



Customer Expert Day

Purpose of today

- Today has been organised to provide an overview and education into some of the topics where there is still an amount of uncertainty and questions are being asked.
- There is also a desire to access the experts in these areas to be able to put questions to them on a one to one basis.
- Today is broken down in two parts. There will a short delivery covering a lot of the aspects surrounding the agreed topics and then the opportunity to discover more information and ask questions to our experts in the room.
- The topics for today are:
 - UIG
 - Reads
 - AQ process



Unidentified Gas (UIG)

Summary

What is Unidentified Gas (UIG)

- The majority of gas consumed in Great Britain can be accounted for as it is metered and registered. However, some gas is lost from the system, or not registered, due to theft, leakage from gas pipes, consumption by unregistered supply points and other reasons.
- The gas that is off taken from the Local Distribution Zone (LDZ) System, but not attributed to an individual Supply Meter Point or accounted for as Shrinkage, is referred to as UIG.

Why is UIG such a hot topic?




- The level of UIG can be volatile on a day to day basis, with calculated UIG values being unpredictable in nature.
- The lack of projected UIG values is financially impacting organisations within the industry and customers are looking to Xoserve for further support and knowledge.



How is UIG calculated?

What are the UIG Contributors & Calculations?

To calculate the Unidentified Gas there are several considerations

- Each LDZ is calculated independently of each other and is calculated on a daily basis.
- The input  to each LDZ is from the NTS. This is known as **Total LDZ Energy**.
- Outputs  are primarily what is consumed at supply points. These are broken down as **Total DM Energy** and **Total NDM Energy**.
- Gas can also be lost as part of the gas transportation activities, theft or leakage. Some of this is accounted for as **Shrinkage** and is also an output .

At a high level, the daily calculation for Unidentified Gas (**UIG**) for each LDZ

is:

$$\text{UIG} = \text{Known inputs} \text{  - \text{Known outputs} \text{ $$



What is Total LDZ Energy?

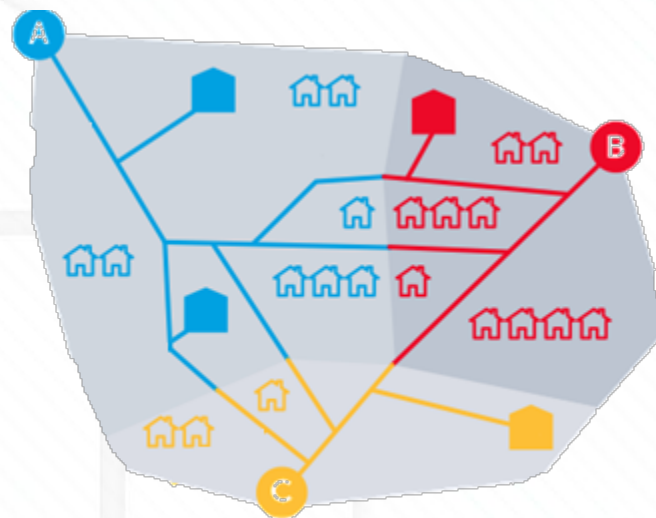
Input 

Total LDZ energy is all of the energy entering an LDZ from the NTS.

LDZs usually have multiple gas input points, as shown in the diagram opposite

To provide the daily LDZ energy and display it in Gemini, National Grid collect readings from the measurement device at each input point. Using an aggregator tool they convert this to a total LDZ before publishing.

Net gas moved to/from storage and any net stock change within the LDZ also contribute to the Inputs to make up Total LDZ Energy.



For more information on
offtake equipment see
<https://www.gasgovernance.co.uk/index.php/MER>

What makes up Total DM Energy?

DM Energy is the total energy for Class 1 & 2 sites. Reads received from Shippers and Daily Metered Service Provider's (DMSP class 1 only) are used to calculate energy in Gemini and are simply added up to provide a Total DM Energy.



+



+



= Total DM Energy

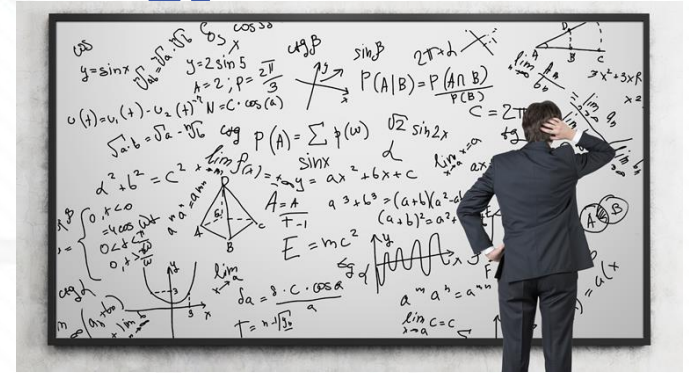
The accuracy of the DM figure relies on timely receipt of accurate data. With only a very small number of sites making up nearly 20% of the allocation, any inaccurate reads received could have a large impact on UIG.

What is Total NDM Energy?

DM Energy is the total energy for Class 3 & 4 sites.

As an individual AQ is available for every single supply meter point we can calculate & allocate energy each day and to each particular End User Category within LDZ.

The calculation is shown below and accuracy relies on the data being as accurate and up to date as possible.



Supply Meter Point Demand = (Rolling AQ/365) X ALP X (1+ (WCF X DAF))

What is Shrinkage?

Within each LDZ there is some expected losses of gas from the network. This is known as Shrinkage.

It is made up of three factors and is calculated by the Network Operators supported by the Industry Shrinkage Forum, these are:

- Leakage, with individual quantities being calculated at LDZ level
- Own Use Gas (used by the Transporters for transportation activities). This is a single factor applied across all LDZs
- Theft of Gas, which is gas stolen upstream of the meter with a single factor being applied across all LDZs.



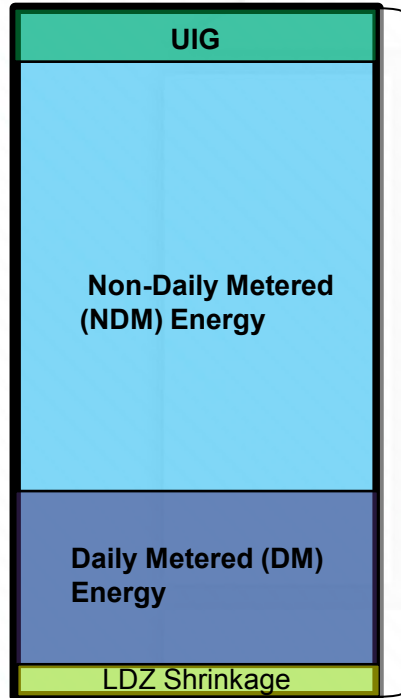
For more information on Shrinkage please refer to the following documents;
[LDZ Shrinkage Adjustment Methodology](#)
[2018-19 Shrinkage Final Proposals](#)



How is UIG then calculated?

Now we are able to identify the majority of the energy passing through the LDZs we are left with a small % that is unidentified. The final calculation is:

$$\text{UIG} = \text{Total LDZ Energy} - \text{DM Energy} - \text{NDM Energy} - \text{Shrinkage}$$



Total LDZ Energy

This is calculated on a daily basis and is reported against a UIG meter in Gemini.

UIG is calculated per LDZ and then this allocated based on Class and EUC category.



How can I help mitigate the impacts of UIG?

How to mitigate impact on UIG

UIG calculations relies on accurate and up to date information. This not only assists in the accurate allocation of energy for this sector, but also having the most up to date information helps to reduce a greater impact at reconciliation. The entire industry can mitigate these impacts by working together and ...

- Review accuracy of AOs and complete adjustments where required
- Promptly registering Shipperless/unregistered sites
- Supplying regular accurate reads, in line with read frequency, for NDM meter points
- Timely notification of meter asset exchanges/updates
- Using the Class 2 product for larger NDM LSP sites where appropriate and submit daily reads
- Support NDM Demand Estimation modelling by enhancing sample data, especially for smaller LSP market
- Continuing to be diligent in managing consumer theft of gas
- Correct Domestic or Industrial & Commercial flag used
- Ensure timely resolution of requests to Xoserve
- Managing changes and defects to support activities feeding into UIG.
- Supply accurate DM Nominations as early as possible each day
- Timely notification of meter asset exchanges/updates
- Support site set-up investigations, including timely site visits
- Continuing to be diligent in managing consumer theft of gas
- Gas Transporters continue to review accuracy of LDZ offtake equipment to minimize errors



How are UIG charges shared out?

How UIG is shared out?

- Due to the changes in gas settlement Project Nexus brought about, the industry agreed there was a requirement to fairly apportion the total UIG between classes and End User Category (EUC).
- To help with this, an **independent expert (AUG Expert)** helped the industry develop a methodology and provide a **table of weighting factors** that assigns the correct amount of UIG to different classes of meter points.
- The table of weighting factors is used in the daily gas nomination and allocation processes.
- Daily measured or estimated gas throughput in each LDZ is weighted using the AUG table factors to assign daily UIG to Shippers based on their throughput by meter point class and EUC.

For more information on the AUG please refer to the following document
[AUG Statement 2018/19](#)

What is the Weighting Factors Table?

- There are 36 Unidentified Gas Weighting Factors, which are made up of nine EUC bands by four Classes*.
- The same factors apply to all Local Distribution Zones (LDZs)
- The Weighting Factors are published on the Joint Office of Gas Transporters website for each year.
- The total UIG for each LDZ, Class and EUC profile are weighted using a ratio calculation rather than a % calculation.

Supply Meter Point Classification	Class 1	Class 2	Class 3	Class 4
EUC Band 1	0.17	43.06	46.41	94.64
EUC Band 2	0.17	43.06	46.41	109.77
EUC Band 3	0.17	43.06	44.06	107.52
EUC Band 4	0.17	43.06	43.60	43.76
EUC Band 5	0.17	43.06	46.06	43.20
EUC Band 6	0.17	44.54	46.06	42.65
EUC Band 7	0.17	32.41	46.06	42.33
EUC Band 8	0.17	4.38	33.40	42.24
EUC Band 9	0.17	0.17	0.17	0.17

Table for 12 month period from 1st October 2018. (Gas year 18/19)

For information Weightings for each year please refer to the following document
<https://www.gasgovernance.co.uk/augenex>

UIG Calculation & Allocation example

At a high level we will look at how this all fits together. For this example we will assume 3 Shippers in one LDZ. All the values are representative of **energy**

Step 1 - Calculate total LDZ Energy

Step 2 - Calculate throughput for each Shipper

Step 3 - Calculate throughput for Total LDZ Energy

Step 4 - Apply weighting factors* to all Shipper throughput

Step 5 - Apply weighting factors* to Total LDZ Energy and total all weightings

Step 6 – Calculate weighted shipper throughput as a percentage

Step 7 - Apportion UIG.

* Weighting table used is example only and not reflective of any true data

UIG Calculation & Allocation example

$$\text{UIG} = \text{Total LDZ Energy} - \text{DM Energy} - \text{NDM Energy} - \text{Shrinkage}$$

Total LDZ Energy	130,000	
Total DM Energy	39,440	
Total NDM Energy	70,220	
Shrinkage	13,800	
UIG	6,540	5.03%

Step 1 - The UIG for the LDZ is calculated using the above calculation. Which in the example equates to 6540 or 5.03% of the total.

Step 2 Calculate the throughput of a shipper (in the example we have titled Shipper A). The throughput is calculated by EUC and class.

Shipper A has a large domestic Portfolio with few Large Supply points & DM sites.

Shipper A

Throughput	Class 1	Class 2	Class 3	Class 4
EUC Band 1	0	0	2048	24384
EUC Band 2	0	0	2015	12441
EUC Band 3	0	0	1035	2541
EUC Band 4	0	0	1456	375
EUC Band 5	0	0	987	154
EUC Band 6	801	0	423	982
EUC Band 7	0	0	0	0
EUC Band 8	2758	0	125	0
EUC Band 9	2879	0	184	0

UIG Calculation & Allocation example

Step 3 We calculate the Total LDZ throughput in the same way .

Total LDZ

Throughput	Class 1	Class 2	Class 3	Class 4
EUC Band 1	0	0	3072	36194
EUC Band 2	0	0	2869	14531
EUC Band 3	0	0	1174	5581
EUC Band 4	0	28	1504	580
EUC Band 5	578	154	987	1358
EUC Band 6	2811	985	423	1405
EUC Band 7	6035	452	50	36
EUC Band 8	14773	895	190	0
EUC Band 9	11304	1425	206	60

Step 4 Apply the weighting Factor table to the throughputs. The weighted throughput is calculated for each shipper.

Each Shipper is calculated independently of each other.

Shipper A

Weighted	Class 1	Class 2	Class 3	Class 4
EUC Band 1	0	0	95047.68	2307702
EUC Band 2	0	0	93516.15	1365649
EUC Band 3	0	0	45602.1	273208.3
EUC Band 4	0	0	63481.6	16410
EUC Band 5	0	0	45461.22	6498.8
EUC Band 6	136.17	0	19483.38	41882.3
EUC Band 7	0	0	0	0
EUC Band 8	468.86	0	4175	0
EUC Band 9	489.43	0	31.28	0

UIG Calculation & Allocation example

Total LDZ

Throughput	Class 1	Class 2	Class 3	Class 4	
EUC Band 1	0	0	142571.5	3425400	
EUC Band 2	0	0	133150.3	1595068	
EUC Band 3	0	0	51726.44	600069.1	
EUC Band 4	0	1205.68	65574.4	25380.8	
EUC Band 5	98.26	6631.24	45461.22	57307.6	
EUC Band 6	477.87	43871.9	19483.38	59923.25	
EUC Band 7	1025.95	14649.32	2303	1523.88	
EUC Band 8	2511.41	3920.1	6346	0	
EUC Band 9	1921.68	242.25	35.02	10.2	
	6035.17	70520.49	466651.3	5764683	6307890

Step 5 Apply weighting factors to Total LDZ Energy.

Once the weighting throughput for Total LDZ has been calculated this is totalled to provide a **Total LDZ Weighted Value**.

<https://www.xoserve.com/media/2599/worksheet-in-customer-expert-day-pack-uig-calculation-and-allocation-example.xlsx>

UIG Calculation & Allocation example

Shipper A

% LDZ Total	Class 1	Class 2	Class 3	Class 4
EUC Band 1	0	0	0.015068	0.365844
EUC Band 2	0	0	0.014825	0.216498
EUC Band 3	0	0	0.007229	0.043312
EUC Band 4	0	0	0.010064	0.002602
EUC Band 5	0	0	0.007207	0.00103
EUC Band 6	2.16E-05	0	0.003089	0.00664
EUC Band 7	0	0	0	0
EUC Band 8	7.43E-05	0	0.000662	0
EUC Band 9	7.76E-05	0	4.96E-06	0

Step 6 The weighted value in each 'cell' (Step 4), is divided by the **Total LDZ Weighted Value** (Step 5) to provide what % share of the total **UIG** will be applied.

Shipper A

UIG Share	Class 1	Class 2	Class 3	Class 4	
EUC Band 1	0	0	98.54513	2392.618	
EUC Band 2	0	0	96.95725	1415.9	
EUC Band 3	0	0	47.28011	283.2615	
EUC Band 4	0	0	65.81752	17.01384	
EUC Band 5	0	0	47.13405	6.737935	
EUC Band 6	0.141181	0	20.20031	43.42343	
EUC Band 7	0	0	0	0	
EUC Band 8	0.486113	0	4.328627	0	
EUC Band 9	0.507439	0	0.032431	0	
	1.134733	0	380.2954	4158.955	4540.385

Step 7 The % share (Step 6) is multiplied to the total **UIG** to provide the amount of **UIG** apportioned to each EUC Band and Class. This can be totalled to give the total **UIG** for the Shipper which is shown in Gemini.

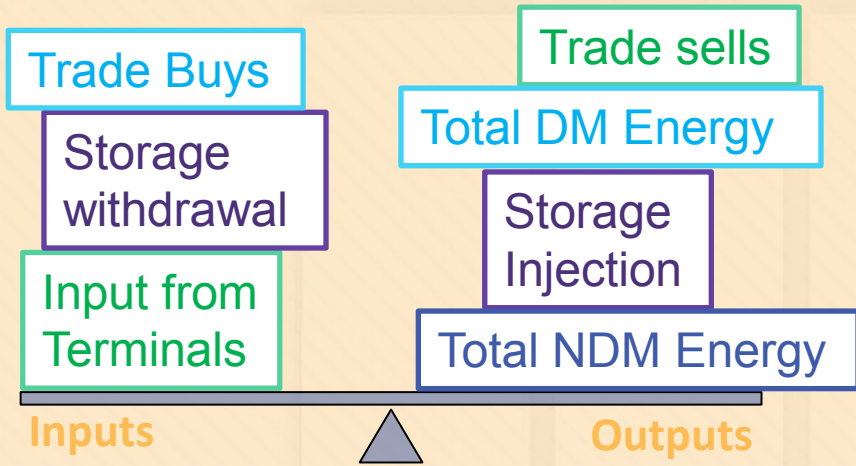


Where do I see the UIG charges?

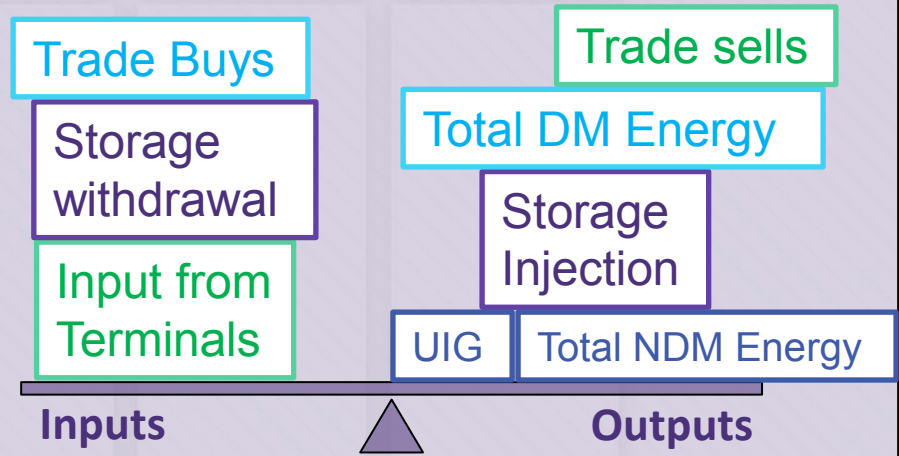
Energy Balancing & Cashout for UIG

Energy Balancing is performed daily to ensure all inputs and outputs from the network are equal and accounted for.

At a high level **Pre Nexus** energy was balanced using the following factors.



At a high level **Post Nexus** energy is balanced using the following factors.



As you can see the main difference is that UIG now appears on the outputs side although the UIG and Total NDM Energy post nexus equates to the Total NDM Energy pre nexus.

Considerations for UIG as Part of EB & Cashout

- As UIG now forms part of a Shipper's overall daily cash out, it is part of the Daily Cashout charges on a Shipper's Energy Balancing Invoice.
- The UIG meter does not appear on the EBI invoice with its own charge type.
- The Shipper's overall daily imbalance is worked out using all input and trades acquired minus all outputs (DM sites, NDM sites, **UIG**) and trades sold which gives the overall imbalance for the gas day and Shipper.
- If the value is positive then the Shipper has over delivered and they are cashed out at SMP sell price. If the value is negative, they have under delivered and this is cashed out at SMP buy price.
- Final allocations are used for final imbalance and cash out.
- UIG is on the output side hence effectively closed out at D+5

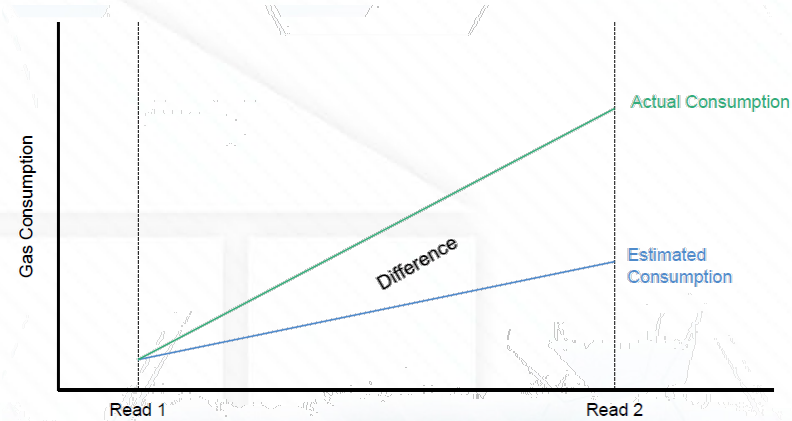


How does reconciliation affect UIG?

How does reconciliation affect UIG?

Reconciliation relies on actual meter reads being submitted. These reads could either account for (identify) more or less gas than was used in the original UIG calculation, based on the previous actual read.

Therefore each actual read on each site impacts UIG in some way. All these reconciliation values are aggregated by Class, EUC and LDZ. The kWh is also apportioned but is not used to recalculate the financial amount and is a notional value.



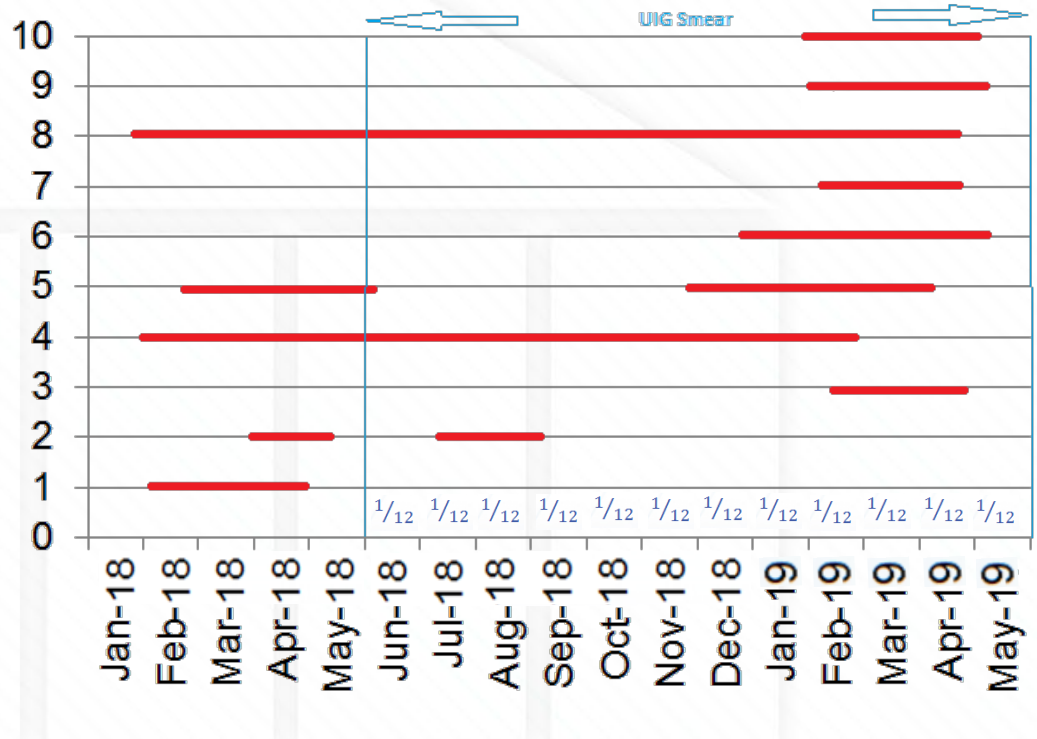
For more information on the Amendments Invoice please refer to <https://www.xoserve.com/services/issue-management/amendment-invoice/>

How does reconciliation affect UIG?

We perform reconciliation on all sites where we have received read(s) in that billing month.

The energy for each site is smeared across the reconciliation period (read date - read date) *shown in red*.

The opposite value amends UIG* energy (aggregated at LDZ, Class, EUC level) and is then smeared equally across the previous 12 months *Impact of UIG smear shown in blue*.



How to view UIG on the Amendments Invoices (AMS)

- The **Amendment Invoice (AMS)** is triggered by a number of factors
- There are 52 possible charges which can appear on the Amendment Invoice
- One of the charge types is the **UGR charge**
- The purpose of the UGR charge is to redistribute UIG throughout the network and across all Shipper networks proportionally to their portfolio

Invoice Files and Supporting Information Files

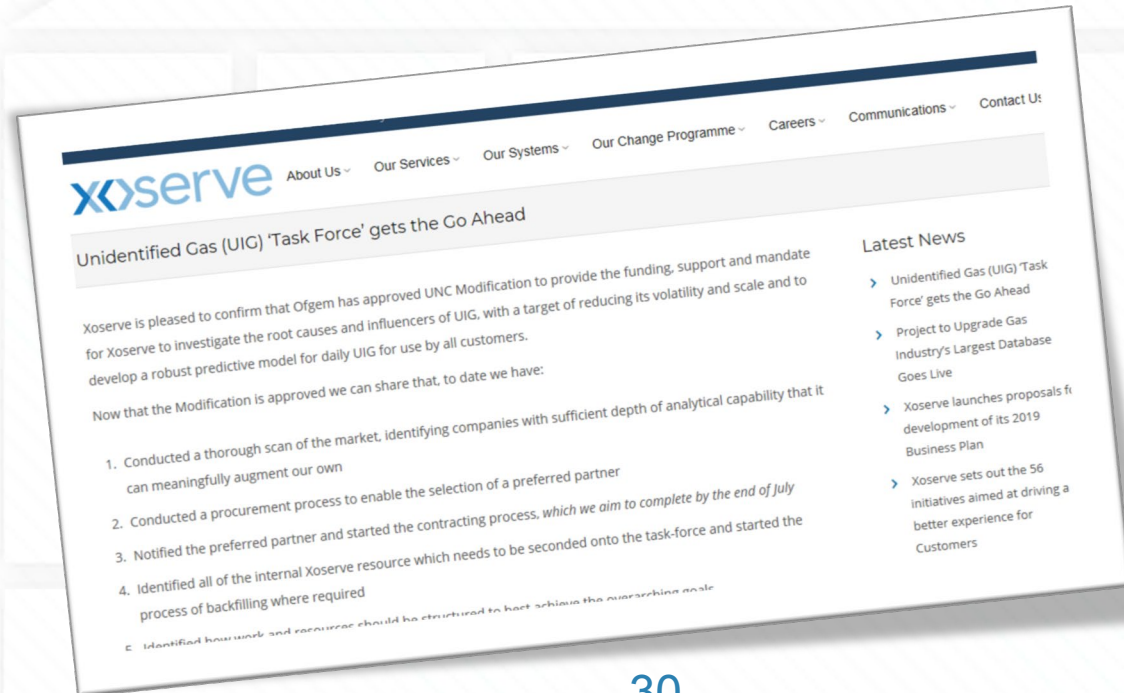
- AMS invoices are issued as a csv file via the IX on the 18th Business Day of each month
- Each AMS Invoice provides the UGR total charge per Network
- Shippers will receive separate invoices for each Network they operate in
- ASP Core Amendment Invoice Supporting Information file provides a further breakdown of the UGR charges across all Networks.



Where can I get more information on UIG?

UIG Task Force

Xoserve has a UIG Task Force to investigate the root causes and influencers of UIG, with a target of making recommendations for reducing its volatility and scale and to develop a robust predictive model for daily UIG for use by all customers.



Further information
is available on
[Xoserve.com](https://www.xoserve.com)

Useful Links

Document and description	Link
UIG pages on the Xoserve Information Library After launching the Information Library, select Q&A Categories from the title page > select the Unidentified Gas (UIG) tile > view the questions and answers.	https://www.xoserve.com/index.php/our-change-programme/uk-link-programme/uk-link-programme-workstream-updates/uk-link-information-library/
UIG pages on Xoserve.com Multiple documents, including UIG Resolution – Weekly Update, UIG Communications, UIG Events Material, UIG Information and Useful Links	https://www.xoserve.com/index.php/unidentified-gas-uig/
AML Supporting Information File Format and File Hierarchy From the UK Link Documentation Library, select UK Link Interface Documents > 3b. System Interface Documents > Shipper	Shipper File Formats Shipper File Hierarchies
Joint Office of Gas Transporters - AUG Statement 2018/19 <ul style="list-style-type: none">• 28 June 2018 Final Allocation of Unidentified Gas Statement for 2018/19• 28 June 2018 Final Factor Table Covering Letter	https://www.gasgovernance.co.uk/augenex/1819
UIG values (kWh & %) published weekly From UK Link Secured Documentation, select Folder 18 > Demand Estimation Project Nexus > LDZ Post-Nexus UIG	https://xoserve.sharepoint.com/sites/XEUK/LinkDev/Pages/UserDocumentMgmt.aspx
Details of the NDM Demand Formula From UK Link Secured Documentation, select Folder 18 > Demand Estimation Project Nexus > current gas year (e.g. 2018-19 Gas Year) > 4. NDM Algorithms booklet > Section08_18	https://xoserve.sharepoint.com/sites/XEUK/LinkDev/Pages/UserDocumentMgmt.aspx

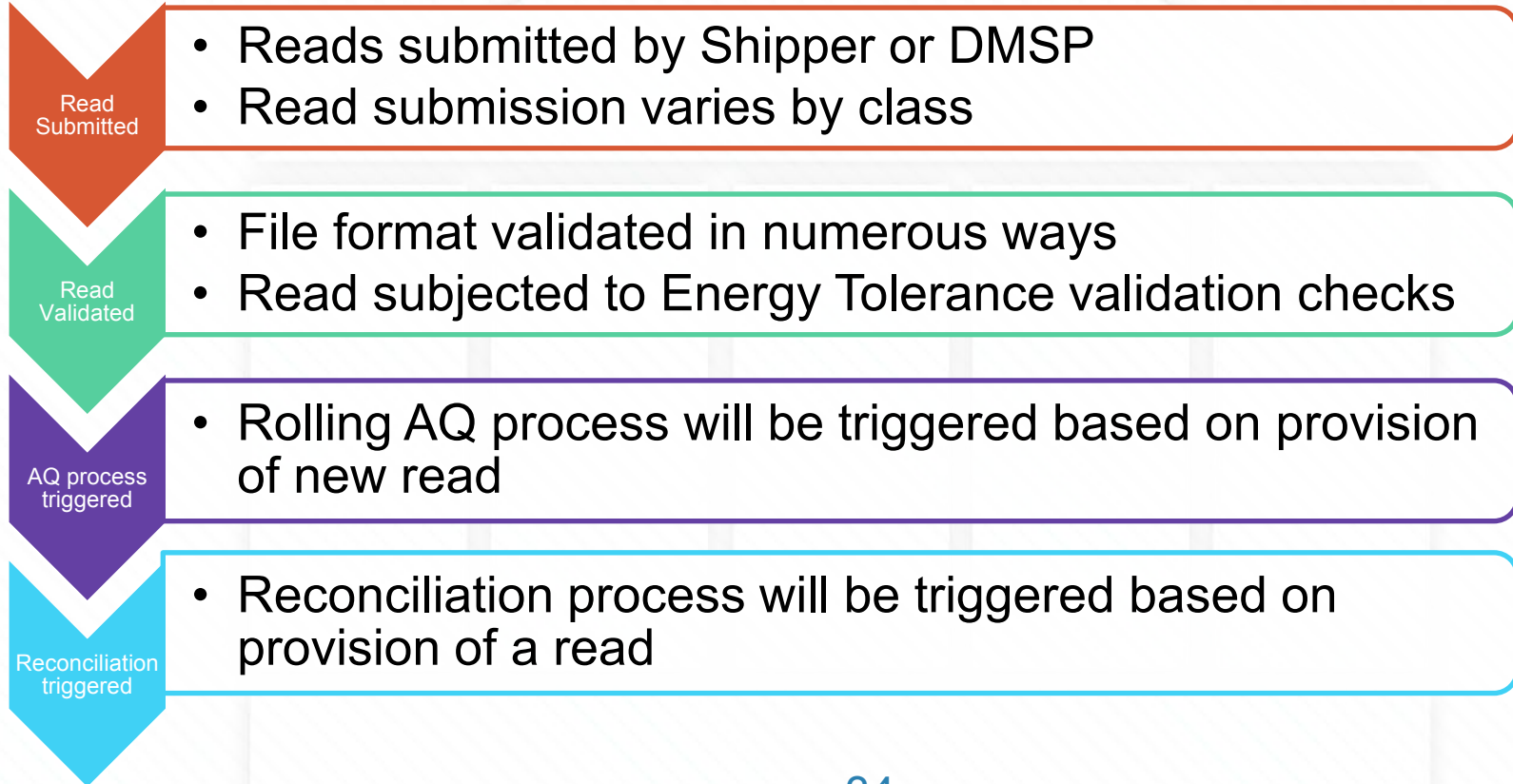
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Reads



What is the read submission process?

Read Submission process



Meter Read Files from Shippers and DMSPs

- **Class 4 Reads**
 - Must be sent in a UMR file
 - U01 Record type
- **Class 3 Reads**
 - Must be sent in a UBR file in Batches (Weekly/Fortnightly/Monthly)
 - U13 and U14 record type. U13 is the parent record containing the MPRN and Meter Serial Number. U14 contains the meter reads
- **Class 2 Reads**
 - Must be sent in a UDR file
 - U12 record type
- **Class 1 Reads**
 - Reads sent by the DMSP not Shipper in DLC file

Shipper Transfer Reads

- Class 1
 - Transfer Read estimated on D
 - Read Provided by the DMSP for the date of Transfer
 - Read to be received by D+5 for Allocations. Read received after D+5 will result in a Reconciliation
- Class 2
 - Transfer Read estimated on D
 - Transfer Read will be accepted for the date of Transfer only
 - Read to be received by D+5 for Allocations. Read received after D+5 will result in a Reconciliation

Shipper Transfer Reads

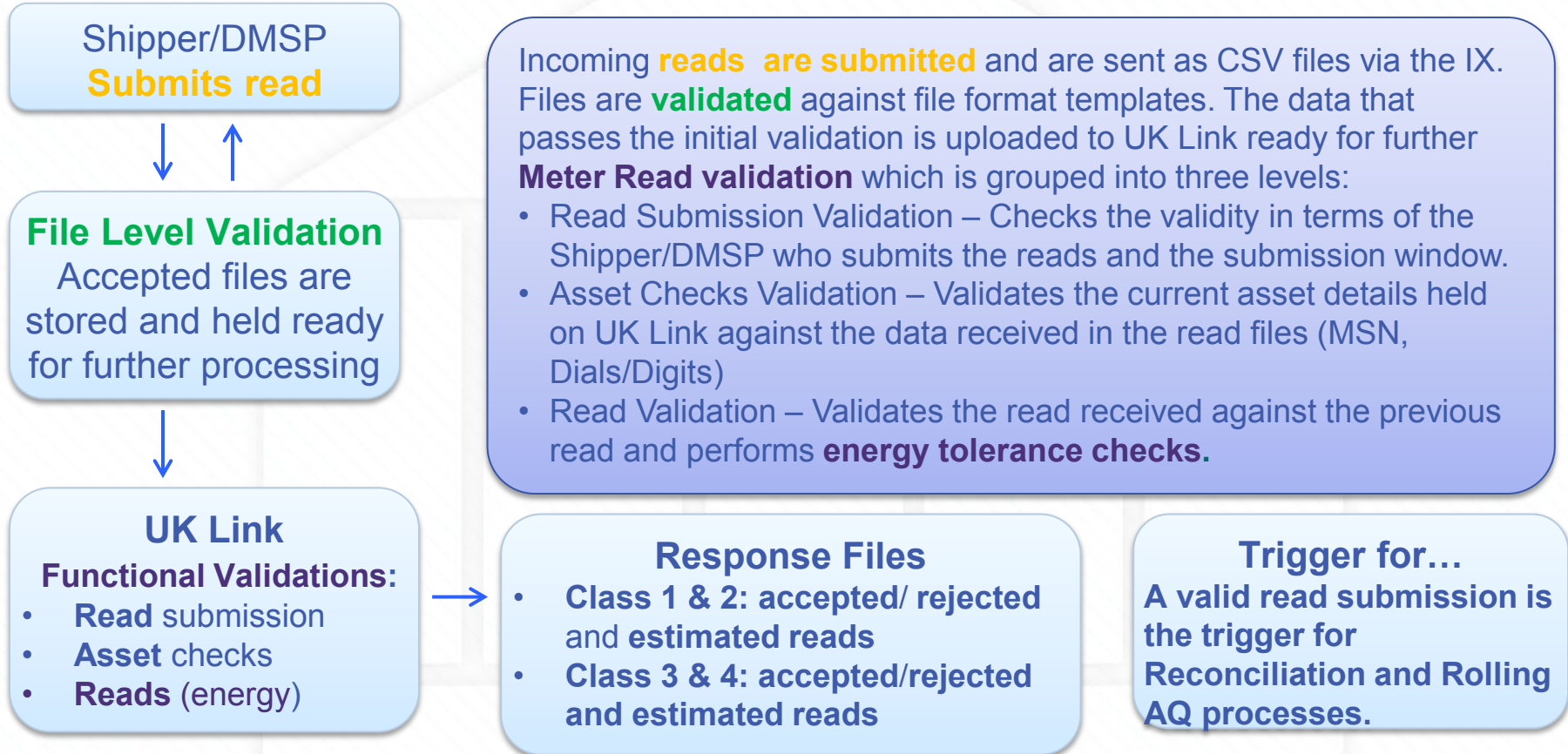
- **Class 3**

- Read will be estimated after D+10, where remaining Class 3.
- If transfer is from Class 1, 2 or 4 to a Class 3, the read will be estimated on D.
- Transfer reads will be accepted for the date of transfer only.
- Read can be sent in as an individual read or contained within a batch of reads.
- If a read is submitted after the estimated Transfer Read has been created it needs to be sent as read reason of R (Replacement read) and a read source of A (Agreed opening read)

- **Class 4**

- Transfer read can be obtained in the 11 day read window of D-5 to D+5, but submitted between D and D+10
- Shipper Transfer Read will be estimated after D+10, where remaining a Class 4. If transfer is from Class 1, 2 or 3 to a Class 4, the read will be estimated on D.
- If an opening read is submitted prior to the estimated Transfer Read being created the read needs to be sent as a read reason of O (Opening read).
- If the opening read is submitted after the estimated Transfer Read has been created it needs to be sent as read reason of R (Replacement read) and a read source of A (Agreed opening read)

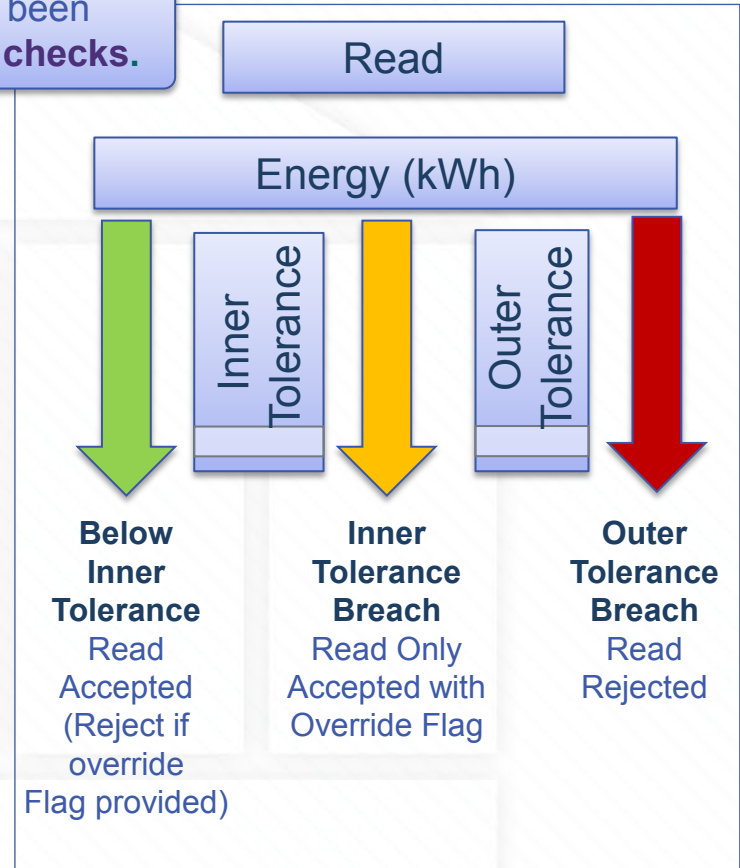
File Format Process Flow- Shippers and DMSPs



Read Validation: Energy Tolerance Check

Once the Read Submission Validation and Asset Checks have been successfully passed UK Link then performs **energy tolerance checks**.

- The system calculates the energy and then checks the energy against permitted tolerance for the AQ band.
- Where the energy falls below the inner tolerance level, the read is accepted.
- If the inner tolerance is exceeded but below the outer tolerance (market breaker), the Shipper can override the breach using the override flag and the read will be accepted.
- To prevent bulk override where the override Flag is set, but the energy has not breached the inner tolerance, then the read is rejected.
- If the outer tolerance is breached, then the read is always rejected.



Tolerances for Class 1 & 2 Meter Points

The following table details the validation bands that will be applied for each of the SOQ Bands for Class 1 & 2 sites.

Lower SOQ Band	Upper SOQ Band	Read Accepted without Tolerance flag	Read Accepted with Tolerance flag	Read Rejected
0	1	0% - 2000000% of SOQ	> 2000000% - 7000000% of SOQ	> 7000000% of SOQ
2	200	0% - 10000% of SOQ	> 10000% - 25000% of SOQ	> 25000% of SOQ
201	500	0% - 4000% of SOQ	> 4000% - 10000% of SOQ	> 10000% of SOQ
501	1000	0% - 2000% of SOQ	> 2000% - 5000% of SOQ	> 5000% of SOQ
1001	5000	0% - 400% of SOQ	> 400% - 2000% of SOQ	> 2000% of SOQ
5001	10000	0% - 200% of SOQ	> 200% - 500% of SOQ	> 500% of SOQ
10001	20000	0% - 150% of SOQ	> 150% - 400% of SOQ	> 400% of SOQ
20001	73200	0% - 300% of SOQ	> 300% - 600% of SOQ	> 600% of SOQ
73201	732000	0% - 250% of SOQ	> 250% - 550% of SOQ	> 550% of SOQ
732001	2196000	0% - 200% of SOQ	> 200% - 500% of SOQ	> 500% of SOQ
2196001	29300000	0% - 150% of SOQ	> 150% - 450% of SOQ	> 450% of SOQ
29300001	58600000	0% - 100% of SOQ	> 100% - 400% of SOQ	> 400% of SOQ
58600001	99999999999999	0% - 100% of SOQ	> 100% - 350% of SOQ	> 350% of SOQ

Tolerances for Class 3 & 4 Meter Points only

The following table details the validation bands that will be applied for each of the AQ Bands for Class 3 & 4 sites.

Lower AQ Band	Upper AQ Band	Read Accepted without Tolerance flag	Read Accepted with Tolerance flag	Read Rejected
0	1	0% - 2000000% of AQ	> 2000000% - 7000000% of AQ	> 7000000% of AQ
2	100	0% - 20000% of AQ	> 20000% - 45000% of AQ	> 45000% of AQ
101	201	0% - 10000% of AQ	> 10000% - 25000% of AQ	> 25000% of AQ
201	500	0% - 4000% of AQ	> 4000% - 55000% of AQ	> 55000% of AQ
501	1000	0% - 2000% of AQ	> 2000% - 25000% of AQ	> 25000% of AQ
1001	5000	0% - 400% of AQ	> 400% - 7000% of AQ	> 7000% of AQ
5001	10000	0% - 200% of AQ	> 200% - 2000% of AQ	> 2000% of AQ
10001	20000	0% - 150% of AQ	> 150% - 1100% of AQ	> 1100% of AQ
20001	73200	0% - 300% of AQ	> 300% - 1100% of AQ	> 1100% of AQ
73201	732000	0% - 250% of AQ	> 250% - 1000% of AQ	> 1000% of AQ
732001	2196000	0% - 200% of AQ	> 200% - 1000% of AQ	> 1000% of AQ
2196001	29300000	0% - 150% of AQ	> 150% - 700% of AQ	> 700% of AQ
29300001	58600000	0% - 100% of AQ	> 100% - 400% of AQ	> 400% of AQ
58600001	99999999999999	0% - 100% of AQ	> 100% - 350% of AQ	> 350% of AQ

Read Tolerances - Example

- AQ = 4600
- Previous Actual read for 24/8/17 of 2728.
- Current read received for 1/3/18 of 4452.
- Metric meter with Correction Factor of 1.02264 and using an average CV of 39.
- Consumption = 1763 and Energy = **19100**
- - Tolerance levels are:-
 - Accepted without flag up to $(4600/365 * 188 \text{ days}) * 400\% = \mathbf{9477}$
 - Requires a flag up to $(4600/365 * 188 \text{ days}) * 7000\% = \mathbf{165852}$
 - Reject as a Market Breaker above $(4600/365 * 188 \text{ days}) * 7000\% = \mathbf{165852}$
 - **This read would have required a Tolerance Override Flag of 'Y'**

Top Rejections for October 2018

Rejection Code	Shipper Meter Read Rejection Reason	Number Of MPRNs	%
MRE00490	A breach of the allowed reading submission frequency occurred	1206875	51.19%
MRE00422	Corrector corrected read has been supplied where no corrector is fitted	248348	10.53%
MRE01029	Reading Breached the upper Inner Tolerance value and no override flag provided	128906	5.47%
MRE01016	Actual read can only be replaced by a replacement read	126463	5.36%
MRE00457	New Meter Reading is less than previous meter reading	119315	5.06%
MRE01026	Reading Breached the lower Outer Tolerance	117174	4.97%
MRE00419	The meter serial number on the read does not agree with the meter serial number held on the Transporter Database	80089	3.40%
MRE01027	Reading Breached the upper Outer Tolerance	50058	2.12%
MRE00482	Meter point has no read to be replaced	45126	1.91%

MRE00490 - A breach of the allowed reading submission frequency occurred

- This only applies to Class 4 sites – All other Classes we expect daily reads.
- Frequency of Submission Rule – The read will not be accepted if the period from the last read date to the submitted read date is:-
 - For a Monthly Read Meter less than 7 days
 - For an Annual Read Meter at a Larger Supply Meter Point (AQ > 73,200), less than 14 days
 - For an Annual Read Meter at a Smaller Supply Meter Point (AQ < 73,200), less than 25 days



Annual Quantity (AQ)



How does the rolling AQ Process Work?

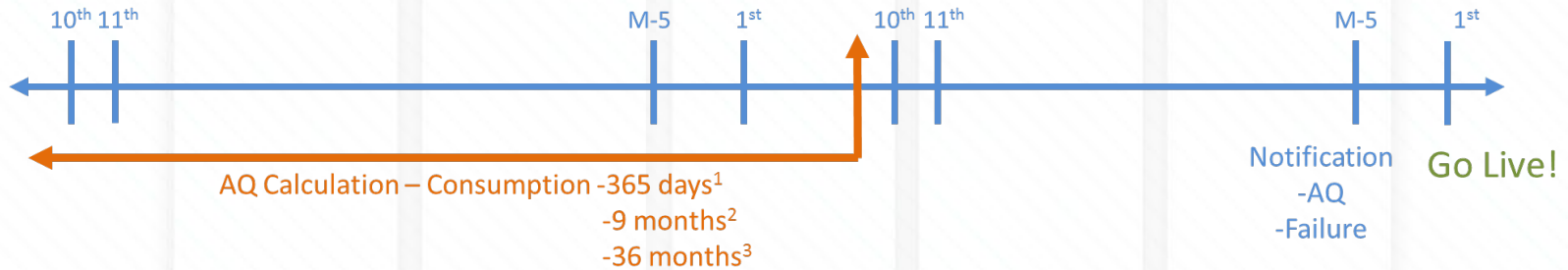
AQ Calculation Process

AQ Calculation

Input
-Read Received
-Read

Process
Calculate

Output
Notify & Assess
impacts of AQ



The AQ Calculation will be triggered by a valid read

Valid / closed out reads need to have been submitted on or before the 10th calendar day of the month to be considered for that month's AQ calculation (performed on the 11th)

If the AQ Value cannot be calculated the previous AQ value will apply and notification will be issued

Isolated Supply Meter Points will not calculate

New Supply Meter Points are not eligible for an AQ Calculation for a period of 9 months

All AQ Notifications will be issued at M-5



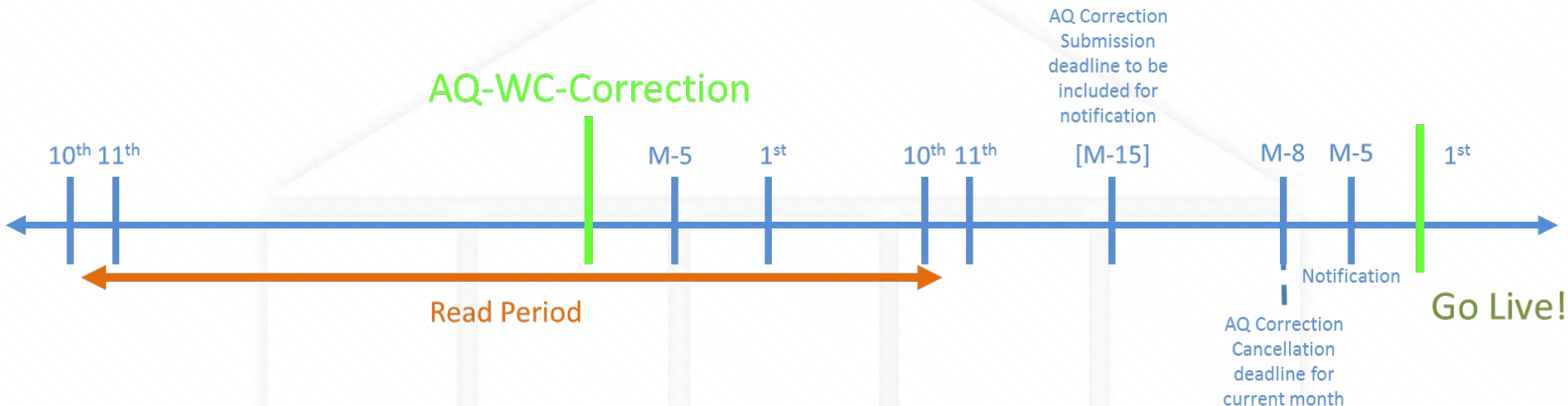
What if I want to correct my AQ?

AQ Correction process

AQ correction using the AQI File

- Registered Shipper can request a change in AQ via the AQ Correction Process for the following reasons
 - Confirmed Theft - Reason Code 1
 - Change in Consumer Plant – Reason Code 2
 - Commencement of New Business – Reason Code 3
 - Tolerance Change – Reason Code 4
 - Winter Consumption Correction – Reason Code 5
- Accepted AQ value will be changed with effect from the first of the month following the request being accepted. The User will receive an AQR file confirming acceptance or rejection of the AQ correction request. The User will also be notified of the AQ change via the NRL File at M-5.
- A backstop date is applied when the AQ is corrected. Therefore the AQ cannot be corrected for a further 9 months.

AQ Correction Process

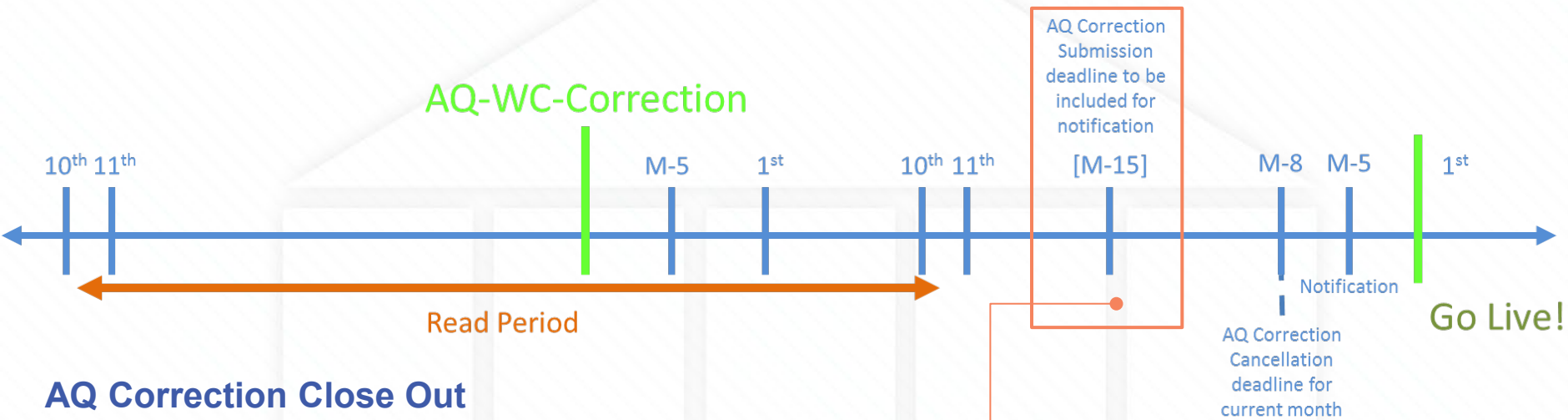


The AQ/Winter consumption correction submission has a close out date, this is the latest date the AQ Correction can be submitted to become effective on the first of the next month. However the AQ Correction requests submitted after close out date will not be rejected, but the corrected AQ in these cases will be effective on the 1st of the next month.

These will:

- Trigger the Offer Addendum process
- Update the Formula Year AQ
- Create a Backstop Date

AQ Correction Process Continued



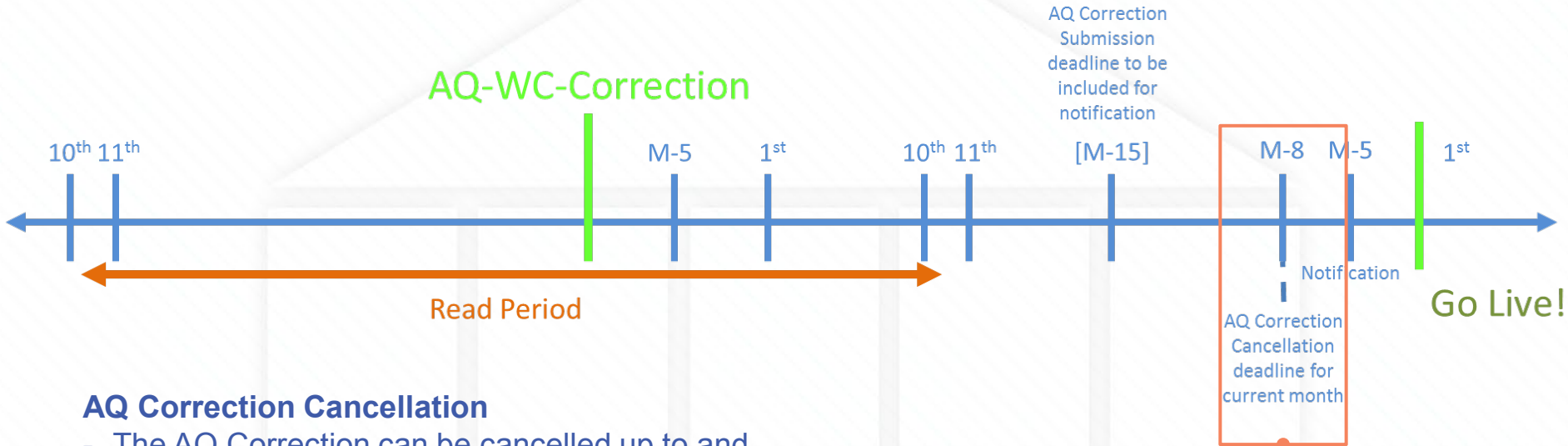
AQ Correction Close Out

- Latest Date the AQ Correction can be submitted to become effective on 1st of next month
- AQ Corrections received after close-out are applied in the following month

Example

AQ Correction is submitted and accepted on M-15 in June (Close out Date) becomes effective on 1st July.
AQ Correction submitted after the M-15 becomes effective on 1st August

AQ Correction Cancellation



AQ Correction Cancellation

- The AQ Correction can be cancelled up to and including M-8 (business days) of going live

Example

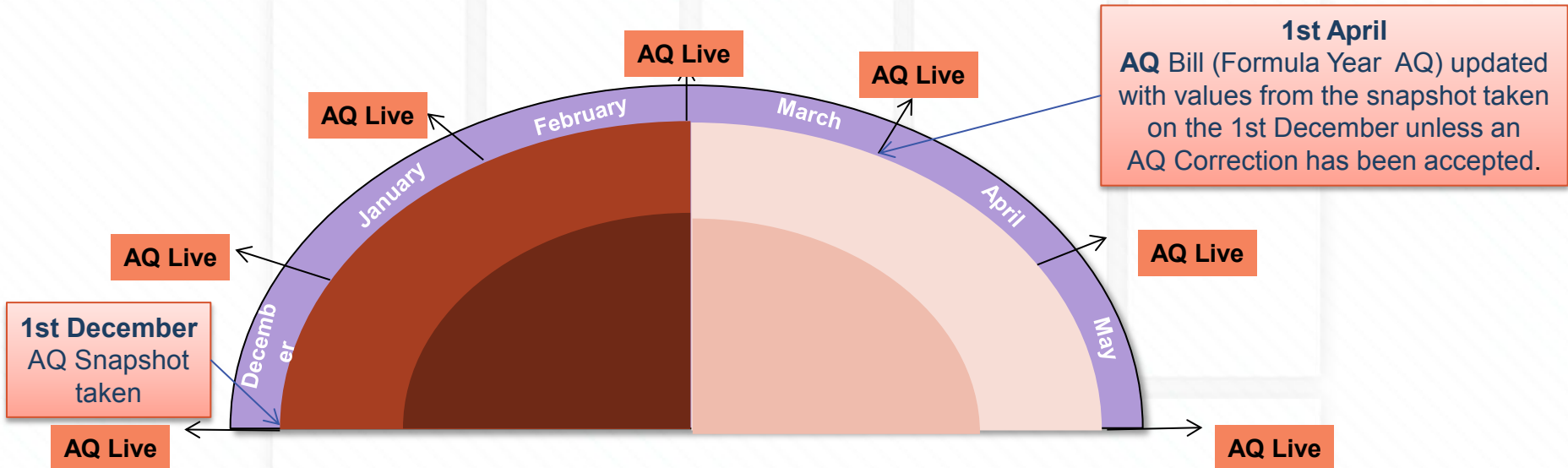
AQ Correction Cancellation must be submitted no later than M-8 in June to prevent the Correction going live on the 1st of July. Cancellation received after M-8 in June will not stop the AQ Correction from going live.



Is this for all SMPs?

NDM Formula Year (AQ Bill)

- With the introduction of rolling AQ for all classes, there is the potential for AQ to be revised each month. In order to provide a stable AQ for billing purposes, the **Formula Year AQ** or **AQ Bill** is used to determine the rates for Class 3 and 4 sites.
- A snapshot of AQ is taken on 1st December. AQ Bill is revised using this snapshot on 1st April unless an AQ correction has been applied in the interim period.





Who monitors these activities ?

Performance Assurance Committee (PAC)

- The PAC was formed following approval of the Gas Performance Assurance Framework and Governance Arrangements and is a defined sub-committee of the Uniform Network Code Committee.
- They have rights and responsibilities relating to the management of the community's Performance Assurance Framework (PAF)
- PAC is chaired by the Joint Office and attended by PAC Members and Ofgem representative
- Standing invitations for Performance Assurance Framework Administrator (PAFA) and CDSP

Membership to PAC

- Made up of:
 - Up to 9 Shipper User Members (all voting parties)
 - Up to 3 Transporter Members
 - 2 Large DNO Transporter Members (NTS excluded by framework)
 - 1 Independent Gas Transporter Member
 - Ofgem (advisory role only not a PAC member)

PAC responsibilities

- Oversee the work of the PAFA
- Oversee the PAF Risk Register
- Determine reporting and analysis to inform a reliable assessment of the performance of Gas Settlement
- Review relevant settlement performance data
- Where settlement deficiencies are identified propose methods of resolution

PAC Reporting

- Set of defined reports, Performance Assurance Report Register (PARR) is provided by Xoserve to the PAFA on a monthly basis
- The reports centre around (not exhaustive):
 - Read performance by class
 - Meter points without a meter recorded
 - Shipper Transfer read performance
 - AQ corrections
 - No reads received for 1,2,3 or 4 years
 - Replaced meter reads
 - Incorrect correction factors
- The PAFA report the data for PAC meeting with alias names per User unless where Shipper Short Code (SSC) disclosure is set out in the report template.

Output from meetings

- The output from each report is discussed at each meeting
- The performance assessed, Members vote to decide if PAFA writes out to the worst performers for each reporting area – the recipient required to report back to PAC the plan to improve performance
- Ongoing assessment of means to improve performance
- Can request additional reporting by a request to the UNCC and by following the standard change proposal process

More information on PAC

- Please find link to the Modifications below:
 - <https://www.gasgovernance.co.uk/0506>
 - <https://www.gasgovernance.co.uk/0520>
- Link to the PAC area on Joint Office website:
 - <https://www.gasgovernance.co.uk/PAC>



What happens if these processes change?

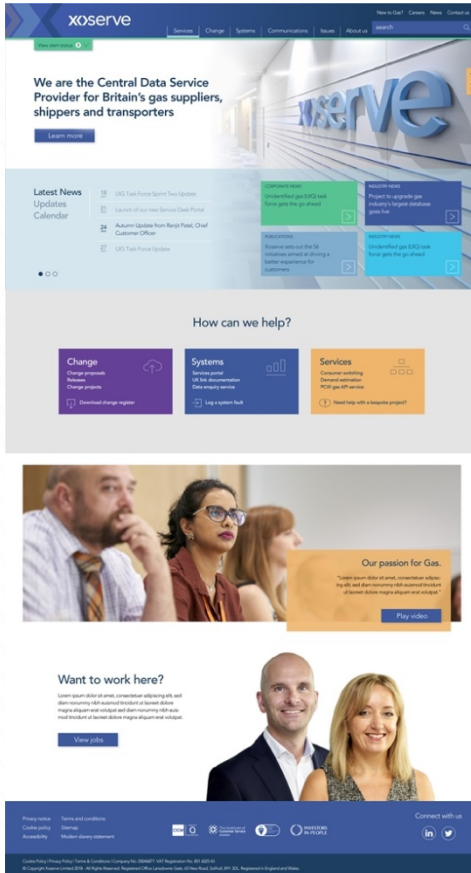
Changes

- When changes to the gas industry via our governance process or functionality to any of our systems a strict change process is followed.
- You can keep abreast of these changes via our Delivery Sub Group (DSG) [page](#) on Xoserve.com

UK Link June 2019 Release

XRN	Title	Description	Benefit
XRN4670	Duplicate Read Replacements creating unnecessary exceptions	Introduce additional read validation steps to NDM inbound files (UMR and UBR) to reject duplicate replacement reads	Reduce exceptions created, recording of unnecessary updates and removal of manual workaround effort for exception resolution
XRN4676	Reconciliation issues with reads recorded between D-1 to D-5	Accept the Outgoing Shipper Read between D-1 to D-5 of Shipper Transfer Effective Date (D) but set it as 'inactive' and use this reading within the Shipper Transfer Read Estimation process, if the estimation process has not yet occurred	Remove issues around incorrect energy and charges against the one day reconciliation between cyclic read and FINT (final transfer read).

New Xoserve.com



- Using feedback we received in August on our initial designs, and after looking at the analytics of the current website, we've identified the key user journeys to shape the site so it's used to its full potential.
- The new website has new features, pages and uses a range of vibrant colours. It has a much simpler navigation and overall we hope it will make your journey more efficient.
- We are really keen to ensure that as we progress, we continue to gather your feedback, and use this to continually develop the website to meet the needs of our customers.

Glossary

A glossary of terms in available using the following [link](#)

