of Appointment or Contract by Supplier. The old NHHDC becomes de-appointed on SSD-1.	Electronic or other method, as agreed.
3.3.1.2	By SSD+5.	Send final Meter register reading(s) or notification that Meter register reading not obtainable and notification that this is a coincident CoS.	NHHMOA.	NHHDC.	D0010 Meter Readings or D0002 Fault Resolution Report or Request for Decision on Further Action (use the "Additional Information" field to indicate that this is a coincident change). D0150 Non-Half Hourly Meter Technical Details.	Electronic or other method, as agreed.
3.3.1.3	By SSD+8.	If Meter register reading(s) obtained, validate Meter register reading(s).	Current NHHDC.		Appendix 4.2 - Validate Meter Data, Appendix 4.6 – Manual Adjustment of Meter Reading(s).	Internal Process.
3.3.1.4	By SSD+8.	If valid Meter register reading(s), produce and send Valid Data Report in time for Final Reconcilitaion Volume Allocation Run.	Current NHHDC.	Old Supplier [41], LDSO. NHHDA	D0086 Notification of Change of Supplier Readings (or D0010 Meter readings if there is no concurrent CoS). Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Electronic or other method, as agreed.

[39] This process can also be used where there is only a CoMC, not a coincident CoS and CoMC.
[40] In addition the old Supplier will inform it's other Agents of their de-appointments (via D0151 Termination of Appointment or Contract by Supplier) and they also become de-appointed on SSD-1.
[41] Where the old Supplier wishes to query the final Meter register reading(s) he shall contact the old NHHDC and the old NHHDC shall endeavour to resolve the query.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.3.1.5	By SSD+8.	If invalid Meter register reading(s), produce and send Invalid Data Report.	Current NHHDC.	Old Supplier, LDSO.	D0010 Meter Readings.	Electronic or other method, as agreed.
3.3.1.6	If concurrent CoS and CoMC and Meter register reading invalid or not received by SSD+8.	Calculate deemed reading(s) and associated EAC/AA(s).	Current NHHDC.		Appendix 4.5 – Deemed Meter Advance Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Internal Process.
3.3.1.7	By SSD+8.	Send Deemed Meter Reading(s).	Current NHHDC.	Old Supplier, LDSO.	D0086 Notification of Change of Supplier Readings. Refer to section 3.3.11 Calculate AA/EAC and send to NHHDA and Supplier.	Electronic or other method, as agreed.
3.3.1.8	If CoMC only, and no Meter register reading received by 15WD after the CoMC and if required.	Request final Meter register reading	Current NHHDC	MOA, Supplier		Post / Fax / Email
3.3.1.9	Within 10WD of 3.3.1.8	Send final Meter register reading	MOA / Supplier	Current NHHDC[7]	D0010 Meter Readings	Electronic or other method, as agreed
3.3.1.10	If required and no valid Meter register reading received within 10WD of 3.3.1.9	Deem final Meter register reading and calculate associated EAC / AA(s)	Current NHHDC		Appendix 4.5 – Deemed Meter Advance Refer to section 3.3.11 Calculate AA/EAC Values and send to NHHDA and Supplier.	Internal Process
3.3.1.11	Following 3.3.1.10	Send Deemed final Meter Reading	Current NHHDC	Supplier, LDSO	D0010 Meter Readings	Electronic or other method as agreed

3.3.2 – No changes

3.3.3 – No changes

3.3.4 – No changes

3.3.5 – No changes

3.3.6 – No changes

3.3.7 – No changes

3.3.8 – No changes

3.3.8.1 – No changes

3.3.8.2 – No changes

3.3.8.3 – No changes

3.3.9 – No changes

3.3.9 Changes to SVA Metering System Standing Data.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.3.10.1	On change of Profile Class.	Send notification of intended change of Profile Class, including the initial value EAC, and if required, request that the NHHDC collects a Meter register reading. Await confirmation of the effective date of the Profile Class change from the NHHDC.	Supplier.	NHHDC. Supplier.	D0005 Instruction on Action. D0052 Affirmation of Metering System Settlement Details. D0205 Update Registration Details	Electronic or other method, as agreed.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.3.10.2	Within 10WD of notification from Supplier.	Either: a) Obtain a Meter register reading[42], or receive Meter register reading from MOA, if there is a change of SSC. b) Send the Meter register reading to the Supplier together with the Meter register reading date. This date will become the effective date of the Profile Class change. If unable to obtain Meter register reading, the NHHDC will inform the Supplier and await further instructions. Supplier will inform NHHDC of next course of action. or If no Meter register reading required, confirm the effective date of the Profile Class change.	NHHDC, MOA. NHHDC. Supplier. NHHDC.	NHHDC. Supplier[43]. NHHDC. Supplier[71].	D0010 Meter Readings. D0004 Notification of Failure to Obtain Reading. D0010 Meter Readings. D0005 Instruction on Action. D0010 Meter Readings.	Internal Process. Electronic or other method, as agreed.
3.3.10.3		Send initial (class) average EAC. See Appendix 4.12 – Usage and Validation of Affirmation of Metering System Settlement Details (D0052) Flow	Supplier.	NHHDC.	D0052 Affirmation of Metering System Settlement Details. D0205 Update Registration Details	Electronic or other method, as agreed.
3.3.10.4		Validate D0052.	NHHDC		See Appendix 4.12 – Usage and Validation of Affirmation of Metering System Settlement Details (D0052) Flow	Internal

[42] Valid reasons for requiring a Meter register reading are:
- the NHHDCs system constraints;
- the change of Profile Class requires a change of SSC or change of Meter or reprogramming of the Meter; or
- as a result of a Supplier request.

[43] The NHHDC will indicate there has been a change of Profile Class by sending a D0010 Meter Reading to the Supplier. In particular the following fields will be completed by the NHHDC : 'Additional Information' field - the NHHDC will confirm that the flow is a Profile Class change flow; if Meter register reading obtained, additionally the 'Reading Type' field will be completed - the NHHDC will select the 's' - for 'Special' value. This combination of data will enable the Supplier to identify that this is a change of Profile Class flow.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.3.10.5	If D0052 invalid	Send notification of invalid Metering System Settlement details to Supplier	NHHDC	Supplier	D0310 Notification of Failure to Load or Receive Metering System Settlement Details[6]	Electronic or other method, as agreed.
3.3.10.6	On receipt of D0310	Supplier should resolve the problem and re-send or revise D0052 as required	Supplier	NHHDC	D0052 Affirmation of Metering System Settlement Details. D0205 Update Registration Details As required	Electronic or other method, as agreed.
3.3.10.7	If Meter register reading not obtained for Profile Class change.	Send the initial value EAC which is effective from the Profile Class change. Process EAC/AA data in accordance with section 3.5.	NHHDC. NHHDA.	NHHDA, Supplier.	D0019 Metering System EAC/AA Data.	Electronic or other method, as agreed.
3.3.10.8	Once Meter register reading obtained.	Calculate an AA based on the MAP, and substitute a Class Average EAC with an Effective From Settlement Date set to the day after the Effective To Date of the AA. Send the AA and the initial value EAC. Process EAC/AA data in accordance with section 3.5.	NHHDC. NHHDC. NHHDA.	NHHDA, Supplier.	D0019 Metering System EAC/AA Data.	Internal Process. Electronic or other method, as agreed.

3.3.11 – No changes

3.3.12 – No changes

3.3.13 – No changes

3.3.14 - No changes

3.4 COLLECTION ACTIVITIES.

3.4.1 NHHDC collects and sends consumption / generation data.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.4.1.1		<u>Metered Supply:</u> Collect Meter register reading(s)[44] for designated SVA MS(s) either directly or via Supplier. Send customer Meter register reading or prepayment Meter register reading(s) to NHHDC. Send customer reading(s) directly to NHHDC. Inform of possible safety problem(s). Inform of possible irregularities. <u>Unmetered Supply:</u> Send UMS EAC	NHHDC. Supplier. Customer. NHHDC. NHHDC. UMSO/ Supplier	 NHHDC. NHHDC. SFIC. Supplier. NHHDC	Complete Site Visit of SVA Metering System – Site Visit Report - Appendix 4.1. D0010 Meter Readings. Prepayment Meters – Appendix 4.11 D0135 Report Possible Safety Problem. D0136 Report to Supplier of Possible Irregularity. D0052 Affirmation of Metering System Settlement Details[45] D0205 Update Registration Details	Internal Process. Electronic or other method, as agreed. Electronic or other method, as agreed.

[44] The NHHDC will inform the Supplier if the SVA MS equipment is inadequate or that insufficient data about a SVA MS is available. The Supplier will investigate the situation and ensure that the SVA MS and the information provided are adequate. Where a SVA MS is de-energised the NHHDC shall make visits to the site concerned every 12 months. <u>The NHHDC shall provide the latest meter readings to the LDSO for all SVA Metering Systems for which it is responsible, as soon as possible and on a regular basis</u>

[45] Where a D0052 Affirmation of Metering System Settlement Details, electronic or otherwise, is received from UMSO or Supplier for an Unmetered Supply, this value must be sent to the NHHDA on a D0019 Metering System EAC/AA Data for use in Settlement. The D0052 Affirmation of Metering System Settlement Details received from UMSO should be used in preference where available.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.4.1.2	If Meter register reading(s) unobtainable.	Add SVA MS(s) to next collection rota.	NHHDC.			Internal Process.
3.4.1.3	On receipt of D0052 from UMSO.	Validate D0052.	NHHDC		See Appendix 4.12 – Usage and Validation of Affirmation of Metering System Settlement Details (D0052) Flow	Internal Process.
3.4.1.4	If D0052 is invalid.	Send notification of invalid Metering System Settlement details.	NHHDC	UMSO, Supplier	D0310 Notification of Failure to Load or Receive Metering System Settlement Details[46]	Electronic or other method, as agreed.
3.4.1.5	If Meter register reading(s) obtained.	Process[47] and validate Meter register reading(s). If SVA MS recorded as de-energised but consumption identified either remotely or by visiting the site record and process this data.	NHHDC.	NHHDA, Supplier, LSDO.	Appendix 4.2 - Validate Meter Data, Appendix 4.6 - Manual Adjustment of Meter Reading(s).	Internal Process
3.4.1.6	If invalid Meter register reading(s).	Produce and send Invalid Data Report.	NHHDC.	Supplier, LDSO	D0010 Meter Readings.	Electronic or other method, as agreed.
3.4.1.7	If valid Meter register reading(s).	Produce and send Valid Data Report[48].	NHHDC.	Supplier, LDSO	D0010 Meter Readings. Refer to section 3.3.11 - Calculate AA/EAC Values and send to NHHDA and Supplier.	Electronic or other method, as agreed.
3.4.1.8	By 7th calendar day of each month.	Produce and send report relating to previous calendar month detailing whether 100kW demand was identified in Metering Systems for which the NHHDC is the appointed NHHDC within the period of the report.	NHHDC.	Panel, Supplier.	P0028 100kW Demand Report - if no 100kW demand is identified, a 'nil' P0028 report.	Electronic or other method, as agreed.

[46] Manual rejection solutions agreed by both the Supplier and NHHDC may be used in place of the D0310 flow

[47] The NHHDC will always apply the 'Meter Register Multiplier' and the 'Pulse Multiplier', as provided by the MOA in the D0150 Non-Half Hourly Meter Technical Details data flow.

[48] Prepare valid data reports including active, reactive and maximum demand readings

3.4.2 NHHDC investigates inconsistencies.

REF	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.4.2.1	As deemed necessary.	Send notification of inconsistencies e.g. any gaps, overlaps, missing or invalid AAs etc.	Supplier, MOA, NHHDA	NHHDC.	As appropriate: D0001 Request Metering System Investigation. D0095 Non Half Hourly Data Aggregation Exception Report. D0148 Notification of Change to Other Parties. D0151 Termination of Appointment or Contract by Supplier. D0152 Metering System EAC/AA Historical Data. D0155 Notification of New Meter Operator or Data Collector Appointment and Terms.	Electronic or other method, as agreed.
3.4.2.2		Investigate inconsistencies[49], take corrective action and inform respective parties of action taken. Re-send AAs (and EACs if previously sent) to the NHHDA and Supplier. Process EAC/AA data in accordance with section 3.5.	NHHDC. NHHDA.	Supplier, NHHDA.	Complete Site Visit of SVA Metering System – Site Visit Report - Appendix 4.1. D0019 Metering System EAC/AA Data.	Electronic or other method, as agreed.

[49] If fault identified covers a CoS, the CoS reading and EAC shall be used and sent to the NHHDA. However, if the fault covers the final Stage 2 Run, a class average EAC will be used and sent to the NHHDA.

3.4.3 – No changes

3.5 INSTRUCTION PROCESSING.

REF.	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.5.1	On receipt of file.	Perform validation checks.	NHHDA.		D0019 Metering System EAC/AA Data.	Internal Process.
3.5.2	If validation successful.	Update database with instruction data.	NHHDA.		D0019 Metering System EAC/AA Data.	Internal Process.
3.5.3.	If validation unsuccessful.	Notify NHHDC of problem.	NHHDA.	NHHDC.	P0035 Invalid Data (for transmission problems). D0023 Failed Instructions (for instruction level validation problems).	Electronic or other method, as agreed.
3.5.4	Upon receipt of failure notification.	If transmission problem, resend exact copy of instruction file with same file sequence number. Upon request by the NHHDA If file validation problem, generate and send revised file. If problem believed to be caused by NHHDA, notify NHHDA.	NHHDC. NHHDC	NHHDA, Supplier. NHHDA NHHDA, Supplier. NHHDA.	D0019 Metering System EAC/AA Data. Resend an exact copy of an instruction file with the same file sequence number. D0019 Metering System EAC/AA Data. As appropriate.	Electronic or other method, as agreed.
3.5.6	When notified of	Resolve the problem and generate a revised	NHHDC	NHHDA	The revised file shall contain all	Electronically or

REF.	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
	any other file instruction file error by the NHHDA	instruction file containing all instructions required to rectify the situation.			instructions from the erroneous file and any instructions contained in subsequent files sent to the NHHDA	other method, as agreed.
3.5.7	Following 3.5.5 and 3.5.6	Inform of the file sequence number of the revised file and send the revised instruction file	NHHDC	NHHDA		Electronically or other method, as agreed.
3.5.8	Notification from NHHDA of error within an instruction	Rectify the erroneous instruction and re-send the instruction in the next instruction file with a new instruction number contiguous in that file	NHHDC	NHHDA		Electronically or other method, as agreed.
3.5.9	Following the correction of an error.	When sending a revised file or re-sending a copy of an instruction file to its NHHDA, provide the same files to the Supplier.	NHHDC	Supplier		Electronically or other method, as agreed.

3.6 REVENUE PROTECTION.

REF.	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.6.1	When informed by the Revenue Protection Business that there is evidence of tampering with a SVA Metering System	Record an adjustment to the meter advance based on the unrecorded units estimated by the Revenue Protection Business.	NHHDC			Internal Process.

REF.	WHEN	ACTION	FROM	TO	INFORMATION REQUIRED	METHOD
3.6.2	After 3.6.1 occurs	Calculate a new EAC and AA based on the adjusted meter advance and send the new EAC/AA	NHHDC	NHHDA		Electronically or other method, as agreed.

4. No changes

4.1 Site Checks of SVA Metering System - Site Visit Report.

The following checks shall be carried out by the NHHDC when visiting a site with a NHH SVA MS installed:

1. Any changes to site which could affect the Profile registered in SMRS
2. Energisation Status (i.e. on/off)
3. Number of Maximum Demand Register (MDR) Resets where appropriate
4. Zero reading on an MDR, if fitted
5. Whether the MDR is on full scale, if fitted
6. Any evidence of suspected faults to the SVA MS
7. Any evidence of damage to LDSO equipment
8. Whether any Meter with time settings or any timeswitch is set to the incorrect time
9. Evidence of tampering with the SVA MS or LDSO equipment, particularly seals
10. Evidence of stopped meters (particularly zero advance on an occupied premises - refer to Appendix 4.2 - Validate Meter Data.)
11. Evidence of supply being taken when the meters are de-energised

The NHHDC shall receive and record cumulative meter readings and maximum demand readings from its Associated MOA following any change of meter detail, any fault rectification and any de-energisation or energisation of Metering Equipment.The NHHDC will report this information to the Supplier, LDSO, MOA, as appropriate via the Site Visit Report.

4.3 Validate Meter Data.

The minimum validation rules contained within BSCP504 apply equally for whether the reading to be validated lies after other valid Meter readings, before other Meter readings or between other Meter readings.

The validation requirements described below are the minimum requirements that the NHHDC shall carry out for each Settlement Register:

1. Check that where data is collected at site the Meter serial number for the MSID is the same as the serial number provided by the MOA for that MSID.

2. Check that the date of Meter reading is after the date of the last valid Meter reading.

In the Change of Supplier scenario, where no Meter reading history has been received:

- In the case of validating a Meter reading, using subsequent Meter readings, the date of the reading to be validated against will be before the date of the reading used to validate;

- In the case of validating a Meter reading, using Meter readings either side, the date of the reading to be validated against will be between the date of the readings used to validate; and

- The reading(s) used in validation will not have passed BSC Validation as there would have been nothing to validate these readings against.

3. Check for zero consumption, where the zero consumption/generation on the Meter register is not necessitated by the Time Pattern Regime, and if so:
3.1 check for previous zero consumptions/generations,
3.2 check for zero MD,
3.3 check Site Visit Report.
3.4 check whether Metering System is being settled on a zero EAC, for example, the Supplier is treating the site as Long Term Vacant.

If zero explained by historical consumption, Site Visit Reports, Time Pattern Regime, or Metering System being settled on a zero EAC, then valid, otherwise invalid.

4. Check for negative consumption/generation and if so:
4.1 check for Meter rollover
4.2 check if the previous Meter register reading is a deemed reading and that the reading prior to the deemed reading is an actual Meter register reading, and that the current Meter register reading advance creates a positive consumption/generation with respect to the last actual Meter register reading (i.e. obtained prior to the deemed reading), making allowance for any Meter register rollover (Appendix 4.1),

if so then reading valid, otherwise invalid

5. Check consumption/generation does not exceed twice the expected advance.
(using the EAC times the Profile Coefficient, or some other equivalent method.) Where the reading to be validated does not come after other validated readings the expected advance may be calculated using either:

- the class avarage Estimated Annualised Consumption (EAC) times the profile coefficient or some other equivalent method, and the first Meter reading available; or

- the Annualised Advance (AA), determined from two readings either side of the reading to be validated, times the Profile Coefficient.

Note that where Profile Coefficients are not yet available they may be submitted by using the Profile Coefficients from the same period last year. If consumption/generation does exceed twice the expected advance, this Meter register reading will fail validation, except where it is caused by a seasonal register Time Pattern Regime. However, a facility to review all Meter register readings which fail validation will be available. Based on this review, the NHHDC may choose to set it to valid and the status may be altered, where good reason exists. If not exceeded then the Meter register reading is valid.

6. Compare actual and expected Meter register readings and identify missing and overdue Meter register readings, in particular meters that have not been read by the Final Reconciliation Volume Allocation Run.

7. Check that the number of MD resets is not greater than one since the last time that the MD was reset by a person authorised by the NHHDC. Where the number of resets is unexplained, the Meter register reading(s) recording energy remain valid unless invalid for a separate reason.

8. For multi-register meters check that all registers have the same date of reading.

9. For remote readings the NHHDC must inform the MOA of any error flags received from the Meter and record the reasons for accepting any error flagged data into Settlements.

10. The validation must retain the original value, the initial validation flag, ~~and~~ the ~~the~~ reason for failure where the flag is invalid and the reason for changing the status to valid.~~.~~

4.3 Withdrawing Meter Reading(s) / AA/EAC(s).

Where a SVA MS has a fault identified with it, it will be necessary to 'roll back' to the last valid Meter register reading. Where the NHHDC is notified of a fault by the MOA the NHHDC will:

1. set the status of all subsequent readings to 'Withdrawn'.

2 set the status of all Meter advances / AAs starting on or after the date of the last valid reading to 'Withdrawn'.

3. set the status of all EACs effective after the date of the last valid reading to 'Withdrawn'.

4. Replace the withdrawn EAC/AA with EAC/AA from last valid meter reading for each Settlement Register.

5. Roll all Settlement Registers for the relevant SVA Metering System back to the same date.

Where the Supplier Start Date for a change of Supplier occurs in relation to a SVA Metering System for which the NHHDC is responsible which has a fault which could affect the accuracy of data for the purposes of Settlement and which has not been remedied at that time, the CoS (Change of Supplier) meter reading and revised EAC shall be used as the last valid meter reading and EAC. When the period of a fault covers SVA Final Reconciliation Volume Allocation Run a class average EAC shall be used for the period from Final Reconciliation Volume Allocation Run to the rectification of the fault.

Where the NHHDC has not received confirmation from the relevant Associated MOA within a month of the status of the SVA Metering System following a fault report from the Associated MOA, it shall continue to request confirmation of rectification of the fault from such Associated MOA not less than once each month.

4.4 – No changes

4.4.1 No changes

4.4.2 No changes

4.4.3 No changes

4.5 – No changes

4.5.1 No changes

4.5.2 Deeming circumstances

The NHHDC shall provide an exception and control report for each run of the EAC/AA and Deemed meter advance calculation processes. Such report shall include details of any SVA Metering System for which EAC/AA or Deemed meter advances have not been calculated including the reason therefor.

A Deemed Meter Reading shall be calculated as set out below if a valid actual Meter register reading cannot be obtained in the following circumstances:

- Change of Supplier;
- Disputed change of Supplier Meter reading;
- Concurrent change of Supplier and change of Measurement Class;
- Change of LDSO; and
- At the RF to ensure that crystallised data is not changed post the RF.

In all other circumstances set out below, a Deemed Meter Reading may be calculated if required by the Supplier. In all cases, the NHHDC shall retain an audit trail to prove that all steps set out below have been completed before a reading is deemed.

Where a Deemed Meter Advance is calculated, it shall be calculated using a system or process so approved in accordance with BSCP537 using the formulae set out in Annex S-2 of the Code. The Deemed Meter Advance can then be used to calculate a Deemed Meter Reading.

Wherever the NHHDC has deemed a Meter reading, the NHHDC shall provide the Deemed Meter Reading and the date of the Deemed Meter Reading to its Supplier.
Where a Deemed Meter Advance has been calculated, this indicates that the process has broken down. The Supplier shall investigate the root cause of the problem and attempt to resolve the underlying issue in all cases where a reading has been deemed.

If a Deemed Meter Reading has been calculated but subsequently the actual Meter register reading for the same Settlement Day (or for a day between SSD-5 and SSD+5 for a change of Supplier), is provided and the actual Meter register reading passes validation, the Deemed Meter Reading should be replaced with the actual Meter register reading.

a) No changes

b) Disputed Change of Supplier Reading

The new Supplier can dispute the change of Supplier reading at any point up to twelve months after the change of Supplier, where in the Supplier's view there is difference of more than 250kWh from the original change of Supplier reading. At this point, the old and new Suppliers will attempt to agree a change of Supplier reading for the Metering System, which will be processed in accordance with section 3.2.6.

Where the Suppliers cannot agree on a change of Supplier reading, the new Supplier will request that its NHHDC obtains a current Meter register reading for the Metering System. The NHHDC will then calculate an AA from the current Meter register reading and the last valid Meter register reading obtained prior to the change of Supplier.

The NHHDC will then calculate a Deemed Meter Reading for the day of the change of Supplier using a Deemed Meter Advance calculated from this AA and the last valid Meter register reading taken prior to the change of Supplier over the Deemed Meter Advance Period starting from the date of the last actual valid read and ending on the day before the date of the change of Supplier.

If the difference between the revised change of Supplier reading and the original change of Supplier reading is less than 250kWh, the NHHDC will not amend the original change of Supplier reading for use in Settlements.

If a revised change of Supplier reading is entered into Settlement, the NHHDC will calculate a new Meter Advance from the new change of Supplier reading and the current Meter register reading, and from this calculate an EAC from the date of the revised change of Supplier reading in accordance with 3.3.11. The NHHDC will provide the EAC with corresponding Effective From Settlement Date to the NHHDA.

If a revised change of Supplier reading is entered into Settlements, the NHHDC will also provide the deemed change of Supplier Reading to the current Supplier and the Old Supplier's NHHDC, who shall determine an associated AA from the date of the last valid Meter register reading taken prior to the change of Supplier to the date of the revised change of Supplier reading in accordance with 3.3.11. The old NHHDC shall send this with corresponding Effective From Settlement Date and Effective to Settlement Date to the NHHDA who shall enter this into Settlements. The old NHHDC shall also provide the revised change of Supplier reading to the old Supplier.

After a meter reading value has been processed for Initial Settlement, Suppliers may agree with each other, following the resolution of a dispute, to process a new or different customer own reading or actual reading. The incoming NHHDC shall receive the reading to be used from its Associated Supplier and pass it to the outgoing NHHDC. The agreed reading shall be processed as occurring on the Supplier Start Date if it occurred or was agreed to have occurred not more than five WDs before or not more than five WDs after the Supplier Start Date.

If the agreed reading occurred or was agreed by the relevant Suppliers to have occurred more than five WDs before or more than five WDs after the Supplier Start Date, the agreed reading shall not be treated as occurring on the Supplier Start Date and a

Deemed reading calculated from the agreed reading shall apply in respect of the Supplier Start Date.

c) No changes

d) No changes

e) No changes

f) No changes

g) On rectification of a Metering System fault

Where a Metering System has become faulty, this may mean that the Metered Data recorded by that Metering System is erroneous, particularly meaning that a valid actual final Meter register reading will not be available for that Metering System. In many cases, a Metering System fault will require the Metering System to be replaced, in which case section 4.4.2(f) should be followed before and if Meter readings are deemed. If the Metering System can be repaired, the MOA should provide the NHHDC with an initial Meter register reading once the Metering System is repaired.

When the NHHDC is informed that the fault has been rectified, the NHHDC may deem the final Meter reading for the Metering System for the day that the fault was rectified using the last valid read taken or the old Metering System and a Deemed Meter Advance calculated using the Last Valid EAC over the Deemed Meter Advance Period starting on the date of the last valid read and ending on the day before the date of the rectification of the fault.

Where the NHHDC has been informed that the fault has been rectified but no actual reading has been provided to the NHHDC within 5WD of the fault being rectified, the NHHDC should request the reading from the MOA and Supplier.

Where an actual reading is not received, an initial Deemed Meter Reading may be calculated when either one or two Meter register reading are obtained, provided that the first Meter reading is at least 10 Working Days after the NHHDC requested the Meter register reading and both Meter register readings are taken by 10 Working Days before the RF for the relevant Settlement Date. The initial Deemed Meter Reading shall be calculated either using the first actual Meter register reading obtained and Deemed Meter Advance calculated using an initial EAC or using the first two actual Meter register readings obtained and the Deemed Meter Advance calculated using the AA calculated using these Meter register readings over the Deemed Meter Advance Period starting on the date of the rectification of the fault and ending on the day before the date that the first (in the case of only one Meter register reading being taken) or second (in the case of two Meter register readings being taken) actual Meter register reading was obtained.

It should be noted that the initial and final Meter readings may not be the same.

Where, for the purposes of minimising the costs of rectifying erroneous registrations, Suppliers agree to a meter reading for SSD that results in a 1kWh advance this shall be

processed by the NHHDC as a "customer own read" type in the manner set out in 1.3.3.1 above so long as;

a. the earlier of the meter reading dates resulting in 1kWh advance is within 3 calendar months of the new Supply Start Date; and

b. the Associated Supplier confirms to the incoming NHHDC that the old Supplier with whom he has reached an agreement for a 1kWh advance is not seeking a similar agreement in respect of more than one hundred SVA Metering systems erroneously registered on one Settlement Day (For the avoidance of doubt, a concurrent change of Supplier and change of Agent does not preclude Suppliers from using a 1kWh advance to make a correction if no further change to the Profile class, NHHDC, Associated NHHDA, Measurement class or Standard Settlement Configuration has taken place)

c. No change in the MSID attributes of Profile class, NHHDC, Associated NHHDA, Measurement class or Standard Settlement Configuration has taken place;

There is no intervening meter reading or meter change between the previous registration and the current registration.

The NHHDC shall determine the AA for the Metering System prior to the rectification of the fault from the date of the last valid reading to the date of the Deemed Meter Reading in accordance with 3.3.11 and the EAC for the Metering System after the rectification of the fault in accordance with 3.3.11 and shall provide the these with corresponding Effective From Settlement Date and Effective To Settlement Date and to the NHHDA.

h) No changes

i) No changes

j) No changes

k) No changes

l) No changes

m) No changes

n) No changes

o) No changes

p) No changes

q) No changes.

4.5.3 Process for calculating a Deemed Meter Advance

In general, the meter advance for a Settlement Register will correspond to the meter advance for the equivalent physical meter register defined in the Metering Equipment Technical Details. Where there is no direct correspondence between a Settlement Register and a physical meter register, the NHHDC shall calculate the relevant meter advance by aggregation or differencing of the physical registers of the SVA Metering System defined by the Metering Equipment Technical Details.

The processing for calculating a Deemed Meter Advance using the formulae set out in Annex S-2 of the Code for each Settlement Register is as follows:

a) Identify the Deemed Meter Advance Period and the associated EAC / AA values from which the Deemed Meter Advance shall be calculated in accordance with section 4.5.2.

b) Retrieve the SSC, Profile Class and GSP Group effective for the SVA Metering System at the start of the Deemed Meter Advance Period, together with any changes to Profile Class or GSP Group that took effect during the Deemed Meter Advance Period.

c) For each Settlement Day in the Deemed Meter Advance Period, retrieve the corresponding Profile Coefficients. The Profile Coefficients retrieved depend on:

(i) The Measurement Requirement for the Settlement Register during the Meter Advance Period, where Measurement Requirement is a valid combination of SSC Id and TPR Id.

(ii) The GSP Group Id effective for the SVA Metering System on the Settlement Day in question.

(iii) The Profile Class Id effective for the SVA Metering System on the Settlement Day in question.

The main exception conditions, which may occur when calculating Deemed Meter Advances, are as follows[50]:

a) If Daily Profile Coefficients are not found for the combination of GSP Group, Profile Class, SSC and TPR effective on any Settlement Day within the Meter Advance Period, the Deemed Meter Advance is not processed and an exception is reported by the NHHDC system; or

b) If the input data is incomplete or invalid.

If either of these exceptions occurs, the NHHDC should investigate the cause of the exception and attempt to rectify it with the Supplier.

[50] Refer to section 4.9

4.6 Manual Adjustment of Meter Reading(s).

The NHHDC may correct Meter register readings considered to be in error, where the NHHDC is able to establish beyond reasonable doubt:

1. from the Meter register reading history that the Meter register readings were incorrectly allocated to the Meter register identifiers by the customer or Meter reader. Where this circumstance exists, the NHHDC shall change the allocation of the Meter register readings to the registers but shall not otherwise change the Meter register reading.

2. Where the NHHDC decides that the meter reading may be altered, the NHHDC shall manually adjust the meter reading and the adjusted meter reading will be reported to the Supplier and in the case of a CoS meter reading to the outgoing NHHDC.

~~2.~~3. from the number of digits provided and / or the Meter reading history that the "one tenth kWh" register digit has been incorrectly added to the end of the Meter register reading by the customer or Meter reader. Where this circumstance exists, the NHHDC shall remove this "one tenth kWh" digit from the Meter register reading but shall not otherwise change the Meter register reading.

~~3.~~4. from the Meter reading history that two adjacent register digits have been erroneously transposed by the customer or the Meter reader. Where this circumstance exists, the NHHDC shall re-order these two register digits but shall not otherwise change the Meter register reading.

~~4.~~5. from the Meter reading history that one or more of the dials on an analogue Meter register has been rounded up rather than down, or vice versa. Where this circumstance exists, the NHHDC shall reverse the data from the dial either up or down but shall not otherwise change the Meter register reading.

The Code has no requirement to identify in the data flows where Meter register readings have been adjusted and the NHHDC and Supplier shall mutually agree the content of this communication where it is a Supplier Hub activity. However where the Meter register reading is a CoS reading, the new NHHDC will send this adjusted Meter register reading to the old Supplier Hub (via the old NHHDC) but there is no requirement for the NHHDCs to mutually agree the content of this communication.

4.7 No changes

4.8 Historical Data Requirements.

References to the "incoming/new NHHDC" are to the NHHDC who is or becomes responsible for the relevant SVA Metering Sustem on a CoS, whether or not that NHHDC was also responsible for it before the CoS; and references to the "outgoing/old NHHDC" are to the NHHDC who is or was responsble for the relevant SVA Metering System before the change of Supplier, whether or not that NHHDC remains responsible for it on and following the CoS.

The historical data requirements described below are the requirements for the old NHHDC during the following business events:

a) Change of NHHDC within a Supplier's Period of Registration (including bulk change of NHHDC).

The old NHHDC will send the meter reading and associated AA/EAC history to the new NHHDC and this will include the data[51] back to the meter reading at or, in the case where no meter reading was obtained at the event, immediately prior to any of these events:

1. Supplier registration
2. change of SSC (change of Profile Class)
3. 28 months
4. CoMC from HH to NHH
5. change of meter

If the new NHHDC identifies a discrepancy between the meter reading(s) and the associated AA/EAC history, the meter reading history will take precedence[52].

b) Change of NHHDC Coincident with Change of Supplier

The old NHHDC will send the last valid meter reading, which was dated prior to the SSD and the associated EAC to the new NHHDC.

In the event that the incoming NHHDC cannot obtain the data from the old NHHDC, having exhausted all reasonable efforts and kept an auditable record of such efforts,

[51] If the old NHHDC is unable to validate meter reading(s) during the Change of Non Half Hourly Data Collector business event, the old NHHDC will identify that the meter reading(s) has not been validated in the appropriate data flow.

[52] The meter reading history will take precedence because this relates to reading data that has undergone validation and is less likely to be inaccurate than the AA/EAC data because this is calculated data.

the incoming NHHDC may seek the information from the relevant Supplier instead. This does not relieve the old NHHDC of their obligations under PSL100 and BSCP504 regarding service levels.

4.9 EAC/AA Calculation.

Use of EAC/AA System

The NHHDC will use the EAC/AA System or any other equivalent system or process so approved in accordance with BSCP537 to calculate the EAC/AA values.

The NHHDC shall ensure that the facility to resend EAC/AA for previous meter readings is used only where it is ecessary to withdraw the intervening meter readings or EAC/AA.

Profile Class Tolerances will be provided to the NHHDC via[53] Market Domain Data. The NHHDC will use these tolerances, which are GSP Group specific, during the EAC/AA calculation.

The EAC/AA and Deemed meter advance calculation processes must be able to process meter advances of up to fifteen months. An advance period longer than fifteen months will cause an error report and processing will continue with the next SVA Metering System.

The NHHDC shall provide an exception and control report for each run of the EAC/AA and Deemed meter advance calculation processes. Such report shall include details of any SVA Metering System for which EAC/AA or Deemed meter advances have not been calculated including the reason therefor.

Excessively Large (Positive or Negative) AAs

When an AA is calculated[54], it will be checked by the EAC/AA System against the current tolerances for the Profile Class. If the tolerances are exceeded i.e. the AA is excessively large (positive or negative), a warning message will be produced but the AA (and the revised EAC) will be included in the EAC/AA output file. In addition the warning message will be added to the large AA exception log.

The NHHDC will:

1. investigate the reason(s) for the large AA. If the AA is invalid, the NHHDC will withdraw the AA
2. report all occurrences of the warning messages to the Supplier together with the status of each exception following investigation

[53] There are no dates associated with the tolerance values therefore there is no requirement for the NHHDC to retain a history.

[54] Revised EACs will only fall outside tolerances as the result of erroneously large AAs, so validation of EACs is superfluous.

3. withdraw an AA notified by the Supplier as invalid

4. retain an audit trail of any AA withdrawn

Three situations in which a large AA will be determined to be invalid are as follows:

1. a reading previously determined to be valid (e.g. B) is now determined to be invalid as a result of reviewing a subsequent reading (e.g. C). In this case:

    a) withdraw the intermediate reading[55] (i.e. B)
    b) calculate a new AA (and EAC) using the last valid reading which was obtained prior to the invalid reading (e.g. A)
    c) the revised AA will replace the previously invalid AA

2. a reading previously determined to be valid (e.g. B) is now determined to be invalid by means other than reviewing a subsequent reading e.g. the new AA/EAC tolerance check, or alternatively notification from the Supplier. In this case:

    a) withdraw the invalid reading (e.g. B)
    b) withdraw the associated AA and EAC
    c) the reading will not be replaced, unless it was a CoS Meter register reading

3. the Meter advance was calculated incorrectly even though there is nothing wrong with the reading (e.g. failing to recognise a Meter register rollover or incorrectly assuming a rollover from a negative advance). In this case:

    a) the Meter register reading remains valid
    b) re-calculate the Meter Advance
    c) re-calculate the AA/EAC

For each run of EAC/AA and Deemed Meter advance calculation.

The NHHDC shall prepare an exception report specifying all negative values of meter advances. The exception and control report shall include totals of the following:-

- the number of SVA Metering Systems;
- the number of SVA Metering Systems for which no Estimated Annual Consumption/Annualised Advance or Deemed meter advance has been calculated;
- the number of SVA Metering Systems for which an Estimated Annual
- Consumption/Annualised Advance or a Deemed meter advance has been calculate

[55] The NHHDC will retain an audit trail of any Meter register reading which is withdrawn.

4.10 No changes

4.11 No changes

4.12 No changes

4.13 No changes

4.14 No changes

4.15 Identification of a site as Long Term Vacant.

4.15.1 Criteria for identifying site as Long Term Vacant.

A Supplier may identify a site as Long Term Vacant if it meets all of the following five criteria:

1. The site is energised according to the Supplier Meter Registration Service (SMRS).
2. The NHHDC is unable to gain access to read the Meter.
3. The Supplier:
   - has received from the NHHDC at least two D0004 'Notification of Failure to Obtain a Reading' data flows, at least 3 calendar months apart and not more than 7 calendar months apart with the J0024 'Site Visit Check Code' data item populated with code 02 'Site not Occupied'; and
   - has not received any D0004s with the J0024 data item populated with anything other than 02 in the interim; and
   - has not received any other data flows containing the J0040 'Register Reading' data item in the interim.

   If a D0004 data flow is received with the J0024 data item unpopulated, it can be excluded for the purposes of this criterion.
4. The Supplier has made proactive attempts to identify the owner of the property to obtain a Meter reading; proactive attempts could include contacting bodies such as estate agents, letting agents, councils or the land registry to find out who the owner is. If the Supplier supplies both gas and electricity, check to see if the same issues are occuring for the gas supply.

   When an owner is identified, attempts must then be made to contact them and obtain a reading.

   The Supplier may have ~~their~~ its own way of meeting this criterion.
5. If the owner is already known, the Supplier must make attempts to contact them to arrange a Meter Reading.

The Supplier must keep auditable records showing that all of these criteria have been met in order to indentify a site as Long Term Vacant.

If all the above criteria have been met, but the Supplier has evidence of consumption on the Metering System, the site must not be identified as Long Term Vacant.

4.15.2 No changes

4.15.3 No changes

4.15.4 No changes

4.15.5 No changes

4.16 Audit Requirements.

4.16.1~~2~~ Retention of Records

The NHHDC shall ensure that all processes must be capable of maintaining data records, together with the user ids of the persons creating or making changes to these records. The minimum period for the retention of records applies to source data as well as the results of processing, where source data is the raw source data (meter reading and associated data in the format originally obtained by the NHHDC) or output material, produced following input into the system, but prior to any processing or amendments. A history of superseded data must be retained, in particular where the status of a reading is changed or where revised data is sent to an Associated NHHDA.

These records must contain such cross references as are necessary to allow verification by tracing data through processing, forwards and backwards, conveniently and old software programs and hardware must, where necessary, be retained to enable these records to be accessed. If the EAC/AA System is not used, the NHHDC shall ensure that its data processing system:-

- retains all Daily Profile Coefficient files used to calculate EAC/AA and Deemed meter advances, including those subsequently replaced by revised data;

- Provides a means of archiving Daily Profile Coefficients and Smoothing Parameters once the Final Reconciliation Volume Allocation Run has taken place for that Settlement Day.

4.16.2~~3~~ Monitoring

The NHHDC shall ensure that all ~~P~~processes must be capable of providing statistical information as may be required from time to time by the Panel to enable monitoring of performance against established criteria.

4.16.3~~4~~ Missing Profile Coefficients

The NHHDC shall ensure that the~~The~~ EAC/AA calculation process must be capable of reporting any request for a Deemed meter advance or EAC/AA which cannot be processed because it relates to GSP Groups, Profile Classes or Measurement Requirements for which no Profile Coefficients have been received by the NHHDC. The report must distinguish between cases where no Profile Coefficients have been received for the relevant Settlement Day and cases where Profile Coefficients have been received for the relevant Settlement Day, but not for the relevant GSP Group, Profile Class or Measurement Requirement.

4.16.4 Version Control on Daily Profile Coefficients

- The system operated by the NHHDC must apply version controls to all sets of Daily Profile Coefficients received from the Supplier Volume Allocation Agent and ensure that all data received has date and version stamps attached to it, identifying the Profile Production Run and the date and time it was received by the NHHDC;

- add a further date and time stamp to the set of Daily Profile Coefficients received, identifying the date and time that the data was loaded;

- check that the date and version stamps on sets of Daily Profile Coefficients received from the Supplier Volume Allocation Agent are consistent with those on data sets already received from the SVAA.

4.16.5~~8~~ Version Control on Output Data

The system operated by the NHHDC must be capable of applying version controls to all data produced by it. It must also be capable of ensuring that data output has date and time stamps attached to it, identifying when the processing was performed.

4.17 Traceability of Estimated Annual Consumption and Annualised Advance values.

The EAC/AA calculation process must be capable of using the date and time stamp of an EAC/AA output data record, together with the date and time stamp of a profile data load, to determine which Daily Profile Coefficients were used to calculate the EAC/AA.

4.18 Input, Processing and Output

~~C~~The system operated by the NHHDC must have controls to ensure input, processing and output are valid may include the use of software validation checks and exception reporting to identify problems:-

- inaccuracy of data entry;
- Meter readings not in line with historical/expected trends;
- Meters which have not had a physical reading within the minimum period established by the BSC;
- identification of Metering System Number's which are "dormant" i.e. not currently in use.

In particular, controls should be developed to ensure that illegal and dangerous situations concerning SVA Metering Systems are identified, recorded and reported to the relevant parties for further action. An example would be the identification, during a physical inspection to obtain a meter reading, of a meter which has been tampered with.