



Mod 0879R Review of current Supply Meter Point Classes (Class 1, 2, 3 and 4)

Characteristics of the Product Classes
1-4

Background

- Initial workgroup discussions took place on 25th July in Distribution Workgroup
- There was an action for the CDSP to gather the characteristics of existing Product Classes 1-4
- These slides have been created to support workgroup discussions
- The characteristics will help to list the Pros and Cons and understand the targets of the Classes

Summary Of Meter Reading And Settlement Processes

SMP Class – Description	Read Submission Timescales	Type of Read Submission	Read Submission Performance Obligation	Read Submission Deadline	Read Submission	Must Read Trigger	Check Read Obligation
1 – Daily Metered (over 58.6m kWh)	By 14:00 on GFD+1	Daily	100%	By 14.00am of Gas Flow Day (GFD) +1	Daily	N/A	12 Months
2 - Daily Metered (under 58.6m kWh)	By end of GFD+1	Daily	97.5% daily target	By end of day of GFD +1	Daily	4 consecutive months	12 Months
3 – Batched Daily Readings	Daily Reads in batches	All reads in batches to an agreed frequency submitted at least weekly	90% monthly target	Month + 10 calendar days	Daily	4 consecutive months	12 Months
4 – Periodic Readings	Periodic	Periodic reads to an agreed frequency	Monthly MRF: 90% per calendar month SSP Annual: 70% in 12-month period LSP Annual: 90% in 12-month period	25 calendar days following the read date	Monthly, if AQ is over 293,000 kWh, OR if an AMR device is fitted or a smart meter is active. Otherwise, you can choose between monthly or annually	Monthly MRF: 4 consecutive months Annual MRF: 24 consecutive months	12 Months for Monthly MRF / 24 Months for annual MRF

Summary Of Meter Reading And Settlement Processes

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SMP Class – Description	Day Ahead Gas Nomination	Process for initial Allocation	Process for Energy Balancing close-out
1 – Daily Metered (over 58.6m kWh)	Shipper nominates (singly or in aggregations)	Uses daily read	Uses daily read
2 - Daily Metered (under 58.6m kWh)	Shipper nominates (singly or in aggregations)	Estimated unless read received before 11.00 am	Uses daily read
3 – Batched Daily Readings	NG using the NDM algorithm $(AQ/365) \times ALPt \times (1 + [DAFt \times WCFt])$	Allocation processes	Allocation processes
4 – Periodic Readings	NG using the NDM Algorithm $(AQ/365) \times ALPt \times (1 + [DAFt \times WCFt])$	Allocation processes	Allocation processes

Class Criteria

- Allocation Requirements (Gemini activity)
- Ratchet charges
- Scheduling charges
Process for Energy
Balancing closeout
- Available site capacity
- UIG Allocation
- Annual Quantity (AQ)
- Type Of Read Submission
- Who Is Responsible For Providing Reads To The CDSP
- Reading Device
- Read Requirement
- Read Submission Time Scales

Annual Quantity (AQ)

(Slides 7 – 10)

AQ Overview

AQ is the amount of gas that a site is expected to use on average in one **year**.
An AQ is calculated based on actual meter reads.

The meter Class determines how the AQ is calculated:

- **Daily Metered sites (Class 1&2)**
 - AQ is the total consumption between two-meter readings 365 days apart
- **Non-Daily Metered sites (Class 3&4)**
 - AQ is based on the consumption between two actual meter readings.
 - The reads used to calculate an AQ should be between 9 and 36 months apart.

Estimated AQs can be adjusted if the AQ at site is **not deemed** to be correct.

The adjustment of an AQ is designed to be utilised as an **exception** process.

If an AQ amendment has been accepted, this sets a “backstop” date of the day on which the **new** AQ goes live for 9 months. This means, in 9 months the AQ will not change or recalculate, despite Actual Reads being submitted.

Other changes following an AQ correction

When an AQ correction is accepted there are further changes that take place

- The Formula Year AQ will change from the same date the new Rolling AQ goes live.
- If the new AQ causes the site to be assigned to a new End User Category, this will take effect on the same day.
- If the new AQ takes the site over the threshold to be read monthly, the meter read frequency will be automatically updated on the same day.

Annual Quantity Requirements Per Class

How is AQ calculated and the Read window for each Class

	SMP Class 1 & 2	SMP Class 3 & 4
Supply Offtake Quantity (SOQ)	<p>SOQ represents the reserved daily capacity in the Network for a site</p> <p>SOQ value is set and maintained by the registered gas Shipper</p>	<p>SOQ is derived from the AQ, by applying a factor set by the Demand Estimation process.</p> <p>Formula is $SOQ = AQ / \text{Peak load factors (PLF)} \times 365$</p>
Read window for Annual Quantity (AQ) Calculations	AQ calculation Reads can be received from 7th of previous month to the 6th of current month	AQ calculation Reads can be received from 11th of previous month to the 10th of current month
AQ notifications issued	All AQ notifications are issued by M-5 (5 business days prior to the end of the month)	All AQ notifications are issued by M-5 (5 business days prior to the end of the month)
AQ calculations Formula	AQMQ which is the sum of actual consumption representing a 12th month period ("AQ Metered Period").	<p>Minimum 9-month period and the Weather Adjusted Annual Load Profile (WAALP) is also applied</p> <p>WAALP is an adjustment is made which 'corrects' the consumption to represent what would have been used assuming seasonal normal weather conditions.</p> <p>AQ formula for Class 3 and 4 supply meter points $AQMQ \times 365 / (\sum (ALP_x(1 + (DAF_x WCF))))$</p>
AQ calculated on a rolling basis	Total consumption between two actual meter readings 365 days apart (without any weather correction)	<p>Formula Year AQ is used. The Formula Year AQ is a snapshot of the Rolling AQ on 1st December and applied on 1st April. This is then used for invoicing, unless a correction has been applied within that period.</p> <p>Two-meter readings the minimum 9 months apart and the maximum 3 years (weather corrected)</p>

Annual Quantities (AQ)



Up to 293,000kWh

- 6 monthly or Annually Read
- Unless functioning, Smart meter or AMR fitted at site, will be Monthly Read



Above 293,000kWh

- Mandatory Monthly Read
- Eligible for Winter Consumption review/WAR Band allocation



Above 732,000kWh

- Priority consumer status
- Emergency contacts requirements
- Non-Standard correction factor
- Meter read tolerances applied



Above 58.6 Million kWh

- Mandatory Class 1

Rolling AQ is used to validate for Class 3 & 4, but SOQ is used for Class 1 and 2

AQ

Do the Review Group have any questions or views on the current AQ criteria and process?

- Are there any current requirements that discourage the wide scale utilisation of DM
- Consideration of future net-zero settlement arrangements / requirements

Allocation and specific Class Charges

(Slides 12 – 18)

Allocation Requirements

- DM sites are time critical due to the impacts on Allocation and Energy Balancing
- System critical (for network operation activities)
- Process critical (for energy balancing & allocation processes)
- Shippers submit Nominations for Product Class 1 and 2 sites, where meter reads are submitted daily and used for allocation and Energy Balancing purpose
- For 'Daily Metered Time Critical' sites (Product Class 1) the reading loaded before 14:00 on GFD*+1 by the DMSP will be used for allocation purposes
- For 'Daily Metered **NOT** Time Critical' sites (Product Class 2) if a valid read is received before Close of GFD+1 this will be used for the initial allocation purposes

*GFD refers to the Gas Flow Day, which runs from 5am to 4:59am the following day.

Example: Meter readings for Gas Flow Day 1 October (for Class 1), must be submitted by 14:00 on 2 October.

Allocation continued (Gemini requirements)

Requirement	Class 1	Class 2	Class 3	Class 4
Meter point requirements within Gemini	Gemini holds Meter Points individually by contractual reference	Gemini holds Meter Points aggregated by Shipper/LDZ/Exit Zone	Gemini holds aggregated AQ only – by Shipper/LDZ/EUC/Exit Zone	Gemini holds aggregated AQ only – by Shipper/LDZ/EUC/Exit Zone
Shippers' nominations within Gemini	Shipper nominates (singly)	Shipper nominates (in aggregations)	Uses the NDM algorithm	Uses the NDM algorithm
Shippers' allocations within Gemini	Uses daily read (or estimate based on D-7 consumption)	Uses daily read (or estimate based on D-7 consumption)	Uses the NDM algorithm	Uses the NDM algorithm
UIG Allocation	Receive share of UIG using Weighting Factors for Class and EUC	Receive share of UIG using Weighting Factors for Class and EUC	Receive share of UIG using Weighting Factors for Class and EUC	Receive share of UIG using Weighting Factors for Class and EUC
Scheduling charges	Apply to Class 1	Apply to Class 2	Do not apply	Do not apply

Scheduling Charges

What are scheduling changes?

	Class 1 & 2
What scheduling charges apply	<p>A shipper must Nominate a location and quantity for where gas is to be input into or off-taken from the NTS.</p> <p>Once measured, the actual quantity which has flowed is compared to the nomination, any differences may incur a charge</p>
Scheduling charges window	<p>D+5 - Output Allocations Close Out</p> <p>M+15 - Input Allocations Close Out (CVAs update Gemini with actual Shipper Allocations at the Sub Terminal)</p> <p>Once Inputs have Closed Out after M+15 a Shipper can view their final energy imbalance position on Gemini (Shipper Energy Imbalance Details)</p>

Scheduling Charges Continued

	Class 1 & 2
<p>Schedule charging calculation</p>	<p>ESC (Entry Scheduling) for differential which is incurred at a Terminal. Nominations and Allocations at Sub Terminal level are first aggregated up to Terminal level before applying tolerances.</p> <p>EXS (Exit Scheduling) for differential which is incurred during output at a DMC site</p> <p>DXS (DMA Exit Scheduling) for differential which is incurred during output at a DMA site</p> <p>DMA Firm Nominations and Allocations at Exit Zone level are first aggregated up to LDZ level before applying tolerances.</p> <p><u>Scheduling charge:</u> Calculation: Nominations – actual allocations = imbalance x rate</p>
<p>Scheduling Tolerances</p>	<p>ESC 3% Nom = dead band 5% Nom = tier 1 = 2% SAP Rest = tier 2 = 5% SAP</p> <p>EXS (DMC N & S) 25% Nom = dead band Rest = 1% SAP</p> <p>EXS (DMC L) 3% Nom = dead band Rest = 1% SAP</p> <p>DXS (DMA F) 20% Nom = dead band Rest = 1% SAP</p>

Ratchet and Capacity

(High level overview of requirements for each Class)

	Class 1	Class 2	Class 3	Class 4
Ratchet Charges apply	Yes	Yes	N/A	N/A
Ratchet window	1 st October till 31 st May	1 st October till 31 st May	N/A	N/A
Read type	Actual meter read	Actual Meter read	N/A	N/A
Ratchet calculation	Calculated by: UDQO (the energy used each day that exceeds the DMSOQ) x double the sum of: Applicable Annual Rate of the LDZ Capacity Charge (ZCA) Applicable Annual Rate of the Capacity Variable Component (if any) of the Customer Charge (CCA)	A Class 2 Ratchet Charge is determined by calculating the daily ratchet charge by the number of days applicable	N/A	N/A
Included on Capacity invoice each month	All sites with a nominated shipper	All sites with a nominated shipper	All sites with a nominated shipper	All sites with a nominated shipper
Capacity invoice Charges	SOQ utilising the nominated DMSOQ	SOQ utilising the nominated DMSOQ	Billing SOQ (formula year)	Billing SOQ (formula year)

Ratchet Soft Landing

If a supply changes from Class 3 & 4 to Class 1 & 2 there is a Soft-Landing phase of 12 months with some exclusions:

- The Supply Point is not a Seasonal Large Supply Point;
- 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

From the SSD and ending on the earlier of the below:

- The expiry of a period of 12 month or
- The date (if any) when the DM Supply Point Capacity becomes less than the NDM Supply Point Capacity or
- The Supply Point Registration Date of any subsequent Supply Point Registration pursuant to which a User other than the Existing User becomes the Registered User
- The Registered User shall not be liable for any Supply Point Ratchet Charge in respect of the Supply Point

Allocation and specific Class Charges

- Do the Review Group have any questions or views on the current allocation logic and specific Class charges. For example:
 - Nomination logic
 - Scheduling charges
 - Ratchet charges (including soft-landing)

Read Submission criteria

(Slides 20 – 25)

Read Submission Time Scales

- **Read submission depends on the following list, including Class:**
 - The read frequency.
 - Read submission time scales
 - Read obligation(Reporting to PAC)
 - Whose obligation it is to provide the read to the CDSP
 - Reading Device requirements
 - Type of read submission

Read Submission Comparison

Product Class	Frequency Of Reads	Read Submission Time Scales	Read Requirement (PAFA)	Whose Obligation It Is To Provide The Read To The CDSP	Reading Device	File Type
Class 1 DM	Daily	By 14:00 of Gas Flow Day (GFD) +1	100%	DMSP submit to the CDSP	Daily Read Equipment attached	DLC File Submission
Class 2 DM	Daily	By End of day GFD+1	97.5%	Users are responsible, submitted by way of UK Link Communication	Automatic Meter Reading (AMR) is usually attached but not mandatory	UDR file
Class 3 NDM	Periodically in batches, to a pre-notified frequency. (Weekly, Fortnightly or Monthly)	Received by M+10 following the date of the read	90%	Users are responsible, submitted by way of UK Link Communication	No mandatory device (Original development through Project Nexus this was thought to be for Smart Meters)	UBR file
Class 4 NDM	Periodic Reads	Annually if the AQ is below 293,000 kWh Monthly if AQ is above 293,000 kWh except for Smart/AMR which MUST be monthly (Periodic Reads)	90%	Users are responsible, submitted by way of UK Link Communication	N/A	UMR File

Shipper Transfer Reads

Transfer reads requirements and windows dependent on class

Product Class	When to take the read	Deadline for submission	Transfer Read
Class 1	D - On Registration day	5 calendar days after D	Daily actual meter read on date of transfer. The read will be notified to both the outgoing and incoming shippers via MDR files
Class 2	D - On Registration day	5 calendar days after D	If the Shipper Transfer read is not provided, then an estimate Read will be calculated for the transfer date and issued to the Shipper immediately
Class 3	D - On Registration day	10 Business days after D	Transfer reads will be estimated after D+10. Transfer reads will be accepted for the date of transfer only and can be sent as an individual read or within a batch
Class 4	D - On Registration day	10 Business days after D	Must be for the effective transfer date and received within D+10 business days or an estimate will be generated

Frequency And Age Of Submission For Class 3 and 4

Product Class	Expected Frequency Of Read Submission	Minimum Gap Since Last Accepted Read	Maximum Age Of Reading
Class 3 AQ >73,200	Daily in batches, expected to be submitted weekly	1 calendar day	Month + 10 calendar days
Class 3 AQ <73,200	Daily in batches, expected to be submitted weekly	1 calendar day	10 calendar days
Class 4 Monthly	Monthly	7 calendar day	25 business days
Class 4 AQ >73,200	Annual	14 calendar day	25 business days
Class 4 AQ <73,200	Annual	25 calendar day	25 business days

If a meter reading is sent in too soon, it **will** be rejected.

If the age of a reading is outside the agreed limit, it **will** be rejected

Check Reads

Class 1 - The CDSP, in the case of a Data-logged Class 1 Supply Meter or the Transporter in the case of a Telemetered Class 1 Supply Meter shall arrange that a Check Read is carried out with a Read Date which is not more than 12 Months.

Visit/Check readings are submitted annually via the Xoserve Services Portal. Class 1 Site Visit/Check Reads are submitted by the DMSP (Daily Metered Service Provider), whilst Class 2 are submitted by the Shipper

Class 2, 3 and 4 - The Registered User, in the case of a Class 2, 3 or 4 Supply Meter shall arrange that a Check Read is carried out with a Read Date which is not more than 12 Months or 24 months Annual Read Meters

Details of a Site Visit must be submitted by the Shipper no later than the 10th day of the following month, via the .SFN file.

Read Submission

- Do the Review Group have any questions or views on the current Read Submission criteria for each class. For example:
 - Read frequency
 - Submission deadlines
 - Read obligation
 - Are there any current requirements that discourage the wide scale utilisation of DM
 - Consideration of future net-zero settlement arrangements / requirements

Links and Reference Documents

	eLearning's	Xoserve Help Centre	UNC TPD Manual
AQ	Annual Quantity (AQ) - Overview Rise 360 (articulate.com) AQ Correction Reasons and Associated Codes - Annual Quantity (AQ) Rise 360 (articulate.com)	Annual Quantity (AQ) (xoserve.com)	Annual Quantity Section H 3.2 6875478.06 (gasgovernance.co.uk) Section TPD G 2.3 6875452.06 (gasgovernance.co.uk)
Meter Reads	Meter Reads - Overview Rise 360 (articulate.com) Must Read Process - Overview Rise 360 (articulate.com)	Submitting Reads (xoserve.com)	Meter Reads Section M5 6878524.06 (gasgovernance.co.uk) Read obligations Section C 2.2 6875404.06 (gasgovernance.co.uk)
Class overview	Class - Overview Rise 360 (articulate.com)		
UIG	Unidentified Gas (UIG) - Overview Rise 360 (articulate.com)		
Ratchets			Ratchets UNC Regs Section B 4.7 6923366.08 (gasgovernance.co.uk)
Scheduling		Nominations and Allocations (xoserve.com) Energy balancing and neutrality (xoserve.com)	Scheduling charges UNC regs F section 3.3 6875458.06 (gasgovernance.co.uk)
UK link manual UKLBD2 - UK Link IS Service v15L.docx (sharepoint.com)		Modification Reference 0831/A - Allocation of LDZ UIG to Shippers Based on a Straight Throughput Method Joint Office of Gas Transporters (gasgovernance.co.uk)	