Redlined BSCP504 'Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS' changes for CP1360 v2.0 'Inclusion of Audit Records for Gross Volume Correction and Dummy Meter Exchanges'

The CP proposes changes to BSCP504 sections: 4.14.3; new section added - 4.14.6.

We have redlined these changes against version 30.0 of the BSCP.

4.14.2 Definitions

For the purposes of this appendix, the following definitions apply:

Compensatory Period	The period between the error freezing reading and the error correcting reading, in which an error is compensated using GVC.
Correct Volume	The Meter Advance between the last valid reading before the error period and the Error Correcting Reading.
Correct Volume in Error Period	An estimate of the Meter Advance that should have been settled for the period between the last valid reading before the error period and the error freezing reading, calculated in accordance with 4.14.6.
Crystallised Period	Periods of Settlement Dates for which RF has taken place and data cannot be amended without the support of an upheld Trading Dispute.
Error correcting reading	The first actual reading in the Fluid Period which has been determined to be valid or a reading in the Fluid Period deemed in accordance with 4.14.4.3.
Error freezing reading	This is a reading deemed in the current RF Window to prevent error that has crystallised being amended. It is calculated using the last valid, erroneous or compensatory Meter reading(s) obtained before and / or after RF and the associated erroneous EAC / AA that was in place at RF. Error freezing readings can only be deemed in the current RF Window. They should not be created at (or close to) the latest Post Final Settlement Run (PFSR), even in the case where the erroneous EAC or AA is subject to an authorised Trading Dispute.
Error period	The period between the last valid reading in the Crystallised Period and the error freezing reading.
Error Volume	An estimate of the volume of energy compensated for by the use of Gross Volume Correction. Calculated as the difference between the Volume in Error Period and the Correct Volume in Error Period.
Fluid Period	Periods of Settlement Dates for which RF has not taken place
Realistic reading	Where a Meter reading is required for a particular Settlement Day to carry out Gross Volume Correction and an actual Meter reading is not available, a realistic reading can be deemed for that Settlement Day using a valid Meter register reading (occurring prior to or after the realistic reading date) and a realistic EAC (i.e. a previous valid EAC or if one is not available an initial (class average) EAC).

RF Window	This is the window of time between 5WD and 20WDs prior to the RF being carried out for a particular Settlement Day (i.e. a window in the period before that Settlement Day has passed through RF). A reading for RF should be deemed in this window since corrective action takes a finite time to be reflected in Settlements as it needs to be completed by the NHHDC, sent to the Non-Half Hourly Data Aggregator (NHHDA), processed by the NHHDA, sent to the Supplier Volume Allocation Agent (SVAA) and processed by the SVAA.
Volume in Compensatory Period	The Meter Advance between the error freezing reading and the error correcting reading.
Volume in Error Period	The Meter Advance between the last valid reading before the error period and the error freezing reading.

4.14.3   Use of Gross Volume Correction

Where an erroneous Meter Advance is identified, the associated AA, EAC and (where applicable) the associated reading may be withdrawn if none of the Settlement Dates in the Meter Advance Period have been subject to a last Volume Allocation Run (i.e. the RF run or, where the AA/EAC is subject to a Trading Dispute, the Post Final Settlement Run (PFSR)).

Where all Settlement Dates within a Meter Advance Period have been subject to a RF run (or, as applicable, PFSR), the associated AA, EAC and reading may not be withdrawn.

If the erroneous Meter Advance has partially crystallised (i.e. a RF run has taken place for some, but not all Settlement Dates within the Meter Advance Period), GVC can be applied to correct the error without amending the energy values which have already been subject to a RF run.

Other than being used to compensate for a partially crystallised error in a single Meter Advance Period, as described above, GVC should only be used where an energy error for a given Metering System is affecting the NHHDC's ability to process subsequent Meter Readings. For example, GVC can be used where the forward EAC is out of line with the expected consumption for the Metering System to the extent that subsequent valid readings for the Metering System are failing validation (or should be likely to fail validation).

GVC cannot be used to compensate for errors across two Meters or two Standard Settlement Configurations (SSCs). In order to correct errors across different Meters or SSCs, the Final/Initial readings need to be withdrawn and replaced (and potentially the change of Meter/SSC needs to be backed out). GVC cannot be applied for any disconnected Metering System or any Metering System that has undergone a change of Measurement Class (NHH to HH), because the principle of applying GVC where there is an ongoing Settlement impact does not apply.

The application of GVC in relation to Change of Supplier readings is described in Section 4.14.5.

Where there is insufficient reading history to apply GVC, or where compensation will introduce further error, the NHHDC may, but only as an action of last resort, take such steps as are necessary to address the ongoing validation problem, without ensuring that the gross volume of energy settled is correct. This will have the effect of "writing off" historic error, but ensuring that future error is minimised (e.g. the application of "dummy meter exchanges"[1]. ~~Where such action is taken by the NHHDC it should be subject to a robust and auditable process~~.

The use of GVC does not remove the requirement to identify and resolve Settlement errors prior to the RF run, but is intended as a reasonable provision for errors that could not have reasonably been detected when they were originally created.

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[1] A "dummy meter exchange" involves the use of Initial and Final Meter readings to effectively re-start consumption histories even though no actual, physical change of Meter has taken place.

GVC is an optional requirement for the Supplier; however the NHHDC must be able to carry out GVC if required to by the Supplier. GVC shall be carried out by the NHHDC when this has been agreed with the Supplier, and when the use of GVC meets the criteria described above. Where the NHHDC receives a request from the Supplier to apply GVC, which does not meet the criteria described above, it should be referred back to the Supplier with supporting rationale for why the NHHDC does not consider that GVC is appropriate. The NHHDC may also initiate the use of GVC, although only with the agreement of the relevant Supplier or Suppliers. Such approval can be obtained on a per-instance or delegated authority basis, as agreed with the Supplier.

The NHHDC may identify that GVC should be carried out if the EAC is above BSCCo monitoring levels or where reads are consistently failing validation but in line with each other.

Where an AA or EAC is subject to an authorised Trading Dispute and the Effective From Settlement Date is after the latest Settlement Date which has been subject to a PFSR, the AA or EAC may be withdrawn without the need to apply GVC. GVC can be applied to any AA or EAC, irrespective of whether these are subject to a Trading Dispute, but error freezing readings can only be applied in the RF Window. Error freezing readings should not be applied at the latest PFSR.

4.14.6 Gross Volume Correction and Dummy Meter Exchange Audit Requirements

The NHHDC shall keep an audit record of every instance of GVC and every dummy meter exchange undertaken in accordance with this section (4.14.6) and 4.5.2 (p). These records shall be made available on request to relevant Suppliers, BSCCo or the BSC Auditor in a comma separated value (.csv) file or other agreed format.

GVC audit records will include all instances where action has been taken to address a perceived error. It will exclude the compensatory effects that are a natural consequence of the Non Half Hourly Settlement processes (for example, a compensatory volume arising from an erroneously large reading that has not been replaced or withdrawn). It will also exclude any compensatory volumes arising from the requirement in section 4.5.2 (e) to deem a reading when the Meter has been read and the RF for the date of the previous Meter register reading has taken place.

Dummy meter exchange records will include all instances undertaken for the reasons set out in paragraph 14.4.3. This will include instances where a dummy meter exchange is being used as an alternative to GVC to re-initialise the Meter reading history, (i.e. as a result of an energy error that is affecting the NHHDC's ability to process subsequent Meter Readings). This will include the use of dummy meter exchanges to correct transposed register issues. It will exclude any dummy meter exchanges with a difference of one unit or less between the final and initial Meter readings on any TPR, as these are likely to be the result of working around system constraints, rather than dummy meter exchanges carried out for the reasons outlined above.

In the case of GVC the audit record shall consist of:

- MSID;
- Supplier Id;
- SSC;
- Profile Class;
- GSP Group;
- Energisation Status;
- Settlement Date of the start of the error period (i.e. date of last valid reading prior to error freezing reading);
- Settlement Date of error freezing reading;
- Settlement Date of error correcting reading;
- For each Settlement Register:
  - TPR;
  - Volume in Compensatory Period (i.e. Meter Advance between error freezing reading and error correcting reading);
  - Volume in Error Period (i.e. Meter Advance between start of error period and error freezing reading);
  - Correct Volume (i.e. Meter Advance between start of error period and error correcting reading);
  - Forward looking EAC following application of GVC (see note below);
  - Replacement EAC indicator (see note below);
- Date GVC undertaken; and
- Rationale for Change (optional).

If the latest EAC resulting from the GVC calculation has been replaced by a realistic value, in accordance with 4.14.4.7, the replacement values should be included in the audit record and Replacement EAC indicator set to 'Y'. Otherwise the latest EAC resulting from the GVC calculation should be included and Replacement EAC indicator set to 'N'.

Please note that the volume in the compensatory period and volume in the error period will include energy that was correctly attributable to those periods. In order to estimate the error volume, users of the audit records should perform the following calculation for each instance of GVC reported.

Error Volume = Volume in Error Period – Correct Volume in Error Period

where Correct Volume in Error Period = Correct Volume * (days in error period) /(days in error period + days in compensatory period)

where days in error period = the number of days between the Settlement Date of the start of the error period and the Settlement Date of the error freezing reading

and

days in error period + days in compensatory period = the number of days between the Settlement Date of the start of the error period and the Settlement Date of the error correcting reading.
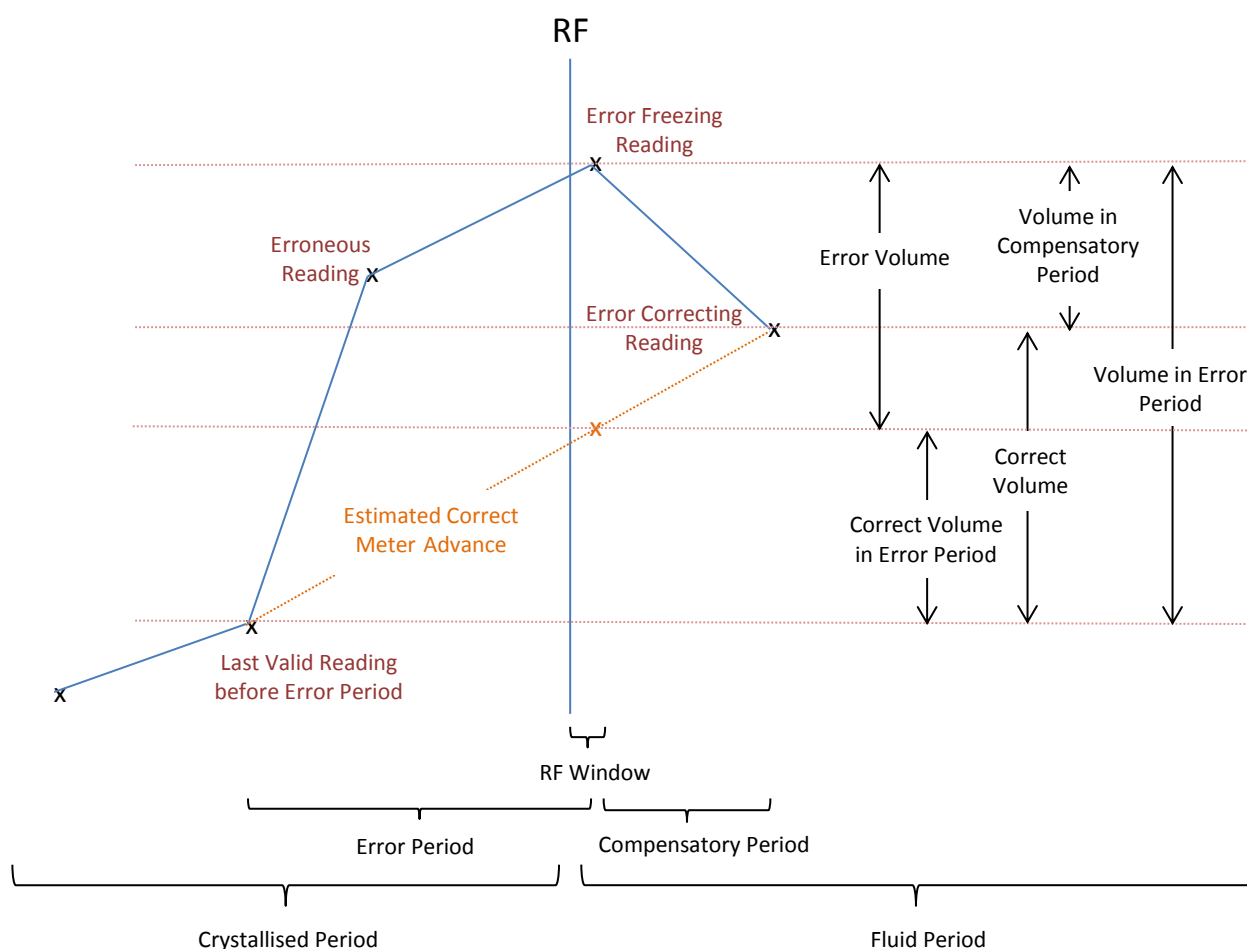
In the case of a dummy meter exchange, the audit record shall consist of:

- MSID;

- Supplier Id;

- SSC;

- Profile Class;

- GSP Group;

- Energisation Status;

- Settlement Date of the dummy meter exchange;

- Meter Multiplier;

- CT Ratio;

- For each Settlement Register:

  o TPR;

  o The final Meter reading;

  o The initial Meter reading;

- Date dummy meter exchange undertaken; and

- Rationale for Change (optional).