Gas Transmission

Gas Operational Forum

MS Teams
30th June 2022
10.02am

Questions
MS Forms (link in the chat)
Teams Chat

nationalgrid

Gas
Transmission

Introduction & Agenda

Martin Cahill
Operational Liaison & Business Delivery Manager

nationalgrid

Presenters

National Grid Gas

Martin Cahill – Operational Liaison & Business Delivery Manager

Mathew Currell – Senior Operational Liaison Officer

Colin Williams – Commercial Codes Change Manager

Karen Healy – Engagement and Publications Lead

Guest Presenters

Wouter De Klein – Senior Director, Utility Markets (ICE Endex)

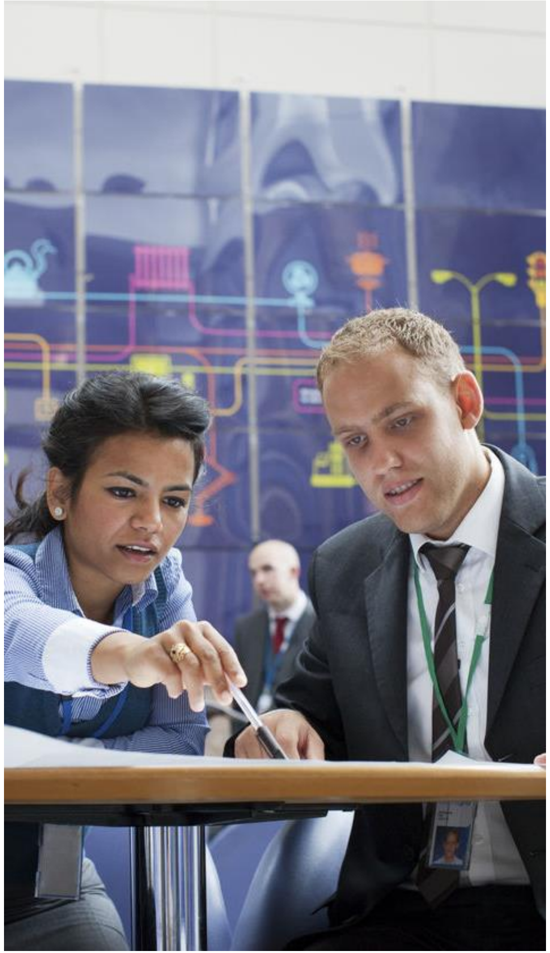
Harriet Reece - Gas Security of Supply Team Leader (BEIS)

National Grid Gas Additional Attendees

Paul Sullivan – Future Networks Manager

Sam Holmes - Operational Liaison Analyst

Luke Parkinson - Gas Transmission Degree Apprentice



Calendar year 2022 Operational Forums

The forums will be hybrid via Microsoft Teams and at the Clermont Hotel, London (exc. January).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Online	Clermont & Online	Clermont & Online	x	Clermont & Online	Clermont & Online	x	x	Clermont & Online	Clermont & Online	Clermont & Online	X
20/01	24/02	31/03		19/05	30/06			15/09	20/10	24/11	

Registration is open for the September 2022 event at:
https://www.eventbrite.co.uk/e/gas-operational-forum-september-in-person-attendance-tickets-376542898947

The Clermont Hotel
Charing Cross
London
WC2N 5HX

Housekeeping for Forums

For Microsoft Teams participants;

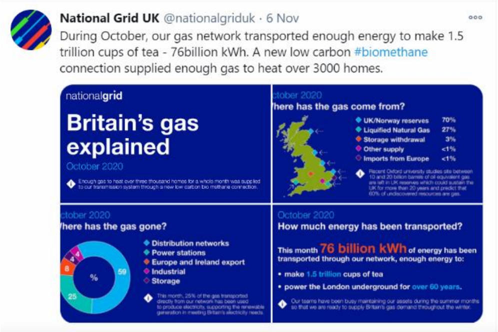
- Attendees will be automatically muted on dial-in and cameras will be unavailable.
- You can use the 'raise a hand' function if you would like to speak and we will enable your camera and microphone options.
- You will then need to un-mute yourself and turn your camera on to ask your question.
- We will be taking questions via the chat function, or if you would like to remain anonymous please use Microsoft Forms (link in the chat)

Key resources available to you

Registration is open for all events at:
https://www.nationalgridgas.com/data-and-operations/operational-forum

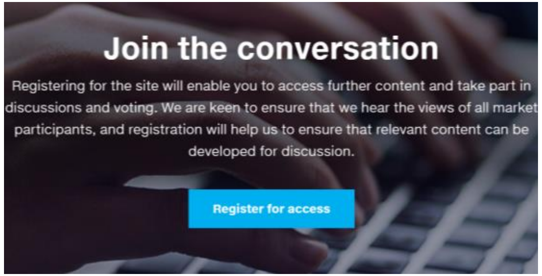
Gas Distribution List

https://subscribers.nationalgrid.co.uk/h/d/4A93B2F6FAF273DE



For the monthly Gas Explained information please visit;
https://twitter.com/nationalgriduk

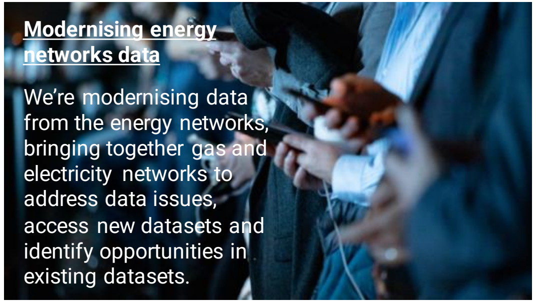
Or follow our personal accounts on LinkedIn



For updates and interaction with National Grid please visit;
https://datacommunity.nationalgridgas.com/

For the National Grid Gas Website, please visit;
https://www.nationalgridgas.com/about-us

Maintenance Planning
https://www.nationalgrid.com/uk/gas-transmission/data-and-operations/maintenance



Energy Data Request Tool:
Microsoft Forms Link

How to contact us

Operational Liaison Team

Martin Cahill: Martin.Cahill@nationalgrid.com

Mathew Currell: mathew.currell@nationalgrid.com

Operational Liaison Email:
Box.OperationalLiaison@nationalgrid.com

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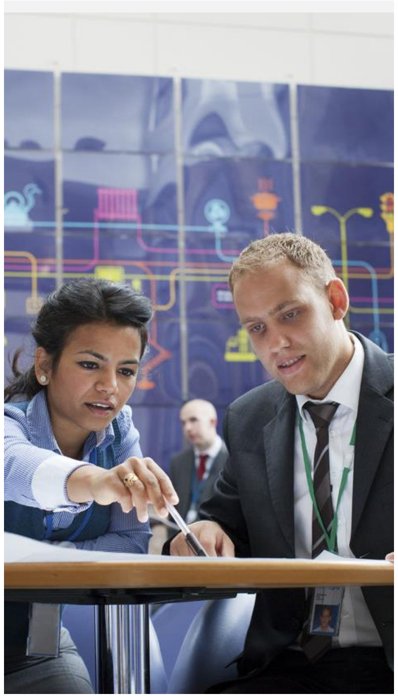

Agenda for Today

01	Welcome and Introduction	10:02
02	Operational Overview	10:10
03	Winter Preparation & Security of Supply	10:25
04	Winter Outlook	10:40
05	Emergency Exercise	10:55
06	ICE Endex Guest Presentation	11:00
07	Charging Update	11:20
08	Updates & Close	11:50

Please ask any questions using the chat function, or through Microsoft Forms (link in the chat).

Questions will be covered at the end of each agenda section.

GT & M Company Sale

In March, National Grid Group announced the acquisition of a 60% equity stake in our gas business by the consortium comprising of Macquarie Asset Management and British Columbia Investment Management Corporation.

While the transaction has been agreed, GT&M remains part of the National Grid Group until the transaction completes, which we expect to complete in the third quarter of the 2022/23 financial year. Steps ahead of completion will include regulatory approval by Ofgem and a review against the National Security and Investment Act.

MACQUARIE

BCI

Gas Transmission

Operational Overview

Mathew Currell
Senior Operational Liaison Officer

Martin Cahill
Operational Liaison & Business Delivery Manager

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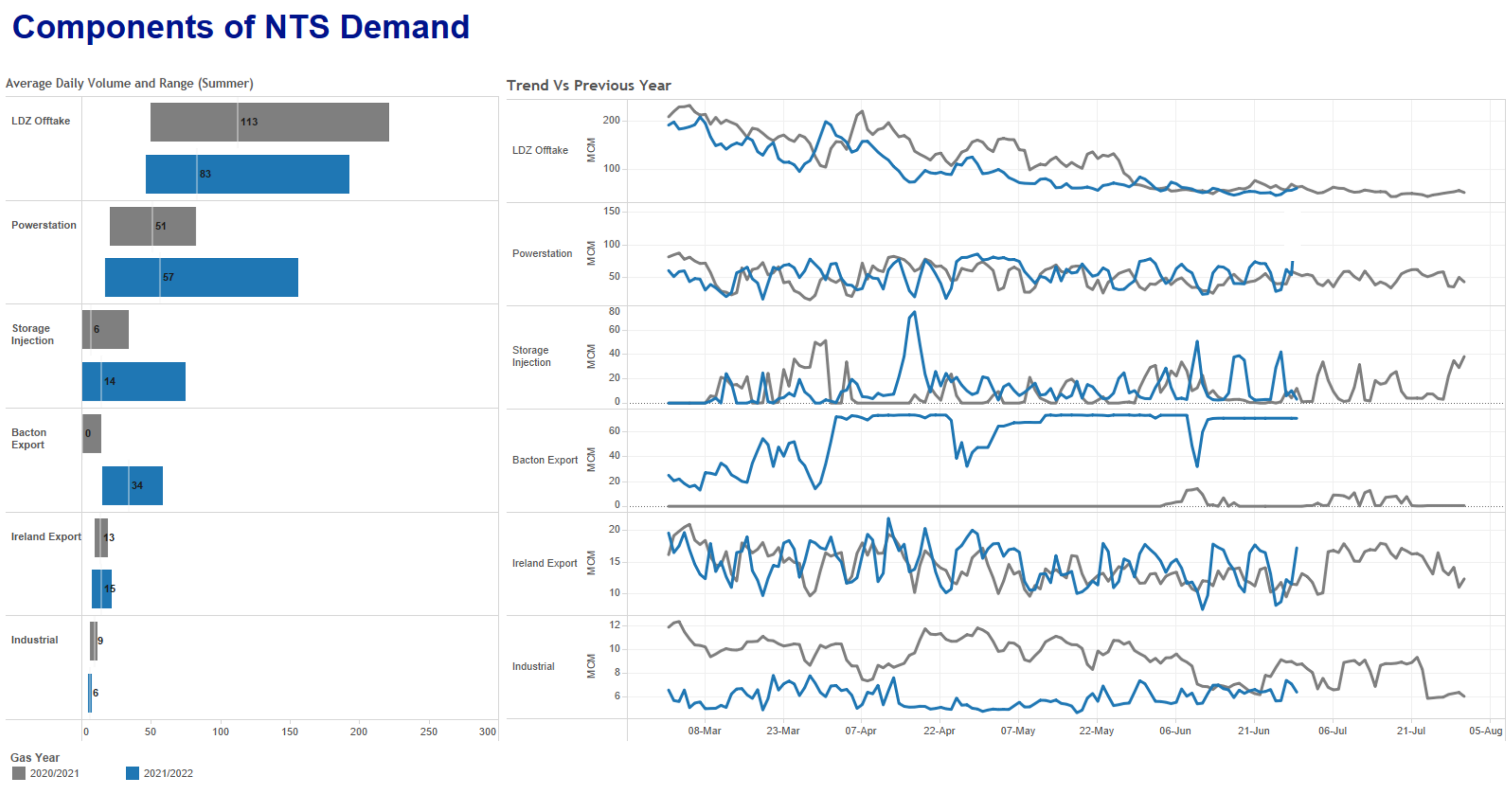
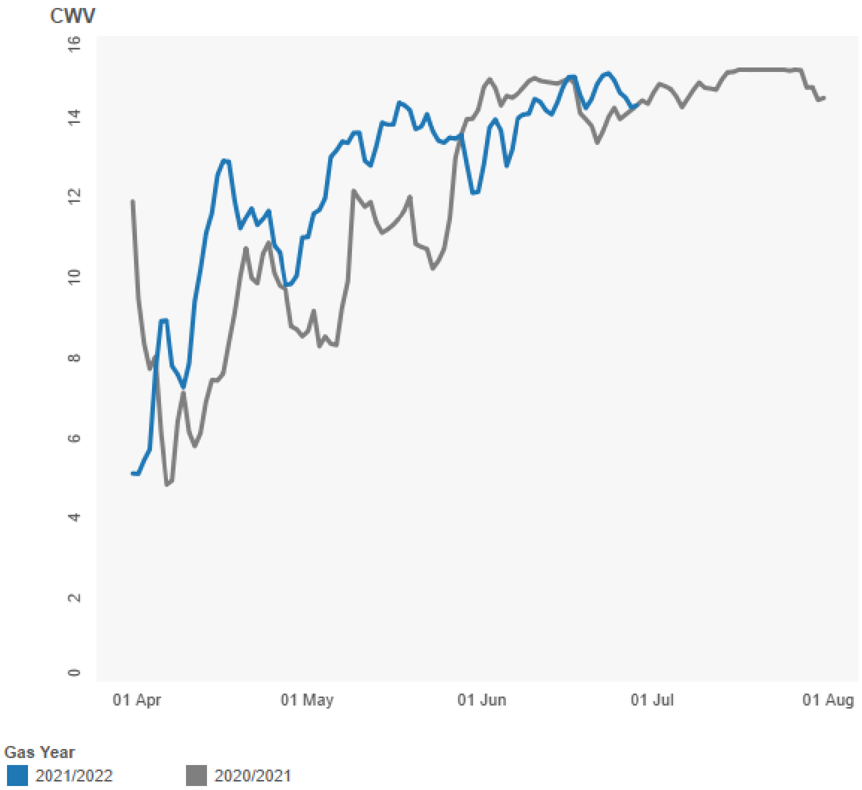
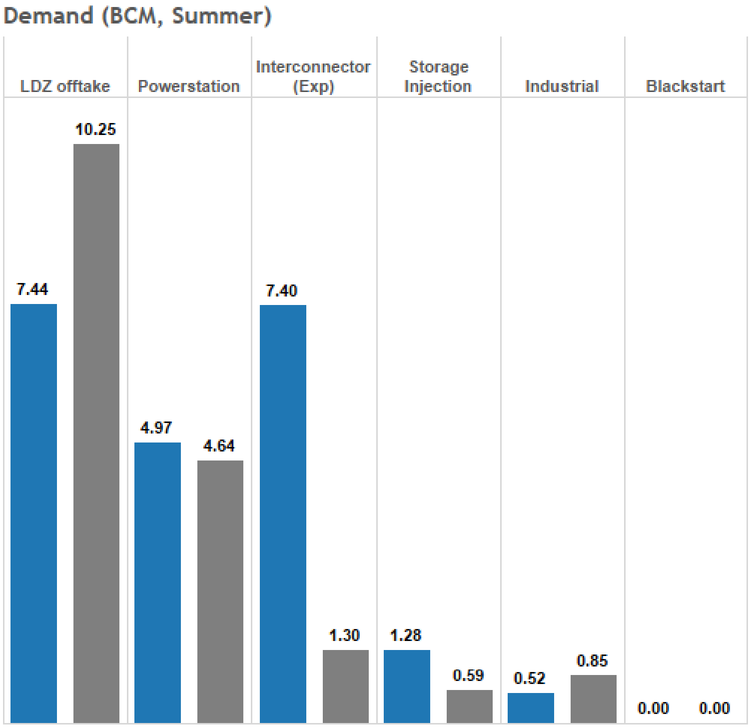
Components of NTS Demand

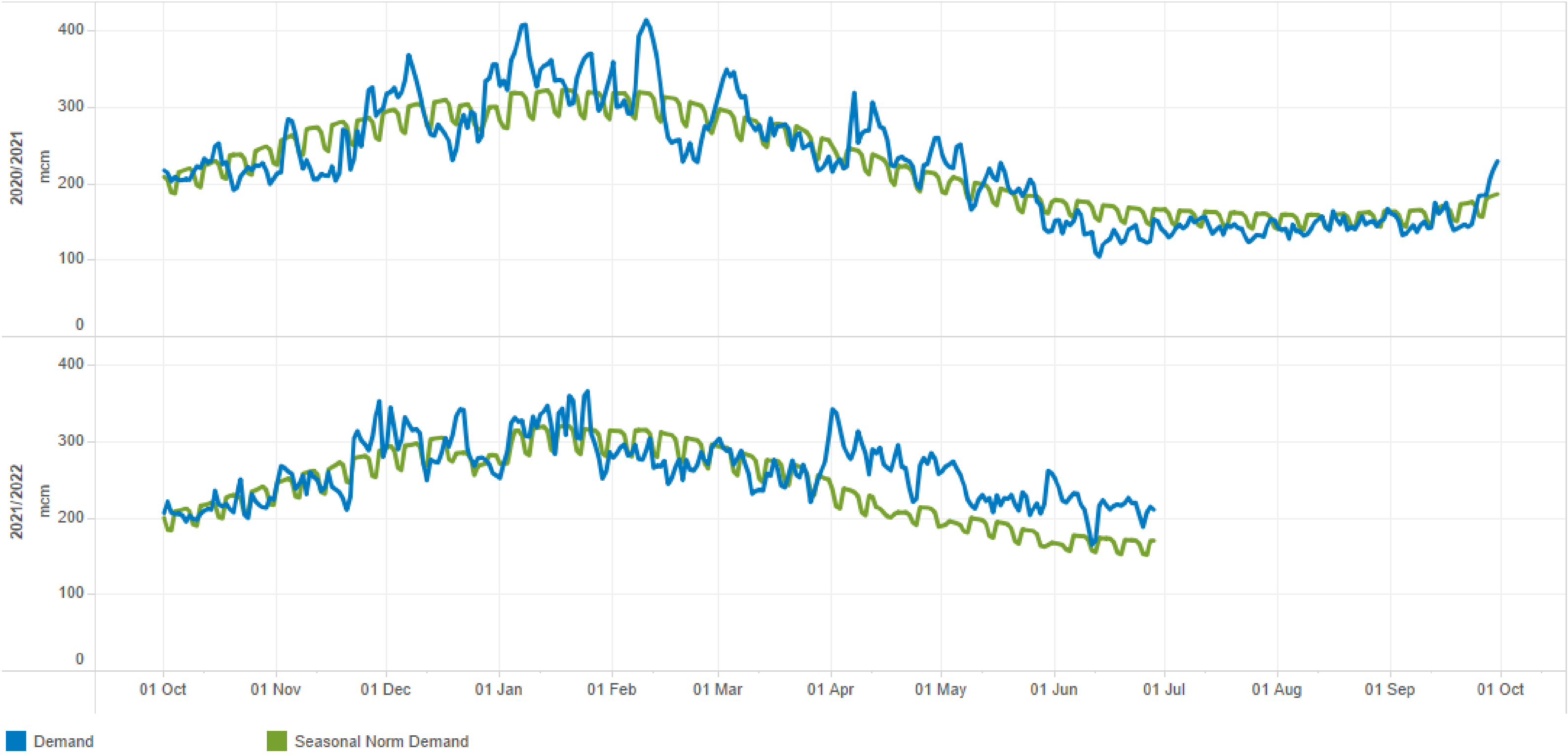


Demand – CWV & Components

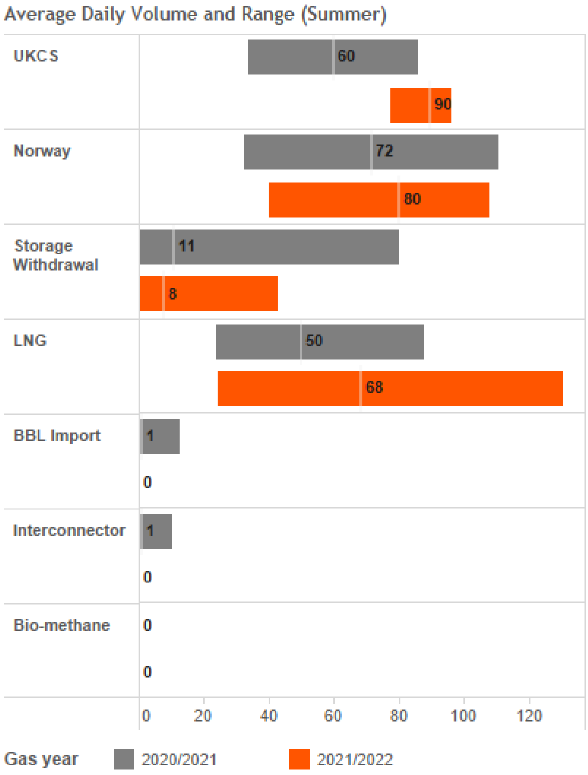


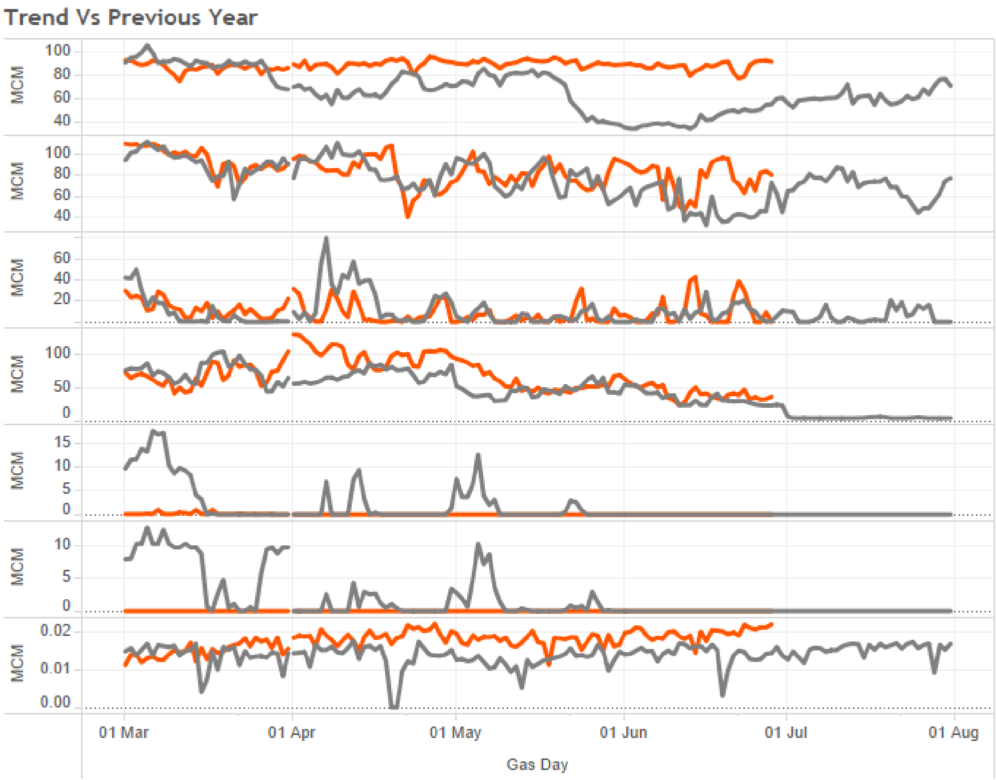


Demand – Comparison to seasonal norm



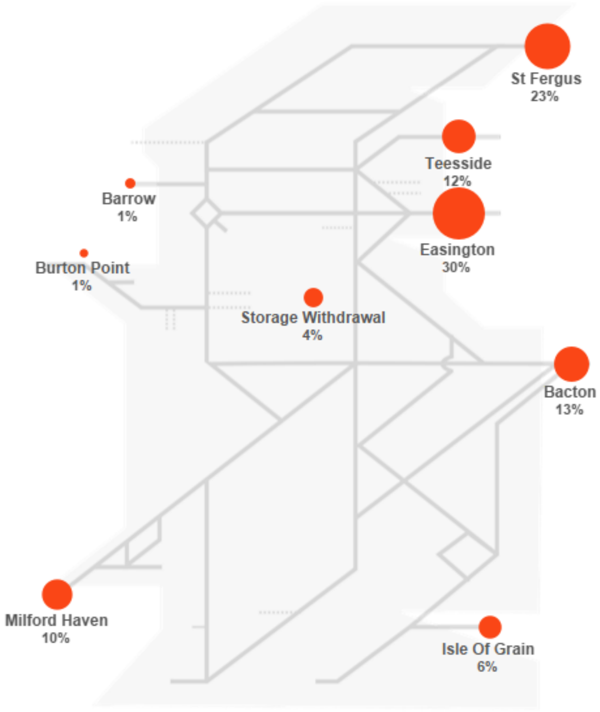
Components of NTS Supply



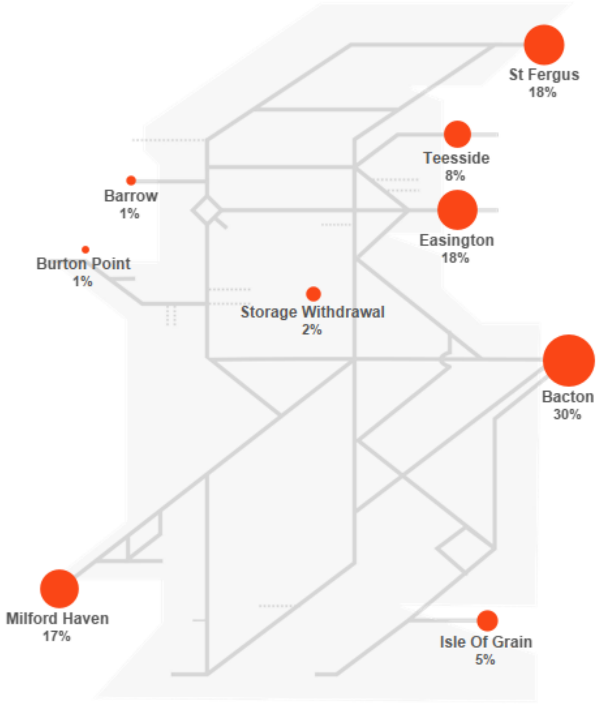


Supply Location

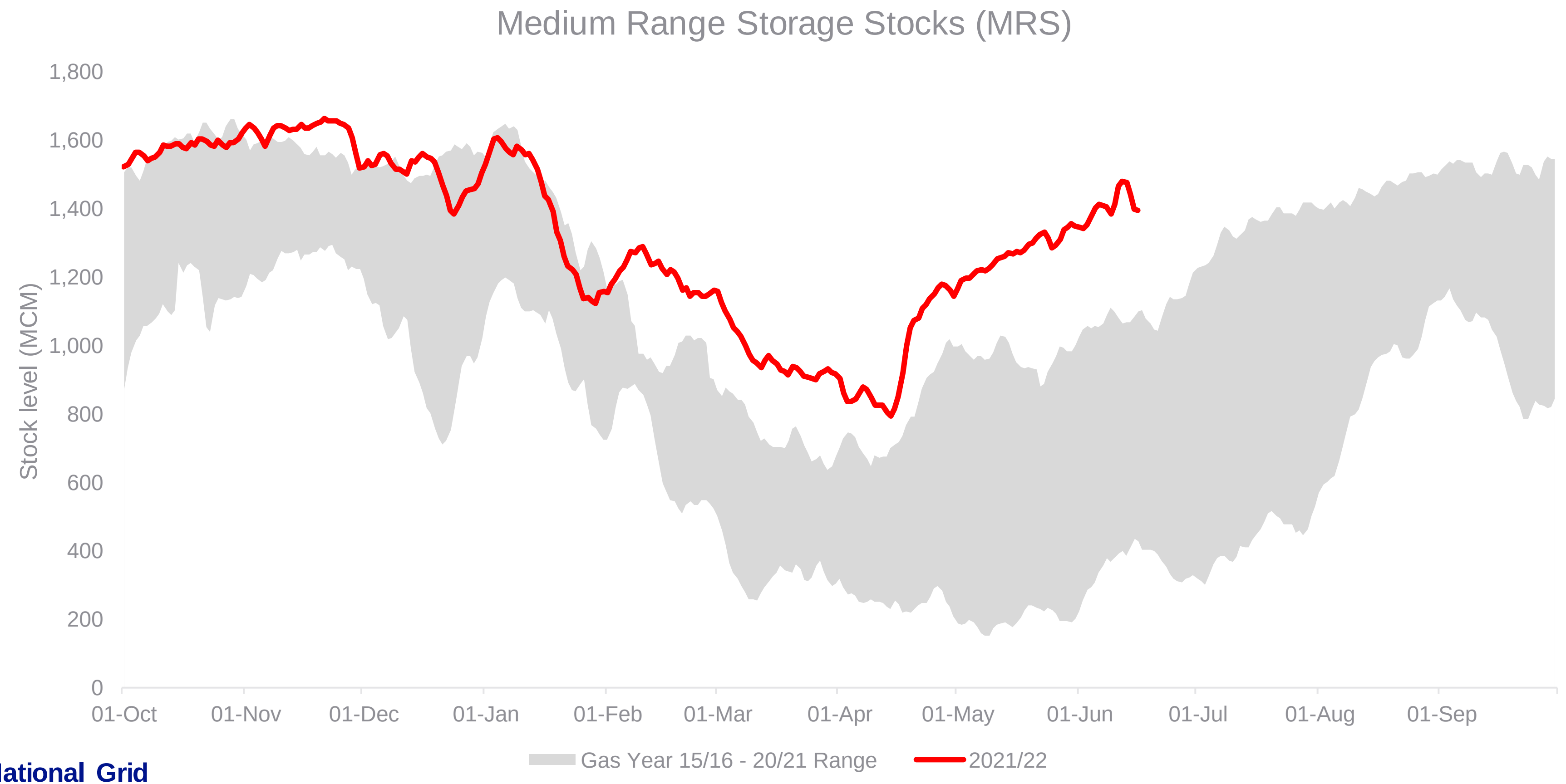
2020/2021 Percentage of total supply (Summer)



2021/2022 Percentage of total supply (Summer)

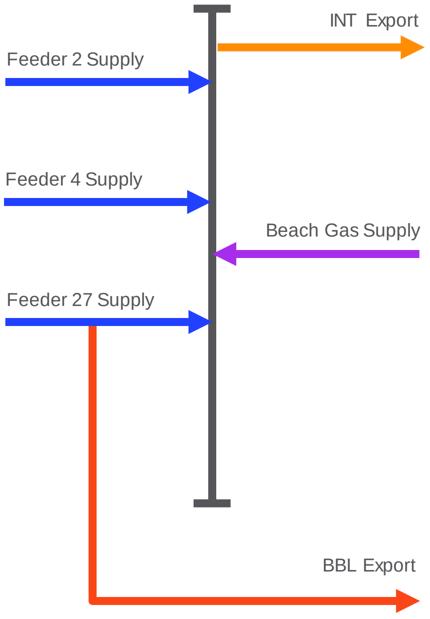


Medium Range Storage Stocks (MRS)



Network Impact of EU Export Gas

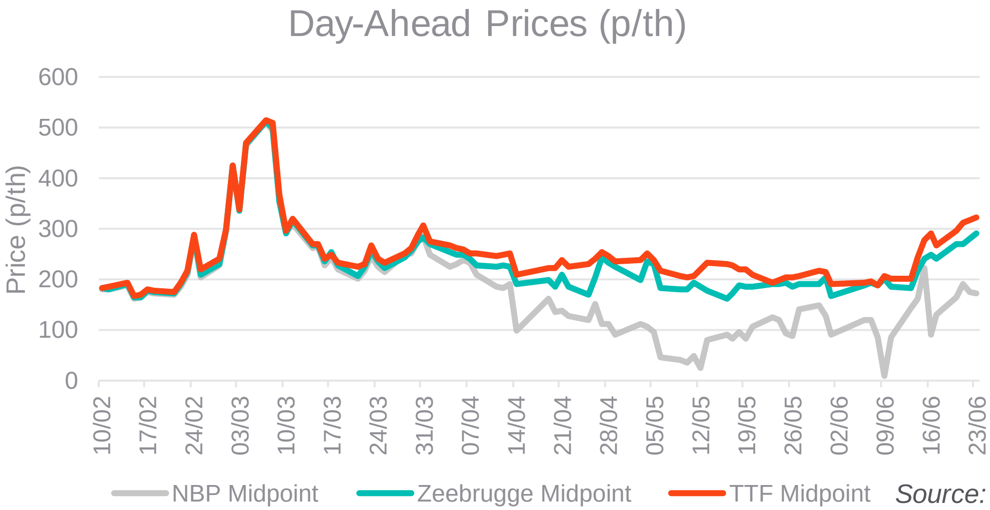
- Unprecedented export volumes at Bacton have resulted in high velocity, turbulent gas flows in the network. Such flows resulted in material ingress into Interconnector Limited, limiting export flows for periods of April
- Steady-state flow conditions since that time saw maximum exports recover throughout May.
- On the 9th of June, legislative maintenance activities were carried out within the NG Bacton facility. Controls put in place in conjunction with Interconnector to mitigate the risk of further delivery of solid materials during the activity failed. This led to filter blockage and consequential flow reductions.
- All summer maintenance activities at Bacton are now complete and NGG/INT will continue to work together to reduce the likelihood of future interruptions.
- Interconnector flow reduction dates:
  25 April to 11 May
  9 June to 11 June



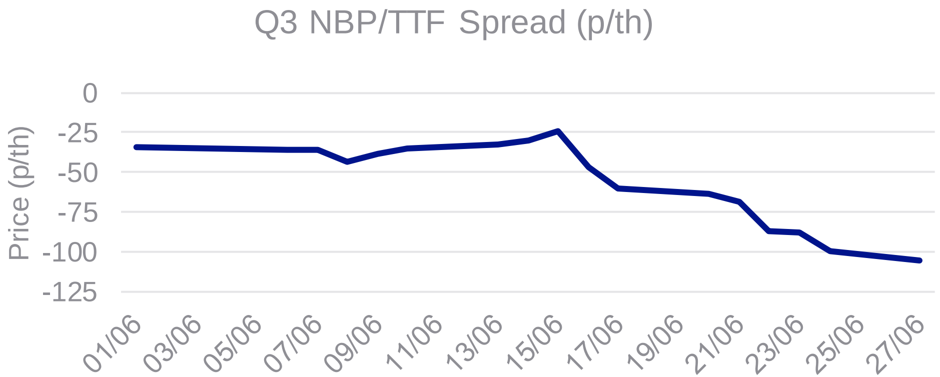
Simplified schematic of Bacton pipework arrangement

Prices

- We are still experiencing a wide spread between NBP and European Prices
- Very low Day-Ahead prices around the 9th June influenced by material ingress at Bacton
- Large spread between NBP and TTF for Q3



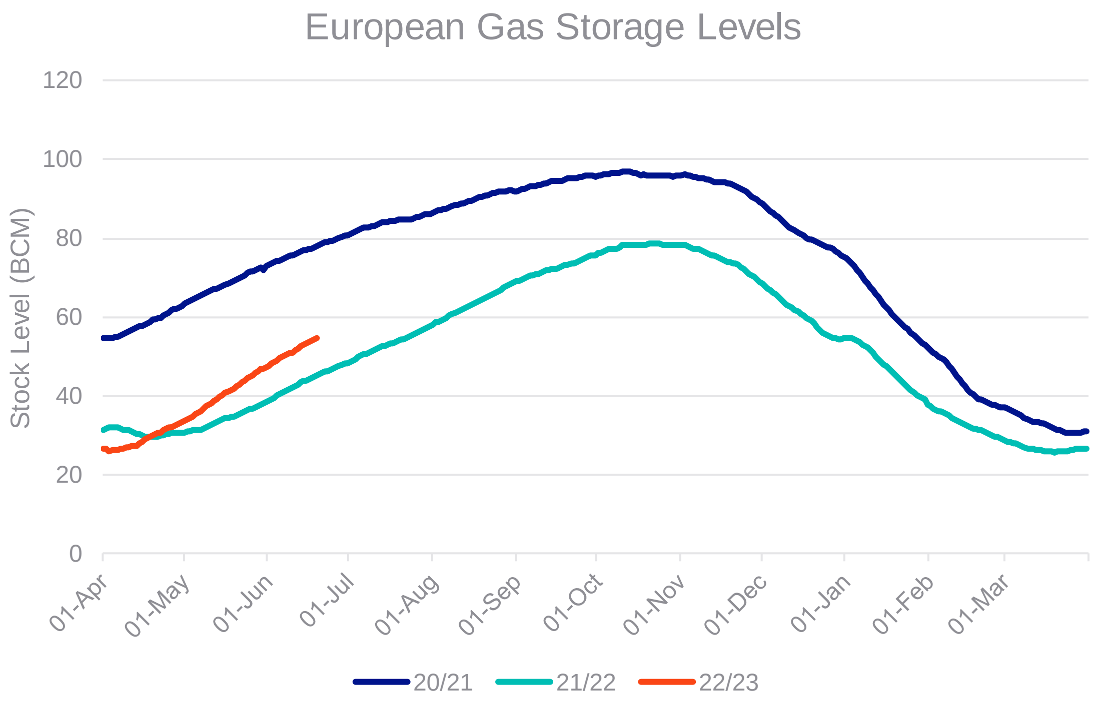
Source: Argus



Source: Argus

European Gas Storage

- **European Storage stock levels are still lower than the 21/22 average, but are still trending upwards as the summer progresses.**
- **Legislation approved this week requiring EU member states to fill storage to 80% capacity by November**



June Gas Operational Forum

Harriet Reece
Gas Security of Supply Team Leader
Gas Security Networks and Markets Team
30.06.22

Department for Business, Energy & Industrial Strategy

Gas Policy teams in BEIS

- UK Gas Security of Supply
- Wholesale Gas Market
- European Gas
- Future Gas Markets
- Future Gas Flexibility
- Future Gas Networks
- Gas Governance

Gas Security Networks and Markets (GSNM)
Clare Dobson & Alexandra Howe

If you are unsure who to contact please contact myself harriet.reece1@beis.gov.uk or our inbox gsnm@beis.gov.uk

Downstream Gas and Electricity Resilience (DGER) and Emergency Response
Mark Prouse & Abi Clarke

- Risk and Resilience
- Critical National Infrastructure
- Emergency Response and Planning (including emergency exercises)

Energy Supply
Jonathan Mills & Johanna Cowan

Oil and Gas Exploration and Production (OGEP)
David Curran & Julian Salazar

- Strengthening and decarbonising the UK's oil and gas production
- Offshore technology
- UK's future energy technologies (floating offshore wind and carbon capture)

HICC (Hydrogen and industrial carbon capture) and Clean Heat
Paro Konar & Steph Murphy
David Capper & Richard Leyland

- Hydrogen Economy
- Industrial CCUS & Hydrogen Business Models
- Hydrogen Production
- and Industry
- Industrial Decarbonisation and Hydrogen Revenue Support

Infrastructure & Materials (Energy Intensive Industries)
Neil Mackenzie & Gavin Fraser

- Energy Intensive Industries (e.g. steel, ceramics, paper and pulp)
- Energy and climate change policies on industrial prices
- Net Zero policies for EIIs

International Energy Unit (Joint BEIS/FCDO)
Marina Skrinar, Tim Stern & Sophie Westlake

- International Gas Security and Strategy
- International engagement on energy
- Diplomatic/Embassy engagement
- Monitoring international gas markets

Department for Business, Energy & Industrial Strategy

Planning for winter 2022/23

- We continue to work closely with Ofgem, National Grid Gas and other key industry organisations to monitor the gas supply horizon and prepare for the upcoming winter.

- This is normal practice in advance of winter, however, in light of recent high gas prices and the geopolitical context of Russian invasion of Ukraine, it is important that all possible options are considered to ensure the supply of gas is available for winter 2022/23 and for future winters.

- We are exploring with NGG, Ofgem, North Sea Transition Authority (NSTA), Health and Safety Executive (HSE) ways in which we can maintain security of gas supply this winter, including:
    - Winter Outlook with NGG and Ofgem
    - Emergency planning
    - Enhanced wholesale market monitoring
    - NGG's extension of market notification tools (7-day early warning market notification)
    - The future of the gas system and the future of gas storage.

- The Government also continues to work closely with its international partners in the EU and further afield.

Gas Transmission

Winter Outlook 2022/23

Karen Healy
Engagement and Publications Lead

nationalgrid

Winter Review & Consultation

- Winter Review and Consultation was published 23rd June

- Key messages:
  - GB demand was lower last year (relatively mild winter)
  - Higher exports to Europe
  - Total demand comparable to last year

- Consultation questions focussed on this winter
  - Open to the end of July & we'd love to hear from you

https://www.nationalgrid.com/gas-transmission/document/139891/download

Scope of Winter Outlook

- Previous Winter Outlook publications focussed on upstream and onshore physical capability
- This still remains an essential element of looking at the operations for the winter period, however
- Given the recent geo-political situation and market volatility we recognise the need to provide additional insight and information into how supplies may be needed to meet varying demands.

And we really want to hear your views on this winter period, what concerns you and what would most help you prepare …………….

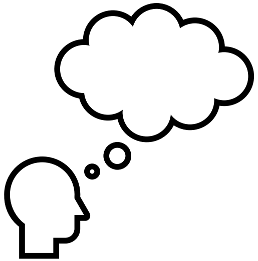
Our initial thoughts:

- Additional demand scenarios to set out the basis on which supply can be assessed
- Supply scenarios which test SoS and the requirement for flexible supplies
- Detail on new/additional tools, monitoring and reporting that has been developed for this coming winter
- Provision of more information on what monitoring and reporting we undertake throughout the winter and quick links to find it

Break out session – 10 mins

- What are your views on this winter period, what concerns you and what would most help you prepare?
- What would be most helpful to you in the NG Winter Outlook?

Breakout Session



Please think about the following 2 questions:

What would you like to see in the Winter Outlook?

What are your main concerns for this winter?

Online attendees: There is an MS form link for these questions posted in the meeting chat and it can also be found at https://forms.office.com/r/awmG6jQzP2

The forum presentation will recommence at 10:50.

Next Steps:

- Collate all the feedback
- Early drops of Winter Outlook in July and August
    - Including a playback of feedback
- Full Winter Outlook early October along with the Ofgem led Winter Outlook Launch

Gas Transmission

Emergency Exercise

Martin Cahill
Operational Liaison & Business Delivery Manager

nationalgrid

NEC Industry Exercise ‘Degree’ 2022

Network
Emergency
Co-ordinator

NEC Industry Exercise ‘Degree’

- **13th September** – Emerging Issues Day
- **14th September** – Pre-Emergency Day
- **4th October** – Emergency Day
- **5th October** – Restoration Day

Scope

Exercise 'Degree' will involve participation across the gas industry to achieve the following scope. Electricity System and Network Operators will also participate again this year.

Tuesday 13th September	Wednesday 14th September	Tuesday 4th October	Wednesday 5th October
Emerging issues	**Pre-emergency**	**Emergency**	**Restoration**
• Gas Transporter collaboration • Gas Availability Status (GAS) report (live exercise activation) • Strategy for restricting release of further NTS capacity • Simulated communications issues • Margins Notice (live exercise activation)	• Gas Balancing Notification (live exercise activation) • OCM balancing trades (notional) • Scaleback off-peak exit capacity (notional) • Operating Margins (live exercise activation) • Electricity System Interactions	• **Stage 1**: 'Emergency Specification Gas' (live exercise activation) • **Stage 2**: Flow Direction & Load Shedding (live exercise activation) • Electricity System Impact • **Stage 3**: Public Appeal and Allocation & Isolation (live exercise activation)	• **Stage 4**: Restoration (live exercise activation) • Issue of Revocation Notices (live exercise activation) *Time Hop (proposed)* • Declaration of the end of an NGSE (live exercise activation)
09:00 – c.16:00	**09:00 – c.16:00**	**09:00 – c.16:00**	**09:00 – c.16:00**

Next Steps

- Industry briefing note will be issued early July
- Emergency Frameworks webinar to be advertised shortly (pre-emergency focus)
- Annual emergency communications checks will be undertaken in August
- GDN Load Shedding Exercises will take place separate to the Industry Exercise in September
    - Top 200 largest sites in each LDZ

UK OCM Market Update

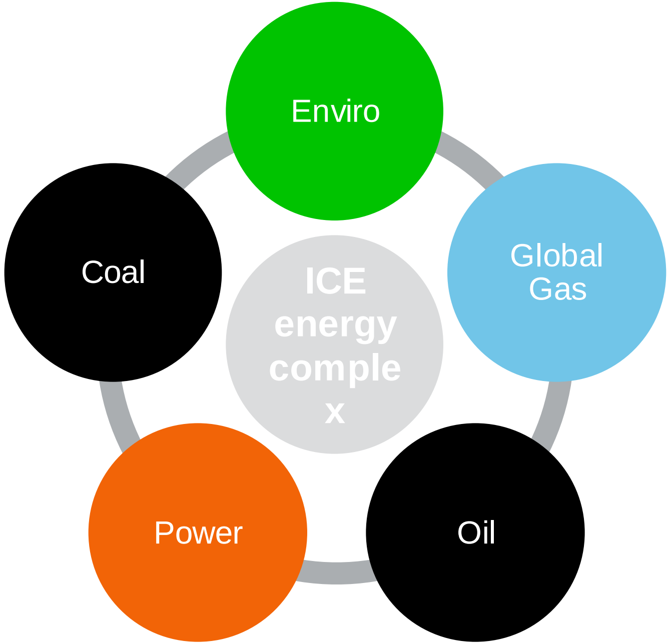
National Grid Operational Forum

Wouter de Klein
Senior Director, Utility Markets

30 June 2022

ICE Energy complex

Global Gas	Global Gas	Enviro	Coal	Power	Oil
TTF	JKM	EUA	API2	German Power	Brent
NBP	NBP 1st line	EUAA	gC Newcastle	Nordic Power	Dubai
Henry Hub	TTF 1st line	UKA	API4	UK Power	Gasoil
PSV	GCM	CCA	gC Richards Bay	French Power	Fuel oil
VTP	WIM	RGGI	M42	Italian Power	Permian WTI
THE	LNG Freight	RECs	gC Indonesian	Spanish Power	WTI
PEG		LCFS		Dutch Power	
		Carbon Credits		Belgian Power	



ICE European Gas portfolio

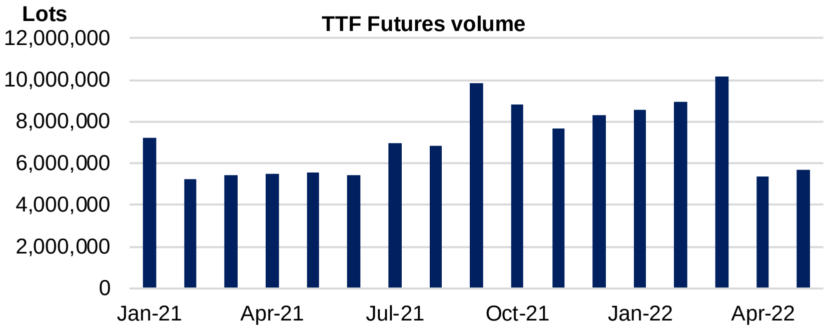
ICE Endex

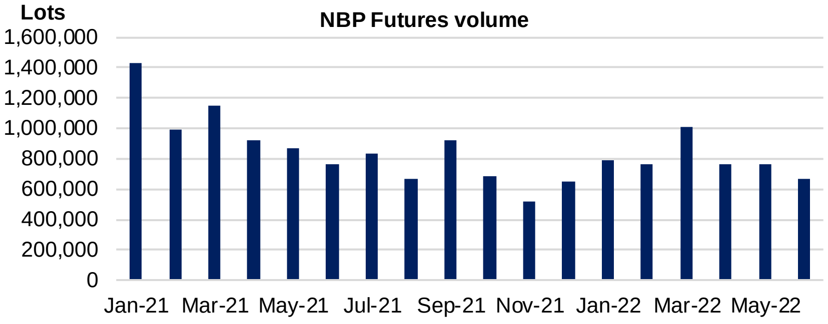
Product name	Type	Settlement	PCC	Market type
Dutch TTF Natural Gas Futures	Monthly futures	Physical	TFM	Dutch TTF Gas Futures
Dutch TTF Natural Gas Options (Futures Style Margin)	Options	Physical	TFO	Dutch TTF Gas Futures
Dutch TTF Natural Gas Daily Futures	Daily futures	Physical	TFE	Dutch TTF Gas Futures
Dutch TTF Natural Gas Daily Financial Futures (ICIS)	Daily futures	Financial	TFL	Dutch TTF Gas Futures
Dutch TTF Gas Spot	Spot	Physical	ETT	Dutch TTF Spot
UK OCM Gas Spot	Spot	Physical	ENB	UK OCM NBP Spot
German THE Natural Gas Futures	Monthly futures	Physical	GNM	German Natural Gas Futures
German THE Natural Gas Options (Futures Style Margin)	Options	Physical	GNP	German Natural Gas Futures
German THE Natural Gas Daily Futures	Daily futures	Physical	TGP	German Natural Gas Futures
German THE Gas Daily Financial Futures (ICIS)	Daily futures	Financial	TGN	German Natural Gas Futures
Italian PSV Natural Gas Futures	Monthly futures	Physical	IGA	Italian Natural Gas Futures
Italian PSV Natural Gas Daily Financial Futures (ICIS)	Daily futures	Financial	PSL	Italian Natural Gas Futures
Austrian CEGH VTP Gas Futures	Monthly futures	Physical	AVM	European Gas Futures
Austrian CEGH VTP Daily Gas Futures	Daily futures	Physical	AVL	European Gas Futures
French PEG Natural Gas Futures	Monthly futures	Physical	PEG	European Gas Futures
French PEG Natural Gas Daily Futures	Daily futures	Physical	PEH	European Gas Futures

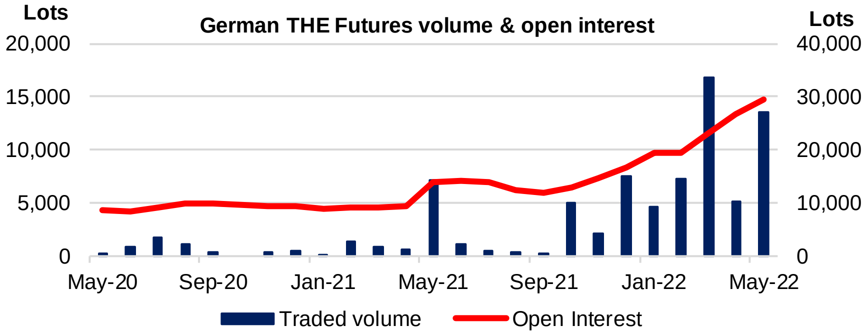
ICE Futures Europe

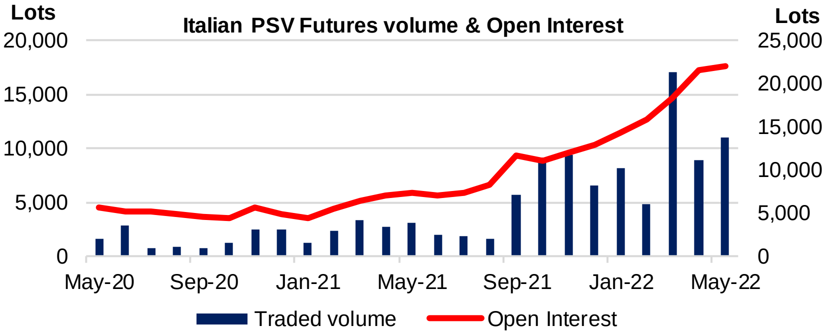
Product name	Type	Settlement	PCC	Market type
UK Natural Gas Futures	Monthly futures	Physical	M	IPE Natural Gas Futures
UK Natural Gas Options (Futures Style Margin)	Options	Physical	UKF	IPE Natural Gas Futures
UK Natural Gas Daily Futures	Daily futures	Physical	NBD	IPE Natural Gas Futures
NBP Natural Gas Daily Financial Futures (ICIS)	Daily futures	Financial	UND	IPE Natural Gas Futures
Dutch TTF Natural Gas 1st Line Financial Futures (USD/MMBTU)	Monthly futures	Financial	TFU	IPE Natural Gas Futures
UK NBP Natural Gas 1st Line Financial Futures (USD/MMBTU)	Monthly futures	Financial	UKD	IPE Natural Gas Futures

ICE European Gas update – key futures markets



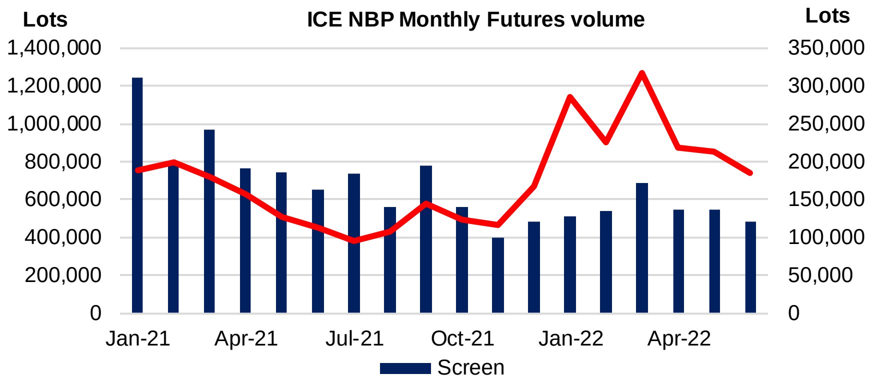




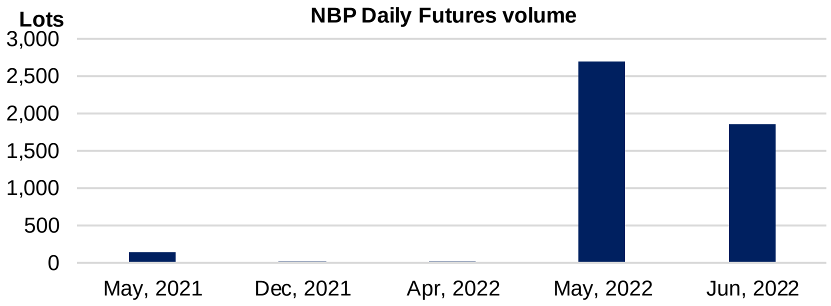


NBP in more detail

- NBP Monthly Futures -22% YTD, in line with UK market trend
- 166 active trading participants YTD, -14 vs. LYTD
- NBP overall traded volume vs. overall EU Gas traded volume 10% YTD, -3% vs. LYTD



- NBP Daily Futures starting to attract more interest
  - Product suite covering all maturities from Day Ahead up to and including Month Ahead
  - Physically and financially (ICIS) settled



UK OCM

UK OCM products – refresher

ICE Endex Gas Spot Ltd is designated by OFGEM and appointed by National Grid Gas as the market operator of the independent market for balancing (OCM)

OCM Products

- OCM TITLE
- OCM PHYSICAL
- OCM LOCATIONAL
- OCM DSR LOCATIONAL

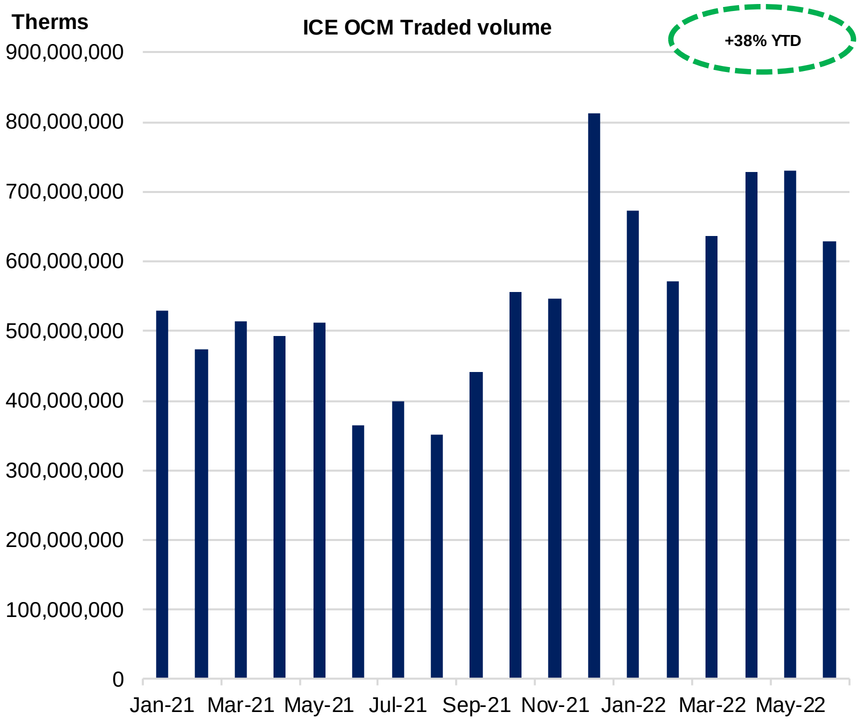
Physical and Locational

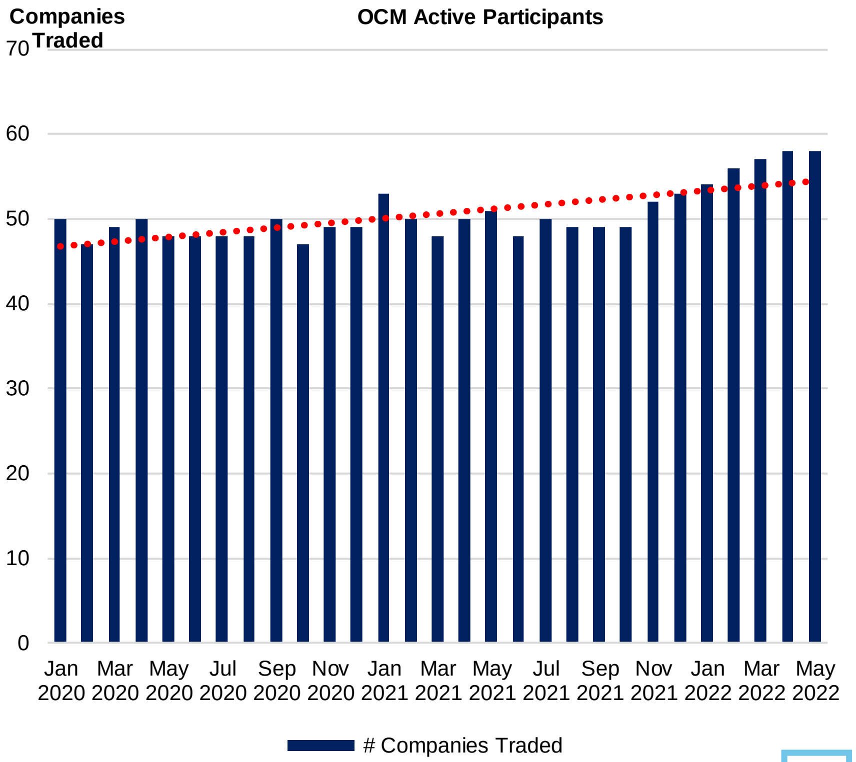
- Transfer of the title on natural gas from seller to buyer takes place at the National Balancing Point (NBP).
- A trade in an OCM Physical or OCM Locational product, results in an obligation on the market participant who placed the Originating Bid or Offer to alter the nominated rate of delivery or offtake of natural gas to or from a System Point (or specific Location).
- Physical delivery obligations are set forth in UNC-TPD-Section D (article D.2.3).

OCM DSR LOCATIONAL

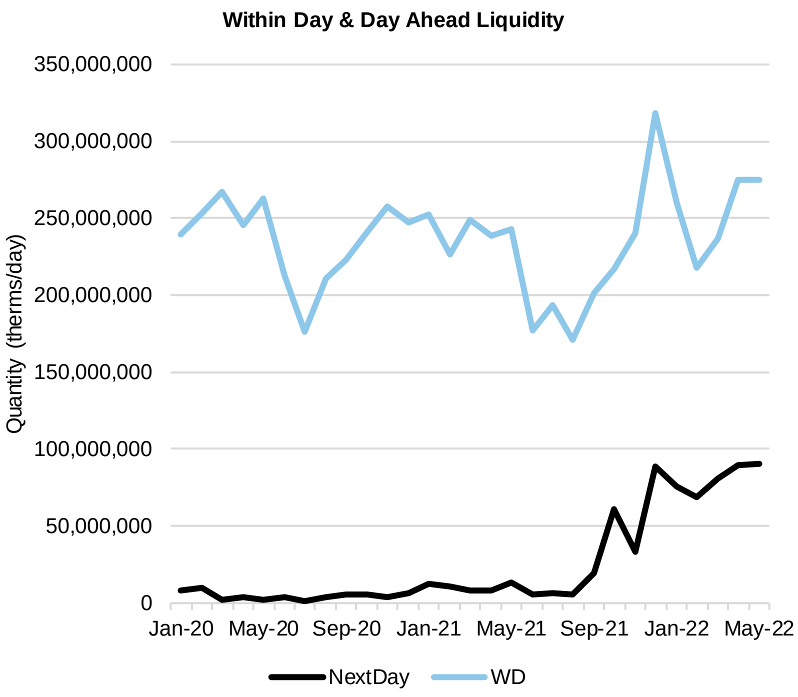
- National Grid is the only party that can buy in the OCM DSR Locational markets. All other parties are only allowed to submit offers.
- OCM DSR Locational markets are only open during a DSR Period, as notified by National Grid.
- Only during a DSR Period live offers can be submitted. Outside a DSR Period non-live order can be submitted.

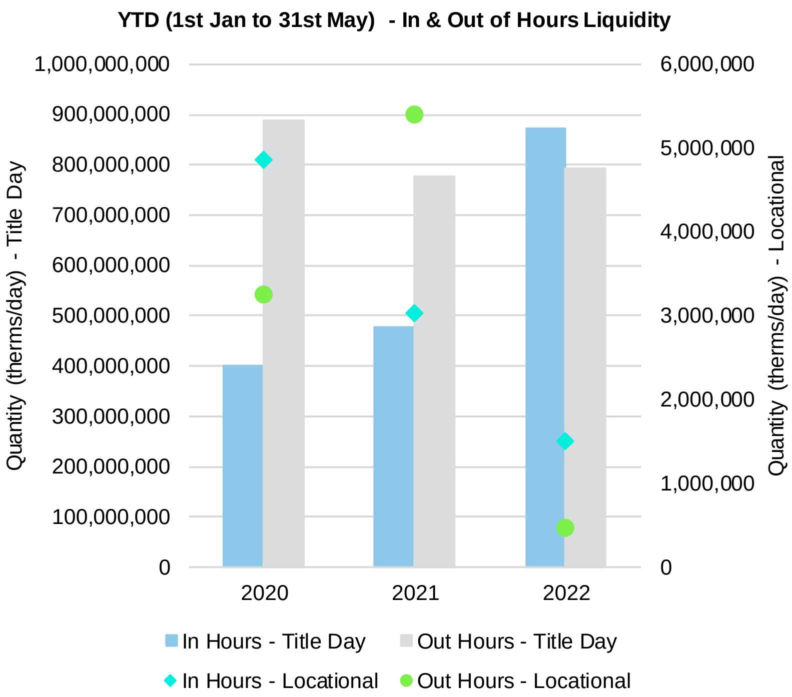
UK OCM – market update I



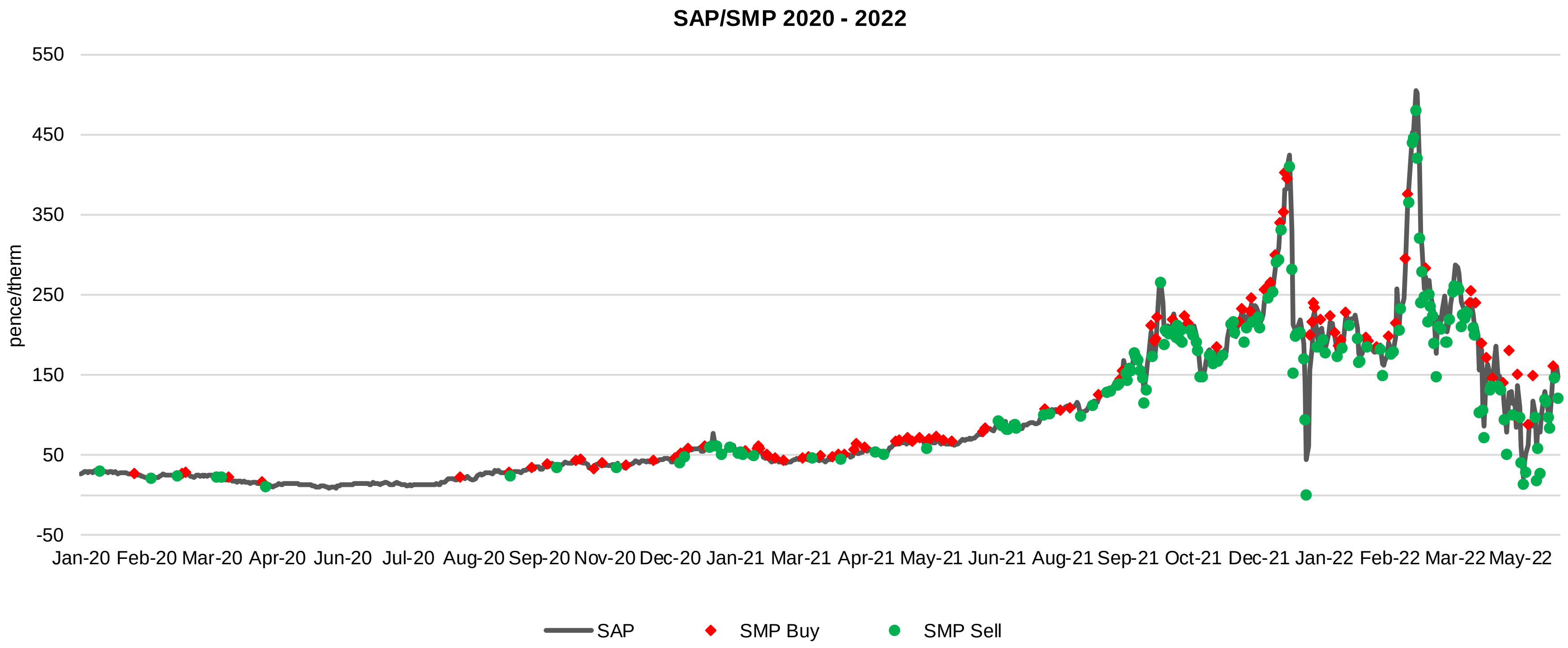


UK OCM – market update II



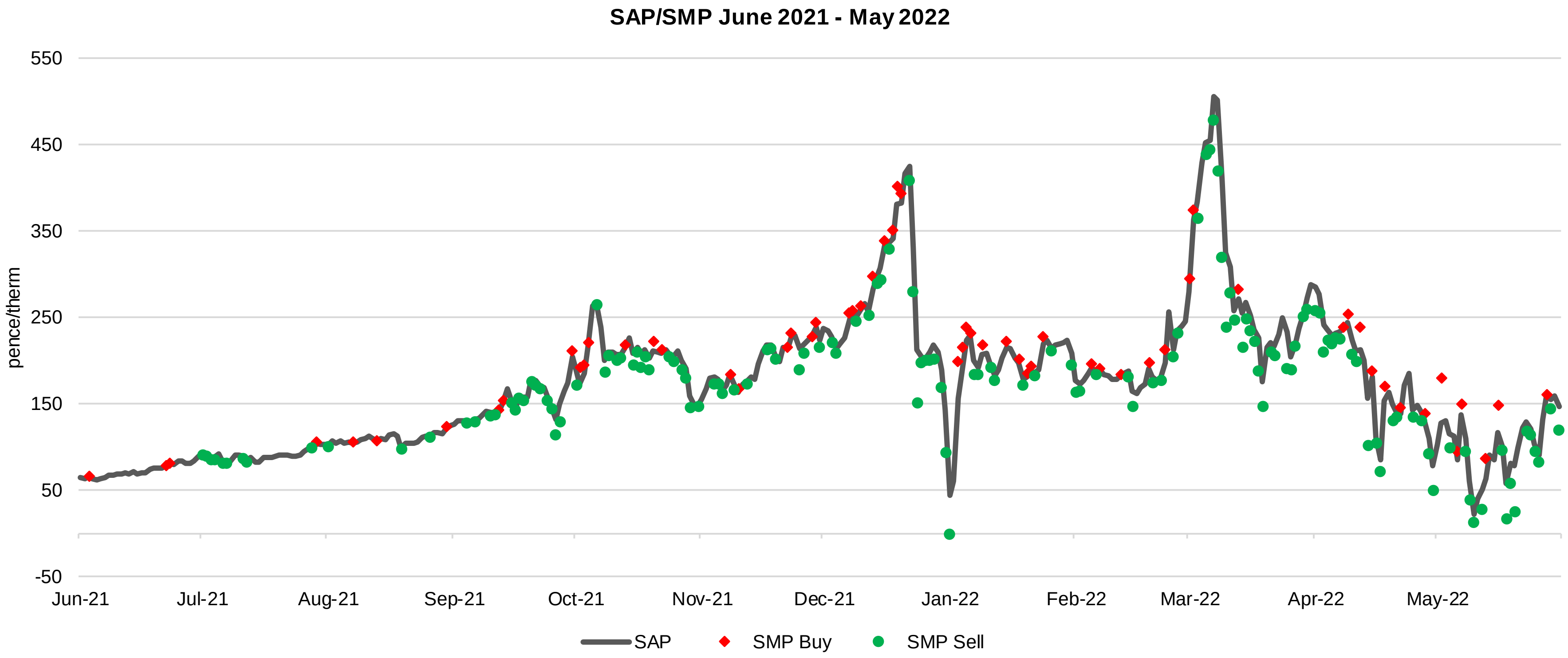


SAP / SMP I



SAP/SMP 2020 - 2022
550
450
350
250
150
50
-50
pence/therm
Jan-20 Feb-20 Mar-20 Apr-20 Jun-20 Jul-20 Aug-20 Sep-20 Nov-20 Dec-20 Jan-21 Mar-21 Apr-21 May-21 Jun-21 Aug-21 Sep-21 Oct-21 Dec-21 Jan-22 Feb-22 Mar-22 May-22
SAP
SMP Buy
SMP Sell

SAP / SMP II



SAP/SMP June 2021 - May 2022
pence/therm
550
450
350
250
150
50
-50
Jun-21
Jul-21
Aug-21
Sep-21
Oct-21
Nov-21
Dec-21
Jan-22
Feb-22
Mar-22
Apr-22
May-22
SAP
SMP Buy
SMP Sell

Thank you

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Gas Transmission

Charging Update

Colin Williams
Commercial Codes Change Manager

nationalgrid

Gas Charging – Which charges are we talking about today

- **Transmission Services Entry and Exit charges for October 2022 – A quick overview of what we have published and some key drivers**

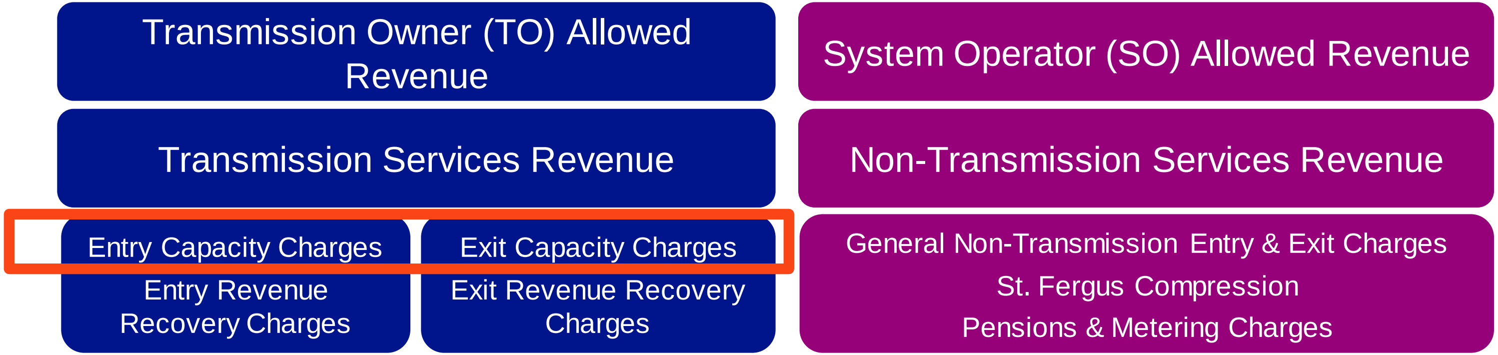
- **Non-Transmission Charges, specifically the General Non-Transmission Charges, to apply for October 2022. An updated indicative view ahead of final publication at the end of July.**

- National Grid held a webinar on 29th June to discuss these items in some depth. The webinar material will be available shortly on NGG's website here: https://www.nationalgrid.com/gas-transmission/charging/transmission-system-charges under "NTS Charging Supporting Information"
  - This pack uses some of the same materials for reference.

October 2022 Transmission Services Entry and Exit Reserve Prices

Gas Charging – Which charges are we talking about

- **Two types of charges** will be effective from 1 October, that will therefore be visible in all invoices issued from November with the ex-post invoicing that takes place.
  - Transmission Services Revenue, which broadly aligns to the Transmission Owner (TO) Revenue, will be recovered by **Transmission Services Charges**
  - Non-Transmission Services Revenues, which broadly aligns to the System Operator (SO) Revenue, will be recovered by **Non-Transmission Services Charges**
- **At the end of May we published the Transmission Services Entry and Exit Capacity charges**



Transmission Services Entry and Exit Capacity Charges - Overview

- **Updated values published end of May 2022 to apply from October 2022.**
  - These cannot be changed withing the Gas (Tariff) Year
  - Whilst set to recover a target revenue Values updated using values for revenues, Transmission Services Revenue, which broadly aligns to the Transmission Owner (TO) Revenue, will be recovered by **Transmission Services Charges**
  - Non-Transmission Services Revenues, which broadly aligns to the System Operator (SO) Revenue, will be recovered by **Non-Transmission Services Charges**
- **At the end of May we published the Transmission Services Entry and Exit Capacity charges**
  - **This also incorporated UNC Modification 0796 -** decided by Ofgem in May for implementation for this year – a modification to help manage some of the volatility in target revenue determination

NTS Transportation Charges: October 2022

Capacity Reserve Prices published on 27 May 2022

Transmission Services Prices (p/kWh/d)	Final	Indicative			
	22/23	23/24	24/25	25/26	26/27
Entry Capacity Reserve Price	0.0851	0.0620	0.0698	0.0671	0.0601
Entry Capacity Reserve Price for Storage (80% discount)	0.0170	0.0124	0.0140	0.0134	0.0120
Transmission Services Entry RRC	0.0000	0.0000	0.0000	0.0000	0.0000
Exit Capacity Reserve Price	0.0218	0.0245	0.0231	0.0240	0.0245
Exit Capacity Reserve Price for Storage (80% discount)	0.0044	0.0049	0.0046	0.0048	0.0049
Transmission Services Exit RRC	0.0000	0.0000	0.0000	0.0000	0.0000

General Non-Transmission Services Prices to be published by end July 2022

NTS Transportation Charges: Drivers

- Charges are calculated using two key drivers:
  - Revenue - the target revenue for the required period(s)
  - Forecasted Contracted Capacity (FCC)

Target Revenue

- Target Revenue for regulatory years (i.e. April to March) Y and Y+1
- Revenue, actual and forecast, up to 30 September 2022
  (the first 6 months of the regulatory year, based on the previous Gas Years prices)
- Revenue profiles across the Gas Years (i.e. October to September)
- Application of UNC Code Modification 0796

Forecasted Contracted Capacity

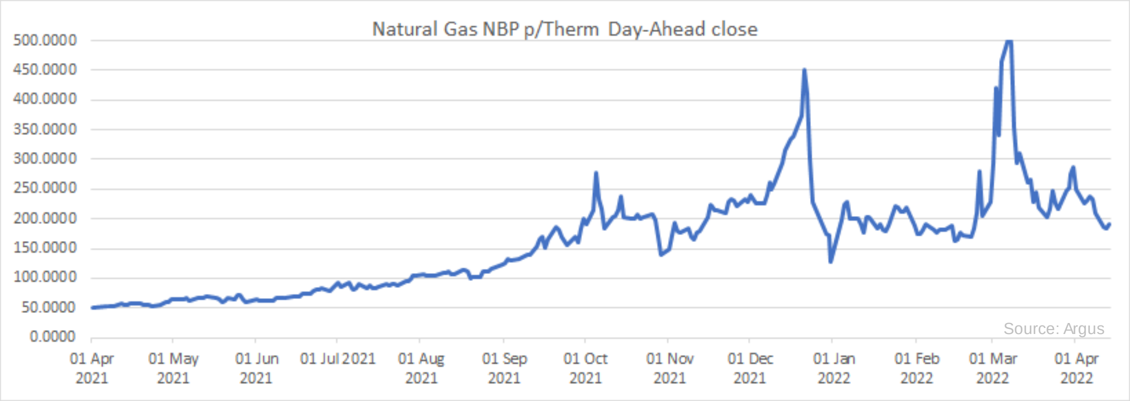
- The amount of capacity forecast to be purchased across the Gas Year
- The Forecasted Contracted Capacity follows the FCC Methodology as per the revised methodology applied for October 2022
- Exceptions to the methodology applied to account for recent activity

Exceptions to Methodology – Revisions to FCC

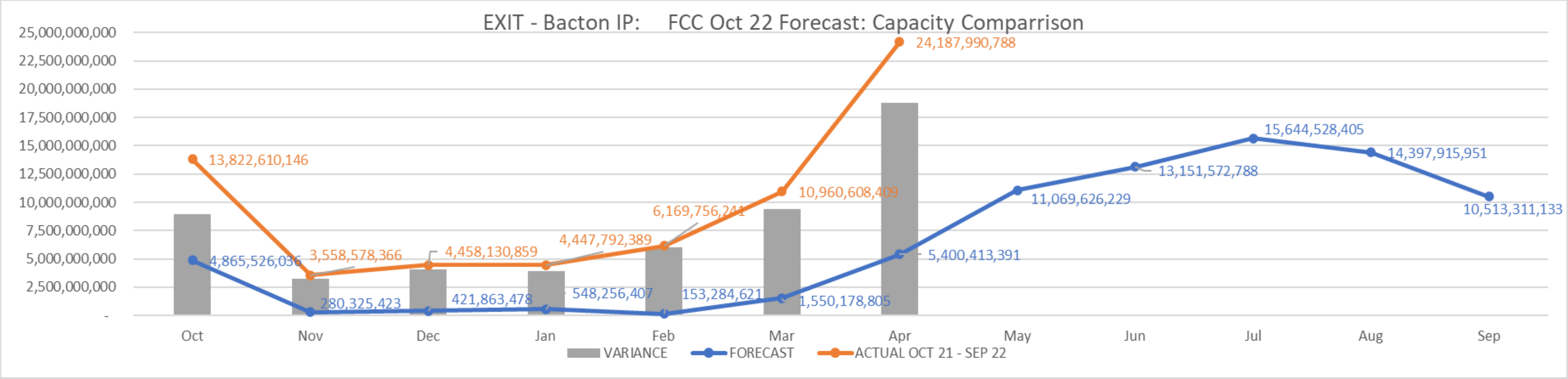
- The FCC forecasts the **volume of capacity** that will be purchased at Entry and Exit for the forthcoming gas year. This is used to drive the **reference price for capacity** to collect allowed revenues
- Revisions to the FCC methodology from Oct 21 resulted in far closer alignment between forecast and actual capacity volumes
- This methodology (updated for Oct 22) has been applied to the FCC for use in setting charges from Oct 22
  - However, this methodology is **based on historic flow data** (Y-2 to Y-6), and the most recent years **FES forecasts** (published July 2021), neither of which account for the activity we have seen over recent months

Exceptions to Methodology – Revisions to FCC

Gas Prices



Interconnector Export



Exceptions to Methodology – Revisions to FCC

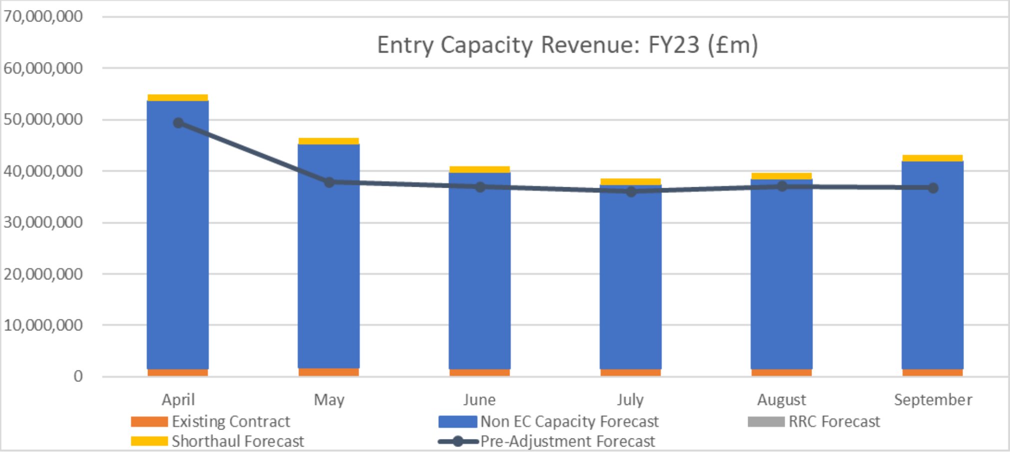
Demand

- Engaged with the FES team prior to 2022 Publication – key changes:
  - Revised LDZ demand down (Domestic and I&C)
  - Increased Power Generation forecast

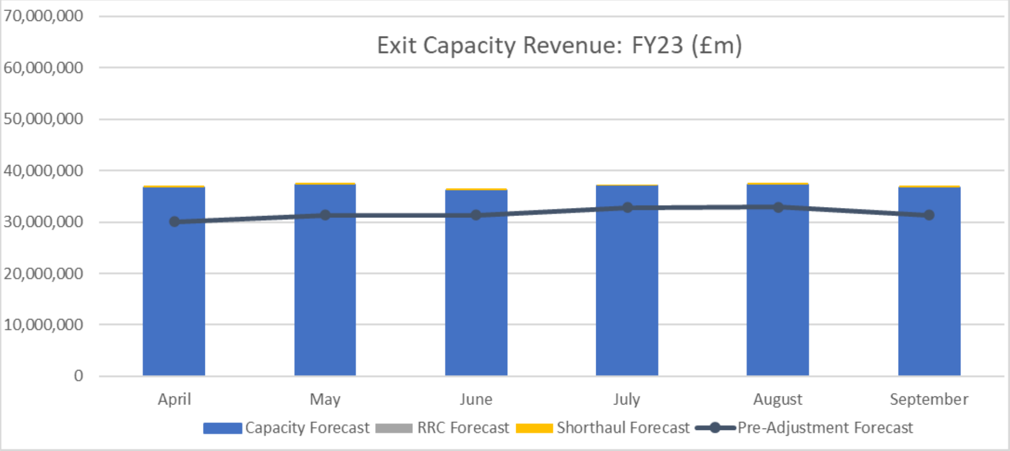
Increased Interconnector Export

- Bacton IP exit flows to remain high over summer months, with winter months forecast to reflect last winter actuals
- Additional Entry gas requirements to be met predominantly via Milford Haven, Isle of Grain, and Beach.

Revenue Forecast: FY23 – April 22 – September 22

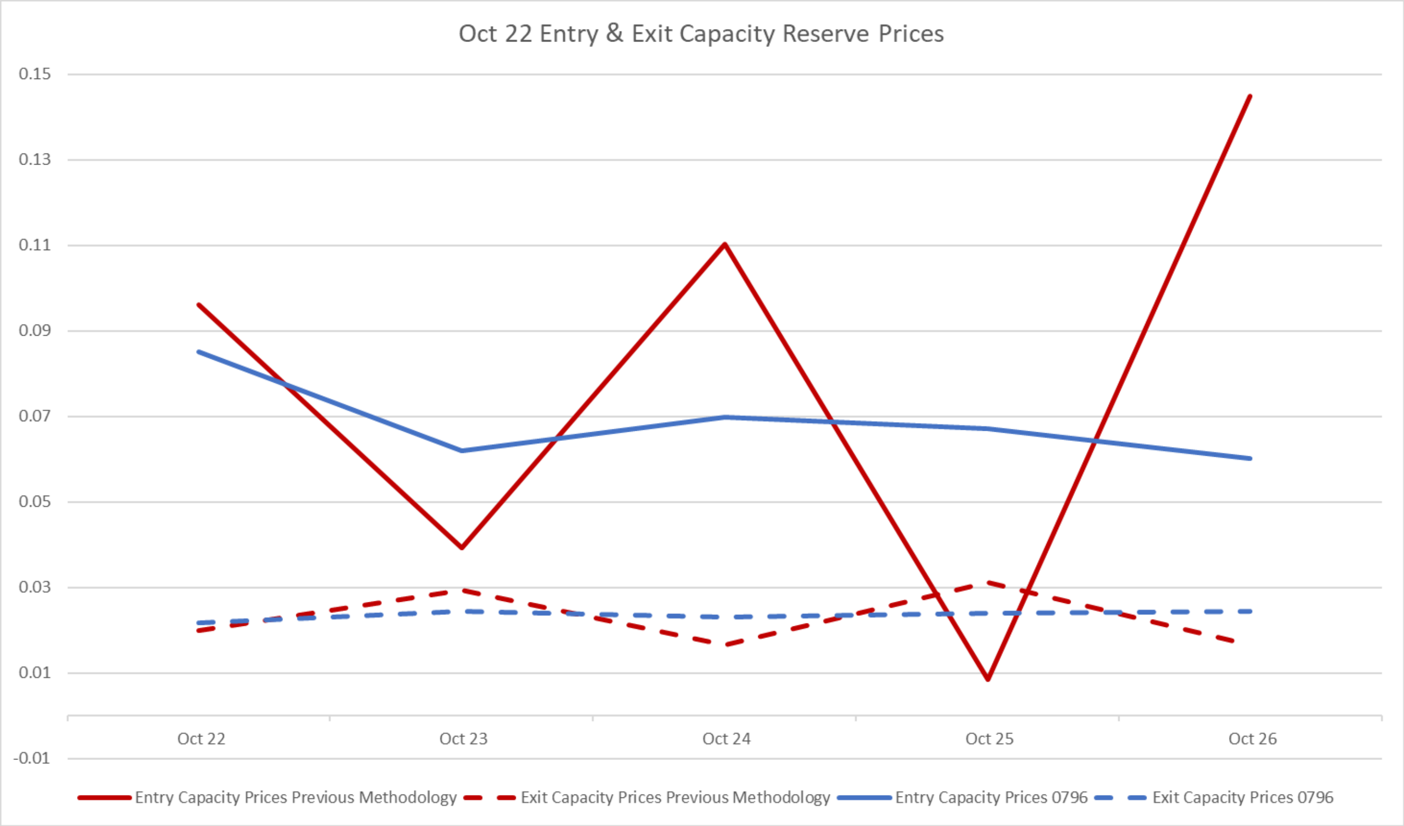


Entry	
Pre-Adjustment Forecast	£234.0m
RPT	£263.7m (+£29.7m)



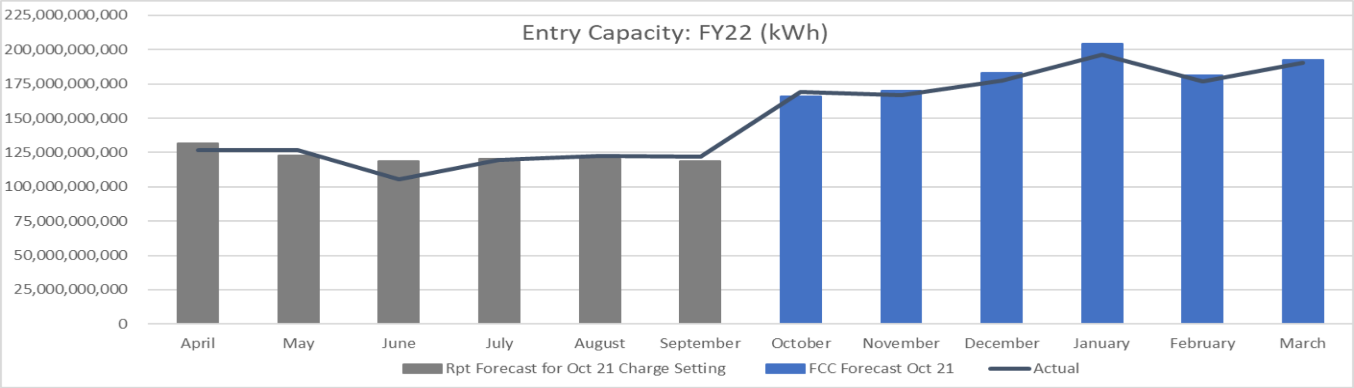
Exit	
Pre-Adjustment Forecast	£189.8m
RPT	£223.0m (+£33.2m)

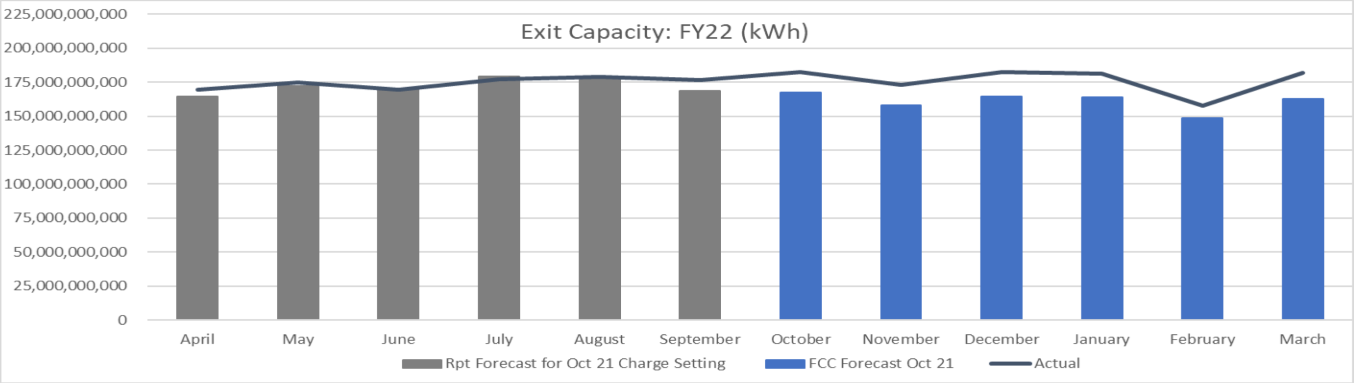
Implementation of UNC Mod 0796 – impact on Revenues and Prices



Forecasted Contracted Capacity (FCC)

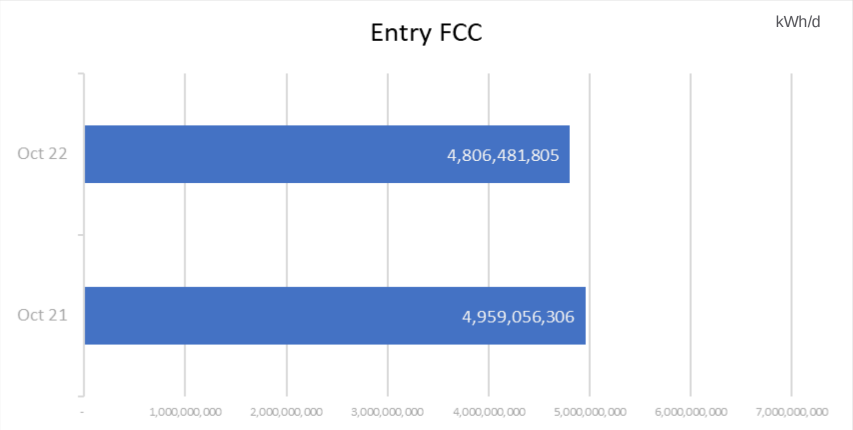
The FCC methodology was revised for October 2021 – more reflective of actuals





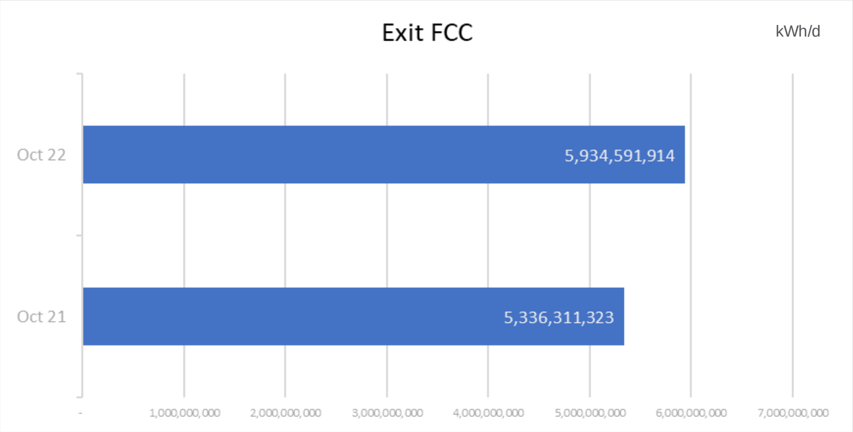
Variance in Exit since October, predominantly due to DN booking profiles. FCC methodology revised for October 2022 charge setting, to utilise the DN LTDS Peak 1 in 20 values for charge setting.

Forecasted Contracted Capacity (FCC)



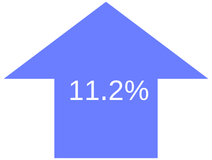
Entry FCC

Entry FCC has decreased by 152,574,501 kWh/d

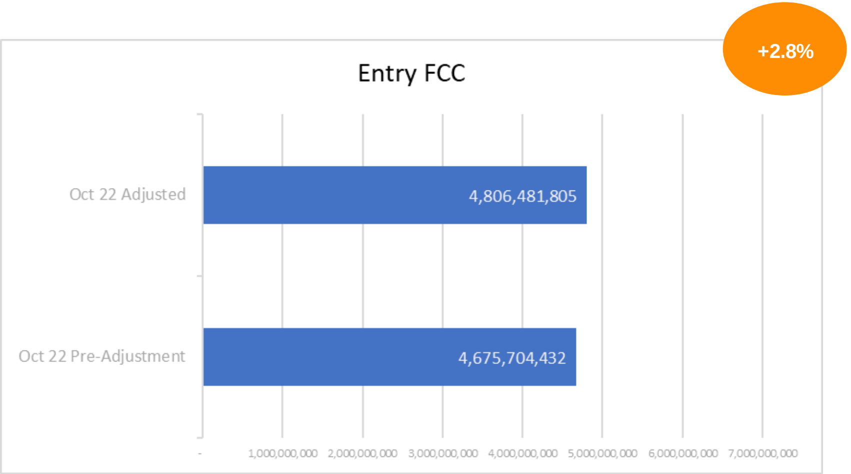


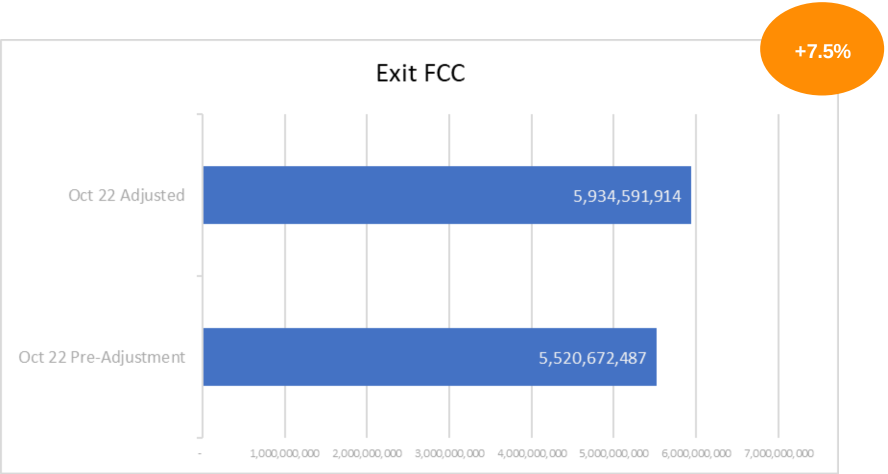
Exit FCC

Exit FCC has increased by 598,280,591 kWh/d

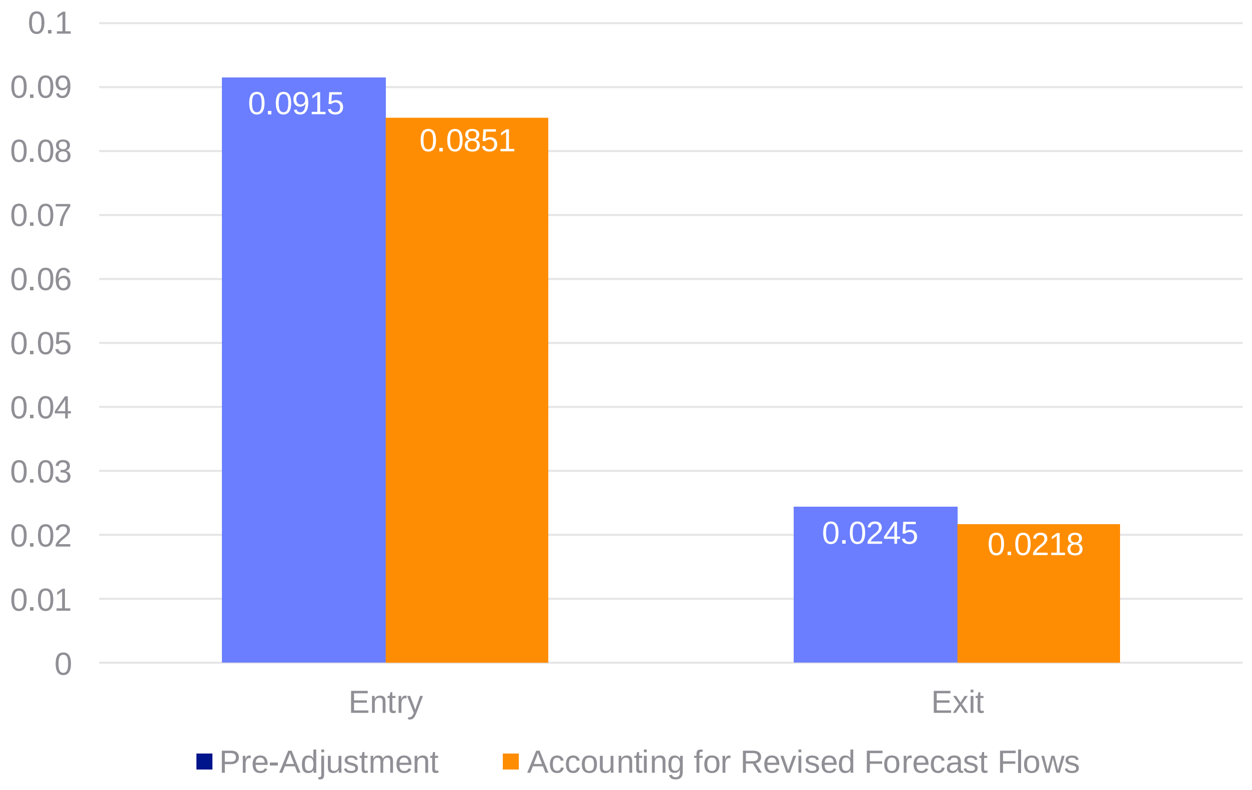


Revisions made to FCC – Impact on FCC

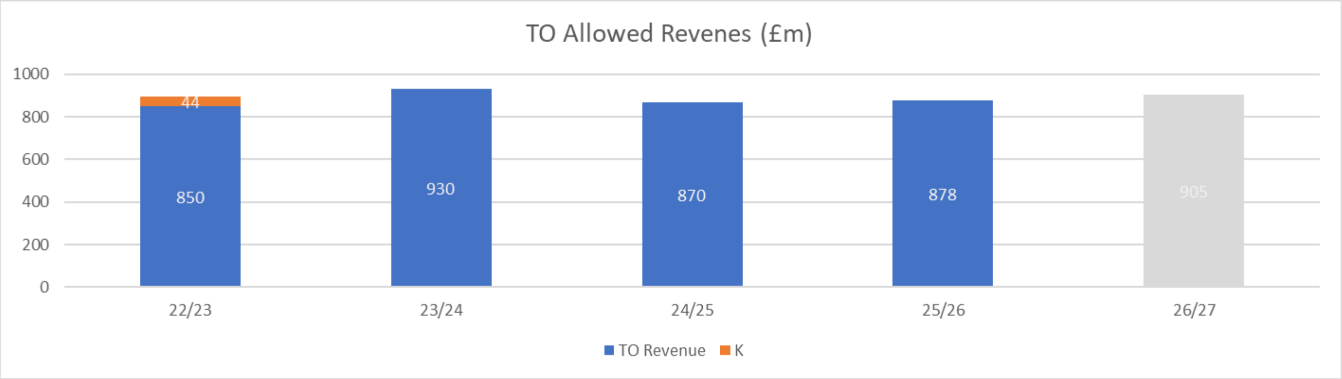


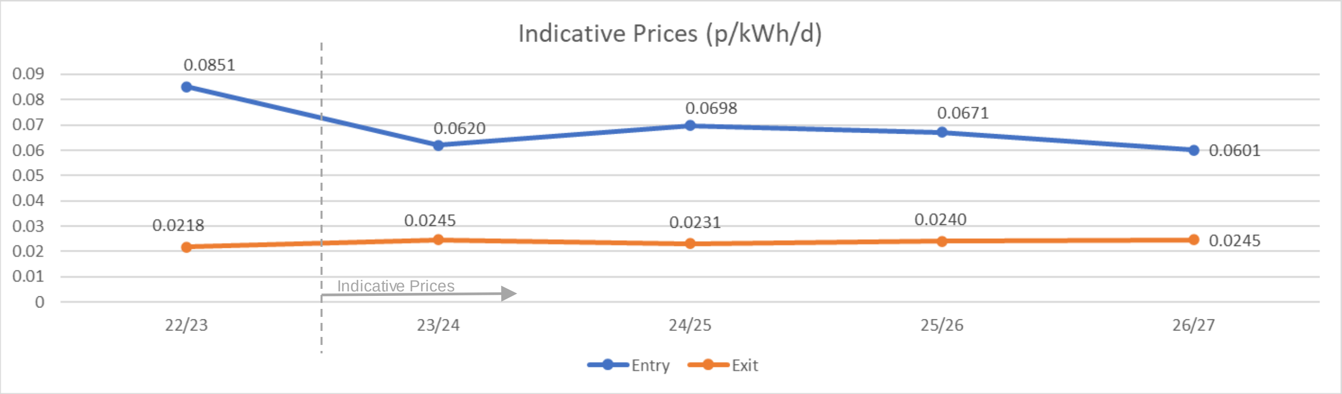


Revisions made to FCC – Impact on Prices



Revenue & Prices: 2022/23 – 2026/27





Summary

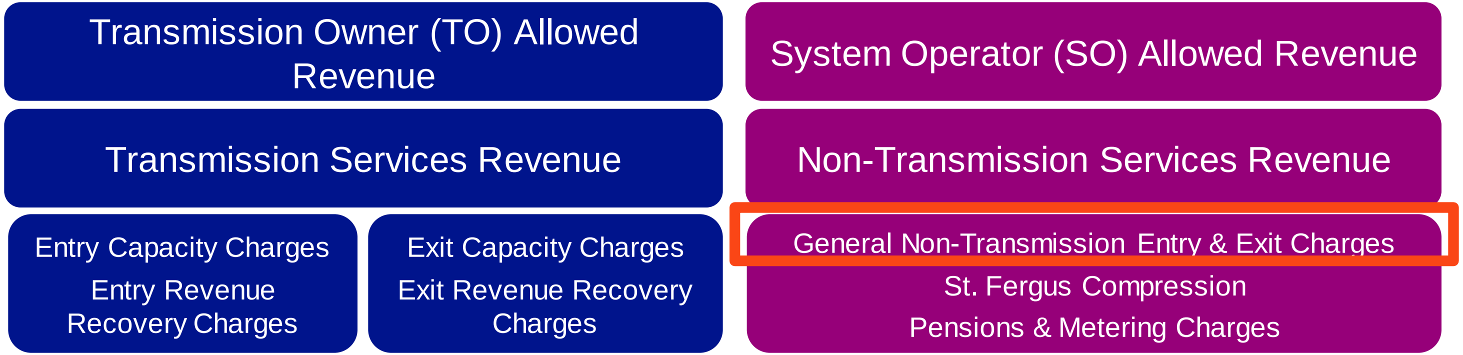
- Transmission Services Entry and Exit Capacity Reserve Prices will be effective from October 2022 for one year
- They've been updated using the established methodology including available opportunities to use up to date data and patterns
- Next update of these prices will be in May 2023 to apply for October 2023

Gas Transportation Charges October 2022

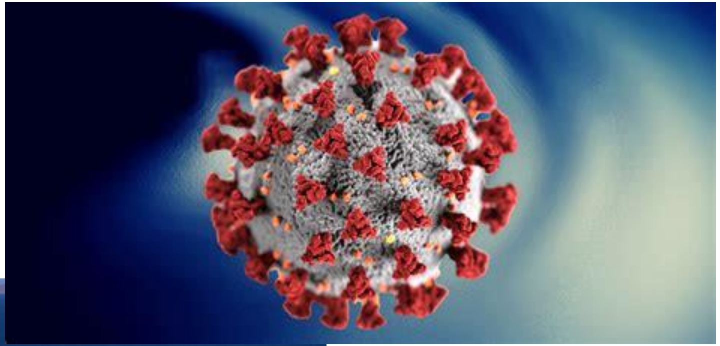
Update on Non-Transmission Charges for October 2022

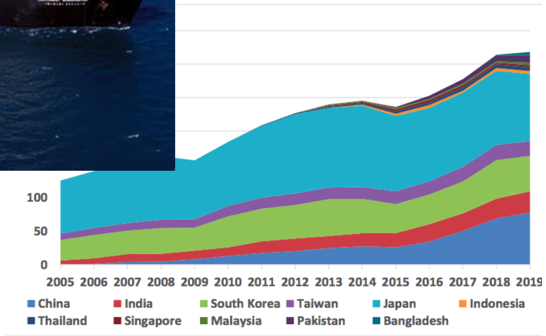
Gas Charging – Which charges are we talking about

- **Two types of charges** will be effective from 1 October, that will therefore be visible in all invoices issued from November with the ex-post invoicing that takes place.
  - Transmission Services Revenue, which broadly aligns to the Transmission Owner (TO) Revenue, will be recovered by **Transmission Services Charges**
  - Non-Transmission Services Revenues, which broadly aligns to the System Operator (SO) Revenue, will be recovered by **Non-Transmission Services Charges**
- **At the end of July we will publish the Non-Transmission Charges**



An unpredictable and unprecedented energy landscape





Indicative revenues and charges for October 2022 and beyond

- Shrinkage costs are the costs of running the compressors on the NTS. They are dominating changes to the System Operator Revenues
- Gas prices have had a significant impact on shrinkage costs
- Keen to provide clarity and transparency of the overall impact to revenues & charges
- Discuss how this impacts the prices, notably the General Non-Transmission Services Entry and Exit Charges

For the immediate year (i.e. from next October), we must set prices to recover revenues output from the PCFM*, a process each year as part of AIP*.

For years beyond this year (i.e. for indicatives) we are updating using our best view of costs/revenues) to provide useful information to Stakeholders

*PCFM – Price Control Financial Model

*AIP – Annual Iteration Process – the process whereby revenues are produced following the PCFM and PCFM Handbook processes per the Licence

General Non-Transmission Services Charges – indicative view on October 2022

- **Implications of shrinkage costs / revenues**
- We pay all the shrinkage costs and only recover in line with our obligations - this protects consumers
- Where shrinkage costs are higher than the value allowed to be recovered, collection is deferred to a future year
- Shrinkage costs and impacts to revenues have risen significantly and are forecasted to remain at high levels for some time

Total value of an updated forecast

Amount in Allowed revenues (due to timing)	Difference from updated forecast
Set to be collected in year prices are to be set for	Deferred to future year

What we shared back in December 2021 (via NTSCMF)

Copy of slide shared at December 2021

- **Table below shows indicative view of October 2022 using latest PCFM* (AIP*) outputs**

	Oct 21	Oct 22	Oct 23	Oct 24	Oct 25
Allowed Revenues – FY: Indicatives published Oct 21	£204.1m	£170.2m	£206.3m	£199.5m	£190.8m
Indicative Oct 22 Gnon-Tx Price: as published Oct 21	0.0092	0.0080			
Allowed Revenues – FY: based on Nov 21 PCFM Submission (including Shrinkage revised forecasts)	-	£466.3m	£249.4m	£236.4m	£224.7m
Indicative Oct 22 Gnon-Tx Prices: based on Nov 21 PCFM Submission	-	0.0362			

- Conscious of the impact of this on both revenues and the resulting volatility we are working with Ofgem, to look at options to manage this before the rates for Non-Transmission are to be published for October 2022.
- Final Rates are due to be published by the **end of July 2022**

Indicative as of December 2021 projected a rate of 0.0362 p/kWh

*PCFM – Price Control Financial Model

**https://www.gasgovernance.co.uk/ntscmf/071221

General Non-Transmission Services Charges – indicative view on October 2022

- **Indicative view of October 2022 using the updated information outputs**

Regulatory Year Revenues	Apr 21 – Mar 22	Apr 22 – Mar 23	Apr 23 – Mar 24	Apr 24 – Mar 25	Apr 25 – Mar 26
Allowed Revenues – used as when publishing October 2021 prices	£204.1m	£170.2m	£206.3m	£199.5m	£190.8m
Allowed Revenues – Updated view (PCFM* Feb 2022) – updated for recovered revenues from previous year for (Apr 22 – Mar 23)	£198m	£514m	£249m	£236m	£224m
Allowed Revenues – Updated view	-	£514m	£574m	£392m	£341m

- Using the updated revenues above the resulting indicative General Non-Transmission Charges below
- Rates are set to recover revenues within a Regulatory Year

	October 2021	October 2022	October 2023	October 2024	October 2025
Prices as published for October 2021	0.0092	0.0080	0.0121	0.0089	0.0105
Non Transmission Unit Cost (p/kWh) – using an updated Shrinkage forecast and calculated over 2021 FES volume assumptions	0.0092	0.0399	0.0253	0.0180	0.0190

- These values **will** change as we update the inputs.
- Charges due to be published at the end of July 2022

*PCFM – Price Control Financial Model, https://www.ofgem.gov.uk/publications/gt2-price-control-financial-model

Summary

- Unforeseen and unpredictable events have had impacts on gas prices that are being felt across the board
- The General Non-Transmission Service charge is increasing as a result and is expected to continue to do so in line with gas prices
- New prices will be published at end July to apply from October 2022

Contact

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Updates

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Operational Liaison Visits

- Part of our role within Operational Liaison at National Grid is that we are responsible for maintaining and improving our service for our external stakeholders.
- We want to maintain effective engagement with all key customers and stakeholders so that we all have the required information to operate effectively.
- We would like to offer liaison visits or meetings to you if it would provide value.
- Typical agenda items (but open to suggestions!):

Operational:

- Gas Sale
- Organisation Structure
- NTS Pressures
- Maintenance Plans

Commercial & Other:

- Capacity
- Modifications
- Future States
- Hydrogen

- If this is of interest to you, please reach out us directly or via the .box below:

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Next Forum

The next Gas Operational Forum will take place on the 15th September.

Please send any topic requests to:

Box.OperationalLiaison@nationalgrid.com

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