

UNC Request 661R – Action 0802 – Version 3

Purpose

This document seeks to highlight the issue described in 661R.

It lays out the Imbalance and Reconciliation processes for Non-Daily Metered Gas Sites.

This document also highlights where System Marginal Sell/Buy Price is used and where System Average Price is used.

Finally, it aims to clarify where quantities used for each process come from.

References

[Uniform Network Code – Transportation Principles Document - Section E](#)

[Uniform Network Code – Transportation Principles Document - Section H](#)

Daily Imbalance Process

The text below describes how each User's Daily Imbalance is calculated.

TPD Section E 5.1.1

The Daily Imbalance for each User shall be calculated in respect of each Day as the difference between:

- (a) the sum of:
 - (i) the aggregate of the User's UDQIs;
 - (ii) the aggregate of the Trade Nomination Quantities under any Acquiring Trade Nominations made by the User; and
- (b) the sum of:
 - (i) the aggregate of the User's UDQOs;
 - (ii) the aggregate of the Trade Nomination Quantities under any Disposing Trade Nominations made by the User; and
 - (iii) the User's Aggregate User Unidentified Gas.

TPD Section E 5.1.2

5.1.2 The Daily Imbalance is positive where the quantity under paragraph 5.1.1(a) is greater than the quantity under paragraph 5.1.1(b), and negative where the quantity under paragraph 5.1.1(b) is greater than the quantity under paragraph 5.1.1(a).

Where;

TPD Section E 5.1.3

5.1.3 For the purposes of the Code, in respect of any Day:

- (a) the “**User Daily Quantity Input**” or “**UDQI**” is the quantity of gas treated as delivered by a User to the Total System on that Day at a System Entry Point;
- (b) the “**User Daily Quantity Output**” or “**UDQO**” is the quantity of gas treated as offtaken by a User from the Total System on that Day at:

As our modification is looking at Non-Daily Metered Sites (Product Class 3 & 4), this means that the inputs for the Daily Imbalance calculation shall be the difference between:

- (a) the sum of:
 - (i) the aggregate of the User's UDQIs; = **Quantity of gas input to the Total System by the Shipper**
 - (ii) the aggregate of the Trade Nomination Quantities under any Acquiring Trade Nominations made by the User; = **Quantity of gas acquired through trade and nominated via Gemini (if applicable);** and
- (b) the sum of:
 - (i) the aggregate of the User's UDQO = **Quantity of gas offtaken from the Total System by the Shipper;** and
 - (ii) the aggregate of the Trade Nomination Quantities under any Disposing Trade

Nominations made by the User; = Quantity of gas sold through trades by the Shipper; and

- (iii) the User's Aggregate User Unidentified Gas. = The Shipper's UIG, as calculated in accordance with [UNC TPD Section H2.6.1.](#)

TPD Section E 3.1.1

For a nominating User the UDQO in respect of a Registered Supply Point for the Gas Flow Day shall be:

- (a) in the case of a NDM Supply Point, the NDM Supply Meter Point Demands (in accordance with Section H2) for the Class 3 or 4 Supply Meter Point comprised in that NDM Supply Point;
- (b) in the case of a DM Supply Point, the User SPDQ in accordance with paragraph 3.1.2.¹

As our request is looking at Product Class 3 and 4 sites, this means that the User's UDQO shall be equal to the NDM Supply Meter Point Demands.

TPD Section H 2.2.1

NDM Supply Meter Point Demand ('SPD') for a Day (Day 't') shall be determined according to the following formula:

$$SPD = \frac{AQ}{365} \times ALP_t \times (1 + (DAF_t \times WCF_t))$$

For the sake of simplicity and to isolate the issue described in 661R, we have assumed that the Shipper only has NDM supply points (Product Class 3 & 4) and therefore the value for 5.1.1 (b)(i) is equal to the sum of the User's NDM Supply Meter Point Demands

1.1.1 ¹ The "User SPDQ" for a User in respect of a Registered DM Supply Point shall be the sum of:

- (a) subject to paragraph (b), the Supply Meter Point Daily Quantity;
- (b) in the case of a Shared Supply Meter Point, the portion of that Supply Meter Point Daily Quantity determined in respect of that User in accordance with the Shared Supply Meter Notification pursuant to Section G1.7.

NDM Imbalance Summary

The summary below describes the process for Product Class 3 and 4 Supply Points and omits any DM elements of the process.

The Shipper's Daily Imbalance Charge is calculated as:

Sum (Shipper's Gas Inputs + Acquiring Trades)

-

Sum (Shipper's NDM Supply Meter Point Demand (estimation calculation) + Disposing Trades + Shipper's Unidentified Gas)

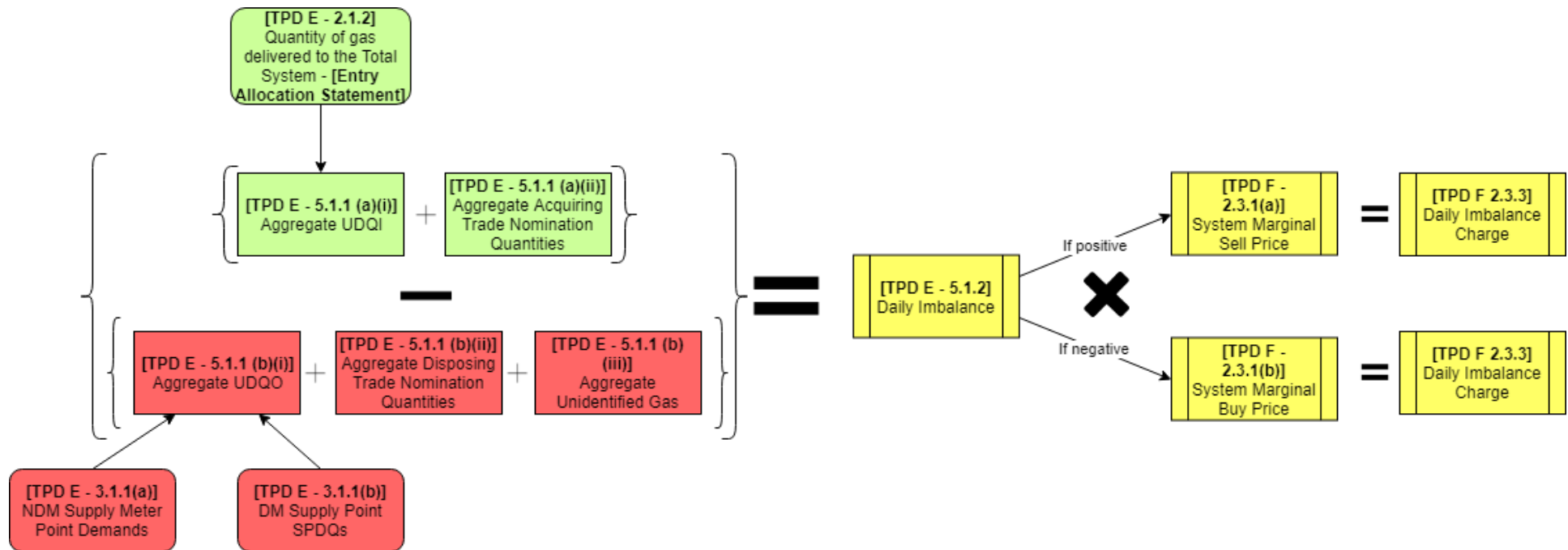
x

System Marginal Price

=

Daily Imbalance Charge

Daily Imbalance Charge Process Flow



Reconciliation Process

The text below describes how each User's Offtake Reconciliation is calculated.

UNC TPD Section E 6.2.2

For the purposes of an Offtake Reconciliation in respect of a relevant System Exit Point, in relation to any Day (D) in the Reconciliation Metered Period:

- (a) the **"Daily Reconciliation Quantity"** (DRQ_D) shall be determined as follows:

$$DRQ_D = PRDQO_D * (DRF_D - 1)$$

where:

$PRDQO_D$ is the Prevailing Reconciled Daily Quantity Offtaken for the Day (as determined prior to the Reconciliation Meter Reading)

DRF_D is the Daily Reconciliation Factor for the Day

- (b) the **"Daily Reconciliation Factor"** (DRF_D) is a factor in respect of the Reconciliation Metered Period, calculated as:

$$DRF_D = RMV / PMV$$

where for that Reconciliation Metered Period:

RMV is the Reconciliation Metered Volume

PMV is the Prevailing Metered Volume

UNC TPD Section E 6.2.3

The **"Prevailing Metered Volume"** for a Reconciliation Metered Period is calculated as follows:

- (a) if the Reconciliation Metered Period is a single Day

$$PMV = PRDQO_D / CV_D$$

- (b) if the Reconciliation Metered Period is more than one Day:

$$PMV = \Sigma (PRDQO_D / CV_D)$$

where

Σ is the sum over all Days in the Reconciliation Metered Period

and where, for each Day in the Reconciliation Metered Period

CV_D is the relevant calorific value

$PRDQO_D$ is the Prevailing Reconciled Daily Quantity Offtaken.

TPD Section E 1.1.8

For the purposes of the Code, as at any time, the **"Prevailing Reconciled Daily Quantity Offtaken"** ($PRDQO$) in respect of a Day and a System Exit Point is the quantity treated, pursuant to the applicable provisions of the Code and/or (in the case of a Connected System Exit Point) of the CSEP Network Exit Provisions, as having been offtaken at the System Exit Point on that Day, being

- (a) in the case of a Class 1 or 2 Supply Meter Point, the Supply Meter Point Daily Quantity;
- (b) in the case of a Class 3 or 4 Supply Meter Point, the NDM Supply Meter Point Demand;

- (c) in the case of a Connected System Exit Point and a User, the UDQO;
- (d) as adjusted (pursuant to paragraph 6.2.4) by all, if any, Offtake Reconciliations which have been carried out prior to that time.

NDM Reconciliation Summary

The summary below describes the Reconciliation process for Product Class 3 and 4 Supply Points and omits any DM elements of the process. It also assumes the Shipper has no connected system exit points.

The Shipper's Reconciliation Clearing Value is calculated as:

Daily Reconciliation Quantity

X

System Average Price

=

Reconciliation Clearing Value

To calculate Daily Reconciliation Quantity:

NDM Supply Meter Point Demand (Estimation Calculation)

/

Calorific Value

=

Prevailing Metered Volume

Reconciliation Metered Volume

/

Prevailing Metered Volume

=

Daily Reconciliation Factor

(NDM Supply Meter Point Demand (Estimation Calculation)

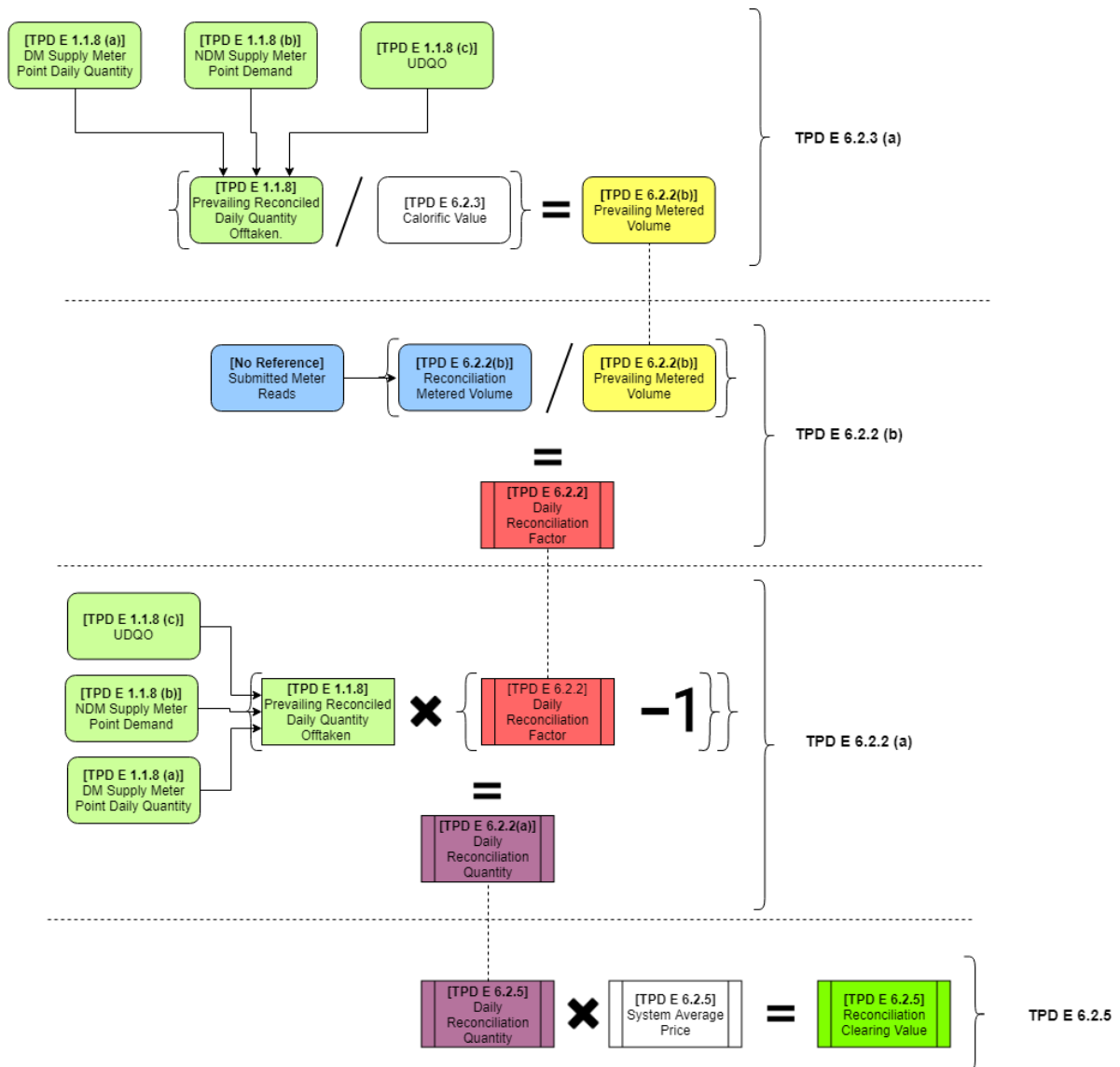
X

(Daily Reconciliation Factor – 1)

=

Daily Reconciliation Quantity

Reconciliation Clearing Value Process Flow



661R Issue Summary

This document shows how the NDM Supply Meter Point Demand estimation is used in both the Imbalance and Reconciliation process for Product Class 3 and 4 supply points.

NDM Supply Meter Point Demand calculation:

$$SPD = \frac{AQ}{365} \times ALP_t^- \times (1 + (DAF_t \times WCF_t))$$

For the Imbalance process:

[(Shipper's Gas Inputs + Acquiring Trades]

-

[**NDM Supply Meter Point Demand estimation** + Disposing Trades + UIG])

*

System Marginal Price

=

Daily Imbalance Charge

For the Reconciliation Process:

[**NDM Supply Meter Point Demand estimation**]

*

(Reconciliation Metered Volume / [**NDM Supply Meter Point Demand estimation**] / Calorific Value)]

*

System Average Price

=

Reconciliation Clearing Value

The issue we seek to highlight is the creation of artificial winners and losers as the result of the use of different system prices for these processes.

Where a Shipper believes that their demand will not equal the quantity calculated by the NDM Supply Meter Point Demand estimation, they will input and/or acquire through trades a higher/lower quantity of gas. The difference between this quantity and the NDM Supply Meter Point Demand is defined as the Shipper's Daily Imbalance. This Daily Imbalance quantity will be multiplied by System Marginal Price to create the Shipper's Daily Imbalance Charge.

Reconciliation Metered Volumes are calculated later through the submission of meter reads. The submitted read is divided by the NDM Supply Meter Point Demand² estimation to calculate the Daily Reconciliation Factor. This factor shows the percentage variance between the NDM Supply Meter Point Demand and the actual demand, as proven through submission of actual meter reads. The NDM Supply Meter Point Demand is then multiplied by this factor minus one³, this gives us the Daily Reconciliation Quantity. This Reconciliation Quantity will be equal to the Daily Imbalance quantity, assuming the Shipper's acquiring trades and/or input exactly matched the subsequent Reconciliation Metered Volumes. This Daily Reconciliation Quantity⁴ is multiplied by System Average Price to calculate the Reconciliation Clearing Value.

This presents a scenario where the Shipper has acquired the exact amount of gas required to meet their demand. The initial variance from their acquisition and the NDM Supply Meter Point demand estimation is multiplied by System Marginal Price. The meter reads submitted show that the Shipper has acquired the correct amount of gas to cover the variance. However, as part of the subsequent Reconciliation Process, this time the variance is multiplied by System Average Price. This means that the Shipper takes a financial hit equal to the difference between System Marginal Price and System Average Price multiplied by volume.

² for the sake of simplicity, it assumes this Shipper has no direct offtakes.

³ this is to calculate the *difference* in volume

⁴ The use of factors in this calculation makes it slightly harder to follow than the Imbalance Process. Essentially, the Reconciliation Quantity is equal to the difference between the NDM Supply Meter Point Demand estimation and the volume shown to have been demanded as the result of the submission of actual meter reads.

661R - Unidentified Gas

Unidentified Gas Balancing

Unidentified Gas is factored into the Daily Imbalance for each User according to TPD E 5.1.1:

TPD E 5.1.1

5.1.1 The Daily Imbalance for each User shall be calculated in respect of each Day as the difference between:

(a) the sum of:

(i) the aggregate of the User's UDQIs;

(ii) the aggregate of the Trade Nomination Quantities under any Acquiring Trade Nominations made by the User;

and

(b) the sum of:

(i) the aggregate of the User's UDQOs;

(ii) the aggregate of the Trade Nomination Quantities under any Disposing Trade Nominations made by the User; and

(iii) the User's Aggregate User Unidentified Gas.

Each User's Daily Imbalance factors in the **User's Aggregate User Unidentified Gas**.

The **User's Aggregate User Unidentified Gas** is calculated according to TPD E 1.1.6:

TPD E - 1.1.6

(b) the "Aggregate User Unidentified Gas" is the net aggregate for all LDZs of the User LDZ Unidentified Gas;

The **Aggregate User Unidentified Gas** is the aggregate across all LDZ of **the User LDZ Unidentified Gas**.

The **User LDZ Unidentified Gas** is calculated according to TPD E 1.1.6

TPD E 1.1.6

ii) the "**User LDZ Unidentified Gas**" ('ULUG') in respect of an LDZ shall be calculated as follows:

$$\text{ULUG} = \text{UIG} * \text{AULOQ} / \text{AAULOQ}$$

Where

UIG is the Unidentified Gas for the LDZ and the Day in accordance with Section H2.6.1;

AULOQ is the User's User Adjusted LDZ Offtake Quantity for the LDZ and the Day;

AAULOQ is the aggregate for all Users of the Adjusted User LDZ Offtake Quantities for the LDZ and the Day;

The User LDZ Unidentified Gas is calculated as: $ULUG = UIG * AULOQ / AAULOQ$

Where UIG is calculated according to TPD H 2.6.1:

TPD H 2.6.1

2.6.1 The “Unidentified Gas” (UIG) for a LDZ and a Day shall be determined as follows:

$$UIG = LDQO - AULOQ$$

where

LDQO is the LDZ Daily Quantity Offtaken

AULOQ is the aggregate for all Users of the User LDZ Offtake Quantities for the Day.

The Unidentified Gas for an LDZ is calculated as: $UIG = LDQO - AULOQ$

Where LDQO is calculated according to TPD E 1.5.1:

TPD E 1.5.1

In respect of each LDZ:

(a) the “LDZ Daily Input Quantity” is the aggregate quantity of gas treated as flowing into that LDZ on a Day, less the quantity (if any) treated as flowing out of the LDZ into another LDZ;

(b) the “LDZ Daily Quantity Offtaken (LDQO)” is the aggregate quantity of gas treated as offtaken from the Total System on a Day at all Supply Points and Connected System Exit Points (and including Unidentified Gas) on that LDZ, determined by adjusting the LDZ Daily Input Quantity to take account of LDZ Shrinkage and changes (between the start and the end of the Day) in LDZ stock.

And where AULOQ is calculated according to TPD E 1.1.6

TPD E 1.1.6

(a)(i) the “Adjusted User LDZ Offtake Quantity” is the sum of the User’s adjusted UDQOs for that Day for all DM Supply Points, NDM Supply Points and Connected System Exit Points in that LDZ;

...

(c) for the purposes of paragraph (a)(i), an “adjusted” UDQO for a Day in respect of a System Exit Point is the UDQO adjusted by the allocation factor specified in the prevailing AUG Table in respect of the category to which that System Exit Point belongs on that Day.

UDQO is calculated as:

TPD E 3.1.1

For a nominating User the UDQO in respect of a Registered Supply Point for the Gas Flow Day shall be:

(a) in the case of a NDM Supply Point, the NDM Supply Meter Point Demands (in accordance with Section H2) for the Class 3 or 4 Supply Meter Point comprised in that NDM Supply Point;

(b) in the case of a DM Supply Point, the User SPDQ in accordance with paragraph 3.1.2.⁵

1.1.2 ⁵ The “User SPDQ” for a User in respect of a Registered DM Supply Point shall be the sum of:

Therefore, the AULOQ is the sum of the User's UDQOs, adjusted according to the AUGE table:

Supply Meter Point Classification	Class 1	Class 2	Class 3	Class 4
EUC Band 1	0.17	43.06	46.41	94.64
EUC Band 2	0.17	43.06	46.41	109.77
EUC Band 3	0.17	43.06	44.06	107.52
EUC Band 4	0.17	43.06	43.60	43.76
EUC Band 5	0.17	43.06	46.06	43.20
EUC Band 6	0.17	44.54	46.06	42.65
EUC Band 7	0.17	32.41	46.06	42.33
EUC Band 8	0.17	4.38	33.40	42.24
EUC Band 9	0.17	0.17	0.17	0.17

Table 13: AUG Factor Table 2018/19

-
- (a) subject to paragraph (b), the Supply Meter Point Daily Quantity;
 - (b) in the case of a Shared Supply Meter Point, the portion of that Supply Meter Point Daily Quantity determined in respect of that User in accordance with the Shared Supply Meter Notification pursuant to Section G1.7.

Unidentified Gas in Balancing – Summary

A User's Imbalance is calculated across all LDZs and uses the **[User's Aggregate User Unidentified Gas]** in the Imbalance calculation. A **[User's Aggregate User Unidentified Gas]** is treated in the same way consumption or disposing trades are i.e. it is treated like an offtake/disposal.

The **[User's Aggregate User Unidentified Gas]** is calculated as the aggregate across all LDZs of the **[User LDZ Unidentified Gas]**.

The **[User LDZ Unidentified Gas]** is calculated by multiplying the total UIG for an LDZ by the ratio between the User's **[User Adjusted LDZ Offtake Quantity]** and the Aggregate of all Users' **[User Adjusted LDZ Offtake Quantity]**. i.e the User's **[User LDZ Unidentified Gas]** is calculated by sharing the total UIG quantity to a User based on their contribution to the total level of LDZ offtakes.

Each User's **[User Adjusted LDZ Offtake Quantity]** is calculated as the sum of the User's Adjusted UDQOs within the LDZ. Adjusted UDQOs are calculated by multiplying the NDM Supply Meter Point Demand (NDM) or the SPDQ (DM) by the AUGE Table weightings.

[Unidentified Gas] for an LDZ is calculated by taking the total **[LDZ Daily Quantity Offtaken]** and subtracting the **[Aggregate User LDZ Offtakes Quantities]**. The **[LDZ Daily Quantity Offtaken]** is derived from meter input volumes and subtracting shrinkage. The **[Aggregate User LDZ Offtake Quantities]** is the aggregate across all Users of the adjusted UDQOs.

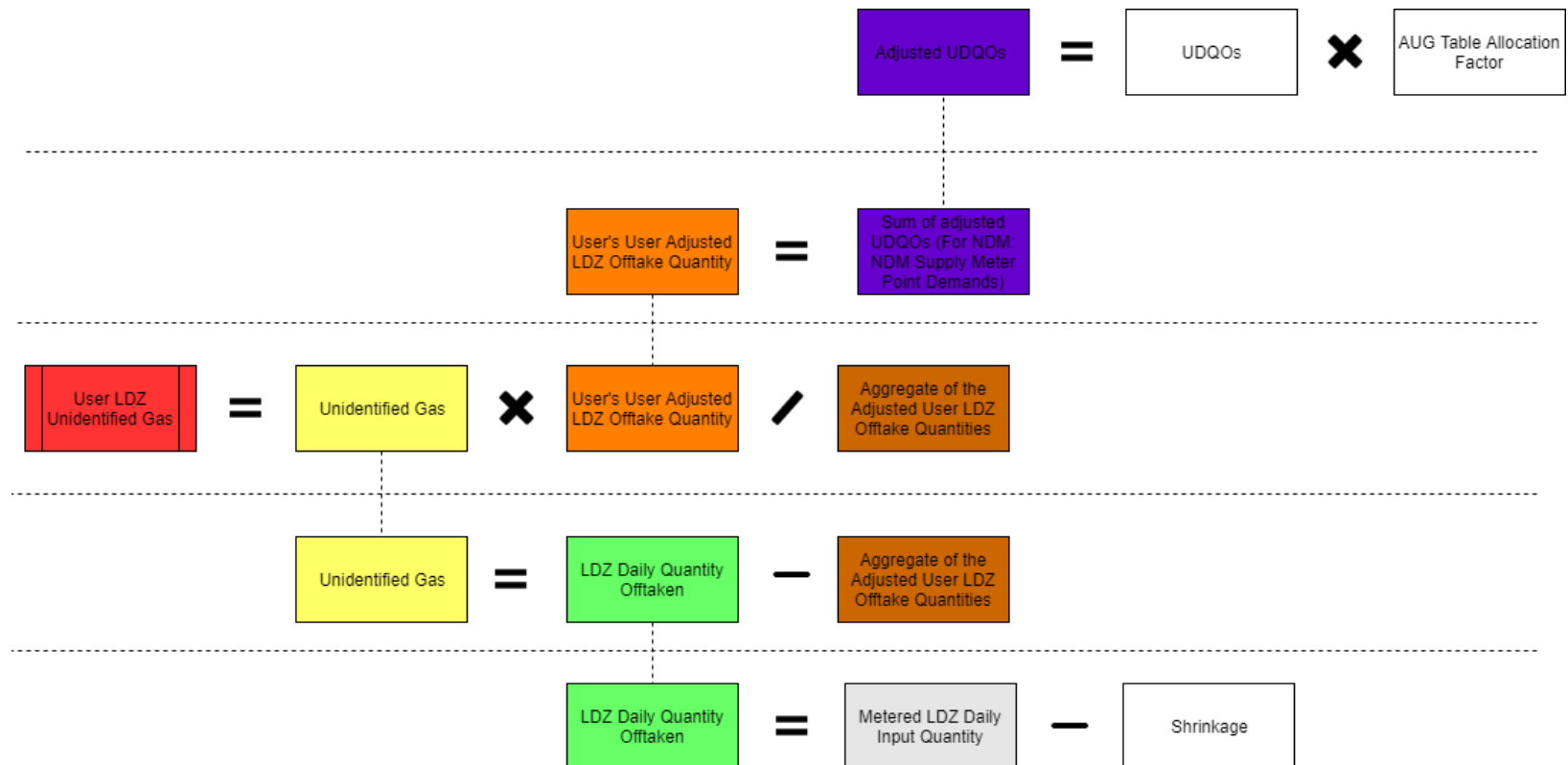
Plain English

An LDZ's Unidentified Gas levels are calculated by applying shrinkage to the metered LDZ Daily Input Quantity and subtracting the aggregate of Users' AUGE Table adjusted UDQOs. This gives the total level of UIG in an LDZ. It takes the total metered input, subtracts known offtakes and any remaining quantity is classed as Unidentified Gas.

The total level of Unidentified Gas in an LDZ is then apportioned to Users according to the ratio between a User's adjusted UDQOs and the aggregated of all adjusted UDQOs. This gives each User their share of Unidentified Gas in an LDZ.

Adding together a User's Unidentified Gas across every LDZ gives the amount to be used in a User's Imbalance Calculation.

Unidentified Gas Balancing



Unidentified Gas Reconciliation

There are two values calculated for Unidentified Gas Reconciliation, a User UGR Quantity (UUGRQ) and a User UGR Clearing Value (UUGRCV).

TPD F5 defines how Unidentified Gas Reconciliation System Clearing shall work:

TPD F 5.1.1 – 5.1.4

Upon each:

- (a) Offtake Reconciliation, the quantity of gas comprising the Reconciliation Quantity;
 - (b) Unidentified Gas Reconciliation, the quantity of gas comprising the User UGR Quantity;
- shall be deemed to have been sold and purchased pursuant to a System Clearing Contract.

...

The amount of the Reconciliation Quantity or the User UGR Quantity shall be extinguished by the System Clearing Contract.

The User UGR Quantity and Clearing Charge are calculated as defined in TPD E 7.2.2 - 3

TPD E 7.2.2 – 7.2.3

Upon each Unidentified Gas Reconciliation, the User UGR Quantity (irrespective of amount and sign) shall be extinguished by a System Clearing Contract in accordance with Section F5

For the purposes of Section F5, the Reconciliation Clearing Charge in respect of a System Clearing Contract under paragraph 7.2.2 shall be the User UGR Clearing Value

User UGR Quantity

The User UGR Quantity is calculated in accordance with TPD E 7.1.3

TPD E 7.1.3

For each User, Reconciliation Billing Period and LDZ:

- (a) the “**User UGR Quantity**” (UUGRQ) is the quantity determined as:

$$UUGRQ = - ARQ * UALQ / ALQ$$

Where

ARQ is the Aggregate Reconciliation Quantity

UALQ is the User Aggregate LDZ Quantity

ALQ is the Aggregate LDZ Quantity

The Aggregate Reconciliation Quantity (ARQ) is calculated in accordance with TPD E 7.1.2:

TPD E 7.1.2

Subject to paragraph 7.5, for each Reconciliation Billing Period and for each LDZ:

(a) the “Unidentified Gas Reconciliation Period” is the period of 12 months ending with (and including) the Reconciliation Billing Period;

(b) the “**Aggregate Reconciliation Quantity**” and “**Aggregate Reconciliation Clearing Value**” are the net aggregate respectively of the **Reconciliation Quantities** and of the **Reconciliation Clearing Values**:

(i) for System Exit Points in that LDZ for which Offtake Reconciliation was undertaken (as referred to in Section S1.1.3(f)); and/or

(ii) in respect of LDZ Reconciliation in respect of that LDZ which was undertaken in that Reconciliation Billing Period

Reconciliation Quantities are calculated in accordance with TPD E 1.3.4:

TPD E 1.3.4

For the purposes of any Offtake Reconciliation: (a) the “Reconciliation Quantity” is sum of the Daily Reconciliation Quantities for the days in the Reconciliation Meter Period;

Daily Reconciliation Quantities are calculated in accordance with TPDE 6.2.2. This is explained in the main Reconciliation section of this document.

User Aggregate LDZ Quantity (UALQ) is calculated as:

TPD E 7.1.2

(d) for each User the “**User Aggregate LDZ Quantity**” is the amount determined as:

$\sum_d \sum_r \text{AUPRDQOrd}$

where \sum_d is the sum over all Days (d) in the Unidentified Gas Reconciliation Period;

\sum_r is the sum over all Supply Meter Points (other than Isolated Supply Meter Points) in the relevant LDZ of which the User is Registered User on Day ‘d’ and all Metered Connected System Exit Points in the relevant LDZ in relation to which the User is a CSEP User on Day ‘d’;

and where, for each System Exit Point ‘r’ and each Day ‘d’ **AUPRDQOrd is the Prevailing Reconciled Daily Quantity Offtaken as determined as at the 10th Day of the month following the Reconciliation Billing Period**, or (in the case of a Shared Supply Meter Point) the amount of the Prevailing Reconciled Daily Quantity Offtaken allocated to the User, adjusted by the allocation factor specified in Annex E-1 in respect of the category (as set out in Annex E-1) to which that System Exit Point belongs on Day ‘d’;

(e) the “Aggregate LDZ Quantity” is the sum for all Users of the User Aggregate LDZ Quantities.

The Prevailing Reconciled Daily Quantity Offtaken is calculated in accordance with TPD E 1.1.8:

TPD E - 1.1.8

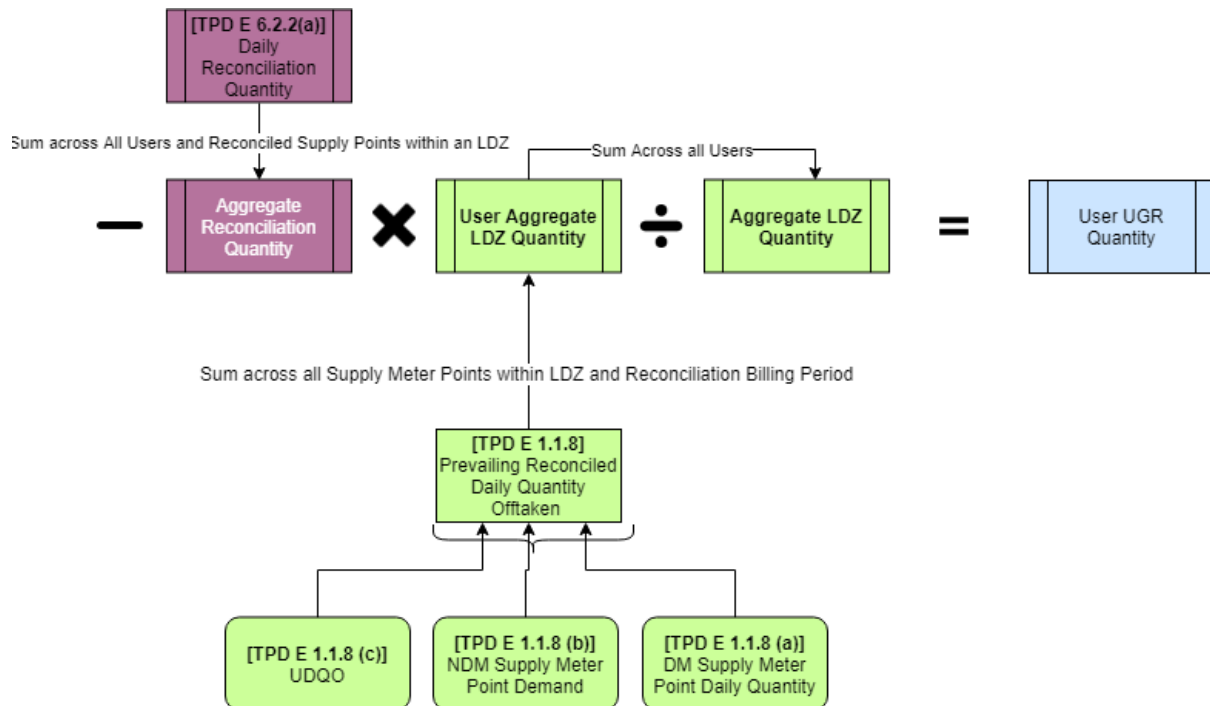
For the purposes of the Code, as at any time, the “**Prevailing Reconciled Daily Quantity Offaken” (PRDQO)** in respect of a Day and a System Exit Point is the quantity treated, pursuant to the applicable provisions of the Code and/or (in the case of a Connected System Exit Point) of the CSEP Network Exit Provisions, as having been offtaken at the System Exit Point on that Day, being

- (a) in the case of a Class 1 or 2 Supply Meter Point, the Supply Meter Point Daily Quantity;
- (b) in the case of a Class 3 or 4 Supply Meter Point, the NDM Supply Meter Point Demand;
- (c) in the case of a Connected System Exit Point and a User, the UDQO;

This value is then adjusted according to the UIG Allocation Adjustment Factors.

ALQ is the aggregate of all User Aggregate LDZ Quantity (UALQ) across all Users.

User Unidentified Gas Reconciliation Quantity



Prevailing Reconciled Daily Quantity Offtaken is adjusted according to the UIG Allocation Adjustment Factors.

User UGR Clearing Value

The **User UGR Clearing Value** is calculated in accordance with TPD E 7.1.3

TPD E 7.1.3

For each User, Reconciliation Billing Period and LDZ:

(b) the “**User UGR Clearing Value**” (**UUGRCV**) is the amount determined as:

$$\text{UUGRCV} = - \text{ARCV} * \text{UALQ} / \text{ALQ}$$

Where

ARCV is the Aggregate Reconciliation Clearing Value

UALQ is the User Aggregate LDZ Quantity

ALQ is the Aggregate LDZ Quantity

Aggregate Reconciliation Clearing Value is defined in accordance with TPD E 7.1.2:

TPD E 7.1.2

Subject to paragraph 7.5, for each Reconciliation Billing Period and for each LDZ:

(a) the “Unidentified Gas Reconciliation Period” is the period of 12 months ending with (and including) the Reconciliation Billing Period;

(b) the “Aggregate Reconciliation Quantity” and “**Aggregate Reconciliation Clearing Value**” are the net aggregate respectively of the Reconciliation Quantities and of the **Reconciliation Clearing Values**:

(i) for System Exit Points in that LDZ for which Offtake Reconciliation was undertaken (as referred to in Section S1.1.3(f)); and/or

(ii) in respect of LDZ Reconciliation in respect of that LDZ which was undertaken in that Reconciliation Billing Period

Reconciliation Clearing Value is calculated in accordance with TPDE 6.2.5

TPD E 6.2.5

In respect of each Offtake Reconciliation, the Reconciliation Clearing Value (“RCV”) shall be calculated as follows:

$$\text{RCV} = \Sigma (\text{DRQD} * \text{SAPD})$$

where

Σ is the sum over all Days in the Reconciliation Metered Period

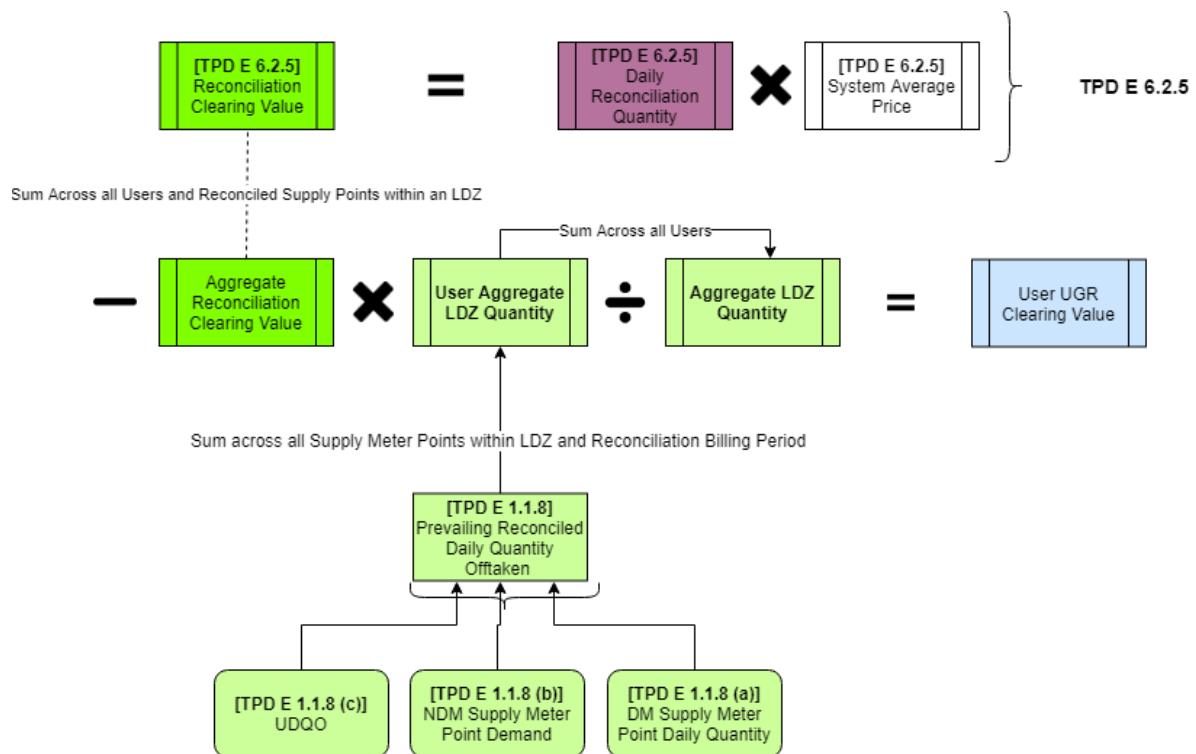
and where, for each such Day

DRQD is the Daily Reconciliation Quantity

SAPD is the System Average Price

UALQ and ALQ are calculated in the same way as described in the User UGR section.

User Unidentified Gas Clearing Value



Prevailing Reconciled Daily Quantity Offtaken is adjusted by UIG Allocation Adjustment Factors

Unidentified Gas Reconciliation Summary

Plain English

A User's Unidentified Gas Reconciliation Quantity is calculated by multiplying the aggregate of all Reconciliation Quantities across Users in an LDZ (i.e. the total amount reconciled) by the ratio between the User's Offtakes and total Offtakes (both adjusted according to the UIG allocation Factors table) within the LDZ across the Reconciliation Period.

A User's Unidentified Gas Reconciliation Value is calculated by multiplying the aggregate of all Reconciliation Values across Users in an LDZ (i.e. the value of the total amount reconciled) by the ratio between the User's Offtakes and the total Offtakes Offtakes (both adjusted according to the UIG allocation Factors table) within the LDZ across the Reconciliation Period.

The value for Unidentified Gas Reconciliation is derived from the Reconciliation Clearing Value, which is calculated using System Average Price.

UIG 661R Context

Unidentified Gas is factored into balancing like an offtake or disposal. Our request is not seeking to change the balancing processes. We do not believe that Solution C would impact UIG in balancing or require any changes to be made.

Unidentified Gas Reconciliation quantities equal in aggregate and opposite to the net aggregate quantities subject to normal offtake Reconciliation in an LDZ over a defined period. Each reconciliation changes the amount of Unidentified Gas. Each reconciliation therefore changes each Shipper's share of Unidentified Gas. Unidentified Gas Reconciliation is smeared across a 12-month period and is distributed based on shares of total aggregate offtakes.

The quantity of gas to be assigned as unidentified gas reconciliation is calculated by taking the reconciliation quantity and multiplying by the ratio of a User's prevailing offtakes vs total LDZ prevailing offtakes (both adjusted according to the UIG allocation Factors table).

The financial value to be exchanged as part of unidentified gas reconciliation is calculated by multiplying the Clearing Value by the ratio of a User's prevailing offtakes vs total LDZ prevailing offtakes (both adjusted according to the UIG allocation Factors table).

Our Request seeks to reverse any unintended cash out differences caused using different prices in Balancing and Reconciliation. Solution C would see the introduction of a new processes purely to achieve this. Whilst Unidentified Gas volumes are constantly shifting, we believe that it is still possible to implement Solution C. We would welcome specific challenges and further questions from the Request group as to why UIG is seen as a potential issue.