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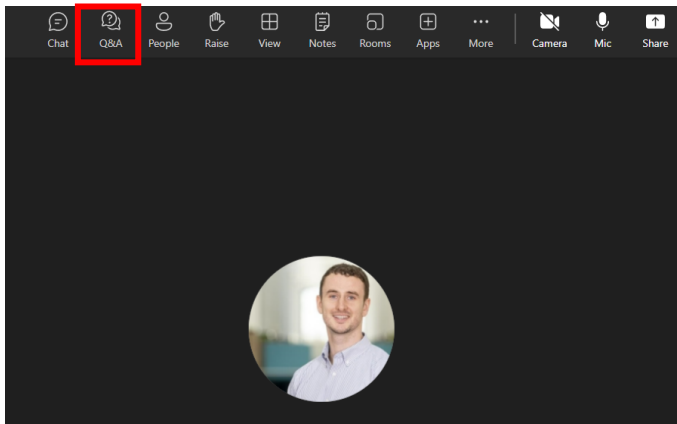
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Housekeeping for Forum

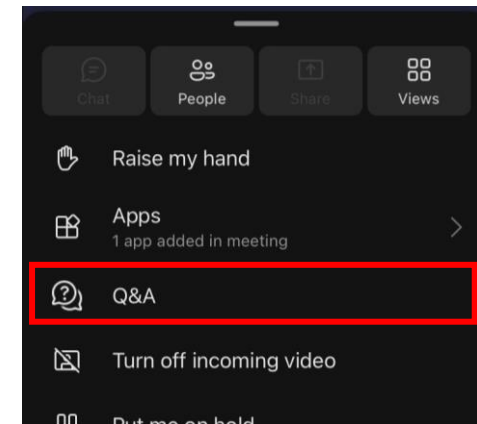
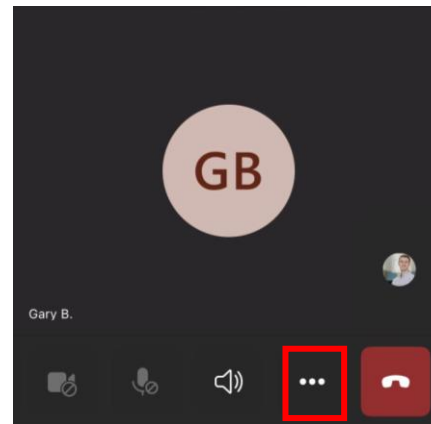
- For Microsoft Teams participants:
- Attendees will be automatically muted on dial-in and cameras will be unavailable.
- We have included time for an extended Q&A following the presentations.
- You can ask questions **via Teams – Q&A**



Laptop



Mobile



Today's Agenda

National Gas Energy Forum

1000 – 11:30

Max Chapman, Welcome & Introduction

10:00

Max Chapman, Operational Updates

10:02

Erin Balogun, Managing Short Term Risk

10:17

Alex Potter, Emergency Exercise Glacier Outcomes

10:27

Pete Crook, Hydrogen Operability Overview

10:37

Bill Goode, Gemini Updates & Microsoft Azure Outage

10:47

Phil Hobbins, UK-EU Co-operation Update

10:57

Max Chapman, General Updates

11:07

Q&A

11:12



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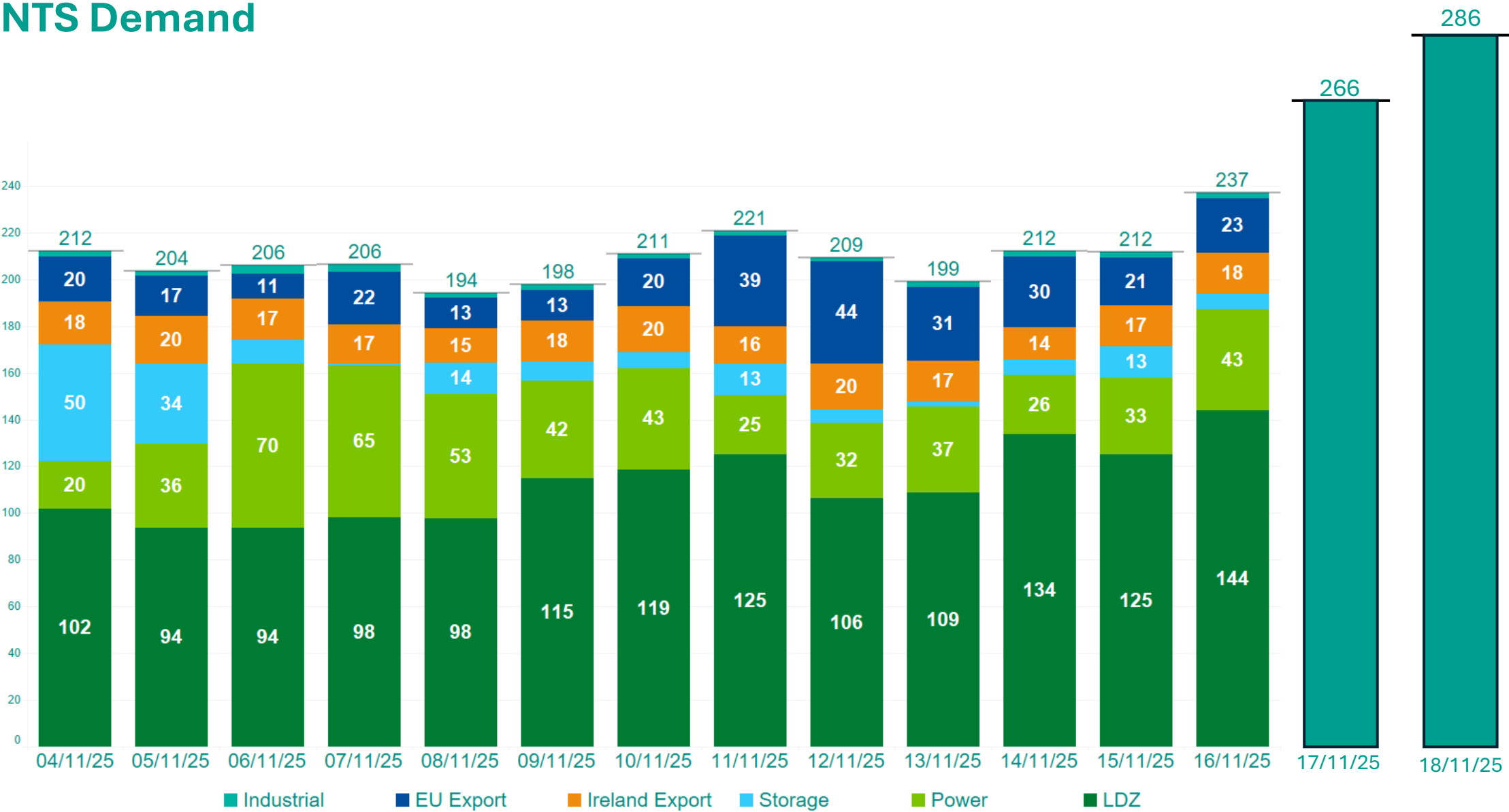
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Max Chapman

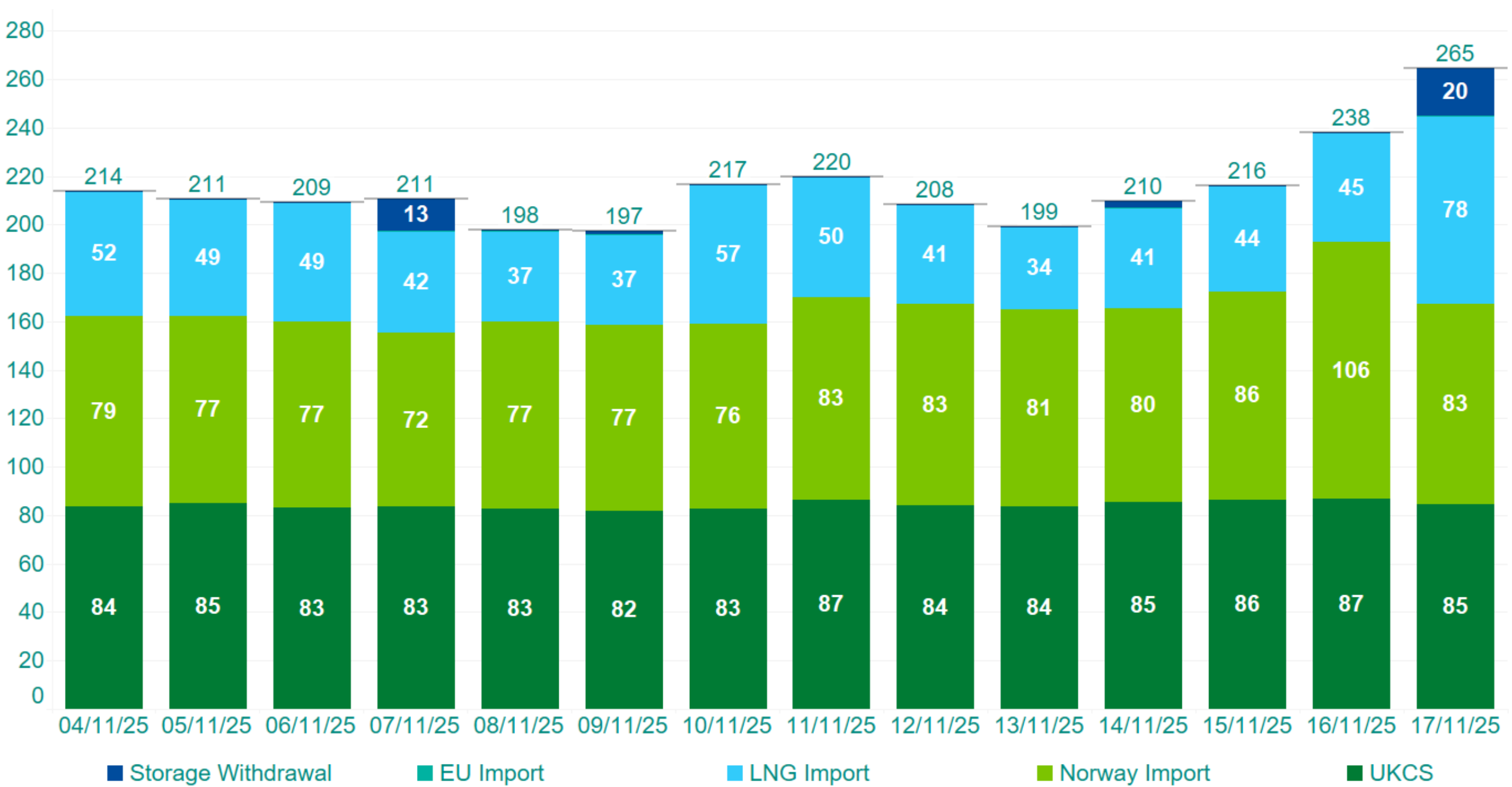
Ops Liaison & Business Delivery Manager
National Gas



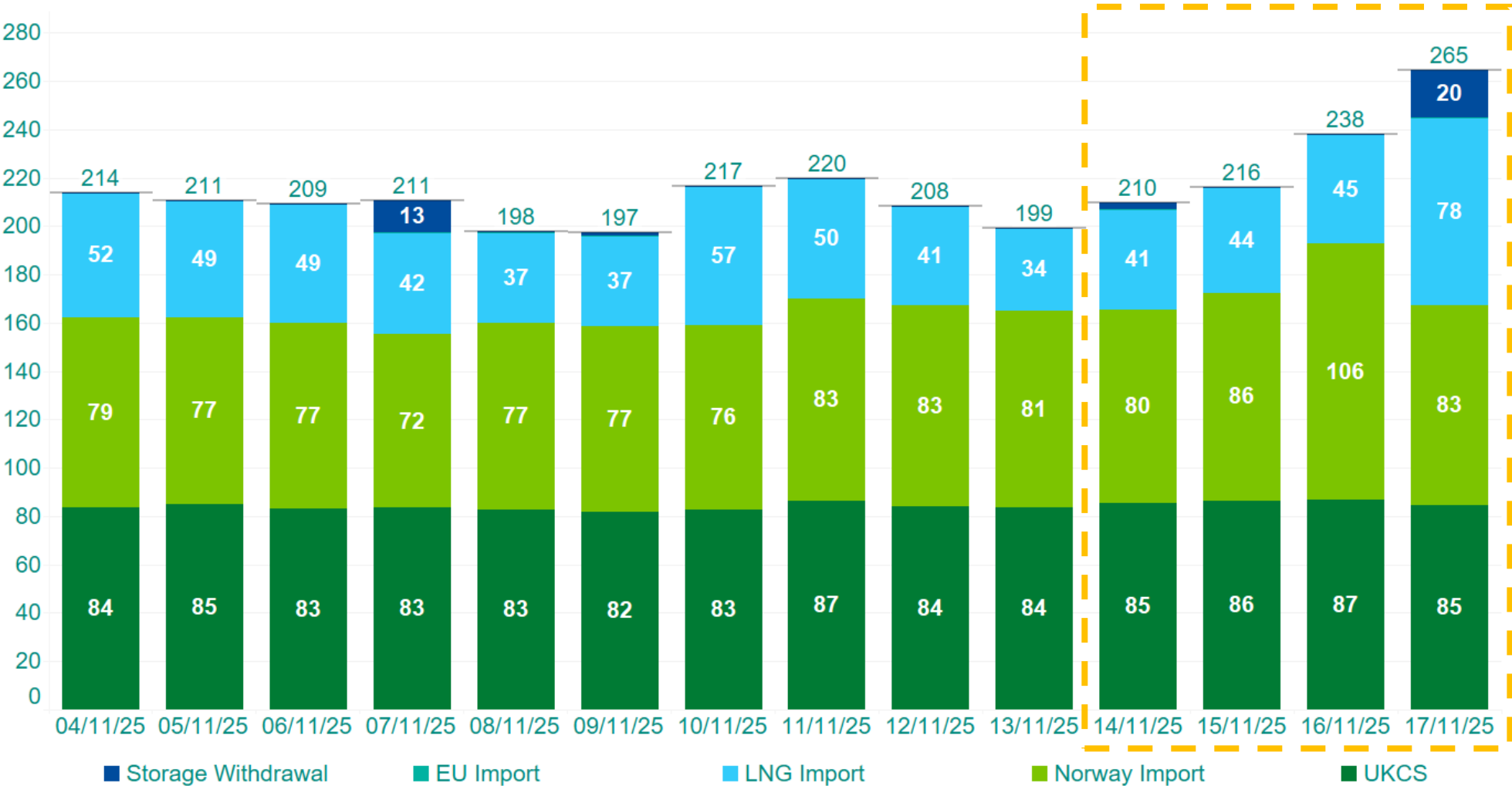
NTS Demand



NTS Supply



NTS Supply



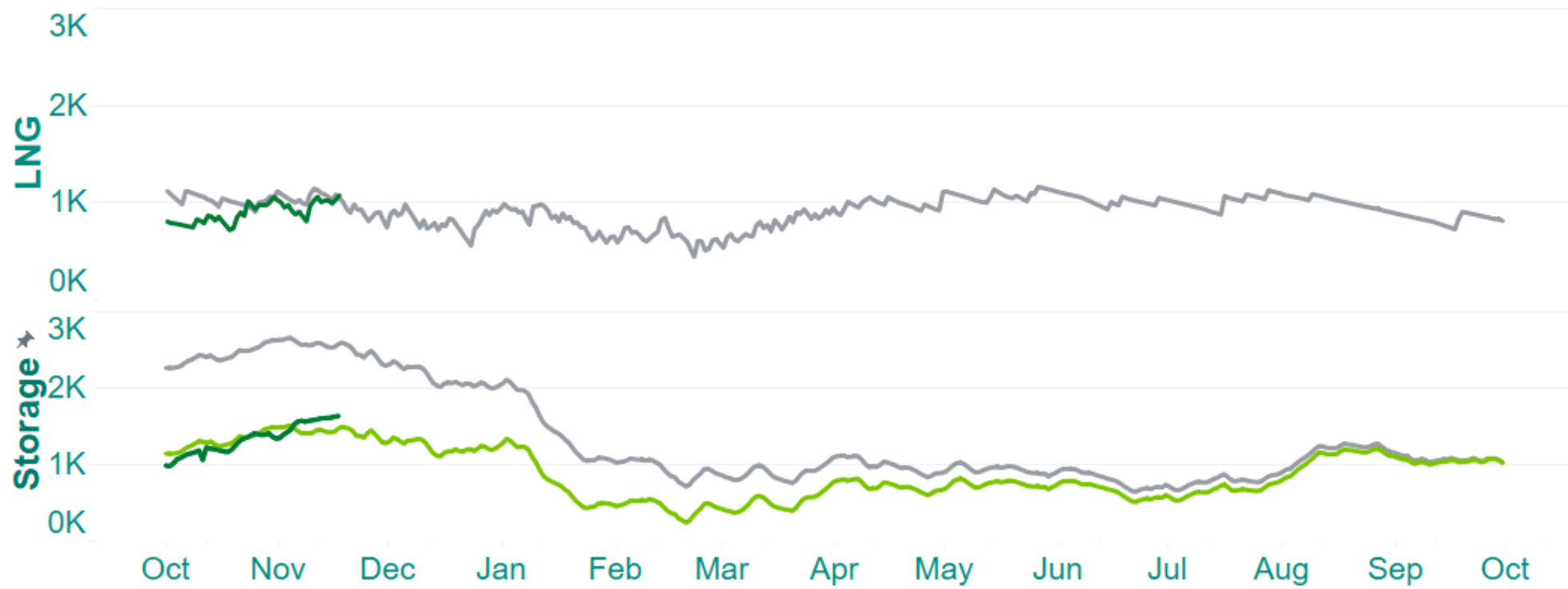
Date	LNG Import	Norway Import
14/11	19%	38%
16/11	18%	45%
17/11	30%	31%

Varying supply patterns and increased demand led to 60% of NTS Compressor Stations being utilised during this 4-day period

Total LNG Stock

1,084 mcm
84% full

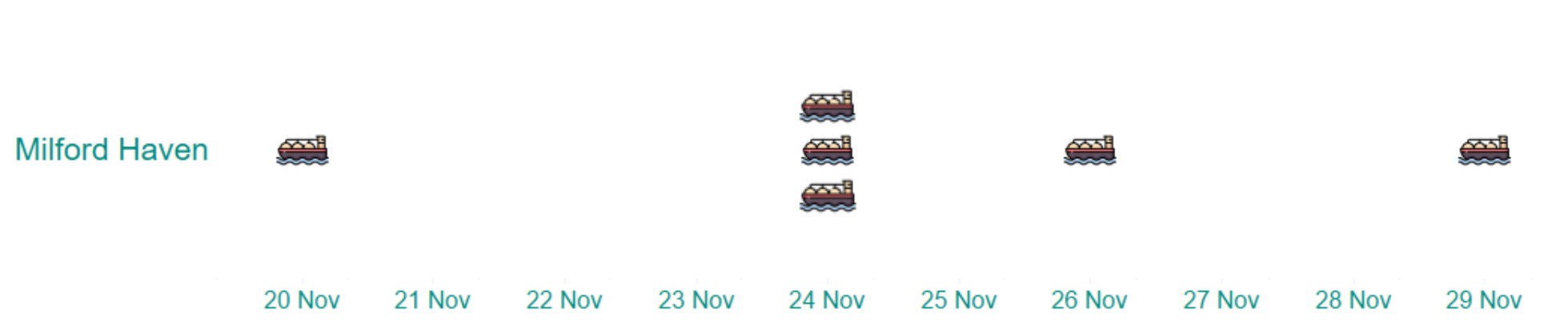
LNG & Storage stock (mcm)



Total GB Storage Stock

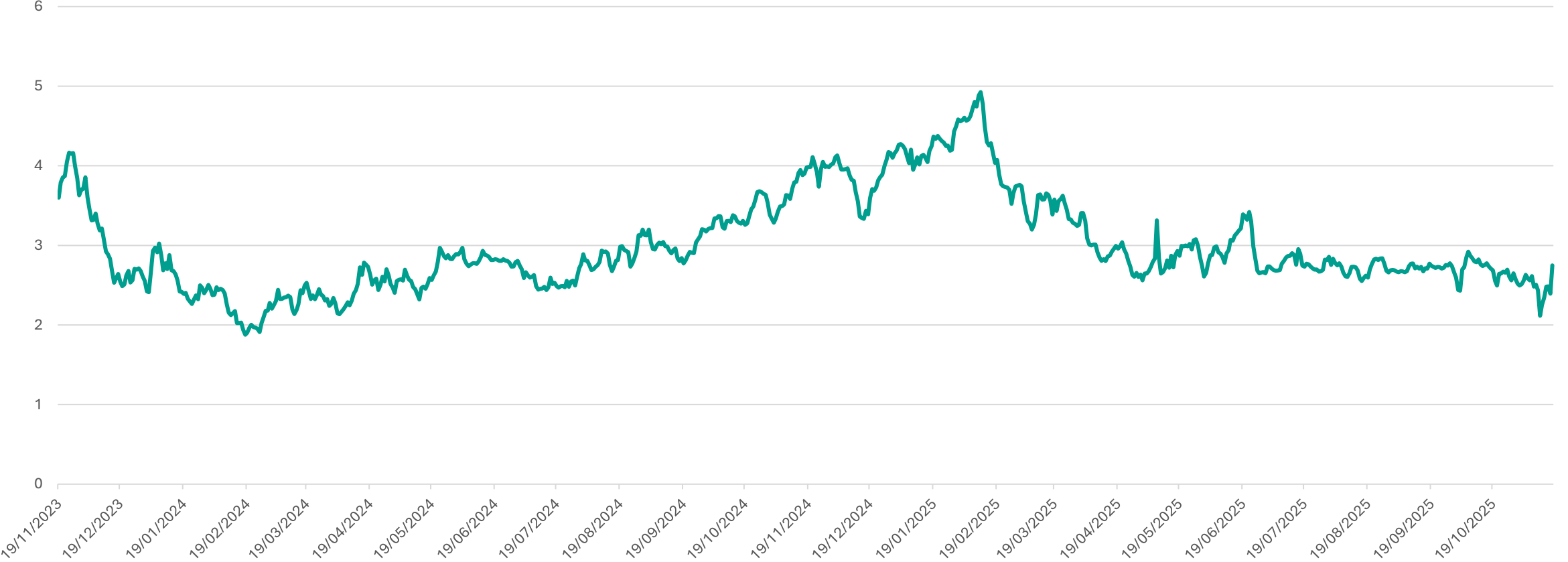
1,669 mcm
49% full

LNG Arrivals



All values shown are volume in millions of cubic metres (mcm)

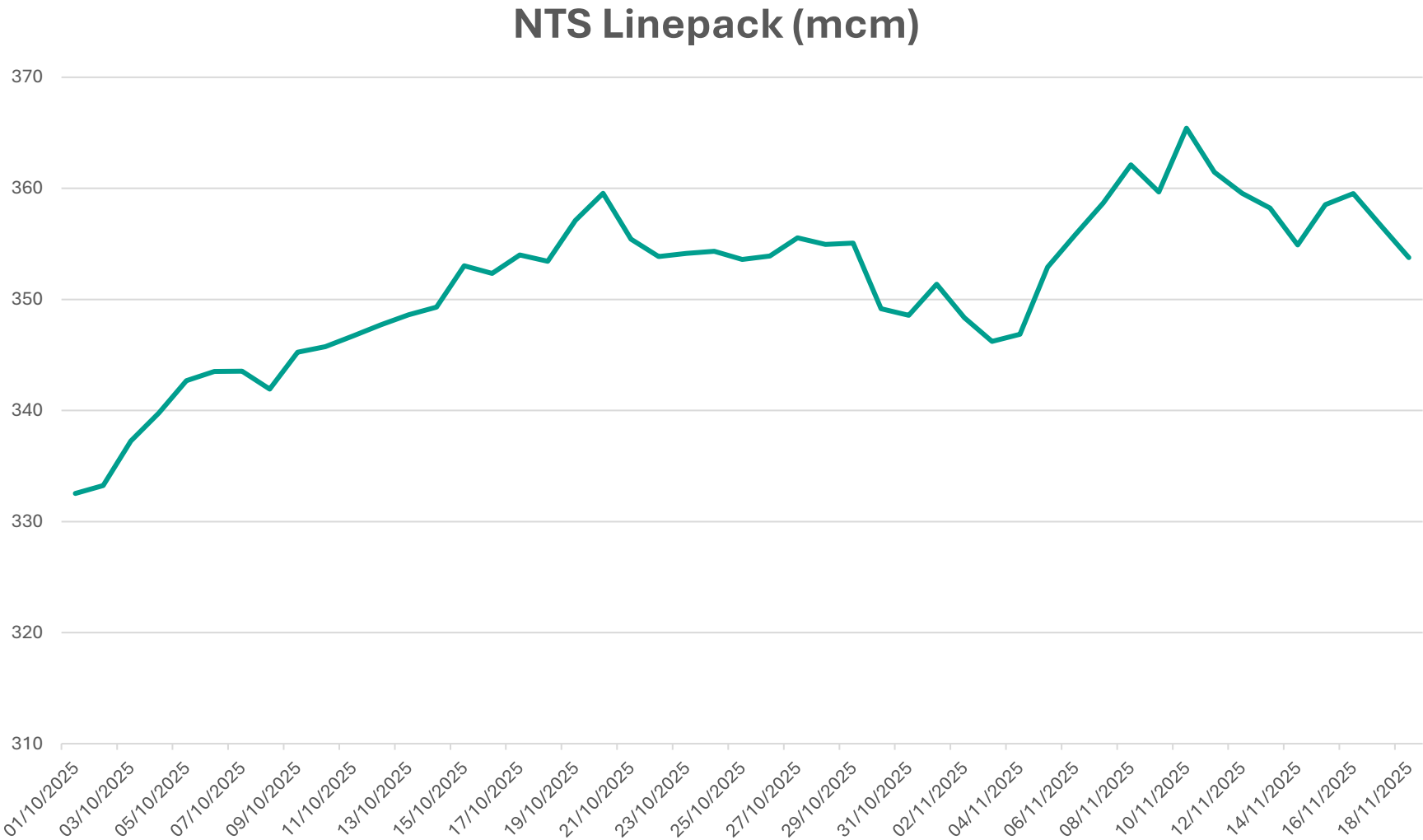
Sap (p/kWh)



EU storage stock (mcm)



NTS Linepack



October/ November are transitional ‘shoulder months’ allowing for Winter preparations

Residual balancing actions made by NCC on 45% of days in October, comparable to 2024

1st October OLP was 332, peak of 365mcm

In Summary:

- Winter demand is yet to come, 300mcm on the horizon
- Varying supplies coupled with increased demand has required increased network flexibility
- LNG inputs and storage levels
- Residual balancing actions were taken by NCC on 45% of days in October, transitioning to Winter NTS Linepack
- Monday 17th REMIT – Wormington Compressor



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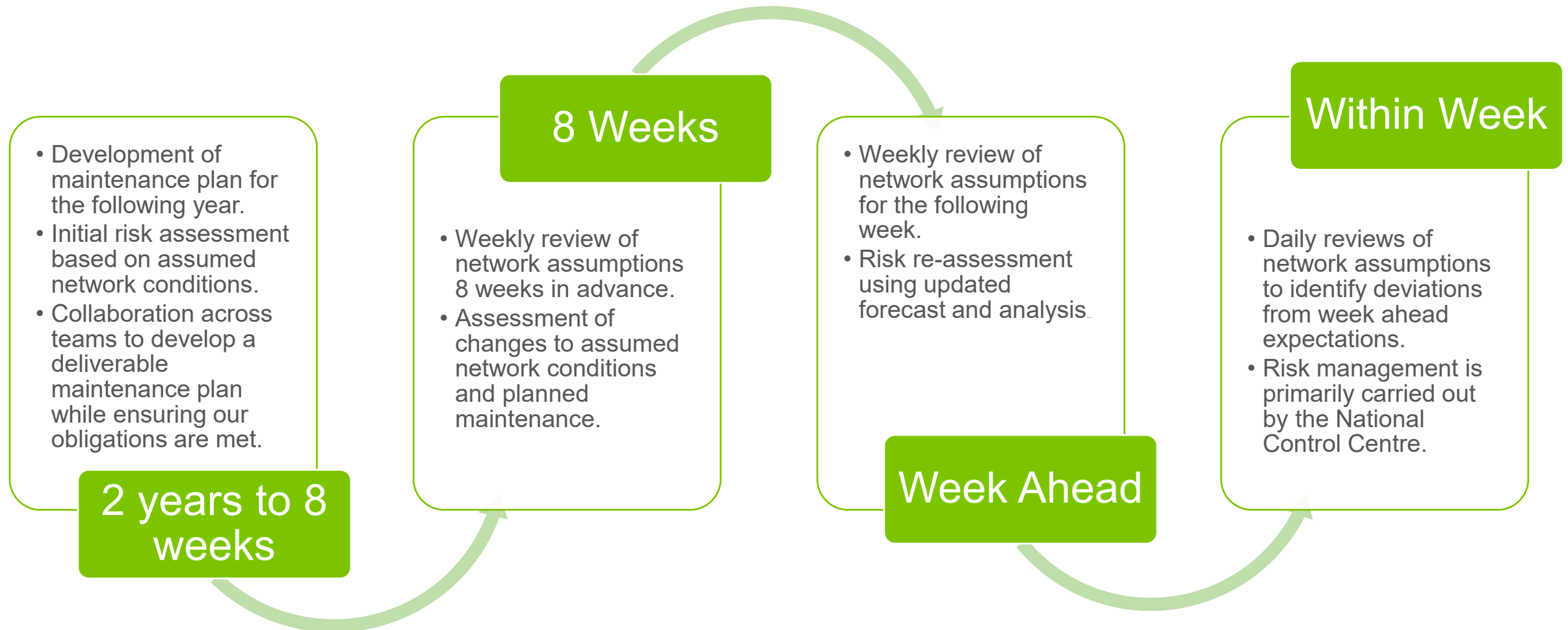
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Erin Balogun

Operational Strategy Engineer
National Gas



Risk Monitoring Timeline



Risk Focus



Entry Obligation

Managing anticipated supplies to the network



Exit Obligation

Managing anticipated demands on the network



Gas Quality

Ensuring gas remains in-spec as per contract and
The Gas Safety Management Regulations (GSMR)



Security of Supply

Managing large supply losses

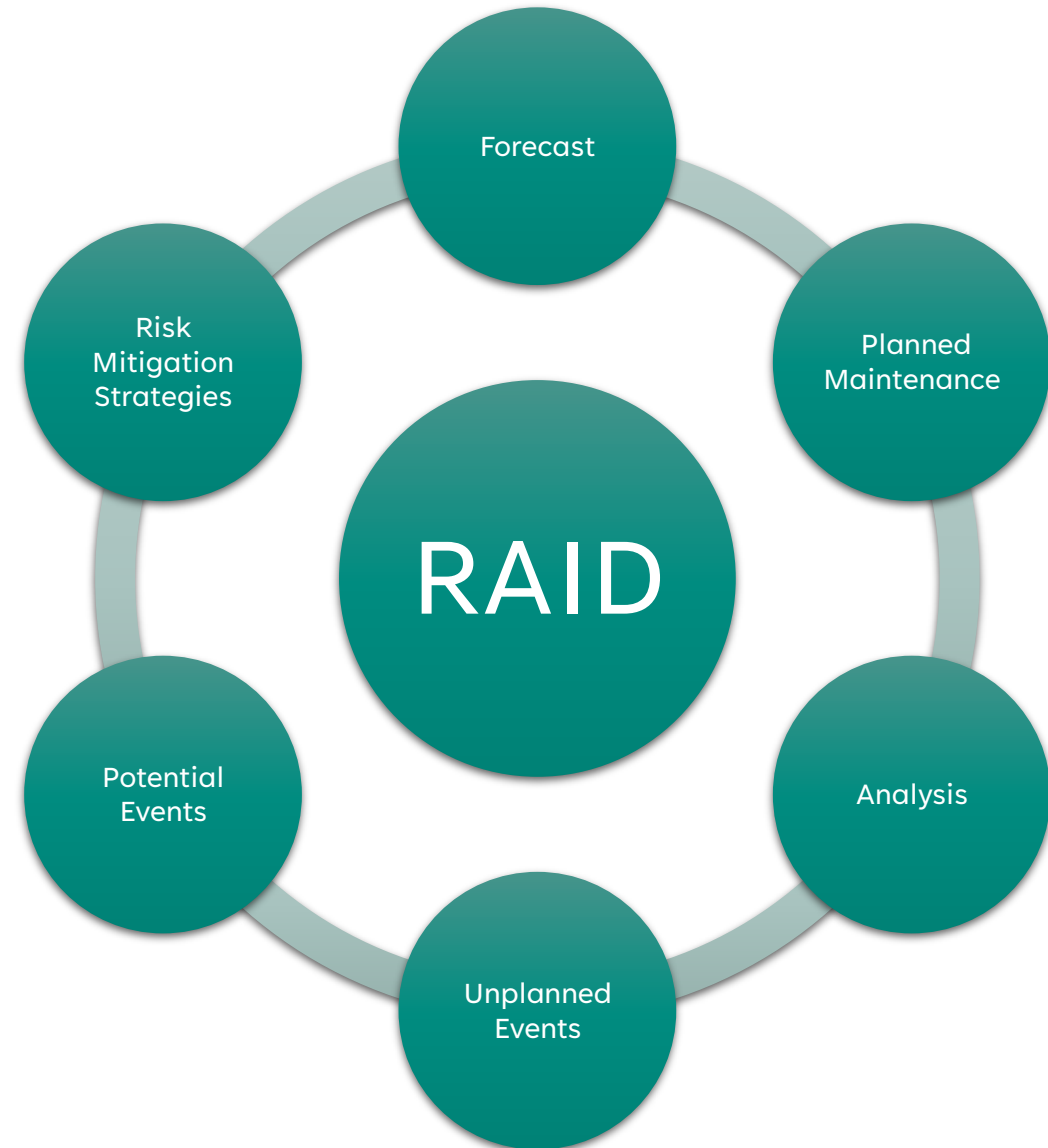
RAID

Risks – potential events that could negatively impact the network.

Assumptions – conditions that are accepted as true for the purpose of planning, which may affect network conditions.

Issues – current problems affecting network operability that need to be addressed.

Decisions – changes made to ensure network obligations are met.



Factors Affecting Risk

Internal

- Changes to planned maintenance
- Opportunity work
- Reactive maintenance

External

- Demand/Supply pattern
- Unplanned terminal outages
- Third party interference
- “Acts of God”
- Black Swan events



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Alex Potter

Lead NEC Specialist
National Gas



Exercise GLACIER 2025

NEC Assurance Exercise

Network
Emergency
Co-ordinator



Exercise Participation

Government and Regulators	National Gas Transmission	Terminal Operators and LNG Importation Terminals		Storage Facilities	National Transmission System – Directly Connected Sites
Department for Energy Security & Net Zero	Crisis Management Team (CMT)	Terminals:		Aldborough – Equinor / SSE Gas Storage	Gas Distribution Network Operators
North Sea Transition Authority (NSTA)	Network Emergency Management Team (NEMT)	Easington – Gassco, Langed	St. Fergus – Ancala (Wood), SAGE	Hatfield Moor – Scottish Power	
Health and Safety Executive (HSE) [Observing]		Easington – Centrica Storage, Rough	St. Fergus – NSMP (PX)	Hilltop – EDF Energy	
Office of Gas and Electricity Markets (Ofgem)		Easington – Perenco, Dimlington	St. Fergus – Shell	Hole House – EDF Energy	
	Corporate Affairs Response Team (CART)	Burton Point - ENI	St. Fergus – National Gas	Holford - UniPer	SGN
	National Transmission System (NTS) Silver Command	Bacton - Shell	Teeside – Antin (Wood), CATS	Hornsea – SSE Gas Storage	Wales and West Utilities (WWU)
		Bacton – National Gas	Teeside - PX	Humbly Grove – Humbly Grove Energy	Interconnectors
Network Emergency Co-ordinator (NEC)	National Energy System Operator (NESO)	Bacton - SEAL	Barrow – Spirit Energy	Stublach - Storengy	
		Bacton - Perenco	Somerset Farm		
			Angus Energy		BBL – BBL Company
		LNG Terminals:			Irish Interconnector – Gas Networks Ireland (GNI)
		Milford Haven – South Hook			Interconnector Limited
		Milford Haven – Dragon			
		Isle of Grain – National Grid			
Energy Networks Association	Electricity System Distribution Network Operators			Shippers	

Key Successes

NGSE
Framework

Public Appeals

Isolation

Senior level
involvement

Broad
Participation

Interactions

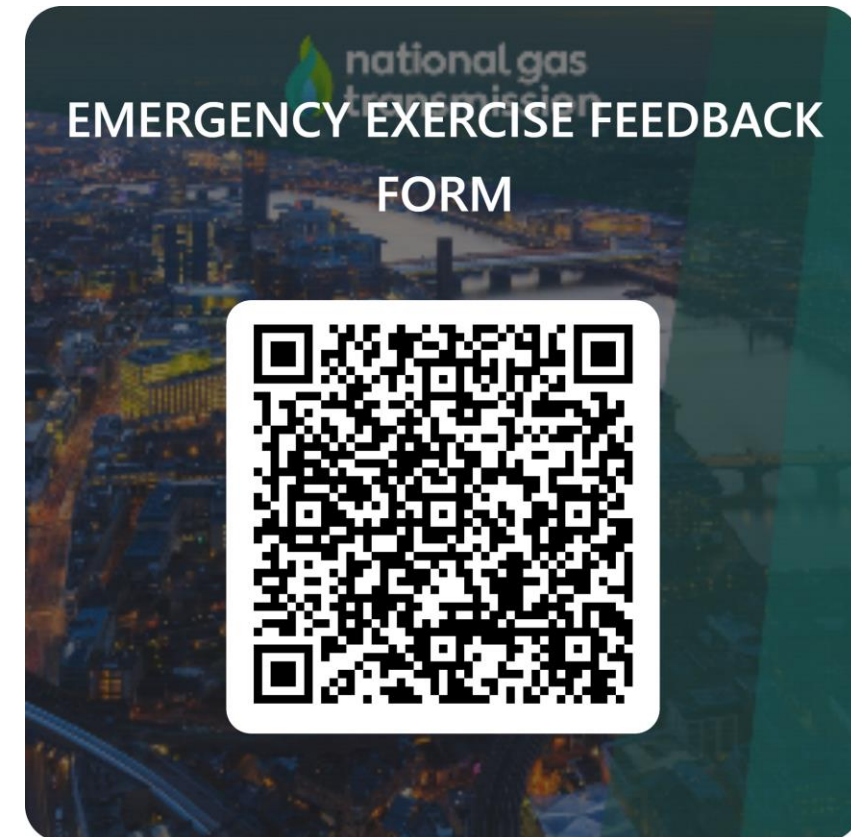
Next Steps

- Thank you for those who participated
- Series of internal / external de-briefs being conducted to capture feedback and lessons learnt.
- If you have any feedback, please use the QR code



Next Steps

- Learning points to be approved by HSE/ NEC and assigned to relevant task groups.
- Post Exercise Report to be written, circulated by end of December.
- End state of Exercise Glacier to be used as the starting point for planned NGT / NEC / GDN restoration exercise planned for spring 2026.





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Pete Crook

Hydrogen Operability Manager
National Gas



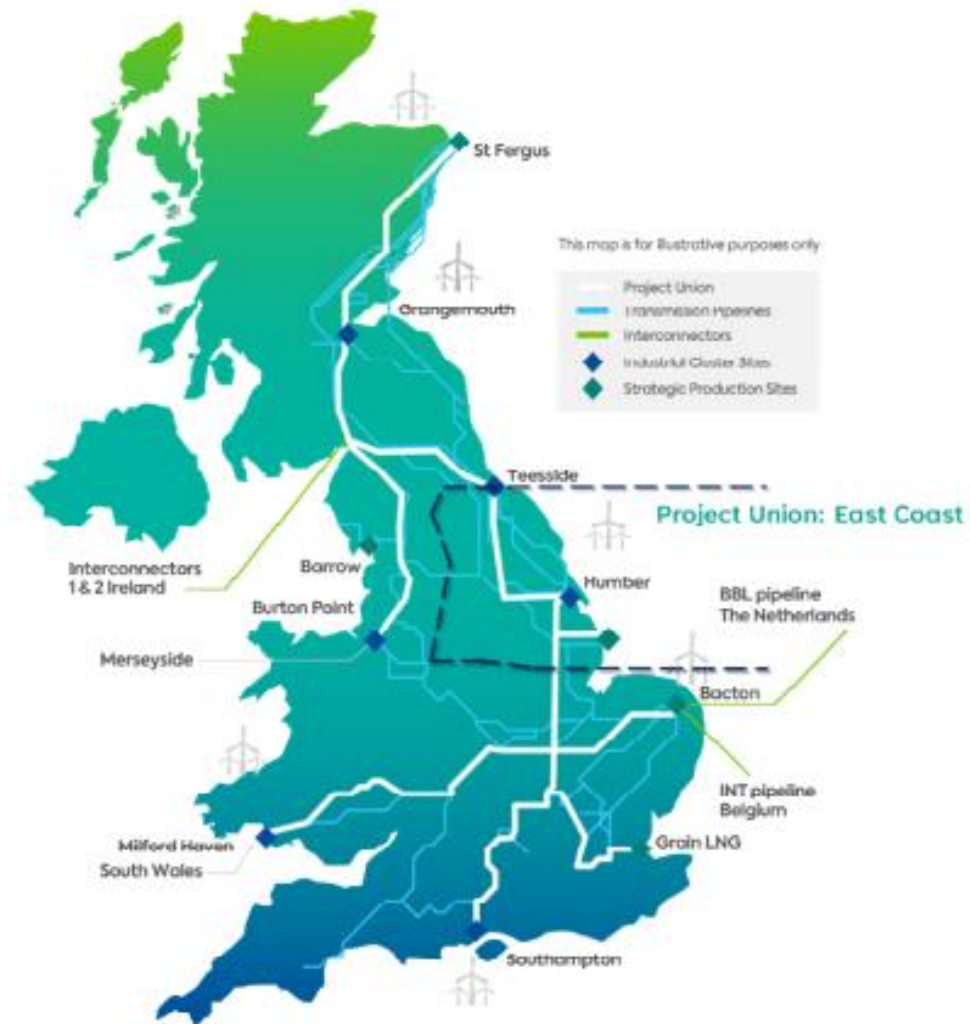
Project Union - Hydrogen

Up to 1500-mile hydrogen transmission system

Connect cross GB supply, demand and strategic storage sites

Use existing infrastructure

Enable early and affordable market growth of a low carbon hydrogen economy



Project Union – East Coast

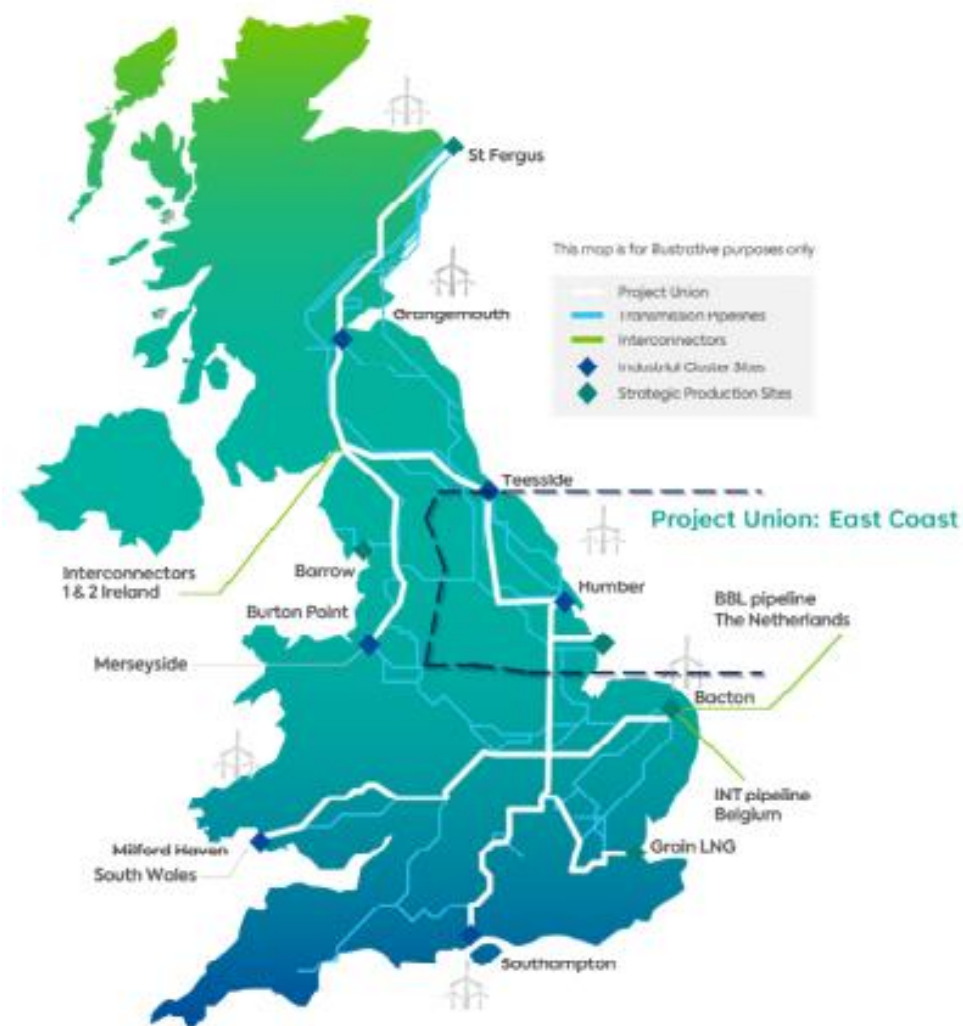
Project Union aims to create a national network rolled out in sections regionally.

The first will be in the East Coast of England, where much of the country's hydrogen will be generated.

Project Union: East Coast aims to establish a hydrogen transmission network across the **North East, Humber, Yorkshire, and East Midlands regions.**

We are currently in a **two-year development phase of design**, environmental assessment, consents and public consultation.

With the East Coast's industrial heritage at its core, Project Union aims to create a **robust supply chain**, unlocking opportunities for businesses across the entire **hydrogen value chain.**



Hydrogen System Operability



Systems and Facilities

Develop scope, Review options and provide cost estimates for physical infrastructure and IT systems required to operate PU east coast



Emergency Management

Work with NESO to develop a whole system Network Emergency Management process which incorporates a 100% hydrogen network to aid in security of supply



Physical and Commercial Ops

Establish and document the mechanisms required for the physical and commercial operation of the hydrogen network



Market Frameworks

Keep informed on hydrogen commercial market framework developments. Work alongside industry (as either support or lead) to agree frameworks to apply to PU east coast

What does a System Operator do?

System Operations

Market Change

Residual Balancing

Managing Emergencies

Connections

Operate the Network

Shrinkage

Emissions Reporting

Gas Quality Management

Data Reporting and CNI

Metering validation and Reconciliation

Charge Setting and Revenue Recovery

Maintenance

Alarm Response

Forecasting & Planning inputs to NESO

Market Frameworks



Hydrogen Delivery Council – Market Framework Sub Group

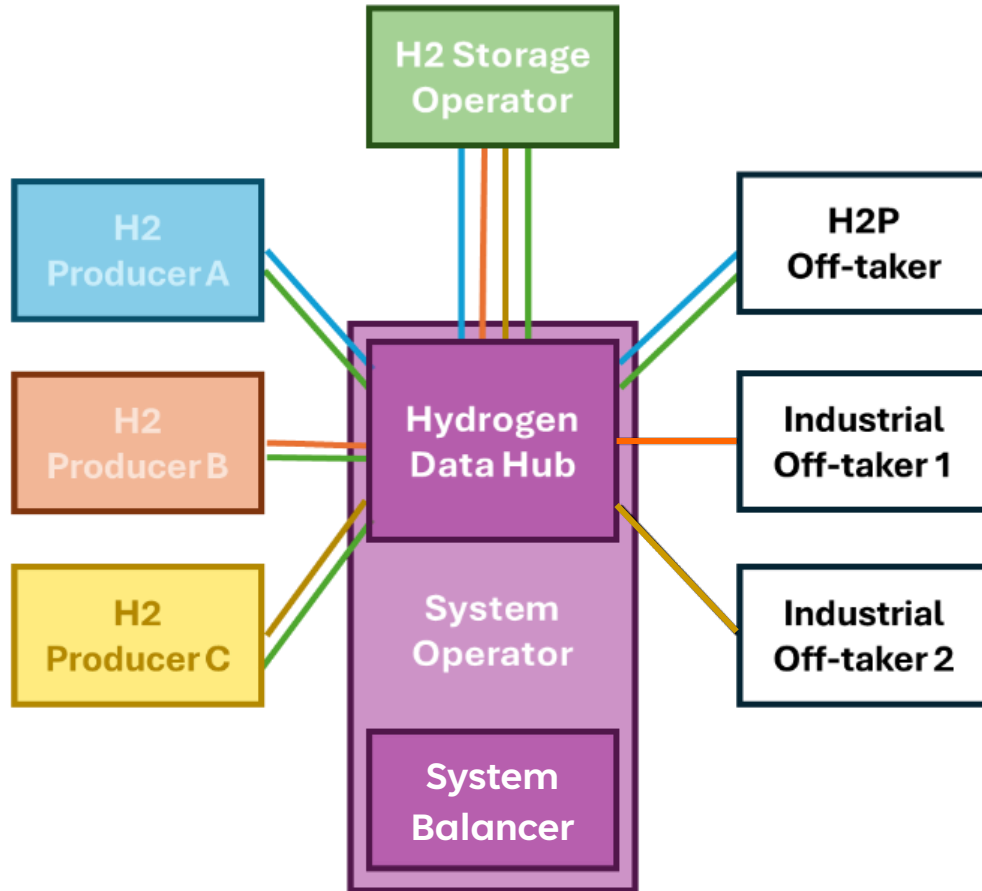


Balancing, Charging, Capacity, Connections, Gas Quality



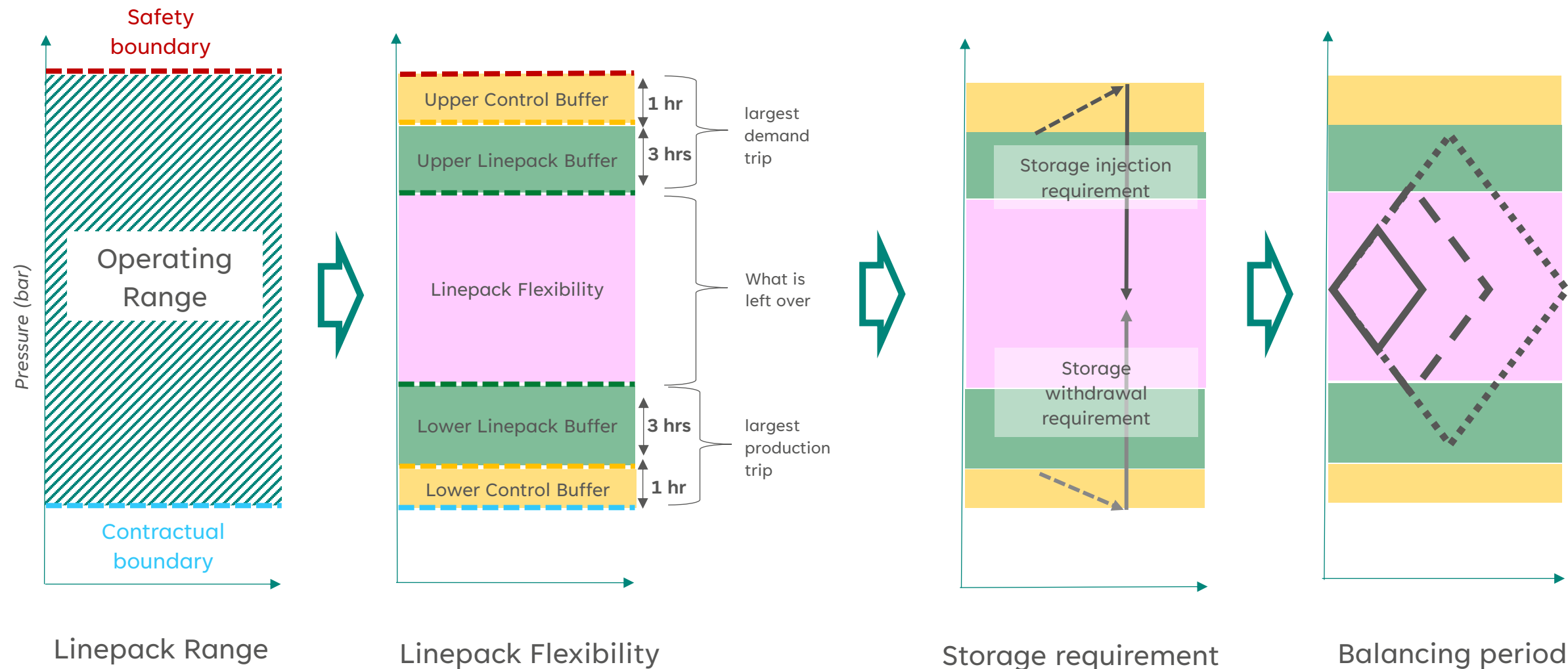
UNC and License development

Decentralised Balancing Model



- HDC – MFSG initial meetings focused on system balancing
- Report published on UESO website
- Decentralised model - hydrogen producers and Offtakers primarily responsible for their own balancing
- System Operator will likely take on the Residual Balancer role
- Centralised Hydrogen Data Hub will be required to ensure transparency and necessary information available to enable parties to balance

Network Analysis



Thank you





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Bill Goode

Business System Delivery Lead
National Gas



Agenda

1. Microsoft Azure Front Door Outage

2. Enhancing the Energy Balancing Adjustment Process

3. Gemini Development Work

4. Engagement Opportunities

Microsoft Azure Front Door Outage

- On Wednesday, October 29, 2025, around 16:00, Microsoft experienced a global outage affecting several services. This disruption was caused by an unintentional global configuration change in the Azure Front Door (AFD) product, leading to widespread service interruptions.
- At 16:08, the Gemini Service Desk began receiving tickets related to Gemini availability, which was quickly identified as a result of the global Microsoft Azure Front Door outage.
- A Major Incident was declared, and external communications were issued using FACT 24 ANS messages and the National Gas Data Portal.
- By 20:00, intermittent access to Gemini via screens and API users resumed as Microsoft services started recovering.
- The major incident team was stood down at 22:11 after full service to Gemini was restored, with further communications sent to the industry.
- Gemini technical teams continuously monitored all impacted services, conducted health checks, and confirmed no additional internal issues contributed to the outage.

Microsoft Azure Front Door Outage – Next Steps

- Microsoft is currently undertaking a Post Incident Review concerning a worldwide issue that impacted roughly 20% of websites.
- Gemini Service Provider is also carrying out a Major Incident Review to ensure no further internal factors contributed to the event and to pinpoint any opportunities for enhancing system resilience.
- A comprehensive review of Gemini's contingency documentation is underway.
- Capacity and Nomination functionality was made available prior to the end of the gas day
- Our understanding is industry parties were able to settle their End of Day positions accurately

If you have any concerns or notice any problems related to Gas Day on October 29th, kindly submit a ticket to the Xoserve service desk.

Enhancing the Energy Balancing Adjustment Process

- On Wednesday 5th November the programme successfully implemented the changes associated with 'Enhancing the Energy Balancing Adjustment Process'.
- The objective of this enhancement is to streamline the process bringing the following benefits:
 - ✓ Enable shippers to directly add, review, approve and reject adjustments for the specified site types.
 - ✓ Reduce reliance on email communications
 - ✓ Improved visibility and traceability of adjustments across all stakeholders
- A copy of the training package for this change is available on the [Gemini Learning Management System](#) to support the new screen introduced (Post Closeout Energy Adjustment).
- Further details of this change can be found on the Gemini Change page on Xoserve.com, including [External Screen Pack](#) screen pack and a [Change Pack](#)
- Please note, the new screen will be available those Users who have access to the GEME01 and GEME02 Gemini User Roles

Gemini Development Work

UNC Modification: 0887 Enabling Bi-Directional Connectivity Between IGT Pipelines and the NTS

- Since the approval of the modification on **19th August 2025**, work has begun on developing the central system solutions to fulfill the requirements outlined in UNC Modification 887.
- The Analysis and Design phase started in November and is scheduled to continue through December.
- Upon approval of the proposed solution, a detailed delivery plan will be created; currently, the anticipated implementation timeline is Q2 2026.
- The programme will prepare all necessary DSC-related documentation, including Change Packs, in readiness for this modification.

Engagement Opportunities

- The Gemini programme is currently undertaking a thorough lessons learned review to assess delivery and identify areas for enhancement.
- Following the go-live, a customer feedback survey was distributed to all Gemini users
- Calls have been offered for organisations to connect with the programme for one-on-one feedback sessions.
- Through this engagement, 15 calls have been conducted, allowing system users to share insights on the key learnings from the Sustain Plus delivery and begin discussions around Product Evolution.
- These conversations have addressed several key topics:
 - Access & Onboarding (Accounts, MFA, APIs)
 - Support Experience (Service Desk & Incident Communications)
 - Guidance, Training & Forums (Readiness & Materials)
 - Service Usage (UI, Performance, Reliability)

Next Steps

- A dedicated Gemini Focus Group is scheduled for February 2nd, where we will present a summary of the User Survey results and feedback sessions conducted during the autumn, and explore opportunities to develop these learnings further.



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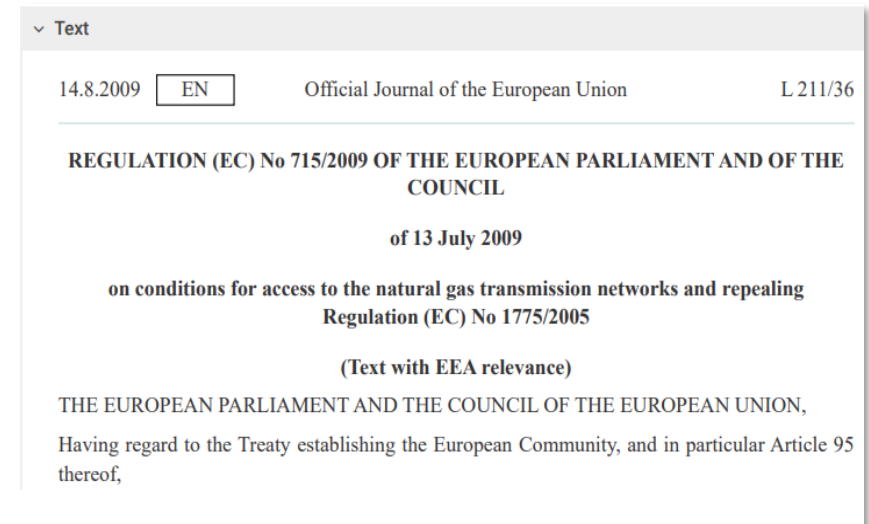
Phil Hobbins

Commercial Codes Change Manager
National Gas



Recap

- EU ‘**Third Package**’ to deliver a single market in natural gas
- **Harmonisation** of operational & commercial arrangements, focus on interconnection points
- **EU Gas Network Codes**
 - Capacity Allocation Mechanism
 - Balancing
 - Interoperability
 - Tariffs
- Major **GB reform** programme 2014-15



Post-Brexit Co-operation



- The UK left the EU on 31 January 2020
- **Post-Brexit trading arrangements** covering all sectors of the economy were agreed between the UK and EU and captured in the **Trade and Co-operation Agreement (TCA)**
- In relation to **energy**, the TCA requires that UK TSOs shall not be members of ENTSOG or ENTSO-E and that Ofgem shall not be members of ACER
- However, the TCA recognises that **future cooperation** is in the interests of both the UK and EU
 - Requirement for '**Working Arrangements**'
- For the **gas TSOs**, this continued engagement has taken the form of a regular '**Taskforce**' meeting between ENTSOG and UK TSO representatives
 - NGT summarises these meetings at Transmission Workgroup
- NGT also exchanges on **gas security** matters e.g. Winter Outlooks with DESNZ, EC, ENTSOG and continental TSOs

Our Partnerships

- We have established **strategic partnerships** through MoUs with key TSOs, including Fluxys (Belgium), Gasunie (Netherlands), Gascade (Germany), and GNI (Ireland).
- These agreements **strengthen GB's position** in the European energy transition.
- MoUs with Gascade and GNI signal a joint focus on near-term **cross-border hydrogen** infrastructure.
- National Gas is also a member of **HYNOS**, a North Sea TSO working group promoting collaboration on hydrogen, offshore/onshore wind, and CCUS.



EU Landscape



- Emphasis is on **competitiveness, growth and decarbonisation**
- Simplification of regulation – ‘**omnibus**’ package
- **EU-UK ‘Reset’**: TCA extended, ETS linkage, work towards UK rejoining single electricity market
- Current EU gas initiatives
 - Eliminate dependence on **Russia**
 - **Storage** and **LNG**
 - Promote **low carbon** sources
 - Implement **Methane Emissions Regulation**
 - Implement the **Gas and Decarbonisation Package**, inc ENNOH
- EU Gas Network Codes reform
 - **CAM** – in flight
 - **Tariffs?** (consequentially?)
 - **Interoperability** and Data Exchange also under consideration

Joint Office of Gas Transporters	
UNC Modification	At what stage is this document in the process?
UNC 0916: Reform of Capacity Arrangements at Interconnection Points	01 Modification 02 Workgroup Report 03 Draft Modification Report 04 Final Modification Report
Purpose of Modification: This Modification is the successor Modification to Request 0902R. It will implement reforms to the capacity regime that apply in respect of GB Interconnection Points to maintain compatibility with adjacent TSOs who will be obliged to implement EU reforms to the Capacity Allocation Mechanism Network Code.	
Next Steps: The Proposer recommends that this Modification should be assessed by a Workgroup. This Modification will be presented by the Proposer to the Panel on 16 October 2025. The Panel will consider the Proposer's recommendation and determine the appropriate route.	
Impacted Parties: High: Shippers, Interconnector operators Low: Consumers None: Distribution Network Operators, Independent Gas Transporters	
Impacted Codes: Uniform Network Code (UNC)	

Summary

- NGT remains **committed** to its engagement with EU stakeholders
- Interconnection is important for GB's **security of supply** today and our **energy future**
- If you wish to discuss any EU related gas issues with us, please contact either Philip.Hobbins@nationalgas.com or Thomas.bourke@nationalgas.com



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Max Chapman

Ops Liaison & Business Delivery Manager
National Gas



Gas Data Portal Updates



**national gas
transmission**

National Gas Energy Forum
November 25

Gas Data Portal Moving away from SOAP APIs

In November 24, we launched our **Representational State Transfer (REST) APIs**, which offer more robust and efficient method of consuming our data and align with industry standards.



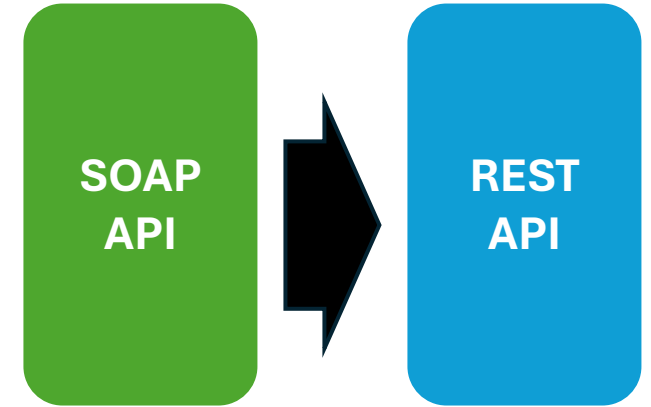
Between March 26 and May 26, we will be **ramping up our activities to remove access to the Simple Object Access Protocol (SOAP) API**. Users are strongly encouraged to transition to the REST API service to continue receiving our operational data.



To support users through the Transition we have **Technical Guides**, **Webinars** and **Support Teams** available to provide further details and support where necessary.



For more information visit our [Gas Data Portal API Page](#) or email the [Operational Liaison Team](#).



Please Note: All operational data will still be available via the [Gas Data Portal Website](#) throughout this transition.

We kindly ask that you notify your IT and Data departments of this upcoming change to ensure adequate preparation time.

Gas Data Portal Join our community

We have created a targeted User Community for the Gas Data Portal, to allow us to keep you updated with all Gas Data Portal communications.

This will enable you to have a voice on upcoming changes and also be informed about all Gas Data Portal related activities.

Updates will include:

- Transformation Project Progress Updates
- Early access to features
- Upcoming planned outages
- High priority Incident updates

To join our community, click the link or scan the QR code



[Join the Community](#)



Transmission Planning Code (TPC)



Developed to improve transparency of the NTS planning process



Review and consult on the TPC at least **every two years**

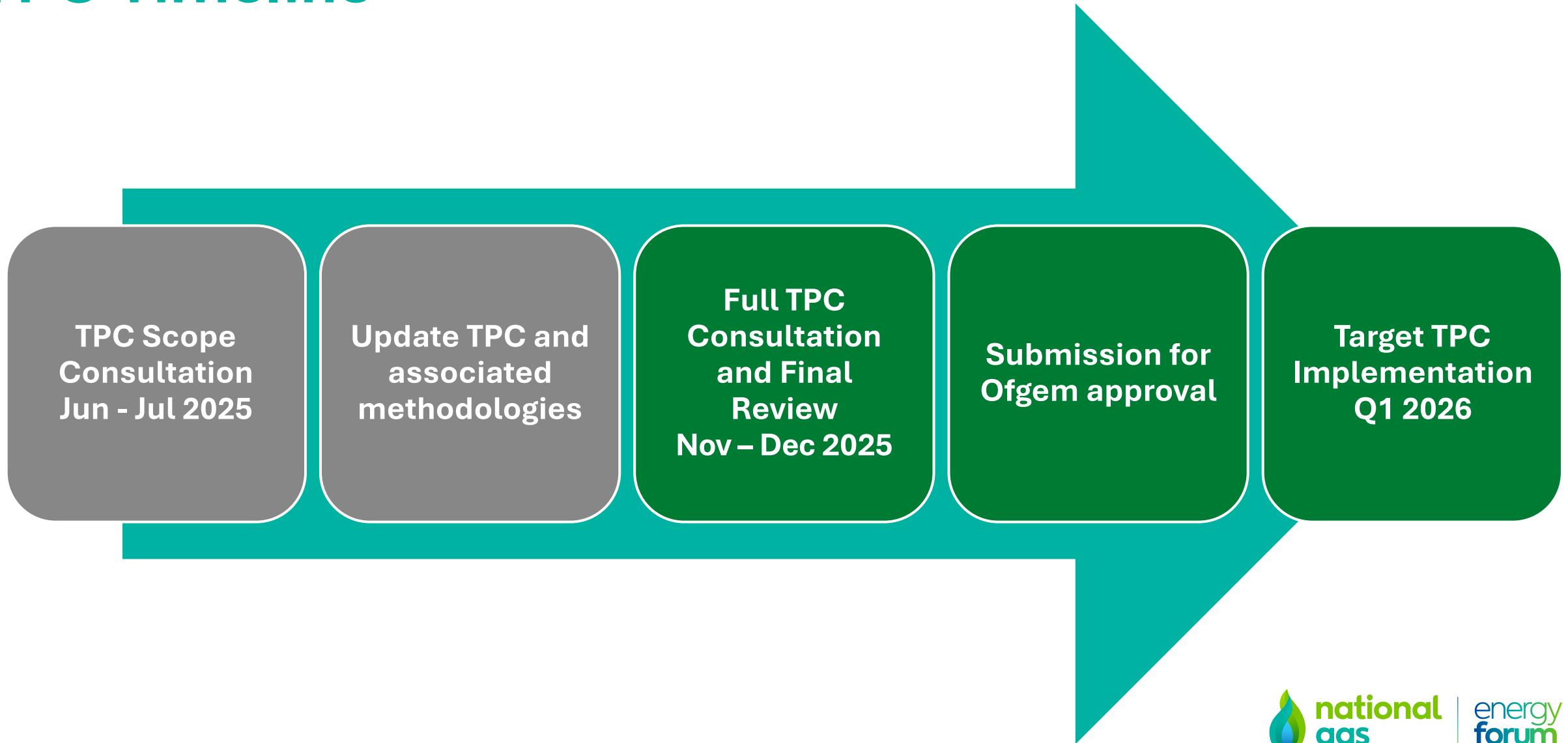


Review cycle includes consultation with relevant stakeholders and industry groups



All modifications are subject to Ofgem Approval

TPC Timeline



We value your feedback

Tell Us What You Think About The Online National Gas Energy Forum

Help us make future Forums even better by sharing your thoughts, suggestions, or questions. Your feedback is important to us!





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Join us at the next hybrid edition!

We look forward to seeing you in the
New Year on January 22nd

Location: Institution of Mechanical Engineers, One Birdcage Walk
SW1H 9JJ London





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Q&A





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**Thank you, we look forward to
seeing you in the New Year!**

