NDM Sample Update

9th December 2019

Background

- Todays objective is to provide feedback on the NDM sample data collected and used in support of the Algorithm Performance work for Gas Year 2018/19

- The NDM sample data used in the analysis is derived from 3 sources:
  - Xoserve Managed Sample
  - Transporter's Managed Sample
  - Third Party (UNC Mod 654S)

- UNC Modification 654S, which went live on 1st March 2019, requires qualifying Shippers to submit daily consumption data to Xoserve to support Demand Estimation processes

- The current analysis period for algorithm performance is 01/10/2018 to 30/09/2019, therefore unless you were able to submit historic data back to October 2018 your data will not have been used and will not have been subject to full validation

- Thank you to those Shippers that have submitted data

How is the data used?

- Once the data has passed validation, it's used in 2 processes:
  - EUC Modelling (Spring)
    - Used to develop Demand Models which enable us to develop consumption profiles used in daily NDM allocation
  - Algorithm Performance (Autumn)
    - Used to assess the performance of the Demand Models in the most recent Gas Year
- It is critical that data errors are removed prior to the Demand Modelling process in order to ensure daily NDM allocation is as accurate as possible and therefore reduce the levels of reconciliation
- Modelling error will always be present but this should be restricted to the modelling approach and not caused by data issues

Common Data Issues (3rd Party Data)

- Day of the Week
  - This is the most common issue we see across the industry and one of the most important items to get right. The file format states that the data should be provided to Xoserve using Meter Read Date
- Negative Volumes
  - As the name suggests, we see a lot of volumes that are less than 0
- Volume Spikes
  - These are typically seen where there has been an exchange or the meter has gone round the clock and tend to show a volume of 999999. Although other ‘random’ spikes are also seen
- File Format
  - Please ensure that the data sent to Xoserve matches the published file format, this includes file type, naming, content and layout. We are building a new validation system which expects all files to match the file format, any deviations to this will be rejected back to the originator
- Market Sector Code
  - We are finding that in a lot of cases we are seeing sites with an incorrect market sector code. Specifically sites that show a considerable dip in consumption at weekends and over the Christmas period but have a code of D (domestic)
- Consecutive Zero Consumption
  - Potentially caused by the file format (more on this in future slide)

File Format Change

- During this analysis phase, we have identified an improvement to the current file format
- UNCORRECTED_VOLUME and CORRECTED_VOLUME are currently numeric field but do not contain any decimal places
- We believe that having these as whole numbers will cause issues with sites that consume small amounts, particularly those within the domestic market. Rounding could potentially cause a significant number of consumptions to incorrectly show as 0 when the site is using gas equivalent to less than 1 cubic meter/foot
- We propose a change to file format to increase the accuracy of the data used in the modelling process

RECORD/FIELD NAME	OPT	DOM	LNG	DEC	DESCRIPTION
METER_POINT_REFERENCE_NUMBER	M	N	10	0	A unique numeric reference associated to the supply meter point
METER_READ_DATE	M	D	8	0	The date that the meter/converter read relates to in order to derive the volume (i.e. the date of the closing 5am read). For example, 'Meter_Read_Date' of '20181029' would relate to the Gas Day '28/10/2018'. **FORMAT: YYYYMMDD**
METER_SERIAL_NUMBER	M	T	14	0	The manufacturers meter serial number from which the meter read/consumption was taken
UNCORRECTED_VOLUME	M	N	12	0	The uncorrected metered volume calculated for the relevant gas day (in Cubic Metres or Cubic Feet)
CORRECTED_VOLUME	O	N	12	0	The corrector (converter) volume calculated for the relevant gas day (in Cubic Metres or Cubic Feet)
UNITS_OF_MEASURE	M	T	5	0	Indicator identifying the unit of measurement of the stated uncorrected / corrected volume. Allowable values: **SCFH = Standard Cubic Feet per Hour** **SCMH = Standard Cubic Meters per Hour**
MARKET_SECTOR_CODE	M	T	1	0	A code that specifies that the site is used for domestic or industrial and commercial purposes. Allowable values: **D = Domestic** **I = Industrial**
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Next steps…

- As we see reductions in the traditional Demand Estimation samples we will need to rely more and more on Third Party data and so it is important that Shippers fully understand the importance of their data submissions
- In the new year Xoserve will contact each of the Shippers that have submitted data to provide detailed feedback and will be happy to offer more support to suit their requirements
- Xoserve shall progress the change to the File Format via the Change Management Committee meeting
- For those shippers that have not yet been able to submit data, the steer from the Performance Assurance Committee (PAC) was that they expect you to do so in April 2020 (as this is 12 months post MOD go live)
- Alternatively, please contact myself (Simon Bissett) if you have any queries via the Demand Estimation Box Account (xoserve.demand.estimation@xoserve.com)