AUG Sub-Committee

2024-2025 Consultation Meeting

13th January 2024

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Consultation Meeting: Purpose

In this session we aim to provide

- A presentation of the draft Weighting Factors and methodology used to derive them
- An opportunity to discuss the Weighting Factors and methodology
- A summary of the investigations undertaken
- An update on consultation timetable and next steps
- An open forum for any further feedback and suggestions

Presentation of draft Weighting Factors

AGENDA

1. Process and timetable
2. Draft Weighting Factors for Gas Year 2023-2024
3. Investigations
4. UIG Contributors
5. Next steps (reminder)

Appendix:

Principles; Methodology

Draft AUG Statement:
Process and timetable

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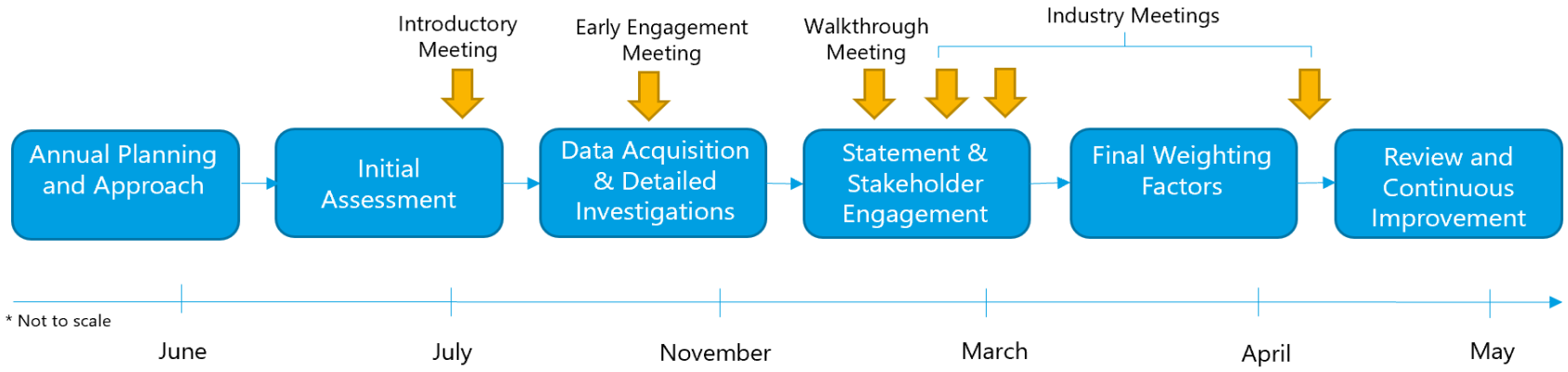
Consultation Process

Timeline [subject to committee discussion]

- The draft AUG Statement was provided to the industry via the Joint Office on 29th December 2023
- The draft AUG Statement was accompanied by a consultation document
- Responses to the draft AUG Statement consultation are requested by 22nd January 2024
- Please send these to analytical.services@xoserve.com, copying us at auge@engage-consulting.co.uk
- Our assessment of the responses received will be presented at the AUG Sub-Committee Meeting on 9th February 2024

Timetable

- Any revision of the draft AUG Statement following consideration of consultation responses will be provided to the AUG Sub-Committee by 5th March 2024
- Final changes to the draft Weighting Factors and AUG Statement (if required) will be presented at the AUG Sub-Committee Meeting on 15th March 2024
- The final AUG Statement will be provided to the AUG Sub-Committee by 31st March 2024 and presented at the 12th April AUG Sub-Committee Meeting, prior to consideration at the April UNCC Meeting
- Engagement with stakeholders will continue throughout the process. We can be contacted at auge@engage-consulting.co.uk



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Draft Weighting Factors:
Gas Year 2024-2025

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Draft Weighting Factor Table

- The Factors will see some movement between now and the final Statement
- Pre-equalised table is provided in the Statement (mod 0840) as required by the framework
- Some additional TRAS (TDIS) data has been received which is currently being analysed
- Note that the relative numbers are comparable with previous Statements, but the absolute numbers are not

Draft Weighting Factors for Gas Year 2024-2025

		CLASS			
		1	2	3	4
EUC BAND	1ND	53.68	53.68	53.68	111.87
	1PD	53.68	53.68	53.68	111.87
	1NI	5.65	399.34	226.35	447.55
	1PI	5.65	399.34	226.35	447.55
	2ND	69.06	69.06	69.06	121.11
	2PD	69.06	69.06	69.06	121.11
	2NI	5.65	128.56	124.01	197.91
	2PI	5.65	128.56	124.01	197.91
	3	5.65	59.49	60.98	70.09
	4	5.65	59.82	63.51	71.39
	5	5.65	65.29	61.38	67.53
	6	5.65	69.97	58.56	66.87
	7	5.65	73.56	62.11	69.02
	8	5.65	60.32	60.57	58.82
	9	5.65	28.78	26.48	29.42

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Year on Year Comparison

UIG as a Percentage of Consumption Forecast

Gas Year 2023-2024

	CLASS				
EUC BAND	2023-2024	1	2	3	4
	1ND	0.0%	0.0%	1.1%	2.1%
	1PD	0.0%	0.0%	1.1%	2.1%
	1NI	0.0%	16.2%	3.0%	11.8%
	1PI	0.0%	0.0%	3.0%	11.8%
	2ND	0.0%	0.0%	1.4%	2.8%
	2PD	0.0%	0.0%	1.4%	2.8%
	2NI	0.0%	5.6%	1.6%	5.7%
	2PI	0.0%	0.0%	1.6%	5.7%
	3	0.1%	1.1%	0.9%	1.0%
	4	0.1%	1.1%	1.1%	1.2%
	5	0.1%	1.3%	1.1%	1.2%
	6	0.1%	1.3%	1.1%	1.2%
	7	0.1%	1.3%	1.1%	1.3%
	8	0.1%	1.1%	1.1%	1.1%
	9	0.1%	0.6%	0.5%	0.5%

Gas Year 2024-2025

	CLASS				
EUC BAND	2024-2025	1	2	3	4
	1ND	0.0%	0.0%	1.1%	2.2%
	1PD	0.0%	0.0%	1.1%	2.2%
	1NI	0.0%	7.8%	4.4%	8.8%
	1PI	0.0%	0.0%	4.4%	8.8%
	2ND	0.0%	0.0%	1.4%	2.4%
	2PD	0.0%	0.0%	1.4%	2.4%
	2NI	0.0%	2.5%	2.4%	3.9%
	2PI	0.0%	0.0%	2.4%	3.9%
	3	0.1%	1.2%	1.2%	1.4%
	4	0.1%	1.2%	1.2%	1.4%
	5	0.1%	1.3%	1.2%	1.3%
	6	0.1%	1.4%	1.1%	1.3%
	7	0.1%	1.4%	1.2%	1.4%
	8	0.1%	1.2%	1.2%	1.2%
	9	0.1%	0.6%	0.5%	0.6%

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Year on Year Comparison

What has changed and why?

- Changes since last year have been driven predominantly by revised datasets. There is minimal change compared to the Weighting Factors for the Gas Year 2023-2024.
- Most movement in Weighting Factors is attributable to updated theft data, due to the high relative proportion of all UIG coming from this contributor.
- Also a reduction in consumption forecast which is not uniform across the Matrix Positions:
  - Class 4 for EUCs 1NI,1PI, 2NI and 2PI have seen a downwards shift, whereas there has also been a small increase in relative UIG for Class 3 in the same EUC Bands. This is due mainly to the shift in the 10-year rolling theft dataset.
  - There has also been a reduction in forecast consumption associated with these Class 3 Matrix Positions due to a general reduction in Class 3 sites seen in recent months. The small number of sites combined with high volume thefts drives relative volatility.
- For No Read, the refreshed data showed a proportionally smaller number of industrial sites with no accepted read. This pushed relatively less UIG towards 2NI and 2PI.

Percentage points change in UIG as a percentage of Consumption Forecast

		CLASS			
		1	2	3	4
EUC BAND	1ND	0.0%	0.0%	0.0%	0.0%
	1PD	0.0%	0.0%	0.0%	0.0%
	1NI	0.0%	-8.4%	1.4%	-3.0%
	1PI	0.0%	0.0%	1.4%	-3.0%
	2ND	0.0%	0.0%	-0.1%	-0.4%
	2PD	0.0%	0.0%	-0.1%	-0.4%
	2NI	0.0%	-3.1%	0.8%	-1.8%
	2PI	0.0%	0.0%	0.8%	-1.8%
	3	0.0%	0.1%	0.3%	0.3%
	4	0.0%	0.1%	0.1%	0.2%
	5	0.0%	0.0%	0.1%	0.1%
	6	0.0%	0.1%	0.1%	0.1%
	7	0.0%	0.1%	0.2%	0.0%
	8	0.0%	0.0%	0.1%	0.0%
	9	0.0%	0.0%	0.0%	0.0%

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Total UIG Estimate

UIG by Contributor and Comparison with 2023-2024 Gas Year

- The total estimate for the 2024-2025 Gas Year is 7,789 GWh
- This is 708 GWh less than last year
- Reduction in consumption forecast drives this
- Our UIG forecast is used only to develop the Weighting Factors (i.e. does not drive the daily balancing figure)

Contributor	2023-2024 Gas Year UIG Volume	Change	2024-2025 Gas Year UIG Volume
Theft of Gas	6,823 GWh	↓	6,285 GWh
Average Temperature Assumption	1,021 GWh	↓	950 GWh
Average Pressure Assumption	326 GWh	↓	305 GWh
No Read at the Line in the Sand	162 GWh	↓	113 GWh
Unregistered Sites	53 GWh	→	53 GWh
Incorrect Correction Factors	53 GWh	↓	44 GWh
Dead Sites	19 GWh	↑	23 GWh
Isolated Sites	19 GWh	↑	21 GWh
IGT Shrinkage	19 GWh	↑	21 GWh
Shipperless Sites	17 GWh	↓	15 GWh
Consumption Meter Error	-15 GWh	↓	-40 GWh
Total	**8,497 GWh**	↓	**7,789 GWh**

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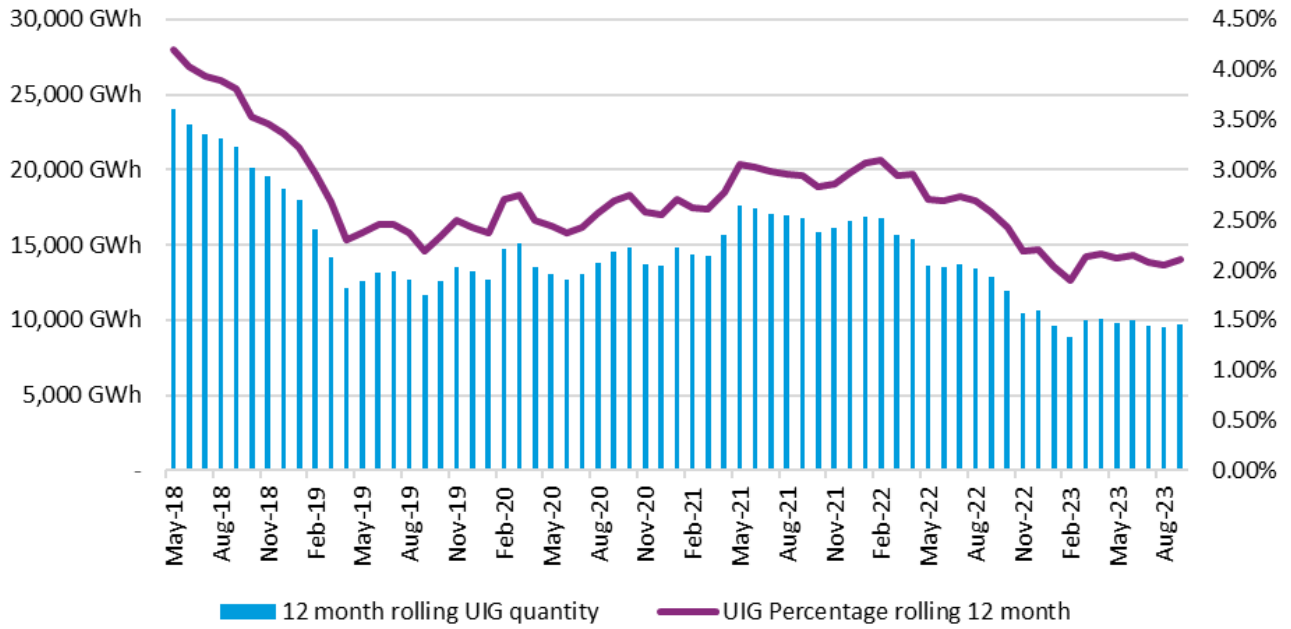
Comparison with Observed Levels

- For benchmarking purposes, we compared our results with observed levels of UIG since June 2017 (taking into account reconciliation)
- Over the last two full Gas Years, the 12-month rolling average UIG percentage is 2.49% (vs. 2.57% a year ago)
- Using this 2.49% and our Consumption Forecast, we calculated benchmark UIG close out for the target Gas Year to be 10,761 GWh
- Our calculated figure is 70.6% of UIG and therefore passes a reasonable sense check against observed levels

UIG 12-month rolling average by volume and %



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Consumption Forecast

Summary

- A key data input into most of our calculations for the various contributors is an estimate of consumption for the target Gas Year
- We use the ETS function to forecast the AQ and count of Supply Meter Points for the target year
- We no longer use data back to Nexus go-live (June 2017)

Total Supply Meter Points by Matrix Position

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	4,028,344	18,499,446
	1PD	-	-	636,942	1,352,560
	1NI	-	19	80,767	442,880
	1PI	-	-	77	3,256
	2ND	-	-	465	45,327
	2PD	-	-	23	1,489
	2NI	-	21	40,328	89,855
	2PI	-	-	1	48
	3	1	88	14,263	24,986
	4	2	259	6,535	9,477
	5	8	69	1,409	2,332
	6	28	116	370	932
	7	40	90	149	372
	8	145	85	34	271
	9	305	6	2	16
					25,284,246

Total Consumption by Matrix Position

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	40,494	193,401
	1PD	-	-	4,867	9,740
	1NI	-	1	1,917	8,616
	1PI	-	-	1	33
	2ND	-	-	63	5,176
	2PD	-	-	2	174
	2NI	-	4	6,141	12,818
	2PI	-	-	1	6
	3	1	49	6,360	11,244
	4	3	323	7,701	10,908
	5	35	289	4,817	7,880
	6	295	1,161	3,274	9,212
	7	985	1,940	3,128	8,000
	8	6,424	3,513	1,293	10,420
	9	47,629	295	127	1,398
					432,160

- For all Matrix Positions, we now base our forecast on the trend observed in data from October 2019 to November 2023
- Falling AQs may further impact the consumption forecast in the Final Statement, despite levelling off over the last few months

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Investigations:
Overview and outcomes

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Introduction to our Investigations

Background

- Our Initial Assessment process identified four focus areas this year
  - 210 Shrinkage Error (new)
  - 180 Unfound UIG (new)
  - 010 Theft (refinement)
  - 140 No Read at the Line in the Sand (refinement)
- We are not proposing to make any changes to our methodology following these investigations

210 Shrinkage Error: Recap

We considered whether Shrinkage Error may be contributing to UIG and if so whether it is possible to estimate the scale of this contribution and propose a justifiable allocation methodology

- **Hypothesis**: Shrinkage Error contributes positive UIG
- APPROACH:
  - Literature review of previous studies to identify sources for an estimate of Shrinkage Error
  - Consider other ways to scale and apportion Shrinkage Error

210 Shrinkage Error: Considerations

Existing sources

- The 'Energy UK Gas Retail Group Study into the effect of shrinkage on domestic customers': "it could easily be argued that the shrinkage estimate error is at least 20%"
- The AUG Statement 17/18 proposed a Shrinkage Error methodology using a fixed percentage error
- Academic studies have considered methane levels over urban areas, suggesting gas network leakage as a source
- There has been no updated calibration study (for shrinkage) in over 20 years, limiting recent alternatives in approach over and above available studies

Options for sizing

- **Option 1 – Allocate 20% of Shrinkage as Shrinkage Error and share UIG by throughput**
  - Is the 20% EUK view justifiable?
- **Option 2 – Acknowledge probable Shrinkage Error but subsume under a robust Unfound UIG Contributor**
  - Would Unfound UIG be allocated in a way that is appropriate to Shrinkage Error?
  - Can an overall methodology ever be proposed for the equitable sizing and allocation of Unfound UIG?

210 Shrinkage Error: Conclusions

We have not included Shrinkage Error as a contributor in our methodology

- AUGE (as currently procured) is not resourced or appropriately qualified to undertake the kind of study needed to propose a robust update or alternative to the existing SLM. Existing studies/sources are the only option for scaling Shrinkage Error UIG
- Shrinkage Error is probable, but existing studies lack consensus
- Assuming Shrinking Error were 20% (i.e. SLM underestimates reality by 20%), recent levels of Shrinkage Error would have been in the region of 500 GWh. That would be the third largest contributor to UIG after Theft and Temperature in our estimations
- If included, its impact on Weighting Factors would be minimal due to its likely relative scale and probable allocation by throughput
- We cannot justify the inclusion of Shrinkage Error as a contributor on the basis of available information

180 Unfound: Recap

We considered whether there exists UIG whose source we are unable to identify, and if so, whether it can be scaled and there is an equitable way to share it between Shippers

- **Hypothesis**: There is an amount of final UIG which is not identified in our existing contributors. There may be justification to adjust allocation of UIG (i.e. the Weighting Factors) to recognise an element of total UIG whose source is unknown.
- APPROACH:
  - Analyse historic delta to actual UIG
  - Properly define Unfound UIG and potential components
  - Consider allocation approaches

180 Unfound: Considerations

Defining Unfound UIG

- UIG for which the source is not known

OR

- An amount of UIG determined by the difference between the estimate that our methodology produces, and the amount of actual UIG observed

OR

- UIG made up of:
  - Contributors to UIG that we are unaware of;
  - Likely contributors to UIG that we are aware of, but are unable to estimate; and,
  - Manifest error in the calculation of contributors to UIG that we do estimate

Allocating Unfound UIG

- Starting assumption: allocate by throughput given source is unknown
- Impact on very large consuming sites in the higher EUC bands is hard to justify as more equitable than the status quo

180 Unfound: Considerations

Estimating Unfound UIG

- **Option 1 – Historic trend**
- Base forecasts on the Gas Year 2021-2022 AUG Statement as this is the only period for which we can make a full comparison

- **Option 2 – Annual balancing figure**

Wait until final Statement production (March) to get the latest view of current UIG percentages and use the results from our sense check

- **Option 3 – Fixed value % or GWh**

Select a fixed estimate or proportion of our total estimate, for example by using average of past differences

All approaches are feasible, but none can be considered a reliable predictor of Unfound UIG

180 Unfound: Conclusions

We are unable to justify accounting for Unfound UIG in our methodology

- By definition, Unfound UIG is hard to size and we found no reliable stable method to do so
- Without demonstrable link to consumption, allocation by throughput should not be a default
- To propose an alternative to allocation by throughput would require estimation of component parts of Unfound UIG (and potentially varying treatment by category)
- The most equitable outcome (or least risk of reducing fairness of UIG allocation) is not to reflect any element of Unfound UIG in the Weighting Factors calculation

010 Theft: Recap

We wanted to assess whether there is justification for updating the assumptions which drive our estimate of UIG attributed to gas theft.

- **Hypothesis**: new insights or inputs are available that would improve our methodology for estimating and allocating Theft UIG
- More specifically:
  - 1. Updating the assumptions that feed into our current total theft estimate will result in a more equitable allocation of UIG
  - 2. Breaking the model's assumed link between total theft and total consumption would be a justifiable improvement to the methodology
  - 3. The inputs to and output of the Theft Estimation Methodology commissioned under the Retail Energy Code (REC) could be used to produce justifiably better view of total theft to be used in our methodology

010 Theft: Considerations

Scale of Total Theft: assumptions

- No additional data on electricity or water theft was identified
- Some additional data on retail theft was identified as it is more widely available and more regularly refreshed
- Latest retail data is indicative of likely increasing theft

Link between Theft and consumption

- Total theft estimate has fallen with our consumption forecast
- Propensity to steal is more likely to move in line with retail gas prices than with gas consumption levels
- Valid alternative approaches may be:
  - Peg total theft estimate to a baseline (and scale on the back of evidence)
  - Propose a theft propensity per consumer or site

RECCo TEM inputs or output

- Where relevant to our methodology, TEM data inputs are the same as what we already access
- TEM's alternative methodology produces much smaller total theft number
- Adopting this would change the balance of theft UIG to all other contributors

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010 Theft: Conclusions

We have not found sufficient justification for changing the methodology and assumptions in our Theft UIG contributor

- On the assumptions behind total theft:
  - With no new authoritative information on energy theft, up-to-date insights in retail theft are insufficient justification for a change to our assumed total theft levels
- On the link to consumption:
  - We concede there is a logical argument that falling consumption does not drive a reduction in theft, and that the opposite may be true when falling consumption is a reaction to higher retail prices. But we are unconvinced that there is an alternative that results in a demonstrably better or fairer outcome for allocation of UIG
- On the adoption of TEM methodology inputs or output:
  - We have identified no additional data sets relevant to our estimation or allocation methodology
  - We are unable to conclude that the TEM's view of total gas theft provides a better (or worse) basis for the equitable allocation of UIG; but adopting such a different total theft number would cause a material change in Weighting Factors
- Overall:
  - Theft UIG and its allocation has a strong impact on the Weighting Factors, and so increasing its scale while other contributors diminish would require especially strong justification

140 No Read: Recap

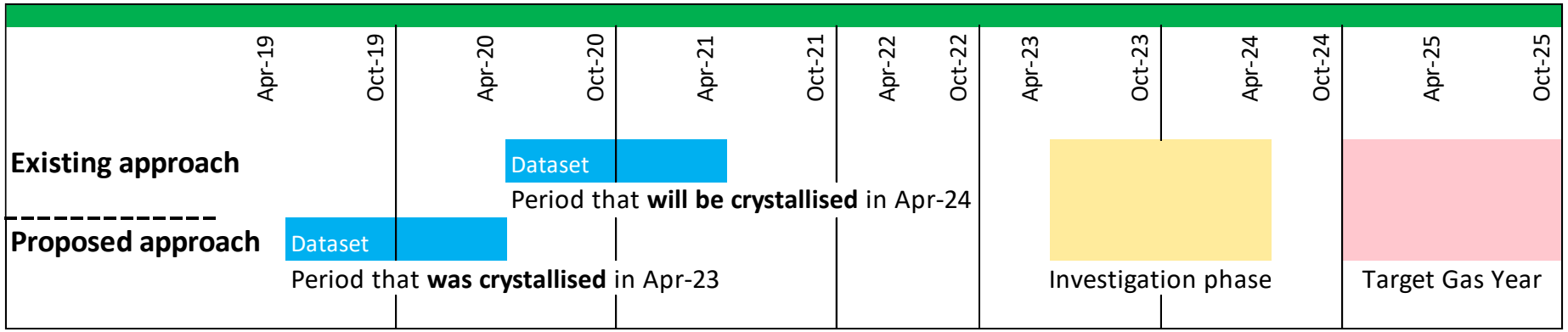
We wanted to investigate whether there is a way to simplify the methodology and improve its output.

- **Case for change**: Repeated iteration in the methodology had led to a confusing combination of data inputs and sub-methodologies, which makes validation and testing of outcomes difficult.
- APPROACH:
  - Changes would be designed to simplify and increase clarity
  - The focus would be an annual calculation of the UIG created from the most recent change in the Line in the Sand

140 No Read: Considerations

Proposed methodology

- Like the existing methodology this involves a two-strand approach to consider
  - the final reconciled position at Line in the Sand; and
  - the rejected reads for the portfolio of sites which have not received a read for four years
- Take the actual period that was frozen in April 2023, (i.e. April 2019 - March 2020) to calculate the actual UIG for this period, then use as a proxy for the target year October 2024 – September 2025.



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140 No Read: Considerations

Outcomes and validation of proposed approach

- Unreconciled percentages are similar to those derived for the 2023-2024
- Pause in meter reader activity during Covid meant that we lack sufficient data to perform the required calculation for the majority of sites
- The two different periods of investigation April 2018 – March 2019 & April 2019 – March 2020 yielded very different results and were based on a very small subset of the sites in scope

EUC	Percentage of sites we could calculate an AQ error for (Investigation Method 19-20)	Percentage of sites we could calculate an AQ error for (Existing Method 20-21)
1ND	8%	20%
1PD	3%	3%
1NI	1%	3%
1PI	2%	2%
2ND	2%	24%
2PD	0%	4%
2NI	1%	5%
2PI	0%	0%
3	0%	11%
4	0%	13%
5	0%	16%
6	0%	3%
7	0%	46%
8	0%	0%
9	0%	0%
Total	7%	15%

140 No Read: Conclusions

We have not updated our methodology for No Read at the Line in the Sand

- The investigation do not give us confidence that the revised methodology would yield a more robust estimation of UIG than the existing one
- Re-testing the proposed revisions may be sensible in future with:
  - (At least) another year of data including one in which the lack of sub-band level information is not problematic
  - More widely available data from smart meters
  - Pandemic impacts no longer impacting data sets

UIG Contributors:
Overview

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UIG Contributors

Summary

- No new contributors have been identified; none have been discounted or removed
- As usual, minor improvements have been made to data validation or methodologies - highlighted in the draft AUG Statement
- Data refreshes were applied to all existing contributors

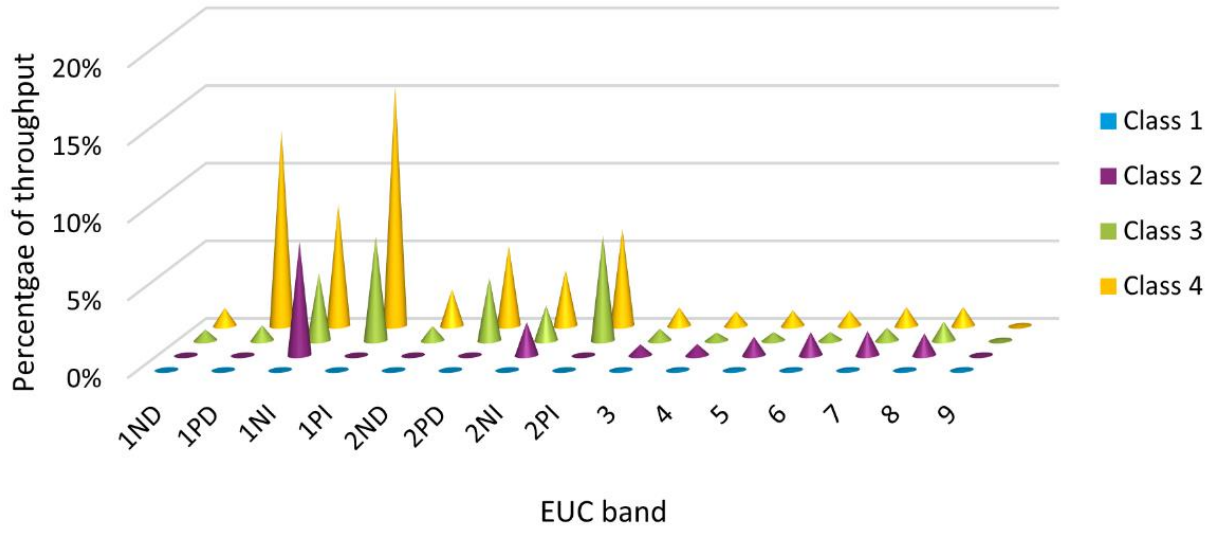
- 010 – Theft of Gas
- 020 – Unregistered Sites
- 025 – Shipperless Sites
- 040 – Consumption Meter Errors
- 060 – IGT Shrinkage
- 070 - Average Pressure
- 090 – No Read
- 080 – Average Temperature
- 100 – Incorrect Correction Factors
- 160 – Isolated Sites
- 200 – Dead Sites

010 – Theft of Gas

Results

- The forecast for this contributor is 6,285 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 6,823 GWh
- Further TDIS data was received at the end of 2023. We expect some movement for the final Weighting Factors

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	290	2,251
	1PD	-	-	48	1,232
	1NI	-	0	83	675
	1PI	-	-	0	5
	2ND	-	-	1	121
	2PD	-	-	0	9
	2NI	-	0	139	463
	2PI	-	-	0	0
	3	0	0	48	134
	4	0	2	40	103
	5	0	3	26	79
	6	0	17	18	91
	7	1	31	26	97
	8	6	50	16	128
	9	47	0	0	1

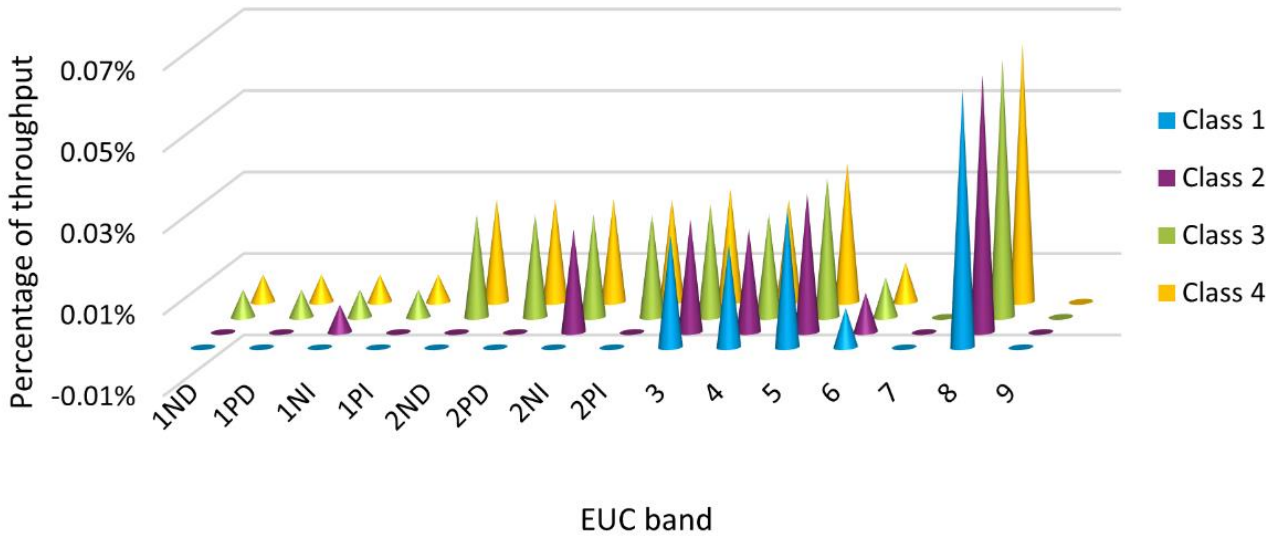


020 – Unregistered Sites

Results

- The forecast for this contributor is 53 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 53 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	3	13
	1PD	-	-	0	1
	1NI	-	0	0	1
	1PI	-	-	0	0
	2ND	-	-	0	1
	2PD	-	-	0	0
	2NI	-	0	2	3
	2PI	-	-	0	0
	3	0	0	2	3
	4	0	0	2	3
	5	0	0	2	3
	6	0	0	0	1
	7	-	-	-	-
	8	4	2	1	7
	9	-	-	-	-

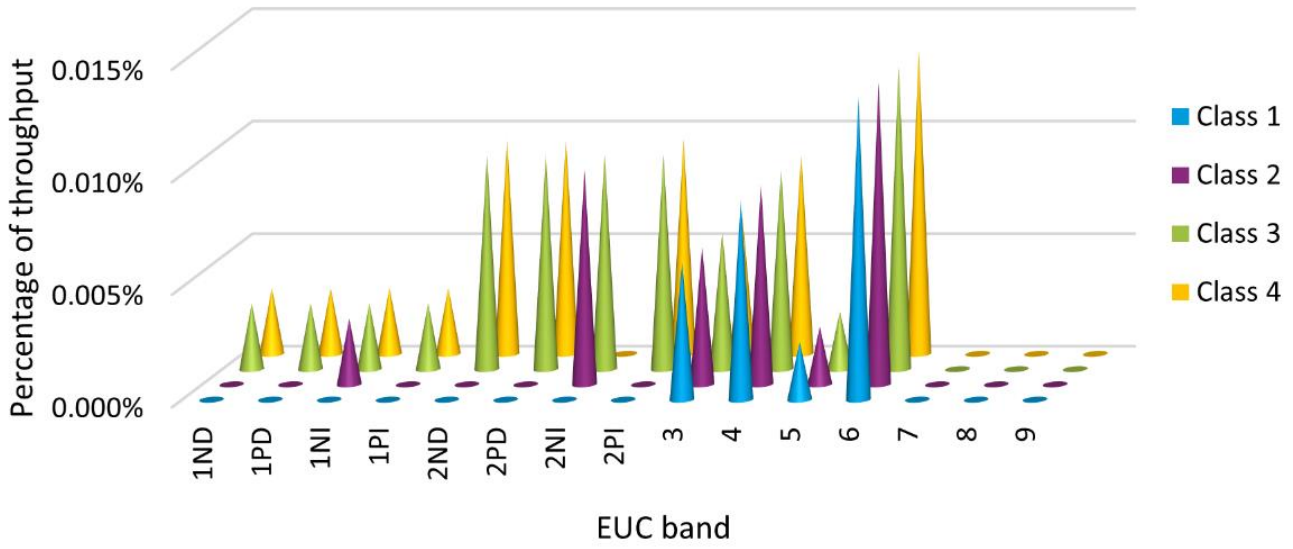


025 – Shipperless Sites

Results

- The forecast for this contributor is 15 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 17 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	1	6
	1PD	-	-	0	0
	1NI	-	0	0	0
	1PI	-	-	0	0
	2ND	-	-	0	0
	2PD	-	-	0	0
	2NI	-	0	1	1
	2PI	-	-	0	0
	3	0	0	0	1
	4	0	0	1	1
	5	0	0	0	0
	6	0	0	0	1
	7	-	-	-	-
	8	-	-	-	-
	9	-	-	-	-

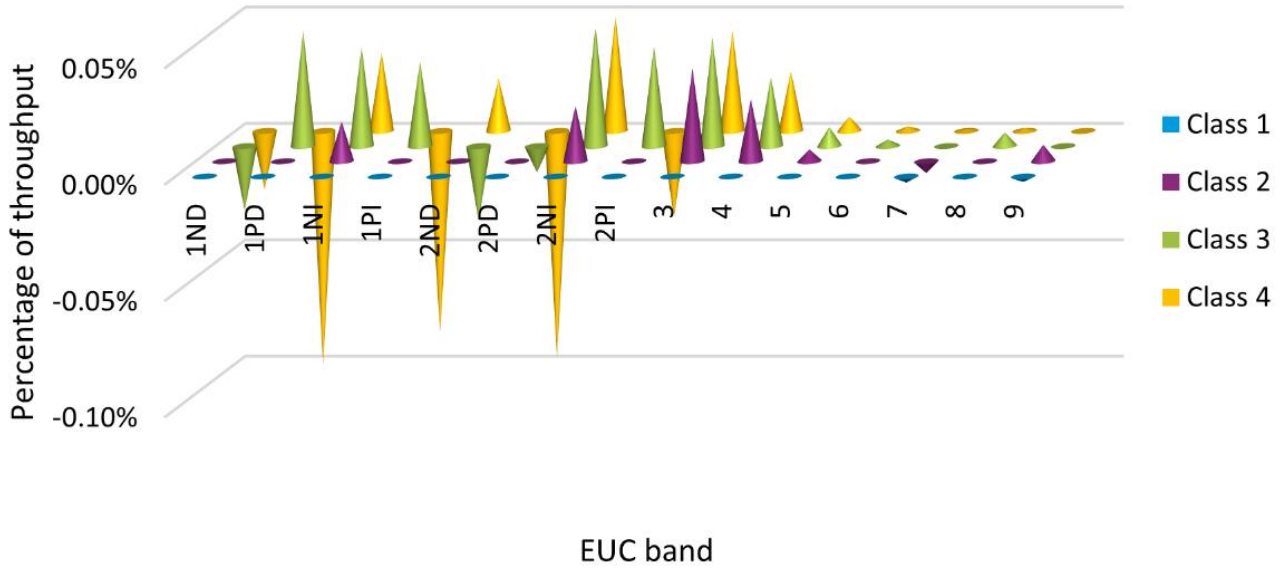


040 – Consumption Meter Error – Inherent Bias

Results

- The forecast for this contributor is -40 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as -15 GWh.

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	-11	-49
	1PD	-	-	2	-10
	1NI	-	0	1	3
	1PI	-	-	0	-0
	2ND	-	-	-0	1
	2PD	-	-	-0	-0
	2NI	-	0	3	6
	2PI	-	-	0	-0
	3	-	0	3	5
	4	-	0	2	3
	5	-	0	0	0
	6	-	0	0	0
	7	-0	-0	-0	0
	8	-0	-0	0	0
	9	-1	0	-	-



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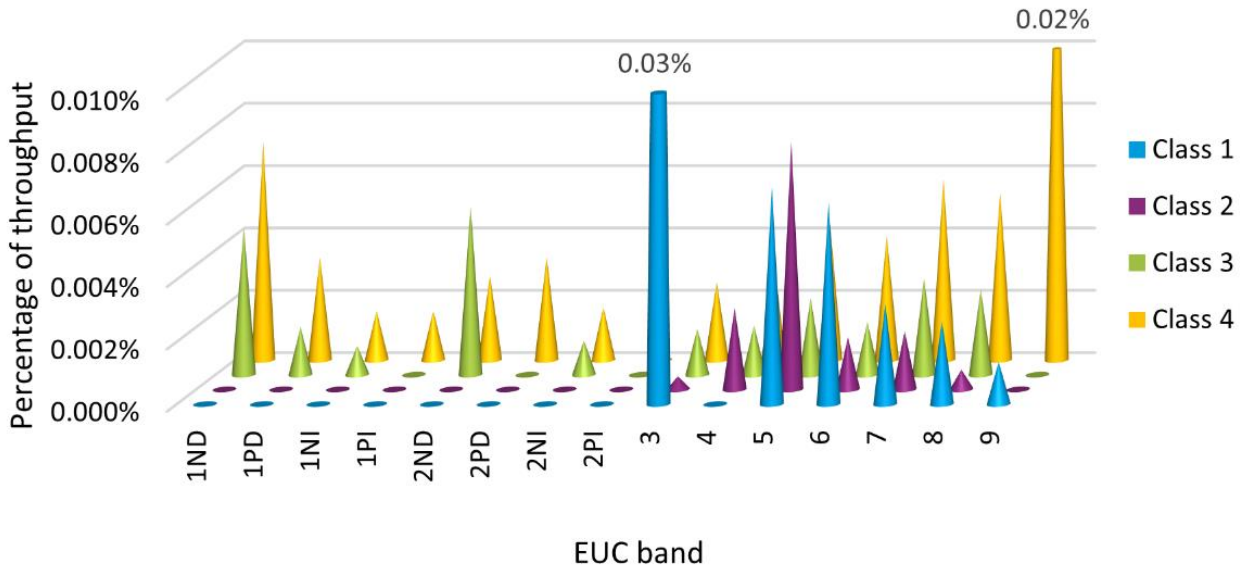
060 – IGT Shrinkage

Results

- The forecast for this contributor is 21 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 19 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	2	14
	1PD	-	-	0	0
	1NI	0	-	0	0
	1PI	-	-	-	0
	2ND	-	-	0	0
	2PD	-	-	-	0
	2NI	-	-	0	0
	2PI	-	-	-	-
	3	0	0	0	0
	4	-	0	0	0
	5	0	0	0	0
	6	0	0	0	0
	7	0	0	0	0
	8	0	0	0	1
	9	1	-	-	0

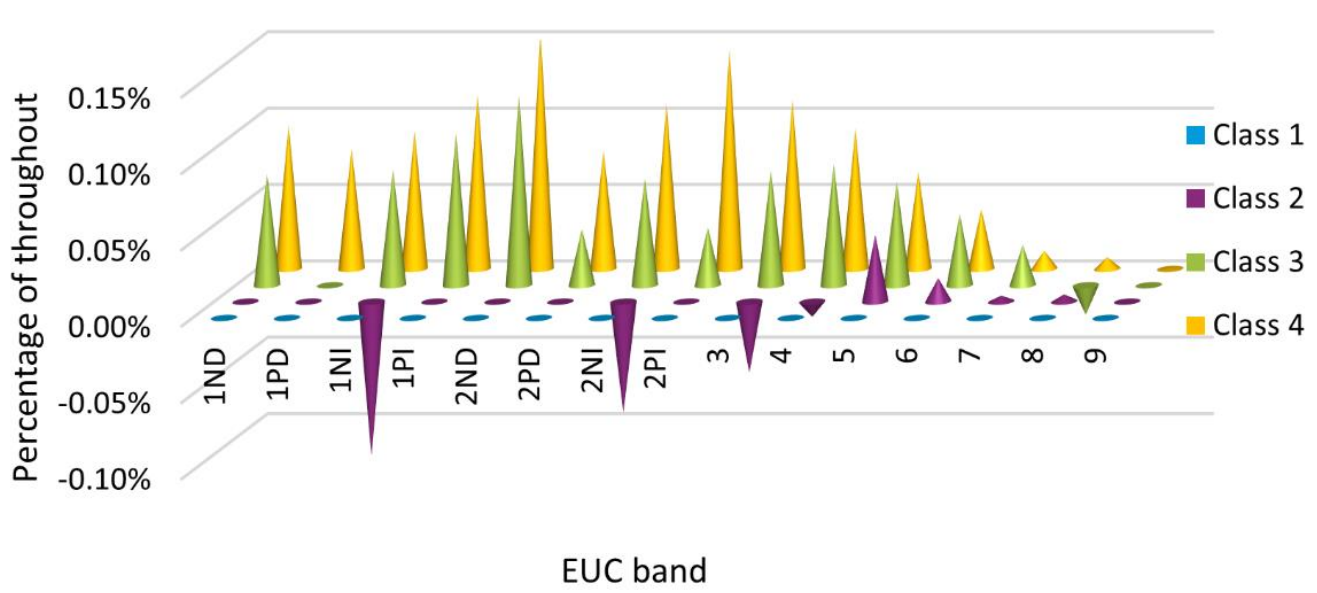


070 – Average Pressure Assumption

Results

- The forecast for this contributor is 305 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 326 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	30	182
	1PD	-	-	-0	8
	1NI	-	-0	1	8
	1PI	-	-	0	0
	2ND	-	-	0	8
	2PD	-	-	0	0
	2NI	-	-0	4	14
	2PI	-	-	0	0
	3	-	-0	5	12
	4	-	-0	6	10
	5	-	0	3	5
	6	-	0	2	4
	7	-	0	1	1
	8	0	0	-0	1
	9	0	-	-	0



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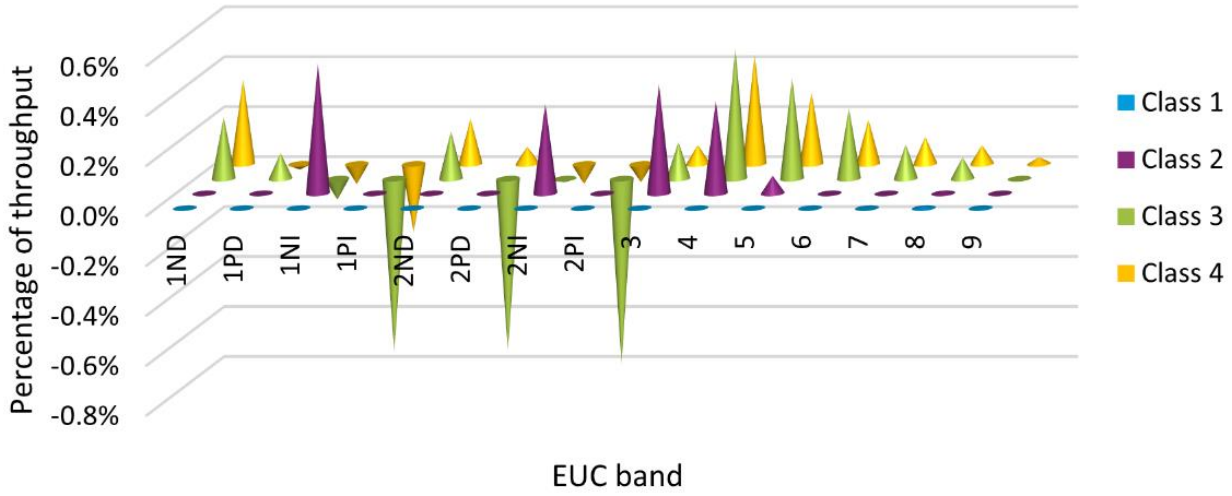
080 – Average Temperature Assumption

Results

- The forecast for this contributor is 950 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 1,021 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	100	657
	1PD	-	-	5	-2
	1NI	-	0	-2	-7
	1PI	-	-	-0	-0
	2ND	-	-	0	9
	2PD	-	-	-0	0
	2NI	-	0	-1	-10
	2PI	-	-	-0	-0
	3	-	0	9	9
	4	-	1	40	48
	5	-	0	19	23
	6	-	-0	9	16
	7	-	-0	4	9
	8	1	0	1	8
	9	2	-	-	0

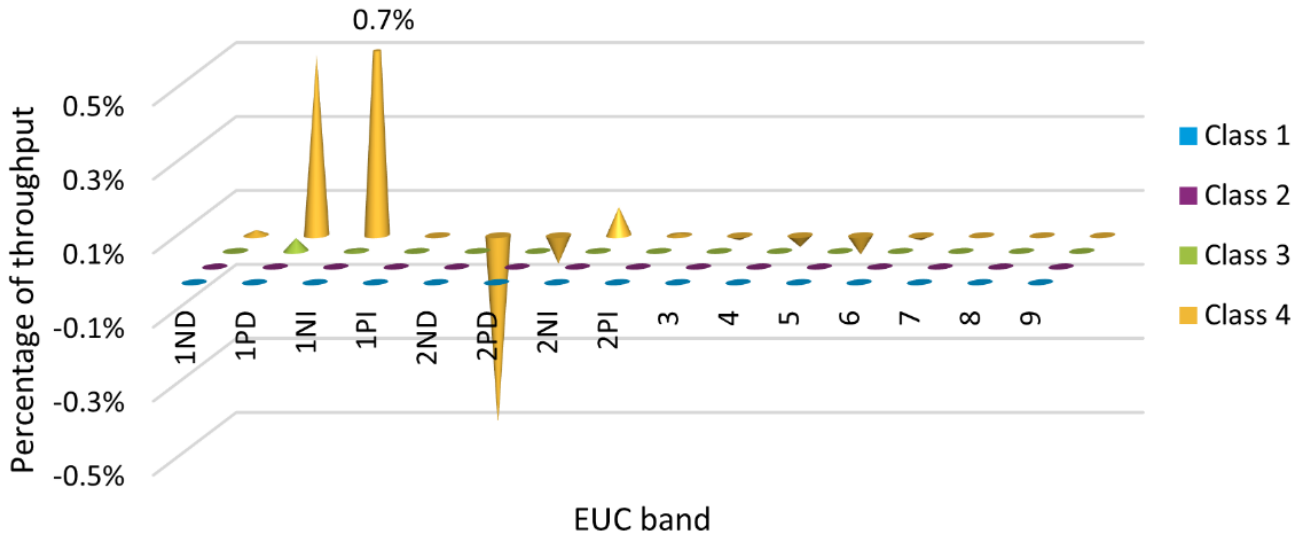


090 – No Read at the Line in the Sand

Results

- The forecast for this contributor is 113 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 162 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	0	28
	1PD	-	-	2	48
	1NI	-	-	0	63
	1PI	-	-	-	-0
	2ND	-	-	-0	-27
	2PD	-	-	-	-0
	2NI	-	-	0	10
	2PI	-	-	-	0
	3	-	-	-0	-1
	4	-	-	-	-3
	5	-	-	-	-4
	6	-	-	-	-1
	7	-	-	-	-0
	8	-	-	-	-
	9	-	-	-	-



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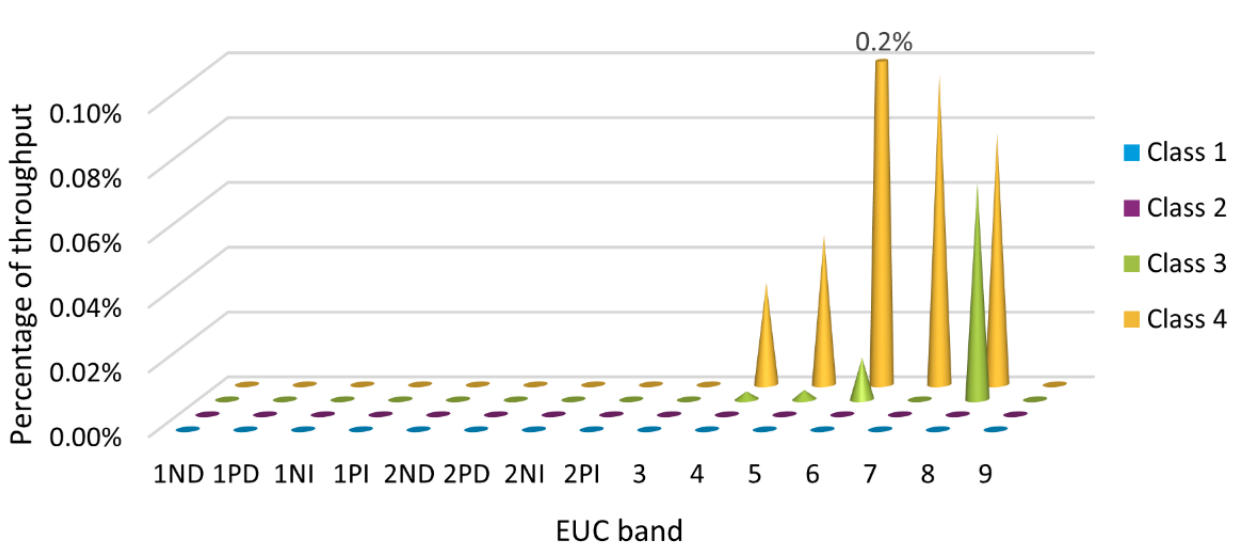
100 – Incorrect Correction Factors

Results

- The forecast for this contributor is 44 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 53 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	-	-
	1PD	-	-	-	-
	1NI	-	-	-	-
	1PI	-	-	-	-
	2ND	-	-	-	-
	2PD	-	-	-	-
	2NI	-	-	-	-
	2PI	-	-	-	-
	3	-	-	-	-
	4	-	-0	0	3
	5	-	-	0	4
	6	-	-0	0	19
	7	-	-	-	8
	8	-	-	1	8
	9	-	-	-	-



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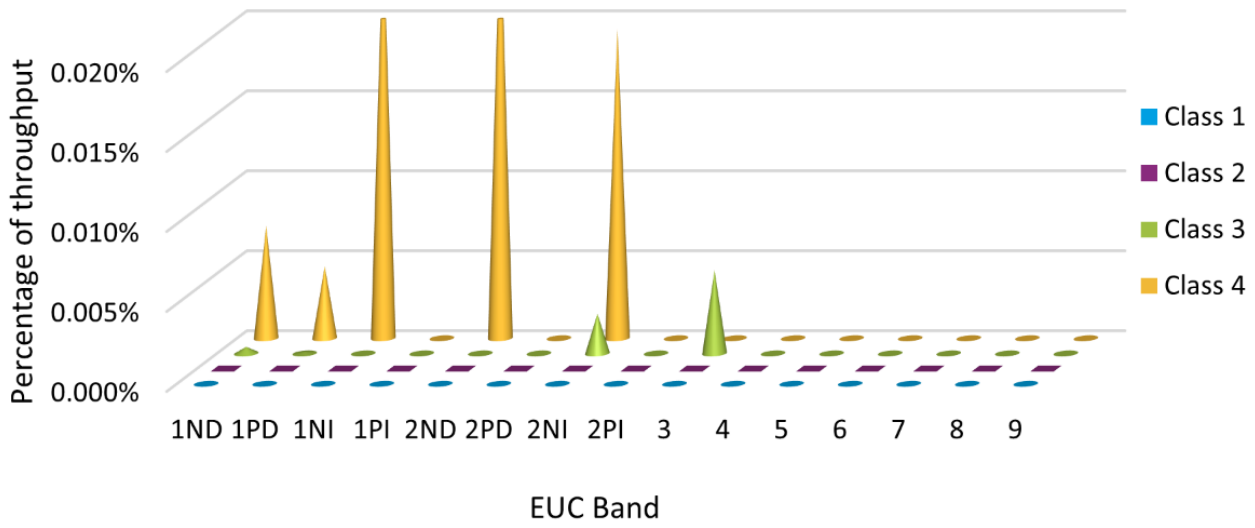
160 – Isolated Sites

Results

- The forecast for this contributor is 21 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 19 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	0	14
	1PD	-	-	0	0
	1NI	-	-	-	2
	1PI	-	-	-	-
	2ND	-	-	-	1
	2PD	-	-	-	-
	2NI	-	-	0	2
	2PI	-	-	-	-
	3	-	-	0	-
	4	-	-	-	-
	5	-	-	-	-
	6	-	-	-	-
	7	-	-	-	-
	8	-	-	-	-
	9	-	-	-	-

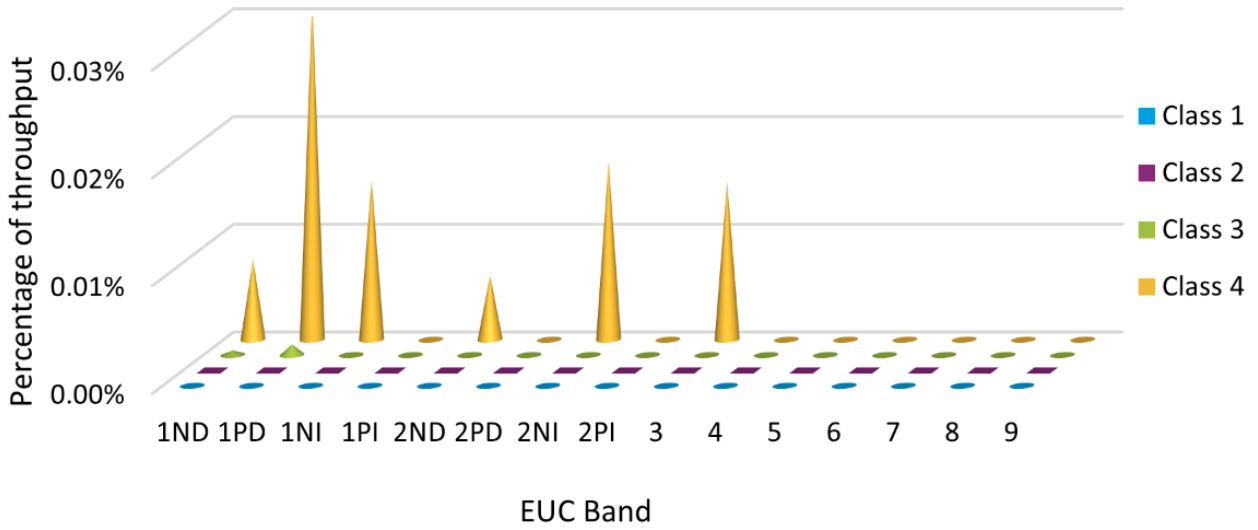


200 – Dead Sites

Results

- The forecast for this contributor is 23 GWh
- The Statement for Gas Year 2023-2024 quantified the UIG for this contributor as 19 GWh

		CLASS			
		1	2	3	4
EUC BAND	1ND	-	-	0	14
	1PD	-	-	0	3
	1NI	-	-	-	1
	1PI	-	-	-	-
	2ND	-	-	-	0
	2PD	-	-	-	-
	2NI	-	-	-	2
	2PI	-	-	-	-
	3	-	-	-	2
	4	-	-	-	-
	5	-	-	-	-
	6	-	-	-	-
	7	-	-	-	-
	8	-	-	-	-
	9	-	-	-	-



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Next steps

And Key Contacts

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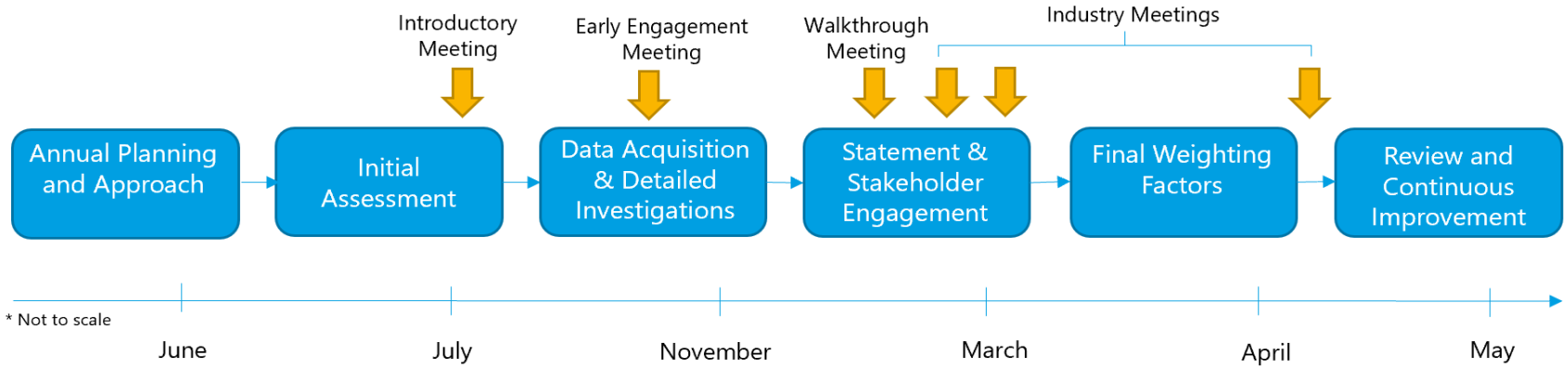
Timetable

- Consultation responses to be provided by 22nd January.
- Consultation responses will be presented and discussed at AUG Sub-Committee on 17th February
- Final changes to the draft Weighting Factors and AUG Statement (if required) will be presented at the AUG Sub-Committee Meeting on 10th March 2023
- The final AUG Statement will be provided to the AUG Sub-Committee by 31st March 2023 and presented at the 14th April AUG Sub-Committee Meeting, prior to consideration at the April UNCC Meeting
- Engagement with stakeholders will continue throughout the process. We can be contacted at auge@engage-consulting.co.uk



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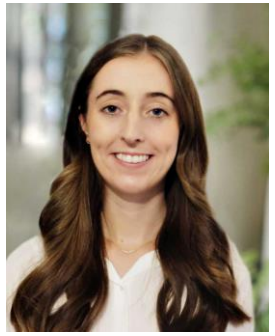

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Appendix:
Further information

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Methodology Principles

Our overarching methodology is founded on three key principles. These are:

- **Bottom-up Determination:** we quantify UIG for each identified contributor and add these together, rather than estimating the overall UIG and apportioning it or using it as a means of differencing

- **'Polluter Pays':** we interpret "fair and equitable" to mean that UIG should be allocated in the same proportions as it is created. As the UNC does not permit the allocation of UIG at a Supply Point level, the best current attainment of this principle is that each position on the matrix of EUC Band and Class attracts its appropriate proportion

- **Line in the Sand:** we only include in our calculation of Weighting Factors the UIG that will exist at the Code Cut-off Date or as it is commonly referred to, Line in the Sand. This will be the 'permanent' UIG present at the final Settlement position, and not UIG that exists temporarily prior to this

Weighting Factor Calculation Process

Methodology

- We calculated the Weighting Factors as a proportion of UIG relative to throughput in our Consumption Forecast for each Matrix Position within the AUG Table
- Some cells had a very small number or no Supply Meter Points so we substituted values
- We smoothed the values in EUC bands 03-09 for class 2-4 to dampen any spikes across like groups with similar characteristics
- We also equalised the relevant factors in accordance with UNC Modification 0840
- After these processes, the factors were normalised so that no UIG was created by the substitution or smoothing process
- We then scaled these factors such that the average of all the Matrix Positions is 100
- This standardises the factors so that the relative values will be comparable year-on-year

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