

Project Nexus Interim Settlement Business Rules

1. Introduction

This version of the document contains draft business rules for settlement arrangements for gas meter points identified by the Settlement Workgroup.

The document defines the arrangements for the interim settlement arrangements until a settlement regime performed daily on actual reads is achievable.

The document has been based on presentations and discussions at the Project Nexus Settlement Workgroup and considering the high level principles agreed at the Allocation Workgroup. These options have been documented for further discussion and clarification. All areas within the document are yet to be agreed and finalised. they are intended to assist discussions in future meetings rather than be a conclusive statement of requirements at this stage.

Deleted: on

Deleted: , ho

Deleted: wever, a

Deleted: . It

Deleted: is

All square brackets – [] – represent areas for clarification which must be resolved by the Workgroup or by the Project Nexus UNC Workgroup prior to the Business Rules being finalised.

2. Scope

In Scope

Function:

- Receipt and processing of meter readings
- After the day gas allocations
- Share of un-allocated energy
- Estimation methodology for allocation purposes
- Estimation methodology for missing reads
- Read validation
- Incentives & obligations

Deleted: , actual or estimated

Deleted: gas

Market Sectors:

- All smart metered sites
- All dumb metered sites
- AMR sites for allocation and the share of un-allocated energy

Out of Scope

Function:

- Reconciliation processes
- Shrinkage calculation
- AQ processes
- Transportation Invoicing

Market Sectors:

- Receipt and processing of meter reads for;
 - AMR sites
 - DM Sites including NTS Telemetered sites
 - [NDM CSEPs]

Deleted: and estimates

Deleted: 1

Deleted: 9

Deleted: 9

Deleted: 11/04/2011

Deleted: 24/03/2011

3. Implementation Timescales

Implementation of the developed solution will be confirmed once all requirements are captured following the Project Nexus Requirements Definition Phase.

4. Change Drivers and Business Goals

Drivers

The drivers detailed below are those identified by the Settlement Workgroup specifically for the interim settlement arrangements.

- To reduce the difference between gas nomination, actual consumption and gas allocation.
- Reduce the changes in forecasting & allocations between D-5 to D+5.
- Improve existing allocation processes
- Implement a fairer smearing mechanism
- Visibility of the value of un-allocated energy
- Provide services to enable Shippers to submit more reads for utilising in downstream processes
- Appropriate incentives & obligations on parties for both Smart & dumb meters

Deleted: ¶
 <#>To reduce the Shippers' risk due to the mismatch between gas nomination, actual consumption and gas allocation. ¶
 <#>Use actual data rather than AQ or estimated reads in allocation processes¶
 <#>To increase the proportion of metered information feeding the settlement processes¶
 <#>Remove requirement for estimation routines and where required, improve the estimation methodology¶
 <#>Remove the dependency on DM allocations for the NDM sector. ¶
 <#>To identify a more accurate value for un-allocated gas ¶
 <#>Implement a fairer smearing mechanism which is applied to all sites¶
 <#>To promptly reflect consumption reduction in the transportation and settlement arrangements¶

Goals

- Ultimately the industry desire is for all sites to utilise actual daily reads for energy allocation (after the day), energy balancing and settlement processes.
 - However, this regime is only achievable in a fully 'remote metered' world (or when 'critical mass' of remote meters has been achieved).
 - The requirements and rules described in this document are therefore the interim arrangements for all directly connected sites during the Smart meter roll-out. These interim arrangements provide the platform for progression to a daily settlement regime for all gas meter points.
- The goal for the interim settlement arrangements is therefore to develop an appropriate 'stepping-stone' towards the ultimate goal of daily settlement based on daily reads.

Deleted: smart
Deleted: smart
Deleted: and with a fully established DCC

5. Change Background

- The changes have been identified as a result of Xoserve's Project Nexus consultation for the replacement of UKLink systems and following DECC's consultation on Smart metering.

Issues raised with the existing Settlement processes

- The following issues were identified during the Settlement Workgroup;
 - Difference in values between gas nominations, actual consumption and allocations
 - Profiling and Scaling Factors are not appropriate
 - Estimation methodology
 - Unfair smearing mechanism

Deleted: 1
Deleted: 9
Deleted: 9
Deleted: 11/04/2011
Deleted: 24/03/2011

- Current regime does not reflect changes in site consumption quickly
- The following issues were raised during the Project Nexus Consultation, taken from the Initial Requirements Register (IRR);

Deleted: <#>To be added¶

<u>IRR Reference</u>	<u>Issue</u>
<u>4.3</u>	<u>Additional and more accurate energy consumption information</u>
<u>4.5</u>	<u>All energy consumption data should be used to ensure that costs are targeted at those that incur them on the system</u>
<u>4.6</u>	<u>Daily energy allocations for a large part, if not all, of the metering points</u>
<u>10.7</u>	<u>Use energy consumption data to develop an additional SSP profile for I&C sites</u>
<u>10.8</u>	<u>Shipper demand allocation data split out by market sector (SSP & LSP) and by LDZ on a daily basis</u>
<u>10.10</u>	<u>Create a new EUC band for Small Supply Points</u>
<u>10.11</u>	<u>Review of the process of Winter Annual Ratio calculation, and the subsequent allocation of EUC and thus load profile</u>
<u>13.9</u>	<u>Meter read window preferably abolished or at least extended significantly from its current 15 days</u>

6. Assumptions

- Shippers will submit validated meter readings; not energy (kWh) or volume (consumption) (this assumption will need to be reviewed when more is known on DCC design and services).
- Exit Close Out remains at GFD+5.
- The requirement for aggregate reconciliation is expected to diminish or be replaced with meter point reconciliation.
- Some LDZ sites will continue to be daily metered (and reads received daily) and their consumption is deducted from the allocation process
- A smearing mechanism for un-allocated energy will continue to be required
- AUGE role and/or methodology may require amending via a Modification as a result of the revised settlement arrangements
- These interim business rules will need to be appropriate for dumb metered sites aswell as remotely read sites
- Continual monitoring to take place of SMIP developments to ensure alignment with parties obligations and DCC services
- Energy allocation processes will continue to run at 1pm on GFD+1

Deleted: <#>To be added¶

Deleted: (actual or estimated)

Deleted: or

7. Constraints

- Final CV value is not known until D+5, CV is used for the calculation of energy.

Deleted: <#>Existing Allocation processes commence at 1pm on GFD+1. ¶

8. Risks and Issues

Risks

- Not all Shippers/Suppliers attend the Settlement Workgroup or are represented therefore there may be opposition to any potential Modifications raised.

Deleted: 1

Deleted: 9

Deleted: 9

Deleted: 11/04/2011

Deleted: 24/03/2011

- DCC scope and services may be different to that expected by the workgroup and so could change the business requirements.

Issues

-

9. Dependencies

- Approval of the business rules by PN UNC
- Approval by Ofgem following the appropriate UNC Modification process

10. Benefits

Workgroup need to define the high level business benefits (tangible & intangible) to support the case for change

- To improve existing industry processes

Deleted: Details of high level benefits (tangible and intangible) are required

11. Summary of the Approaches

The following approaches for the future gas Settlement regime were agreed at the PN UNC Settlement Workgroup on March 2nd, 2011.

Process Description	Process for Allocation	Process for Energy Balancing close-out	Read Submission	Type of Read Submission
Periodic Readings	GT estimate	GT estimate	Periodic single read	Single Read submitted to a pre-notified frequency
Batched Daily Readings	GT estimate	GT estimate	Daily reads in batches	Daily reads submitted in batches monthly

Note:

- Both of the processes described could (depending on Mod approval) be available in the future solution; they are not alternative solutions
- All 'days' specified within this document refer to calendar days except where stated 'business days'.

Deleted: will

Deleted: 1

Deleted: 9

Deleted: 9

Deleted: 11/04/2011

Deleted: 24/03/2011

12. Business Rules

12.1 General

Gas Nominations

There are a number of approaches for managing 'before the day gas nominations', two of which are documented below;

1. [Obligations for submitting Gas Nominations are unchanged;
 - a. Shippers submit Nominations for sites where meter reads are submitted daily
 - b. GT calculates gas nominations on behalf of Shippers in aggregate for sites where daily reads are not submitted daily and used for allocation processes]

or

2. [Shippers will nominate energy for all of their sites ahead of the day. This nomination will be in aggregate for many of these sites.]

3. [Total Shipper gas nominations will be subject to a 'Nominations Scaling Adjustment' (smear) to ensure that total gas nominations match forecast gas demand.]

Deleted: balancing correction

4. A 'Nominations Scaling Adjustment' (Smear) will be applied at LDZ and Shipper portfolio level and will be visible to Shippers.

Deleted: The

Deleted: Balancing Correction

Energy Allocation and Balancing

5. Daily energy allocation will be calculated on GFD+1 by the GT.
6. The estimate generated for energy allocation is described below under 'Estimation Methodology'.
7. The closed out energy balancing position at D+5 will be based on the estimate calculated by the GT.

Share of un-allocated energy (Allocation Scaling Adjustment)

8. Each LDZ is balanced separately. The 'Nomination Scaling Adjustment' (smear), is calculated daily and applied to all sites within the LDZ.
9. Shrinkage is deducted before un-allocated energy is calculated
10. The share of un-allocated energy is calculated as follows;
 - a. Total of all site consumptions (daily read sites) and the total of all estimates will be combined daily to give the total LDZ consumption.
 - b. Compare total LDZ consumption to the total actual LDZ offtake (after Shrinkage deduction).

Deleted: Balancing Correction/Smear

Deleted: , t

Deleted: balancing correction

Deleted: /

Deleted: '

Allocation Scaling Adjustment % is calculated as:

Deleted: Balancing Correction

$$\frac{(\text{Actual LDZ offtake} - \text{Total LDZ site level consumption})}{\text{Total LDZ site level consumption}}$$

11. The difference between the two could be a positive or negative and will be apportioned equally to all sites within the LDZ; smart metered, DM, AMR and dumb meters.
12. All sites within the LDZ would receive the same % correction applied to the site's consumption for the day.

Deleted: 1

Deleted: 9

Deleted: 9

Deleted: 11/04/2011

Deleted: 24/03/2011

- 13. The Allocation Scaling Adjustment will be applied at LDZ and Shipper portfolio level, not at individual site level.
- 14. A positive value denotes an increase to site level consumption and a negative value would decrease the site level consumption.

Deleted: Balancing Correction

Example:

Actual LDZ offtake	=	1,010,000 kWh
Total of individual Site level consumptions	=	1,000,000 kWh
Difference	=	10,000 kWh
<u>Allocation Scaling Adjustment</u>	=	+1%

Deleted: Balancing Correction

Deleted: .

+1% Allocation Scaling Adjustment (smear) applied to the consumption of all sites within the LDZ

Deleted: balancing correction

Estimation Methodology for GFD+1 Allocation

- 15. These business rules need to contain the nature of the methodology and the source of the parameters, not necessarily the parameter values.

12.2 Settlement of Periodic Readings (Approach 2)

Read Submission and Processing

- 1. Shippers obtain and validate the periodic read.
- 2. A single actual meter reading is submitted to an agreed frequency by the Shipper to the GT. Estimated readings will not be submitted.
- 3. The read frequencies are: Weekly, Monthly, Quarterly, 6 monthly or annually.
- 4. [Minimum read frequencies will be required based on consumption/meter type/market sector (e.g. Monthly read frequency for site where the AQ is greater than 293,000 kWh)].
- 5. The maximum planned interval for submission of an actual meter reading is two years.
- 6. On receipt of a reading the GT will carry out 'logic checks' and a response issued notifying the Shipper if the read has failed (see section 15 for read communication content).
- 7. On receipt of a valid reading the GT will perform reconciliation for each gas day since the last read and upto and including the date of the current reading.
- 8. Treatment of reconciliation and the impact of the reconciliation on the 'Allocation Scaling Adjustment' will be covered under the Reconciliation Workgroup.

Deleted: s

Deleted: [annual]

Deleted: [passed] or

Deleted: balancing correction

12.3 Settlement of Batched Daily Readings (Approach 3)

Read Submission and Processing

- 1. Shippers obtain & validate the daily reads.
- 2. Single daily readings are not submitted daily. Daily readings are submitted in batches monthly.

Deleted: [

Deleted:]

Deleted: 1

Deleted: 9

Deleted: 9

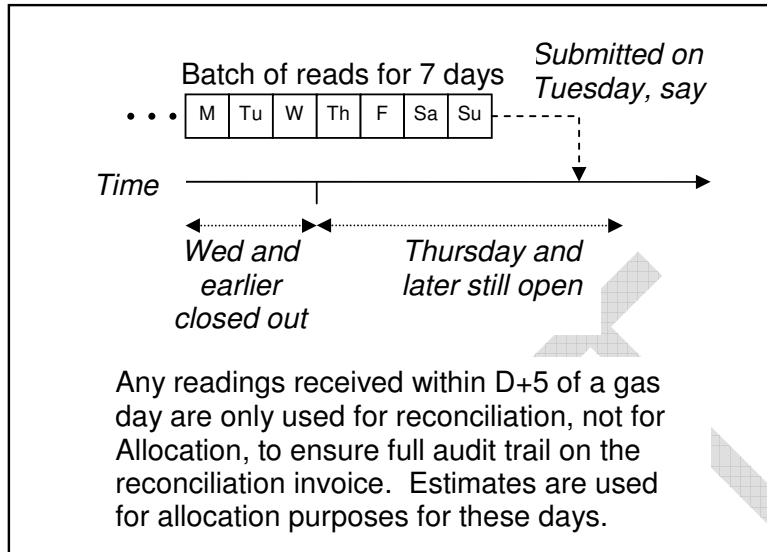
Deleted: 11/04/2011

Deleted: 24/03/2011

- The reads submitted will not be used in allocation or energy balancing processes; A read may be submitted before D+5 ~~Close Out~~ but it **will** only be used for reconciliation processes, see example below;

Deleted: c

Deleted: o



- Readings submitted **will** be **actual reads [not estimated reads]**.
- On receipt of a batch of readings the GT will carry out 'logic checks' and a response issued notifying the Shipper of which reads have failed **(see section 15 for read communication content)**.
- A completeness check will also be performed on receipt of a batch of reads **and notify the Shipper of any missing read days**.
- If there is a gap between the last reading date of the previous batch and the first reading date of the new batch, or for any missing reads within the batch, the GT will estimate the read and notify the Shipper of the estimated reading.
- On receipt of a batch of accepted meter readings the GT will perform individual daily reconciliations for each gas day upto and including the date of the last reading in the batch. Treatment of reconciliation and the impact of the reconciliation on the **'Allocation Scaling Adjustment'** will be covered under the Reconciliation Workgroup.

Deleted: may

Deleted: [or estimated reads]

Deleted: The read notification must specify whether the read is actual or estimated.

Deleted: [passed] or

Deleted: and any missing read days

Deleted: balancing correction

13. Read Obligations & Incentives

13.1 Must Reads

The Must Read requirement will apply where an actual valid meter read is not received for [x] consecutive months [dependent on read frequency / meter type / market sector].

13.2 Read Submission Incentive

Shippers will have an obligation to ensure that a valid read is submitted for [X%] of sites per [read frequency / market sector / meter type] in the Shippers portfolio.

13.3 Read Submission Deadline

Deleted: 1

Deleted: 9

Deleted: 9

Deleted: 11/04/2011

Deleted: 24/03/2011

A read must be submitted within [X] days after the meter read date.

14. Election for change in regime or read frequency (no change in Shipper)

1. Change in read frequency: The GT needs to know [X] business days before the gas day of the elected read frequency. A change in Meter Reading Frequency can only be effective [X months] after the current Meter Reading Frequency effective date, except where;
 - There has been a change of Shipper.
 - [There has been a meter exchange e.g. dumb to Smart meter]
2. Change in regime: An election for a change of regime must be received and accepted by [D-X] business days. A change in settlement regime can only be effective [X months] after the current regime effective date.
3. Only the Registered User or a Confirming User (with a confirmation about to become effective after D-7) can submit an election described in 1 or 2 above. If the requesting User will not be the Registered User on the day to which the election refers, the election will be rejected.

Deleted: 10
 Deleted: (as per existing requirement)
 Deleted: 2

Deleted: 8
 Deleted: using the existing Reconfirmation process as per UNC G2.2.5, 2.5.1 & 2.5.8
 Deleted: 2

15. Read Communication Content

15.1 Read Information from the Shipper to the GT:

- MPRN
- [Confirmation Number]
- Meter Serial Number
- Meter Type (e.g. Dumb, Smart)
- Reading
- Date of Reading
- Reading Source (customer, transmitted, MRA)
- Through the Zero Count
- Derived or Actual Read
- Reading Units
- Metric or Imperial Indicator
- Read Reason Code (Opening Read, Replacement Reading)
- Converter Reading
- Start & End Date of Read Batch (Process 3 sites)
- Read Verified Indicator

15.2 Read Information from the GT to the Shipper:

- At 'File' Level
 - Total Number of Reads Received
 - Total Number of Accepted Reads
 - Total Number of Rejected Reads

Deleted: 1
 Deleted: 9
 Deleted: 9
 Deleted: 11/04/2011
 Deleted: 24/03/2011

- Total Number of Missing reads
- At MPRN Level for Rejected reads:
 - MPRN
 - Reading
 - Date of Reading
 - Rejected reason Code
- At MPRN Level for Missing Read Days:
 - MPRN
 - Date of Missing Read
- Estimated Read Notification:
 - Estimated Reading
 - Date of Estimated Reading
 - Reason Code for Estimated Reading (e.g. read failed validation, no read received)

DRAFT

Deleted: 1
Deleted: 9
Deleted: 9
Deleted: 11/04/2011
Deleted: 24/03/2011