#### **DNV-GL**

**DIGITAL SOLUTIONS** 

# **AUG Sub-committee of UNCC**

**Early Engagement Meeting for 2018/19** 

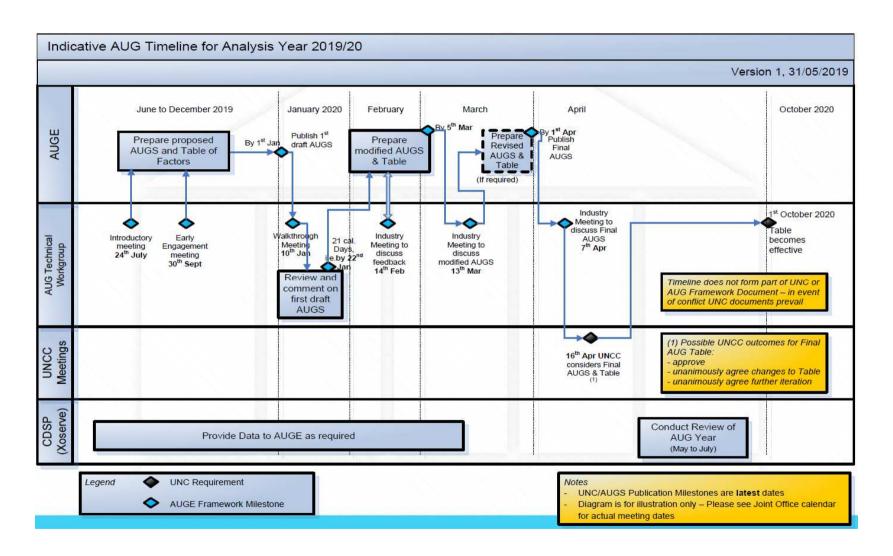
**Tony Perchard & Andy Gordon** 

30 September 2019

#### **Agenda**

- Introduction
- Data Status
  - Update on data provision
  - Update on gas temperature data request
- Analysis Update
  - Review of Topics
    - Update on Current Topics
    - Potential New Topics
    - Innovations
- Industry Changes and Modifications
- Review of General Query & Response
- Next Steps
- AOB

#### **Introduction**



#### **Data Status**

- Register of Data Requests Published on JoT monthly
  - No major data delivery issues
  - Investigating data available from large sites e.g. temperature, pressure
- Risks
  - Supplier Theft of Gas Data not provided in time

#### **Gas Temperature Data**

- Responses to data request
  - Recommended Publication from Energy Institute, "HM27: A guide to gas metering systems"
  - No actual data identified
- Original Reports on Domestic Meter Temperature Survey
  - Seeking permission to use and share report findings
  - Consider possibility of incorporating temperature effect (not 12.2C) in methodology
  - Review scope of Meter Temperature study

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#### **Analysis Update**

- Update on each Topic
  - Status of analysis and preliminary results
  - Current thoughts on methodology impact
  - Additional supporting data & information required/available

#### **Theft Analysis (Topic 8)**

- Method as documented in last year's AUGS
  - Generation of best estimate of Unbiased Leads
  - Leads → Investigations → Detections
- Provision of additional supplier theft data approved
- New approach will be implemented in full subject to receipt of data
- Mod0677R Fiscal theft tamper code
  - Agreed in principle by TIG
  - Experian currently carrying out impact analysis

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#### **Volume Conversion (Topic 25)**

- Significant amount of detailed analysis last year
  - Concluded that data was insufficient to justify varying from 12.2C
  - LDZ specific factors are outside of current AUGE remit
  - UIG factors cannot remove effect of volume conversion errors, just re-distribute these
- Status at end 2018/19 AUG year
  - Detailed report on temperatures at DM sites available
  - Reference to domestic temperature study with summary values
    - Extent of domestic study unknown
    - Not clear if temperatures were gas temperatures or air in the vicinity of the meter
    - Not clear if temperatures were flow weighted or not
    - Noted that study was carried out over a period <> 12 months

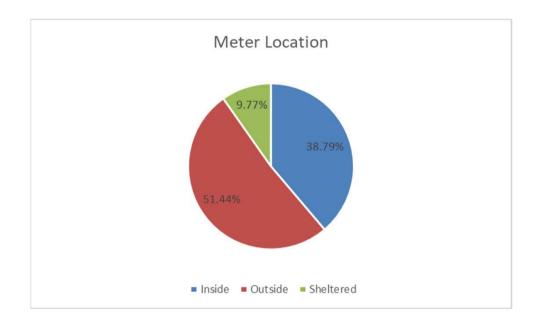
#### **Volume Conversion (Topic 25)**

- Original reports for Domestic Meter Temperature Survey acquired
- Subject to permission to use report findings, we propose
  - Estimate UIG from temperature conversion (assuming SNT)
    - By LDZ & EUC
    - Use LDZ specific temperatures
    - Different temperature for different site types (to be defined)
    - Temperatures based on EUC specific meter location data (See Topic 58)
  - Assess potential to develop relationship between gas temperature and air/ground temperature
    - Can only do this at annual level
  - Will need to account for
    - Difference between temperature for years of study and current SNT
    - Differences in Flow Weighted Average calculation
- Review need/requirements for proposed gas temperature study

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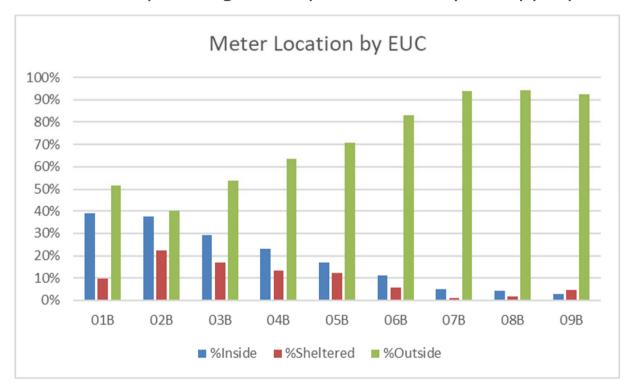
# **Meter Location (Topic 58)**

- Meter Location Information available for ~77% of Meters
- Divided into 3 categories
  - Sheltered refers to location in an unheated space e.g. garage or cellar



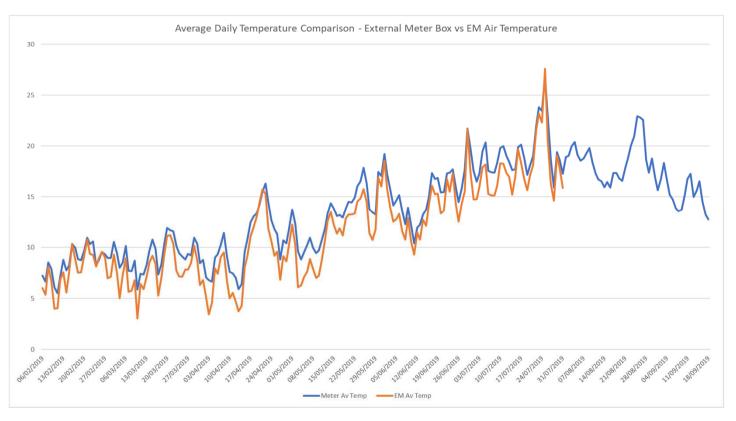
#### **Meter Location Results – By EUC (Topic 58)**

- Meter Location by EUC
  - Meters are much more likely to be indoors or in a sheltered location (e.g. garage) for lower EUCs
  - Suggests use of EUC specific gas temperatures may be appropriate



#### **External Meter Temperatures - Update**

- Comparison of LDZ Air Temperature to Meter Box Temperature
  - Significant damping of temperature extremes (bi-hourly)
  - − On average, meter box 1.5C warmer (~18miles away)





#### **Level of Permanent UIG post-Nexus**

Ongoing action item – monitoring

# UIG as a % of Total Throughput – Original v Latest as at July 2019 Amendment Invoice



#### **Meter Exchange (Topic 35)**

- Initial Assessment last year highlighted a number of potential issues
  - Veracity of data questioned (suspected missing reads)
- Based on latest meter read data for SSPs in 1 LDZ
  - This suggests that data quality was in fact the issue
  - There are a few anomalies being investigated
- Investigation to continue
  - Confirm findings for LSP and more LDZs

#### Converted/Unconverted Reads (Topics 37, 60 & 61)

- Initial query (37) related to XRN4621
  - Xoserve believe no permanent UIG
  - Topic closed
- Topics 60/61 Use of data from Volume Converters
  - Investigating what data can be captured
  - Sample of Corrected/Uncorrected reads provided by CDSP for 1 LDZ
    - Clarifications sought
    - Telecon with SME 18 Sep

# **Accuracy of NDM algorithm (Topic 39)**

- Ongoing action item monitoring
  - Changes to algorithm may impact AUG methodology

#### **Incorrect Customer Information (Topic 54)**

- Call with SGN (Lisa Warnock) 5 Sep
  - No new sources of UIG identified
  - Issues SGN are facing mainly related to shipperless/unregistered sites
  - Topic closed

# **New EUCs (Topic 55)**

- Data for new EUC mappings requested
  - Enable analysis by new EUC groups if required

#### **Review of CSEP methodology (Topic 59)**

- Not started
  - Plan to compare CSEP consumptions from actual reads with estimated consumption (aggregate AQ) use pre-Nexus
  - Requires data for meters on CSEPs with multiple reads
  - Awaiting more read data

#### **Potential New Issues**

- VLDMC/DM Meter Maintenance
  - Lack of maintenance usually results in under-read e.g. lack of regular oiling
- Use of Volume converters without Z conversion for high pressure installations

#### **Innovations**

- What is the process for managing innovations which fall outside of the AUGE Framework and/or require UNCC Mod? e.g.
  - Different factors for permanent & temporary UIG
  - LDZ specific factors
  - Factors for new EUC bands

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#### **Industry Changes and Modifications**

- 0664 Transfer of Sites with Low Read Submission Performance from Class 2 and 3 into Class 4
- 0672 Target, Measure and Reporting Product Class 4 Read Performance
- 0677R Shipper and Supplier Theft of Gas Reporting Arrangements
- 0681S/IGT127/XRN4932 Improvements to the quality of the Conversion Factor values held on the Supply Point Register (Implemented)
- 0690S Reduce qualifying period for Class 1
- 0691S CDSP to convert Class 3 or 4 meter points to Class 1 when G1.6.15
   criteria are met
- 0692S/XRN4941 Automatic updates to Meter Read Frequency
- 0693R Treatment of kWh error arising from statutory volume-energy conversion
- 0699 Incentivise Key Areas of Performance using additional UIG Charges
- IGT126F Alignment between the IGT UNC and UNC for Unregistered New Supply Meter Points
- 0700 (Urgent) Enabling large scale utilisation of Class 3

#### **Industry Changes and Modifications**

- XRN4645 The rejection of incrementing reads submitted for an Isolated Supply Meter Point
- XRN4665 Creation of new End User Categories
- XRN4690/4713 Actual read following estimated transfer read calculating AQ of 1
- XRN4740 AQ Calculation for Class 4 sites with AMR Fitted
- XRN4742 Incorrect AQ calculations due to migrated consumption
- XRN4772 Composite Weather Variable (CWV) Improvements
- XRN4933 Datafix CWV and recalculate WCF and WAALPs for SW LDZ
- XRN4946 Reporting on Installed Meters with Conversion Capability

#### **Summary of Proposed Changes to Methodology**

- Methodology Updates
  - Implement new Theft methodology in full (subject to data)
  - Incorporate volume conversion UIG from temperature (subject to permission to use report)
- Areas Under Investigation (Priority order for discussion)
  - Meter Exchange (35)
  - Converted/Unconverted Reads (60/61)
  - CSEP Consumption Analysis
  - New Issues?

# **Next Steps**

- AUGE to publish draft AUG Statement 1<sup>st</sup> Jan 2020
- Any Feedback?

# **AOB**

• AUG Year Review for 2018/19

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# **Thank you**

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