



delivered by  correla

Demand Estimation Sub Committee

NDM Algorithms Update - Gas Year 2023/24

6 March 2024

Background

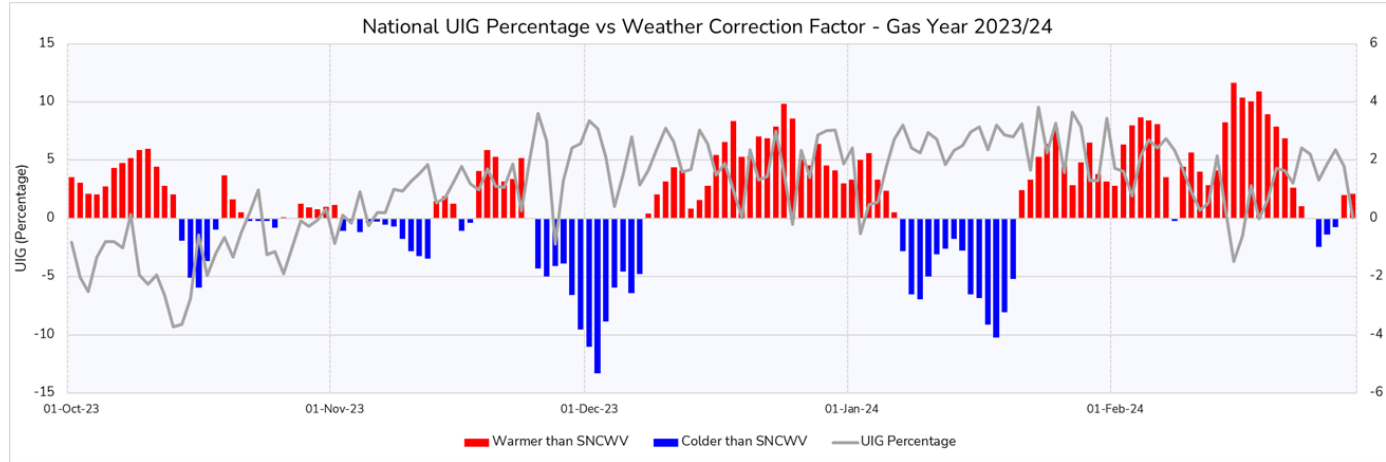
- During the second half of Gas Year 2021/22, a trend was evident of significant overallocation of NDM demand by the Demand Estimation process
- This had been caused predominantly by AQs not reflecting the latest 'base level demand', due to the step change in behaviour caused by increase in wholesale gas prices
- At the start of Gas Year 2022/23 and ahead of the upcoming winter, DESC discussed potential options to mitigate the NDM over allocation, including applying factors to the Annual Load Profile (ALP). At the 5th October 2022 meeting DESC concluded that this was not the correct approach and focus should be on the root cause i.e. AQ and not the demand profiles
- DESC confirmed in October 2023 the topic should **continue** to be kept as a standard agenda item during Gas Year 2023/24 so the UIG levels and associated metrics could be monitored and discussed, especially as the market potentially looks to correct itself post energy price crisis

Objective

- Review latest Unidentified Gas (UIG) levels and trends for Gas Year 2023/24 and any other related data items e.g. Annual Quantities (AQs)

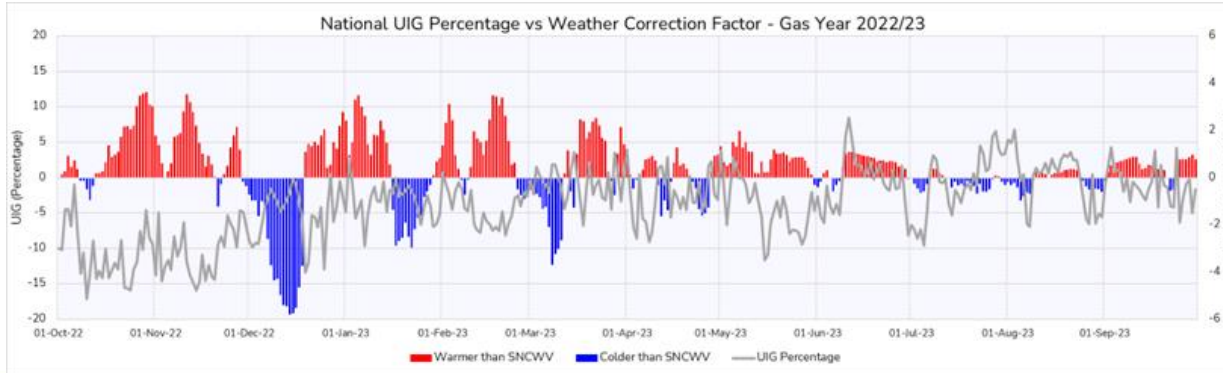
Analysis – Gas Year 2023/24: UIG Review

Fig.1 National UIG – Gas Year 2023/24



- Fig.1 shows UIG since November 23 has now switched to a positive value which suggests the significant **over allocation** from the NDM Algorithm (observed in Gas Year 2022/23) is no longer occurring
- Upcoming AQ and Reconciliation slides support this assessment

Fig.2 National UIG – Gas Year 2022/23



- Reminder of UIG levels and weather experienced in Gas Year 2022/23 is shown in Fig.2
- Predominantly negative due to NDM over allocation

Analysis – Gas Year 2023/24: AQ Trends

Fig.3 Domestic AQ Trend

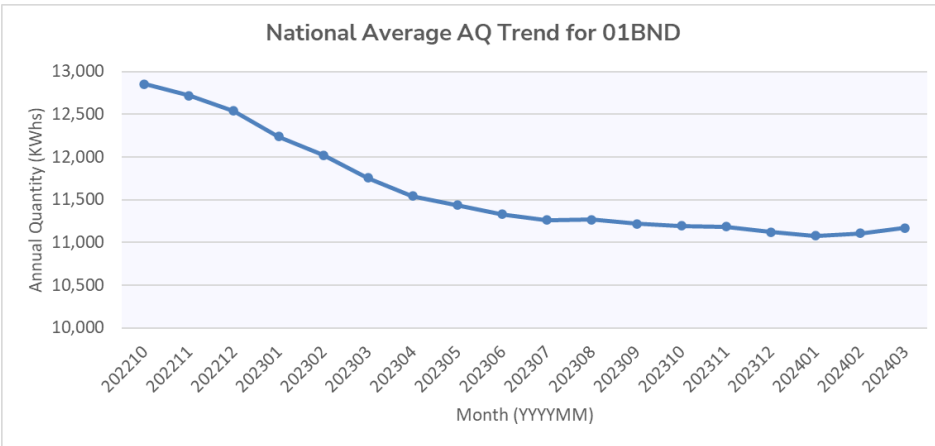
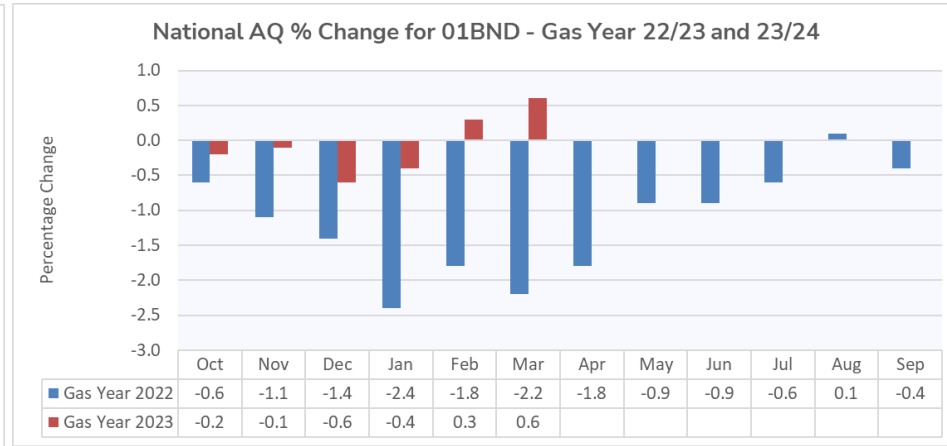


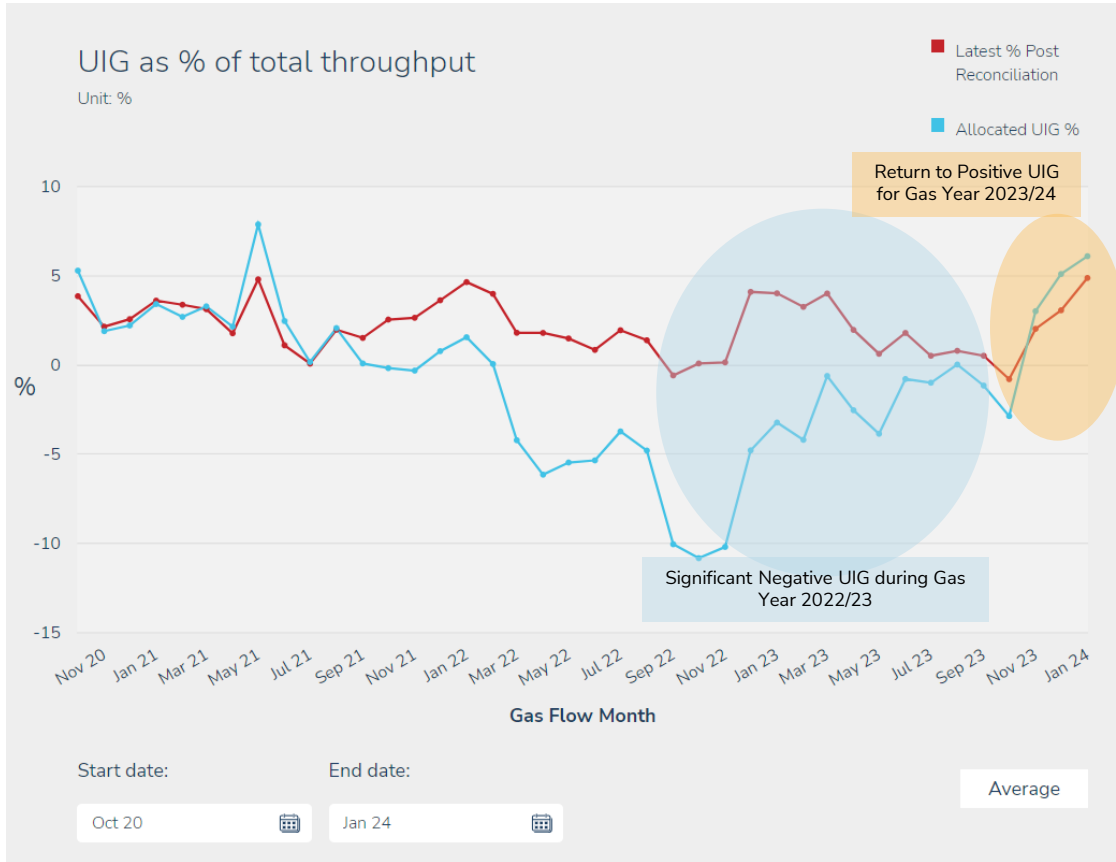
Fig.4 Average AQ % Change



- Fig.3 shows for Gas Year 2023/24, the Average AQ for Band 1 Domestic Non-Prepayment EUC (“01BND”) has started to increase, suggesting the end of price driven conservation observed in Gas Year 2022/23
- Fig. 4 shows the last 2 months AQ calculations have seen an increase, although current average is still below start of Gas Year 2023/24
- Reminder: Gas Year 2022/23 Band 1 Domestic Non-Prepayment (“01BND”) the average AQ declined by -14%, Band 1 Domestic Prepayment (“01BPD”) declined by -18% and Band 1 I&C Non-Prepayment (“01BNI”) declined by -5%
- The Demand Estimation team continue to provide the industry a view of the latest Average AQ data/trends following each monthly calculation of Rolling AQs

Analysis – Gas Year 2023/24: Post Reconciliation

Fig.5 Estimated UIG% post Reconciliation



- Meter Point Reconciliations processed on the Amendment Invoice (AMS) in recent months (Dec'23 and Jan'24) have generated debit reconciliations and therefore credits to UIG (see Reconciliation by Month Report for more detail)
- Fig.5 - Orange shaded area (GY 23/24) on chart confirms that UIG at Allocation (D+5) is now running positive. Estimated view of UIG% post Reconciliation is moving closer to expected 'real' UIG% (c.2%) – link to online chart [here](#) (up to and incl. January Amendment Invoice)
- Reminder: Blue shaded area (GY 22/23) demonstrates how inaccurate NDM Allocation was (due to unprecedented conservation in the population)

Conclusions – Gas Year 2023/24

- Since November 2023 average UIG (%) for Gas Year 2023/24 has returned to positive values – see Fig.6 for comparison to equivalent months in Gas Year 2022/23
- Due to the significant reduction in AQt last year the ‘base level demand’ used in NDM Allocation for Gas Year 2023/24 is likely to have been too low if, as it seems, the behaviours related to energy price conservation are not representative of this winter’s reactions
- The differences between Allocated UIG (D+5) and UIG post Reconciliation are not as significant as seen in the second half of Gas Year 21/22 and all of Gas Year 22/23
- The unknown is where the new base level demand position will be, particularly for the Domestic market

Fig.6 National Average UIG% by Month

Month	Gas Year 22/23 Avg. UIG (%)	Gas Year 23/24 Avg. UIG (%)
Oct	-10.7	-3.1
Nov	-10.5	2.7
Dec	-5.2	4.9
Jan	-3.37	5.9
Feb	-4.3	3.3
Mar	-0.84	
Apr	-2.68	
May	-4.13	
Jun	-0.56	
Jul	-0.88	
Aug	0.09	
Sep	-0.54	