

Gas
Transmission

Gas Operational Forum

WebEx

22nd October 2020
9.30am

Slido

#GasOps20

nationalgrid



**Gas
Transmission**

Introduction & Agenda

Joshua Bates

Operational Liaison & Business
Delivery Manager

nationalgrid



Presenters

National Grid

Joshua Bates – Operational Liaison and Business Delivery Manager

Martin Cahill – Operational Liaison Lead

George Killick – Operational Strategy Engineer

Alison Tann – NTS Capacity Manager

Karen Healy – Gas Network Analyst

Colin Williams – Commercial Codes Change Manager

Tom Wilcock – Safety, Response & Assurance Manager

BEIS

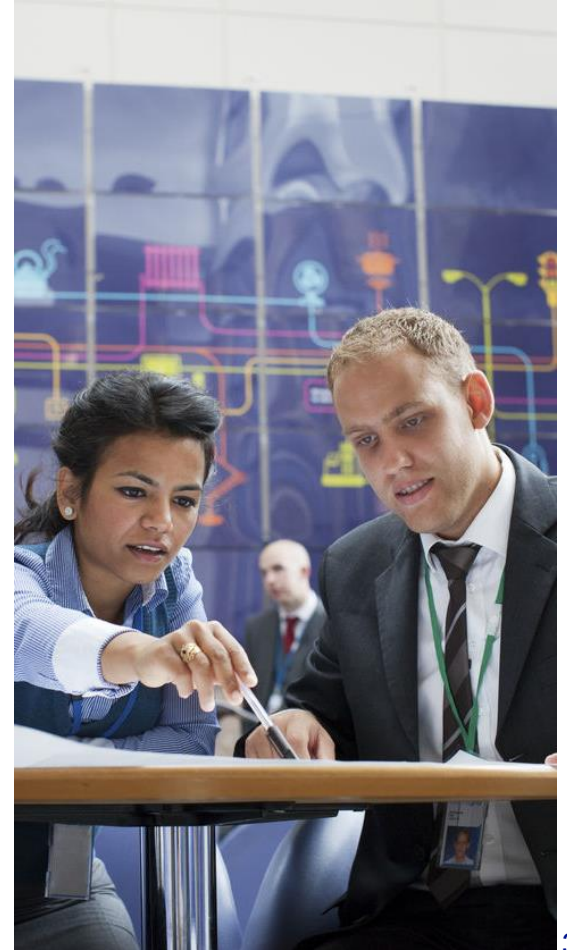
Myra Fazal- Energy Security – Gas Security, Network and Markets

Elena Magrina – European Gas, Energy Security

Xoserve

Victoria Mustard – Customer Advocate

National Grid



Calendar year 2020 Ops forums

All forums will be held via WebEx until further notice

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lon	Lon	Online	X	Online	Online	X	X	Online	Online	Online	X
23/01	20/02	19/03		14/05	18/06			17/09	22/10	19/11	

Location:

Amba Hotel
Strand
Charing Cross
London
WC2N 5HX

Registration is open for all 2020 events at:

<https://www.nationalgridgas.com/data-and-operations/operational-forum>

Housekeeping for WebEx Forums

During our WebEx events;

- Attendees will be automatically muted on dial-in, please ensure your cameras are off too.
- We will break at the end of each section to answer questions, please use the 'raise a hand' function on WebEx and we will un-mute you.
- Alternatively, you can ask any questions via sli.do and we will answer them at the end of each section. The meeting code is #GasOps20.
- For both presenters and any verbal comments, please state your name and company before speaking.

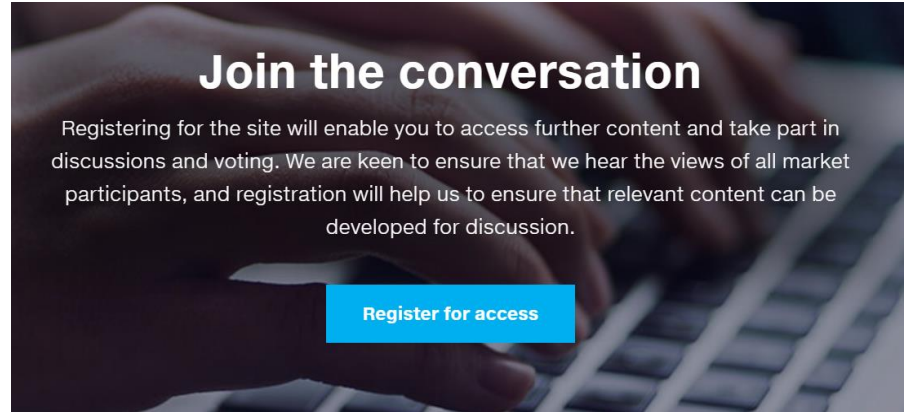


Resources Available to you

Gas Ops Forums

Throughout the year, we hold regular Operational forum meetings. This forum aims to provide visibility and awareness for our customers and stakeholders to help understand and discuss the operation and performance of the National Transmission System (NTS). We also proactively invite any suggestions for operational topics that would promote discussion and awareness.

Registration is open for all 2020 events at:
<https://www.nationalgridgas.com/data-and-operations/operational-forum>



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>

How to contact us

Operational Liaison Team

Joshua Bates: Joshua.Bates@nationalgrid.com

Martin Cahill: Martin.Cahill@nationalgrid.com

Operational Liaison Email:
Box.OperationalLiaison@nationalgrid.com

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National Grid Join at [slido.com](https://www.slido.com) #GasOps20



Agenda for Today

- | | |
|----|--|
| 01 | Welcome and Introduction |
| 02 | Operational Overview |
| 03 | Winter Outlook |
| 04 | Winter Preparedness Interactive Session |
| 05 | BEIS: Brexit negotiations and no-deal preparations |
| 06 | Charging Review Implementation – Capacity Updates |
| 07 | Exercise Baltic |
| 08 | Gemini Service Report September |
| 09 | Updates |

Please ask any questions using slido #GasOps20 or by raising your hand.

These will be covered at the end of each agenda section

Joining as a participant?

GasOps20

Join an existing event

By using Slido I agree to the [Policy](#).

Shaping the gas transmission system of the future – Have your say

Why?

- We are committed to undertake a **stakeholder-led decision making** approach. As part of this, in addition to our continuous engagement, we'll hold **annual engagement** to bring everything together for stakeholders. This allows a holistic conversation in one place.

What?

- A month long programme of **interactive webinars** and **roundtables** designed to get stakeholder **insight** across all our stakeholder priorities

When?

- The events kick off on **02nd November** with Phil Sheppard giving a round up of our performance against all our priorities. There are a further 11 webinars **throughout November**

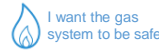
How do I get involved?

- Each event has a **registration link** (see details on next slide)



What's on...

Stakeholder Priorities



I want the gas system to be safe



I want to take gas on and off the transmission system where and when I want



I want you to protect the transmission system from cyber and external threats



I want you to care for the environment and communities



I want to connect to the transmission system



I want you to facilitate the whole energy system of the future – innovating to meet the challenges ahead



I want you to be efficient and affordable



I want all the information I need to run my business and to understand what you do and why

Round up of priorities

Mon 2nd Nov
@ 11.00

[Click to register](#)

Digital Strategy & Information Provision

Mon 2nd Nov
@ 14.00

[Click to register](#)

Shaping the Innovation strategy for RIIO-2

Tue 3rd Nov
@ 14.00

[Click to register](#)

Operating the network

Thu 5th Nov
@ 10.30

[Click to register](#)

Building skills today for a Net Zero future

Mon 9th Nov
@ 13.30

[Click to register](#)

Reducing methane emissions: opportunities and barriers

Thu 12th Nov
@ 11.00

[Click to register](#)

Gas Markets Action Plan (GMaP)

Mon 16th Nov
@ 10.00

[Click to register](#)

Mapping our hydrogen transition

Wed 18th Nov
@ 14.00

[Click to register](#)

Net Zero Construction 2025/26 roadmap

Thu 19th Nov
@ 10.00

[Click to register](#)

Heating our homes in a Net Zero future - Understanding what matters to consumers

Fri 20th Nov
@ 11.00

[Click to register](#)

Planning the gas network

Mon 23rd Nov
@ 14.00

[Click to register](#)

HyNTS FutureGrid – Next steps

Tue 1st Dec
@ 14.00

[Click to register](#)

**Gas
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Operational Overview

George Killick

Operational Strategy Engineer

Martin Cahill

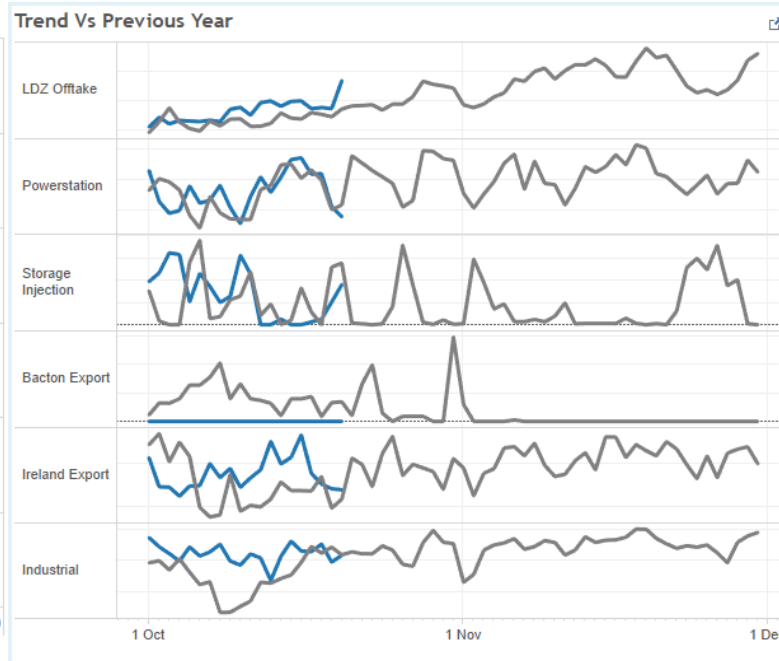
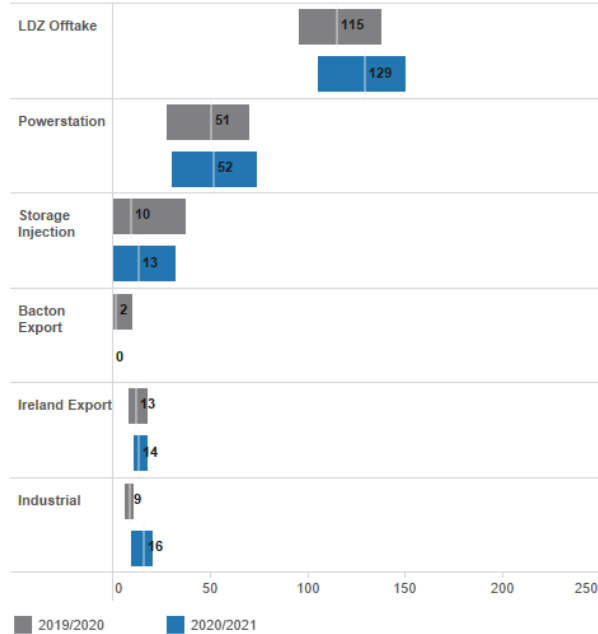
Operational Liaison Lead

nationalgrid



NTS Demand

Average Daily Volume and Range (Winter)

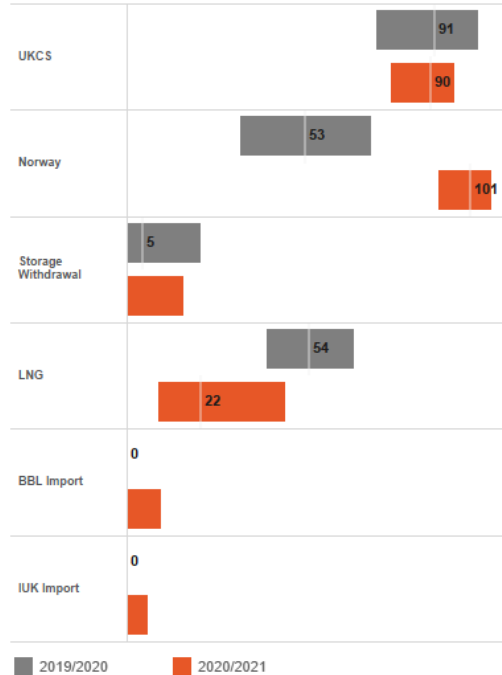


Weather in October has been slightly colder than last year, but in a similar range

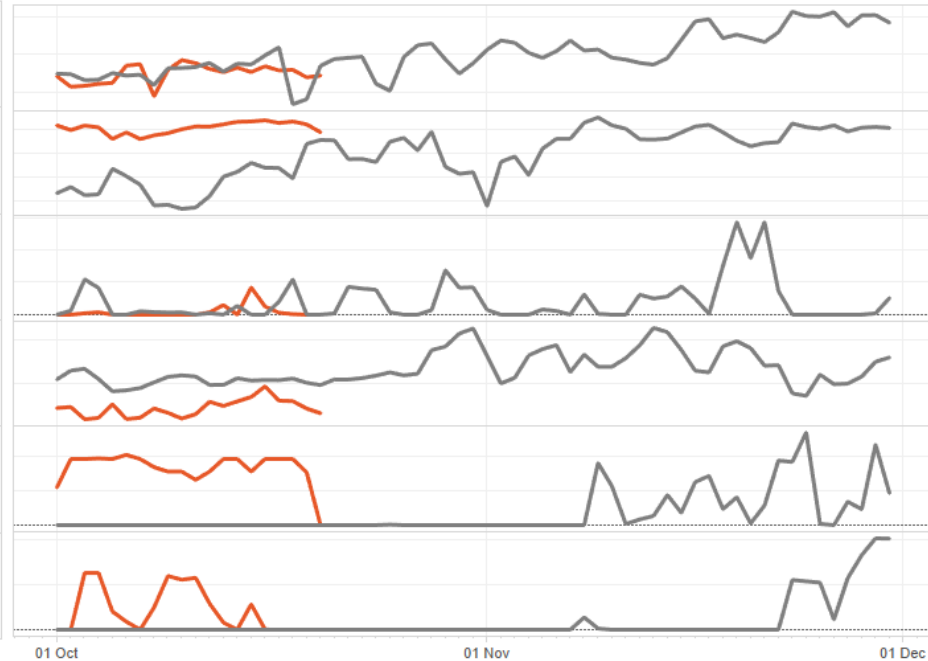
Last year saw Bacton exports throughout October, but these have only been used on import this year

NTS Supply

Average Daily Volume and Range (Winter)



Trend Vs Previous Year

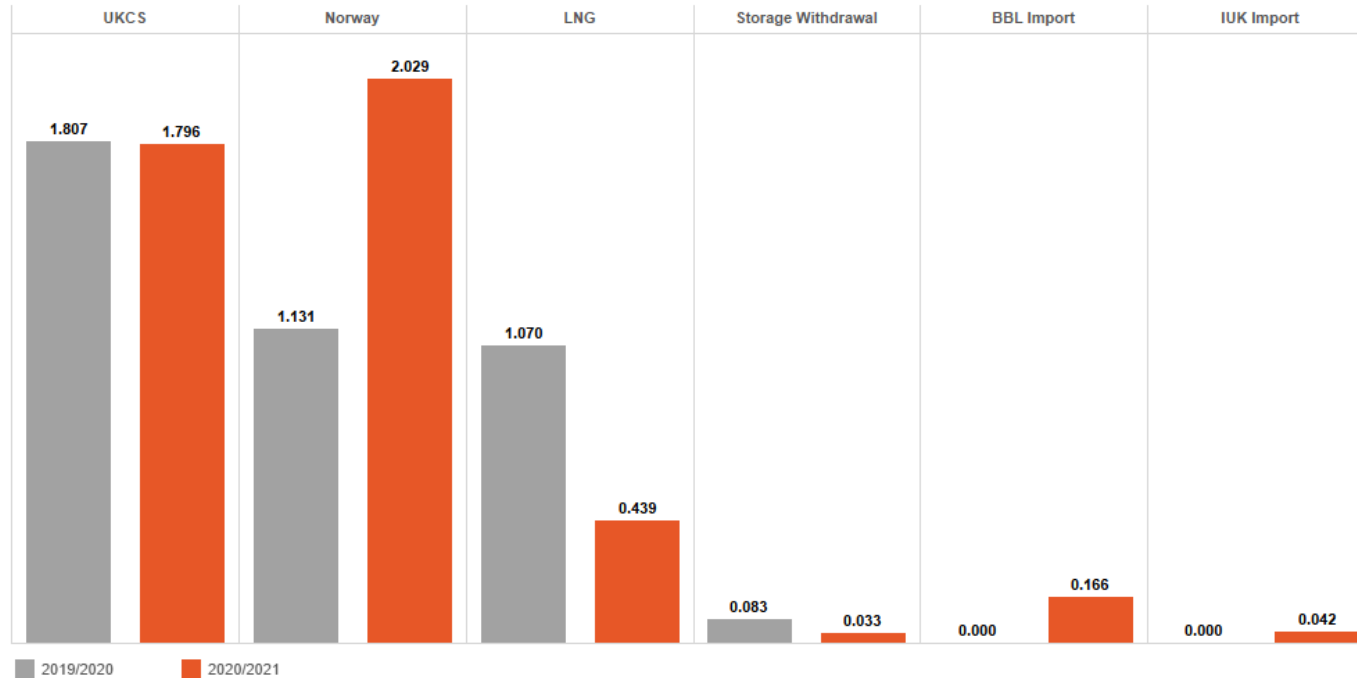


Consistently higher Norway flows, with Langede utilised to near maximum flows

Lower LNG flows

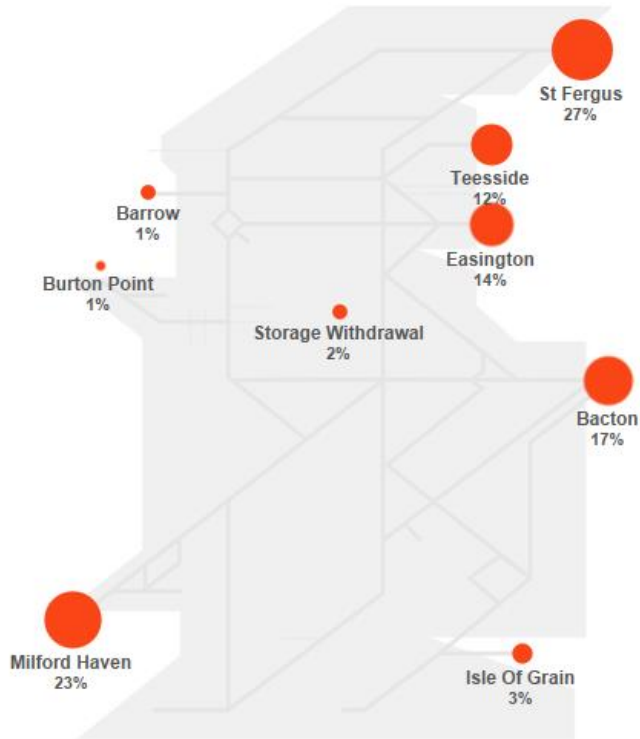
Supply – Yearly Comparison

Supply (BCM, Winter)

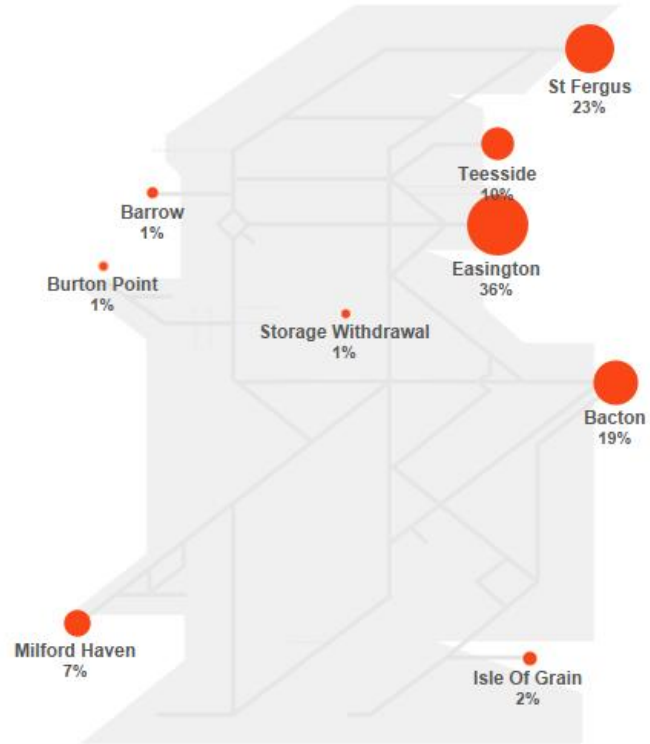


Supply Location

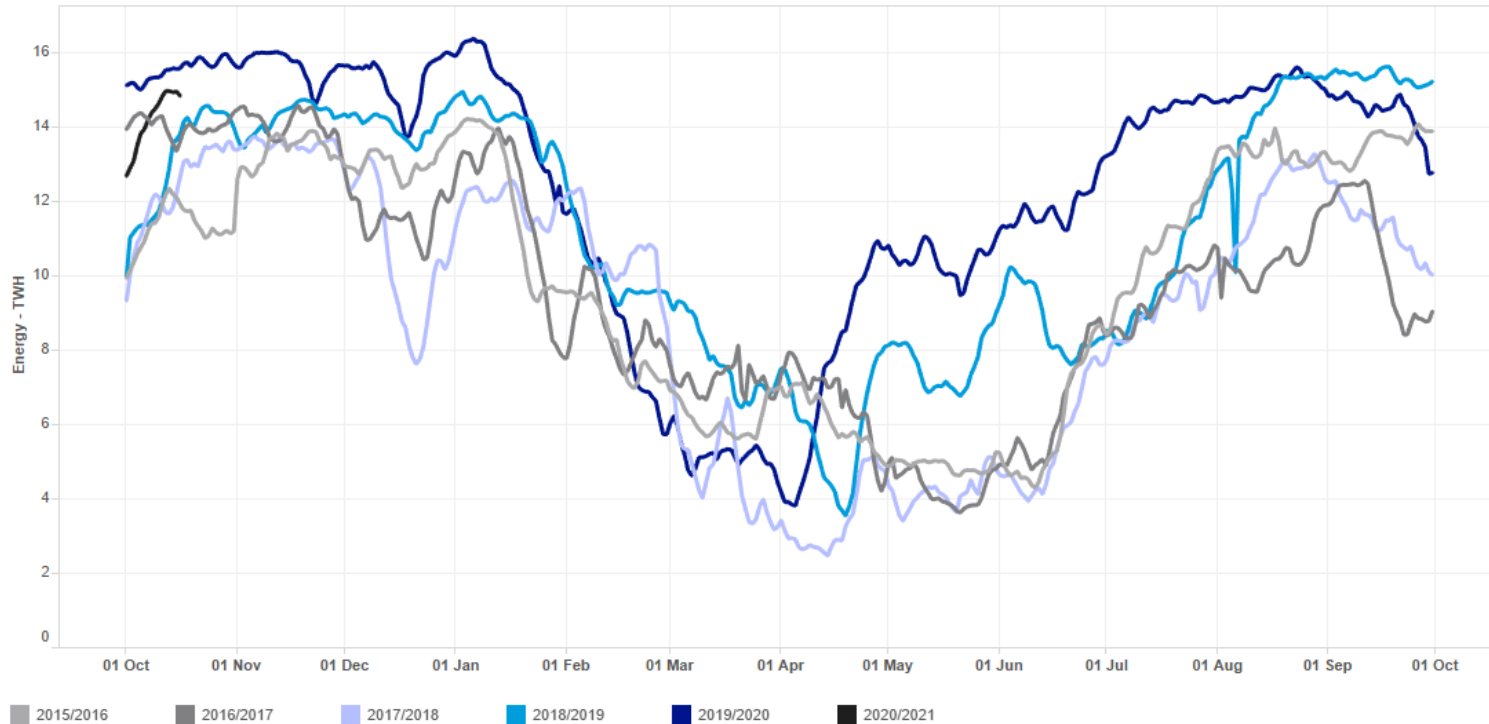
2019/2020 Percentage of total supply (Winter)



2020/2021 Percentage of total supply (Winter)



Storage Stocks



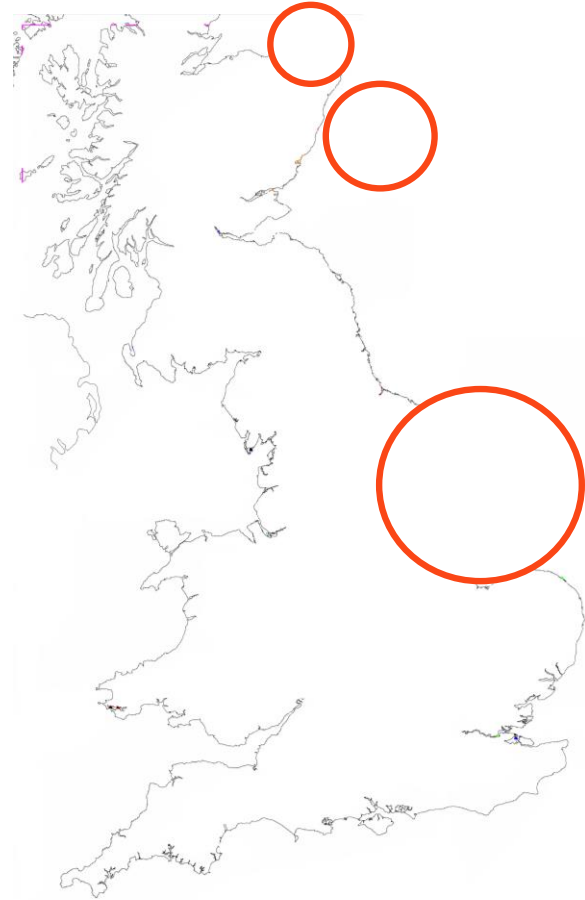
Storage stocks remain high ahead of the winter

Norway Supply

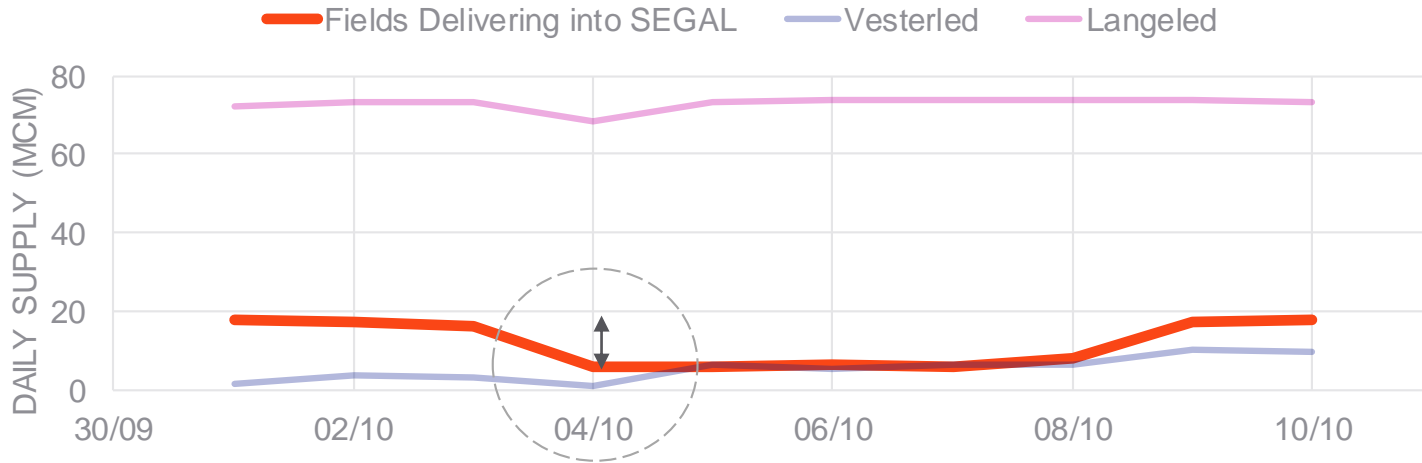
Strikes saw a potential reduction of around 8% in Norway output for a few days earlier this month

Impact on the UK was limited, with imports through Easington Langedled and St Fergus Versteled remaining high

Reduction in flows through SEGAL



Flow Comparison

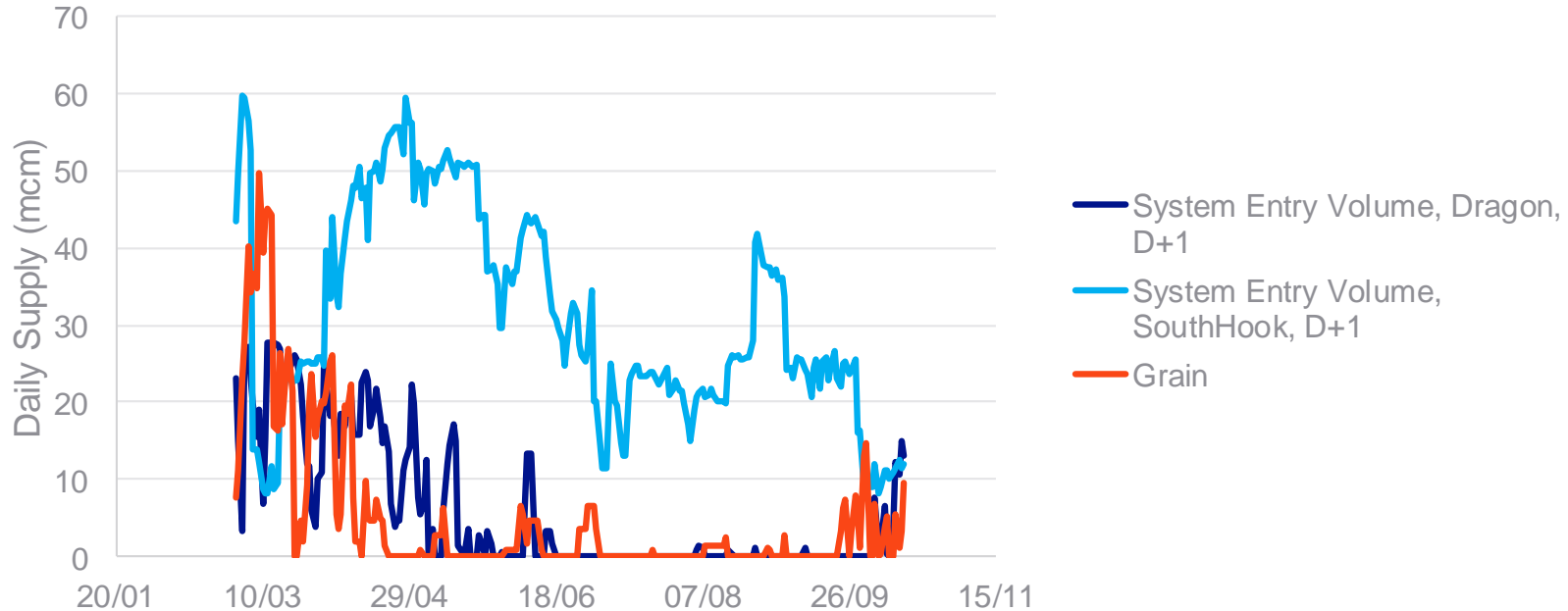


Only significant reduction was the delivery into SEGAL

LNG

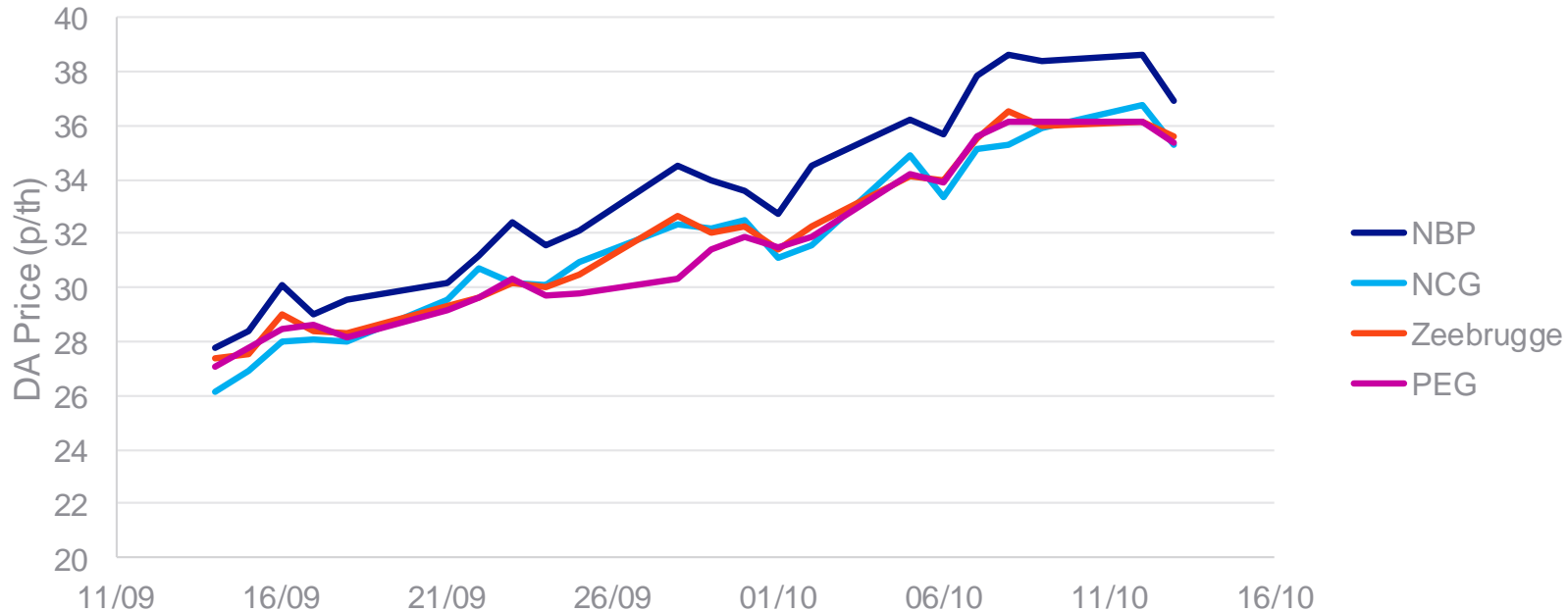
LNG continues to contribute proportion of the UK supply mix but has reduced recently, with reduction in supply contributing to higher gas prices

Largest reduction seen through South Hook



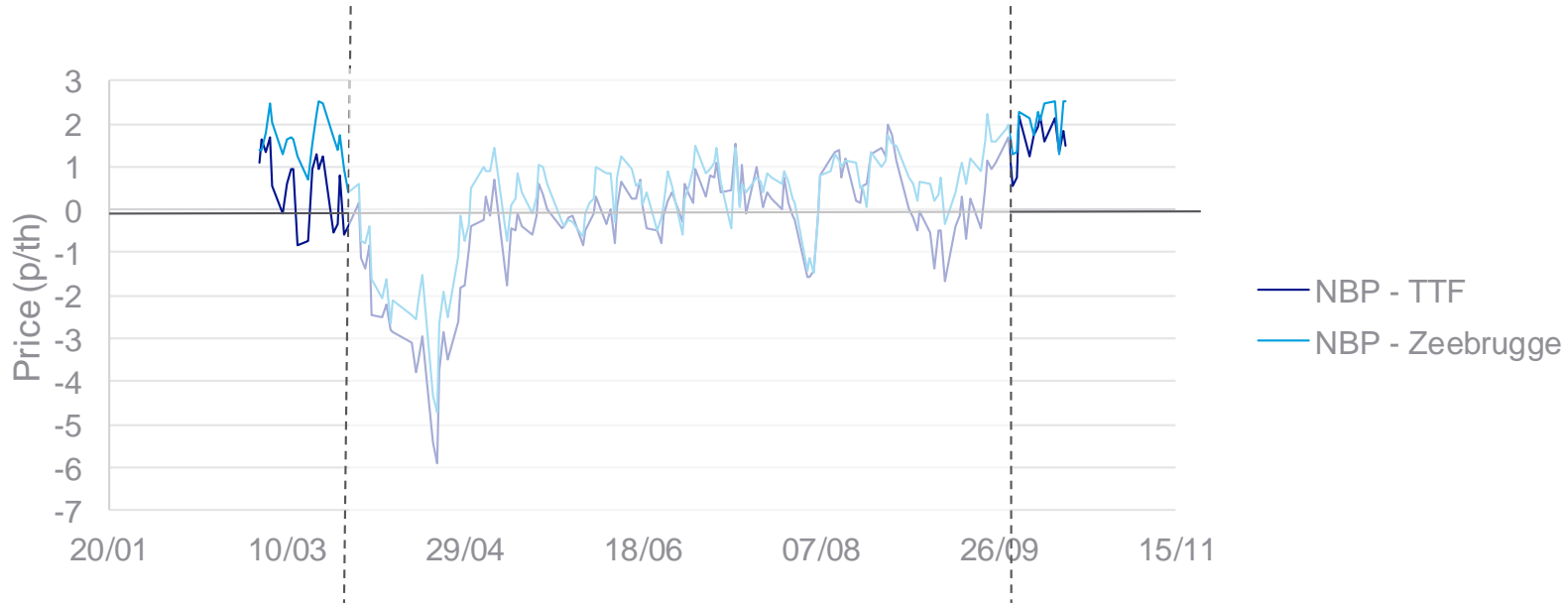
Prices

Prices have continued to rise with a reduction in supply
NBP has continued to stay above other markets



Interconnectors

October saw the first imports on each of the Bacton Interconnectors since March, with NBP-Zeebrugge and NBP-TTF spreads both reaching around 2p/th

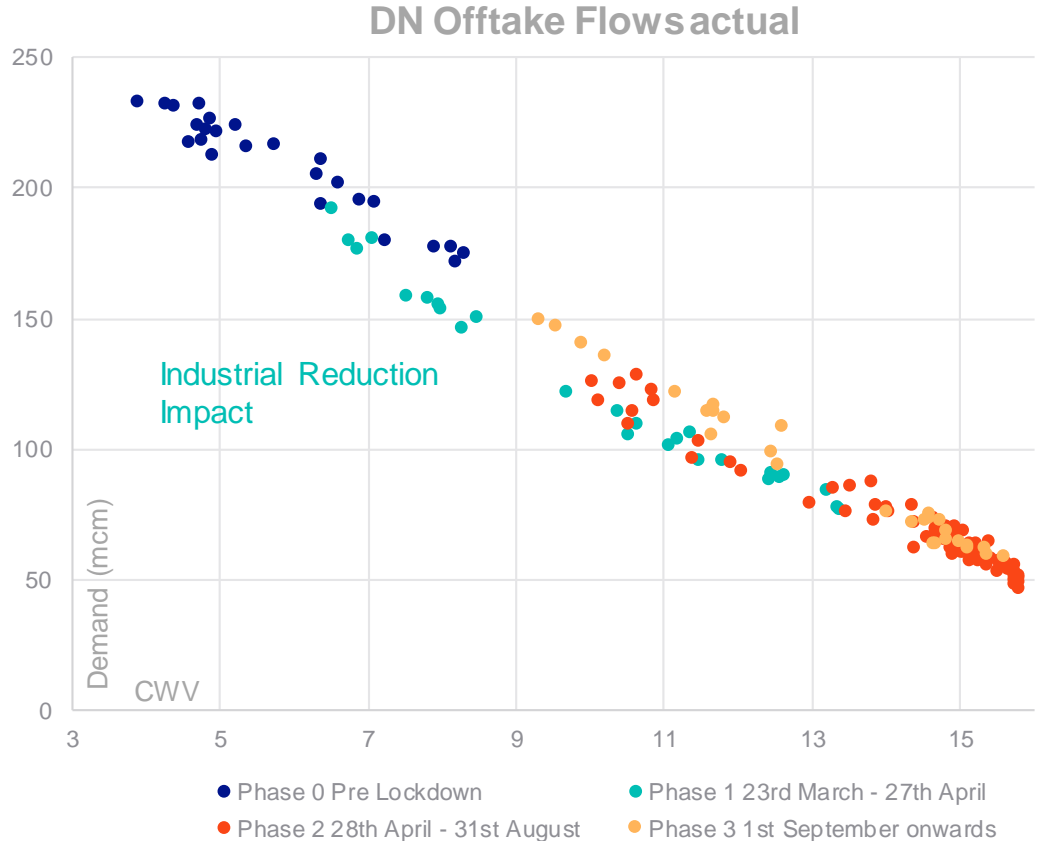


Covid-19 Demand Impact

Impact to date has largely been on Industrial and Power station demand

Currently there is no clear impact on domestic demand

- Relatively mild weather still so would not expect to see an impact yet
- Demand actuals, within day profiles and UIG will help to understand domestic use as temperatures drop



**Gas
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Gas Winter Outlook

Karen Healy
Gas Network Analyst

nationalgrid



Introduction

Agenda

01 Gas Supply Margin

02 Gas Supply

03 Gas Demand

04 COVID-19 spotlight

05 Connections to Europe

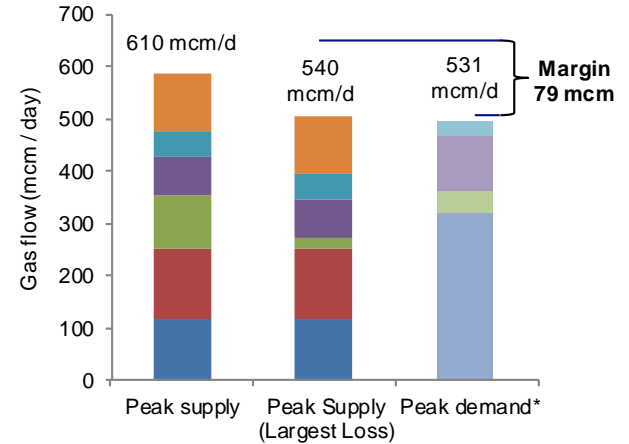
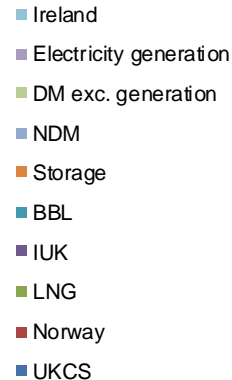
06 Summary

07 Contact us

Gas supply margin

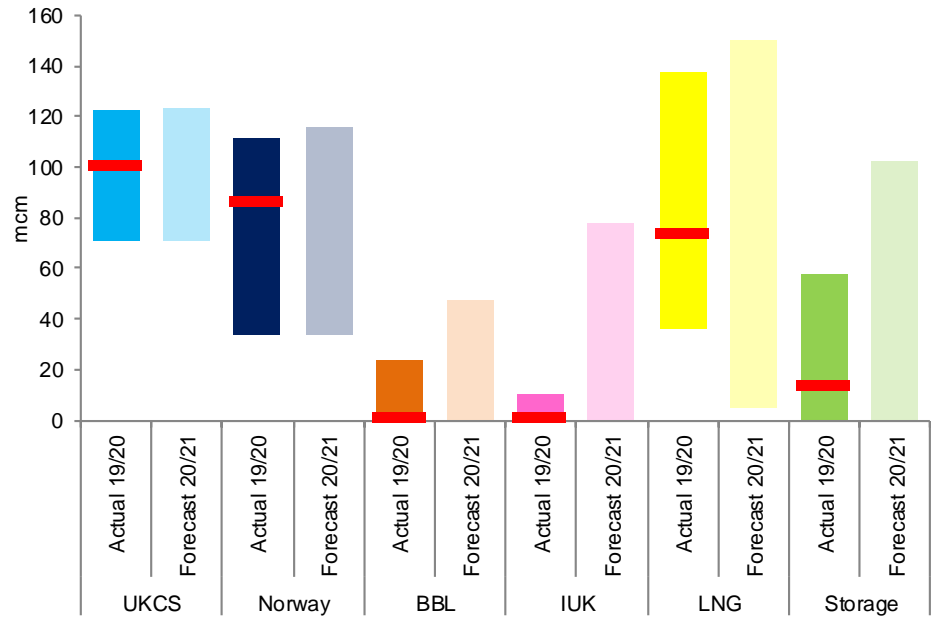
- We have a diverse supply portfolio which will ensure we have sufficient gas this winter, with a margin of 79 mcm
- We retain a positive supply margin under N-1 conditions
- 1-in-20 supply has increased from last year from 588mcm/d to 610mcm/d largely due to an increase in storage deliverability and the capability of the network to accept higher LNG flows at higher demands
- 1-in-20 demand has increased from 499mcm/d to 531mcm/d this is due to both a change in methodology (removing an adjustment for climate change), alongside an increase in power generation demand

2020/21

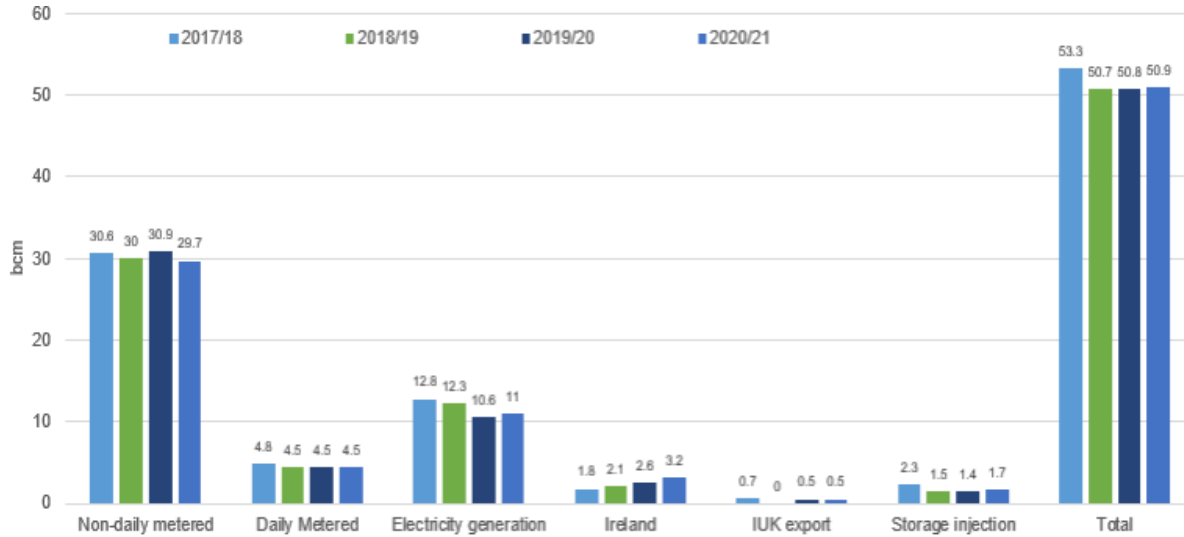


Gas supply

- Our supplies are all flexible sources and can turn up or down when required, or when there is a signal from the market. The range of flows they can supply is large and is generally greater than we see in a typical winter.
- UK Continental Shelf and Norway continue to be the main sources of supply to GB.
- High volumes of LNG imports are again expected this winter, as LNG supply capability continues to exceed global demand.
- An increase in storage deliverability compared to last winter, and strong domestic stock levels at the end of summer 2020, strengthen the security of supply position.



Gas demand



- Gas demand forecast for 2020/21 is 50.9 bcm (50.8 bcm in 2019/20).
- Forecast demand from Ireland has increased, from 2.6 bcm last winter to 3.2 bcm in 2020//21. This is due to economic expansion and the reduction in gas supplied from the Corrib gas field off the Irish coast.
- Forecast demand for gas fired-electricity generation is lower than pre-2017/18 levels as a result of increased renewable generation

COVID-19 spotlight

- In the initial phase of lockdown (March to mid-May), NTS demand was reduced when compared to seasonal normal levels. Demand reductions varied between 6-11%. As lockdown eased, and industry, businesses and homes returned to more normal behaviours from mid-May to August, this reduction decreased to 2%.
- Dependent on the severity of controls and restrictions imposed throughout this winter, our analysis indicates peak gas demand could range between 531 mcm/d and 499 mcm/d
- Robust contingency measures have been put into place to ensure if further lockdowns on the scale of those experienced in the 2020 spring/summer occur this winter, the safe operation of the NTS would continue unaffected.
- During seasonal normal weather, and in a scenario where business/industry largely remains open, we would expect to see a slight increase in demand compared to pre COVID-19 estimates due to more people remaining at home. This level of demand would remain well below 1-in-20 peak capability.

Our network is built to deliver the highest level of demand as forecast in 1-in-20 peak conditions (531 mcm/d)

COVID-19 spotlight

We have modelled three COVID-19 scenarios based on varying levels of national restrictions. For all three scenarios we expect that residential heat demand on a 1-in-20 peak day will be largely unaffected by infection rates or control measures.

- High demand case – Infection rates decline steadily through winter, business and industry remain open
- Central demand case– Infection rates are similar to the levels seen in September 2020, demand is reduced, driven by lower industrial consumption as a result of the ending of the coronavirus job retention scheme.
- Low demand case – Infection rates increase through winter to the extent of a second wave. Most, if not all, areas of the UK are in lockdown. Demand is reduced further, driven by lower industrial consumption due to greater control measures being in place.

Scenario	Gas 1-in-20 peak demand (mcm/d)	% difference from 5 year 1-in-20 projection
High case	531	0
Central case	514	-3.1%
Low case	499	-6.0%

Connections to Europe

- We do not anticipate operability challenges this winter resulting from the UK leaving the EU when the transition period ends
- We expect the established commercial arrangements across the interconnectors to remain.
- We have a diversity of supply sources to GB which provides a level of resilience should this position change.
- Actual flows from IUK and BBL will be highly dependant on the level of demand and market prices.

Summary

1. The gas supply margin is expected to be sufficient in all of our supply and demand scenarios.
2. We have considered a range of scenarios to estimate the impact that COVID-19 might have on gas demand this winter. We do not expect COVID-19 to increase our calculated 1-in-20 peak demand.
3. We do not anticipate any disruption to gas supplies in the event of a 'no-deal' arrangement for the UK's exit from the EU. We have a diverse supply portfolio, and we expect the established commercial arrangements across the interconnectors to be maintained or alternative supply sources to respond.
4. We have the appropriate tools available to manage any operational challenges throughout the winter period.

**Please contact
us if you have
further questions
or feedback:**

Box.OperationalLiaison@nationalgrid.com

**Gas
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Winter Preparedness Interactive Session

Joshua Bates

Operational Liaison & Business
Delivery Manager

nationalgrid



**Gas
Transmission**

**BEIS:
Brexit
negotiations and
no-deal
preparations**

Myra Fazal
Energy Security

Elena Magrina
Energy Security

nationalgrid



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Transmission**

Charging Review implementation

Capacity updates

Alison Tann
NTS Capacity Manager

nationalgrid



Introduction and areas covered

- On 1st Oct Charging Review (UNC0678A) was implemented, introducing a “postage stamp” pricing structure for Entry and Exit capacity products
- The following slides will cover, in relation to this:
 - Gemini system updates
 - Queries received to GNCC and NTS Capacity team
 - Short-term capacity auctions information links
 - Importance of using Shipper / User Preferences in Gemini

Gemini system updates post- 1st Oct

The only Gemini change due to UNC0678A was to update capacity reserve prices

- A couple of anomalies surfaced since 1st Oct, status of these detailed below.....

Impact / issue post- 1 st Oct	Current status
WDDSEC bids below reserve price held at “new” status until EOD on Gemini.	ANS sent 7 th Oct to flag the issue. Fix implemented 16 th Oct.
Overrun multiplier incorrect on Shipper-facing Gemini screen.	ANS sent 9 th Oct to flag the issue. Fix scheduled for 1 st Nov.

Comments and queries since 1st Oct

- Requests for Exit allocation info at greater frequency than current auctions provide for
 - Ad-hoc auctions have been run on a few occasions – we will flag these via ANS 1hr+ in advance
- Queries around Non-Obligated capacity release
 - Release is at GNCC discretion, based on the physical and operational outlook at that time
- Requests for clarification on auctions timings
 - Auctions timings are on our website pages [Exit Capacity pages](#) / [Entry Capacity pages](#) – we've updated the format to try and make this clearer
 - The capacity FAQ doc has also been updated and can be found here - [FAQ doc](#)

Importance of setting up Shipper / User Preferences in Gemini

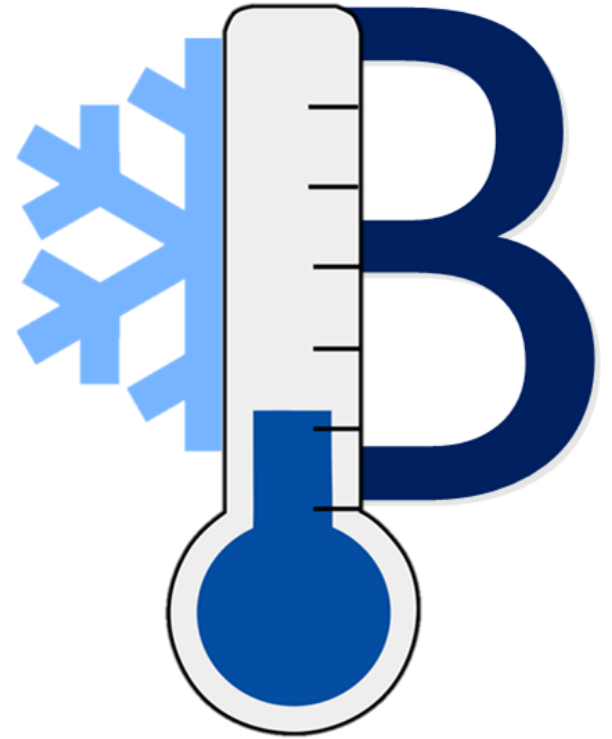
- The new pricing regime and removal of zero-priced products means a change to data entered when placing bids. This could potentially increase the risk of data entry errors.
 - There may also be a lack of familiarity as different strategies are adopted and product usage changes
- Last month I reiterated the importance of correct data entry, our respective responsibilities on entering and processing data, also the process to follow should there be an issue.
 - Note, the .box account for post-auction bidding issues is capacityauctions@nationalgrid.com
- If you haven't already, **please take the time to set up Shipper/User Preferences in Gemini**. This functionality exists specifically to prevent erroneous data entry.
 - Step-by-step instructions can be found in the [Sept OF Pack](#) , starting on [slide 60](#)

**Gas System
Operator**

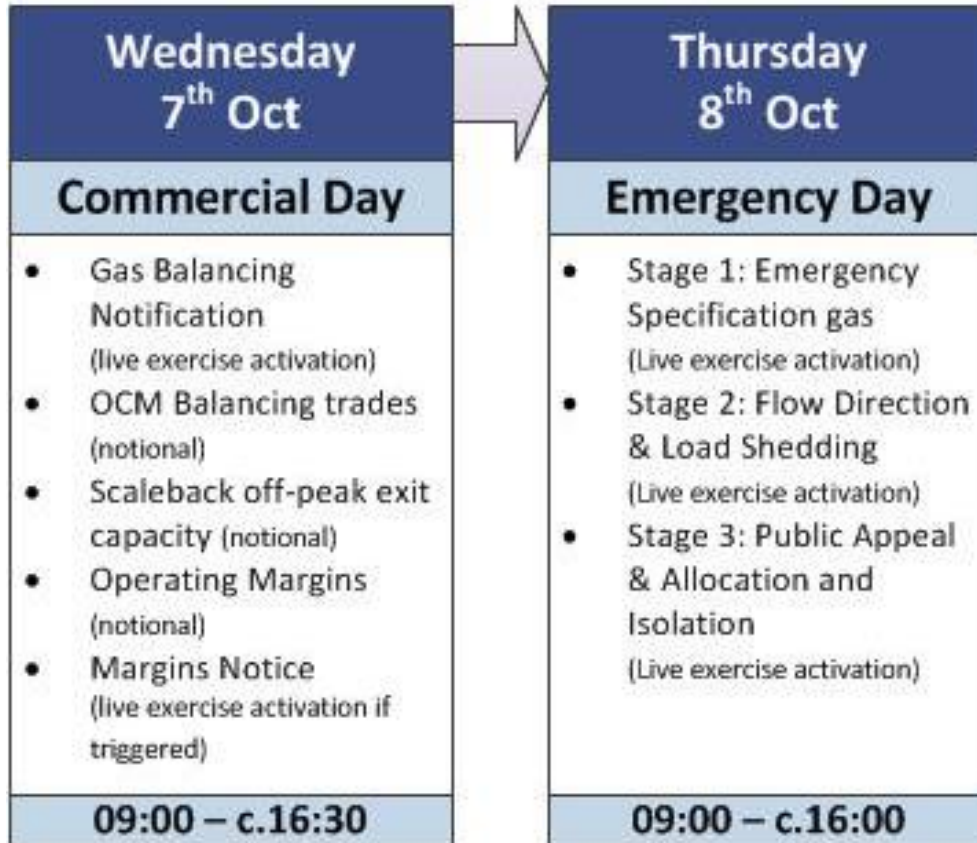
NEC Industry Exercise 'Baltic' - Seeking Feedback

Tom Wilcock
Safety, Response & Assurance
Manager

nationalgrid



Exercise Baltic - Scope



Aim and objectives

Successfully achieved:

1. Assurance to the NEC and the HSE that the Gas Industry is prepared to respond to a Network Gas Supply Emergency (NGSE) this winter
2. Demonstration of our ability to effectively manage an NGSE remotely



Your Feedback

Focus on:

- The messages you received and if they were consistent with your expectations
- Any contact information updates or channels which you expected to receive messages via but didn't
- Any general notes on process and exercise facilitation

Issue to:

GSO Emergency and Incident Framework Team:

gasops.emergencyplanning@nationalgrid.com

Fact 24 – Ex Baltic

- FACT24 will replace Criticall, as our, Active Notification System (ANS), from 1st December 2020, following a period of parallel running during October and November.
- We are aware some Exercise Baltic messages sought a confirmation:
 - Unusual request
 - Unrecognised URL
- We will review the need for a confirmation and match the approach for GNCC messaging
- Red Text is difficult to read on fax messages

Reporting and Planning for Exercise 'C'

- November '20 – Initial Findings
- January '21 – Exercise Baltic Report
- February '21 – Scoping for 'Restoration' Exercise
- June '21 – scoping for Exercise 'C'
- August '21 – briefing for Exercise 'C'
- September '21 – Exercise 'C'

**Gas
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Xoserve

Victoria Mustard
Customer Advocate

nationalgrid





**GEMINI Monthly Service Report
September 2020**

P2 Overview

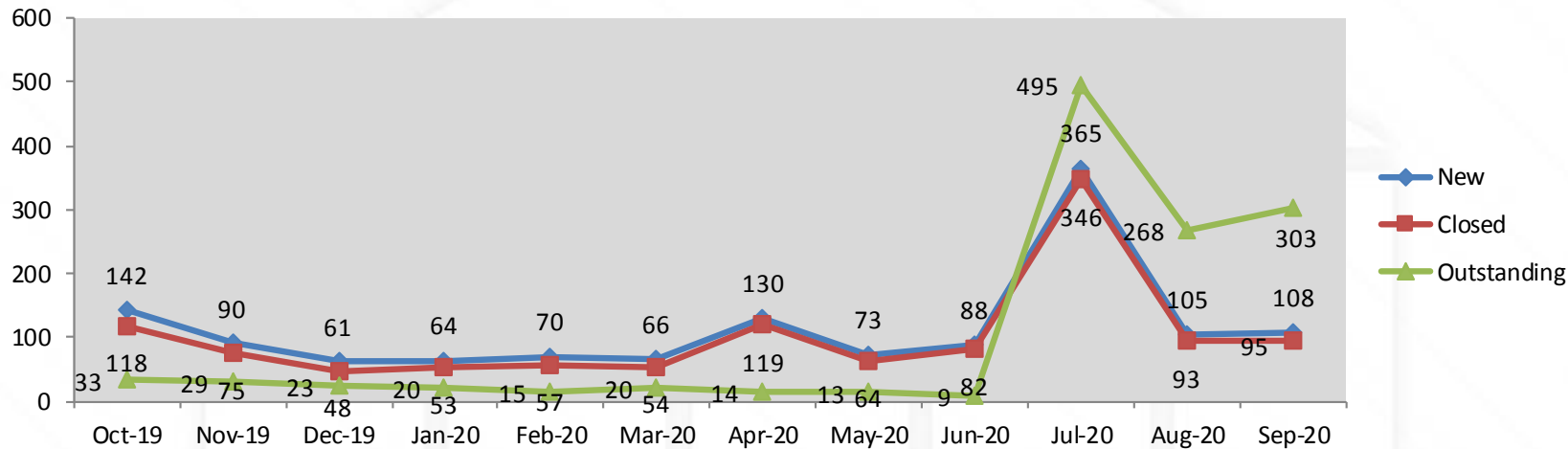
Date	Shipper	Ticket Reference	Problem Record	Overview	Root Cause	Impact	Mitigation	Permanent Solution	Fault Domain	Area
01/09/2020	Multiple	1179970	2686	Issue with file flow from Gemini to B2B.	Corruption caused by irregular service start up process.	EU Nominations were delayed in being confirmed within the Gemini system leaving associated Shippers not being fully confident of their trading position.	N/A.	An automated service restart process has been put in place in order to prevent future corruption from occurring.	B2B	Xoserve
06/09/2020	Multiple	1181315	2688	Gemini B2B-DELORD file not sent to IUK TSO..	Believed to be an issue with the Cloud infrastructure hosting provider where network data packets are being dropped.	EU Nominations for a single TSO, IUK, were not being confirmed within the Gemini system leading to uncertainty with their trading position.	The service is being rehosted on a more robust platform host.	Relocate service within the hosted infrastructure to provide added redundancy and additional bandwidth.	B2B	Xoserve
08/09/2020	Multiple	1182455	2649	Gemini – Multiple Entry and Exit Batch jobs are failing continuously in Control – M.	Gemini filestore component reverted to “read only” mode.	The Gemini service was unavailable to the user community whilst a service restart was performed.	Remount filestore and restart services..	Update FNIC driver as recommended by vendor.	Infrastructure	Xoserve

P2 Overview

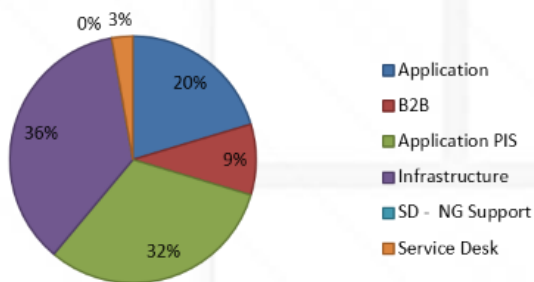
Date	Shipper	Ticket Reference	Problem Record	Overview	Root Cause	Impact	Mitigation	Permanent Solution	Fault Domain	Area
15/09/2020	Multiple	1184427	N/A	Shippers are unable to access Citrix to login to Gemini application.	Two separate issues by reported by Shippers. These were subsequently identified as local connectivity issues.	Two Shippers were unable to connect to the Gemini system.	Attempt to use XP1 token to access the system.	N/A.	Infrastructure	External
23/09/2020	Multiple	1186606	2708	Gemini - Menu Options available which are access restricted.	Project deployment requiring Siteminder changes which were implemented incorrectly.	Additional product menu data was available within the Entry and Exit Auction screens which the Shipper community could access when this should not have been visible.	Remove online screen access delivered by the Project implementation.	Reintroduce the Siteminder project Changes in the proscribed manner.	Infrastructure	Xoserve

Monthly Service Reporting

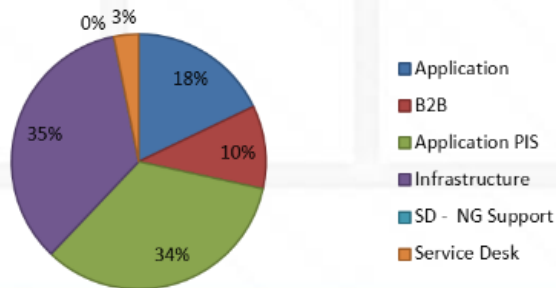
Incident Ticket Trend Analysis



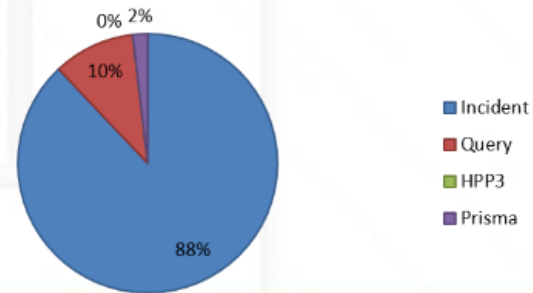
Tickets Raised



Tickets Closed



Incidents vs Queries



Gas
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Updates

nationalgrid



Gas Quality Blending Services Webinar

Upstream Stakeholders have expressed an interest in NG developing gas Quality Blending services at entry points to maximise the recover of UKCS gas

You can view the webinar from 13th October online via the Data Community site – please see the webinars page

<https://datacommunity.nationalgridgas.com/key-documents/webinars/>

Gas Market Change – Contact Us

Charging Review

- Amending the Gas Transmission Charging regime to better meet relevant charging objectives and customer/stakeholder provided objectives for Transportation charges
- Colin Williams
colin.williams@nationalgrid.com
07785 451776

Gas Quality

- Exploring the feasibility of National Grid gas quality blending services at NTS entry points
- GS(M)R Review
- Phil Hobbins
philip.hobbins@nationalgrid.com

Access Review

- To address short-term issues and review the principles to establish a long-term strategy for the NTS capacity access regime
- Webinar to be held imminently, invite to be sent via Joint Office
- Jen Randall
jennifer.randall@nationalgrid.com

Other Queries

- Queries for National Grid Consultations: .box.GSOConsultations@nationalgrid.com
 - All other queries: box.OperationalLiaison@nationalgrid.com
-

**Gas
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Close

Joshua Bates

Operational Liaison & Business
Delivery Manager

nationalgrid



Next Forum

The Next Operational Forum will take place on the 19th November via WebEx or Teams

Please send any topic requests to:

Box.OperationalLiaison@nationalgrid.com

Register now at:

<https://www.eventbrite.co.uk/e/gas-operational-forum-november-2020-tickets-85103419619>

