

# Class



This pack provides you with information on Class types with regard to supply meter points, what these mean and the differences with each class type.

≡ **Supply Meter Point Types** *Page 2-3*

≡ **What is Class?** *Page 4-6*

≡ **Class 1** *Page 7-18*

≡ **Class 2** *Page 19-37*

≡ **Class 3** *Page 38-49*

≡ **Class 4** *Page 50-60*

## Supply Meter Point Types

---



Supply Meter Point (SMP) is a term to describe the end of the network where the end user consumes the gas. Each SMP has its own reference number known as a Meter Point Reference Number (MPRN).

The SMPs can be divided up in a variety of ways and this pack will concentrate on the Class site types. Flip over the tiles for an overview of the other site types available.

**LSP**

**SSP**

Sites can be placed into two categories Large Supply Points (LSP) and Small Supply Points (SSP) this distinction is based on Annual Quantity (AQ). An LSP has an AQ equal to or greater than 73,200 kwh whilst a SMP is below this threshold.

The primary differences between these site types is within the SPA process whereby additional information becomes mandatory for an LSP and the charge codes used on the invoices.

**SLSP**

A Seasonably Large Supply point (SLSP) is a site type whereby more gas is utilised unseasonably (in the summer months).

These sites are subject to the ratchet process during its main months of operation. (the ratchet process will be explained later)

SLSPs also have alternative charge codes used on some invoices.

# Non-Standard

A Non-Standard Site is a site type which does not follow the Standard process due to its complexity. These sites have their own pack located [here](#). Non-Standard Sites consist of:

- - Shared Supply Points
- Directly Connected Sites with Optional Tariff (LDZ & NTS)
  - Interconnectors
  - Twin Stream configurations
- Connected System Operator (CSO)
- Liquified Petroleum Gas (LPG)

You could also break down SMPs into End user category and WAR band (more information can be found in our WAR band e-learning, [here](#).)

However, the biggest impact on site types is Class and this pack will look at what these changes are.

## What is Class?

---



### History lesson



Back in the olden days Supply Meter Points (SMPs) were divided into two main site types:

- Daily Metered (DM)
- Non Daily Metered (NDM)

These two site types had similarities and differences associated with the process they followed. (There were also Optional DMs but this does not matter now).

### What do we have now

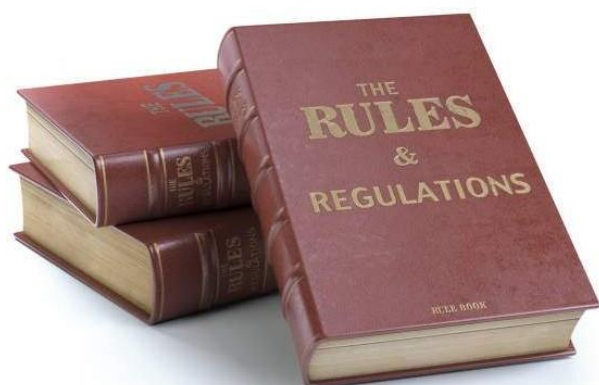
Now the site types are divided into 4 Class products and are known as:

- Class 1
- Class 2
- Class 3

At a high level people still refer to Class 1 and Class 2 as Daily Metered (DM) and Class 3 and Class 4 as Non Daily Metered (NDM). Whilst the process is the same for each class, each Class has its own rules, file flows and nuances to process and should all be treated differently.

This pack will go into those differences (and similarities).

## Can a site be any Class it wants?



There is only one rule governing Class and that is based around Annual Quantity (AQ).

If a site has an AQ greater than 58.6 million kWh it is required to be a Class 1 site and cannot be any other Class, after that the Shipper can choose whether to be a Class 2, 3 or 4 site.

> Note - There are a very small number of sites with AQs less than 58.6m kWh which are Class 1, these are:

- Seasonably Large Supply points
- (SLSP) Network Designated Sites
- Sites which are Interruptible

## High level overview of the differences

The below table shows at a high level the main processes and how they differ (or stay the same) for those processes.

Process Description	Process for initial Allocation	Process for Energy Balancing close-out	Read Submission Timescales	Type of Read Submission	AQ Calculation	Reconciliation
<b>Class 1 – Daily Metered Time Critical Readings</b>	Uses daily read	Uses daily read	By 11am on GFD+1	All reads daily on GFD+1	Monthly using Optimum Read	Meter Point level following a site visit or estimate
<b>Class 2 - Daily Metered not Time Critical Readings</b>	Transporter estimate	Uses daily read	By end of GFD+1 (05.59 am)	All reads daily by end of GFD+1	Monthly using Optimum Read	Meter Point level following a site visit or estimate
<b>Class 3 – Batched Daily Readings</b>	Allocation Profiles	Allocation Profiles	Daily Reads in batches	All daily reads in batches	Monthly using Optimum Read	Daily Rec at Meter Point level on receipt of a batch of reads
<b>Class 4 – Periodic Readings</b>	Allocation Profiles	Allocation Profiles	Periodic	Periodic reads	Monthly using Optimum Read	Meter Point level at receipt of read

## Class 1

---



### Facts about Class 1 sites

- 1 As previously stated a Class 1 site, is a site with an AQ greater than 58.6m kWh (in old money this is 2 million Therms)
- 2 These sites are Daily Metered sites and a read is required for each day
- 3 A Daily Metered Service Provider (DMSP) will provide the reads for Class 1 sites
- 4 An Automated Meter Reading (AMR) or Datalogger device is attached to Class 1 sites which allows readings to be collated remotely every day. These devices are checked annually to ensure that all devices are working correctly
- 5 Allocation and Energy Balancing processes are based on the daily read

### Read Submission

As previously stated the daily reads for a Class 1 site are submitted by the DMSP via the DLC file.

A reading must be submitted to the Gas Transporter (GT) by the DMSP before 1400 hrs. (Best endeavours by 1200 hrs) to close out the previous gas day.



These reading will be used to determine read performance. Any read received by GFD+5 will be used in the Allocation processes, any read received after this time will be used in reconciliation.

The file is subject to a number of validations to ensure it can be submitted which include, but are not exclusive to:

- File format has been completed correctly
- SMP is part of Shipper portfolio
- Meter Serial Number (MSN) matches
- Energy tolerance\* checks

\*Energy tolerance is based on the consumption between two actual reads, the AQ will determine the relevant band, and the SOQ and percentage uplift within each banding will determine whether the consumption is within or outside tolerance.

Where the energy falls below the inner tolerance level, the read is accepted. If the inner tolerance is exceeded but below the outer tolerance (AKA market breaker), the DMSP 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. See below for tolerance bands.

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.

Lower AQ Band (kWh)	Upper AQ Band (kWh)	Tolerances where read will be accepted	Tolerances where a Read will be Accepted if Submitted within Override Flag (Inner Tolerance)	Outer Tolerance Where Read will be Rejected (Market Breaker)
1	1	0% - 2,000,000% of SOQ	2,000,001% - 7,000,000 % of SOQ	$\geq 7,000,001\%$ of SOQ
2	200	0% - 10,000% of SOQ	10,001% - 25,000 % of SOQ	$\geq 25,001\%$ of SOQ
201	500	0% - 4,000% of SOQ	4,001% - 10,000 % of SOQ	$\geq 10,001\%$ of SOQ
501	1,000	0% - 2,000% of SOQ	2,001% - 5,000 % of SOQ	$\geq 5,001\%$ of SOQ
1,001	5,000	0% - 400% of SOQ	401% - 2,000 % of SOQ	$\geq 2,001\%$ of SOQ
5,001	10,000	0% - 200% of SOQ	201% - 500 % of SOQ	$\geq 501\%$ of SOQ
10,001	20,000	0% - 150% of SOQ	151% - 400 % of SOQ	$\geq 401\%$ of SOQ
20,001	73,200	0% - 300% of SOQ	301% - 600 % of SOQ	$\geq 601\%$ of SOQ
73,201	732,000	0% - 250% of SOQ	251% - 550 % of SOQ	$\geq 551\%$ of SOQ
732,001	2,196,000	0% - 200% of SOQ	201% - 500 % of SOQ	$\geq 501\%$ of SOQ
2,196,001	29,300,000	0% - 150% of SOQ	151% - 450 % of SOQ	$\geq 451\%$ of SOQ
29,300,001	58,600,000	0% - 100% of SOQ	101% - 400 % of SOQ	$\geq 401\%$ of SOQ
58,600,001	and above	0% - 100% of SOQ	101% - 350 % of SOQ	$\geq 351\%$ of SOQ

#### Tolerance Bands for Class 1 & 2 sites

If a valid reading is not received by 13:00 hrs on GFD+1, the GT will estimate a reading based on the previous day's reading or the gas day 7 days earlier (a "D-7" estimate); or, if no previous consumption is recorded for the site, the estimate will be calculated by  $AQ / 365$ .

All reads will be issued to the Registered Shipper by no later than 14:00 hrs (best endeavours by 12:00 hrs) on

GFD+1. However multiple MDR files are sent throughout the day.

## Read Replacement



Actual reads cannot be replaced. Where the actual read loaded is incorrect (for example where the meter is identified as faulty) a Consumption Adjustment must be used to amend the consumption for the gas day.

Where a read is received to replace an estimated read, after Close Out (GFD+5), any estimated reads within Close Out (GFD+5) will be recalculated to produce a 'better estimate'. This replaced 'better estimate' will be issued to the Shipper.

## **Shipper Transfer Reads**

The transfer read needs to be obtained on the transfer date and submitted by the DMSP by D+5, the read will be subject to full validations.

For sites where a transfer read is not submitted the GT will calculate an estimated transfer read and submit to both the Outgoing & Incoming Shipper as the closing/opening read on D+1. The estimate to be calculated as per the estimation methodology for the outgoing Product.

An estimated transfer read can be replaced if submitted & accepted within GFD+5. The Incoming or Outgoing Shipper can challenge the estimated transfer read using the existing Shipper Agreed Read process (SAR).

## **Class Change Reads**

When changing from or to a Class 1, the AMR device will need to be replaced. When transferring to Class 1 any Shipper AMR device is automatically removed from our system and the DMSP on behalf of the GT will install their own equipment.

An estimated read will be generated for the Class change date and the consumption will feed allocation. Where an actual read is received for the Class change date and where AMR is present (in all cases for Class 1) Check to Check reconciliation will be triggered.

This read (when no AMR is present) for the effective date of the Class change will not be subject to full read tolerance validations only standard asset validation. This

is due to the fact the read may not follow on from the previous read due to the difference between the on-site reading and the derivable reads.

Where AMR is present the Class change read will be validated back to the last site visit read including energy tolerance.

## RGMA



### All looks the same here!

The Review of Gas Metering Arrangements (RGMA) is the process whereby device/asset information is maintained including Meter/Corrector

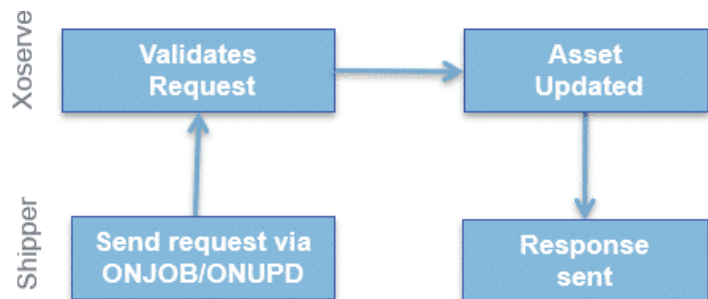
Installations/exchanges /removals.

For standard sites the same files and are used for all RGMA activity.

### FYI

The RGMA process is outlined on the right and utilises one of two following files;

1. An ONJOB is a notification of any physical asset installation, removal and exchange.
2. An ONUPD is a notification of any cosmetic asset updates.



## AQ

The AQ and SOQ are used in many downstream processes, including read submission validations, nomination and allocation and invoicing.

## Invoicing

The invoice process itself does not change dependent on Class however the information seen within the invoices and supporting information will differ.

All Transportation Invoices are all sent as a generic invoice file (.INV) via the IX Network, these include:

- Core Invoices: Capacity, Commodity and Amendments
- Scheduled Ancillary Invoices: Ad-hoc invoices issued on specific days. For example; Meter Asset, DNI, Compression and Failure to Supply Gas
- Unscheduled Ancillary Invoices: Ad-hoc invoices issued on request. For example; Request to Bill and Site Visit

In addition to the Transportation invoices there are Transmission invoices also known as Gemini Invoices.

CAZ - CORE CAPACITY INVOICE		
Charge	Charge Description	Comment
SCF	SEASONAL CAPACITY FAILURE CHARGE	SLSMP Only
871	UNIQUE - LDZ CAPACITY CHARGE	Non Standard Sites only
872	UNIQUE - CUST CAPACITY CHARGE	Non Standard Sites only
881	LDZ OPTIONAL TARIFF	Non Standard Sites only
884	ADMINISTRATION CHARGE - NTS	Non Standard Sites only
901	UNIQUE - EXIT CAPACITY LDZ ECN CHARGE	Non Standard Sites only
891	CSEPS - LDZ CAPACITY CHARGE	IGT / CSO Sites only
894	NDM CSEPS - ADMINISTRATION CHARGES	IGT / CSO Sites only
C04	CSEPS - EXIT CAPACITY LDZ ECN CHARGE	IGT / CSO Sites only
SRA	SOQ RATCHET CHARGE	Class1&2 sites only
883	DM ADMINISTRATION CHARGE LDZ	Class1&2 sites only
ZRA	CUSTOMER RATCHET CHARGE	Class1&2 sites only
CCA	CUSTOMER CAPACITY CHARGE	Standard Charge
CFI	CUSTOMER FIXED CHARGE	Standard Charge
ZCA	SUPPLY POINT CAPACITY CHARGE	Standard Charge
ECN	EXIT CAPACITY LDZ ECN CHARGE	Standard Charge

As stated, the invoice process does not change on the charge types seen. On the left is an example of all Commodity charge types which can be found on the Xoserve Comprehensive Invoices and Charge Types and is available on [Xoserve.com](http://Xoserve.com).

The standard charges identified are for all classes, then there are additional charges for Class 1 and 2 sites including admin and ratchet charges where applicable.

One of the big differences for Class 1 and 2 sites with Invoicing is the supporting information.

For core invoices Supporting Information file accompanying the .INV file displays the charge information at SMP level for Class 1 & 2 sites so you can see the charges per site rather than the Charge information for Class 3 & 4 sites which is only shown at an aggregated level.

For the core invoices there is an additional supporting information file providing charge information at SMP level for Class 3 & 4 sites which can be requested.

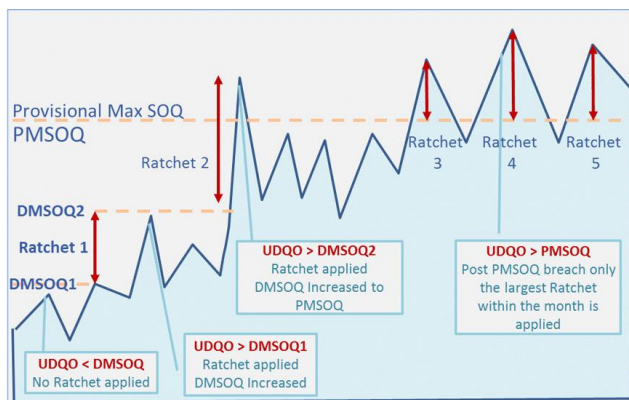
The file names are shown below,

Core Invoice	Invoice	Supporting Information 1 <sup>st</sup> Level	Supporting Information 2 <sup>nd</sup> Level
COM	Commodity	COM	COI
CAZ	Capacity	ZCS	CZI
AMS	Amendment	ASP	AML

## Ratchets

The ratchet process is an incentive regime to ensure that the offtake of gas does not exceed the Daily Standard Offtake Quantity (SOQ) for a site. It applies to the Class 1 and 2 sites, including SLSPs.

**Class 1 sites** will be subject to the Ratchet Charging arrangements as defined in UNC TPD Section B 4.7.7 ([UNIFORM NETWORK CODE](#) - TRANSPORTATION PRINCIPAL DOCUMENT SECTION B Part 4.7).



Following a ratchet, the DMSOQ is recalculated the following day the lesser of either, the UDQO that caused the ratchet, 2 x previous DMSOQ or 16 x the DMSHQ.

**Class 1 Ratchet Charge** shall be calculated by taking the (UDQO) which is the energy used each day that exceeds the DMSOQ and multiplying this by double the sum of Applicable Annual Rate of the LDZ Capacity Charge (ZCA) and Applicable Annual Rate of the Capacity Variable Component (CCA) (if any) of the Customer Charge.

The SRA Charge will reflect the LDZ Capacity Charge (ZCA)

The ZRA Charge will reflect the Customer Capacity Charge (CCA)

These will invoice at M+2 on the LDZ capacity invoice on the 4th Business day

## Soft Landing

When the Registered User changes the Class of the Supply Meter Point from Class 3 or 4 to Class 1 or 2; and where the Supply Point is not a SLSP **and** the DM Supply Point Capacity following such Supply Point Registration

**or** Supply Point Amendment is not less than the NDM Supply Point Capacity of the Supply Point prior to it Soft

Landing rules may apply. See [UNC](#) for details.



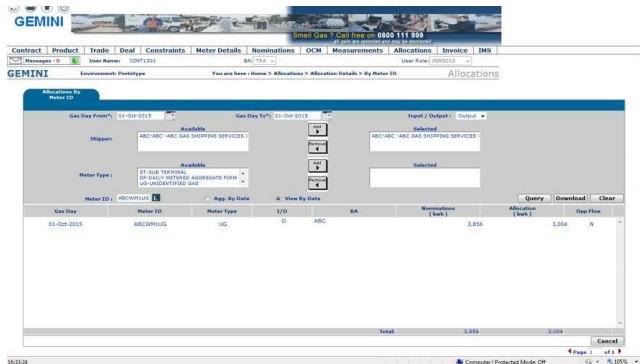
## Allocation and Nominating Gas

Once an SMP is classed as Class 1 (or 2), 2 days prior to the conformation effective date (go live) a meter is created or modified in Gemini, a Shipper then can place nomination for their sites from the go live dates for each gas day. A Gas Nomination is a forecast of the amount of gas that is expected to flow at the SMP for a Gas Flow day.

In the case no nomination for a Supply Meter Point is made then an estimation process will be carried out which will utilise D-7 Nomination values. If this is unavailable, system will use AQ/365 as the Gas Nomination D-7 Value.



The reading loaded before 11.00 am on GFD +1 by the DMSP will be used for allocation purposes. Where a valid read is not received the GT will generate an estimate which can be replaced before the end of GFD+5.



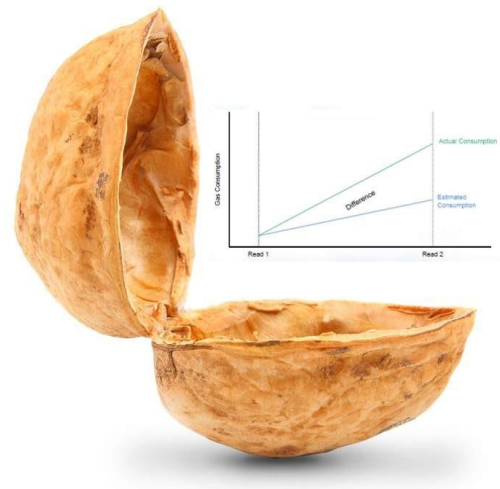
Shipper can change the estimated D-7 Gas Nomination with their own value within the submission timescales. An example of the Shipper Allocation Screen in Gemini is shown here.

## Reconciliation

### In a nutshell

The difference between the previous energy calculated and the new energy calculated.

This value can be positive or negative (as more or less could have been consumed) which will appear as a debit or credit on the reconciliation charge code on the Amendments invoice.



### Reasons for reconciliation



#### 1 Check read

Class 1 Meter Points are daily read and rely on a remote meter reading device.

However, when a site visit is performed whereby someone actually gets to look at the meter, there is an opportunity to reconcile

the gas used against what is previously been invoiced/recorded.

## **2 Estimates between actuals (EBA)**

For whatever reason be it, a technical fault sending the read information, an actual Fault set by the DMSP or the read being rejected for a variety of reasons, a Class 1 site may have had a series of estimates (E) against it.

When the reason has been resolved and an actual (A) read is received then EBA is identified. The estimated reads are recalculated to better estimates.

If closeout has occurred (D+5) then the actual reads will be used to recalculate the volumes and energy and reconciliation will take place.

The consumption which is inside closeout will feed allocation and the commodity invoice and the consumption outside close out will feed reconciliation and the amendment invoice.

### **Faults, Site Visits and Consumption Adjustments**

Site visits and faults and Consumption Adjustments are recorded and maintained on UK Link Services Portal for

Class 1 by DMSP or Shipper (see Class two for Shipper screens).

Consumption Adjustments could also be raised through CMS. Shippers would have to raise a DMQ (Daily Meter query) which would go to the DMSP to progress.

➤ **Note: if a Shipper sets a fault and if it was later determined that the fault was set in error, then the fault can only be removed by the Shipper and if the fault was set by the DMSP then only the DMSP can remove the fault.**

## Class 2

---



### Facts about Class 2 sites

- 1 A Class 2 site will have a an AQ less than 58.6m kWh (in old money this is 2 million Therms)
- 2 Shippers will nominate sites as Class 2 sites
- 3 These sites are daily metered sites and a read is required for each day, but these can be sent a day later.
- 4 The reads are all provided by the Shipper by D+1
- 5 An Automated Meter Reading (AMR) device is usually attached (but not mandatory) to Class 2 sites which allows reading to be collated remotely every day. These devices are checked annually to ensure that all devices are working correctly
- 6 Where daily reads are provided before D+5 or the read date, the consumption will feed allocation and Energy Balancing processes

## Read Submission

As previously stated the daily reads for a Class 2 site are submitted by the Shipper on the UDR file.

Between 12.00 and 13.00 hrs on GFD+1 the GT will estimate a reading for the purposes of Allocation. This reading will be calculated from the previous day's reading to produce an identical gas volume to the gas day 7 days earlier (a "D-7" estimate) or, if no previous consumption recorded, the estimate will be calculated by  $AQ / 365$ .

Where a valid read is loaded on the UDR before 15.00 hrs on GFD+1 by the Shipper the reading will be used for the initial Allocation.

The UDR file is subject to a number of validations to ensure it can be submitted which include, but not to exclusive to:

- File format has been completed correctly
- SMP is part of Shipper portfolio
- Meter Serial Number (MSN) matches
- Energy tolerance checks

For energy tolerance checks the system calculates the energy from the read and then checks the energy against permitted tolerance for the SOQ 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 (AKA 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. The tolerance bands are below;

Lower AQ Band (kWh)	Upper AQ Band (kWh)	Tolerances where read will be accepted	Tolerances where a Read will be Accepted if Submitted within Override Flag (Inner Tolerance)	Outer Tolerance Where Read will be Rejected (Market Breaker)
1	1	0% - 2,000,000% of SOQ	2,000,001% - 7,000,000 % of SOQ	>= 7,000,001% of SOQ
2	200	0% - 10,000% of SOQ	10,001% - 25,000 % of SOQ	>= 25,001% of SOQ
201	500	0% - 4,000% of SOQ	4,001% - 10,000 % of SOQ	>= 10,001% of SOQ
501	1,000	0% - 2,000% of SOQ	2,001% - 5,000 % of SOQ	>= 5,001% of SOQ
1,001	5,000	0% - 400% of SOQ	401% - 2,000 % of SOQ	>= 2,001% of SOQ
5,001	10,000	0% - 200% of SOQ	201% - 500 % of SOQ	>= 501% of SOQ
10,001	20,000	0% - 150% of SOQ	151% - 400 % of SOQ	>= 401% of SOQ
20,001	73,200	0% - 300% of SOQ	301% - 600 % of SOQ	>= 601% of SOQ
73,201	732,000	0% - 250% of SOQ	251% - 550 % of SOQ	>= 551% of SOQ
732,001	2,196,000	0% - 200% of SOQ	201% - 500 % of SOQ	>= 501% of SOQ
2,196,001	29,300,000	0% - 150% of SOQ	151% - 450 % of SOQ	>= 451% of SOQ
29,300,001	58,600,000	0% - 100% of SOQ	101% - 400 % of SOQ	>= 401% of SOQ
58,600,001	and above	0% - 100% of SOQ	101% - 350 % of SOQ	>= 351% of SOQ

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. See left for tolerance bands.

## Tolerance Bands for Class 1 & 2 sites

## Replacement Reads

Actual reads cannot be replaced. Where the actual read loaded is incorrect (for example where the meter is identified as faulty) a Consumption Adjustment will be used to amend the consumption for the gas day.

Where a read is received to replace an estimated read, after Close Out (GFD+5), any estimated reads within Close Out (GFD+5) will be recalculated to produce a 'better estimate'. This replaced 'better estimate' will be issued to the Shippers.

## Shipper Transfer Reads

If the Shipper Transfer is not provided, then an Estimate Read will be calculated on the transfer date.

Where the outgoing Class is Class 1 or 2 the D-1 volume will be estimated for allocation

purposes, either using D-7 or AQ/365.

## Class Change Reads

When changing from Classes 3 or 4 where **AMR** is present the kit is **not changed** on a Class change only event.

For a change in Class an **actual read is required** to close out the outgoing Class.

Where an AMR is present the Class change read will be validated back to the last site visit read and will include energy tolerance checks.

## Shipper Change with Class Change from Class 4

If the Class change accompanies a Shipper transfer with an AMR fitted and an actual Read is provided the read will undergo full validations back to the last site visit read and will be marked as a Check Read.

Reconciliation will be triggered to:

- The last actual read where no AMR equipment is fitted, or where the Shipper transfer/class change read is an estimated read
- Shipper transfer date with a class change
- Same Shipper class change
- Asset Update date
- Primary meter reconciliation date

If the Opening Read has been provided by the Incoming Shipper and the Outgoing Shipper provides a read for the change date the read will be rejected.



If no opening read is provided by the incoming Shipper an estimate will be calculated, the estimate will be based on the outgoing Class, therefore either Class 1 & 2 D-7 principles or Class 3 & 4 NDM algorithm. It will be then marked as a check read.

The first subsequent actual read will be subjected to all read validations based on the previous actual read in the outgoing Class and will trigger reconciliation back to the estimated opening read.

If a Shipper Agreed Read (SAR) from the Shipper is received for the Class change day (after close out) it will be used to reconcile backwards and forwards.

## RGMA

### All looks the same here!



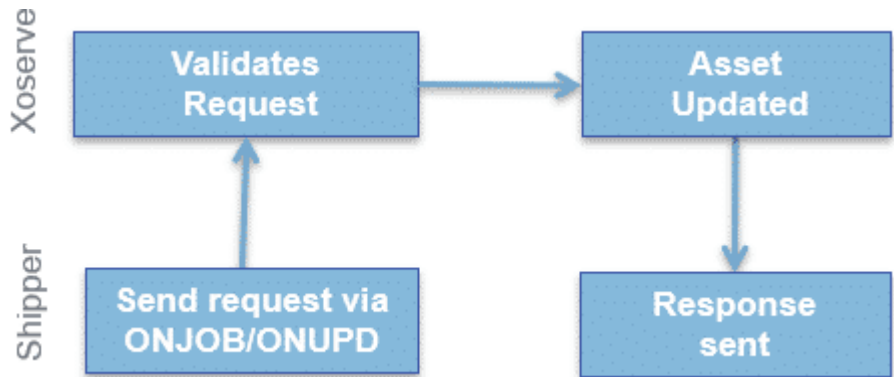
The Review of Gas Metering Arrangements (RGMA) is the process whereby device/asset information is maintained including Meter/Corrector Installations/exchanges/removals.

For standard sites the same files and are used for all RGMA activity.

### FYI

The RGMA process outlined on the right, utilises one of two following files;

1. An ONJOB is a notification of any physical asset installation, removal and exchange.
2. An ONUPD is a notification of any cosmetic asset updates.



## AQ

Annual Quantity is calculated for every SMP and rolling AQ (also referred to as SMP AQ)

The AQ and SOQ are used in many downstream processes, including read submission validations, nomination and allocation and Invoicing.

## Invoicing

The invoice process itself does not change dependent on Class however the information seen within the invoices and supporting information will differ.

All Transportation Invoices are all sent as a generic invoice file (.INV) via the IX Network, these include:

- Core Invoices: Capacity, Commodity and Amendments
- Scheduled Ancillary Invoices: Ad-hoc invoices issued on specific days. For example; Meter Asset, DNI, Compression and Failure to Supply Gas
- Unscheduled Ancillary Invoices: Ad-hoc invoices issued on request. For example; Request to Bill and Site Visit.

In addition to the Transportation invoices there are Transmission invoices also known as Gemini Invoices.

CAZ - CORE CAPACITY INVOICE		
Charge	Charge Description	Comment
SCF	SEASONAL CAPACITY FAILURE CHARGE	SLSMP Only
871	UNIQUE - LDZ CAPACITY CHARGE	Non Standard Sites only
872	UNIQUE - CUST CAPACITY CHARGE	Non Standard Sites only
881	LDZ OPTIONAL TARIFF	Non Standard Sites only
884	ADMINISTRATION CHARGE - NTS	Non Standard Sites only
901	UNIQUE - EXIT CAPACITY LDZ ECN CHARGE	Non Standard Sites only
891	CSEPS - LDZ CAPACITY CHARGE	IGT / CSO Sites only
894	NDM CSEPS - ADMINISTRATION CHARGES	IGT / CSO Sites only
C04	CSEPS - EXIT CAPACITY LDZ ECN CHARGE	IGT / CSO Sites only
SRA	SOQ RATCHET CHARGE	Class1&2 sites only
883	DM ADMINISTRATION CHARGE LDZ	Class1&2 sites only
ZRA	CUSTOMER RATCHET CHARGE	Class1&2 sites only
CCA	CUSTOMER CAPACITY CHARGE	Standard Charge
CFI	CUSTOMER FIXED CHARGE	Standard Charge
ZCA	SUPPLY POINT CAPACITY CHARGE	Standard Charge
ECN	EXIT CAPACITY LDZ ECN CHARGE	Standard Charge

As stated, the invoice process does not change on the charge types seen. On the left is an example of all Commodity charge types which can be found on the Xoserve Comprehensive Invoices and Charge Types and is available on [Xoserve.com](https://www.xoserve.com).

The standard charges identified are for all classes then there are additional charges for Class 1 and 2 sites including admin and ratchet charges where applicable.

One of the big differences for Class 1 and 2 sites with Invoicing is the supporting information.

For core invoices Supporting Information file accompanying the .INV file displays the charge information at SMP level for Class 1 & 2 sites so you can see the charges per site rather than the Charge information for Class 3 & 4 sites which is only shown at an aggregated level.

For the core invoices there is an additional supporting information file providing charge information at SMP level for Class 3 & 4 sites which can be requested.

The file names are shown below:

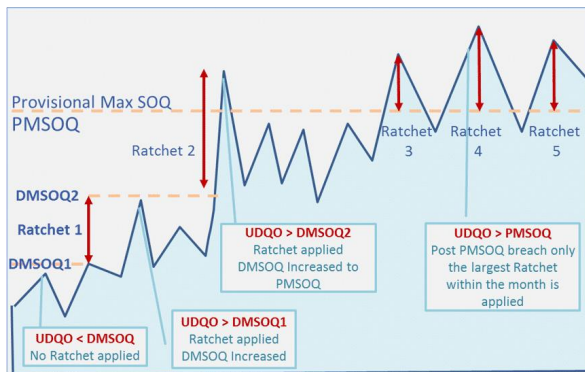
Core Invoice	Invoice	Supporting Information 1 <sup>st</sup> Level	Supporting Information 2 <sup>nd</sup> Level
COM	Commodity	COM	COI
CAZ	Capacity	ZCS	CZI
AMS	Amendment	ASP	AML

## Ratchets

The ratchet process is an incentive to ensure that the offtake of gas does not exceed the Daily Standard Offtake Quantity (SOQ) for a site. It only applies to the Class 1 and 2 sites, but is also used for SLSPs

**Class 2 sites** will be subject to an amended Ratchet Charging Arrangements which is defined in UNC TPD Section B

4.7.8 ([UNIFORM NETWORK CODE](#) - TRANSPORTATION PRINCIPAL DOCUMENT SECTION B Part 4.7)



Following a ratchet, the DMSOQ is recalculated the following day the lesser of either, the UDQO that caused the ratchet, 2 x previous DMSOQ or 16 x the DMSHQ.

**Class 2 Ratchet Charge** is determined by calculating the daily ratchet charge by the number of days applicable and difference between the pre and post ratchet charges.

The SRA Charge will reflect the LDZ Capacity Charge (ZCA)

The ZRA Charge will reflect the Customer Capacity Charge (CCA)

These will invoice at M+2 on the LDZ capacity invoice on the 4th Business day

## Soft Landing

When the Registered User changes the Class of the Supply Meter Point from Class 3 or 4 to Class 1 or 2; and where the Supply Point is not a SLSP **and** the DM Supply Point Capacity following such Supply Point Registration

**or** Supply Point Amendment is not less than the NDM Supply Point Capacity of the Supply Point prior to it Soft

Landing rules may apply. See UNC for details.



## Allocation and Nominating Gas

Once an SMP is classed as Class 2 (or 1), 2 days prior to the conformation effective date (go live) a meter is created or modified in Gemini, a Shipper then can place the nomination for their sites from the go live dates.

A Gas Nomination is a forecast of the amount of gas that is expected to flow at the SMP for a Gas Flow day

In case no nomination for a Supply Meter Point is made then an estimation process will be carried out which will utilise D-7 Nomination values. If this is unavailable, the system will use AQ/365 as the Gas Nomination D-7 Value.

The screenshot shows the Gemini Allocation screen. At the top, there is a navigation bar with tabs: Contract, Product, Trade, Deal, Constraints, Meter Details, Nominations, OCM, Measurements, Allocations, Invoice, and IMS. Below this, there is a header section with the Gemini logo, a banner image, and a search bar. The main content area is titled 'Allocations By Meter ID'. It features a table with columns: Gas Day, Meter ID, Meter Type, I/O, BA, Nominations (kwh), Allocation (kwh), and Opp Flow. The table shows data for Gas Day 01-Oct-2015, with a single row for Meter ID ABCW101US, Meter Type US, I/O O, BA ABC, Nominations 3,856, Allocation 3,004, and Opp Flow N. Below the table, there is a 'Total' row showing Nominations 3,856 and Allocation 3,004. The screen also includes various input fields for Shipper, Meter Type, and Gas Day, as well as buttons for 'Query', 'Download', 'Clear', and 'Cancel'.

Gas Day	Meter ID	Meter Type	I/O	BA	Nominations (kwh)	Allocation (kwh)	Opp Flow
01-Oct-2015	ABCW101US	US	O	ABC	3,856	3,004	N
Total:					3,856	3,004	

A Shipper can change the estimated D-7 Gas Nomination with their own value within the submission timescales.

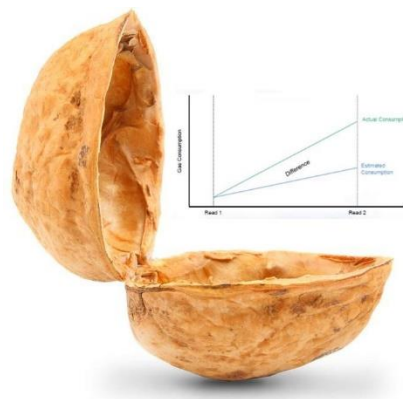
An example of the Shipper Allocation Screen in Gemini is shown here.

## Reconciliation

### In a nutshell

The difference between the previous energy calculated and the new energy calculated.

This value can be positive or negative (as more or less could have been consumed) which will appear as a debit or credit on the reconciliation charge code on the Amendments invoice.



### Reasons for reconciliation



#### 1 Check read

Class 2 Meter Points are daily read and rely on a remote meter reading device.

However, when a site visit is performed whereby someone actually gets to look at the

meter, there is an opportunity to reconcile the gas used against what is previously been invoiced/recorded.

#### 2 Estimates between actuals (EBA)

For whatever reason be it, a technical fault sending the read information, an actual Fault set by the Shipper or the read being rejected for a variety of reasons, a Class 2 site may have had a series of estimates (E) against it.

When the reason has been resolved and an actual (A) read is received then EBA is identified. The estimated reads are recalculated to better estimates.

If closeout has occurred (D+5) then the actual reads will be used to recalculate



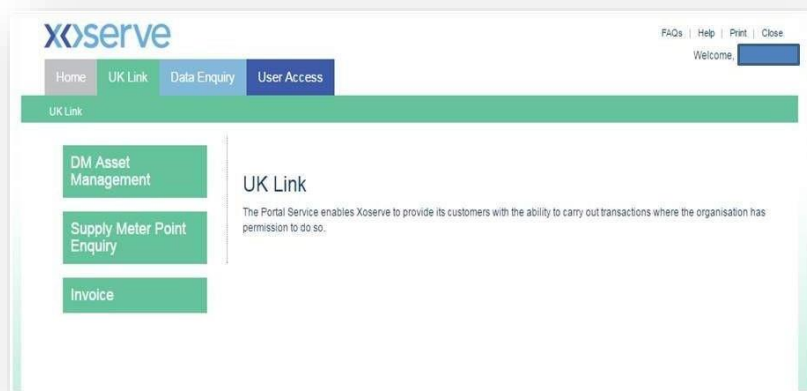
the volumes and energy and reconciliation will take place.

## Faults and Site Visits and Consumption Adjustments

Site visits and faults and Consumption Adjustments are recorded and maintained on UK Link Services Portal for Class 2 by Shippers.

Consumption Adjustments could also be raised through CMS.

## UK Link Services Portal



### Landing Page

The UK Link Portal Landing Page shown opposite is an application where certain activities can be performed by industry Stakeholders.

The below guide is focused at Shippers. You would firstly select either:

- DM Management
- Supply Meter Point Enquiry
- or Invoice

### DM Asset Management Page Landing Page

From here you can search by MPRN to view asset details and navigate to further to the screens listed below. Most are the same screen that is accessed by the DMSP Class 1 sites, but some are Shipper only (as identified)

- Consumption Adjustment Page
- Configuration History Enquiry Page
- Convertor Enquiry Page
- Site Visit Notification Page
- Site Visit History Enquiry Page
- Daily Read Error Page
- Flag Fault at Site Page
- Install Daily Read Equipment Page
- Meter Asset Enquiry Page
- Meter Point Detail Enquiry Page
- Meter Reading Enquiry Page
- Add Site Visit Page (Shipper only)
- Daily Read Equipment Exchange Page (Shipper only)
- Consumption Adjustment Page (Shipper only)
- Remove Daily Read Equipment Page (Shipper only)

DM Asset Management

Selection Criteria

MPRN

Search

Meter Point Details

Meter Serial Number

Convertor Serial Number

Number of Meters

Meter Point Status

Isolated Status

Supply Point Category

Address

Information

Last Inspection Date

Fault Start Date

Fault End Date

Shipper

Supplier

Navigate to

Navigate to \*

-- Select --

Ok

Back

### Core Invoice Supporting Information (MPRN) Page

From here you can retrieve supporting level information for core invoices at MPRN level or navigate to Release Charges Page.

**INVOICE**

UK Link / Core Invoice Supporting Information (MPRN)

### Core Invoice Supporting Information (MPRN)

**Selection Criteria**

Invoice Type Code \*  
Billing Period From \*  
Meter Point Reference \*

Add +

**MPRN List**

Select	Meter Point Reference
<input type="checkbox"/>	

Remove
MPRN Bulk Upload
Browse... No file selected.
Upload

**Navigate To**

Navigate To -- Select --

Submit Clear Back

## Release Charges Page

Release Charges Pages - Navigated to from the Core Invoice Supporting Information (MPRN) Page

UK Link / InvoiceReleaseCharges

### Release Charges

**MPRN**

Meter Point Reference \*
Search

**Details**

Select Charges	Charge Type	Charge Amount	Amendment Code	Amendment Start Date	Amendment End Date	Variance Start Date	Variance End Date

**Navigate To**

Navigate To -- Select --

Submit Clear Back

## Supply Meter Point Enquiry Landing Page

From here you can search by MPRN to view asset details and navigate to further to the Supply Meter Point History Enquiry Page

## Supply Meter Point History Enquiry Page

Navigated to from the Supply Meter Point Enquiry Landing Page

Supply Meter Point History Enquiry

Confirmation Details

Shipper

Supplier

Shipper Customer Name

Nomination Reference

Confirmation Reference

Manned 24 Hours

Confirmation Effective Date

Confirmation End Date

LDZ

Exit Zone

Information

Meter Class

MPRN	Class	SMP AQ	SMP SOQ	SMP SHQ	Current Year Min SOQ	Effective Date

Back

Additional screenshots:

Consumption Adjustment

MPRN

Meter Serial

Converter Serial

DRE Number

No. of Meters

Meter Details

Meter Dials

Imperial Indicator

Meter Status

Converter Details

Uncorrected Dials

Corrected Dials

Converter Status

Latest Readings

Shipper Short Code	Meter Serial Number	Reading Date	Meter Reading	Corrected Reading	Metered Consumption	Adjusted Consumption	Class	Read Type	Daily Read Error	Tolerance Override

Consumption Adjustment Details

Adjusted Consumption \*

Gas Flow Day \*

Adjustment Reason \*

Override Inner Tolerance

Submit

Clear

Back

UK Link / DM Asset Management / Configuration History Enquiry

Configuration History Enquiry

MPRN

Shipper

Configuration Date

Search

Meter Details

Meter Serial Number

Model

Meter Status

Number of Dials

Correction Factor

Change

Effective Date

Input Date

Input Time

Input By

Converter Details

Converter Serial Number

Model

Converter Status

Corrected Dials

Correction Factor

Change

Effective Date

Input Date

Input Time

Input By

Daily Read Equipment Details

DRE Number

Status

Site Visit Date

Change

Effective Date

Input Date

Input Time

Input By

Back

Convertor Enquiry

MPRN

Meter Serial

Convertor Serial

DRE Number

No. of Meters

Convertor Details

Model

Product ID

Manufacturer

Year of Manufacture

Correction Factor

Installed Date

Convertor Status Date

Convertor Status

Transporter Owned

Correcting Basis

Convertor Reading Details

Uncorrected Dials

Uncorrected Units

Uncorrected Reading Factor

Corrected Dials

Corrected Units

Corrected Reading Factor

Back

Site Visit Notification

MPRN

Meter Serial

Convertor Serial

DRE Number

No. of Meters

Details

Site Visit Date \*

Submit

Clear

Back

Site Visit History Enquiry

MPRN

Meter Serial

Convertor Serial

DRE Number

No. of Meters

Site Visit History

Site Visit Date

Site Visit Reason

Meter Reading

Meter RTC

Uncorrected Reading

Corrected Reading

Convertor RTC

Fault Corr.

Tolerance Override

Amend

Back

UK Link / DM Asset Management / Daily Read Error

Daily Read Error

MPRN

Meter Serial

Convertor Serial

DRE Number

No. of Meters

Details

Gas Flow Day \*

Navigate to

Navigate to

-- Select --

Submit

Clear

Back

Flag Fault at Site

MPRN	Meter Serial	Convertor Serial	DRE Number	No. of Meters

Fault Details

Fault Start Date \*

Fault Status \*

-- Select --

Submit

Clear

Back

Install Daily Read Equipment

MPRN	Meter Serial	Convertor Serial	DRE Number	No. of Meters

Install Daily Read Equipment

Installed Date \*

Arrival Readings

Departure Readings

Meter Reading

Uncorrected Reading

Corrected Reading

Meter Reading \*

Uncorrected Reading

Corrected Reading

Meter RTC

Convertor Uncorrected RTC

Convertor RTC

Override Inner Tolerance

Submit

Clear

Back

Meter Asset Enquiry

MPRN	Meter Serial	Convertor Serial	DRE Number	No. of Meters

Primary Meter Details

Model

Number of Dials

Product ID

Meter Type

Imperial Indicator

Manufacturer

Year of Manufacture

Meter Mechanism

Meter Capacity

Additional Details

Installed Date

Meter Status Date

Gas Act Owner

Meter Status

Collar Status

DRE Indicator

Meter Reading Details

Reading Units

Reading Factor

OK

Back

Meter Point Detail Enquiry

MPRN	Meter Serial	Convertor Serial	DRE Number	No. of Meters

Location Details

LDZ

Location Description

Address

Location Code

Access Instruction

Meter Point Details

Meter Point Status

Isolation Status

Effective Date

Bypass Indicator

Meter Link Code

Back

### Meter Reading Enquiry

MPRN	Meter Serial	Convertor Serial	DRE Number	No. of Meters

Fault Start Date  Enquiry Date

Fault End Date

Meter Readings

Previous 1-10 of 50

Shipper Short Code	Meter Serial Number	Reading Date	Meter Reading	Corrected Reading	Metered Consumption	Adjusted Consumption	Class	Read Type	Daily Read Error	Tolerance Override

Navigate to

Navigate to

UK Link / DM Asset Management / Add Site Visit Read

### Add Site Visit Read

MPRN	Meter Serial	Convertor Serial	DRE Number	No. of Meters

Site Visit Details

Visit Date \*  Visit Reason \*  Site Visit

Arrival Readings

Meter Reading   
 Uncorrected Reading   
 Corrected Reading

Departure Readings

Meter Reading \*   
 Uncorrected Reading   
 Corrected Reading   
 Meter RTC   
 Convertor Uncorrected RTC   
 Convertor RTC   
 Override Inner Tolerance ☐

Previous Site Visits

Site Visit Date	Site Visit Reason	Meter Reading	Meter RTC	Uncorrected Reading	Corrected Reading	Convertor RTC	Fault Count	Tolerance Override

UK Link / DM Asset Management / Daily Read Equipment Exchange

### Daily Read Equipment Exchange

MPRN	Meter Serial	Convertor Serial	DRE Number	No. of Meters

Exchange Daily Read Equipment

Exchanged Date \*

Arrival Readings

Meter Reading   
 Uncorrected Reading   
 Corrected Reading

Departure Readings

Meter Reading \*   
 Uncorrected Reading \*   
 Corrected Reading \*   
 Meter RTC   
 Convertor Uncorrected RTC   
 Convertor RTC   
 Override Inner Tolerance ☐



Consumption Adjustment

MPRN

Meter Serial

Convertor Serial

DRE Number

No. of Meters

Meter Details

Meter Dials

Imperial Indicator

Meter Status

Convertor Details

Uncorrected Dials

Corrected Dials

Convertor Status

Latest Readings

Shipper Short Code	Meter Serial Number	Reading Date	Meter Reading	Corrected Reading	Metered Consumption	Adjusted Consumption	Class	Read Type	Daily Read Error	Tolerance Override

Consumption Adjustment Details

Adjusted Consumption \*

Gas Flow Day \*

Adjustment Reason \*

Override Inner Tolerance

Submit

Clear

Back

Remove Daily Read Equipment

MPRN

Meter Serial

Convertor Serial

DRE Number

No. of Meters

Remove Daily Read Equipment

Removed Date \*

Arrival Readings

Meter Reading

Uncorrected Reading

Corrected Reading

Departure Readings

Meter Reading \*

Uncorrected Reading

Corrected Reading

Meter RTC

Convertor Uncorrected RTC

Convertor RTC

Override Inner Tolerance

Submit

Clear

Back

## Class 3

---



### Facts about Class 3 sites

- 1 A Class 3 site is a site with an AQ less than 58.6m kWh (in old money this is 2 million Therms)
- 2 Shippers will nominate sites as Class 3
- 3 Daily Reads are sent in bundles on a regular basis by the Shippers.
- 4 A Class 3 site will have 2 AQs, a Rolling and Billing AQ
- 5 Allocation and Energy Balancing processes are based on allocation Profiles

### Read Submission

Reads are submitted by the Shipper on the UBR file.

A read file can contain reads for a mix of MPRN's with different read frequencies, for example, file contains 5 days consecutive reads for site A, 30 days consecutive reads for site B etc.

The file is subject to a number of validations to ensure it can be submitted which include, but not exclusive to:

- File format has been completed correctly
- SMP is part of Shipper portfolio
- Meter Serial Number (MSN) matches
- The read is not too old - A Meter Reading for a Class 3 Supply Meter Point where the Read Date falls within calendar month M is only valid when submitted not later than the 10th Day of month M + 1.  
Once you are outside the read submission window reads can only be replaced (back to LiS) by the Shipper who had responsibility for the site at the date of the Meter Read. New reads cannot be slotted in between, where reads were missing. **Following MOD700** (for EUC01 sites only) the read must be provided within D+7 of the read date
- Energy tolerance checks. **Following MOD700** (for EUC01 sites only) whilst reads are received in batches, only the latest read is validated and if the last read passes validation all other reads are marked as 'assured' but not loaded on to system. If read fails validation it is rejected, and we validate the next latest read, and if it passes all other reads are marked as 'assured'. If it also rejects, then all the other reads are marked as 'unassured'. The Shipper has the option to nominate a 'preferred date', which if a read for this date is present in the batch this will be the read that is validated rather than the latest read

For **energy tolerance checks** the system calculates the energy from the read 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 (AKA 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. See below for tolerance bands;

To prevent bulk override where the override Flag is set, but the energy has not breached the inner tolerance, then the read is rejected.

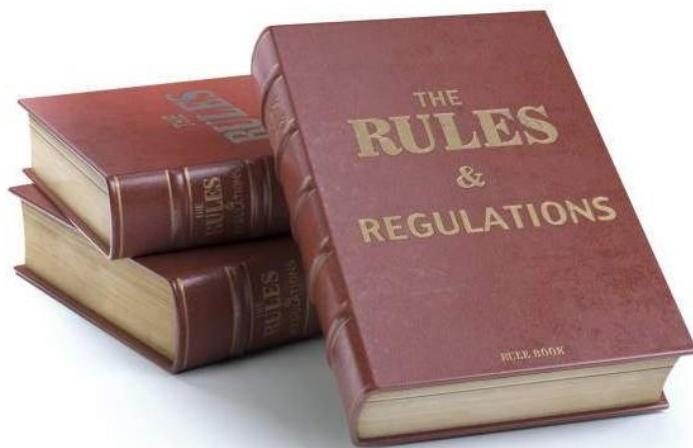
If the outer tolerance is breached, then the read is always rejected. See left for tolerance bands.

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	28300000	0% - 150% of AQ	> 150% - 700% of AQ	> 700% of AQ
28300001	58600000	0% - 100% of AQ	> 100% - 400% of AQ	> 400% of AQ
58600001	9999999999999999	0% - 100% of AQ	> 100% - 350% of AQ	> 350% of AQ

Tolerance Bands for Class 3 & 4 sites

## Shipper Transfer Reads

As part of the supply point administration process (SPA) one of the key processes is a Shipper transfer. They ensure accuracy of invoicing from previous the Shipper and the New Shipper, to support this a read is required. Below are a number of rules surrounding the submission of this.



Transfer read will be estimated after D+10, if site is transferring from Class 3 to Class 3. If Shipper Transfer includes Class Change and transfer is from Class 1, 2 or 4 the read will be estimated on D either using D-7 or AQ/365.

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 subsequent reads.

If a read is submitted after the estimate has been created, it needs to be sent as read reason of R (Replacement read) and a read source of A (Agreed opening read).

➤ **Note - The transfer read for D should be sent prior to sending any subsequent reads in a batch to avoid the batch reads from being held.**

---

## **Class Change Reads**

A Shipper may wish to change the Class of a site and this will primarily be done using the Nomination (NOM) and confirmation (CONF) process

However, you can also do this using the SPC file. If so you are required to give a minimum 5 and a maximum of 30 Business Days' notice to change Class using an SPC file.

> **Note - When using SPC file for Class change, only the Class change element can be changed.**

**If a class 3 or 4 is being changed to Class 2 or 1 then the requested DMSOQ needs to be the equivalent of the current (Billing/SMP) NDM SOQ value.**

**You will then need to also provide DMSHQ value and this needs to be in ratio to the requested DMSOQ. This needs to be between 1:4 and 1:24.**

> **Note Once a site has changed Class it is not possible to change again within 2 months via an SPC file unless there has been a Supplier change.**

Where there is an **AMR** present the kit is **not changed** on a Class change only event.

For a change in Class an **actual read is required** to close out the outgoing Class. Where an AMR is present an actual read would be treated as a check read.

The read for the effective date of Class change will be subject to all read validations and will be validated to the previous check reads where there is an AMR present.

## Shipper Change with Class Change Reads

For change of Class from 2 to 3, if a read is provided then the Class change read will start the incoming Class 3 reconciliation position. The Class change read will be subject to all read validations.

If the read is a Shipper transfer and Class change, then the read will undergo basic check read validations (serial number, dials and units etc.). Where there is AMR present energy tolerance validations will be based on the last check reading. Where there is no AMR the read will be validated back to the last actual cyclic read.

A valid opening read will trigger reconciliation, reconciliation is based on check to check reconciliation rules and closes the outgoing Class 2 period.

If no actual opening reading is received for the Class Change date, then an estimate will be calculated and issued immediately to the Shipper. Where no AMR is present the estimated read will be used to trigger reconciliation, where AMR is present, the read date will be recorded as a check read date, however reconciliation will be back to the last actual cyclic reading.



Any attempt by the outgoing Shipper to submit a read for the Class change date will be rejected.

If a Shipper Agreed Read (SAR) is received for the Class change day (after close out) it will be used to reconcile backwards.

## AQ

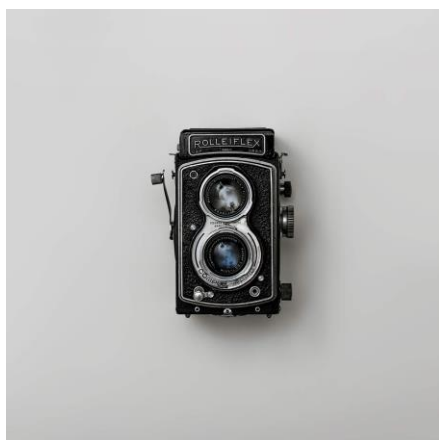
Annual Quantity is calculated for every SMP and rolling AQ...

In addition to rolling AQ Class 3 sites also have a billing AQ. The Billing AQ was an industry requirement to provide a stable AQ for Class 3 & 4 sites with regards to invoicing processes whilst the Billing AQ and SOQ are used in the nomination and allocation processes.

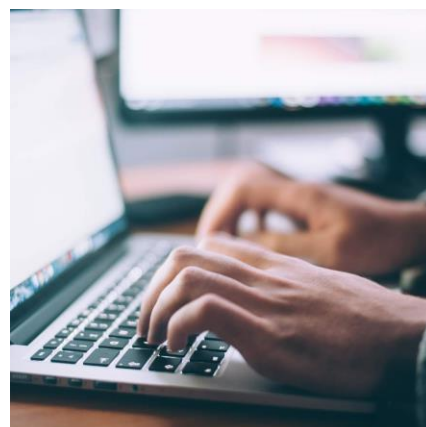
## Billing AQ

For billing AQ, sometimes referred to as formula year AQ, a snapshot of the previous year's AQ is taken on 1st December.

The billing AQ value is then updated using this snapshot on 1st April unless an AQ correction has been applied.



Snapshot



Upload

## RGMA



### All looks the same here!

The Review of Gas Metering Arrangements (RGMA) is the process whereby device/asset information is maintained including Meter/Corrector Installations/exchanges /removals.

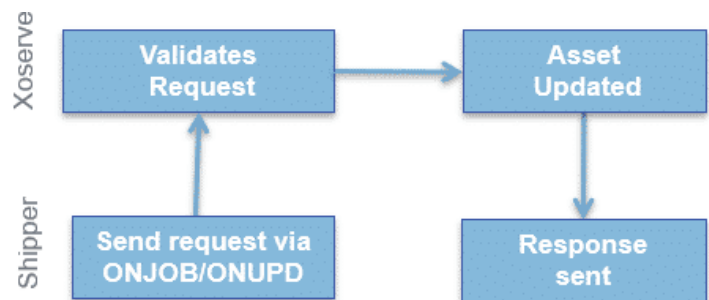
For standard sites the same files and are used for all RGMA activity.



## FYI

The RGMA process is outlined on the right and utilises one of two following files;

1. An ONJOB is a notification of any physical asset installation, removal and exchange.
2. An ONUPD is a notification of any cosmetic asset updates.



## Invoicing

The invoice process itself does not change dependent on Class however the information seen within the invoices and supporting information will differ.

All Transportation Invoices are all sent as a generic invoice file (.INV) via the IX Network, these include:

- Core Invoices: Capacity, Commodity and Amendments
- Scheduled Ancillary Invoices: Ad-hoc invoices issued on specific days. For example; Meter Asset, DNI, Compression and Failure to Supply Gas
- Unscheduled Ancillary Invoices: Ad-hoc invoices issued on request. For example; Request to Bill and Site Visit

In addition to the Transportation invoices there are Transmission invoices also known as Gemini Invoices.

CAZ - CORE CAPACITY INVOICE		
Charge	Charge Description	Comment
SCF	SEASONAL CAPACITY FAILURE CHARGE	SLSMP Only
871	UNIQUE - LDZ CAPACITY CHARGE	Non Standard Sites only
872	UNIQUE - CUST CAPACITY CHARGE	Non Standard Sites only
881	LDZ OPTIONAL TARIFF	Non Standard Sites only
884	ADMINISTRATION CHARGE - NTS	Non Standard Sites only
901	UNIQUE - EXIT CAPACITY LDZ ECN CHARGE	Non Standard Sites only
891	CSEPS - LDZ CAPACITY CHARGE	IGT / CSO Sites only
894	NDM CSEPS - ADMINISTRATION CHARGES	IGT / CSO Sites only
C04	CSEPS - EXIT CAPACITY LDZ ECN CHARGE	IGT / CSO Sites only
SRA	SOQ RATCHET CHARGE	Class1&2 sites only
883	DM ADMINISTRATION CHARGE LDZ	Class1&2 sites only
ZRA	CUSTOMER RATCHET CHARGE	Class1&2 sites only
CCA	CUSTOMER CAPACITY CHARGE	Standard Charge
CFI	CUSTOMER FIXED CHARGE	Standard Charge
ZCA	SUPPLY POINT CAPACITY CHARGE	Standard Charge
ECN	EXIT CAPACITY LDZ ECN CHARGE	Standard Charge

As stated, the invoice process does not change only the charge types seen change. On the left is an example of all Commodity charge types which can be found on the Xoserve Comprehensive Invoices and Charge Types is available on [Xoserve.com](http://Xoserve.com).

The standard charges identified are for all classes then there are additional charges for Class 1 and 2 sites including admin and ratchet charges where applicable.

One of the big differences for Class 1 and 2 sites with Invoicing is the supporting information.

For core invoices Supporting Information file accompanying the .INV file displays the charge information at SMP level for Class 1 & 2 sites so you can see the charges per site rather than the Charge information for Class 3 & 4 sites which is only shown at an aggregated level.

For the core invoices there is an additional supporting information file providing charge information at SMP level for Class 3 & 4 sites which can be requested.

The file names are shown below:

Core Invoice	Invoice	Supporting Information 1 <sup>st</sup> Level	Supporting Information 2 <sup>nd</sup> Level
COM	Commodity	COM	COI
CAZ	Capacity	ZCS	CZI
AMS	Amendment	ASP	AML

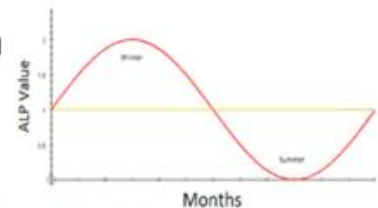
## Allocation and Nominating Gas

For Class 3 sites gas is nominated and allocated based on the below calculation;

### ALP

The Annual Load Profile (ALP) is the daily seasonal normal as a proportion of the average daily seasonal normal demand for the End User Category.

If sites used the same energy every day then this figure would always be 1, each EUC has its own ALP Profile



Example shown above.  
The total values must equal 365

### Rolling AQ

This is the Annual Quantity that could potentially be recalculated each month depending on read history.

$$SMP\ Demand = \frac{RollingAQ}{365} \times ALP \times (1 + (WCF \times DAF))$$

### WCF

The Weather Correction Factor (WCF) is calculated for each LDZ using the Composite Weather Variable (CWV) minus the Seasonal Normal Composite Weather Variable (SNCWV).



### DAF

The Daily Adjustment Factor (DAF) is the adjustment for weather sensitivity in the End User Category as a proportion of the seasonal normal.



## Reconciliation

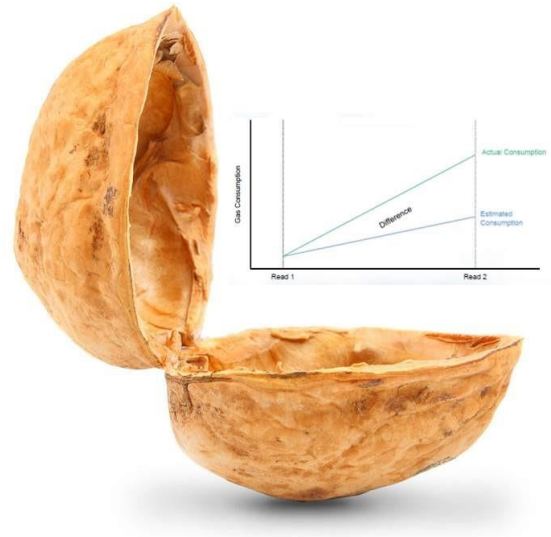
Once reads (or a consumption adjustment) are received a variance period is created that shows the **exact amount used** by that particular SMP.

This value can then be **reconciled** against what has been invoiced previously, and the difference will be the charges seen on the Amendment Invoice.

## In a nutshell

The difference between the previous energy calculated via the commodity invoice and the new energy calculated.

This value can be positive or negative (as more or less could have been consumed) which will appear as a debit or credit on the reconciliation charge code on the Amendments invoice.



## Reasons for reconciliation

### 1- Read file submitted

When a read file is submitted for a Class 3 site (and is accepted) then these daily reads are used to profile the new consumption over that period and reconciliation is performed.

Class 3 is reconciled daily, the expectation is that a reading will be provided in batches for each day, where a daily read has not been provided, a reconciliation will be created between two valid uploaded reads.



### 2 - Check read

Class 3 Meter Points reads are sent in batches periodically however, when an AMR is installed, a site visit is performed whereby someone actually gets to look at the meter. This an opportunity to reconcile the gas

used against what is previously been invoiced/recorded.

## **Faults and Site Visits and Consumption Adjustments**

Site visits and faults for Class 3 sites are recorded using the SFN file.

Reads received during the fault period are suspended and are not subject to tolerance checks (just Submission Checks). The fault can be ended only by marking it in error or by carrying out asset exchange or by carrying out a site visit (where AMR is faulty).

All other validations will only be performed if the fault is removed due to the fault being recorded in error.

Consumption Adjustments for the fault period (or longer but including the fault period) are raised using CMS.

## Class 4

---



### Facts about Class 4 sites

- 1 A Class 4 site is a site with an AQ less than 58.6m kWh (in old money this is 2 million Therms)
- 2 Reads are sent periodically (monthly, quarterly or annually) by the Shipper
- 3 A Class 4 site will have 2 AQs, a Rolling and Billing AQ
- 4 Allocation and Energy Balancing processes are based on allocation Profiles
- 5 Sites that were previously NDM sites were classed automatically as Class 4 as part of the Nexus Project

### Read Submission

Reads are submitted by the Shipper on the UMR file.

The file is subject to a number of validations to ensure it can be submitted which include, but not exclusive to:

- File format has been completed correctly
- SMP is part of Shipper portfolio
- Meter Serial Number (MSN) matches

- The read is not too old. A Read for Class 4 site is only valid for 25 Supply Point Business days beyond the read date. Once you are outside the read submission window reads can only be replaced (back to LiS) by the Shipper who had responsibility for the site at the date of the Meter Read. New reads cannot be slotted in between
- Energy tolerance checks
- The reads are not too frequent. A 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 Calendar days  
 For an Annual Read Meter at an LSP less than 14 Calendar days  
 For an Annual Read Meter at an SMP less than 25 Calendar days

➤ **Note -If the site has an AQ equal to or greater than 293,000 kWh it is mandatory for it to be monthly read.**

For energy tolerance checks the system calculates the energy from the read submitted back to the last actual read 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 (AKA 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.

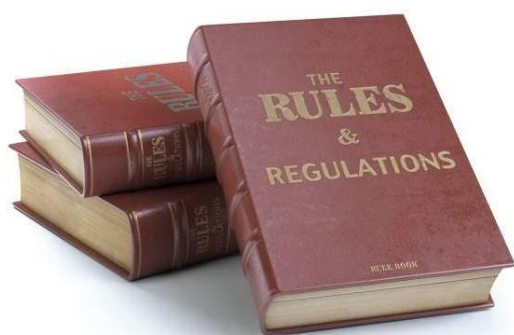
If the outer tolerance is breached, then the read is always rejected. See left for tolerance bands.

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

Tolerance Bands for Class 3& 4 sites

## Opening or Shipper Transfer Reads

As part of the supply point administration process (SPA) one of the key processes is a Shipper transfer. They ensure accuracy of invoicing from previous Shipper and New Shipper for which a read is required. Below are a number of rules surrounding the submission of this.



Transfer reads can be obtained in the 11 day read window of D-5 to D+5 but submitted between D and D+10 using read reason of O (Opening read).

Transfer Read will be estimated after D+10, if site is transferring from a Class 4. If transfer is from Class 1, 2 or 3 the read will be estimated on D either using D-7 or AQ/365.

If a read is submitted after the estimate 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 Change Reads

A Shipper may wish to change the Class of a site and this will primarily be done using the Nomination (NOM) and confirmation (CONF) process.

However, you can also do this using the SPC file. But are required to give a minimum of 5 and a maximum of 30 Business Days' notice to change Class using an SPC file.

➤ **Note - When using SPC file for Class change, only the Class change element can be changed.**

**If a Class 3 or 4 is being changed to Class 2 or 1 then the requested DMSOQ needs to be the equivalent of the current (Billing/SMP) NDM SOQ value.**

**You will then need to also provide DMSHQ value and this needs to be in ratio to the requested DMSOQ. This needs to be between 1:4 and 1:24.**

➤ **Note Once a site has changed Class it is not possible to change again within 2 months via an SPC file unless there has been a Supplier change.**

Where **AMR** is present the kit is **not changed** on a Class change only event.

For a change in Class an **actual read is required** to close out the outgoing Class and where an AMR is present, an actual read would be treated as a check read.

The read for the effective date of Class change will be subject to all read validations and will be validated to the previous check read where there is an AMR present.

## AQ

Annual Quantity is calculated for every SMP.

In addition to rolling AQ (also referred to as SMP AQ) Class 4 sites also have a Billing AQ (also referred to as formula year AQ). The Billing AQ was an industry requirement to provide a stable AQ for Class 3 & 4 sites with regards to invoicing processes whilst the Billing AQ and SOQ are used in the nomination and allocation processes.

### Billing AQ

For billing AQ, a snapshot of the previous year's AQ is taken on 1st December.

The billing AQ value is then updated using this snapshot on 1st April unless an AQ correction has been applied in the interim period.



Snapshot



Upload

## RGMA



**All looks the same here!**

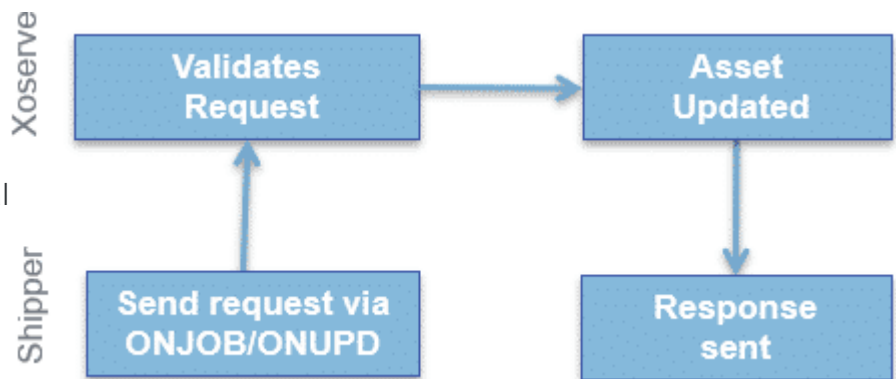
The Review of Gas Metering Arrangements (RGMA) is the process whereby device/asset information is maintained including Meter/Corrector Installations/exchanges /removals.

For standard sites the same files and are used for all RGMA activity.

### FYI

The RGMA process outlined on the right utilises one of two following files;

1. An ONJOB is a notification of any physical asset installation, removal and exchange.
2. An ONUPD is a notification of any cosmetic asset updates.



## Invoicing

The invoice process itself does not change dependent on Class however the information seen within the invoices and supporting information will differ.

All Transportation Invoices are all sent as a generic invoice file (.INV) via the IX Network, these include:

- Core Invoices: Capacity, Commodity and Amendments

- Scheduled Ancillary Invoices: Ad-hoc invoices issued on specific days. For example; Meter Asset, DNI, Compression and Failure to Supply Gas
- Unscheduled Ancillary Invoices: Ad-hoc invoices issued on request. For example; Request to Bill and Site Visit

In addition to the Transportation invoices there are Transmission invoices also known as Gemini Invoices.

CAZ - CORE CAPACITY INVOICE		
Charge	Charge Description	Comment
SCF	SEASONAL CAPACITY FAILURE CHARGE	SLSMP Only
871	UNIQUE - LDZ CAPACITY CHARGE	Non Standard Sites only
872	UNIQUE - CUST CAPACITY CHARGE	Non Standard Sites only
881	LDZ OPTIONAL TARIFF	Non Standard Sites only
884	ADMINISTRATION CHARGE - NTS	Non Standard Sites only
901	UNIQUE - EXIT CAPACITY LDZ ECN CHARGE	Non Standard Sites only
891	CSEPS - LDZ CAPACITY CHARGE	IGT / CSO Sites only
894	NDM CSEPS - ADMINISTRATION CHARGES	IGT / CSO Sites only
C04	CSEPS - EXIT CAPACITY LDZ ECN CHARGE	IGT / CSO Sites only
SRA	SOQ RATCHET CHARGE	Class1&2 sites only
883	DM ADMINISTRATION CHARGE LDZ	Class1&2 sites only
ZRA	CUSTOMER RATCHET CHARGE	Class1&2 sites only
CCA	CUSTOMER CAPACITY CHARGE	Standard Charge
CFI	CUSTOMER FIXED CHARGE	Standard Charge
ZCA	SUPPLY POINT CAPACITY CHARGE	Standard Charge
ECN	EXIT CAPACITY LDZ ECN CHARGE	Standard Charge

As stated, the invoice process does not change on the charge types seen. On the left is an example of all Commodity charge types which can be found on the Xoserve Comprehensive Invoices and Charge Types and is available on [Xoserve.com](https://www.xoserve.com).

The standard charges identified are for all classes then there are additional charges for Class 1 and 2 sites including admin and ratchet charges where applicable.

One of the big differences for Class 1 and 2 sites with Invoicing is the supporting information.

For core invoices Supporting Information file accompanying the .INV file displays the charge information at SMP level for Class 1 & 2 sites so you can see the charges per site rather than the Charge information for Class 3 & 4 sites which is only shown at an aggregated level.

For the core invoices there is an additional supporting information file providing charge information at SMP level for Class 3 & 4 sites which can be requested.

The file names are shown below:

Core Invoice	Invoice	Supporting Information 1 <sup>st</sup> Level	Supporting Information 2 <sup>nd</sup> Level
COM	Commodity	COM	COI
CAZ	Capacity	ZCS	CZI
AMS	Amendment	ASP	AML

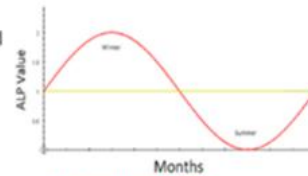
## Allocation and Nominating Gas

For Class 4 sites gas is nominated and allocated based on the calculation shown below:

## ALP

The Annual Load Profile (ALP) is the daily seasonal normal as a proportion of the average daily seasonal normal demand for the End User Category.

If sites used the same energy every day then this figure would always be 1, each EUC has its own ALP Profile



Example shown above.  
The total values must equal 365

## Rolling AQ

This is the Annual Quantity that could potentially be recalculated each month depending on read history.

$$SMP\ Demand = \frac{RollingAQ}{365} \times ALP \times (1 + (WCF \times DAF))$$

## WCF

The Weather Correction Factor (WCF) is calculated for each LDZ using the Composite Weather Variable (CWV) minus the Seasonal Normal Composite Weather Variable (SNCWV).



## DAF

The Daily Adjustment Factor (DAF) is the adjustment for weather sensitivity in the End User Category as a proportion of the seasonal normal.



## Reconciliation

Once reads (or a consumption adjustment (CA)) are received a variance period is created that shows the **exact amount used** by that particular SMP.

The reads/CA will create a reconciliation period, with associated month end, or specific data item change variance periods, i.e. Meter Read Frequency.

This value can then be **reconciled** against what has been invoiced previously, and the difference will be the charges seen on the Amendment Invoice.

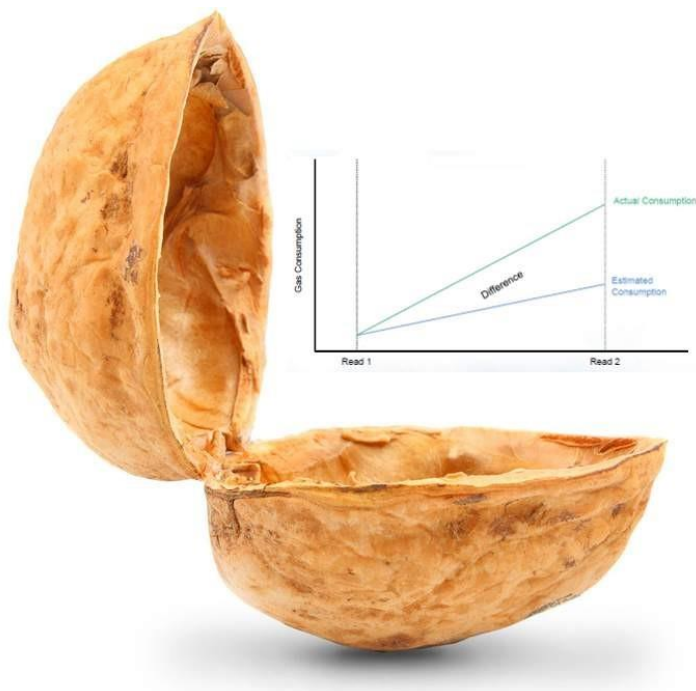
## In a nutshell

The difference between the previous energy calculated via the commodity invoice and the new energy calculated.

This value can be positive or negative (as more or less could have been consumed) which will appear as a debit or credit on the reconciliation charge code on the Amendments invoice.

Since 01/06/2017(Nexus) reconciliation for all Class 4 sites occurs at SMP level

(Prior to Nexus implementation only Large Supply Meter points were reconciled at Meter Point level, whereas Small Supply Meter points were reconciled under Reconciliation by Difference principles (RBD).



## Reasons for reconciliation



### Actual read (including Replacement read)

When an actual read is received for a Class 4 site (whereby someone actually gets to look at the meter) there is an opportunity to reconcile the gas used against what is previously been invoiced/recorded.



## Faults and Site Visits and Consumption Adjustments

Site visits and faults for Class 4 sites are recorded using the SFN file

Reads received during the fault period are suspended and are not subject to tolerance checks (just Submission Checks). The fault can be ended only by marking it in error or by carrying out asset exchange or by carrying out a site visit (where AMR is faulty).

All other validation will only be performed if the fault is removed due to the fault being recorded in error.

Consumption Adjustments for the fault period (or longer but including the fault period) are raised using CMS.