# UIG Task Force

## 3.2.1: Inaccurate / Out of date AQs - Non-Daily Metered EUC09 Sites

# Summary of Findings

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|---|---|
| **Area & Ref #** | Inaccurate / Out of date AQs - Non-Daily Metered EUC09 Sites (Ref#3.2.1) |
| **UIG Hypothesis** | EUC09 sites where the AQ is greater than 58.6m kWh should be re-designated as Class 1. The NDM profile may not be a good representation of their usage, thus contributing to UIG |
| **Data Tree References** | Annual Quantity, Class 1 and 2 Energy, Meter Readings |

| | |
|---|---|
| **Findings Status** | **Closed** |
| **UIG Impact Peak Volatility %** | **Up to 0.3%** |
| **UIG Impact Annual Average %** | **Up to 0.85%** |
| **Confidence in Percentages** | **H** |

| Findings | Approach to analysis |
|---|---|
| We have identified 25 Class 3 and 4 sites with an AQ placing them in EUC band 9. These sites should be in Class 1 based on their AQ.<br><br>Comparing daily measurements from the NDM sample against site level allocation does not have a material impact on total levels of National UIG. Individual LDZ impacts are as follows:<br><br>NE: Shows a clear day-of-week trend. Contributes up to 0.3% of LDZ throughput to NE LDZ UIG on Sundays and Mondays, but shows a similar level of reduction on Tuesday – Saturday. Overall the result is a negligible reduction in UIG for this LDZ, but these sites are contributing to NE UIG volatility.<br><br>SO: These sites can contribute up to 0.85% of LDZ throughput to SO LDZ UIG. One site displayed a step change in its recorded consumption following an asset update but investigation indicates the current asset setup is correct.<br><br>WM: Impact on UIG is short lived but the sites in this LDZ were contributing up to 0.25% of LDZ throughput to WM LDZ UIG in the 3 months following go-live.<br><br>This illustrates the significant impact that an inappropriate EUC profile and/or AQ for just 12 sites can have on allocation and therefore UIG. | The analysis will illustrate the impacts on UIG of using the NDM algorithm instead of a daily measurement by comparing the Demand Estimation Sample Measurements vs Allocated Energy for the sites where we have daily energy consumption available. We will analyse the comparison to identify any trends or UIG impacts. |

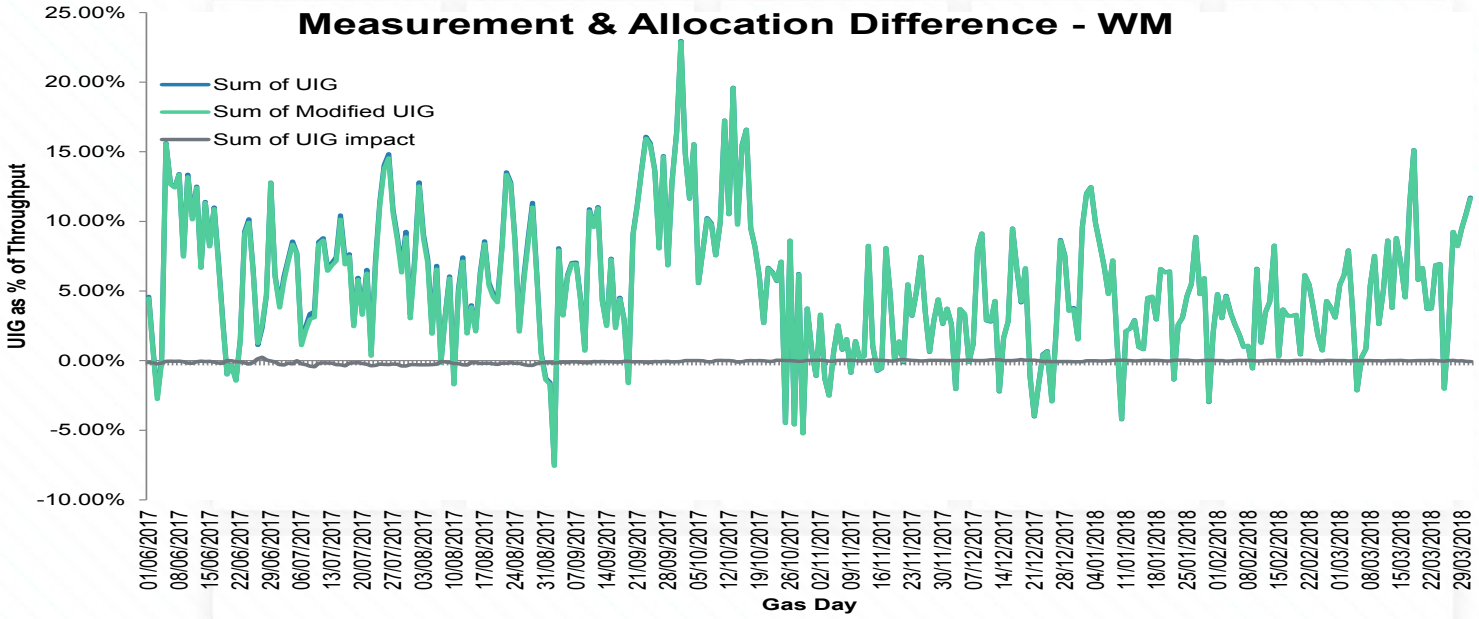
# Supporting Evidence (1/3)

**Charts Illustrating LDZ Level Impact.**

**The Blue Series is the LDZ UIG as held on Gemini.**

**The Green Series is the Adjusted UIG when we net off the difference between measurement and allocation for just 12 Meter Points. In all cases the UIG volatility spikes are visibly reduced.**

**The Grey series is the percentage of LDZ throughput which was included in UIG because it was not allocated appropriately.**



# Supporting Evidence (2/3)

**Charts Illustrating LDZ Level Impact.**

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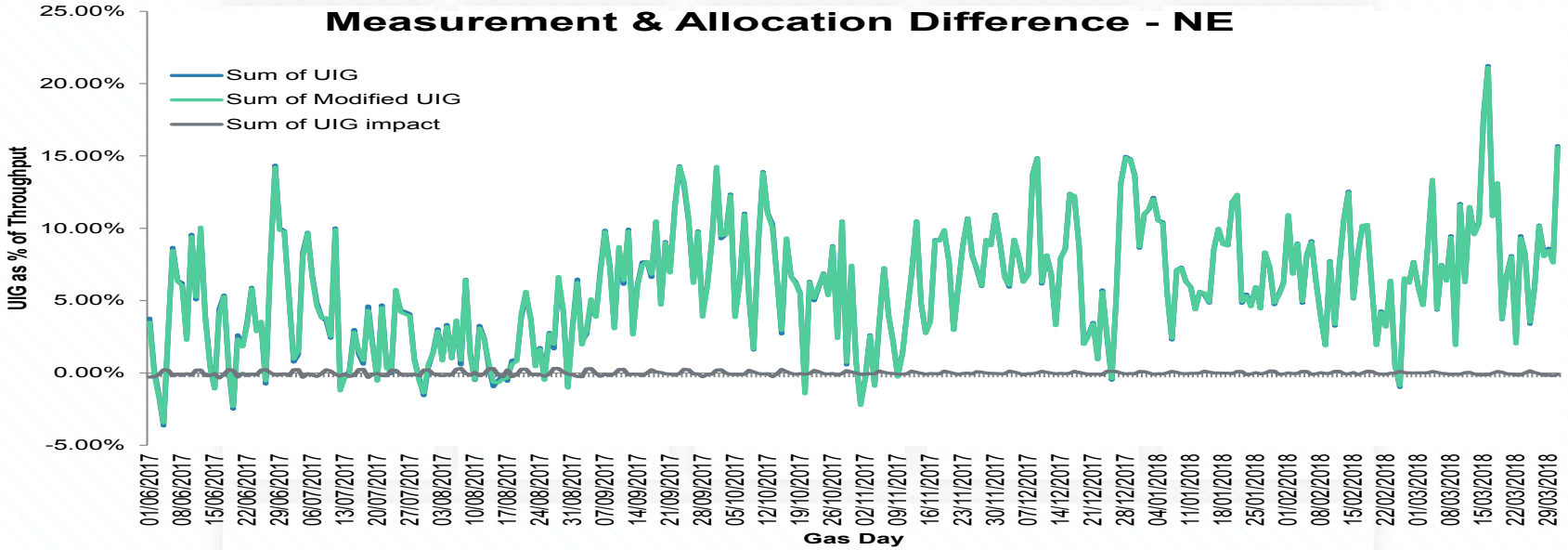

# Supporting Evidence (3/3)

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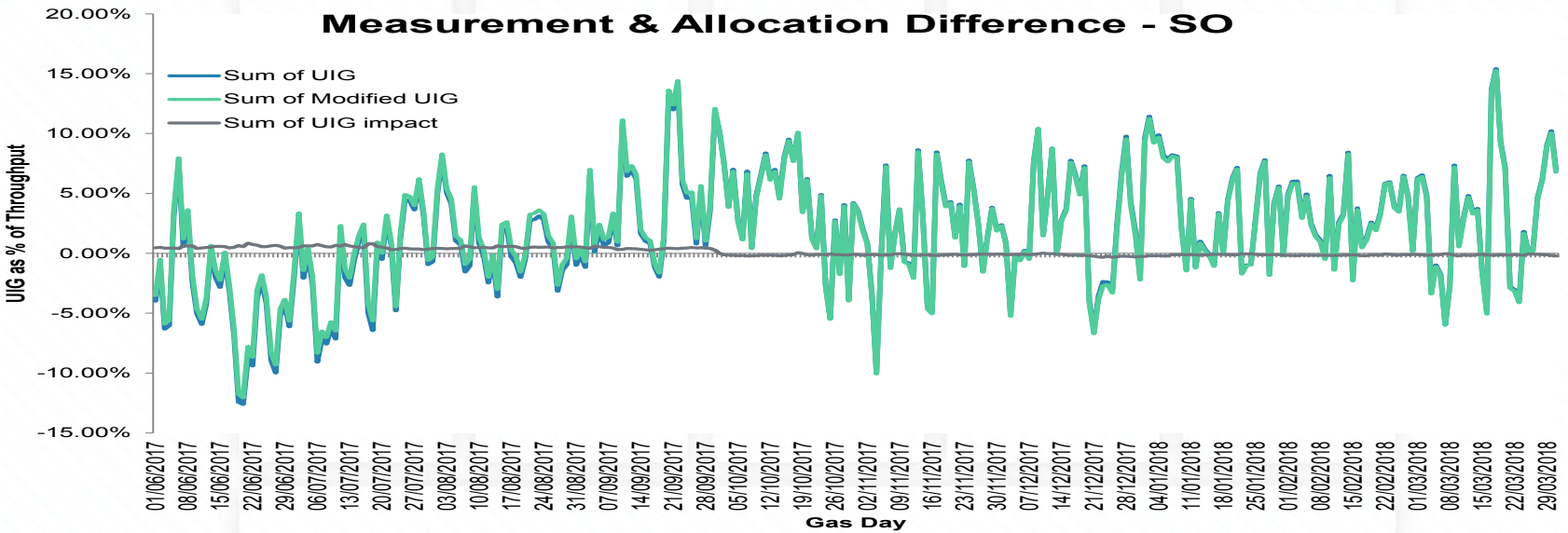

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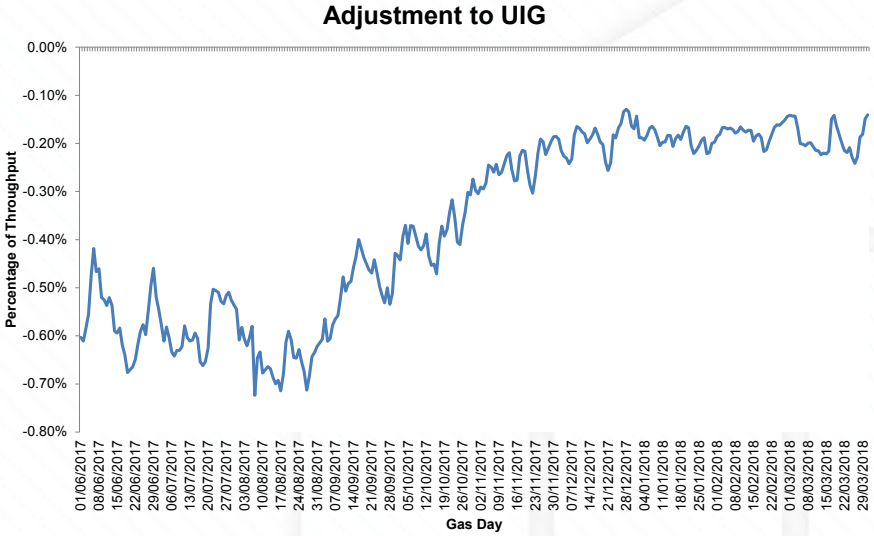
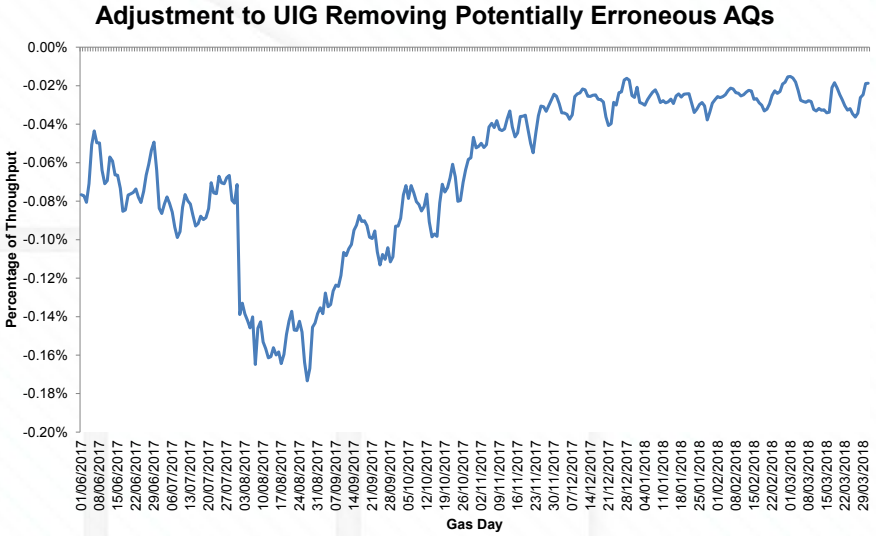
| | |
|---|---|
| **Findings Status** | **Closed** |
| **UIG Impact Peak Volatility %** | **Up to 0.7%** |
| **UIG Impact Annual Average %** | **Up to 0.38%** |
| **Confidence in Percentages** | **M** |

| Findings | Approach to analysis |
|---|---|
| We have identified a very small number of Class 3 and 4 sites with an AQ placing them in EUC band 9. These sites should be in Class 1 based on their AQ. The analysis will illustrate the impacts on UIG changing AQs for a small number of sites and the potential impacts of the speed of AQ change for larger sites.<br><br>Nationally, the allocation differences for these sites could account for up to 0.7% of throughput on a given gas day. In the months following go-live, the contribution was consistently around 0.6% of national throughput – or around 10% of total UIG. Over the analysis period they potentially contributed 0.28% of throughput to UIG.<br><br>Filtered to just the 8 impacted LDZs, the allocation differences for these sites could account for up to 1% of throughput on a given gas day. In the months following go-live, the contribution was consistently around 0.9% of throughput for these LDZs – or around 30% of the total UIG for the 8 LDZs. Over the analysis period they potentially contributed 0.4% of throughput to UIG for these LDZs.<br><br>We are aware of an issue with AQ calculation and sites which have AMR kit fitted and so the confidence in percentages is Medium. Removing impacted sites reduces the modelled impact. The un-impacted MPRNs could account for up to 0.35% of throughput for the impacted LDZs on a given gas day, and consistently account for 0.2% of total throughput for the impacted LDZs. Over the analysis period they potentially contributed 0.1% of throughput to UIG in the impacted LDZs.<br><br>This analysis shows the hypothetical level of historic UIG that was accounted for by these sites or, if the current AQ is incorrect, the amount of UIG currently being absorbed by these sites' allocation. It illustrates the importance of regular read submission to ensure as accurate AQ as possible and the impacts a few large AQ sites can have on National UIG if they are not Daily Metered. | This hypothetical analysis assumes that the current AQ and allocation profile is correct. Reallocate the sites from Go-Live to end of March 2018 using Current AQ and appropriate Band 9 EUC factors. |

# Supporting Evidence (1/1)




**Charts illustrate the daily adjustment to UIG. The second chart excludes MPRNs where there could be an issue with the AQ as currently held on UK Link. We have not modelled the impact on the AQ of these sites at this stage and have removed them from the analysis to show the minimum impact on UIG of the sites where the issue is not present.**