



Recap on UIG Task Force Issue 12.2 – Standard Conversion Factor

UNC Review Group 0693

25 February 2020

History of the Standard Conversion Factor Issue

- Raised by the UIG Task Force
- Presented at the first UIG Task Force Findings Walkthrough
- No clear consensus on a way forward
- Further walkthrough at a subsequent UIG Workgroup meeting
- Agreed to be a complex topic and a UNC Review Group was the best route for reviewing options and making recommendations

Background

- All sites under 732,000 kWh AQ should have a single industry standard conversion factor specified in legislation (also referred to as a Correction Factor)
- Standard factor of 1.02264 accounts for an assumed average temperature and altitude
- Warmer gas will have a greater metered volume than cooler gas – **the same energy quantity will take on a larger volume under warmer conditions** – gas is metered in volume then converted to energy
- Gas at higher altitude will have a greater metered volume than gas at a low altitude – the AUGE* assesses the impact of altitude to be negligible compared to temperature¹

**AUGE = Allocation of Unidentified Gas Expert*

¹ = Presentation at 12/10/18 UNCC meeting

Impacts of standard temperature in Conversion Factor on Unidentified Gas (UIG)

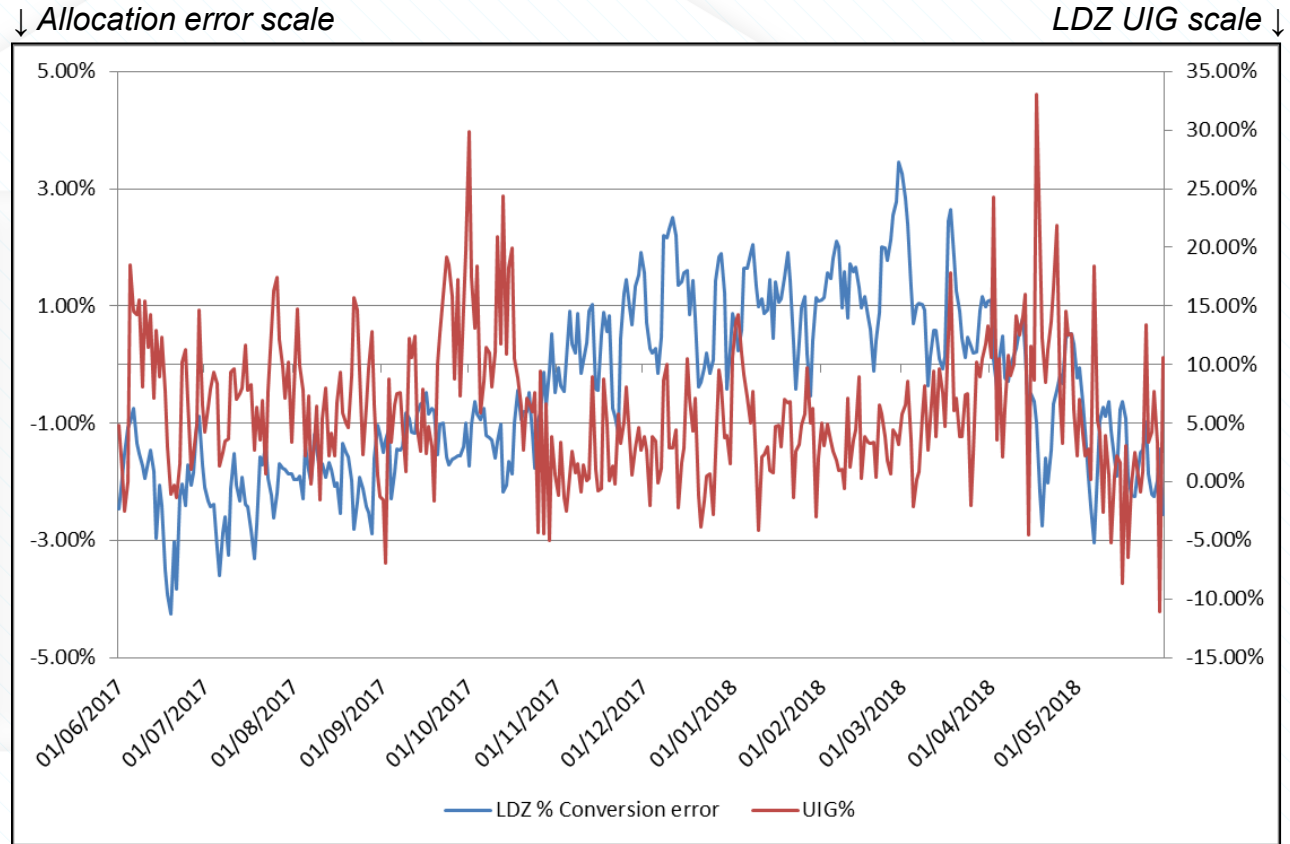
1. Non-Daily Metered (NDM) Daily Allocation

- NDM sites are allocated gas each day using Profiles based on reactions of the NDM Sample to weather
- Demand from the NDM Sample in EUCs 01 to 03 (AQ <732,000 kWh) is corrected at standard CF which **assumes a constant temperature of 12.2°** – sample demand is understated when colder, overstated when warmer
- This in turn understates NDM Allocation in winter, overstates in summer
- This could be contributing to the general trend of positive UIG in winter and low/negative UIG in summer (as seen in pre-Nexus simulations)
- *Simulation of allocation error on next slide*

Estimated daily % error in WM LDZ Allocation – temperature only – compared to daily LDZ UIG

Notes

- Based on WM LDZ air temps only for first year post-Nexus
- Impacts will be very different depending on actual weather
- Also impacted by location of gas meter – heated room/ unheated location e.g. cellar or garage/ outside location – sheltered or exposed – sunny or shaded
- Depending on flow rate, gas takes on more of ambient temp, less impact of ground temp
- No widespread available info on temps of gas at point of metering



Impacts of standard temperature in Conversion Factor on UIG

2. Meter Point Reconciliation

- When meter readings are received for NDM sites the same standard CF is used to convert volume to energy
- Cold weather demands are understated, warm weather demands are overstated
- Gives an incorrect seasonal shape
- UIG impacts from NDM Allocation for EUCs 01 to 03 will persist after meter point reconciliation, especially for sites which are read monthly

Impacts of standard temperature in Conversion Factor on UIG

3. NDM Annual Quantities (AQs)

- AQ is the main component of NDM Allocation – combined with the NDM Profiles and weather data
- Analysis suggested that the annual impact of the standard CF is non-zero and slightly positive
- This is highly dependent on the weather and the considerations noted on **Slide 4**
- Any impacts on AQs would also flow into subsequent NDM Allocation

Additional Resources

Material	Location
UIG Task Force findings (on Xoserve.com)	https://www.xoserve.com/media/1956/task-force-findings-item-122v2.pdf
UIG Task Force Recommendations (on Xoserve.com)	https://www.xoserve.com/media/2499/122-uig-task-force-use-of-standard-conversion-factor-for-all-ndm-sites-with-aqs-1t-732-000kwh-recommendations.pdf
Detailed comparison of the various Task Force Recommendations	https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/2019-02/5.1%20Iss%2012.2%20Options%20Analysis.xlsx

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