

Demand Estimation Gas Year 2022/23 Update

September 2022

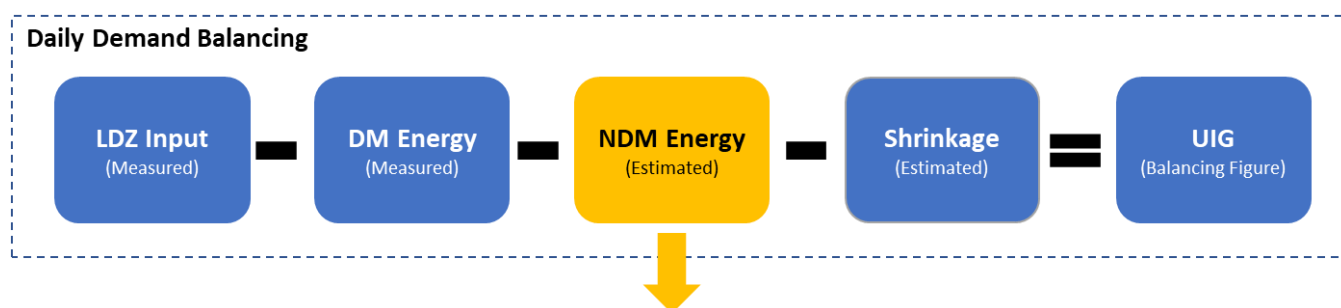
Dear Customers and Industry Colleagues,

Xoserve would like to share an update about key parameters used in daily demand balancing activities that are due to change on the commencement of the new Gas Year on 1st October 2022, namely:

- **End User Categories (EUCs) and Gas Demand Profiles and**
- **Unidentified Gas (UIG) Weighting Factors**

The article also considers the outlook for UIG over the next Gas Year given the trends observed recently and the ongoing cost of living crisis.

End User Categories (EUCs) and Gas Demand Profiles – Gas Year 2022/23



Annually, ahead of a new Gas Year, Demand Estimation Sub Committee (DESC) is responsible for:

- (i) defining the End User Categories (EUCs) required to represent the various types of gas consumer groups in the Non-Daily Metered (NDM) Sector and
- (ii) creating the Gas Demand Profiles which represent those EUCs, for use in NDM Allocation, AQ Calculation and Transportation Capacity Invoicing processes

DESC agreed that the EUCs for Gas Year 2022/23 should remain unchanged and so the current set of 39 EUCs per LDZ will persist – see Table 1 in News Article Appendix.

The EUC definitions were shared with customers electronically via the .EUC file issued on 24th August 2022.

Key Point:

Gas Demand Profiles represent the key output from the Demand Estimation process:

- Annual Load Profile (ALP): a view of the EUC's typical gas consumption profile
- Daily Adjustment Factor (DAF): a view of the EUC's typical weather sensitivity reaction
- Peak Load Factor (PLF): a view of the EUC's typical reaction to extreme cold weather

The headline items from this year's Demand Modelling process are:

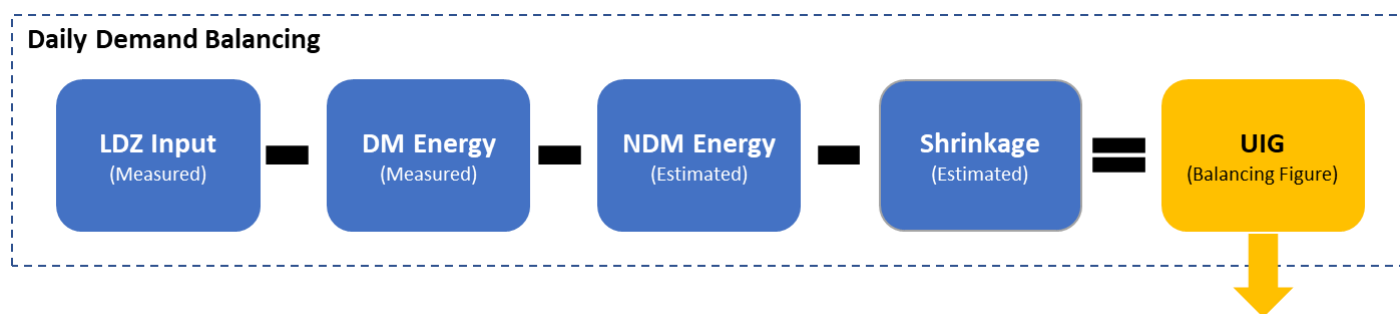
- Following a [DESC review](#) of the rules used to model holiday periods, a change was approved which has updated the definitions of certain holiday periods e.g. Christmas and May Day bank holiday. A further change was introduced which allowed, for the first time, different holiday code definitions depending on geographical location (LDZ) and sector (Domestic and I&C) e.g. Scotland New Year Bank Holiday is now treated differently to the other LDZs. This is explained further in the approved [Modelling Approach](#).
- The second biggest EUC in the population (c. 2m supply points) is represented by "01BPD" which relates to Domestic Prepayment consumers. Since its introduction in October 2019, the Gas Demand Profiles for this EUC have been based on a demand model using data that is now nearly 10 years old (due to lack of robust sample data). This year has seen a transition towards more up to date demand reactions with the use of sample data from the past 12 months – explained further in the [Demand Modelling Results](#).
- This year is the first time in two years that the Industrial & Commercial Gas Demand Profiles have been revised following the decision last year to not use to the data collected due to the clear impacts of COVID-19.

A summary of the end-to-end process to create this year's Gas Demand Profiles is available in Folder 18 of the secure area [here](#). Navigate to location: 2022-23 Gas Year / 4 NDM Algorithms Booklet

For Information:

The industry approved End User Category Definitions and Gas Demand Profiles for Gas Year 2022/23 are available to download [here](#)

Unidentified Gas (UIG) Weighting Factors – Gas Year 2022/23



Annually, ahead of a new Gas Year, the AUGER (Unidentified Gas Expert) is responsible for consulting with the [AUG Sub Committee](#) and for defining the Unidentified Gas (UIG) Weighting Factors used in the sharing out of UIG in the daily demand balancing calculations.

This will be the second year that the Weighting Factors classification table includes all the EUCs within Bands 1 and 2, following the implementation of [UNC Modification 0711](#) on 1st October 2021.

The detail behind how the values for Gas Year 2022/23 have been determined is available in the "Final Allocation of Unidentified Gas Statement" available [here](#).

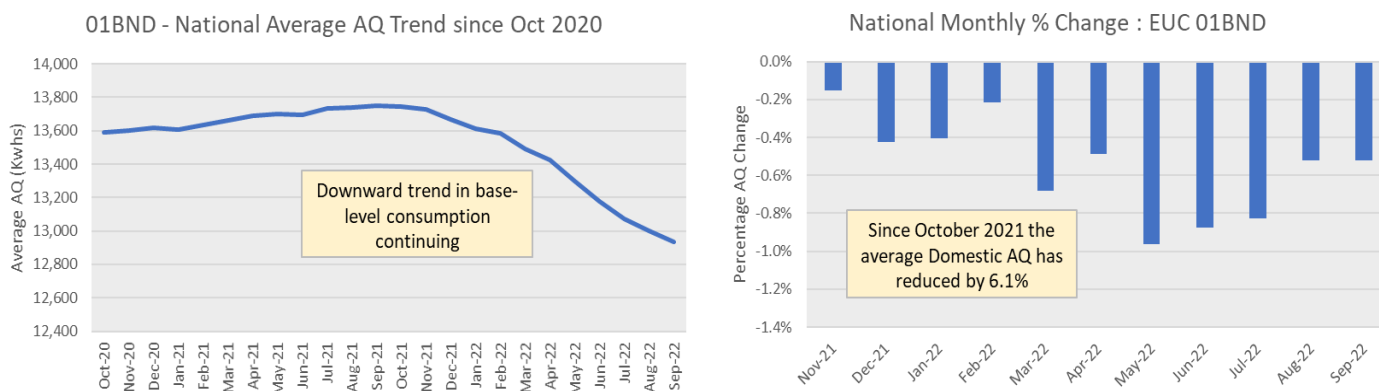
For Information:

The industry approved Unidentified Gas Weighting Factors Table for Gas Year 2022/23 is available [here](#)

Unidentified Gas (UIG) Outlook - Gas Year 2022/23

During the current Gas Year the industry has seen a [consistent trend of negative UIG](#) which can be clearly linked to the estimate of NDM demand being too high, a point that is verified by the levels of credit meter point reconciliation (and therefore debit UGR) seen on this year's Amendment (AMS) Invoices. This topic was explored in more detail during a [UIG Webinar](#) earlier this summer.

Since the webinar, we have seen the patterns of negative UIG and decreasing AQs (particularly in Domestic sector) continue – see updated charts below (up to and including the September 2022 AQ Review)



The AQ value is a key parameter in the NDM demand estimation calculation. If as expected we see a continuation of the ongoing 'enforced conservation' due to the high consumer prices and rising wholesale prices, then it is highly likely that AQs will continue to not update quickly enough to reflect the latest consumption levels.

Although a refreshed set of Gas Demand Profiles for the NDM population will hopefully provide a more accurate reflection of their daily profile and sensitivity to weather, any improvements will, at the moment, be 'overridden' by the fact that NDM AQs are too high.

We would therefore expect UIG to continue to be negative during Gas Year 2022/23 due to the NDM demand estimation process resulting in an over-allocation at closeout (D+5). This position will only be corrected once meter reads are received and processed on the AMS invoice.

Demand Estimation Sub Committee (DESC) are next due to meet on 5th October and will discuss any potential options it has to help 'counteract' this over-allocation, given the unprecedented energy crisis the industry is experiencing. This may include 'applying factors' to the profiles to reduce the impacts we may see this winter. Any decisions made here will be issued via the Joint Office and the "Communications of Key Messages"

Further Information

For further information please take a look at Xoserve's dedicated web pages relating to the processes discussed in the news article - [Demand Estimation](#) and [Unidentified Gas](#).

If you have any follow up queries for the Demand Estimation Team please raise a Help and Support request [here](#)

Appendix

Table 1 – EUC Summary – Gas Year 2022/23

Consumption Range	Lower AQ Band	Upper AQ Band	Domestic Credit	Domestic Prepayment	I&C Credit	I&C Prepayment	No. of EUCs
01	0	73,200	xx:E2201BND	xx:E2201BPD	xx:E2201BNI	xx:E2201BPI	4
02	73,201	293,000	xx:E2202BND	xx:E2202BPD	xx:E2202BNI	xx:E2202BPI	4

Consumption Range	Lower AQ Band	Upper AQ Band	Bucket Band	WAR Band 1	WAR Band 2	WAR Band 3	WAR Band 4	No. of EUCs
03	293,001	732,000	xx:E2203B	xx:E2203W01	xx:E2203W02	xx:E2203W03	xx:E2203W04	5
04	732,001	2,196,000	xx:E2204B	xx:E2204W01	xx:E2204W02	xx:E2204W03	xx:E2204W04	5
05	2,196,001	5,860,000	xx:E2205B	xx:E2205W01	xx:E2205W02	xx:E2205W03	xx:E2205W04	5
06	5,860,001	14,650,000	xx:E2206B	xx:E2206W01	xx:E2206W02	xx:E2206W03	xx:E2206W04	5
07	14,650,001	29,300,000	xx:E2207B	xx:E2207W01	xx:E2207W02	xx:E2207W03	xx:E2207W04	5
08	29,300,001	58,600,000	xx:E2208B	xx:E2208W01	xx:E2208W02	xx:E2208W03	xx:E2208W04	5
09	58,600,001	-	xx:E2209B	-	-	-	-	1

Note: Following last year's suspension in using COVID impacted data (apart from 01BND), this year **ALL EUC Demand Models** have been revised, including the latest 12 months analysis period: (1st April 2021 to 31st March 2022)

Table 2 – UIG Weighting Factors – Gas Year 2022/23

Supply Meter Point Classification	Class 1	Class 2	Class 3	Class 4
EUC 1ND	60.12	60.12	60.12	84.50
EUC 1PD	64.11	64.11	64.11	382.64
EUC 1NI	5.10	830.68	173.52	756.21
EUC 1PI	173.52	295.06	173.52	756.21
EUC 2ND	69.94	69.94	70.04	126.46
EUC 2PD	70.04	91.22	70.04	126.46
EUC 2NI	5.10	100.34	63.15	199.46
EUC 2PI	26.18	26.18	63.15	199.46
EUC Band 3	5.10	53.23	48.36	52.53
EUC Band 4	5.10	60.64	54.07	58.44
EUC Band 5	5.10	55.38	52.51	55.56
EUC Band 6	5.10	58.76	53.69	71.81
EUC Band 7	5.10	63.30	57.14	62.54
EUC Band 8	5.10	50.85	60.52	46.14
EUC Band 9	5.10	28.00	23.64	26.34

Note: This is the second year of application of UIG weighting factors to the four extra Band 1 and 2 EUCs