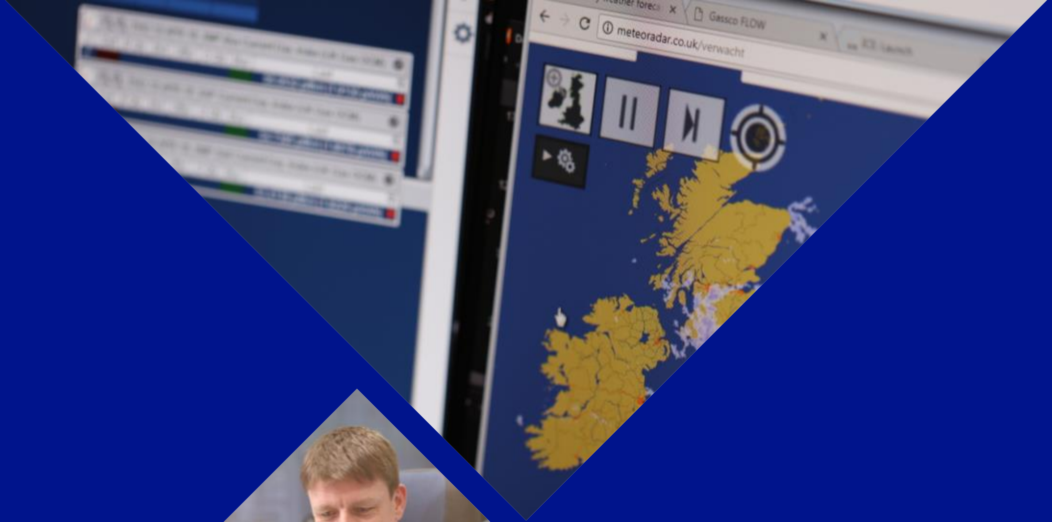
Gas System Operator

Gas Operational Forum



London Radisson Grafton

14th February 2019

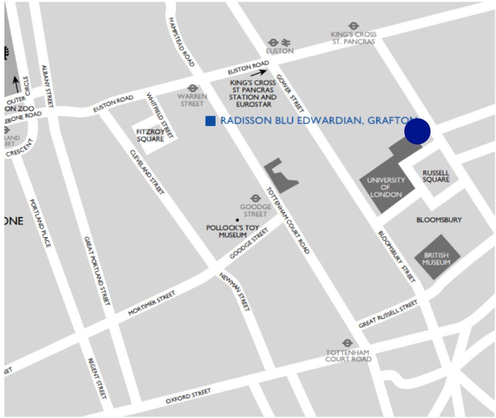
nationalgrid

Health & Safety

No Fire Alarm testing is planned for today

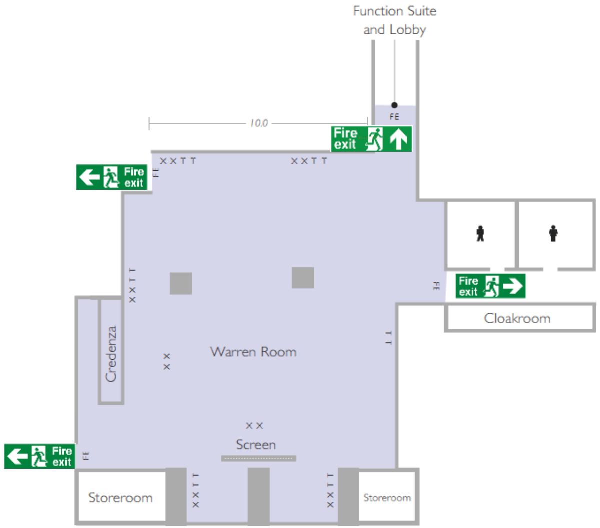
In case of an alarm, -please follow the fire escape signs to the evacuation point

This is at the rear of the Hotel by Fitzroy Square



Warren Room Fire Exits

There are 4 fire exits in the Warren Room, as shown be the map below



Feedback & Questions

For any questions during the forum you can:

- Ask during the presentations
- Speak to an NG representative during the break
- Utilise the Query Surgery time at the end of the Forum

Contents page

Breaks:

Morning Break

10:15 – 10:45

Lunch Break & Query Surgery

12:10 onwards

National Grid and Xoserve Attendees

Gas Operations

- Karen Thompson
- Jon Davies
- Martin Cahill
- Harj Kandola

Future Markets

- Elaine Baker

SO Strategy and Regulation

- Stephanie O’Connor

Customer & Stakeholder Relations

- Helen Field

Previous Actions

Item	Action	Detail
LNG Insight	National Grid to aim to invite an industry rep to discuss LNG at a future forum	Have had discussions on this, aiming to include as an agenda item at the forum in March or April
Survey Breakout	Share feedback from January breakout session on customer surveys	This is included in the agenda for today
Offtake Rules Question	If OPN has been accepted, and ‘rules’ are then switched on, does this stay accepted?	Covered on the next slide
Check if ANS details are up to date	Industry to check if ANS details are up to date	Can be checked at the following address: https://www.s2.emergencycallsecure.com/newlogin/

OPN Rejections when ‘Rules’ are on

If National Grid rejects an OPN, the prevailing (previously accepted) OPN stands.

If we are in a constraint or forecast constraint situation and you submit an OPN that is requesting flexibility over and above your Network Exit Provisions and this could cause an operational balancing action, or worsen the situation we are in, we could reject. However, if a new OPN is stating that adjusted flows are beneficial and look to help mitigate the constraint situation, we are more likely to accept it. Rejections will be mostly related to increases for additional flexibility that we are not in a position to offer.

Feedback Since Last Forum

Feedback	Description	Actions
Collaboration site	+ Some fantastic feedback on the site itself - Some issues with access + registration. This can be caused by company firewall settings	More feedback needed from signed up users. Inform NG of any access issues Instantaneous Demand Trial data published on usual website also.

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02

Brexit Preparations Update

BEIS

nationalgrid

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03

Operational Overview

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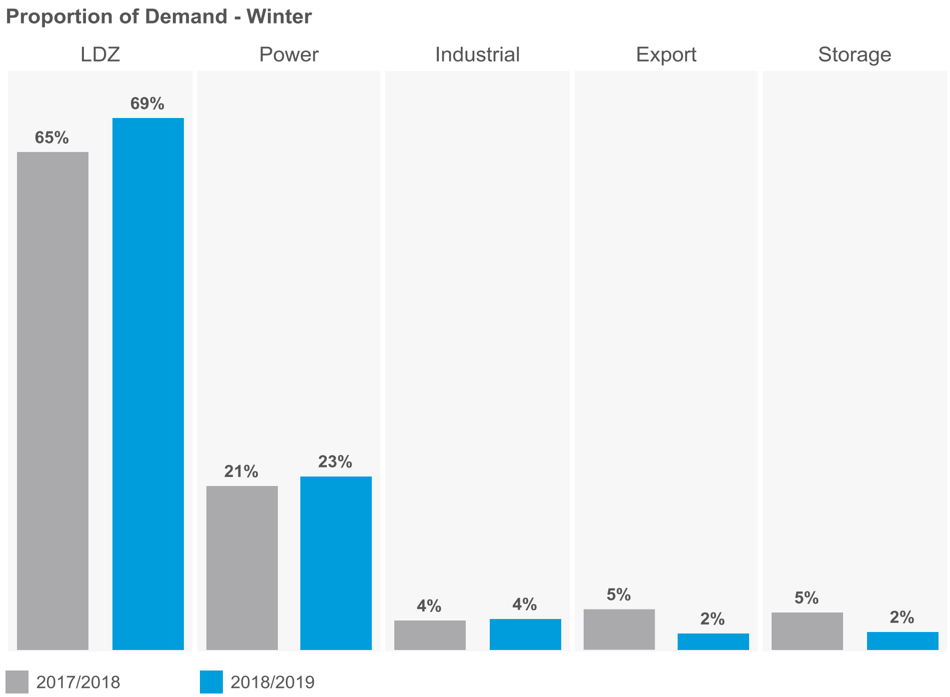
Demand - Components

The profile of demand seen so far this Winter is broadly similar to that of the same period last year.

The changes observed so far this Winter are

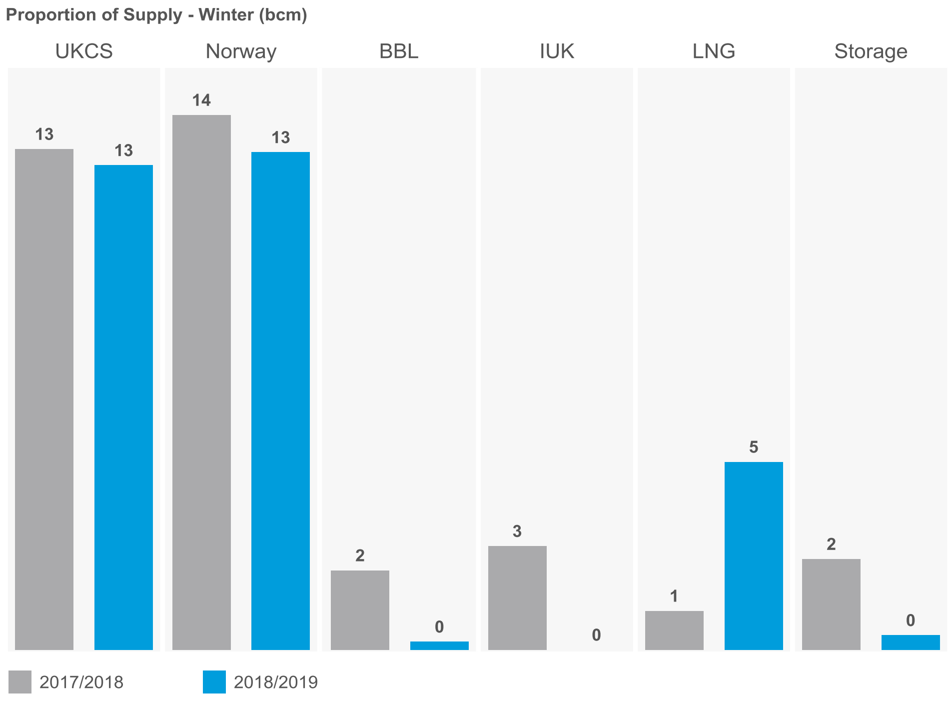
- increase in LDZ demand as a % of total demand;
- decrease in the volume of IUK exports.
- Decrease in Storage injection.



Supply - Components

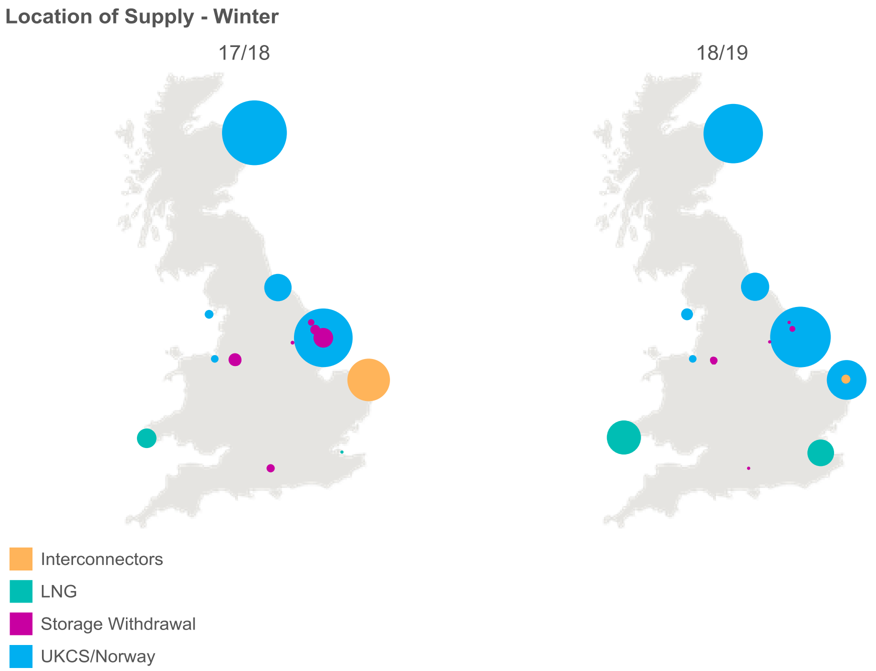
The most noticeable change so far this year is a pronounced increase in supplies from LNG.

Compared to last year, we have seen a marked reduction in the proportion of gas being supplied from IUK and Storage.



Supply - Location

With the increase in supply from LNG, the locational profile of supply has changed somewhat, with a larger proportion of gas in the South East and the West.



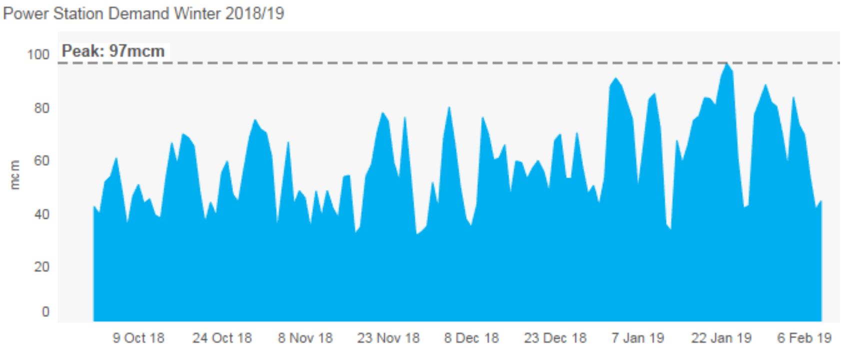
High Power Station Demand

On Wednesday 23rd January, we recorded Power Station demand of

97mcm*

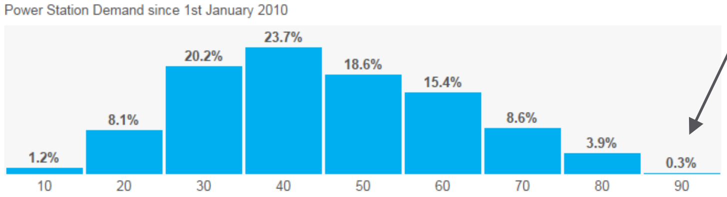
which is the

Highest since 2010



This came as part of 3 consecutive days of Power Station demand in excess of 90mcm.

Prior to this week, Power Station demand of 90mcm or more had occurred on only 6 days since 2010.



On average, Power Station demand of greater than 90mcm occurs on only 1 in every 500 days.

Relatively low levels of wind generation over the past week have led to an increased need for power generation.

Given the current prices, whereby gas-fired power generation is more efficient than coal-fired, it has been the gas-fired generation that has ramped up significantly.

*This number is still subject to settlement process

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04

Operational Example – 23rd January

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What is a high demand day?

23rd of January saw

402mcm: 2nd highest demand day since 2011

'Cold' demand day in winter outlook was 407mcm

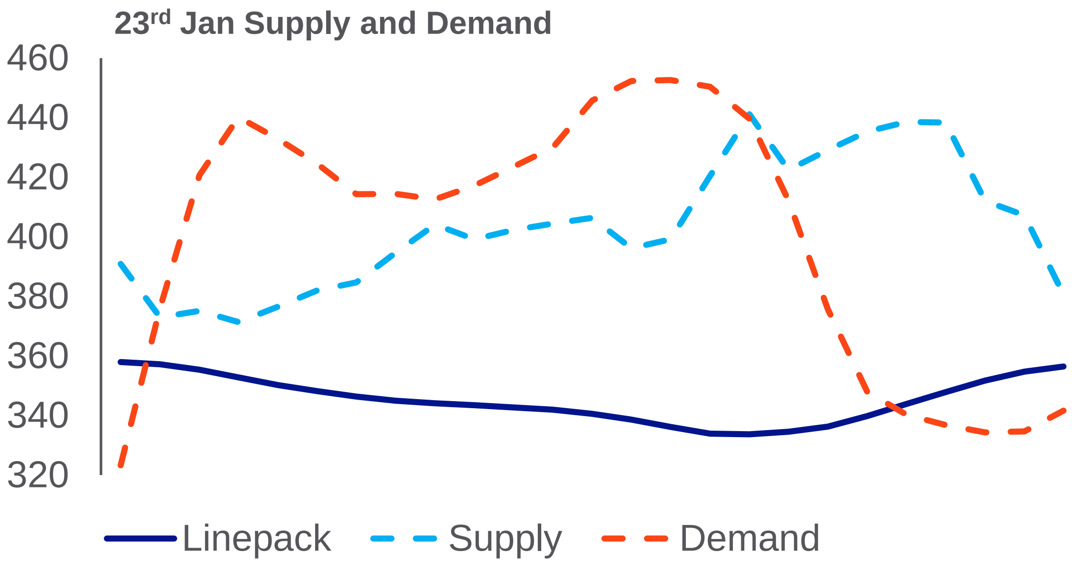
Although this reads like a high demand day, operationally it was a low risk day

Instantaneous demand reached 445mcm at peak

GNCC is the Gas National Control Centre

GNCC Strategy is focussed on ensuring a balance across the NTS, meeting required exit pressures and ensuring no entry constraints

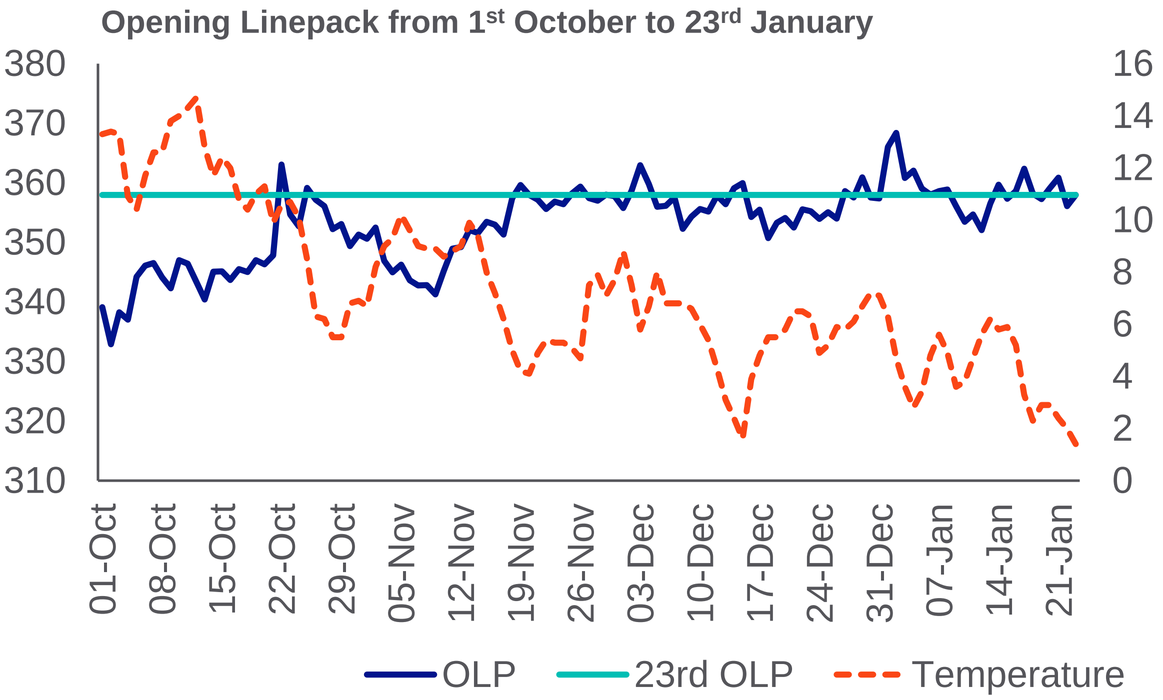
High Demand Challenges



For more information about National Grid's Linepack strategy, see agenda item in November 2018 Forum

- High Supply/Demand differential means a **larger linepack swing**
- Lower linepack means a reduced **network flexibility**
- NTS must be configured to ensure **exit pressures** met in every region
- Higher pressure losses creates challenge to meet **extremity exit obligations**

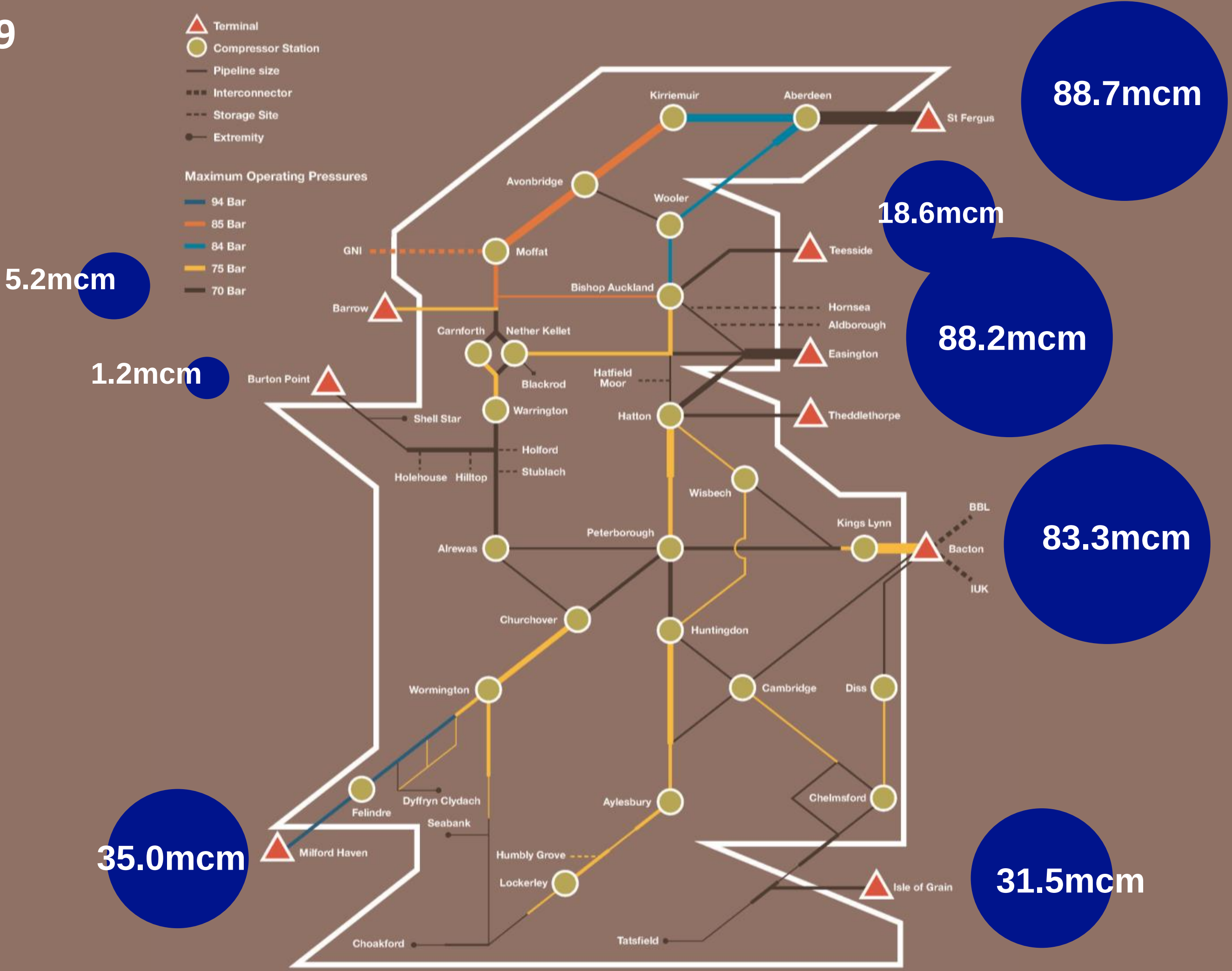
Opening Linepack



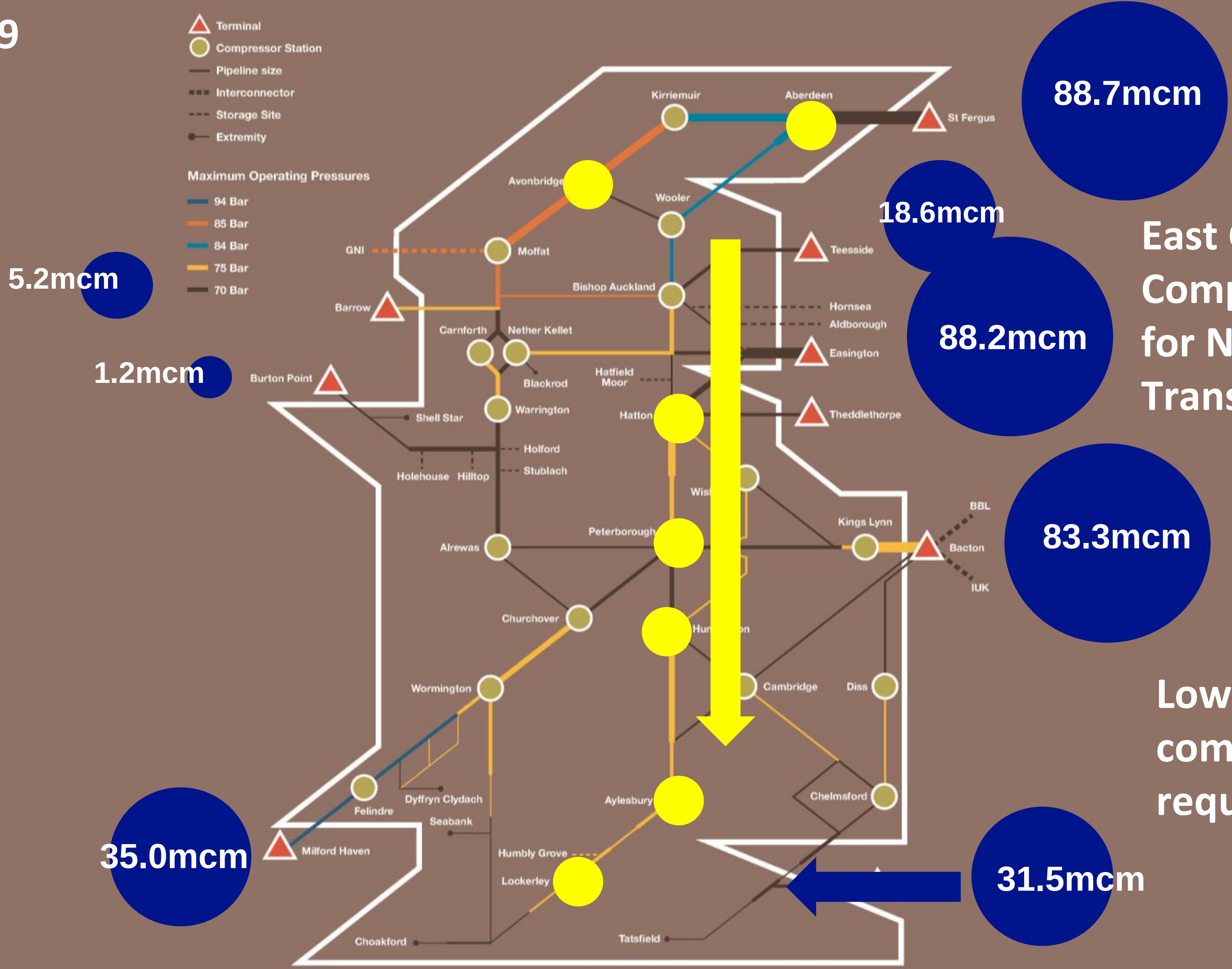
- OLP of 357.98
- This was a fairly strong opening linepack for winter, which was sufficient even on a particularly high demand day
- Cold week in the lead up to day meant linepack not built up any more than this

Terminal
Compressor Station
Pipeline size
Interconnector
Storage Site
Extremity
Maximum Operating Pressures
94 Bar
85 Bar
84 Bar
75 Bar
70 Bar
Kirriemuir
Aberdeen
St Fergus
Avonbridge
Wooler
GNI
Moffat
Teesside
Bishop Auckland
Hornsea
Aldborough
Barrow
Carnforth
Nether Kellet
Easington
Blackrod
Hatfield Moor
Burton Point
Warrington
Hatton
Theddlethorpe
Shell Star
Holford
Stublach
Holehouse
Hilltop
Wisbech
BBL
Kings Lynn
Peterborough
Alrewas
Bacton
IUK
Churchover
Huntingdon
Wormington
Cambridge
Diss
Dyffryn Clydach
Felindre
Seabank
Aylesbury
Chelmsford
Milford Haven
Humbly Grove
Lockerley
Isle of Grain
Choakford
Tatsfield

23rd Jan 2019



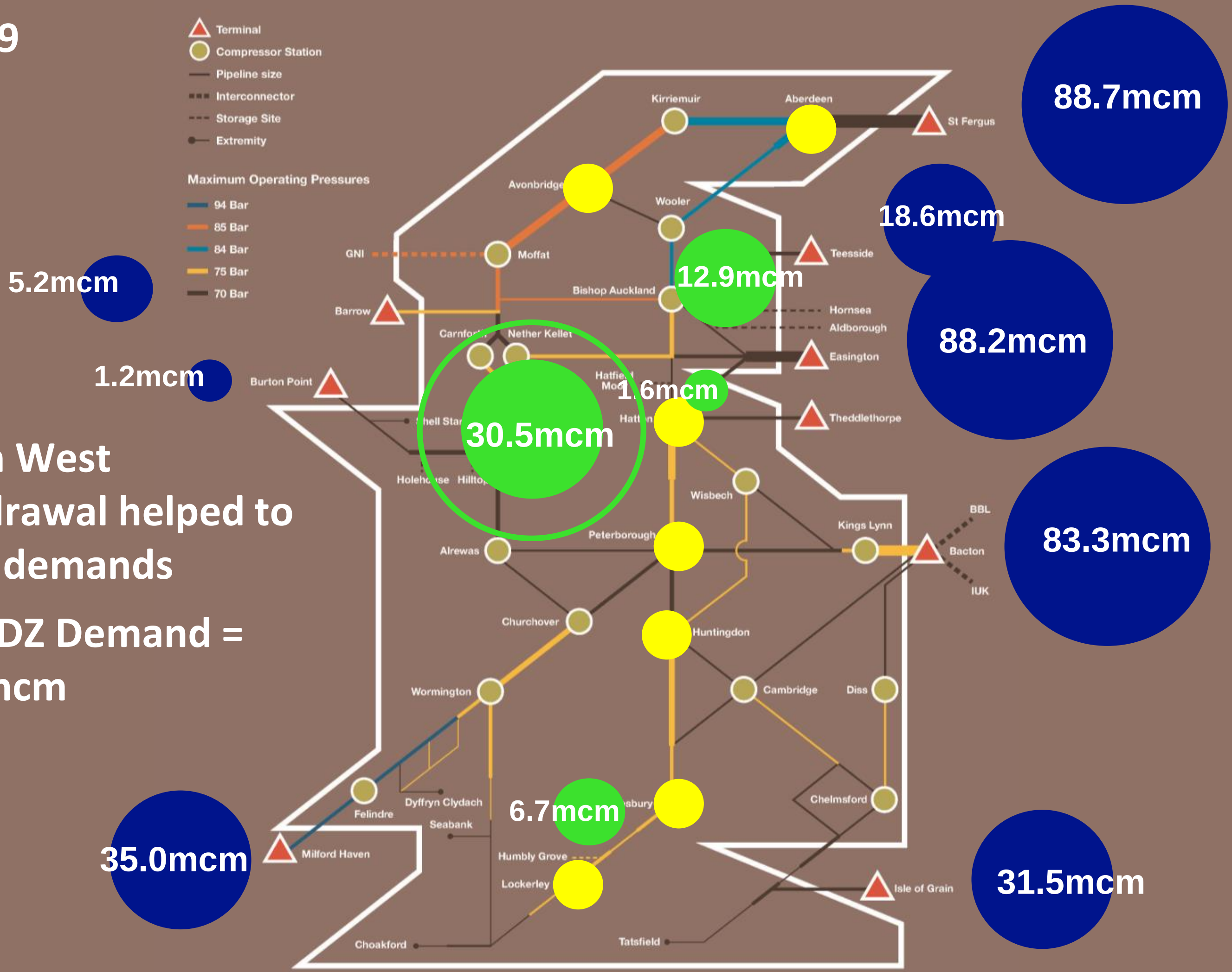
23rd Jan 2019



East Coast Compression used for North to South Transmission

Lower SE compression requirements

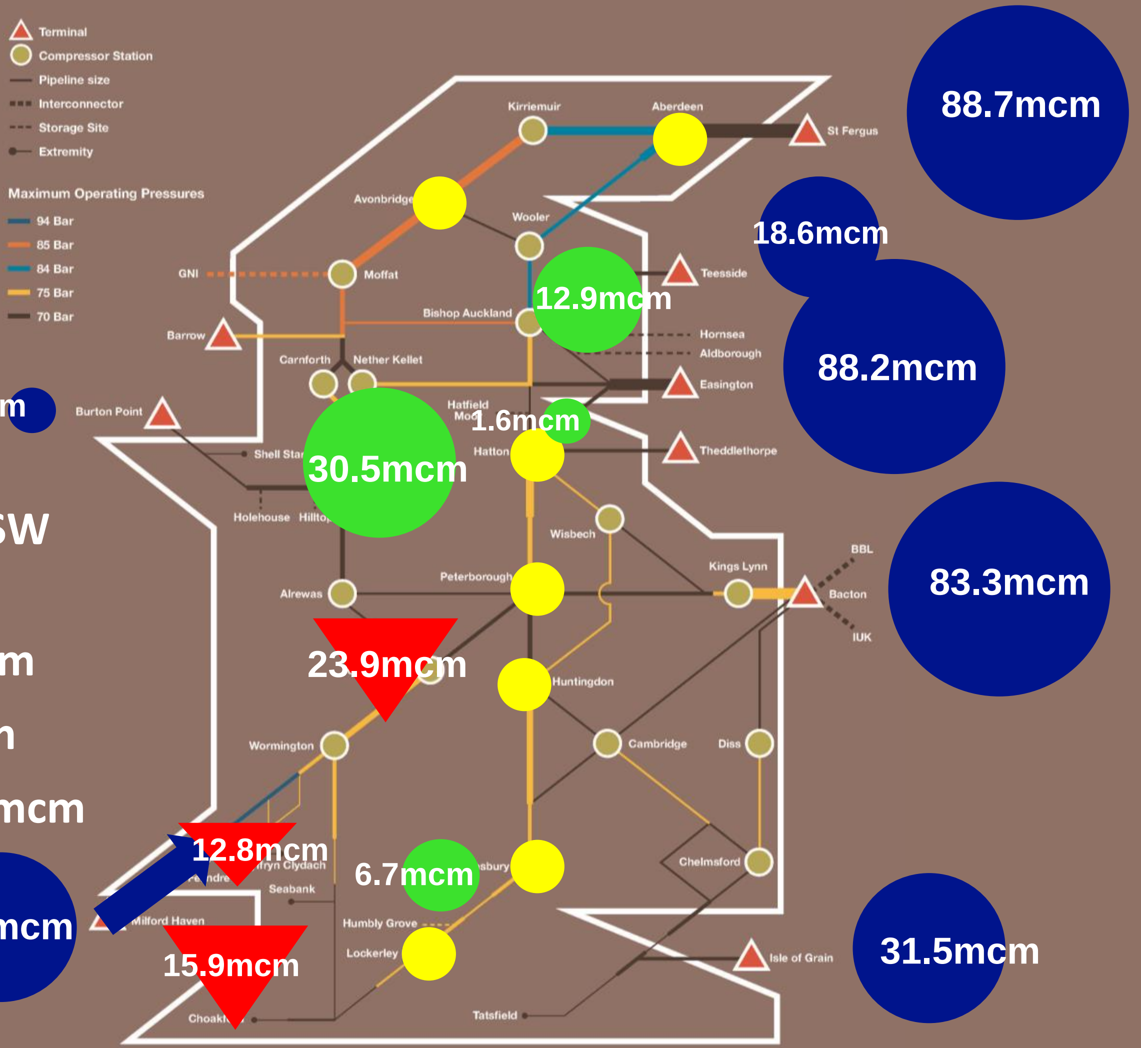
23rd Jan 2019



North West withdrawal helped to meet demands

NW LDZ Demand = 33.8mcm

23rd Jan 2019



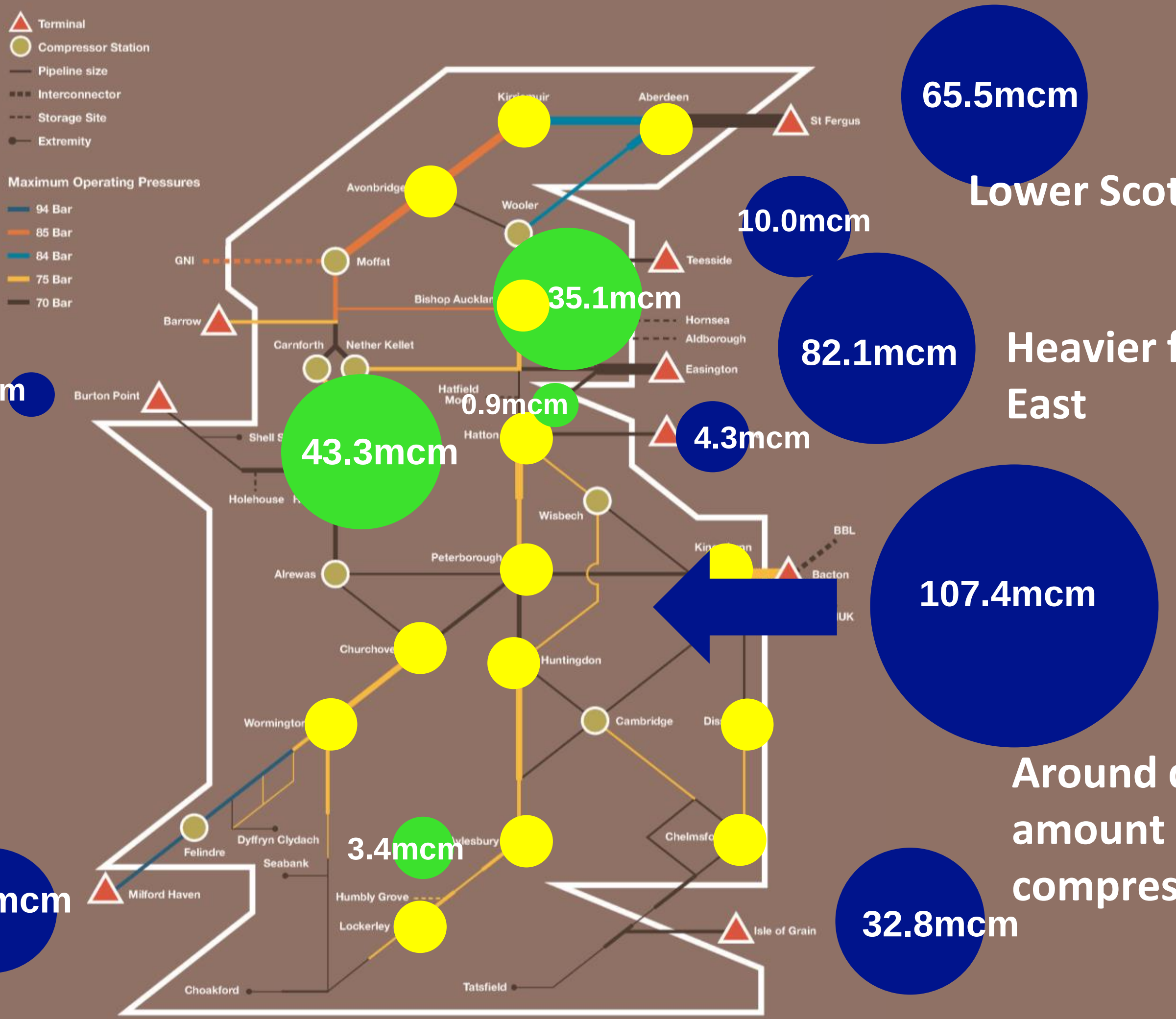
Milford flows meet SW demand

Wales South 12.8mcm

South West 15.9mcm

West Midlands 23.9mcm

1st March 2018



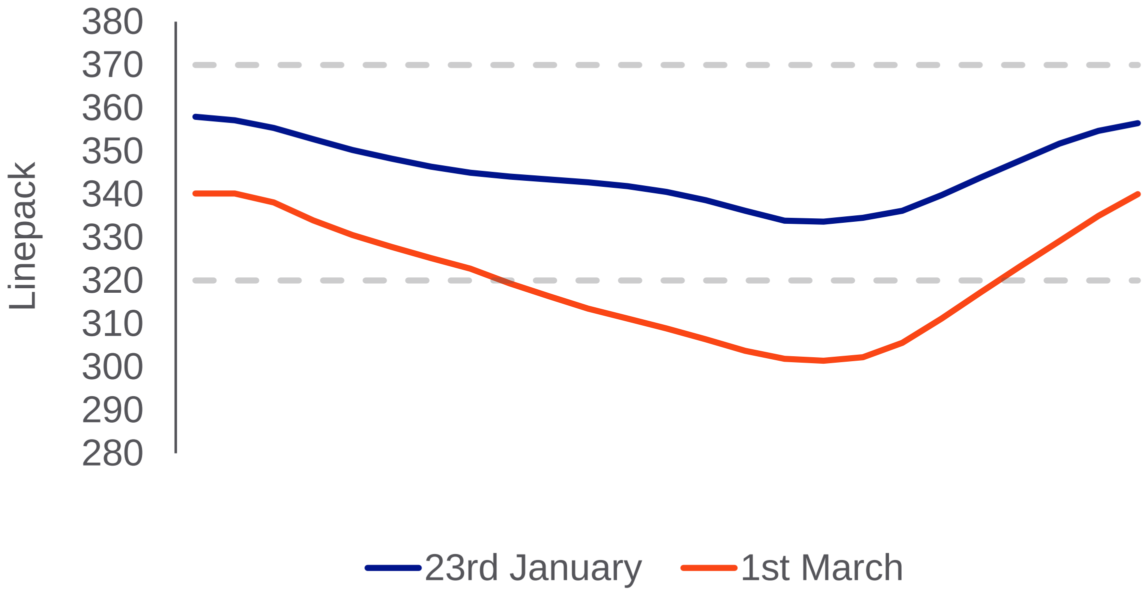
Lower Scotland flows

Heavier flows from East

Majority of Compressor Fleet required to manage exit pressures

Around double the amount of compressors utilised

Linepack comparison



- 1st March linepack started from a much lower position, reducing flexibility
- Steeper drop at the start of the day due to supply losses
- Total supply :
  418.9 1st March
  403.3 23rd January

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05

Gas Markets Plan (GMaP) and engagement

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Why GMaP?

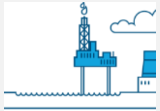
Decarbonisation of Heat

Decarbonisation of Transport

Decarbonisation of Industry

Future Networks & Markets

Carbon Capture Usage & Storage



Whole Energy System

What is needed from here? … Gas Markets Plan (GMaP)

What do stakeholders think of the GMaP concept?

Unanimous view that a forum to discuss and agree such a plan would advance the energy transition

Strong support for NG developing the plan and for a broad group of current and future industry participants to be engaged

2-10 years represents the right period for the GMaP

The GMaP framework should be open to all interested parties, with a clear route to input feedback

Some thought including an indication of cost, willingness to pay etc. could lead to a more realistic plan

Who we engaged with in Summer 2018:

- BEIS
- Ofgem
- Scottish Government
- Welsh Government
- Citizens Advice
- Energy UK
- Energy Networks Assoc
- Gas Distribution Networks
- Wales & West Utilities
- Decarbonised Gas Alliance
- Equinor
- Cadent
- Joint Office
- Centrica
- Transmission WG
- Xoserve
- Future Capacity & Balancing event
- Presentations at RIIO-T2 Regional events

What is the GMaP?

Objective

GB gas industry stakeholders agree the gas market challenges of the next 2-10 years, their level of impact, work package triggers, focus areas and timings in order to inform National Grid Gas SO's development of physical and commercial market options

Scope

Initially, NTS gas market framework developments over a 2-10 year timeframe.

(Potential for widened scope as momentum is grown.)

Outputs

Providing clarity when the future is uncertain – defining the possible future pathways and identifying market triggers to start industry debate

Facilitating broad stakeholder discussion – educating and debating across industry to gain consensus on the commercial, technical or regulatory changes required

NG Gas SO is agile in facilitating the market efficiently

Sector-wide agreement on the challenges and the right things to do at the right times

will allow the SO to facilitate the future market efficiently for consumers

The GMaP at launch…

Customers and stakeholders have told us about potential change projects they think are likely to be necessary in the next 2-10 years.

These will form the basis of a high-level GMaP to develop with stakeholders early 2019.

Market frameworks	Services	Operational
• Connections to the NTS • EU Regulatory Change • Gas quality specification changes • Charging	• Gas quality services (prior to entry) • Information provision (inc quality, pressure, operational) • Digital services • Future of Gemini • Pressure services	• Review operability of the NTS in the face of supply/demand volatility

What's missing? What are the triggers to act? When will this needed to be acted on?

Which projects could be complementary?

How can we look across the challenges to create the best value future for consumers?

Testing the approach to developing the GMaP

- Continuing to test the concept
- Designing a starter approach
- On-going engagement and governance model
- Invite industry to join the initiative
- Updates in the Future Markets Gas and RIIO Stakeholder newsletters
- Updates at Operations Forums
- www.futureofgas.uk

Gas Markets Plan : Helping to identify the evolving pathway for gas and drive action on the right commercial and network changes at the right times.

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06

Feedback from last month’s breakout session

nationalgrid

Allocation

Issues with Invoicing/allocations

- Point of contact unclear for Allocation – National Grid / Xoserve
- Gemini API's limited

Post close-out measurement / allocation

- D+5 close out can be a pain point, rolling process would be preferred

Meter Validation Process

- Manual workarounds sometimes required

- Allocation topic will be discussed at upcoming forum. Query contact list updated.
- Feedback needed on Gemini API's for future enhancements.
- Intention to collaborate on a customer journey around post nomination process - allocation-invoicing. Support from customers ahead of forum discussion would be valued.
- Any questions/feedback provided ahead of Forum can be included in agenda item

GEMINI

New Starters	GEMINI needs to be more user friendly	Xoserve and National Grid working together to plan required changes for the future of Gemini.
Online Training	Training environment could be improved	Update to be provided at the Operational Forum for expectations/ timelines
Service Desk	Hard to find info – more of an issue for new starters	

Contacts

Finding the right person to speak to

Are the right contacts there?

Sometimes it can be hard to find the right person, even with the I have a query document

I would like to have a person to speak to in addition to shared email accounts

FAQs could be useful

Xoserve/National Grid responsibilities not always clear

We have refreshed the query document with additional contacts

Where possible we have now added new names and contact numbers

See AOB today – Capacity Auction FAQs started initially

Xoserve contacts being refreshed, allocation agenda item in March

Technical Knowledge

Level of detail in presentations/ meetings

New customers need to be able to tap into technical knowledge but existing customer want meetings to still stay fairly technical.

Different ranges of people present at Ops Forums

We will always try to balance between technical content and subject matter explanation. The content and the value from this forum will only get richer through your feedback – keep talking!

Query Management

Query Response Rate

SLA

Getting the answers you need

As a new customer harder to find contacts in NG.

Would be good to understand the triage process for queries

Query reference number would be useful

Prefer phone calls to emails

Agenda item how we manage queries included today in AOB

Customer Records Management reference numbers to be shared

Fed back internally.

Phone numbers added to query document

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07

Xoserve Updates

nationalgrid

Line Pack (PCLP) not published for the Gas day 2nd Jan 2019

Issue

- Gemini System had not received the Line Pack file from the National Grid GCS system for the 11:00 hour bar

Impact

- All Shippers were impacted
- Line Pack data was not published for 11:00 hour bar

On the day Resolution

- GCS were contacted and they confirmed the values were re-published
- This re-triggered the files and they were successfully received into Gemini

Permanent Solution

- RCA pending with National Grid

Nomination mismatch between BBL and Gemini on 7th Jan 2019

Issue

- There was an instance where some Input and Output Nominations were placed on Gemini by a shipper but only the corresponding Input Nomination was placed on the Balgzand Bacton Line (BBL) TSO system.

Impact

- As part of the matching process BBL rejected the output Nominations as it was missing from the BBL system.
- This caused the Interface file to be rejected impacting all shippers trying to place Nominations with BBL.

On the day Resolution

- BBL manually amended the Interface file so that Nominations were confirmed for 7th January Gas day.

Permanent Solution

- The Shipper and has changed their process to ensure they placed their Nominations correctly

NXC file Delay 7th January 2019

Issue

- The NXC invoices were not processed in UKLink due to a data item in the file being more than 9 digits

Impact

- This impacted all shippers that receive the NXC invoice

On the day Resolution

- Communications were sent out to all impacted shippers to discuss the issue and agree the delivery method

- The invoices were either sent out via contingency method e-mail or via the IX

Permanent Solution

- A code fix has been performed in Gemini to ensure that the specific data item only goes up by an increment of 1 and the sequence was reset to a unique range so that only 9 digits would be used for future invoices

WDDSEC auction for the 08:00 hour bar failed on 10th Jan 2019

Issue

- The Control Room were not able to process the WDDSEC auction for the 08:00 hour bar and also reported a database error while cancelling the auction

Impact

- All shippers who wanted to place bids were impacted, as bids were not allocated in Gemini

On the day Resolution

- The Control Room carried out the known work around to re-process the WDDSEC auction.

Permanent Solution

- Root Cause being analysed, however this hasn’t reoccurred since

DELRES files are not received from Interconnector UK (IUK) for 10th Jan 2019

Issue

- A shipper Nomination was placed in IUK before being placed in Gemini.
- IUK sent the response to confirm the Nomination before the shipper placed the Nomination in Gemini causing the Nomination to not be confirmed.

Impact

- Only GAZ impacted

On the day Resolution

- The shipper re-nominated in Gemini and then re-nominated in the IUK system , which resolved the issue and the Nomination was confirmed.

Permanent Solution

- The EU Nomination guide has been updated to state that all Nominations need to be placed in Gemini before they are placed in the TSO systems

Allocation file from Gemini Failed to process in GEMIPI on 11th January 2019

Issue

- Gemini sent the daily Allocation data to the National Grid GEMIPI system, however this was larger than the expected uncompressed size on 11th January 2019

Impact

- This impacted National Grid
- Due to the file size GEMIPI were unable to load the data which consequently impacted 19 obligated reports being produced in MIPI.

On the day Resolution

- The file was split into 2 smaller files, and re sent to GEMIPI via the normal route
- The files were loaded individually and the reports were produced in MIPI

Permanent Solution

- A discussion is underway with National Grid to agree an enduring solution

Multiple job failures in Gemini on 21st January 2019

Issue

- Multiple Gemini jobs failed causing delays in processes to run on 21st January 2019

Impact

- All shippers who wanted to place bids in the IPDISEC auction were impacted
- This was due to the database memory being fully utilised.

On the day Resolution

- No manual intervention was taken as the database memory utilisation reduced and the batch jobs began to run again.
- Monitoring was performed to ensure no further issues

Permanent Solution

- Root Cause being analysed, however this hasn't reoccurred since

Demand Attribution failed to run on 27th January 2019

Issue

- The 13:00 hour bar Demand Attribution and UIG Nominations batch jobs had failed on 27th January 2019

Impact

- This was due to the table space memory being full, which caused a delay (80 mins) in publishing the figures to the Industry

On the Day Resolution

- Additional memory of 2GB was added to the table space and the batch jobs were re-triggered, and published the values successfully

Permanent Solution

- Table space monitoring was incorrectly configured this has now been corrected and checks across Gemini have been completed

UIG Nomination Day Ahead Failed on 31st January 2019

Issue

- The UIG Nominations for Day Ahead was not published for the 11:00 hour bar on 31st January 2019

Impact

- This impacted all shippers
- This was due to incorrect data that was sent to Gemini from UKLink

On the Day Resolution

- A datafix was performed to remove the incorrect records and the job was re triggered

Permanent Solution

- A defect has been raised and a code fix is being deployed in UKLink to stop the same data issue occurring in the future

DELORD files are not flowing to GNI on 2nd February 2019

Issue

- The DELORD files were not being received by the GNI TSO from 09:00

Impact

- This impacted any shipper Nominations that had been placed against GNI between 09:00 and 15:00

On the day Resolution

- To resolve the issue the B2B Gateway GNI server was restarted and the files began to flow to the GNI TSO.

Permanent Solution

- A review is underway to understand why there was a delay in Xoserve communicating this issue, and to put steps in place to make sure that issues are communicated immediately
- Root Cause being analysed, however this hasn't reoccurred since

Demand data not visible 4th February 2019

Issue

- Demand Attribution values for Within Day 00:00 hour bar did not publish on 4th February 2019

Impact

- This impacted all shippers as the value they would have been using would be from 21:00 hour bar.
- The UIG Within Day values could not be published due to the Gemini maintenance window

On the day Resolution

- A datafix was performed to amend the flag status for all 18 LDZ’s and then once completed an ad hoc run of the batch job was triggered at 02:45 completing all processes except UIG Within Day at 02:55.

Permanent Solution

- Root Cause being analysed, however this hasn’t reoccurred since

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08

Operational Data Enhancements

nationalgrid

Operational Data Enhancements Project

(1) To deliver an industry enhancing IT solution which will maintain compliance to our current licence and contractual operational data requirements and facilitate the changing needs of the industry both now and into the future.

(2) To deliver an industry collaborative platform to enable:

- All industry players to feed into the change needed for transparency of gas operational data now and into the future so market needs can be anticipated for change.
- To enable a mechanism for NG to provide transparency to the market in an efficient manner on on residual balancing decisions – e.g. ‘Day in brief.
- To provide better visualisation of operational data.
- To test concepts and gain feedback on requirements for new data both now and into the future.

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Overview of trial collaboration site

nationalgrid

Operational Data Enhancements Project

What good looks like for 2019:

- The industry clarifies what data is required (NTS data/3rd party data/data gaps)
- We understand who is using our data and why (the benefits across the industry).
- We understand how the industry uses our data- API's, reports, webpage views etc.
- We understand what data is not used and determine whether this is still relevant.
- Current and new operational data is made available on time and to agreed quality.
- Where availability of data is affected the industry are made aware of this.
- A solution is implemented such that when new data requirements are agreed these can be implemented efficiently (cost and time).
- Industry have developed the suite of operational data which will enable market players to become more efficient and hence pass on savings to end consumers
- Industry is collaborating via online platform around value and prioritisation of data enhancements on an enduring basis
  - Need to work together to enable this

What feedback do we need?

What new NTS data does the industry value

What current NTS data is not valued

What other 3rd party data would industry value on one platform

How do the industry wish to receive/view data?

Industry desire/value for a collaboration platform

Is there value in closing NTS data gaps?

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Feedback to date

nationalgrid

New NTS data requirements

Instantaneous demand

Trading data

- Within day
- After the day per hour rather than 6 hour period.

Day in Brief

- Pre interesting day analysis.

Gas Quality actuals (with day)

- CV

Alerting

- NG system alerts e.g. ANS
- Remit – advising of all relevant REMIT portals for advice.

New NTS data requirements

Instantaneous demand

Trading data

- Within day
- After the day per hour rather than 6 hour period.

Day in Brief

- Pre interesting day analysis.

Gas Quality actuals (with day)

- CV

Alerting

- NG system alerts e.g. ANS
- Remit – advising of all relevant REMIT portals for advice.

New 3rd party data – feedback to date

DN level

- UIG (industry totals)
- Imbedded Supply

Trial Collaboration site

Over the past 6 weeks we have worked in an agile way to launch a trial community platform & a number of new ways of presenting our data to drive cross industry engagement.

Content has included videos, discussion boards, a new ‘Day in Brief' service and for the first time giving people access to instantaneous demand and better granularity of NG trading information.

In 4 weeks since launching the first version of the platform we have had over 90 people sign-up and the volume of new site visitors has increased by over 170% in the last week.

Trial Collaboration site

Detailed comments have been received from members highlighting the current barriers of not having information & how further transparency would benefit end consumers.

We would encourage further sign up to the trial site and provision of feedback and we will keep you informed of the plans to invest in an enduring solution over the next few weeks.

Let me know your thoughts on the collaboration site so we can ensure the enduring model it one that suits the industry and further enables transparency and efficiencies in the market.

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Focus for Today

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Current status

Data gaps

- Lag times
- Report totals not matching: Energy/volume/both

Third party data

- Additional third party data which is needed to provide a complete overview of UK supply and demand.

Additional NTS data

- Instantaneous demand
- Hourly trade data

Data quality

- Historic data errors

Data processing timeline

D

Within Day, Hourly and instantaneous

D+1 to D+5

Demand and CV Measurement, Validation

M+1 to M+15

Supply and CV Measurement, Validation

Data gaps

	D+1	D+2	D+5	D+6	D+7	M+7	M+15	M+16
Actual Demands SISR04								
Actual Offtake Flows AOF								
Aggregate Allocation - Demand								
Daily Balance Report (Nod01b) - Nominations								
Aggregate Allocation - Supply								
NTS Commercial Entry (NTSEOD)								
NTS Physical Entry (NTSEOD)								
Daily Balance Report (Nord01b) - Nominations								
Daily Balance Report (Nord01b) - Allocations								

Data landscape

nationalgrid

- LDZ Offtake
- NTS Linepack
- CCGT
- NTS Storage
- Interconnector
- NTS & Storage Shrinkage
- Industrial
- NTS Supply

LDZ

- Storage
- Linepack
- DM Demand
- NDM Demand
- UIG
- Shrinkage
- Embedded/ Direct Supply
- LDZ Transfer

Example – Offtake report

	Volume Totals (mscm)	Energy Totals (kWh)
Interconnector Exit Total	10.15400 L	110,144,444 L
Industrial Offtake Total	9.12051 A	100,322,796 A
LDZ Offtake Total	172.46773 L	1,884,485,926 A
NTS Power Station Total	54.24032 A	592,499,416 A
Storage Injection Total	10.47260 L	113,997,635 L
Demand, NTS, D+1	251.6489	

Note: The Demand, NTS, D+1 Total Includes shrinkage which is not listed as a subtotal.

Components of demand are published 3 times through gas day D+1

Demand number is published once at D+1

Example – Offtake report

	Volume Totals (mscm)	Energy Totals (kWh)
Interconnector Exit Total	10.15400 L	110,144,444 L
Industrial Offtake Total	9.12051 A	100,322,796 A
LDZ Offtake Total	172.46773 L	1,884,485,926 A
NTS Power Station Total	54.24032 A	592,499,416 A
Storage Injection Total	10.47260 L	113,997,635 L
Demand, NTS, D+1	251.6489	

Note: The Demand, NTS, D+1 Total Includes shrinkage which is not listed as a subtotal.

Exit Points	Allocation (kWh)
Aggregate Interconnector Exit Total	147,311,991
Aggregate Storage Exit Total	148,568,590

Allocation report published at D+2

Allocation report contains commercial values where as the offtake report contains net physical flow

Breakout Session

Data gaps

- Lag times
- Report totals not matching: Energy/volume/both

Third party data

- Additional third party data which is needed to provide a complete overview of UK supply and demand.

Additional NTS data

- Instantaneous demand
- Hourly trade data

Data quality

- Historic data errors

Next Steps

We will assess your views from the breakout session today in more detail

We encourage you to also understand the views of your colleagues and feed back through the collaboration website

https://gasoperationaldatacommunity.spin-up.io

It's important that we receive feedback within the next 6 weeks for improvements during 2019

First scoped requirements will be fed back at the March Operational Forum

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09

Signposting of Information

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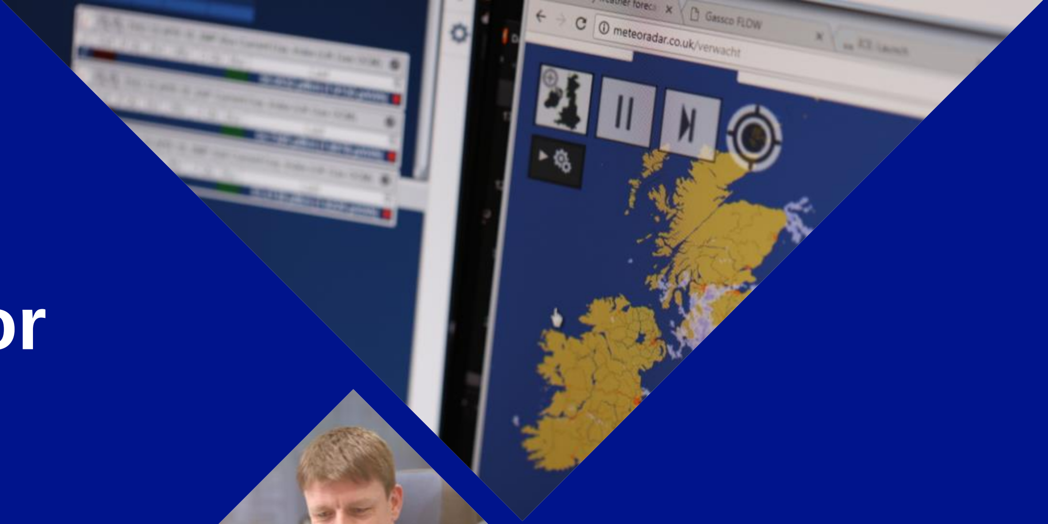
Transmission Workgroup Update for Operational Forum



February 2018

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February Transmission Workgroup Update

Brexit Pre-Mod Discussion

National Grid intend to raise a UNC Mod to replace existing references to EU regulations with UK amendment regulations and remove references to EU entities in the event of a ‘no deal’ Brexit

Mod 0662 – Revenue Recovery at Combined ASEPs

National Grid UNC Mod to allow entry capacity booked for the entry of gas into the NTS from storage sites within combined Aggregated System Entry Points (ASEPs) to be treated the same as a ‘storage site’ as designated in National Grid’s Licence with respect to the application of any revenue recovery charge based on capacity bookings. Dependent on the new charging modification 0678.

0667 – Inclusion and Amendment of Entry Incremental Capacity Release NPV test in UNC

South Hook modification seeking to insert the Net Present Value test required for Non-IP Entry Incremental Capacity Release into UNC, and amend the mechanics of the NPV test

February Transmission Workgroup Update

0671 – New Capacity Exchange process at NTS exit points for capacity below baseline

WWU Mod which proposes to introduce a new process to allow exchanges of both Enduring and Annual Exit Flat Capacity between NTS exit points were the capacity does not go above baseline. It Relief from changes to the User Commitment obligations in respect of the capacity exchanged is also proposed.

Capacity Methodologies

Consultation closes on 15th February.

Forthcoming National Grid Consultations in February

System Management Principles Statement (SMPS)

Gas Demand Side Response (DSR) Methodology

Data Exchange

Note: 0669R – Review of the Gas Deficit Warning and Margins Notice Arrangements

The last scheduled meeting of this review group is on 7th March 2019

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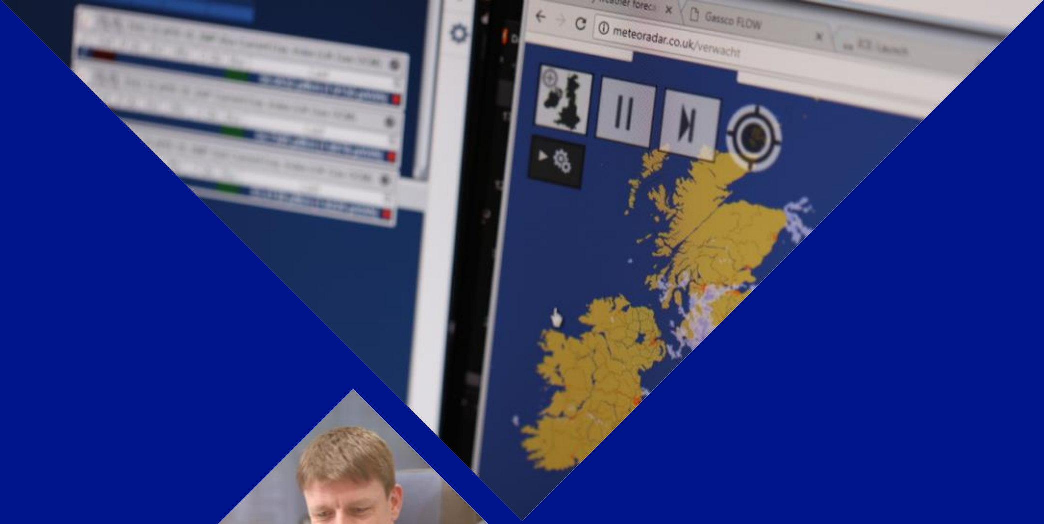
Query Resolution Process



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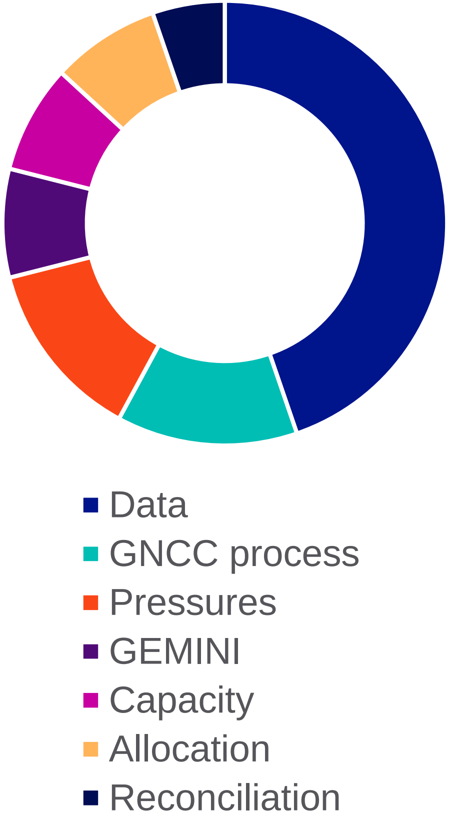
Query Process

Contact NG	Contact from Query document	Acknowledge + share reference	Actioning	Response to Customer
At any time query can be escalated to your relationship manager if you feel the resolution is not fast enough / adequate	Relationship Manager	Logged in CRM (Customer Records Management)	**Query owner is responsible** to ensure actions for other staff are communicated and resolved	**Historical queries are assessed to identify improvement plans**
	Other known Contact	**Reference no generated**	**Escalation process where reliant on other departments**	
	Person who receives query is the **owner**	Actions logged against relevant **SMEs**		

Review: Customer & Stakeholder hub each week will review all queries in Customer Records Management to ensure queries are resolved in a timely manner, and outstanding queries all have an action to resolve logged

Queries in the last 60 days

- Operational Data is comfortably the biggest query category still. The most common query is about CV data, with how to access/interpret data also a regular query
- GNCC process includes queries about communications from control room, OPNs etc.
- Pressures on the network was the 3rd most common query in the last 2 months
- Queries also received regularly about GEMINI, Capacity Auctions, Allocations and Reconciliation



‘I have a Query’ document

Version 2.0 now available

Directory has been refreshed to ensure correct contacts are included

Phone numbers added where possible for escalation routes

Gas System Operator

NG Publications

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National Grid Publications: Timeline

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

Winter Outlook

Our expectations of the coming winter. This is reviewed throughout the winter, and stakeholders can feed back at any time

SCOPE: NEXT 6 MONTHS

Winter Review & Consultation

Findings from previous winter review & consultation published

GFOP

Gas Future Operability Planning looks at how evolving energy landscape may impact gas network operability. Different studies published during year

Current GFOP study is assessing within day behaviour and will be published later in the year

SCOPE: UP TO 30 YEARS AHEAD

Summer Outlook

Our expectations of the coming summer

SCOPE: NEXT 6 MONTHS

GTYS

Gas Ten Year Statement explains how we intend to operate and plan the NTS over the next 10 years

SCOPE: NEXT 10 YEARS

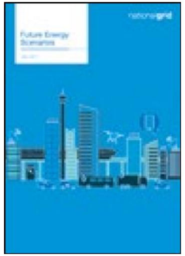
FES

Future Energy Scenarios provide a range of plausible and credible pathways for the future of energy

SCOPE: OUT TO 2050

View the latest publications

Future Energy Scenarios:



http://fes.nationalgrid.com/

Gas Ten Year Statement:

https://www.nationalgridgas.com/insight-and-innovation/gas-ten-year-statement-gtys

Gas Future Operability Planning:

https://www.nationalgridgas.com/insight-and-innovation/gas-future-operability-planning-gfop

Winter Outlook:

https://www.nationalgridgas.com/insight-and-innovation/winter-outlook

GFOP – within-day behaviour study. On Thursday 14th Feb, we will release a playback of the stakeholder insights we have gathered so far.

For the 1st time, we will be releasing our findings:

- directly onto our website (no pdf document)
- in “sprint-like” batches

This approach will allow you to:

- Provide continual insight to enhance the next stage of our study and strengthen findings
- Challenge our released findings so we can revisit, refine and republish
- Help shape the scope of future studies so that outputs are of most benefit for the market

Support our next study:

We are now working to predict how within-day flow behaviour could change in the future. This will be strongly influenced by the insights we have gathered so far. To improve our predictions:

I. is there any potential drivers for change in within-day flow behaviour that we have not captured in our latest release?

II. what factors do you believe will most strongly impact how gas is brought on and off the network in the future?

Please email your responses to box.gfop@nationalgrid.com.

Upcoming release dates and themes (nationalgrid.com/gfop)

February 14th

Summary of how within-day flows have changed, and factors influencing behaviour

February 21st or 28th (depending on additional insights received)

Predict how within-day gas flows could change by 2025

March 7th

“What if scenario” impact study of south east in 2025

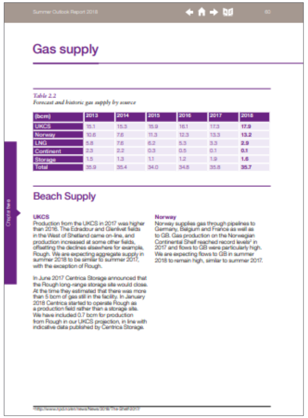
March 28th

Wider study considering notice period for a flow change and notification accuracy

Outlooks proposal for new format

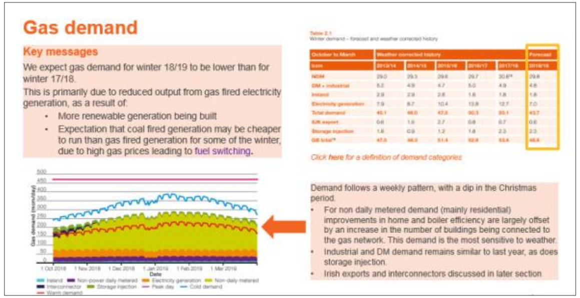
Proposal to condense the format of winter and summer outlooks into slide format with more visuals

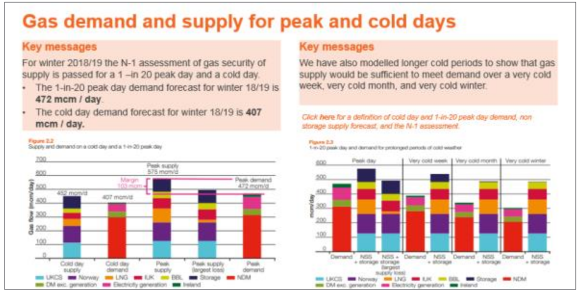
Current format: ~80 page document



Questions? marketoutlook@nationalgrid.com

New format: condensed briefing style slide pack





Example: Main body slides based on Summer Outlook 2018

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RIIO T2 Playback documents and events

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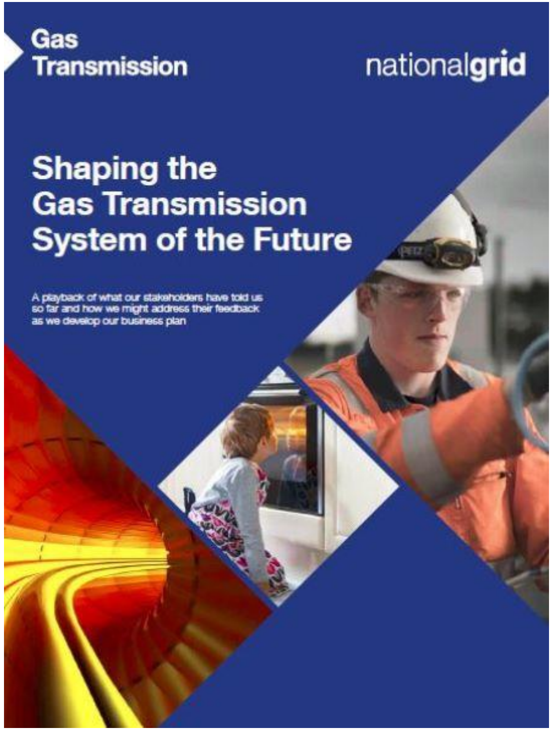
RIIO T2 ‘Playback Documents’

On February 6th We launched our RIIO-T2 ‘Stakeholder Playback’ documents

These reflect the conversations we have had so far, with suggestions for future business plans

Draft Plans will be submitted to Ofgem on 1st July, with a second draft on 1st October

There is still time to feed back your views



https://www.nationalgridgas.com/sites/gas/files/documents/riio-full-document.pdf

RIIO T2 Events

Playback Consultation Webinar 13th February **13:00 – 14:00**	Working to agree a common language to help us and our stakeholders articulate what level of capability is required from the network • What does Network Capability mean and why is it important? • How this will be used to define the needs of the Gas Transmission System
Shaping the South East Network 20th February **13:30 – 14:30**	Introductory Webinar, giving an overview of problems faced, what they could mean for you and how to get involved in decision making
Shaping the South East Network Workshop 7th March **10:00 – 16:00**	Interactive workshop covering more detail on: • Your views on the future of energy for the south East • Needs from the network • Your views on potential options • Impacts of not meeting needs, impact on local communities

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After the Day Measurement

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Publication of after the day measurement data

At next month's Operational Forum the Gas Operations Energy Balancing team will describe how they publish after the day measurement data for the NTS entry and exit points

- An overview of the team's processes for receiving, validating and publishing volume, calorific value and energy measurements on a daily basis
- An explanation of how and why measurement data can change during the closeout period
- How to raise queries regarding the published measurement data
- How to request amendments to the measurement data
- An opportunity to provide further feedback to the team
- Please contact David Lavender (david.p.lavender@nationalgrid.com) if you would like the team to discuss any other aspects of the publication of after the day measurement data

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Capacity Auction FAQs

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Gas Capacity Auction Queries

The Capacity Auction Team is producing an online Frequently Asked Questions document for queries you have about National Grid's Gas Capacity Regime; helping us make our processes clearer for you and your teams.

This FAQ document will be posted on the National Grid Gas Capacity website for you and your teams to access.

To help us formulate the areas to cover, we want your thoughts and inputs on what you would like to see in the document.

Please email any Gas capacity related questions that you or your team members would like more clarity around, or answered, to our email capacityauctions@nationalgrid.com before Friday 8th March, ahead of the March Ops Forum.

We look forward to the opportunity to discuss your feedback during the Ops Forum.

Please note; this FAQ document will only cover Capacity related queries such as auction participation, overruns and capacity allocations, so we would ask that wider queries such as site metering and balancing are separately sent to the relevant teams.

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Next Forum and Query surgery

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Proposed Agenda Items in March

LNG Market	**Guest Presentation from Oxford Institute for Energy Studies** • Current drivers in the global market • Potential trends in the future
Energy Balancing	**After the day measurement** • Overview of processes • Opportunity to feed back and where to direct queries
Capacity FAQs	**FAQ Document Overview** • Any queries raised before 8th March can be included • Document for common queries, to be rolled out to other areas

Guest Presentations

The Operational Forum provides an opportunity to share views across the industry, and National Grid can accommodate guest slots for companies to present operational topics of interest.

Over the last year we have had guest presentations including GNI, GASSCO, ICE, and Storengy

Please get in touch if you are interested in presenting a topic at a future forum

Query Surgery and Next Forum

The Next Operational Forum will take place on Thursday 14th March

Please send any requested topics to:

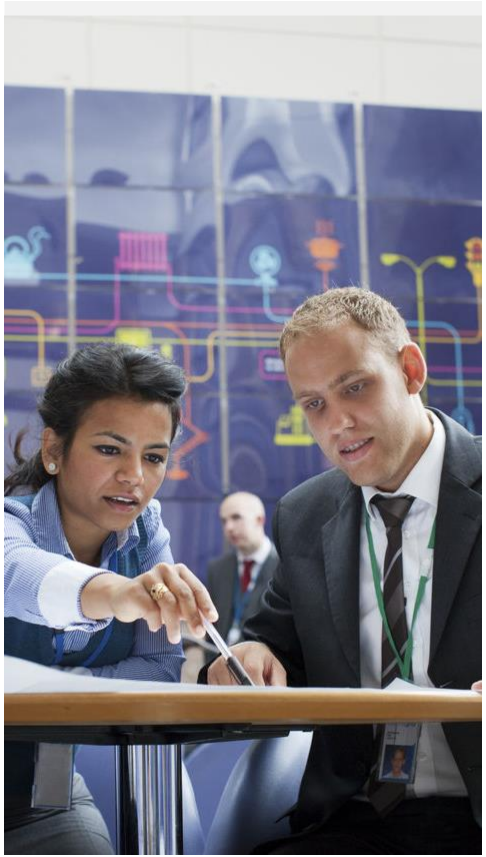
Karen.Thompson@nationalgrid.com

or

.Box.OperationalLiaison@nationalgrid.com

Opportunity now for 121 discussion with NG and Xoserve attendees

Lunch Available



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