AQ (Annual Quantity) & SOQ (Supply Offtake Quantity) Calculation's

Version 2.0

AQ Calculation Formula

The formula used to derive an AQ is outlined in Uniform Network Code H3.2.1 (link provided below).

https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/page/2018-10/TPD%20Section%20H%20-%20Demand%20Estimation%20and%20Demand%20Forecasting.pdf

The formula for Meter classes 3 & 4 is as follows: AQ = AQMQ x 365/(∑ (ALP x (1 + (DAF x WCF)))
The formula for Meter classes 1 & 2 is as follows: AQ = AQMQ

∑ is the sum of the daily values for the period that matches the period for the metered quantity and has the effect of removing estimated weather impacts for the read period, whilst multiplying by 365 gets to an annualised value at seasonal normal weather conditions.

The Weather Correction factors (WCF) are available on the National Grid Data Item explorer website:
http://mip-prod-web.azurewebsites.net/DataItemExplorer

The Annual Load Profiles (ALP) and Daily Adjustment Factors (DAF) are available on Xoserve's secure website:
https://www.xoserve.com/systems/extranet-secured-sites/

AQ Calculation Criteria

- The AQ calculation period for Meter classes 1 and 2 is two Meter Reads twelve months apart (365 days).

- The optimum AQ calculation period for Meter classes 3 and 4 is two Meter Reads twelve months apart (365 days).

- The minimum AQ calculation period for all Meter classes is two Meter Reads nine months apart (274 days).

- The maximum AQ calculation period for all Meter classes is two Meter Reads three years apart (1,095 days).

- All valid Meter Reads on UK Link are considered for the AQ calculation (except those prior to the Back-stop date).

- The trigger for a Rolling AQ calculation is a valid Meter Read received by the 10th calendar day of the month.

SOQ Calculation Formula

The formula used to derive an SOQ is outlined in Uniform Network Code H4.1.1 (link provided below).

https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/page/2018-10/TPD%20Section%20H%20-%20Demand%20Estimation%20and%20Demand%20Forecasting.pdf

The formula for Meter classes 3 & 4 is as follows: AQ / 365 / Load Factor

- The Load Factor is determined by the current EUC code.

- The SOQ for Meter classes 1 and 2 is set and maintained by the registered gas Shipper.

- The requested SOQ for Meter classes 1 and 2 must be greater than the Current Year Minimum SOQ (CYMSOQ).

Hints and Tips (based on FAQ's)

- Xoserve estimated Shipper transfer and class change Meter Reads are considered valid reads and trigger a new Rolling AQ calculation.

- Xoserve estimated RGMA reads do not trigger a new Rolling AQ calculation.

- The current EUC code denotes the WAALP profile to be used to adjust the AQ calculation to Seasonal Normal demand.

- The AQ validation rules as part of Nexus implementation, a Market Breaker tolerance is applied to all calculations where the start Meter Read date used is before 1st June 2017.

- The AQ calculation fail to calculate reasons and codes can be viewed on the 'UK Link Secured Documentation' site on the Xoserve secured website https://www.xoserve.com/systems/extranet-secured-sites/

- When present, Converter Meter Reads will be used in the AQ calculation.