Invoicing Discovery Days

October 2021

Provided by:

Agenda

Monday 18th October 10-12pm

1. Introduction to Invoicing

- Introduction and Purpose of Document
- Transportation: National Transmission System
- Infrastructure Map
- Invoicing Principles
- Introduction to Charges and Invoices
- Charge Concepts

2. Invoice Files Overview

- Introduction
- File Format Principles: Transportation Invoices
- File Format Principles: NTS Gemini Invoices
- Generic Invoice File (.INV) Hierarchy
- Supporting Information File Hierarchy

1. Introduction to Invoicing

Provided by:

Introduction

Xoserve are responsible for the delivery of Transportation Billing on behalf of Network Operators (NWO), Energy Balancing invoicing and Credit & Risk on behalf of National Grid.

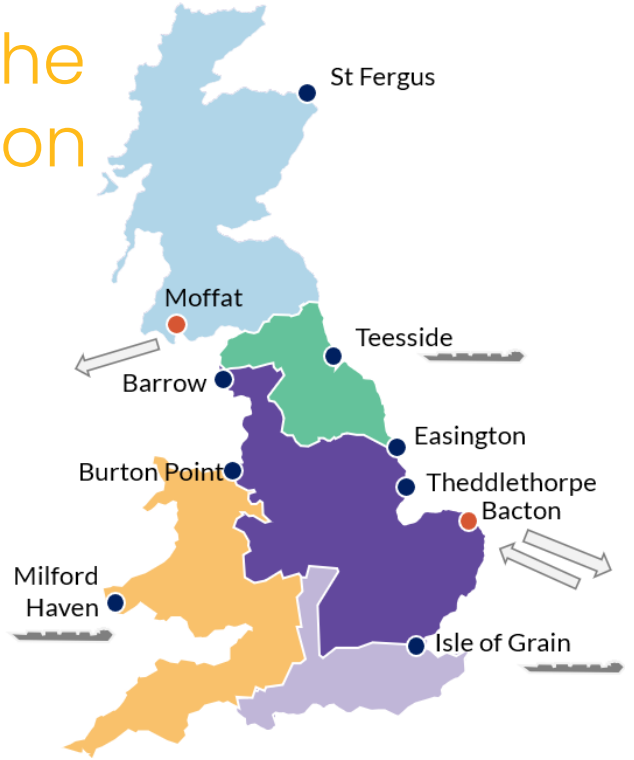
Xoserve ensure that Shippers and Traders who use the Transporter's networks are charged in accordance with the Uniform Network Code (UNC) as per the NWO Charging Statements.

The purpose of this document is to provide an overview of:

- Invoicing principles
- Invoice and supporting information file formats
- Each invoice and the associated charge types

1.2 Transportation: The National Transmission System

- Producers and importers deliver gas to the UK via:
  - 7 gas reception terminals
  - 3 Liquefied Natural Gas (LNG) importation terminals
  - 3 Interconnectors connecting Great Britain via undersea pipes with Belgium, Netherlands and Ireland
- Gas is treated and enters the National Transmission System (NTS) which is a vast network containing approximately 7,660km of high pressure pipe
- The NTS is owned and operated by National Grid, under the direction of the UNC and scrutiny of Ofgem
- Gas is off taken directly from the NTS or transported to the 13 Local Distribution Zones (LDZs) where it enters a Distribution Network (DN) from which end consumers are supplied
- There are 8 regional DNs controlled by 5 Distribution Network Operators (DNO) as shown on the map:



Distribution Network Operators:

Southern Gas Networks	GT4
Wales & West Utilities	GT5
Northern Gas Networks	GT3
Cadent	TGT
Scotland Gas Networks	GT2

Terminal

Terminal / Interconnector

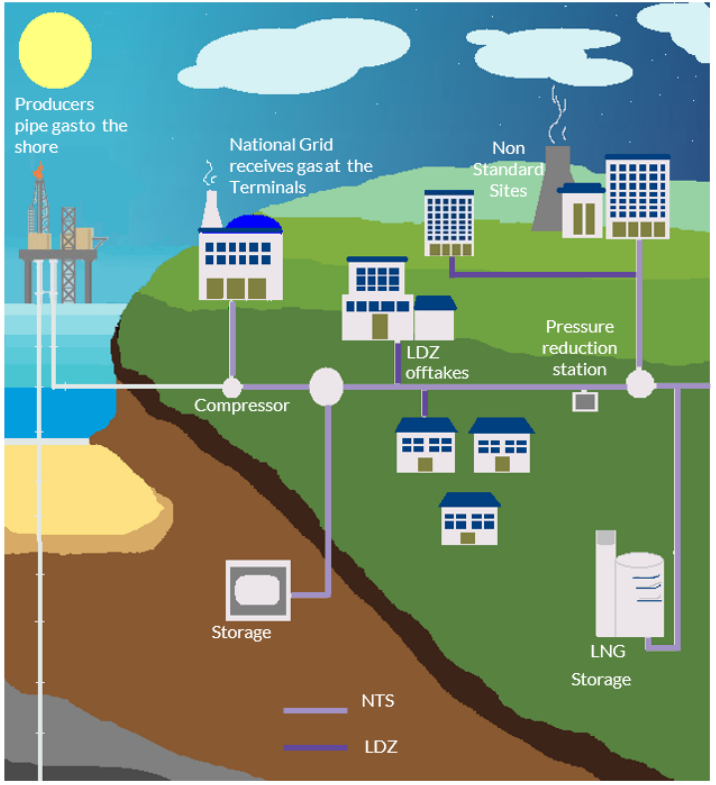
https://www.nationalgrid.com/uk/about-grid/our-role-industry/about-gas

Network information

Network Name	Network Code	Org ID
Southern Gas Networks Plc	DNL	10002811
Northern Gas Networks Limited	DNN	10002809
Cadent Gas Limited	DNR	10002808
Scotland Gas Networks Plc	DNS	10002812
Wales & West Utilities Ltd	DNW	10002810
Scotland Gas Networks Plc	GT2	10001724
Northern Gas Networks Limited	GT3	10001727
Southern Gas Networks Plc	GT4	10001726
Wales & West Utilities Ltd	GT5	10001723
Southern Gas Networks Plc	SPW	10001736
Wales & West Utilities Limited	SPX	10001734
Northern Gas Networks Limited	SPY	10001735
Scotland Gas Networks Plc	SPZ	10001737
Cadent Gas Limited	TGT	800
National Grid Gas Plc	NTS	10008750

Infrastructure Map

- The map summarises (at a very high level) the UK gas transportation infrastructure
- The primary users of the National Transmission System (NTS) are Shippers transporting gas from terminals to the Local Distribution Networks (LDZs) in order to provide suppliers and end consumers with gas
- There are a number of NTS connections which offtake gas directly from the NTS, these are typically large Daily Metered (DM) sites
- Use of the NTS and LDZ is not free and charges are applied for different sections of the network, all of which have multiple dependencies



Invoicing Principles

Gas is transported from the terminal through the NTS and LDZ network to the supply meter point. There are charges which relate to the various aspects of the supply and delivery of gas.

Invoices can broadly be split into two categories;

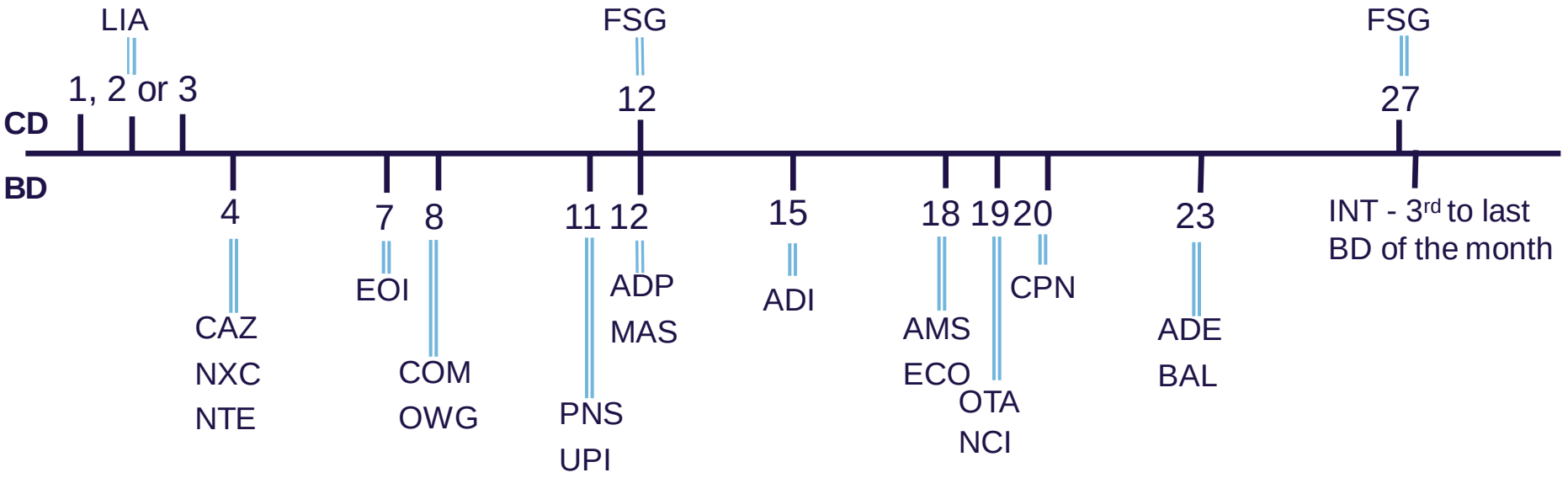
- NTS Gemini Invoices – Charges calculated directly in Gemini
- Transportation Invoices – Charges calculated directly in UK Link

Invoices are generated based upon scheduled invoice dates which can be viewed via the Xoserve Billing Calendar, which is published annually on Xoserve.com

Further details of the invoices and charges are outlined in section 3.

Invoicing Timeline

The timeline below indicates which Calendar Day (CD) or Business Day (BD) the scheduled invoices are issued. This pattern is repeated monthly.



Refer to section 3.2 for invoice short codes definitions

Introduction to Charges and Invoices

Transportation Invoices are all sent as a generic invoice file (.INV) via the IX Network.

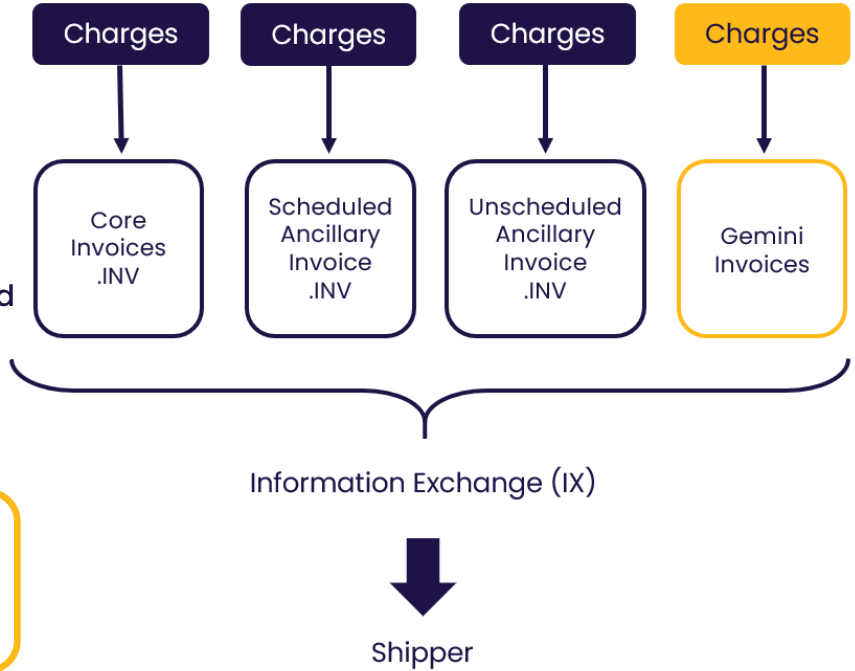
Transportation Invoices are categorised as:

Core Invoices: The three core invoices are; LDZ 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

Gemini Invoices (e.g. Energy Balancing) are sent via the IX and do not follow a generic format. There are 7 types of Gemini Invoice and the invoices Shippers receive depend upon their activities and portfolio.



Invoice files are explained in further detail in Section 2

Charge Concepts

- Invoices are made up of numerous charges, calculated by various factors which differ from charge type to charge type
- All rates are assessed annually by the NWOs and published in the Transportation Charges Statements on www.gasgovernance.co.uk
- The complete list of invoice types mapped to charge types can be found in the Comprehensive Invoices and Charge Types and is available **UKLink Documentation Library**
- The table to the right is an example of all charges which can appear on the 'COM –Core Commodity Invoice'
  - Some charges will always be included
  - Other charges are only included if applicable to the site configuration and the Shipper's portfolio (i.e. Domestic only or includes IGT, Non Standard or Commercial sites)

Charge Type	Charge Type Description	Invoice Type
COM - CORE COMMODITY INVOICE		
877	UNIQUE-NTS EXIT Commodity	COM
87T	UNIQUE-NTS TO EXIT COMMODITY	COM
87S	UNIQUE-NTS SO EXIT COMMODITY	COM
878	UNIQUE - LDZ COMMODITY	COM
880	UNIQUE NTS COMMODITY SHORTHAUL	COM
892	CSEPS- NTS EXIT COMM CHARGE	COM
89T	CSEPS- NTS TO EXIT COMM CHARGE	COM
89S	CSEPS- NTS SO EXIT COMM CHARGE	COM
893	CSEPS - LDZ COMMODTY CHARGE	COM
NCO	NTS EXIT COMMODITY CHARGE	COM
NCS	NTS SO EXIT COMMODITY CHARGE	COM
NCT	NTS TO EXIT COMMODITY CHARGE	COM
ZCO	LDZ COMMODITY CHARGE	COM
LEC	LDZ SYSTEM ENTRY COMMODITY CHARGE	COM
LEA	LDZ SYSTEM ENTRY COMMODITY CHARGE ADJ	COM

Charges for each invoice are explained in further detail in Section 2

2. Invoice File Overview

Provided by:

Introduction

Invoices are issued to Shippers as electronic files over the IX network. The files are formatted as comma separated values (CSV) using industry agreed formats.

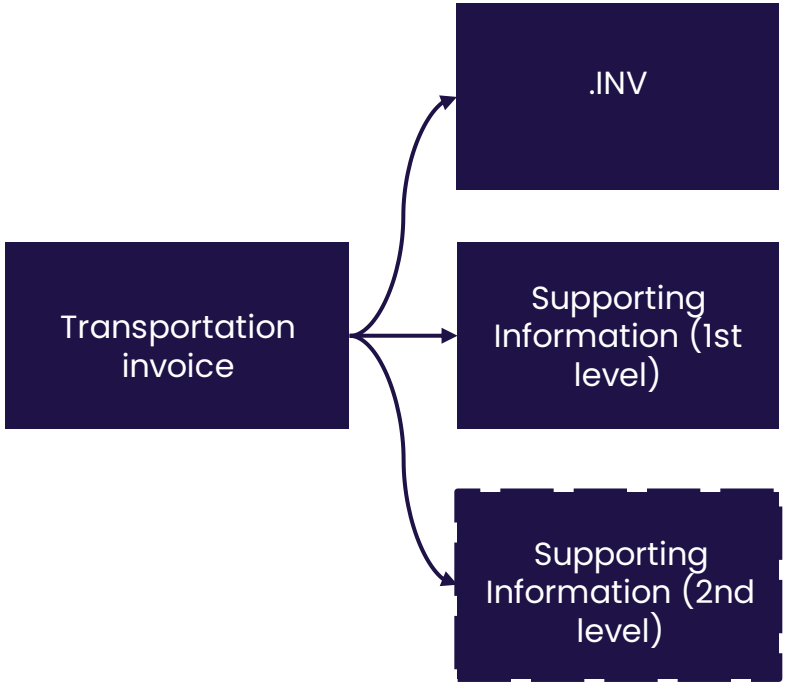
Additional files containing lower level detail are also provided to support the invoices. These are known as supporting information files.

Each invoice and supporting information file follows an agreed file hierarchy, with specific file records which align to an agreed file format.

The Xoserve Comprehensive Invoices and Charge Types document defines which Supporting Information files are available against each Invoice Type.

The following section outlines the invoice and supporting information files in further detail.

File Format Principles – Transportation Invoices

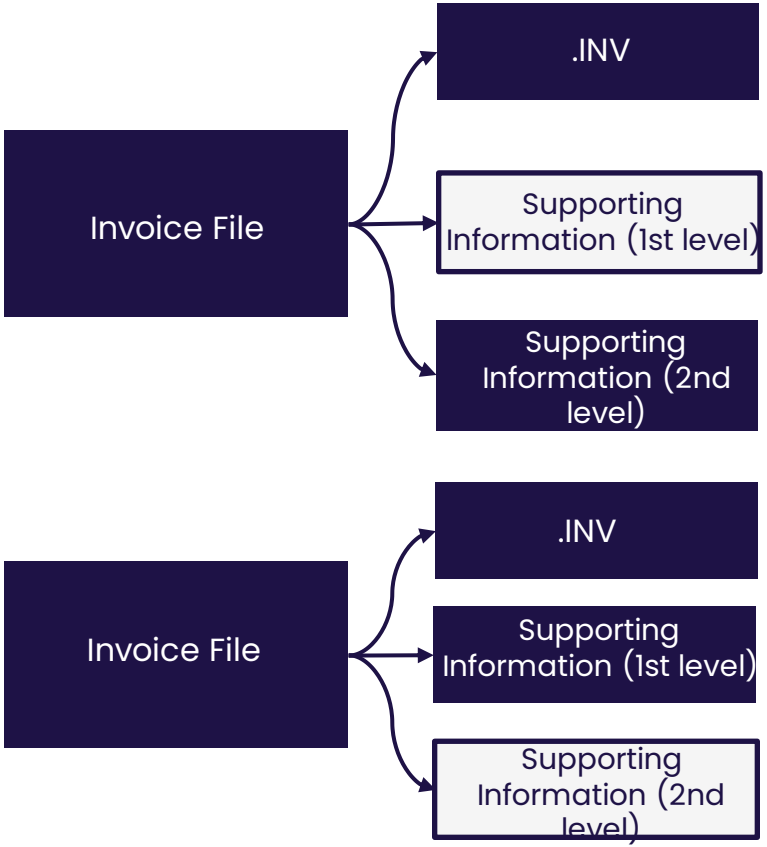


- The invoice file contains charge types and charge values
- Generic Invoice file .INV for all invoice types

- Supporting Information file accompanying the .INV
- Charge information at SMP level for Class 1 & 2 sites
- Charge information for Class 3 & 4 sites at aggregated level (Core invoices only)

- Only applicable to Core invoices
- Additional Supporting Information providing charge information at SMP level for Class 3 & 4 sites

Supporting Information Files



Thin Files are the 1st level of Supporting Information

- Mandatory to accompany Core Invoices (CAZ, COM and AMS)
- Sent with some Ancillary Invoices
- Automatically sent in a separate file and on same day as the .INV
- Delivered via the IX

Thick Files are the 2nd level of Supporting Information

- Not mandatory and only available for Core Invoices (CAZ, COM and AMS)
- Thick Files are delivered via the IX at a later date following invoice generation within agreed timescales
- Available on Shipper request by completing the Request for Additional Supporting Information Template and files will be sent for future dates. Please note, retrospective requests for data is not available as standard.
- Exceptional request may be discussed with the Xoserve Commercial Team via commercial.enquiries@xoserve.com (please include exact details of information required)

Supporting Information Level 1 and 2

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

File Examples for LDZ Transportation (CAZ)

This example demonstrates how the two levels of Supporting Information relate back to the Invoice. A similar structure can be applied to the other Core Invoices (COM and AMS).

File	File description	Comments
 Microsoft Excel ro-Enabled Works	.INV Invoice File for CAZ *(csv file)*	Invoices are generated per Shipper at Network level. In this example, it is for a single Shipper ("SHP" in this file but this would be the actual Shipper Short Code) for the GT2 Network.
 SHP01.PN000002	ZCS Supporting Level 1 *(csv file has already been delimited in this example)*	Supporting information for all Networks "SHP" operates in. In this example, it covers all 5 Networks. Class 1 & 2 – SMP level (n/a as Shipper only has a DOM portfolio) Class 3 & 4 – Aggregated from SMP charges
 SHP01.PN000333	CZI Supporting Level 2 *(csv file has already been delimited in this example)*	Additional Supporting Information file that is available for Shippers to view information at the SMP level for Class 3 & 4 Reminder: This information is available upon request only.

The files are based on real data but information has been masked for Data Protection purposes and naming convention will always be in a 5.8.3 format

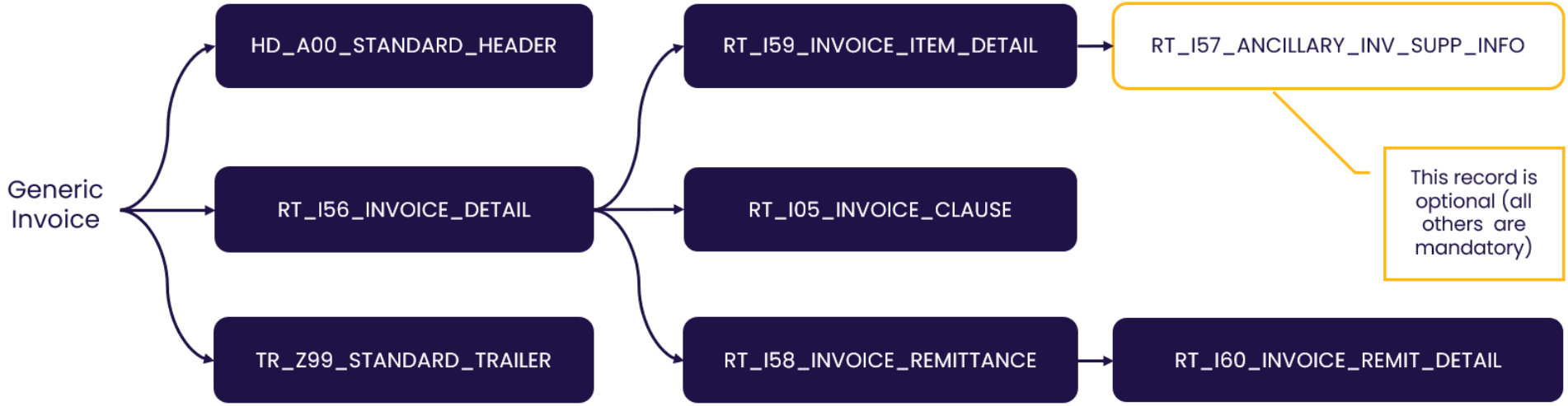
File Format Principles – NTS Gemini Invoices

- Gemini invoices do not follow a generic invoice file format as the Transportation Invoices do
- Each Gemini invoice has their own industry agreed file format and hierarchy
- Supporting Information is embedded into the invoice file, so there is not a separate supporting information file
- For example, the Energy Balancing Invoice (.IDB) includes the Supporting Information within the same CSV invoice file
- Gemini File Formats can be found at
  - UK Link Documentation Library > UK Link Interface Documents > 3b. User Interface Documents > Gemini > Gemini File Formats

To gain access to the Xoserve site where the file formats are held, please complete and submit a Secure Site Access Request Form. You will need an Office 365 account as documents are stored on SharePoint Online.

Generic Invoice File (.INV) Hierarchy

The hierarchy is formatted into three levels. Each invoice file is made up of 7 mandatory records and 1 optional record. For support with reading the files, please refer to the INV_Generic_Invoice File Format document (see next slide for location on Xoserve.com).

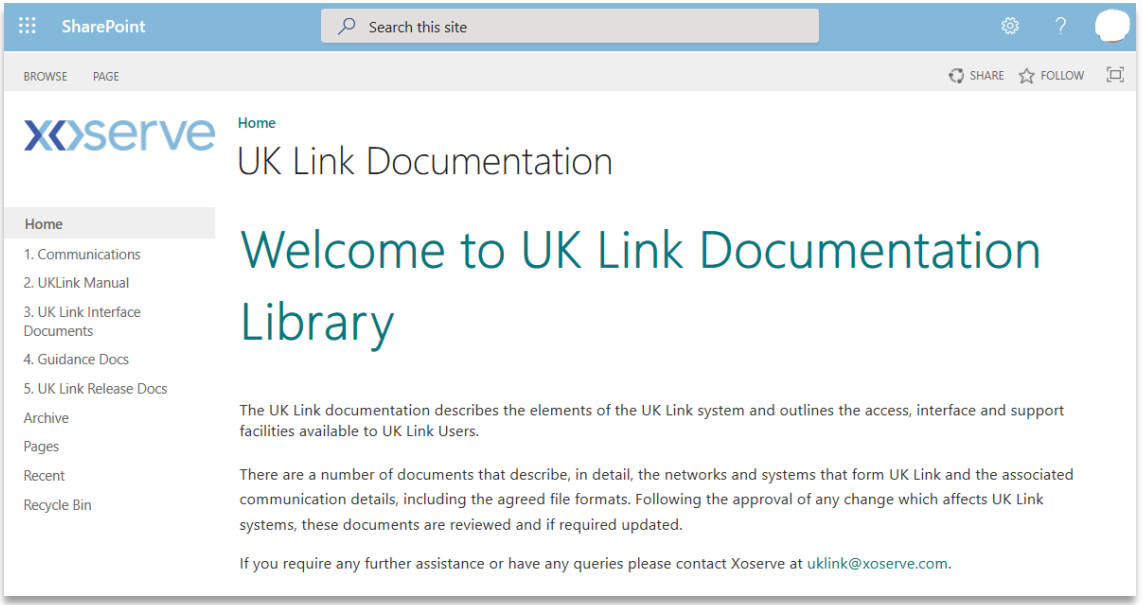


.INV File Hierarchy and File Format

The UK Link Documentation Library on Xoserve.com provides the .INV file format hierarchy and file format

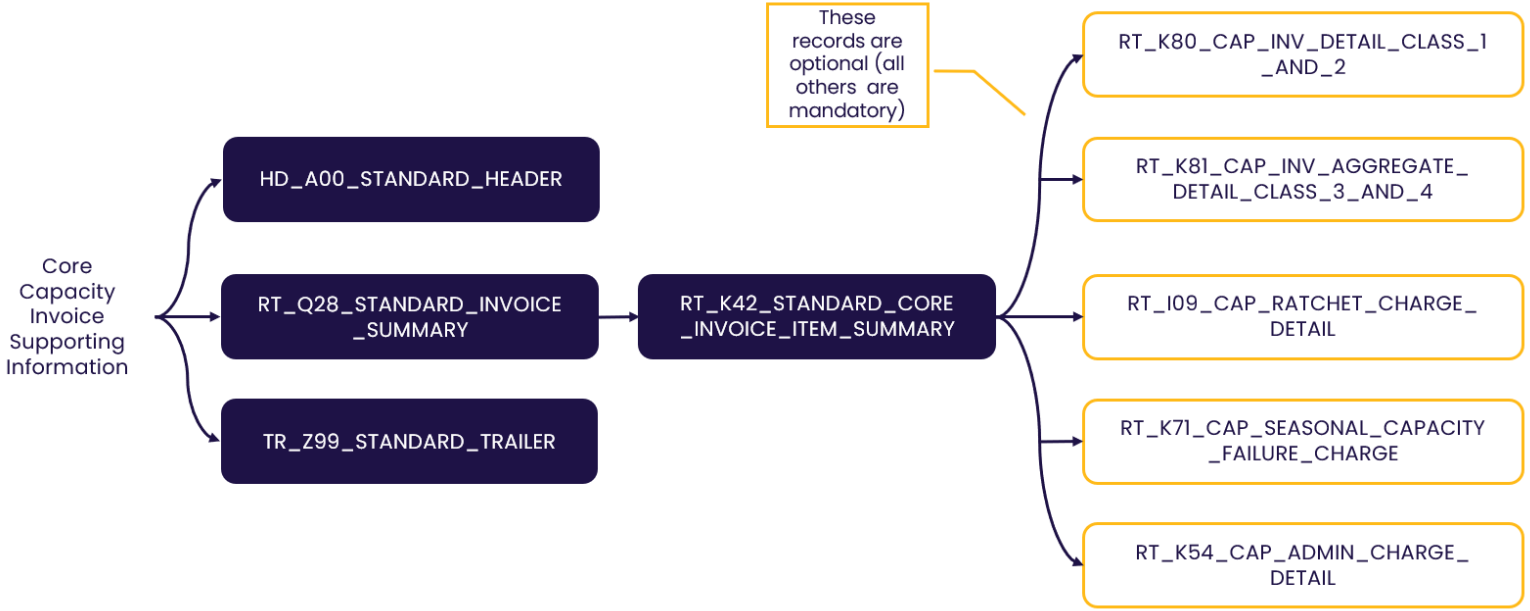
File Hierarchy can be found here
UK Link Documentation Library > UK Link Interface Documents > 3b. User Interface Documents > Shipper File Hierarchies > INV File Hierarchy

File Format can be found here
UK Link Documentation Library > UK Link Interface Documents > 3b. User Interface Documents > Shipper File Formats > INV_Generic_Invoice



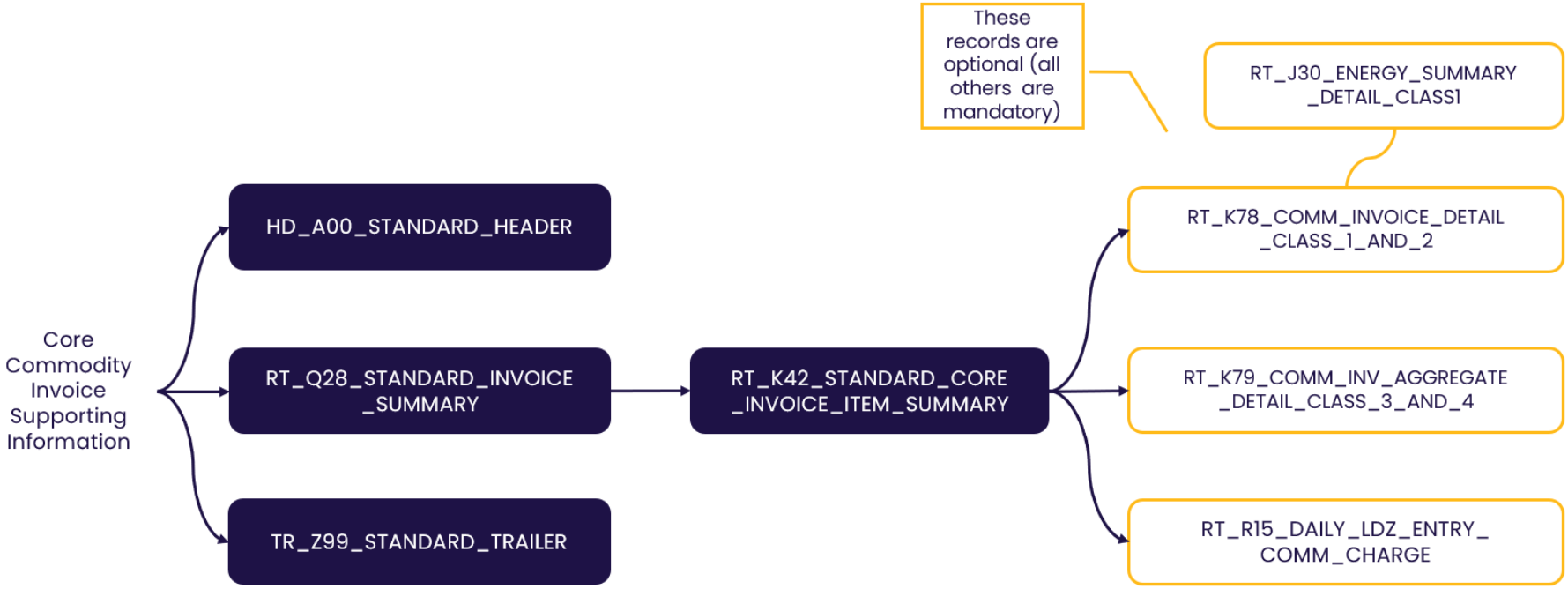
Supporting Information File Hierarchy (COM)

As per the .INV file, supporting information files follow a hierarchy. As an example, the Core Commodity Invoice Supporting Information (.COM) is shown below and is formatted into 4 levels. For support with reading the files, please refer to the relevant File Format document



Supporting Information File Hierarchy (CAZ)

As per the .INV file, supporting information files follow a hierarchy. As an example, the Capacity Invoice Supporting Information (.ZCS) is shown below and is formatted into 3 levels. For support with reading the files, please refer to the relevant File Format document.

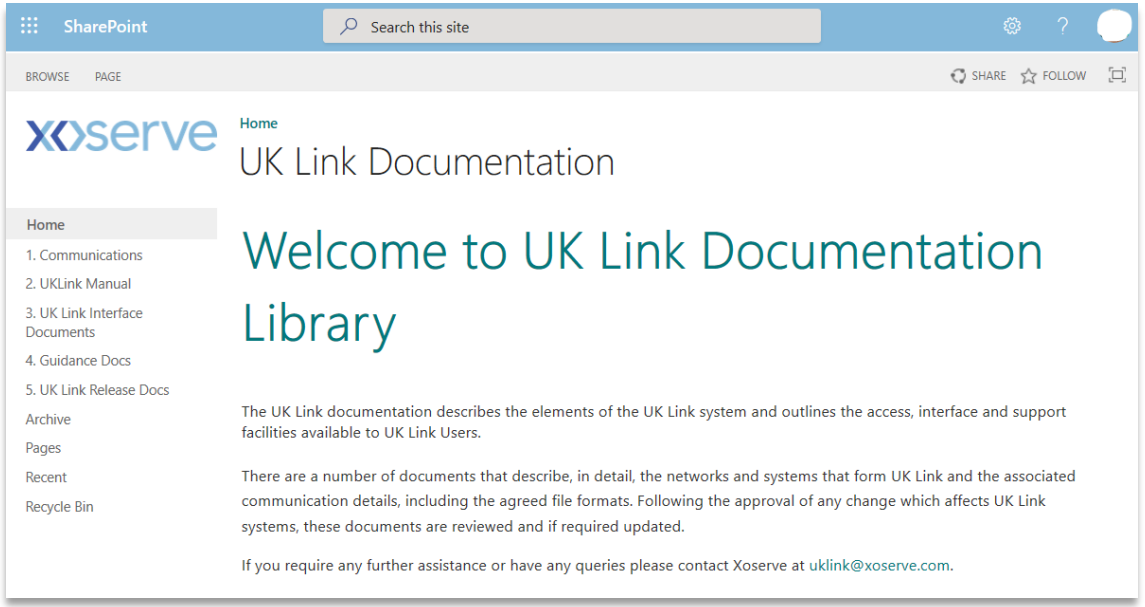


Supporting Information File Hierarchies and File Formats

The UK Link Documentation Library on Xoserve.com provides the file format hierarchies and file formats for each type of Supporting Information

File Hierarchies can be found here
UK Link Documentation Library > UK Link Interface Documents > 3b. User Interface Documents > Shipper > File Hierarchies (then look for the relevant Supporting Information File)

File Formats can be found here
UK Link Documentation Library > UK Link Interface Documents > 3b. User Interface Documents > Shipper > File Formats (then look for the relevant Supporting Information File)



3. Invoices and Charges

Provided by:

Introduction

- As previously stated Invoices can be separated into 3 categories; Core, Ancillary Scheduled and Ancillary Unscheduled.
- The majority of charges are VAT applicable, some are VAT exempt and others have VAT applied at 0%. As a general rule, the prevailing VAT rate is charged for Transportation Charges (TPN) and at 0% for Energy Charges (ENG).
- Whilst the charges are VAT applicable some Shippers are not registered in the UK and therefore will pay the relevant taxes appropriate to their country of registration
- The majority of the Invoices are scheduled and released in line with Section S of Uniform Network Code in a controlled and predictable manner.

Introduction

The Invoice Schedule is shared with the industry on a published billing calendar.

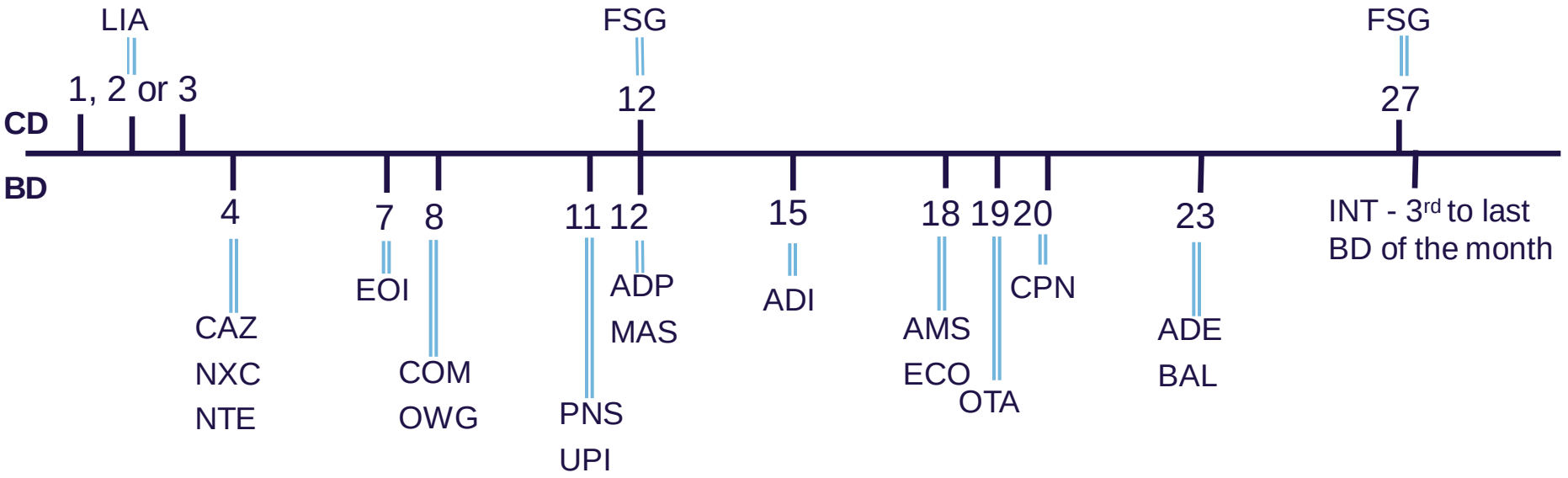
The calendar details the invoices due to be issued within the month, along with the payment due date.

Invoices are scheduled on a specific calendar or business day.

The Billing Calendar can be found here.

Invoicing Timeline

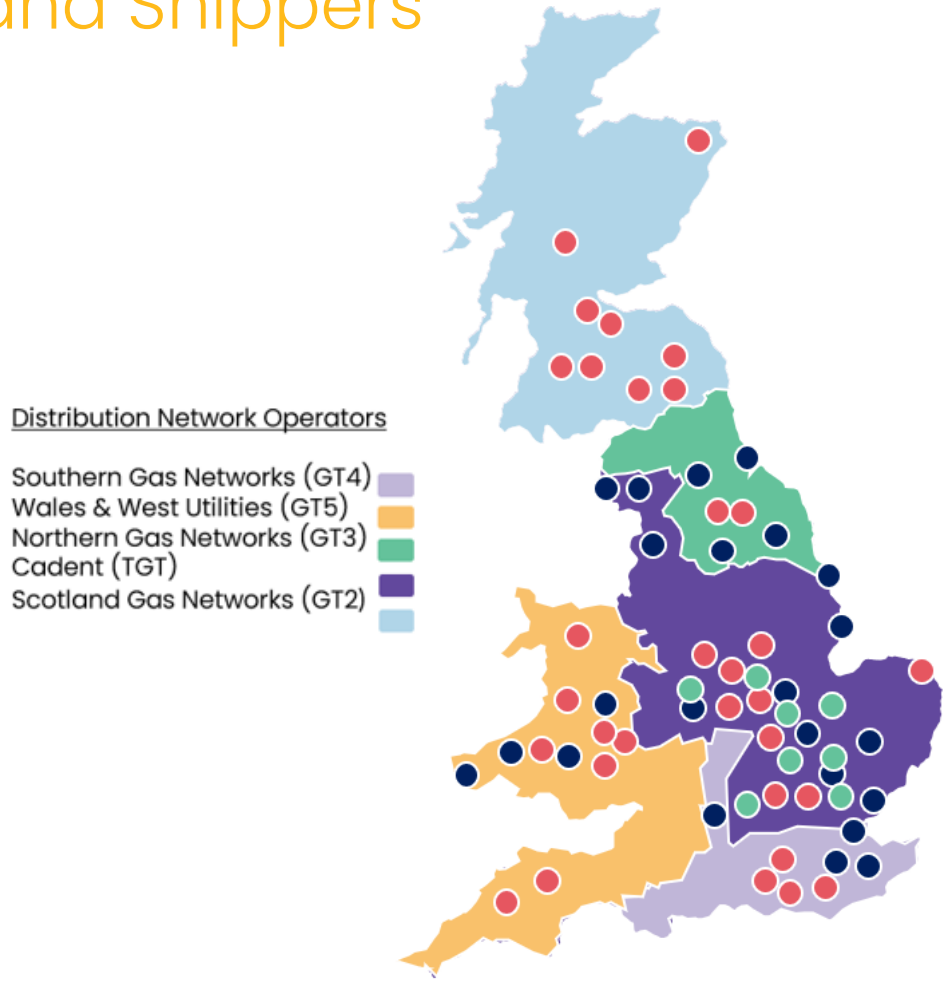
The timeline below indicates which Calendar Day (CD) or Business Day (BD) the scheduled invoices are issued. This pattern is repeated monthly.



Refer to section 3.2 for invoice short codes definitions

Networks and Shippers

- Core Invoices (and others) are created at Shipper/Network level and potentially each Shipper could receive multiple each invoice type each month
- The map shows the different geographical Network locations, along with an example of potential sites for 3 Shippers (circles)
- A Shipper would only receive a core invoice if they had a portfolio with sites in a specific network.
- They would also receive a invoice for NTS charges.



Calculations Overview

Invoices are made up of various charges and at a very high level charges can be split into two groups, those driven by usage and those driven by events.

Therefore, the charge is calculated by either:

Billing Quantity x Rate

OR

Occurrence x Rate

The billing quantity is calculated in kwh as a quantity and can be calculated using the Supply Offtake Quantity (SOQ=The maximum daily consumption for a supply point) x number of days in that billing period, or the billing quantity is determined as an energy by Gemini and invoiced accordingly. Energy can be calculated from the meter read shown next.

Calculating energy from reads

To calculate energy usage you require two reads (volume) and work out the difference. Then convert this volume to energy (kwh) following the below steps.

1. If imperial covert to metric by multiplying the units by 2.83*
2. If meter reading multiply by volume correction factor (e.g.1.02264)**
3. Multiply by calorific value (e.g.40.0)***
4. Divide by kwh conversion factor 3.6

*If your imperial meter measures in cubic feet rather than hundreds of cubic feet, you'll need to use 0.0283 for step 2 rather than 2.83. If it uses thousands of cubic feet, you'll need to use 28.3 instead. Your meter will usually say 'x100' or 'x1000'

**The correction factor (typically 1.02264) is used to take into account the temperature, pressure and atmospheric conditions at a site. If a site has a corrector the read will have this calculated already.

***The calorific value (CV) is a measurement of the amount of energy contained in gas, measured in megajoules per cubic meter (MJ/m cubed). The CV of the gas at each LDZ is continually measured by National Grid, who publish the figures. Typically, a gas supply has a CV between 37.5 and 43.0 MJ/m cubed.

Prices and Rates

Prices or rates are determined by a number of factors.
For standard sites, prices are set by the Networks and will differ depending on location and usage of the site.
Each year the new rates are published in the charging statements per LDZ and AQ band (when appropriate).

	AQ to	AQ From
Band	0	<73,200
	73,200	<732,000
	732,000	+

All rates are published in the transportation charges statements www.gasgovernance.co.uk
For Non Standard Sites the rates/prices are agreed between Shipper and Network.

LDZ map

Charges Overview

- Each rate is associated with a charge and invoices are made up of multiple charges
- There are approximately 350 charges in total
- Charges are identified by a 3 digit reference
- The majority of these charges are only applied for specific site types, for example;
  - Non Standard Sites*
  - Sites on an IGT*
  - Class 1&2 Sites*
  - Seasonal Large Supply Meter Points (SLSMP)*
- These charges are listed against each invoice in the Xoserve Comprehensive Invoices and Charge Types and is available here

*See Appendix for definitions

Help and support

The table below provides the various ways you can get in touch depending on your type of request.

Invoicing queries	If you would like to raise a query relating to invoicing, please raise a support request here. We will then put you in touch with the right team.
Data Services Contract (DSC) Credit Management	Please contact our DSC Credit and Risk Team: box.xoserve.crm_xoserve@xoserve.com
Energy Balancing Credit Management	Please contact our Energy Balancing Credit and Risk Team: box.xoserve.crm_securities@xoserve.com
For contacts including defects or requests	Please contact the Xoserve Service Desk : 0845 600 0506 +44 (0)121 623 2858 servicedesk@xoserve.com

Core Invoices

The following section aims to:

- Summarise all invoices under the three main categories, including the VAT and Scheduled Dates
- Provide a high level description of each individual invoice
- Provide a high level overview of all charges which could appear within each invoice

Invoice Type	Invoice short code	Invoice Name
Core In voices	CAZ	Core Capacity Invoice
	COM	Core Commodity Invoice
	AMS	Core Amendment Invoice

- For further details on the charges which appear in the Scheduled and Unscheduled invoices, refer to the Xoserve Comprehensive Invoices and Charge Types

Scheduled Ancillary Invoices

Invoice Type	Invoice short code	Invoice Name
Scheduled Ancillary Invoices	NTE	NTS Entry Capacity Invoice
	NXC	NTS Exit Flat Capacity Invoice
	ECO	NTS Entry Commodity Invoice
	OWG	Own Use Gas (Exit Commodity) Invoice
	BAL	Energy Balancing Invoices
	OTA	Optional Tariff Invoice
	CPN	Compression Invoice
	LIA	Service Standard Liabilities Invoice
	EOI	DN Interrupt Option and Exercise Fee
	FSG	Failure To Supply Gas Invoice
	PNS	Prime And Subs Invoice
	MAS	Meter Asset Charges Invoice
	ADP	Meter Reading Data Logger Charges Invoice
	INT	Interest On Adjustments Invoice

These invoices are primarily calculated by:
Billing Quantity x Rate

The Billing quantity is determined by Gemini and thus these invoices are often referred to as Gemini Invoices

The invoices are Primarily calculated based on occurrences of various factors
e.g.
How many Assets on a special metering sites, number of site visits & how many liabilities have been breached etc.

Unscheduled Ancillary Invoices

The remainder of the invoices are unscheduled and are issued for specific infrequent scenarios or activities.

Invoice Type	Invoice short code	Invoice Name
Unscheduled Ancillary Invoices	ADB	Energy Reconciliation Adjustment Invoice
	ADG	GRE Invoice
	ADK	Contingency Invoice
	ADR	Reconciliation Invoice
	ANC	Ancillary Invoice
	TSV	Transporter Site Visit Invoice
	UPI	User Pays Type 1 Invoice

Invoicing Discovery Day – Deep Dive

19/10/2021

Provided by:

Agenda

Tuesday 19th October 9:30-3:30pm

3. Invoices and Charges
- Introduction
- Overview of Invoices and Charges
- Summary of Invoice Types
- Core Invoices
- Scheduled Ancillary Invoices
- Unscheduled Ancillary Invoices

4. Other
- Data Services Contract
- Credit and Risk

Invoicing type	Time	Presented by
Capacity	9:30 – 10:30	Louise Tulk
Commodity		
Amendments	10:45 – 11:45	Rachel Martin
Adjustments		
Transmission	13:00 – 14:00	James Sweeney
Energy Balancing		
Data Services Contract	14:15 – 15:15	Sharon Bright
Credit and Risk		
Appendix and closing	15:15 – 15:30	Gavin Statham

Capacity and Commodity

Provided by:

CAZ – CORE CAPACITY INVOICE

All sites with a nominated Shipper will be included on the capacity invoice every month.

The Capacity Invoice charges for booked SOQ (Supply Off-take Quantity) for class 1 & 2 sites this utilises the nominated Daily Metered SOQ (DMSOQ). For class 3 & 4 sites we use a Billing SOQ which is calculated on an annual basis sometimes referred to as formula year.

The Supply Meter Points (SMPs) are charged for the full daily SOQ, although the entire booked capacity might not be utilised.

If a Class 1 or 2 SMP exceeds its Daily Metered Supply Off-take Quantity (DMSOQ) during the live ratchet period then a ratchet charge is applied and will be issued on Month +2 after the Ratchet was incurred. Ratchets are only applicable for the period of October to May.

The .INV file aggregates these charges at Shipper/Network level.

These charges are VAT applicable and issued on 4th Business Day along with the first level Supporting Information (.ZCS) File.

CAZ – CORE CAPACITY INVOICE

Daily validations include:

- Daily Validations to ensure UKLink & Gemini Class 1 and 2 energies are in line
- AQ Validations to ensure UK Link and Gemini are in line.
- Ratchets (October – May inclusive)
- Seasonal Supply Points (all year round check)

Invoice validations are subject to thorough tolerance checks and include:

- SOQ comparisons
- Energy comparisons
- Trend analysis (month on month and year on year)
- Monetary value checks and comparisons
- Rate checks following price changes and monthly VAT checks

Capacity (CAZ) Charges

Taken from the Xoserve Comprehensive Invoices and Charge Types Sheet, the capacity charges are identified and the site types they apply to.

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
883	DM ADMINISTRATION CHARGE LDZ	Class1&2 sites only
SRA	SOQ RATCHET CHARGE	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

These charges are only relevant for Non Standard Sites i.e. IGT, CSO, Short haul Direct connect etc.

Ratchets are only charged when a Class 1 or 2 site offtakes too much gas over the winter period

A Shipper with a portfolio only containing standard SMPs will only see the 4 standard capacity charges on their CAZ invoice

CCA, ZCA, ECN, CFI Standard Charges (How it is calculated)

These are calculated using Supply Offtake Quantity x number of days in that billing period, x Rate as follows :

(The below calculation is based on an SOQ of 313 with example rates taken from the published Transportation Charges Booklets for a 31 day month)

ZCA Charge = 313 (SOQ) * 0.1987 (Rate) * 31 (No. of days) / 100 = £19.28

CCA Charge = 313 (SOQ) * 0.1061 (Rate) * 31 (No. of days) / 100 = £10.29

ECN Charge =313 (SOQ) * 0.0076 (Rate) * 31 (No. of days) / 100 = £0.74

CFI Charge - This charge is a fixed charge per day and only applies to supply meter points with an AQ between 73,200 and 732,000 kWh.

Ratchet Charges

What is a Ratchet?
A Ratchet is the term used when a DM (Daily Metered) SOQ breach occurs. This is when a daily consumption exceeds the SOQ (Standard Offtake quantity) on any gas flow day between 1st October to 31st May.

Flows
A Pre Ratchet Notification file (.PRN) is issued on the following calendar day of the breach to advise Shippers.

Shippers have until D+5 to investigate the consumption for the day on which the breach occurred (any queries should be managed with the DMSP, Daily Metered Service Provider).

After D+5, if there has not been any change to the consumption on the gas day, a Ratchet Notification File (.RAT) will be issued, indicating that the DM SOQ breach on the day has been closed out and as such Ratchet charges will be calculated and issued on the next LDZ Capacity Invoice at M+2.

Following a breach (or ratchet) the DMSOQ and PMSOQ is recalculated for the following day. This recalculation is the lesser of:

- UDQO (total energy value) that caused the ratchet
- 2 times the previous DMSOQ
- 16 times the DMSHQ (Supply point hourly Quantity)

Ratchet Charges – Automated calculation and issue Invoices)

What is Class 2 Ratchet Charging?
A Class 2 Ratchet Charge is determined by calculating the daily ratchet charge by the number of days applicable. This shall be calculated as the sum of:

$$((A+B+C) * D) - ((E+F+G) *H) *J/365$$

Where: A+B+C is the post ratchet value. E+F+G is the pre ratchet value.

- A is the Applicable Annual Rate of the LDZ Capacity Charge (SRA)
- B is the Applicable Annual Rate of the Capacity Variable Component (if any) of the Customer Charge (ZRA)
- C is the applicable annual rate of the LDZ ECN charge
- D is the Ratchetted Supply Point Capacity
- E is the Applicable Annual Charge of the LDZ Capacity Charge (SRA)
- F is the Applicable Annual Rate of the Capacity Variable Component (if any) of the Customer Charge (ZRA)
- G is the applicable annual rate of the LDZ ECN charge
- H is the Registered User's Supply Point Capacity on the Day of the Supply Point Ratchet
- J is the number of Days (See Uniform Network Code – Transportation Principal Document Section B Part 4.7 for details about days.

Ratchet Charges – Automated calculation and issue Invoices)

What is Class 1 Ratchet Charging?

A 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)
- Applicable Annual Rate of the Capacity Variable Component (if any) of the Customer Charge (CCA)

Sites can be designated as Class 1 by the network, see Nov 2020 changes for details

Ratchet Charges – Automated calculation and issue Invoices continued)

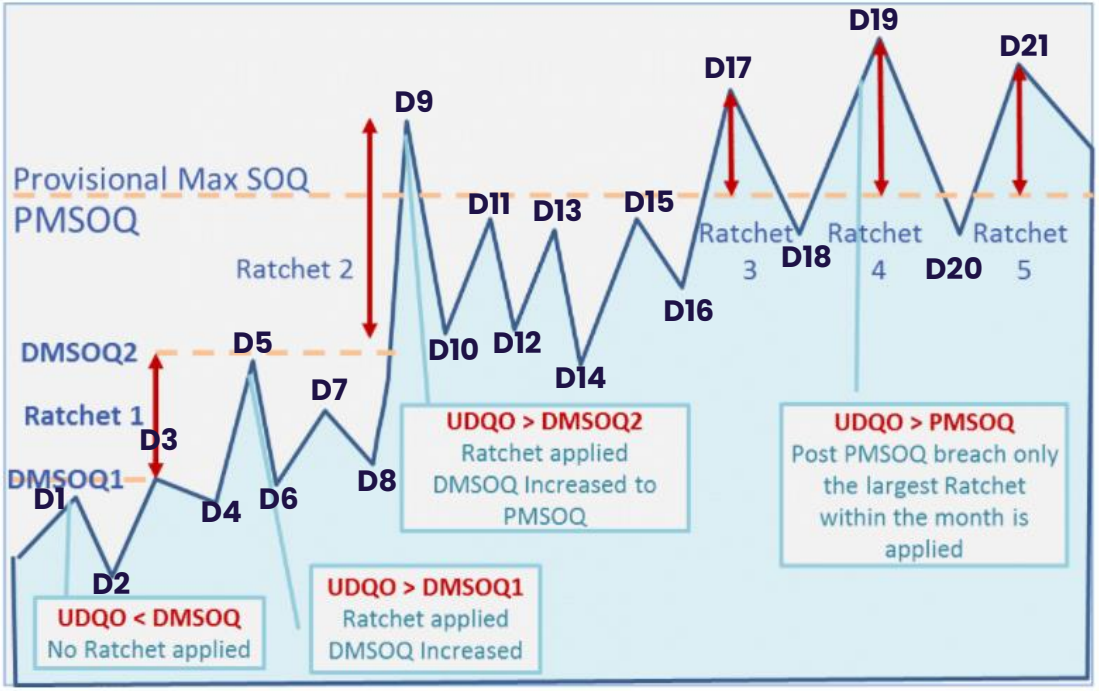
3 weeks of reads (energy) for Class 1:

Here is an example of a 21 days of reads and DMSOQ is set at DMSOQ1.

On day 5 DMSOQ is breached, ratchets applied and DMSOQ2 calculated based on UDQO.

On Day 9 DMSOQ2 is breached and ratchets apply but as PMSOQ is breached the DMSOQ is set to this level.

For the breaches that occur on days **17, 19 and 21,** as these are all PMSOQ breaches, only the highest ratchet within the month will be charged.



Ratchet Charges – Soft Landing

The soft landing rules for class change are still applicable. When the Registered User changes the Class of the Supply Meter Point from Class 3 or 4 to Class 1 or 2 the Registered User shall not be liable for any Supply Point Ratchet Charge where:

- The Supply Point is not a Seasonal Large Supply Point; and
- The DMSOQ is equal or greater than the NDM Supply Point Capacity of the Supply Point prior to it.

Where above is applied, for a period starting with the Supply Point Registration Date (effective date of the Supply Point Amendment), and ending on the earlier of:

- 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 the Registered User shall not be liable for any Supply Point Ratchet Charge in respect of the Supply Point

COM – CORE COMMODITY INVOICE

The Commodity Invoice contains charges for the transportation of gas (kWh) through both the NTS and LDZ system. Like the Capacity invoice, the Commodity Invoice is calculated by using Billing Quantity and Rate.

For Class 1 and 2 sites the charge is calculated using the daily reads.

However for class 3 & 4 sites the Billing Quantity has an energy factor applied which takes into consideration a number of elements. Energy factors are detailed in the daily LPA files you receive via the IX.

Every live site will be subject to a commodity charge every month and this is calculated by individual MPRN (SMP). Exception to this rule is where a site is isolated and as a stop commodity flag.

LSEC charges which credit/charge Shipper for flowing gas onto the network for Bio Methane sites are also issued on the Commodity Invoice and will appear in the COM supporting data and issued at M+2.

These charges are VAT applicable and issued on 8th Business Day along with the first level Supporting Information (.COM) File.

Commodity (COM) Charges

Taken from the Xoserve Comprehensive Invoices and Charge Types Sheet, the Commodity charges are identified and the site types they apply to.

COM - CORE COMMODITY INVOICE		
Charge	Charge Description	Comment
ZCO	LDZ COMMODITY CHARGE	Standard Charge
NCO	NTS EXIT COMMODITY CHARGE	Standard Charge
NCS	NTS SO EXIT COMMODITY CHARGE	Standard Charge
NCT	NTS TO EXIT COMMODITY CHARGE	Standard Charge
878	UNIQUE - LDZ COMMODITY	Non Standard Sites only
877	UNIQUE-NTS EXIT Commodity	Non Standard Sites only
87T	UNIQUE-NTS TO EXIT COMMODITY	Non Standard Sites only
87S	UNIQUE-NTS SO EXIT COMMODITY	Non Standard Sites only
880	UNIQUE NTS COMMODITY SHORTHAUL	Non Standard Sites only
893	CSEPS - LDZ COMMODTY CHARGE	IGT/CSO Sites only
892	CSEPS- NTS EXIT COMM CHARGE	IGT/CSO Sites only
89T	CSEPS- NTS TO EXIT COMM CHARGE	IGT/CSO Sites only
89S	CSEPS- NTS SO EXIT COMM CHARGE	IGT/CSO Sites only
LEC	LDZ SYSTEM ENTRY COMMODITY CHARGE	Standard Charge
LEA	LDZ SYSTEM ENTRY COMMODITY CHARGE ADJ	Standard Charge

A Shipper with a portfolio only containing standard SMPs will see the standard commodity charges on their COM invoice.

Charges for Non-standard Sites only (replace standard charges)

Charges for IGT/CSO only (replace standard charges)

LSEC charges for Bio methane sites

The charges in red are described in further detail on the next slide

ZCO Charge for class 4 sites (How it is calculated)

Class 3 and 4 sites are calculated based on deemed energy. Energy factors are used to calculate this as follows:

$$\text{Billing Quantity} = \frac{\text{Energy Factor Last day of Current Month} - \text{Energy Factor Last day of Previous Month} \times \text{AQ ROLL}}{10}$$

Therefore as an example:

If the Energy Factor for Gas Flow Day 30th June 2017 is 9.15088593297741
And The Energy Factor for Gas Flow Day 31st July 2017 is 9.38953643703708
The rolling AQ for the period 01.07.2017 to 31.07.2017 is 39589.

$$\frac{(9.38953643703708 - 9.15088593297741) * 39589}{10} = 944.79348052 \text{ kwh}$$

You would then multiply this by the rates published in the appropriate Transportation Charges Booklet.

Amendments and Adjustments

Provided by:

AMS – CORE AMENDMENT

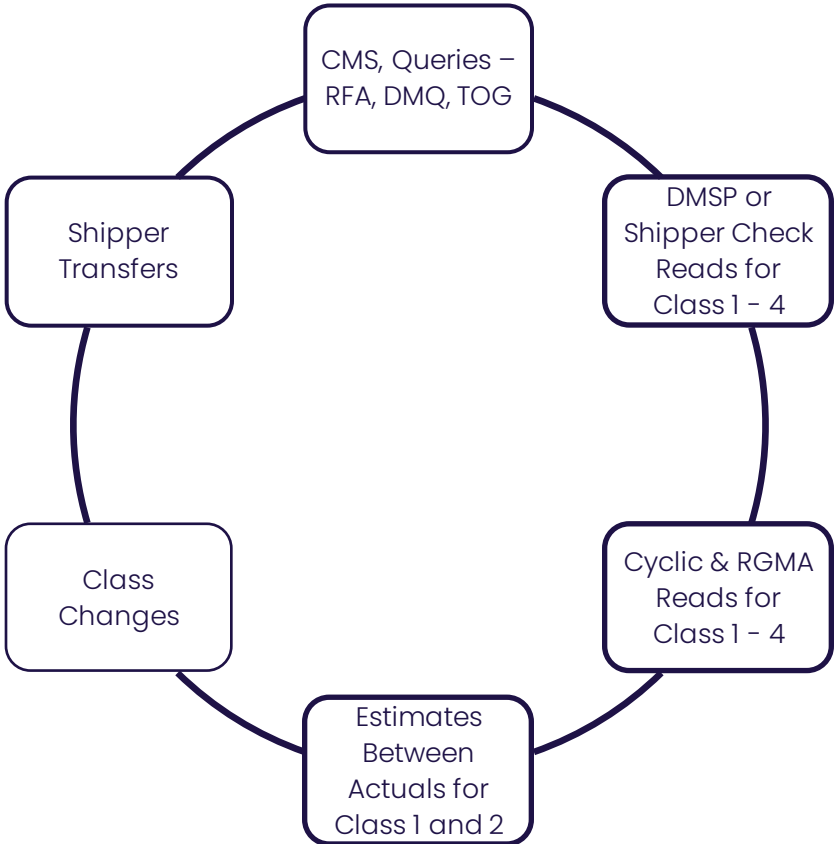
The Amendment Invoice is used to correct the position that was previously issued on the Commodity Invoice.

Once reads, or a consumption adjustment, are received a variance period is created that shows the exact amount used by that particular meter point.

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

VAT applicable on Transportation Reconciliation, not applicable on Energy Reconciliation.

Amendment invoice – inputs



3.4.3 AMS

Reconciliation Class 1 and 2

Class 1 and 2 Meter Points are daily read, these daily consumptions are used to drive the values for the Commodity Invoice. Once a check read (e.g.:- RGMA / Site Visit) is received, it will generate a reconciliation back to the previous check read.

Reconciliation Class 1 and 2 – EBA

Estimates Between Actuals (EBA) is a period of estimate (E) reads followed by an actual (A) read. Reconciliation is performed by way of the system deriving better estimate (B) reads once actual consumption is known.

Date	Volume	Actual / Estimate
01/01/2020	500	A
02/01/2020	600	E
03/01/2020	700	E
04/01/2020	650	A

When an EBA is identified (and provided the reads have closed out):

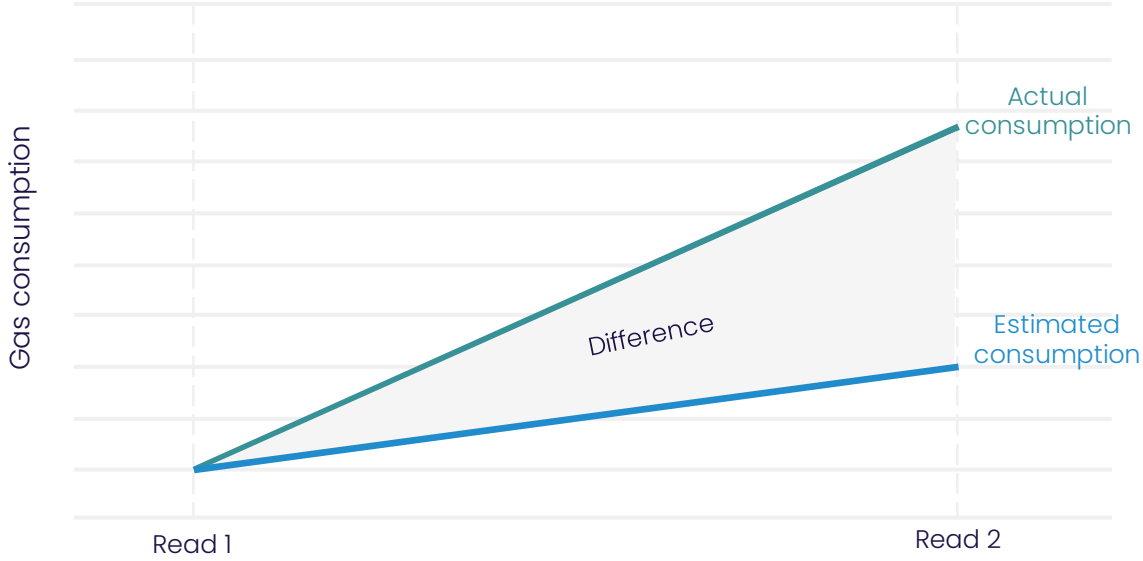
- The actual (A) readings will be used to recalculate the volumes
- Reconciliation can then take place (in the above example to refund the 50 units)

3.4.3 AMS

Reconciliation Class 3

The Commodity values for Class 3 sites are deemed in the same way as Class 4, however reconciliation is based on the daily reads submitted. Reads can be submitted in batches but must be done before M+10.

These daily reads are then used to profile the new consumption over the reconciliation period.



3.4.3 AMS

Reconciliation Class 4

The difference between the energy allocated via the Commodity Invoice and the actual usage is reconciled, and charges (debits or credits) are made for transportation and cost of energy.

Reconciliation is always at Meter Point level and includes Small Supply Points (SSPs).

Amendment invoice - Timings

Amendments (AMS)

Taken from the Xoserve Comprehensive Invoices and Charge Types Sheet, the AMS charges are identified by relevance to site type.

AMS - CORE AMENDMENTS		
Charge	Charge Description	Comment
ZRE	LDZ COMMODITY RECONCILIATION	Standard Charge
GRE	GAS VARIABLE RECONCILIATION	Standard Charge
NRE	NTS EXIT COMM RECONCILIATION	Standard Charge
CRC	CAPACITY RECONCILIATION CHARGE	Standard Charge
CRA	CAPACITY RECONCILIATION CHARGE ADJ	Standard Charge
UGR	UNIDENTIFIED GAS RECONCILIATION ENERGY	Standard Charge
AMC	CUSTOMER CAPACITY CHARGE ADJ	Standard Charge
AMZ	SUPPLY POINT CAPACITY CHARGE ADJ	Standard Charge
AMF	CUSTOMER FIXED CHARGE ADJ	Standard Charge
AME	EXIT CAPACITY LDZ ECN CHARGE ADJ	Standard Charge
83A	ADMINISTRATION CHARGE LDZ ADJ	Standard Charge
84A	ADMINISTRATION CHARGE NTS ADJ	Standard Charge
SRD	SOQ RATCHET CHARGE ADJ	Class1&2 sites only
ZRD	CUSTOMER RATCHET CHARGE ADJ	Class1&2 sites only
SCD	SEASONAL CAPACITY FAILURE CHARGE ADJ	SLSMP Only

A Shipper with a portfolio only having standard SMPs will only see the 12 standard Amendment charges on their AMS invoice

Ratchets occur on class 1&2 sites and adjustments occur when the original ratchet is amended or challenged

The charges in red are described in further detail on the next slide

ZRE Charge for class 3 & 4 sites (How it is calculated)

Reconciliation will occur on a Class 3 & 4 site when an actual read is received. The system will calculate the usage back to the previous read received to determine actual energy and then calculates the difference between this actual and the deemed energy for the same period.

If we assume the deemed energy was 944kWh for this period which was calculated using energy factors and Annual Quantity (AQ) roll.

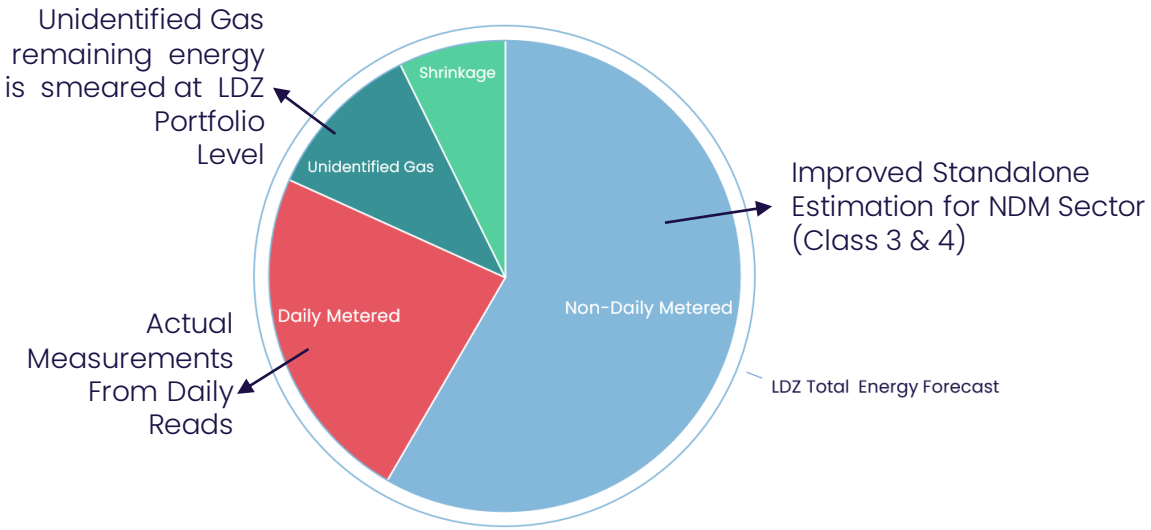
The reads received have given us a calculated actual energy of 950kwh.

The difference between the two, multiplied by the rate would be the ZRE charge for that site (can be credit if less is used)

950-944 x 0.698/100= **£0.04**

UGR Charge (How it is calculated)

UIG Allocation Process:



Unidentified Gas = (shared at LDZ & Shipper portfolio level based on throughput, not AQ)	Total LDZ Forecast	
	Minus	Shrinkage
	Minus	DM Usage
	Minus	NDM Estimate Usage

After the Gas Day Allocation

- The gas is allocated to daily metered Supply Points based on actual measurements.
- An estimate for Non Daily Metered points is calculated based upon AQ and weather
- The remaining gas is unidentified gas
- The unidentified gas (energy) is shared to all Shippers equally in proportion to the Shipper's portfolio. This is sent at LDZ level also using throughput as one of its parameters.
- Meter reads are used to reconcile the consumption of the individual Meter Point and can identify more or less gas than was used in the original UIG calculation.
- Charges are issued on the AMS invoice on the UGR charge type
- The UIG allocation will be visible in Gemini.

Core Invoice Charge Mapping Amendments (AMS)

Taken from the Comprehensive Invoices and Charge Types Sheet, the AMS charges are identified by relevance to site type.

AMS - CORE AMENDMENTS		
Charge	Charge Description	Comment
S15	CSEP AGG REC NTS TRANS CHG ANN SHR ADJ	
916	CSEP AGG REC LDZ TRANS CHG ADJ	IGT/CSO Sites only
926	CSEP AGG REC CLEARING VALUE	IGT/CSO Sites only
S16	CSEP AGG REC LDZ TRANS CHG ANN SHR ADJ	IGT/CSO Sites only
S26	CSEP AGG REC CLEARING VALUE ANN SHR	IGT/CSO Sites only
ACZ	CSEPS - LDZ CAPACITY CHARGE ADJ	IGT/CSO Sites only
ACE	CSEPS - EXIT CAPACITY LDZ ECN CHARGE ADJ	IGT/CSO Sites only
895	CSEPS - ADMINISTRATION CHARGES ADJ	IGT/CSO Sites only
ACY	CSEPS - LDZ COMMODITY RECONCILIATION	IGT/CSO Sites only
ACT	CSEPS - NTS TO EXIT COMMODITY RECONCILIATION CHARGE	IGT/CSO Sites only
ACS	CSEPS - NTS SO EXIT COMMODITY RECONCILIATION CHARGE	IGT/CSO Sites only
915	CSEP AGG REC NTS TRANS CHG ADJ	IGT/CSO Sites only
ACN	CSEP - NTS EXIT COMM RECONCILIATION	IGT/CSO Sites only

These CSEP Charges are only appropriate for Shippers with IGT or CSO sites in their portfolio

Core Invoice Charge Mapping Amendments (AMS)

Taken from the Comprehensive Invoices and Charge Types Sheet, the AMS charges are identified by relevance to site type.

A Shipper with a portfolio only containing standard SMPs will not see these charges on their invoice as these are only relevant for non-standard Sites i.e. IGT, CSO, Shorthaul Direct connect etc.

Charge	Charge Description	Comment
S22	USER AGG REC CLEARING VALUE ANN SHR	
917	USER AGG REC NTS TRANS CHG ADJ	
918	USER AGG REC LDZ TRANS CHG ADJ	
922	USER AGG REC CLEARING VALUE	
S17	USER AGG REC NTS TRANS CHG ANN SHR ADJ	
S18	USER AGG REC LDZ TRANS CHG ANN SHR ADJ	
AUA	UNIQUE - CUST CAPACITY CHARGE ADJ	Non Standard Sites only
AUZ	UNIQUE - LDZ CAPACITY CHARGE ADJ	Non Standard Sites only
AUE	UNIQUE - EXIT CAPACITY LDZ ECN CHARGE ADJ	Non Standard Sites only
88A	UNIQUE NTS COMMODITY SHORTHAUL ADJ	Non Standard Sites only
882	LDZ OPTIONAL TARIFF ADJ	Non Standard Sites only
AUY	UNIQUE - LDZ COMMODITY RECONCILIATION	Non Standard Sites only
AUT	UNIQUE - NTS TO EXIT COMMODITY REC CHARGE	Non Standard Sites only
AUS	UNIQUE - NTS SO EXIT COMMODITY REC CHARGE	Non Standard Sites only
AUN	UNIQUE - NTS EXIT COMM RECONCILIATION	Non Standard Sites only
NRT	NTS TO EXIT COMMODITY RECONCILIATION CHARGE	Non Standard Sites only
NRS	NTS SO EXIT COMMODITY RECONCILIATION CHARGE	Non Standard Sites only
705	NTS OPTIONAL COMMODITY REC	Non Standard Sites only

AMS – AMS – CORE AMENDMENT

Before the Amendment Invoice is issued to the industry, Correla (on behalf of Xoserve) perform a number of validations outside of the automated tolerance validations that take place when reads and adjustments are input:

- Reconciliations from all classes are manually checked dependent on the value of their GRE – Class 1 over £50k, Class 2,3,4, LSP over £50k and SSP over £20k. Any suspicious reconciliations will be held from the invoice and the Shipper contacted. We will not release the reconciliation until confirmation that it is correct or an amendment has been made (e.g.: replacement read, consumption adjustment)

- Any reconciliations impacted by known defects relating to charge/energy calculations are identified and excluded whilst the defect is resolved. These are reported on the monthly Exceptions and Exclusions reports issued within D+2 of the invoice issue date. Once resolved the reconciliations will be corrected prior to issue

Adjustments

But what happens if the Volume is incorrect....

- Adjustments are requested via the Contact Management Service (CMS)
- Depending on the type of request, these are raised using contact codes Request For Adjustment (RFA) / Consumption Dispute Query (CDQ)
- Once an adjustment has been raised it will sit in our work queue awaiting action and is prioritized in date receipt order
- The contacts go through a number of validations to ensure the adjustment is correct
- There may be some instances where further information or clarification is required and the contact will be sent back to the Shipper
- Once all validations are passed, the adjustment will be entered in the UK Link system
- (Please be aware when an adjustment is performed, only the volume is amended not the reads)

Adjustments – Request for Adjustment (RFA)

RFAs can be raised for Class 2, 3 & 4 sites The most common reasons for raising an RFA are due to asset related enquiries:-

- Inaccurate reads creating an incorrect volume
- Late meter exchange / corrective exchange
- Incorrect correction factor
- Correcting previous reconciliation / adjustments
- Shipper Transfer

For a Class 1 site you would need to raise a DMQ (Daily Metered Query) contact within CMS which will go direct to the relevant DMSP(Daily Metered Service Provider) who will raise a RFA request on your behalf.

Adjustments – Request for Adjustment (RFA)

*Please note: as per MOD 152, no adjustment periods will be processed pre Line in the Sand. Any that span this date will be accepted, however no charges pre the cut off date will be invoiced

What are the most common rejection reasons?

1. Incorrect adjustment dates
2. Incorrect data items / calculations
3. Spanning a meter exchange

RFA e-learning: click here

Adjustments – Consumption Dispute Query (CDQ)

A CDQ can be raised within the Contact Management Service if the adjustment is non asset related.

The SLAs below are for the closure of contacts for each individual Shipper Short Code:

4 days: 80%

10 days: 95%

20 days: 98%

Adjustments will be issued on the Amendments invoice on the **18th business day** of every month.

The cut off for an adjustment to appear on Amendment's invoice is the **10th of each month**.

If an adjustment is entered after this date it will appear on the following months invoice.

Adjustments – Previously Submitted Contact (PSC)

What happens if I wish to challenge the resolution of a Contact?

If you do not agree with a previously submitted contacts resolution you have the ability to challenge it within 12 business days via a PSC contact

CMS user guide: click here

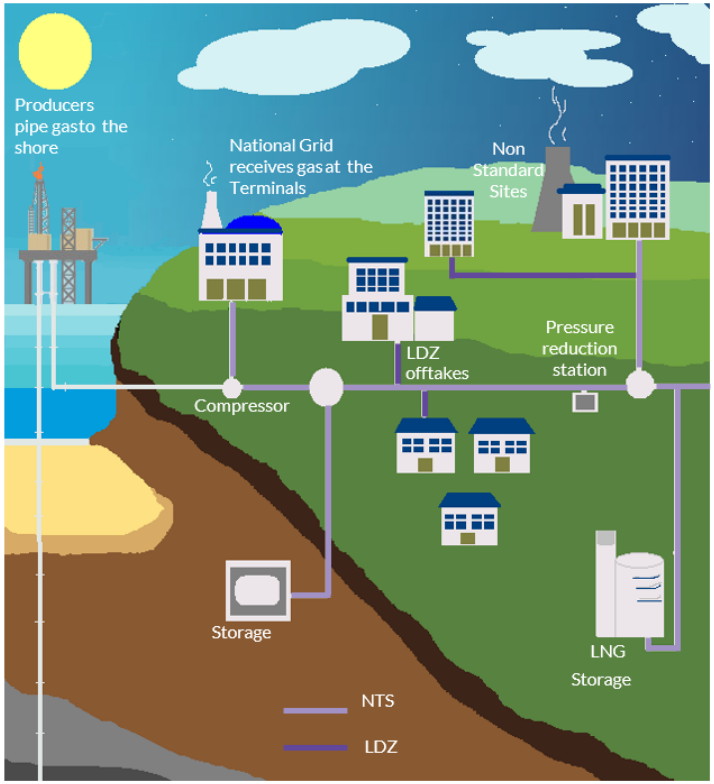
Transmission and Energy Balancing

Provided by:

Scheduled Ancillary Invoices

Infrastructure Map

- The infrastructure can be used to define some of the Gemini Invoices
- The Shipper's responsible for transporting gas on and off the NTS pipeline are subject to additional Capacity and Commodity Charges which are issued on the following invoices:
    - NXC - NTS EXIT FLAT CAPACITY
    - NTE - NTS ENTRY CAPACITY
    - ECO - NTS ENTRY COMMODITY
    - OWG - OWN USE GAS (EXIT COMMODITY)
    - CPN - COMPRESSION INVOICE (Geographical)
- Shippers with a portfolio wholly made up of LDZ sites will also not be subject to these NTS invoices.



Gemini Invoicing Principles

Gas is transported from the terminal through the network to the supply point. There are NTS charges which relate to the various aspects of the supply and delivery of gas on and off the NTS network .

Shippers bid at auction to book entry capacity at a specific terminal. Auctions are available for daily, monthly or quarterly entry capacity. Shippers bid for kilowatt hours (kWh) by price. At the close of the auction successful bidders are allocated capacity in order of price from highest to lowest.

Once the gas has entered a terminal, the Shipper pays for the entrance of that gas into the NTS (**Entry Capacity**) and a separate **Exit Capacity** charge to offtake the gas. The transportation of the gas between entry and exit is the NTS **Commodity** charge.

NXC – NTS EXIT FLAT CAPACITY

NTS Exit Capacity is the booking of space on the National Transmission System and allows Users to take gas off at system NTS exit points.

Initial capacity values were carried over from the previous NTS Exit capacity regime.

National Grid Transmission sells NTS System Exit Capacity at NTS exit points.

Annual application for NTS enduring Exit Capacity and auctions for daily capacity are within and before the day auctions.

Users bid for capacity – requirement in kWh and price p/kWh.

Auctions pay as bid – once closed allocated on highest price downwards

Invoices including VAT where applicable are issued on the 4th business day each month.

Invoice Payment Due Date is the 20th day of the month of issue

The invoice payment is dealt with by National Grid Credit Risk at Warwick.

NXC Primary Charges

Data item	Gemini	Charge type issued
Registered capacity application request Auction Type Bid Quantity Actual or Bid Price p/kWh	**LONG TERM APPLICATIONS** NXA-IFLEC-Initial Prevailing AIEFLEC, ADEFLEC - adhoc inc/dec AFLEC - annual inc, EAFLEC - enduring inc/dec PARCA - reservation for enduring capacity **DAILY AUCTIONS** NXD - WDDNEX, DADNEX NXO - DONEX **SURRENDER AUCTION** NXB - DBNEX	NXA NXD NXO NXB csv file to Shippers Charges are: rate x quantity x no of days / 100

NXC Primary Charges (Interconnector points)

As part of the EU Phase 2 a number of new Methods of Sale (MOS) have been introduced where Shippers can purchase capacity at Interconnection Points (IPs) – Bacton and Moffat

Data item	Gemini	Charge type issued
Auction Type Bid Quantity Long term - actual and premium price Short term - premium and reserve price Pence /kWh	EIL - IPAYNEX (yearly) EIL - IPAQNEX (monthly) EIR - IPRMNEX (quarterly) **DAILY AUCTIONS** EIO - IPDONEX EID - IPWDDNEX, IPDADNEX **SURRENDER AUCTIONS** SUC - CMPSURR LUC - LTUIOLI	EIL EIR EIO EID SUC LUC csv file to Shippers

NXC Overruns

Overruns occur when:

Aggregate allocation/measurement for all users exceeds aggregate Net Entitlement for all users at an NTS Exit point.

To calculate an Exit Overrun you will need to work out the following:

- Aggregate Overrun Qty all users at NTS Exit point
- Individual Overrun Qty = Allocation Qty – Net Entitlement Qty
- Sum of Individual Overrun Quantities

*Overrun Qty = Aggregate Overrun Qty * (Individual Overrun Qty / Sum of individual Overrun Quantities)*

All overruns are invoiced one month in arrears following close out

- Charge type is XOV, Formula:

Overrun Quantity X Overrun Rate / 100 = (£s)

NTS Exit Capacity Revenue Recovery charges MOD678A

- Following the implementation of MOD678A from gas day 01/10/2020 new Revenue Recovery charges have been introduced on the NTS Exit Capacity Invoice.
- The Modification incorporates a mechanism to manage the consequence of under or over recovery of revenues from Transmission Services Capacity Charges.
- The new Revenue Recovery charge are based on a Revenue Recovery rate which is then applied to the Fully Adjusted capacity (at each NTS Exit Location for each gas day).
- The Fully Adjusted capacity will be net of trades and buy backs.

NTS Exit Capacity Revenue Recovery charges MOD678A

- The new charge type for Revenue Recovery is RRX and there is also an adjustment charge type ARX.
- The RRX charge is calculated as follows for each NTS Exit Location and each gas day:-
- RRX = Revenue Recovery Rate * Users Fully Adjusted Capacity/100
- The Revenue Recovery Rate published by National Grid can be positive, zero or negative – if positive it will be a debit on the invoice and if negative it will be a credit on the invoice.
- Users Fully Adjusted Capacity will be derived based on the below algorithm;

$$F = \text{Max}(0,T)$$

Where:

F = User Adjusted Capacity (UAC) (kWh)
T = Total Entitlement (kWh)

NTE – NTS ENTRY CAPACITY

NTS Entry Capacity is the booking of space on the National Transmission System and allows Users to deliver gas at system entry points.

National Grid Transmission sells System Entry Capacity at auctions.

Capacity is purchased at Aggregated System Entry points (ASEPs) e.g. Terminals and Storage points.

Users bid for capacity – requirement in kWh and price.

Auctions pay as bid – once closed this is allocated on the highest price downwards.

Capacity is available in quarters, months, days.

Price pence/kilowatt hour basis

Additional charges occur when capacity is exceeded at a specific ASEP, this is known as an overrun.

NTS Entry Capacity Invoice (.NTE) Primary Charges

Data item	Gemini	Charge type issued
Auction Type Bid Quantity Bid Price Pence/kWh	LTC- QSEC AUCTION (Quarterly) MEC- MSEC AUCTION (Monthly) DRSEC AUCTION (Adhoc) RMC- ROLLING MONTHLY AUCTION SMC- SURRENDER MONTHLY AUCTION CEC – CAPACITY CONVERSION DAILY AUCTIONS DFC- DADSEC, WDDSEC DIC- DISEC	LTC MEC RMC SMC CEC DFC DIC csv file to Shippers Charges are: rate x quantity x no of days/100

3.5.4 NTS Entry Capacity Invoice (.NTE)

As part of the EU Phase 2, a number of new Methods of Sale (MOS) have been introduced, where Shippers can purchase capacity at Interconnection Points (IPs) – Bacton and Moffat.

These new MOS require new IP charge types to be set up and associated to them.

The new charges were effective from 1st November 2015 and were issued for the 1st time on 4th December 2015

NTE Primary Charges – Interconnector Points

Data item	Gemini	Charge type issued
Auction Type Bid Quantity Long term - actual and premium price Short term - premium and reserve price Pence/kWh	IPY - IPAYSEC AUCTION (yearly) IPQ - IPAYQSEC AUCTION (quarterly) IPM - IPRMSEC AUCTION (monthly) **DAILY AUCTIONS** IPD - IPDADSEC, IPWDDSEC IPI – DISEC **BACTON SPLIT** BSS - BBSEC BSB – BSBB **SURRENDER and USE IT OR LOSE IT** CMP – CMPSUR LTU - LTUIOLI	IPY IPQ IPM IPI IPD BSS BSB CMP LTU csv file to Shippers Charges are: rate x quantity x no of days / 100

NTE Primary Charges – Bacton Split

As part of the EU phase 2 European changes, Bacton Split resulted in two new charge types (adjustment charge types ABA and ABS) to allow the buyback of long term capacity at legacy Bacton BA and the resale at the two new Bacton ASEPs BI and BU.

Data item	Gemini	Charge type issued
Entitlement Bid price p/kWh No of days	BSB - Bacton Split Buyback Credit BSS - Bacton Split Sell Debit	BSB BSS csv files to Shippers Charges are: bid price x entitlement x no of days/100

NTE - Overruns

Overruns occur when:

Allocated capacity is greater than Net Capacity Entitlements at an ASEP
Allocations are received from the Claims Validation Agency (CVA) at M+15
The charge type for this is OVR

Negative Overruns occur when:

A Shipper trades more capacity than they own at an ASEP
The charge type for this is NVR

All overruns are invoiced one month in arrears following close out

Charge Formula: Overrun Quantity X Overrun Rate / 100 = (£s)

VAT applicable Issued on 4th Business Day

NTE Neutrality

Data item	Gemini	Charge type issued
Financial values from Gemini feed Revenue, Costs and Adjustment Neutrality pots REV & ARS Neutrality charges smear based on User End of Day Firm Capacity divide by total system End of Day Firm Capacity	Negative Overruns and Overruns (1 month in arrears ARS) Entry Capacity bought back Any Non obligated capacity sold above baseline including non obligated within day and day ahead Firm capacity sold above baseline (REV)	REV (current month) ARS (historical month) csv file to Shippers

NTE Key Dates

- 1st of the month - Neutrality job runs
- 1st of the month - Invoice creation process
- 4th business day - Invoice issue process

Invoice Payment Due Date is the 20th day of the month of issue

The invoice payment is dealt with by National Grid Credit Risk at Warwick

3.5.4 Scheduled Ancillary Invoices - NTE

NTS Entry Capacity Revenue Recovery Charges – MOD678A

- Following the implementation of MOD678A from gas day 01/10/2020 new Revenue Recovery charges have been introduced on the NTS Entry Capacity invoice.

- The Modification incorporates a mechanism to manage the consequence of under or over recovery of revenues from Transmission Services Capacity Charges.

- The new Revenue Recovery charge are based on a Revenue Recovery rate which is then applied to the Fully Adjusted capacity (at each ASEP for each gas day) apart from that classified as “Existing Contracts/Holdings”.

- Existing Contracts/Holdings are for Available capacity bought at any entry point before 6th April 2017 for gas day from 1st October 2020 onwards

- The Fully Adjusted capacity will be net of trades and buy-backs.

3.5.4 Scheduled Ancillary Invoices - NTE

NTS Entry Capacity Revenue Recovery charges MOD678A

The new charge type for Revenue Recovery is RRC and there is also an adjustment charge type ARR.

- The RRC charge is calculated as follows for each ASEP and each gas day:-
- RRC = Revenue Recovery rate * Users Fully Adjusted Capacity/100
- The Revenue Recovery rate published by National Grid can be positive, zero or negative – if positive it will be a debit on the invoice and if negative it will be a credit on the invoice.

Users Fully Adjusted Capacity will be derived based on the below algorithm

$$F = \max(0, T - H)$$

Where;

F = User Adjusted Capacity (UAC) (kWh)
T = Total Entitlement (kWh)
H = Existing Available Holdings (kWh)

NTS Entry Capacity Entry Charge Rebate MOD678A

- In addition to the Revenue Recovery charges on the NTS Entry Capacity side only MOD678A also introduced an NTS Entry Rebate charge.
- This will be applied as a Transmission Services entry capacity credit. The charge mechanism reduces any Transmission Services entry over recovery. The process may be triggered at the end of the Formula Year ending 31st of March each year. Does not occur every year – National Grid confirm if there is an over recovery credit to be processed.
- If there is an over recovery credit, it will be processed on the April NTS Entry Capacity Invoice.

3.5.4 Scheduled Ancillary Invoices - NTE

NTS Entry Capacity Entry Charge Rebate MOD678A

- The new charge type for NTS Entry Charge rebate is NER and there is also an adjustment charge type NEA.
- The NEA charge (which will appear as a credit on the invoice) is calculated as follows for formula year 1st of April to 31st of March for each user:

NEA Rebate Charge = (Total Revenue / Aggregate NTS Entry Capacity at all Entry Points for all users) * Aggregate NTS Entry Capacity at all Entry Points for a Shipper

- *Where, Total Revenue = total value to be credited as advised by National Grid across all users*
- Aggregate NTS Entry Capacity at all Entry Points = Aggregate amount of NTS Entry Capacity which Users (Shippers) are Registered as holding at all Entry Points aggregated over all days in the rebate period.
- Aggregate NTS Entry Capacity at all Entry Points for a Shipper = Aggregate amount of NTS Entry Capacity which a particular user (Shipper) is Registered as holding at all Entry Points Aggregated over all Days in the rebate period.

ECO and OWG

ECO - NTS ENTRY COMMODITY

This energy invoice charges for entry onto the National Transmission System. This relates to the actual gas that passes through the NTS entry points.

VAT applicable Issued on 18th Business Day

AOC	NTS COM ENTRY REB ADJ CHG (only applicable for gas days to and including 30/09/2020)
ECS	NTS ENCOM CHG NTRXN

OWG - OWN USE GAS (EXIT COMMODITY)

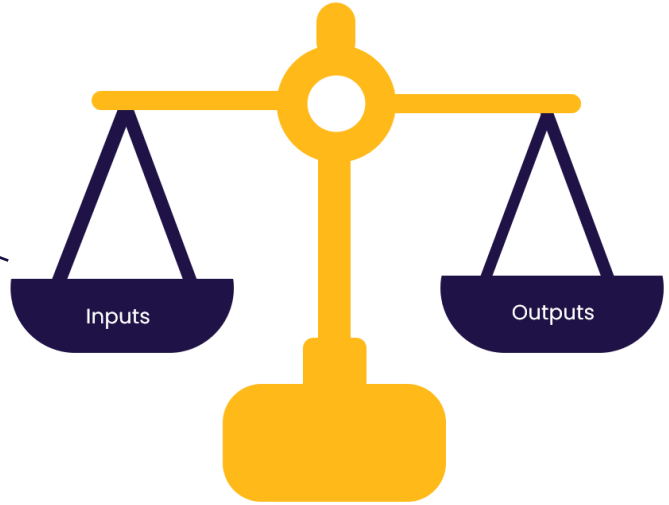
Own Use Gas is used by Storage Operators in order to carry out certain activities, such as running compressors (which ensure that the required pressure is maintained), preheating and venting gas. The Charge Code is 840 and it is VAT applicable, issued on the 8th Business Day.

BAL – ENERGY BALANCING INVOICE

The Energy Balancing regime involves maintaining the balance between system inputs and system outputs. National Grid Transmission are responsible for the safety and security of the system. Ensuring the physical balance and not to make a profit or a loss from carrying out this activity.

Users have a financial responsibility to balance the system and there are incentive charges to help them accomplish this.

Terminals
Storage Withdrawal
Trade buys
- OTC
- OCM (APX Gas)



Meters DM,NDM
Storage injection
Trade sells, UIG
- OTC
- OCM (APX Gas)

Issued on 23rd Business Day

BAL – Primary Charges

Data item	Gemini	Charge type issued
Daily Energy Inputs Noms and Allocations Outputs Noms and Allocations System Prices Trades	DCS - Cashout DCT ESC - Entry Scheduling EXS - Exit Scheduling DXS TTS - National Grid trade sell TTB - National Grid trade buy	DSC DCT ESC DXS EXS TTS (ICE) TTB (ICE) csv file to Shippers

Gemini invoice issued via the IX on the 23rd Business Day following end of the current billing month.

BAL – Neutrality

Data item	Gemini	Charge type issued
Daily Energy Inputs Noms and Allocations Outputs Noms and Allocations System Prices Trades CNU & ADS Neutrality charges smear based on daily UDQI + UDQO excluding Trades divide by total system UDQI + UDQO	Cashout Entry / Exit Scheduling National Grid trade sell National Grid trade buy Adjustments	CNU (current month) ADS (historical months) csv file to Shippers

Financial values above feed Neutrality pot
Included as part of invoice issued via the IX

BAL

SAP is calculated each day:

- Sum of all (Accepted Trade Bids x Price) divided by Sum of all Trade Bid Quantities.
- A small percentage of SAP is used in calculation of Entry & Exit scheduling charges.

SMP Prices are calculated each day:

- SMP Sell price is used to calculate credit cashout charges when a user has over delivered and input more than they have taken off.
- SMP Buy price is used to calculate debit cashout charges when a user has under delivered and input less than they have taken off.

BAL

D + 5 - Output energy closeout- UNC section E1.8
M + 15 - Input energy closeout- UNC section E1.8
M + 19 - Neutrality process
M + 21 - Invoice creation process
M + 23 - Invoice issue process
D + 12 - (After M + 23)- Invoice Payment Due Date

M – refers to business day. D refers to calendar day

The invoice must be paid in full by the Invoice Payment Due Date – no monies can be withheld – managed by **Xoserve's Credit and Risk team**

File Example – NTS Gemini Invoice

- The BAL Invoice is an example of a NTS Gemini Invoice
- There is no separate Supporting Information file, all invoice and supporting information data is within the same file

File	File description	Comments
	NTS Gemini Invoice for Energy Balancing	File Type is IDB Invoice Type is BAL
	(csv file has already been delimited in this example)	

- The files are based on real data but information has been masked for Data Protection purposes and naming convention will always be in a 5.8.3 format

CPN – COMPRESSION INVOICE

For shippers which have booked gas onto the network which has passed the St Fergus compressor, near Aberdeen incur additional charges due to the additional activity. Charge code 900

VAT applicable Issued on 20th Business Day

New 2021/22 gas year Invoice

Provided by:

Introduction

As of the 2021 & 2022 gas year, a new invoice was introduced.

The following slides provide further information....

NCI NTS Optional Capacity Invoice – Implementation of MOD728B

- Following the implementation of MOD728B from gas day 01/10/2021 a new invoice NCI NTS Optional Capacity Invoice has been introduced.
- The main objective of MOD728B and the new NCI invoice is to give users the ability to apply for discounts to NTS Entry & NTS Exit Capacity charges for Entry to Exit point routes with a distance of 28km or less.
- The maximum discount for an Entry to Exit point route is 90% for a route distance of 0 km
- The minimum discount for an Entry to Exit point route is 10% for a route distance of 28km.

NCI NTS Optional Capacity Invoice – Implementation of MOD728B

- An indicative list of sites, Entry to Exit distances and percentage discounts can be found on pages 30 to 32 of the MOD728B pdf document on the Gas Governance website.
- The formula used to calculate the discount can also be found on page 18 of the MOD728B PDF document on the Gas Governance website.
- The discount will be applied to the eligible kWh quantity for the route
- There are 8 charge types on the new invoice as follows:

NTC ENTRY TRANSMISSION SERVICE CREDIT CHG –
This credits the original NTS Entry Capacity Charge for the eligible quantity.

NTD ENTRY TRANSMISSION SERVICE DISCOUNT CHG –
This charges the new discounted charge based on the percentage discount for the eligible quantity.

NCI NTS Optional Capacity Invoice – Implementation of MOD728B

- TCA ADJ TO ENTRY TRANSMISSION SERVICE CREDIT CHG – adjustment to the NTC charge type
- ATD ADJ TO ENTRY TRANSMISSION SERVICE DISCOUNT CHG – Adjustment to the NTD charge type
- XTC EXIT TRANSMISSION SERVICE CREDIT CHG – This credits the original NTS Exit Capacity charge for the eligible quantity
- XTD EXIT TRANSMISSION SERVICE DISCOUNT CHG – This charges the new discounted charge based on the percentage discount for the eligible quantity

NCI NTS Optional Capacity Invoice – Implementation of MOD728B

- CTA ADJ TO EXIT TRANSMISSION SERVICE CREDIT CHG – adjustment to the XTC charge type
- DTA ADJ TO EXIT TRANSMISSION SERVICE DISCOUNT CHG – adjustment to the XTD charge type
- The invoice will be issued on M+19 each month (19th Business Day)
- The first NCI invoice for October 2021 billing period is due to be issued on the 25/11/2021.

For more information on MOD0728B click here

Scheduled
Adhoc &
Unscheduled
Ancillary
Invoices

LIA and FSG

LIA – SERVICE STANDARD LIABILITIES

- Within Uniform Network Code (UNC) a number of performance standards are set out for class 3&4 sites. Failure to meet these standards results in liability payments to Shippers. The aggregated data is calculated to produce the liability invoices that are issues to Shippers.
- There Standard Liability Charges that are entered into UKLink and are invoiced on a monthly basis, charge code is 810
- VAT exempt Issued on 1st 2nd or 3rd Calendar Day

FSG – FAILURE TO SUPPLY GAS

- If there is a failure with gas supply, the Network is liable to pay the Shipper (and consumer) a pre-agreed rate (compensation) for every 24 hour period of failure.
- The Network Organisation records the FSG (Failure to Supply Gas) incidents at MPRN level. This is an example of Service Standard Liability however, with its own invoice with Charge code 823. (FSG charges for Sites > 732,000kWh are charged on the LIA)
- VAT exempt Issued on 12th and 27th Calendar Day

File Example - FSG Invoice & Supporting Information

The FSG Invoice is an example of a Scheduled Ancillary Invoice which has one Supporting Information file.

File	File description	Comments
 SHP01.PN012345	.INV Invoice File for FSG *(csv file)*	Invoices are generated per Shipper at Network level. In this example, it is for a single Shipper ("SHP" in this file but this would be the actual Shipper Short Code). The invoice is for a single Network.
 SHP01.PN000777	.FSI Supporting information for the FSG Invoice *(csv file has already been delimited in this example)*	Supporting information for all Networks the Shipper operates in and only where the FSG invoice applies.

The files are based on real data but information has been masked for Data Protection purposes and naming convention will always be in a 5.8.3 format

EOI and ADP

EOI – DN INTERRUPT OPTION & EXERCISE FEE

- For sites which have opted to be interruptible during a period of gas shortage, a DNI contract will be in place and a monthly invoice will be created (charge codes are N59 for a debit and N60 for a Credit)
- A second monthly invoice created on the 18th is only produced when actual interruptions take place. (charge codes are N59 for a debit and N60 for a Credit)
- VAT applicable Issued on 7th Business Day

ADP – METER READING DATA LOGGER CHARGES

- This is for sites with a data logger (AMR) installed and charges are when the annual inspection (Site Visit) has occurred. This is a report send via UK Link and verified by DMSPs.
- VAT applicable Issued on 12th Business Day

P01	DM METER READING CHARGE
P02	DM METER READING ADJUSTMENT
P03	DATALOGGER ASSET CHARGE
P04	DATALOGGER ASSET ADJUSTMENT CHARGE

PNS and MAS

The following invoices are relevant to sites with specific asset arrangements. Invoices will only be created where these sites exist.

PNS - PRIME AND SUBS INVOICE

- Prime and sub configurations must require an actual read of the prime meter and all sub-meters within a 5 day period (known as a co-terminus read). Charge Codes are N05 for Monthly read sites and N06 for non monthly read sites
- VAT applicable Issued on 11th Business Day

MAS - METER ASSET CHARGES

- For sites where the Network is responsible for the assets are identified as Special Metering Sites. Specific charges for meter and correctors for this service are applied on the MAS invoice and are different depending on if the site is on directly on the LDZ or the NTS.
- VAT applicable Issued on 12th Business Day

N01	METER ASSET CHARGE
N18	METER ASSET CHARGE – NTS
N19	CORRECTOR ASSET CHARGE – LDZ
N20	CORRECTOR ASSET CHARGE - NTS

INT

INT - INTEREST ON ADJUSTMENTS

- The interest invoice is made up of two parts.
- Firstly If any stakeholder pays a deposit, and is essentially in credit to the network, then interest on this balance is calculated each month and credited back.
- Secondly if there are any late payments for any invoice within the month then interest is calculated on the outstanding balance(s) and is charged back to the Shipper(s).
- There is also an unscheduled element to this invoice and therefore if any ad-hoc activity is highlighted within the month an invoice will be issued.
- VAT exempt Issued on 3rd to last Business Day

802	INTEREST CREDIT
I01	LATE PAID INV INTEREST DR
I02	LATE PAID INV INTEREST CR
I03	INVALID QUERY INTEREST
I04	INTEREST ON ADJUSTMENTS
I05	TRANSCO LATE PD LIAB INTEREST
I09	LATE PAID COMPENSATION INTEREST – DEBIT
I10	LATE PAID COMPENSATION INTEREST - CREDIT

3.5.12 UPI – USER PAYS TYPE 1 INVOICE

- This ancillary invoice is issued for a variety of industry related charges with examples show to the right
- VAT applicable Issued on 11th Business Day

W07	MUST READS CR
W08	MUST READS DR
W13	UNC PROPOSAL DEVELOP CHARGE CR
W14	UNC PROPOSAL DEVELOP CHARGE
W17	SETTLEMENT ERROR CLAIM CR
W18	SETTLEMENT ERROR CLAIM DR
N28	SHIPPER AGREED READS CREDIT
N29	SHIPPER AGREED READS DEBIT
W15	USER PAYS ONE OFF CHARGE CR
W16	USER PAYS ONE OFF CHARGE DR
W01	AUGE DEVELOPMENT CHARGE CR
W02	AUGE DEVELOPMENT CHARGE DR
W03	AUGE ONGOING CHARGE CR
W04	AUGE ONGOING CHARGE DR

When a read is obtained by the industry as part of the Must Reads process

When a read is obtained by the industry as part of the Shipper Agreed Read process

Allocation of unidentified gas is calculated periodically by experts and the cost to calculate these charges are distributed

3.6 Unscheduled Ancillary Invoices

Unscheduled Ancillary Invoices

The remainder of the invoices are unscheduled and are issued for specific scenarios.

ADB – ENERGY RECONCILIATION ADJUSTMENT

- When notified of unidentified gas or shrinkage that was not linked to the core invoices for that BillingPeriod

ADG – GRE INVOICE

- To enable and reconciliation of Gas Cash out due to Transporters orShipper

ADK – CONTINGENCY INVOICE

- For the occasional NTS Entry Capacity Retention charge and any overrun chargeadjustments

ADR – RECONCILIATION INVOICE

- To allow further adjustments of the commodity Reconciliations already performed for that billingperiod

ANC– ANCILLARY INVOICE

- This is for a variety of charges see Xoserve Comprehensive Invoices and Charge Types here.

TSV– TRANSPORTER SITE VISIT

- Enables the refund or rebilling of a Site Visit.

Request To Bill

There is one final invoice type INR which is the Request to Bill invoice, any charge type can be associated to this invoice type.

This invoice is used to manually process any of above invoice/charges which are issued through UK Link.

Data Services Contract

Provided by:

What is the Data Services Contract? (DSC)

The Data Services Contract is an agreement between Transporters, Independent Gas Transporters (IGTs) and Shippers for the services that Xoserve deliver as the Central Data Service Provider (CDSP).

This includes the delivery of information, data processing, invoicing, supply point administration services and our change programme. It is the agreement through which Xoserve earns most of its income.

Some Xoserve services are provided under different contract arrangements depending on the service and customer type.

What is the Data Services Contract? (DSC)

CDSP Service Charges reflect the Budget approved by the Xoserve Board following a period of customer consultation. The CDSP Annual Charging Statement provides further information.

Xoserve will invoice and collect funds from DSC and other customer contracts in line with rules set out in the CDSP Budget and Charging Methodology and the CDSP Credit Policy.

Xoserve will consult with its customers during the development of its annual Business Plan and Budget before making a recommendation to the Xoserve Board for approval.

CDSP Invoicing Schedule

DSC/UUA Contracts (Shipper and Trader Users, GTs and IGTs)

Service	Issued
General Service	12th Business Day of the Month
Specific Services	Month End Plus 16 Business Days
Additional Services	Adhoc

DSC/UUA Payment Terms – 20 Business Days after invoice issue date

Third Party Contracts (for customers who are not a DSC Party)

Majority issued in line with Specific Services Schedule others issued on Adhoc basis.

Credit and Risk

Provided by:

DSC
Credit and Risk

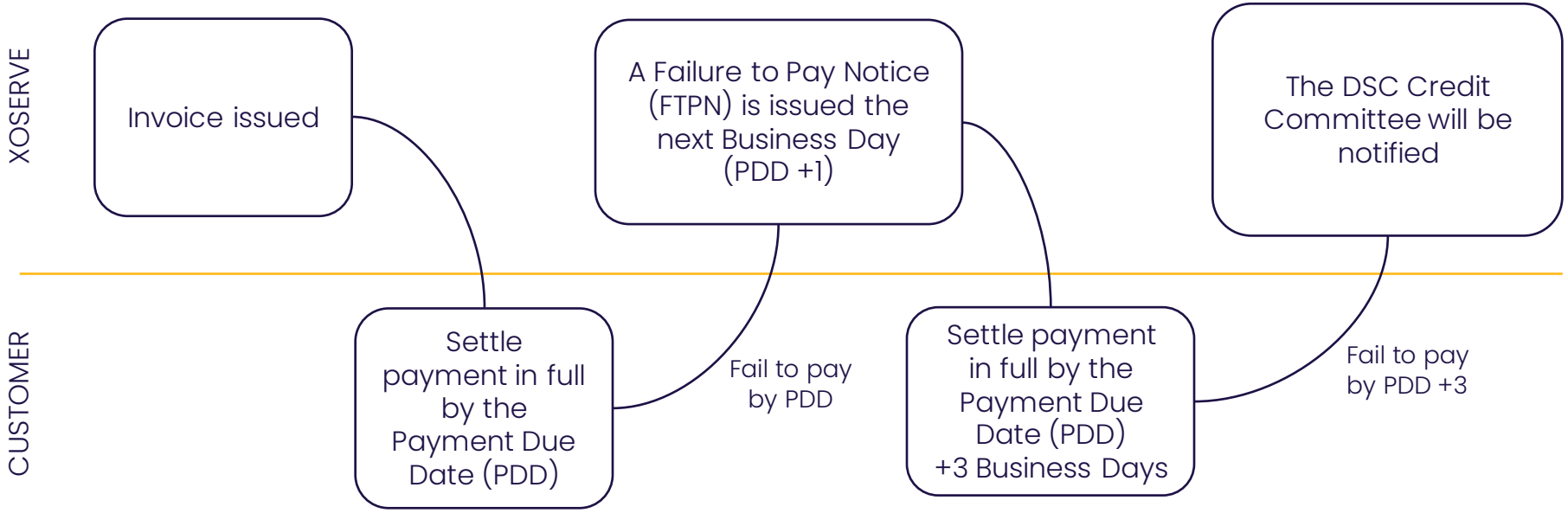
Team responsibilities - DSC Credit

- Cash Collection of all DSC invoices, scheduled and ad-hoc
- Security Management – Using published ratings from two credit scoring agencies, Parent Cover Guarantees and Letter of Credits
- Management Information – Performance information published monthly on the Joint Office website
- DSC Credit Committee – Quarterly meetings with minutes published on the Joint Office website

Failure to pay and escalation

If you fail to pay a DSC invoice by the Payment Due Date (PDD), the following steps will take place:

Late payment interest charges are incurred in accordance with the Late Payment of Commercial Debts (Interest) Act



DSC Security Management

Any changes in a customers credit rating are highlighted daily via alerts from the two **credit checking** agencies:

- Graydons
- Experian

Should a customers rating drop lower than their monthly service charges they must place **alternative security** in the form of a Letter of Credit or a Parent Cover Guarantee.

Energy Balancing Credit and Risk

Team responsibilities – Energy Balancing Credit

National Grid have appointed Xoserve as the CDSP to undertake the relevant Section X activities which are defined in the Energy Balancing Credit Committee Rules.

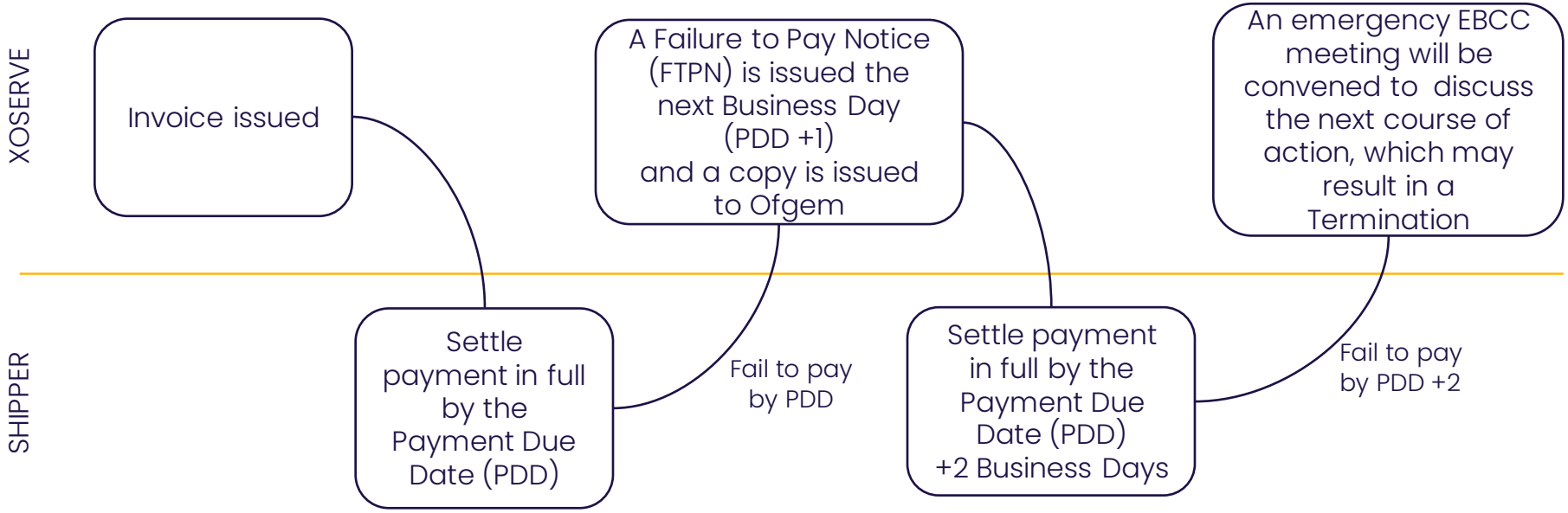
The rules were developed to manage the gas communities financial exposure and avoid any potential loss to the industry.

The responsibilities include:

- **Cash Collection -** Of all Energy invoices, scheduled and Adhoc
- **Daily Monitoring of Indebtedness** – Issuing Cash Call notices for any users in breach of their security limit
- **Security Management** – All users have an obligation to lodge security in the form of a Deposit Deed or Letter of Credit
- **Management Information** – Performance information published monthly on the Joint Office website
- **Energy Balancing Credit Committee** – Quarterly meetings with minutes published on the Joint Office website

Failure to pay and escalation

If you fail to pay an Energy Balancing invoice by the Payment Due Date (PDD), the following steps will take place:



Late payment interest charges are incurred in accordance with the Late Payment of Commercial Debts (Interest) Act

Energy Balancing Security

- All users have an obligation to post security to cover their Energy Balancing activities
- This is either in the form of a Letter of Credit from a list of approved financial institutions or a Deposit Deed
- Renewals take place annually for each user to ensure their security value is sufficient

Calculating Energy Balancing security for new customers

New applicant Shipper completes Customer Application Form with projected annual throughput

Level of security that is required is calculated in line with the Energy Balancing Credit Rules Section 2.1c

Acceptable forms of security:

- Irrevocable Standby Letter of Credit
- Multiple User Irrevocable Letter of Credit
- Non Registerable Deposit Deed

Security placed prior to becoming a live user on Xoserve systems

Terminology

Indebtedness –

Invoiced, unpaid Energy Balancing charges and accrued Energy Balancing charges for the period which is yet to be invoiced

---

Secured Credit Limit –

Value of security provided by the user, which in the event of default may be released to meet its outstanding indebtedness

---

Cash Call Limit –

85% of the Secured Credit Limit and represents a threshold for Indebtedness which, if breached, results in a user being issued a Cash Call Notice

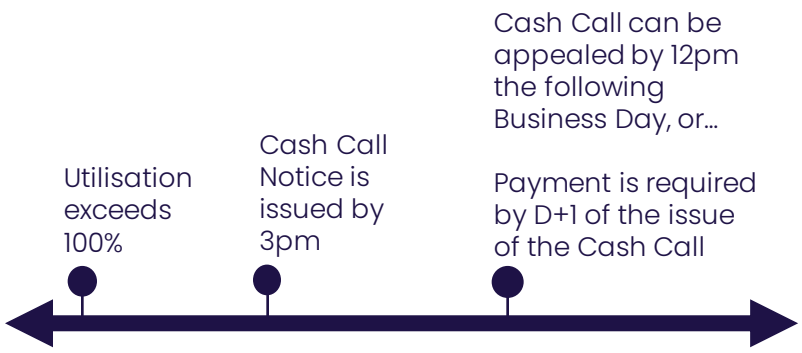
Indebtedness

Indebtedness is monitored daily by Xoserve's Credit and Risk Team.

The Indebtedness utilisation % is calculated by:

$$\frac{\text{Net Energy Balancing Indebtedness}}{\text{Cash Call Limit*}}$$

When utilisation exceeds 100%:

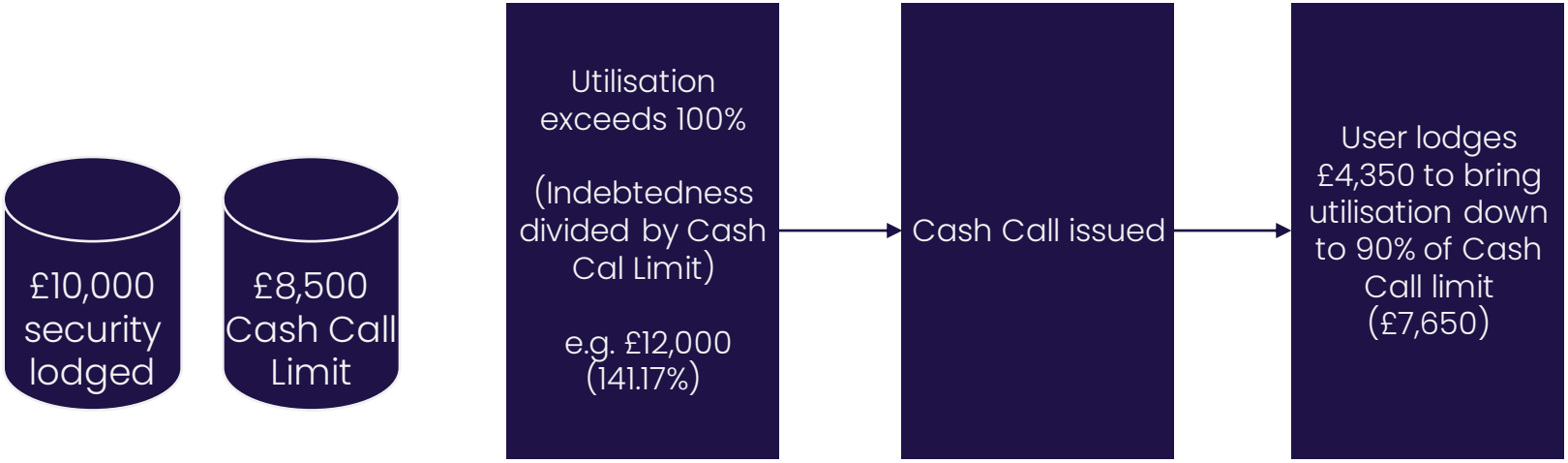


Cash Call will request a payment of a prescribed amount of cash in order to reduce Indebtedness to 90% of the Cash Call Limit.

If 2 Cash Calls occur within 28 days, a Further Security Request is issues and additional security must be lodged for a minimum of 90 days.

***Cash Call Limit is 85% of the secured Credit Limit**

Monitoring Indebtedness



Cash call limit

The Cash Call Limit for new users =

3 days non deliverability at 12 months average System Average Price* (SAP) to represent 85% of the Secured Credit Limit (based upon an estimate of projected throughput)

For example:

A user projects 80,000,000 kWh annual throughput 80,000,000 kWh / 365 x 3 x 12 month average SAP (1.843p) = £12,118.35** (rounded = £13,000)

*SAP is published by National Grid NTS at http://nationalgrid.com/uk/Gas/Data/dataitemexplorer

**The Cash Call Limit is multiplied by a factor of 100/85 to find the Secured Credit Limit

Energy Balancing & DSC Credit Committees

- Operational meetings are held quarterly via teleconference and chaired by the Joint Office
- Both committees are made up of industry and CDSP representatives
- Members are elected annually on 1st October
- Powers and duties are detailed in the Energy Balancing Credit Committee Rules and the DSC Credit Committee Rules which include minimising customers risk from avoidable financial loss resulting from another customers default

Further reading

- DSC Credit Committee Rules – click here
- Energy Balancing Credit Committee Rules - click here
- UNC Section X – click here

Contact information

- Energy Balancing Credit Management - box.xoserve.crm_securities@xoserve.com
- Energy Invoice payments - xoserve.crm@xoserve.com
- DSC Credit Management - box.xoserve.crm_xoserve@xoserve.com
- Credit and Risk Lead – sharon.bright@xoserve.com or 0121 229 2621

Appendix

Provided by:

Types of Non-Standard Sites (1 of 2)

Term	Description
Shared Supply Meter Point (SSMP) – NTS and LDZ	More than one Shipper supplies gas through one meter. Shippers specify how the gas is to be allocated as a part of the nomination process by either default allocations based on % of SOQ or appoint an Agent to allocate the gas used on a daily basis. Shippers cannot be given access to the information about another Shipper.
Optional Tariff - NTS Shorthaul and LDZ Shorthaul	Site has to be eligible for but also chooses to take specific (shorthaul) rates and charges. It is available as a single charge, as an alternative to both the standard LDZ/NTS Capacity and LDZ Commodity Charges.
NTS/LDZ Telemetered	These sites do not send readings but instead energy values are sent directly to National Grid. Energy is then sent to the Gemini files (USM). This is currently a monthly file updated to the old UK Link, but will be sent daily to SAP. There will be a separate device against the installation. This will be the billable register.
IGT CSEP	An individual IGT network is connected to the LDZ network or another IGT's network through a Connected System Exit Point (CSEP). Each CSEP will have a unique CSEP ID, and will have a downstream connection to one or more SMPs.

Types of Non-Standard Sites (2 of 2)

Term	Description
Interconnector	These are telemetered gas terminals which ship gas on and offshore. There is no Nomination/Confirmation process and charges are specific based on the price book. The 3 main sites are; • Bacton: ships to and from Belgium • IUK (Moffatt): ships gas to Ireland and ship gas from Norway • BBL: ships gas to and from Netherlands
Directly Connected	These are sites which may offtake very large quantities of gas such as power stations or industrial sites. Such sites will contract with a Shipper/Supplier for the gas they offtake
Connected System Operator (CSO) sites (NTS CSEP)	These sites are CSEP Sites on the NTS pipeline which operate under a different Transporter license to an IGT. The Network will request the set up of the CSEP project and the related MPRN creation details.
Twin stream	A Twin stream site will have more than one meter feeding into one Supply Meter Point. Therefore one MPRN will have two or more meter attached. Each meter could also have a convertor and daily read equipment (DRE/AMR) attached.

Class Overview

Class	
Class 1 Sites > 58.6m kWh	The existing DM mandatory process. SMPs are read daily by the DMSP. Allocation and energy balancing processes are based on the daily read.
Class 2 Sites < 58.6m kWh	Shipper provides daily reads, which will be used for Allocation and energy balancing processes. Shippers can elect for any SMP to be class 2.
Class 3 Sites < 58.6kWh e.g. Smart Meters	Demand Estimation process for daily allocation. Shipper provides daily reads periodically in batches. The reads will be used for daily reconciliation. Available for any SMP
Class 4 Sites <58.6kWh	Demand Estimation process for daily allocation. Shipper provides a periodic read (monthly/annually) for reconciliation

Any questions?

Questions and Answers can be found here

Provided by: correla

Thank you

We are always working to drive improvements to our customer experience.

Your feedback is important to us, so we'd love to hear what worked and how we can do better.

Click here to leave feedback

Please contact box.xoserve.training2@xoserve.com if you have any questions about our training days or material.