



Gas Operational Forum

Clermont Hotel & MS Teams
21st September 2023
10:02am

Questions
SLIDO = #OPSFORUM



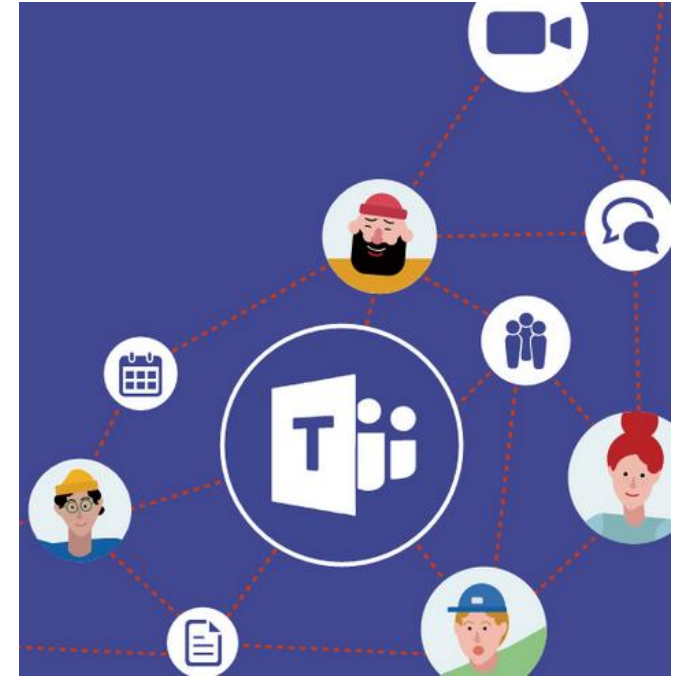
Introduction & Agenda

Nicola Lond

Operational Liaison and Business Delivery Manager

Housekeeping for Forum

- For Microsoft Teams participants;
- Attendees will be automatically muted on dial-in and cameras will be unavailable.
- You can ask questions via Slido (#OPSFORUM)
- We have included some time to answer questions following the presentations



Joining as a participant?

OPSFORUM|



Agenda for Today

Welcome and Introduction	Nicola Lond - Operational Liaison & Business Delivery Manager	10:02
Operational Overview & Summer Recap	Bridget Hartley – Head of Operational Delivery	10:05
T3 Updates	Jon Dutton – T3 Team Lead	10:20
Incentives Update	Anna Stankiewicz – Principal Incentive Performance Management Analyst	10:50
Gas Data Portal Update	Nicola Lond	11:05
NTS Specification for Mercury Update	Nicola Lond	11:20
General Updates	Nicola Lond	11:30
Ops Forum Feedback	Nicola Lond	11:35
AOB & Close	Nicola Lond	11:50

Please ask any questions using Slido: #OPSFORUM
Questions will be covered at the end of each agenda section.



Operational Overview & Summer Recap

Bridget Hartley

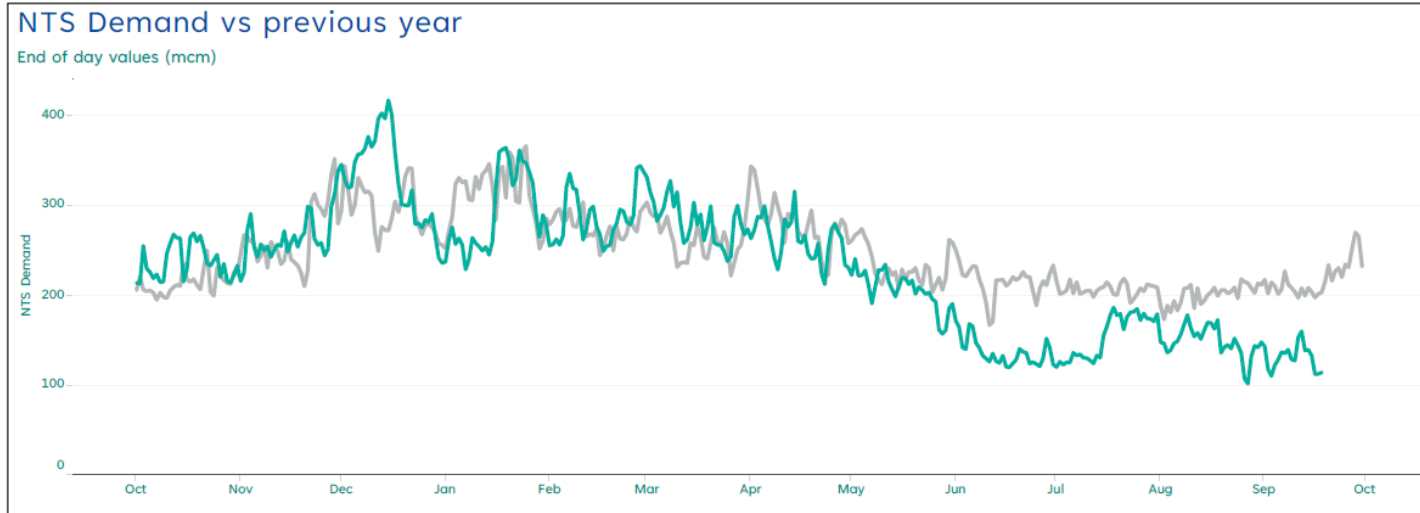
Head of Operational Delivery



Agenda

- UK summer demand and supply summary
- Norwegian Flows
- LNG imports – Milford Haven and Isle of Grain
- Interconnector Exports
- Power Station Demand
- Storage Usage
- Storage – UK and EU

NTS Supply and Demand

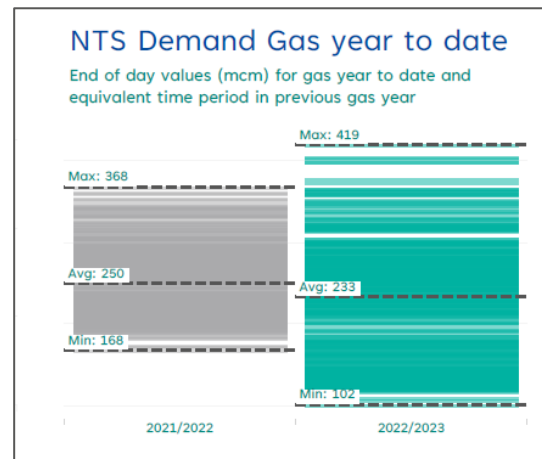


Since May 2023 gas demand has fallen significantly


This is largely driven by significantly lower interconnector exports to Europe and reduced power demand for gas.

Norwegian, UKCS and LNG gas supplies have been significantly lower than 2022.

Gas demand increased in late July due to increased EU exports following an increase in Norwegian supplies.



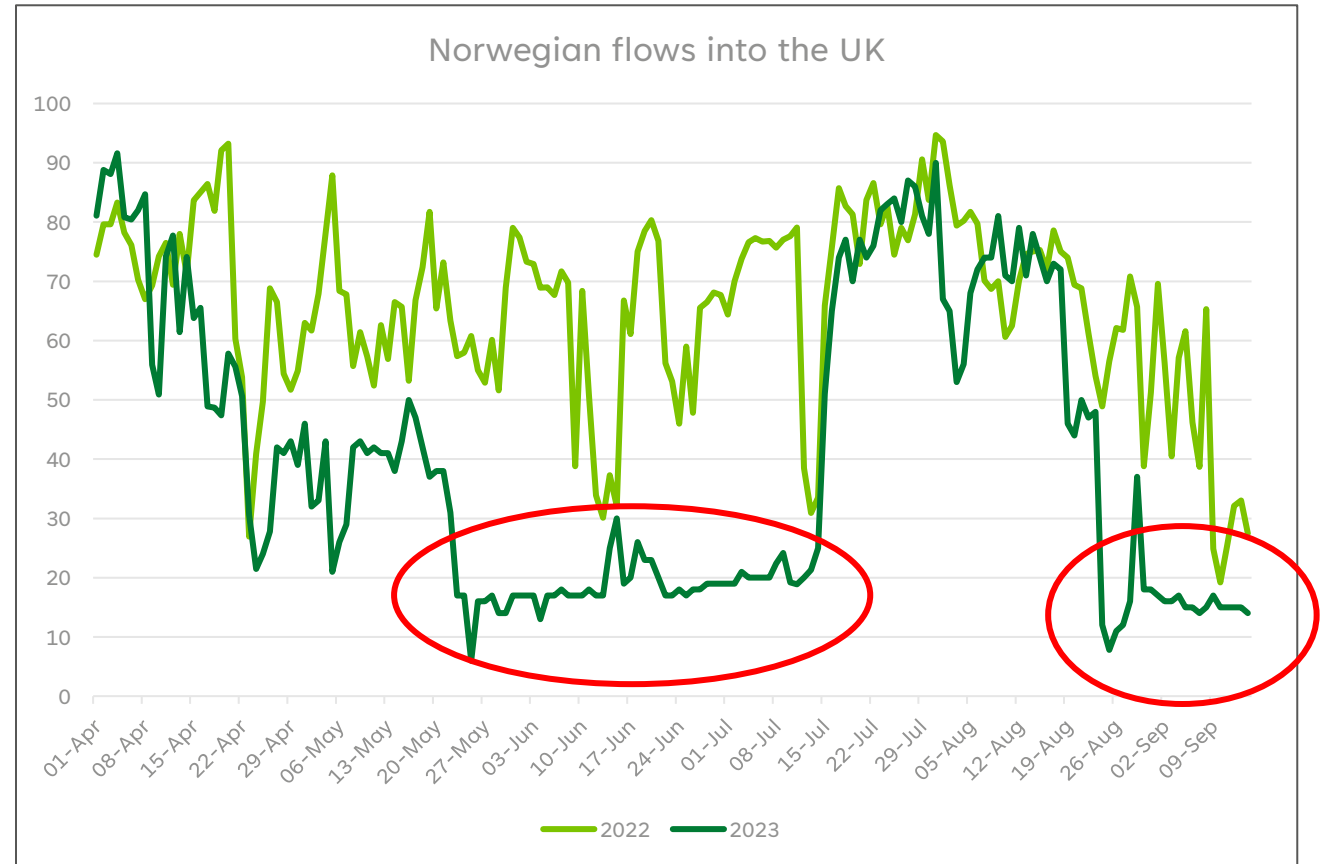
Norwegian Flows

>4bn


There are significant Norwegian outages this summer that are impacting flows to the UK.

In April we started to see the impact of the outages on flows to the UK. When the plant returned in mid July after an extended outage flows returned to 2022 levels. In late August they have reduced again with further Norwegian outages taking place.

Over 4bcm* less Norwegian gas has come into the UK in 2023 compared to the previous year.

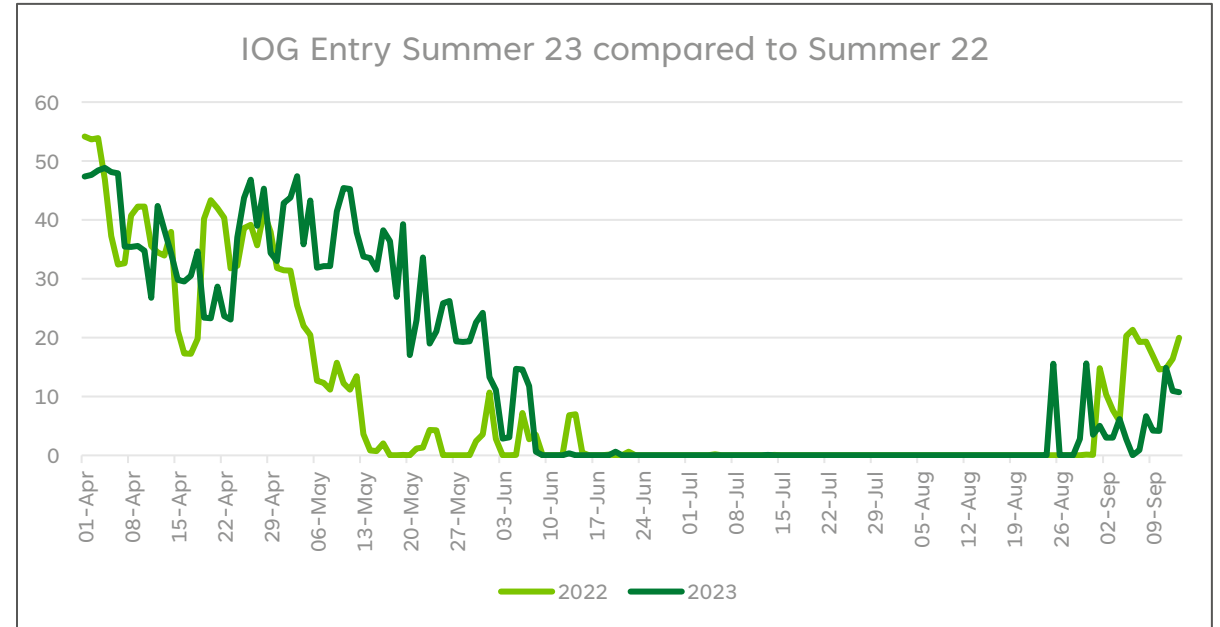
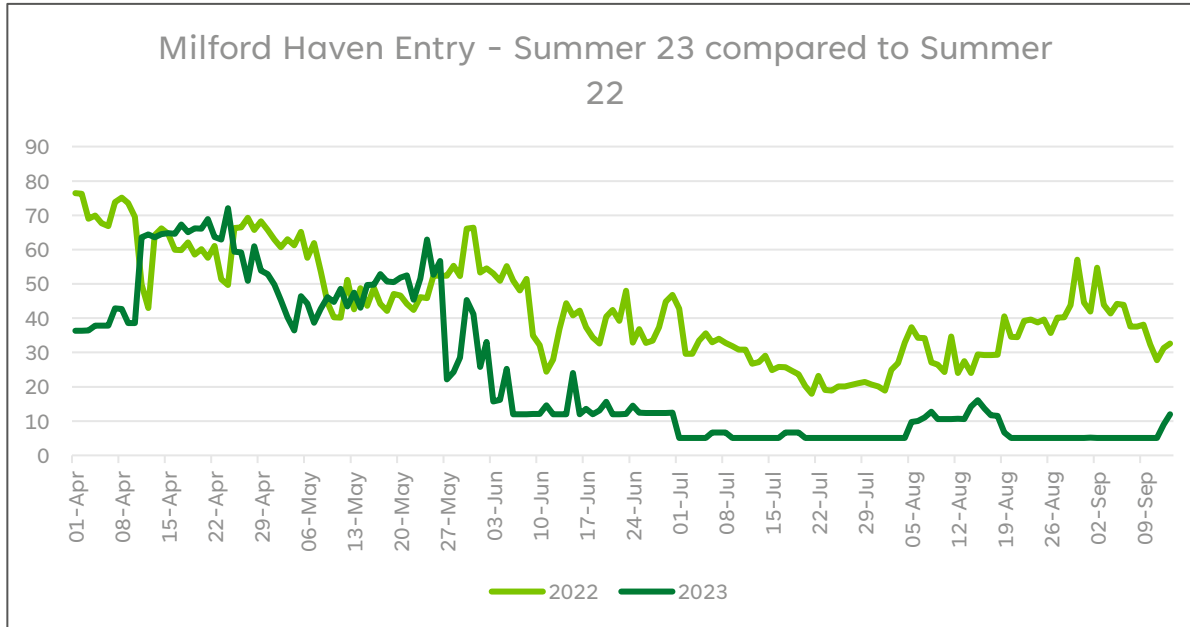


*Due to the flow arrangements upstream of our St Fergus terminal, Norwegian import numbers have less accuracy than other data presented.

LNG Imports

2.5bn
↓

Overall LNG imports YTD are ~2.5bcm less than this time in 2022.



Isle of Grain imports were close to system capability for much of April and May but have been almost zero for the rest of the summer picking up a little as we've moved into September which is consistent with previous years.

Milford Haven imports have been well within the capability of the system throughout the summer and significantly lower than summer 22 enabling essential maintenance to be undertaken.

There is currently one LNG ship forecast to dock in the UK over the coming weeks.

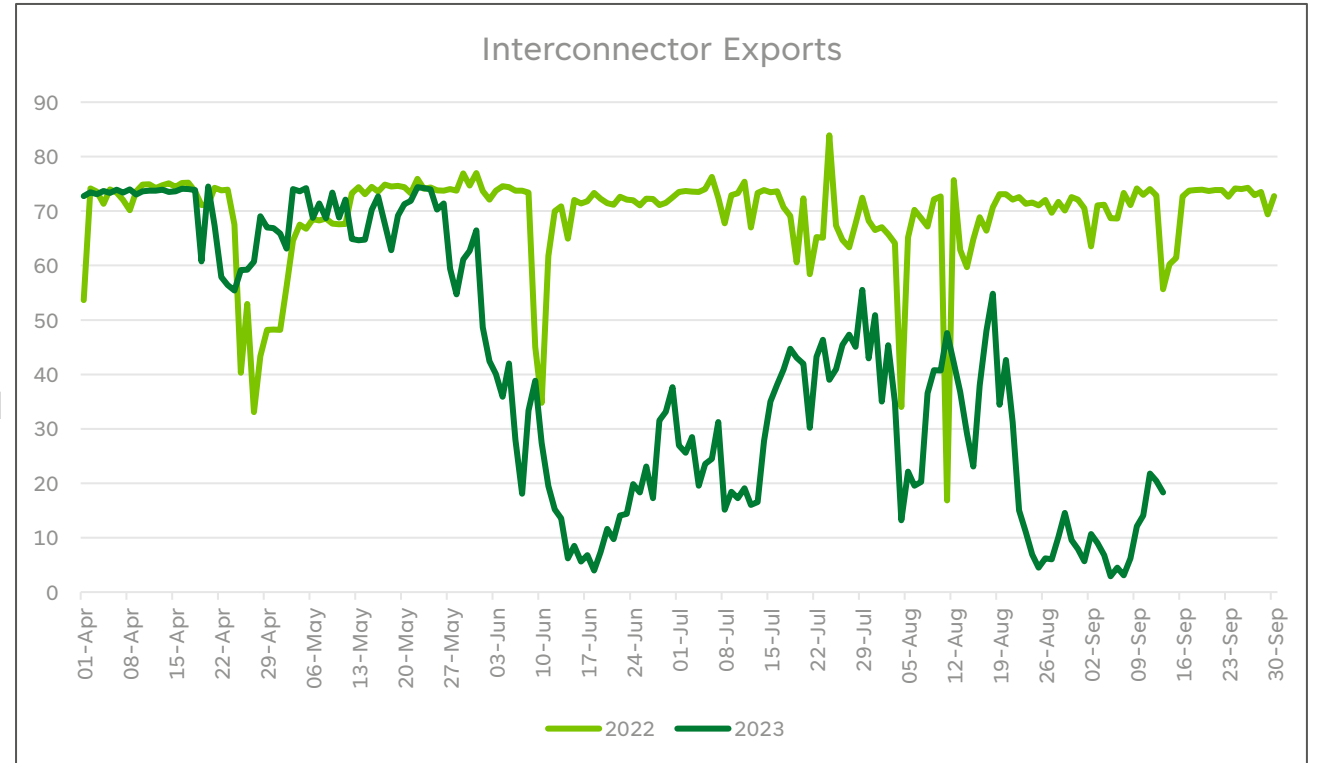
Interconnector Exports

4.6bn

In our summer outlook publication we expected that Interconnector exports would be lower in summer 2023 than in summer 2022.

Exports were high in April and May at similar overall rates to 2022. However, exports reduced significantly in June to mid July, stepping up as Norwegian flows increased and then reducing as Norwegian flows reduced again.

From April to September 14th we have exported 6.9bcm of gas to Europe compared to 11.5bcm for the same period in 2022.

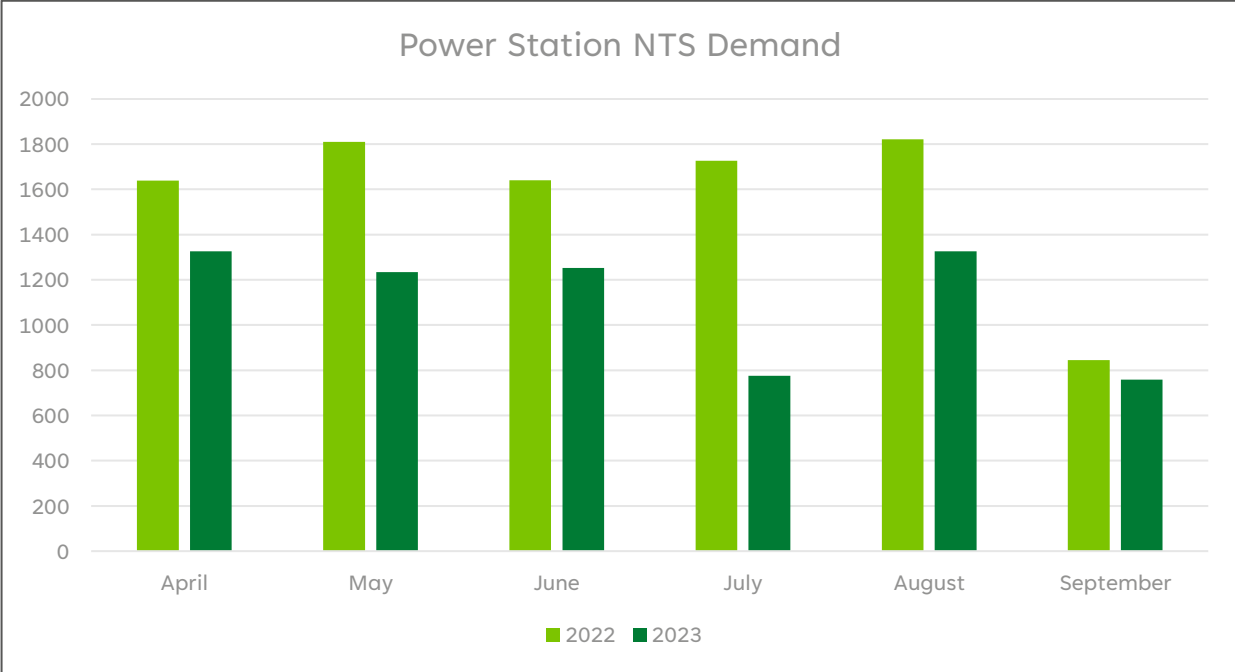


Power Station NTS Demand

2.8bn

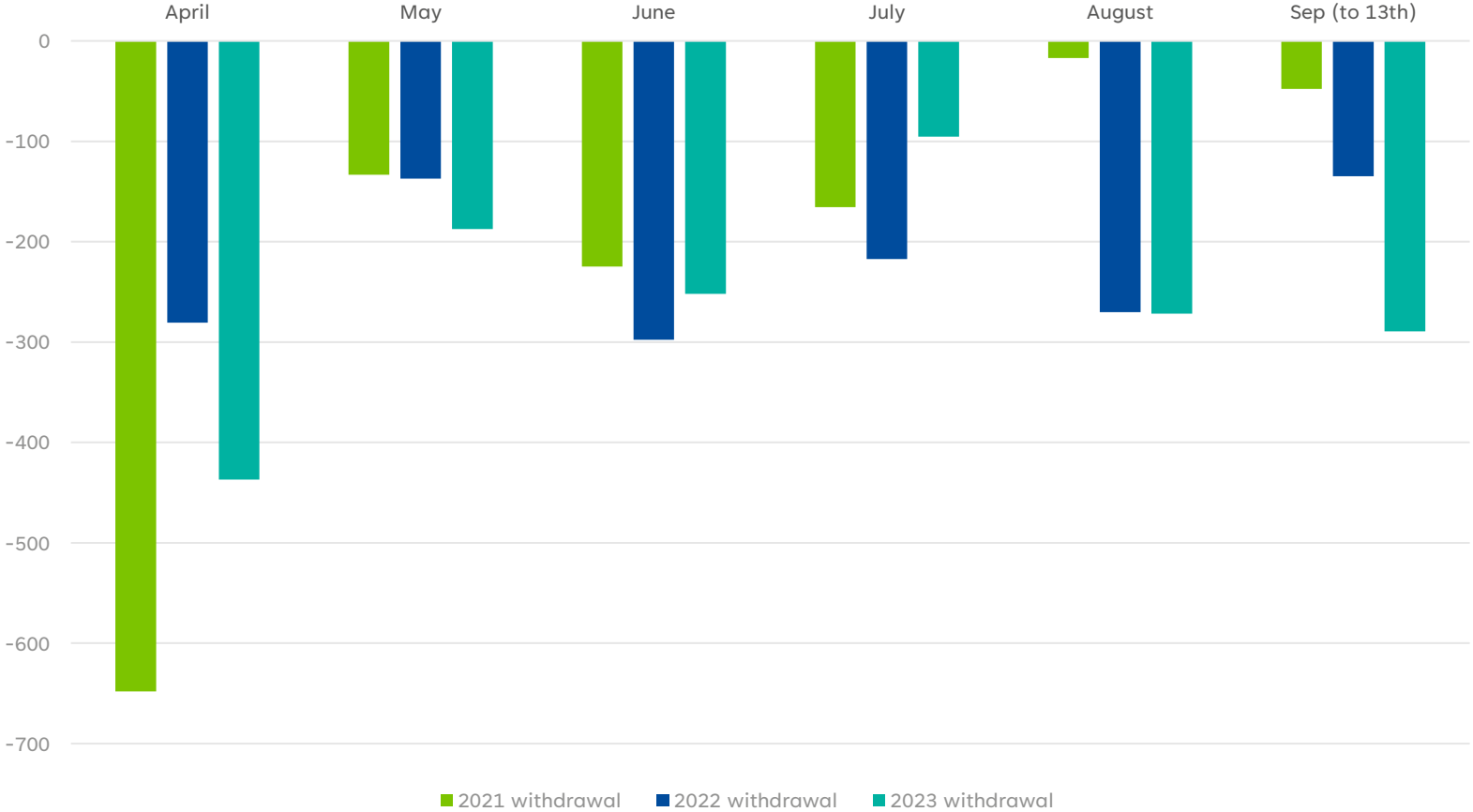
Power station demand has reduced from 9.5bcm in 2022 to 6.7bcm in 2023.

1st April – 14th September



Storage Withdrawal

~20% more gas has been withdrawn from storage this summer compared to the previous two summers



Storage & LNG

Total LNG Stock and Percent Full
Snapshot as of: 19 September 2023

809 mcm
63% full

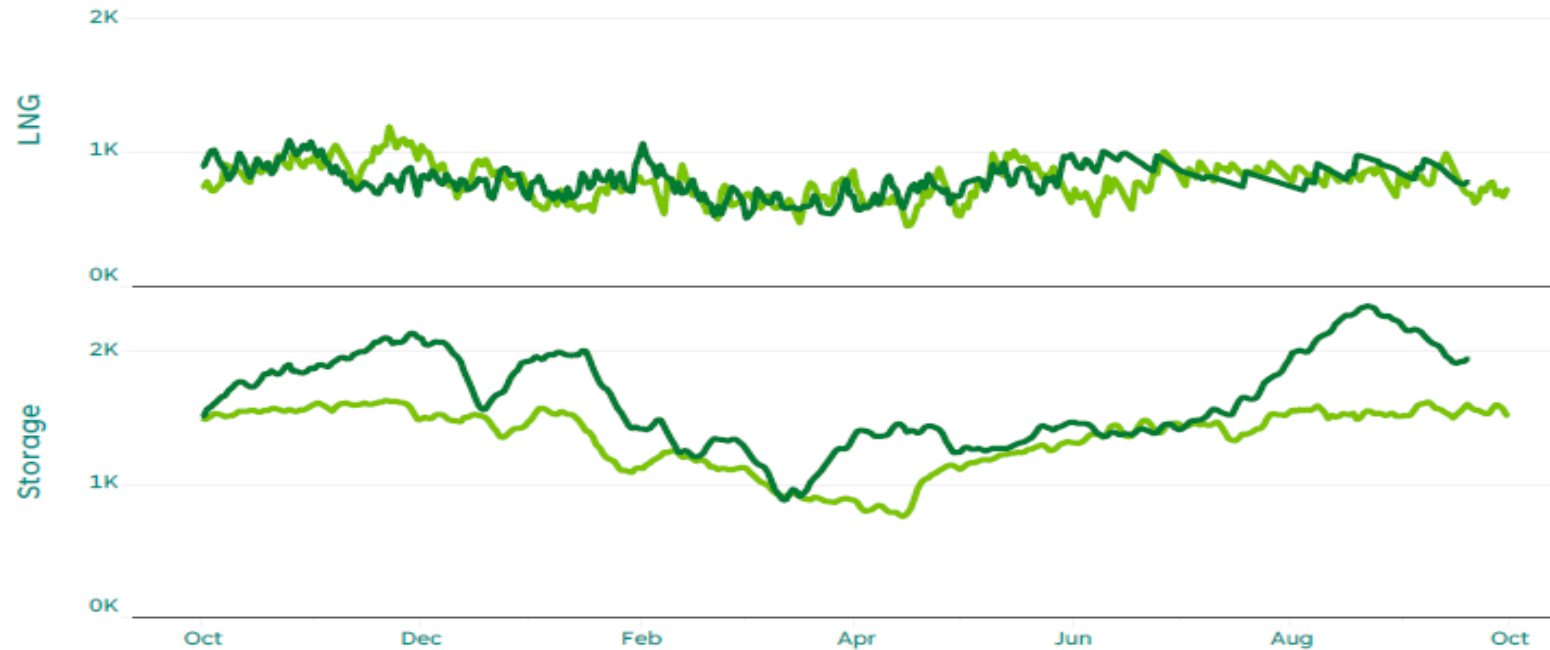
Total GB Storage Stock and Percent Full
Snapshot as of: 19 September 2023

1,984 mcm
60% full

(LRS 62%)

(MRS 58%)

LNG & Storage stock (mcm)

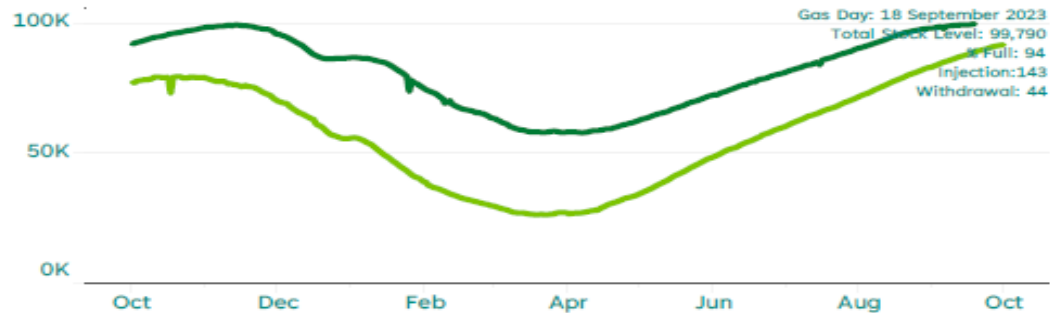


LNG Arrivals

No Scheduled LNG Tankers

EU storage stock (mcm)

Data Source: GIE (Gas Infrastructure Europe)



Data as of beginning of gas day 19/09/23

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

Previous year data is shown for the equivalent time period from the start of the gas year (01 Oct) to latest data

2022/2023

2021/2022

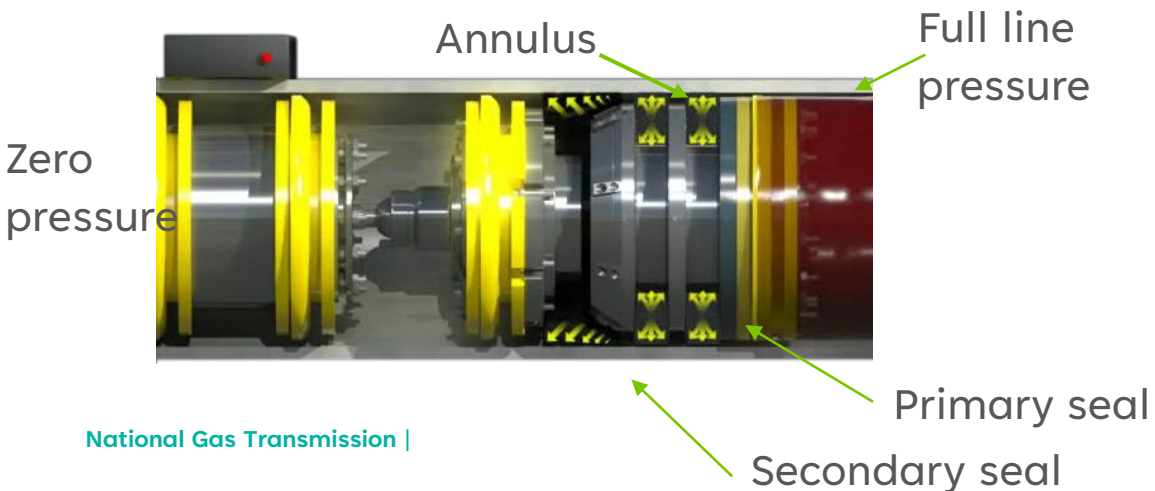
Maintenance Innovation: Use of Remote Plug Isolation Tool

Aberdeen Lochside isolation in May

- Placed in position to an accuracy of +/-50mm
- Monitors the space between the seals to ensure no leakage through the seal
- Reduces reliance on recompression

At Aberdeen Lochside

- Insulation Joint Replacement
- Reduced gas vented by 427,000m³ from the recompression alternative



Winter Outlook

The Gas Winter Outlook will be published on **28th September**. You'll be able to find it [here](#).

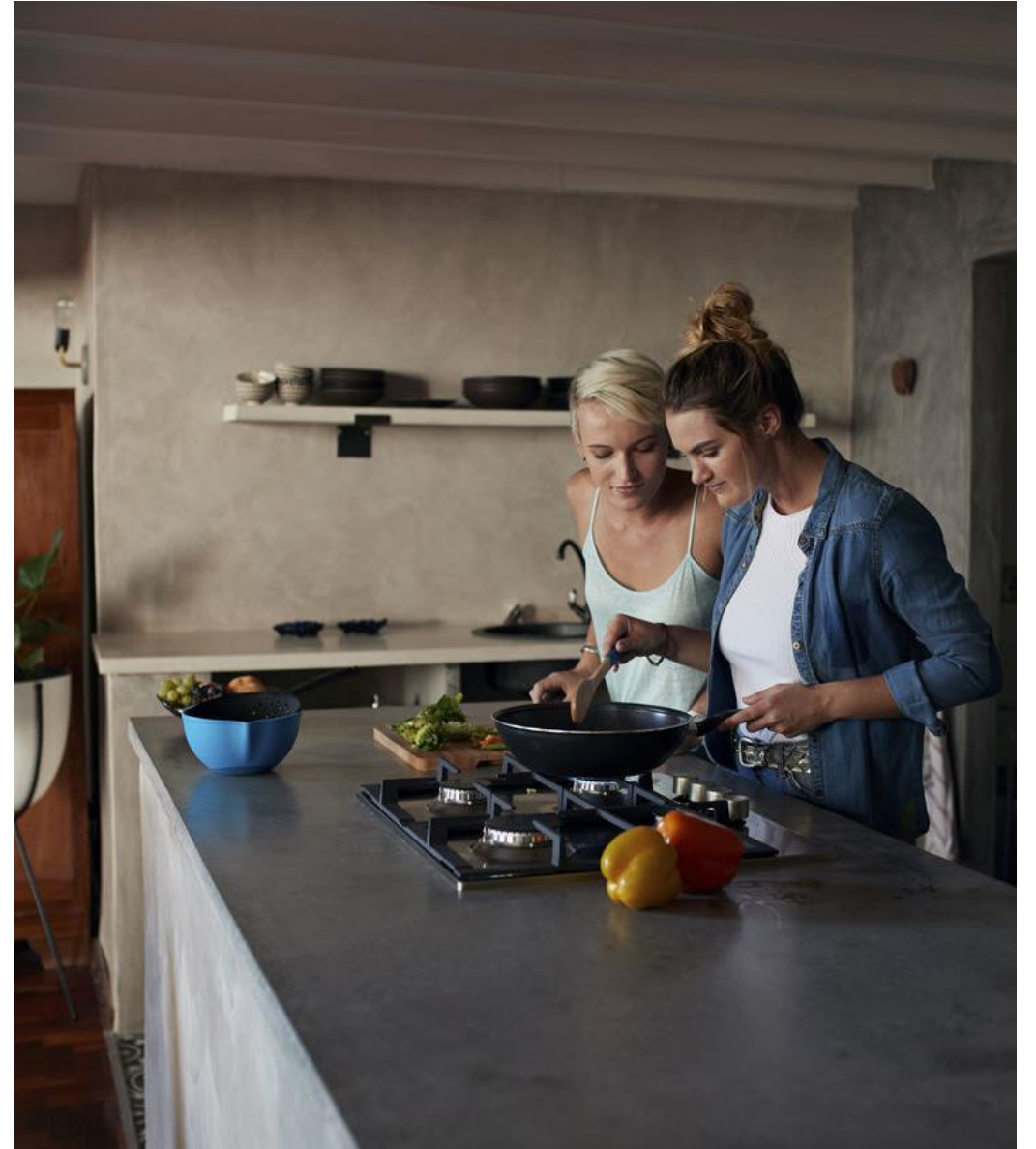
It will contain all the content you'd expect, including:

- Supply margins
- Demand forecast
- Supply and demand scenarios
- And much more!

Ofgem are leading a Winter Outlook launch event (as they have in previous years).

If you'd like to join this event, please register here:

[Winter Outlook Seminar 2023 Tickets, Thu 28 Sep 2023 at 10:00 | Eventbrite](#)

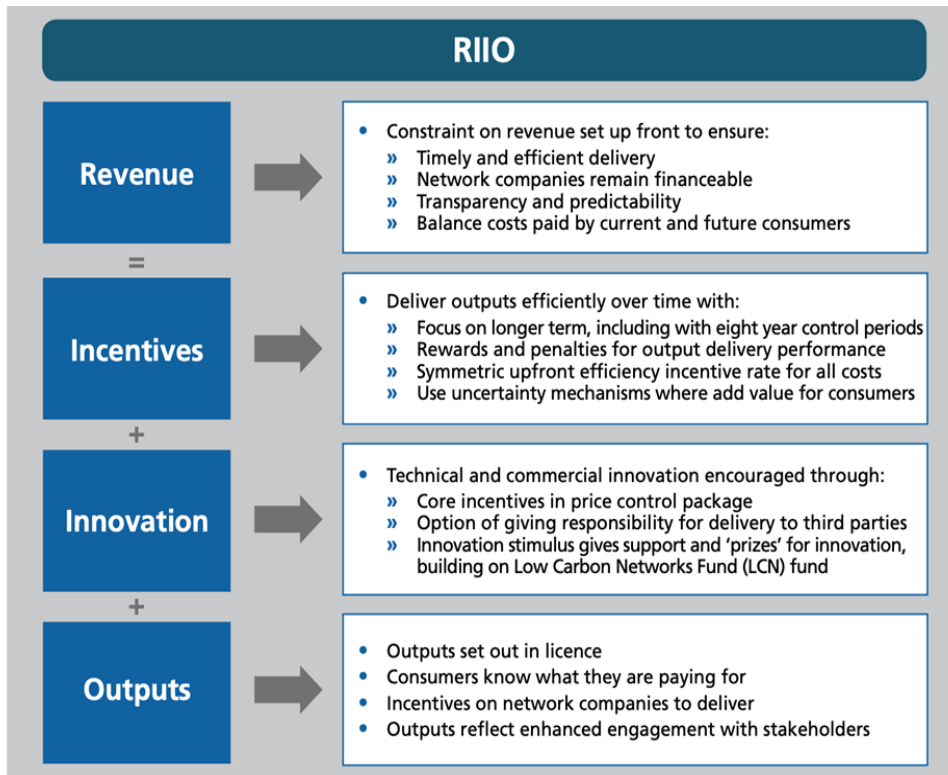


RIIO T3

Jon Dutton
T3 Team lead

Background - RIIO framework

Ahead of each regulatory period, we submit a detailed Business Plan to Ofgem



Ofgem is currently consulting on how it regulates networks and drives performance for existing and future consumers. Decision due Autumn 2023

The gas network will perform a **critical role in ensuring secure energy needs**

Achieving net zero will require a **smart combination of all network assets, gas and electricity alike**

We are building our RIIO-T3 plan and considering how it is compatible with a Hydrogen future

Why should our price control matter to you?



Context

- Relates to the period from April 2026 onwards
- This is likely to be a period of significant change for the energy landscape in the UK – although natural gas will continue to be a vital component of the energy mix through heat and power

Pathway to Net Zero

Energy security

Network resilience

Future System Operator
(FSO)

Ofgem's Open Letter July 2023

<https://www.ofgem.gov.uk/publications/open-letter-decision-future-gas-price-controls>

'the next price control should take the form of a medium-term ex-ante framework'

'we intend to streamline the process where possible, retaining or removing existing outputs, and only introducing new ones where essential'

'digitalisation would form a key pillar for enabling whole system benefits and delivering consumer benefits'

'in our framework decision, we will set out our views on the appropriate process for enhanced engagement'

Possible areas of engagement



Supporting the path to Net Zero



How we deliver maintenance

Resilience and security of supply



Future System Operator



Forecasting and scenarios



Data and market intelligence

Possible areas of engagement



Supporting the
path to Net Zero

- Market frameworks for blending and hydrogen networks
- Developing operational capability to manage the transportation of hydrogen blends
- Market intelligence and data provision

Possible areas of engagement

Resilience and
security of supply



- Are the existing network security standards still appropriate?
- How should we deliver the right level of reliability?
- How do we adapt to increased import dependency in a volatile global market?

Possible areas of engagement



Forecasting and scenarios

- We have supported an industry project to develop a Common Planning Pathway
- Do we need to develop extra capabilities in this area?

Possible areas of engagement

- Do our existing processes work for you?
- Do you get the right level of information?
 - What could we do better?



How we deliver
maintenance

Possible areas of engagement

- Do you have views on the allocation of responsibilities between FSO and other parties?
- How should we interact with the FSO?

Future System
Operator



Possible areas of engagement

- Do you find it easy to access the data you need?
- Is there additional data you would find valuable?
 - Do we provide the right level of market intelligence?



Data and market
intelligence

Why do we need your input?



SLIDO Poll

#OPSFORUM

“Which of these potential areas of engagement are most important to you?”

The poll will be live for 1 day.

What happens next?

- We are currently building our plans and will start engaging with our customers and stakeholders in the next few weeks
- Please let us know what works best for you
- And which areas you would like to talk to us about

- To discuss activities and outputs relating to the System Operator, please contact Jon.Dutton@NationalGas.com / 07976 268933

- Or to register your interest and preferences for our wider engagement programme please contact Engage@NationalGas.com

Incentives Update

Anna Stankiewicz

Gas Incentives - Introduction

Content

- Brief overview of existing incentives
- Quarter 1 FY (Apr-Jun) 2023 performance
- Your feedback

Current financial incentives:

- Capacity Constraint Management
- Maintenance
- Demand Forecasting D-1
- Residual Balancing
- Greenhouse Gas Emissions

Our obligation

- Our incentives are regularly reported on and monitored by Ofgem.
- designed to minimise the overall cost of system operation leading to benefit for consumers
- developed to influence our behaviour to minimise the impact on the market, to consider environmental impacts and to support the efficient operation of the wholesale gas market

Capacity Constraint Management

- Customer value: release of capacity up to and above our obligations and minimising the costs of constraints against a set financial cost target
- Target = £8.5m
- Value = +£5.2m to -£5.2m
- 14% scaling for revenues from Non-Obligated capacity
- Sharing Factor = 39% NG, 61% customers

Maintenance

- Customer value: additional revenue opportunity due to maintenance alignment of planned outage
- We are incentivised to minimise the use of 'maintenance days' and making changes to the maintenance plan.
 - Changes – target 7.25% of the total maintenance plan days in the year.
 - Use of Days – (VO) – target 11 days + Use of Days – (ex VO) – target align 75% of customer impacting.
- Value = +£0.5m to -£1.5m

Q1 Performance

- Continuation of Non-Obligated Capacity release at Bacton Exit IP
- Commercial actions have been deployed at Isle of Grain (1-3 May) and St Fergus/Teesside (17-19 May) to manage constraints requiring the use of commercial tools. Emerging constraint risk has been managed through use of operational tools, planning and strategy.

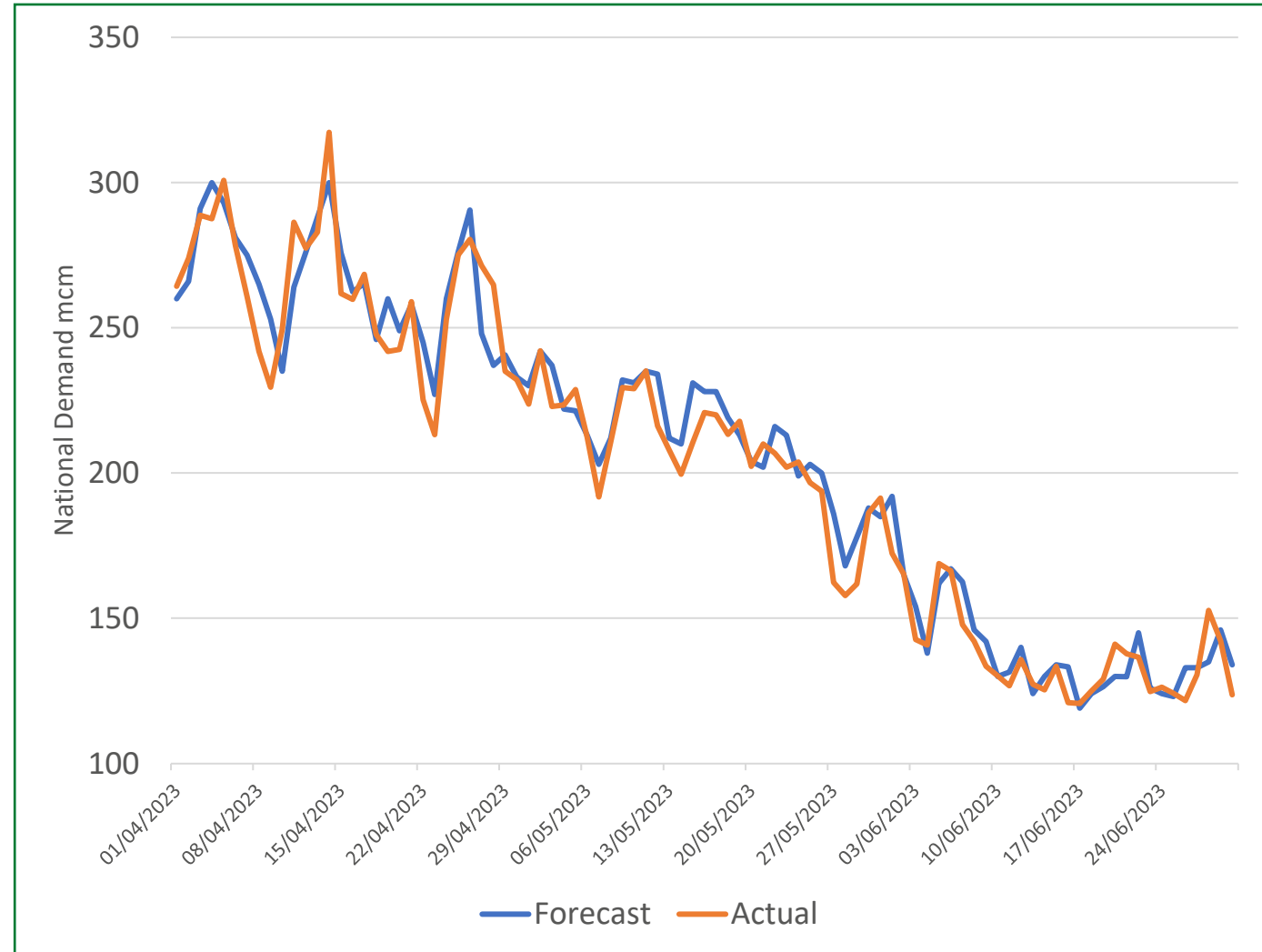
- The Summer 23 maintenance outage plan included 246 days of customer impacting work of which 245 days are aligned. This included use of days for both VOs and Non-VOs works.
- Approximately 39% of aligned summer maintenance completed in 1st quarter, with no changes to the plan initiated by NGT.

Demand Forecasting

- Customer value: make forecasts for the day ahead demand (D-1) to enable informed commercial decisions
- Target: 8.35 mcm/d (+1mcm DFSA)
- Value = +£1.5m / -£1.5m

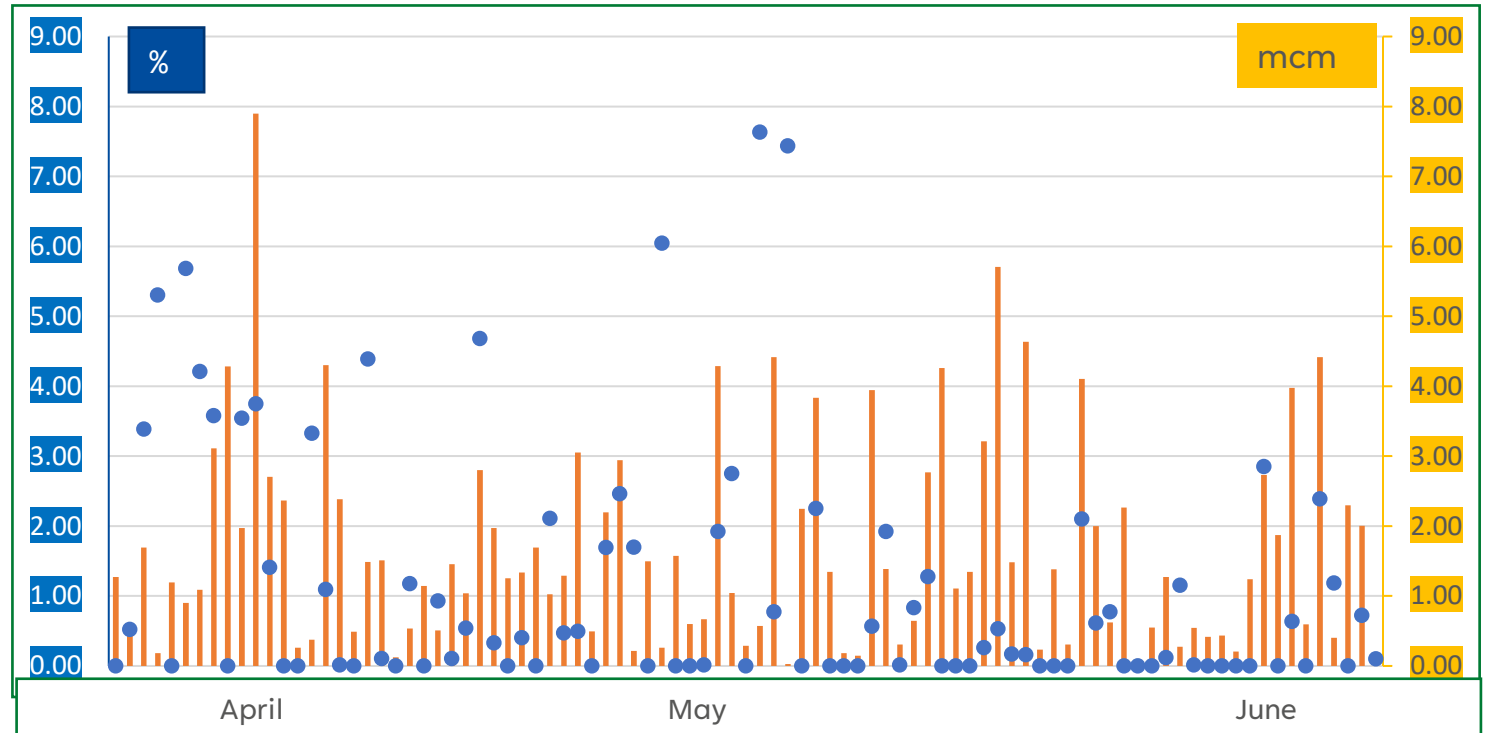
Q1 Performance

- Average daily error of 8.34mcm in Q1.
- DFSA = 0.2457mcm as 7/8 sites have met the requirement.
- Underlying demand levels for Q1 23/24 are lower this year (202mcm) compared to the same period last year (243mcm) mainly due to the reduced EU exports.
- Wind forecast changing impacting 20mcm daily.



Residual Balancing

- Customer value: enabling efficient use of network with minimum impact on the market and publishing hourly trade/LP swing data
- Balancing supply and demand on the gas day to ensure the NTS remains within safe operating limits.
 - Price Performance Measure (PPM) target: 1.5%
 - Linepack Performance Measure (LPM) target: 2.8mcm
 - Value = +£1.6m to -£2.8m



Q1 Performance

- Average Price Performance Measure (PPM): 1.1%.
- Average Linepack Performance Measure (LPM): 1.7 mcm.
- Traded 66 out of 91 days on OCM on 73% of days.

Greenhouse Gas Emissions

- Customer value: improved local air quality, economic compressor venting strategy
- We are incentivised to minimise the amount of GHG that enters the atmosphere and consider the environmental impact of our compressor operations when venting
- Vented Emissions target:
< 2,897 tonnes
- Value = +£1.5m to -£1.5m.

Q1 Performance and Developments

- Vented Emissions to date: 562 tonnes.
- Used 19% of allowance.
- Compressor running hours 13,246. 12% increase from the same period last year.



More information

- Our quarterly incentive report can be found on our website: <https://www.nationalgas.com/document/144141/download>.
- Q2 incentives performance will be summarised at the November Gas Ops Forum.
- More information: [Gas Operator Incentives](#).

Contact:

- Anna Stankiewicz, Incentives Analyst (anna.stankiewicz@nationalgas.com)
- Darren Lond, Incentives Performance and Development Manager (darren.lond@nationalgas.com)

RIO-T3 Regulatory incentive arrangements

As a part of our RIO-T3 business planning process we will be reviewing the current incentive arrangements. We would like to ensure that our incentives continue holding value to our customers and gain feedback on what additional incentives our customers would value in the next price control period.

Do the current incentive schemes drive valuable outcomes to your business or to your interests?
Please explain your reasoning.

SLIDO Poll

#OPSFORUM

“Do the current incentive schemes drive valuable outcomes to your business or to your interests? ”

Please explain your reasoning

The poll will be live for 1 day.

Gas Data Portal Updates

Nicola Lond

Operational Liaison & Business Delivery Manager

Gas Data Portal Launch Feedback

In July 23 we launched the **National Gas Transmission Data Portal** (previously MIPI). The aims was to improve the user experience, provide easier access to data and lay the foundation for future changes and improvements.

Through a number of forums we have had the following themes of feedback:

Common Feedback

- The Data Portal is an improvement visually
- Banners and header size is too big
- Sizing on mobile devices
- Ability to have personalised dashboards
- Accurate and consistent data
- Auto refresh on pages – Gas System Status
- Develop REST APIs
- Common units across graphs

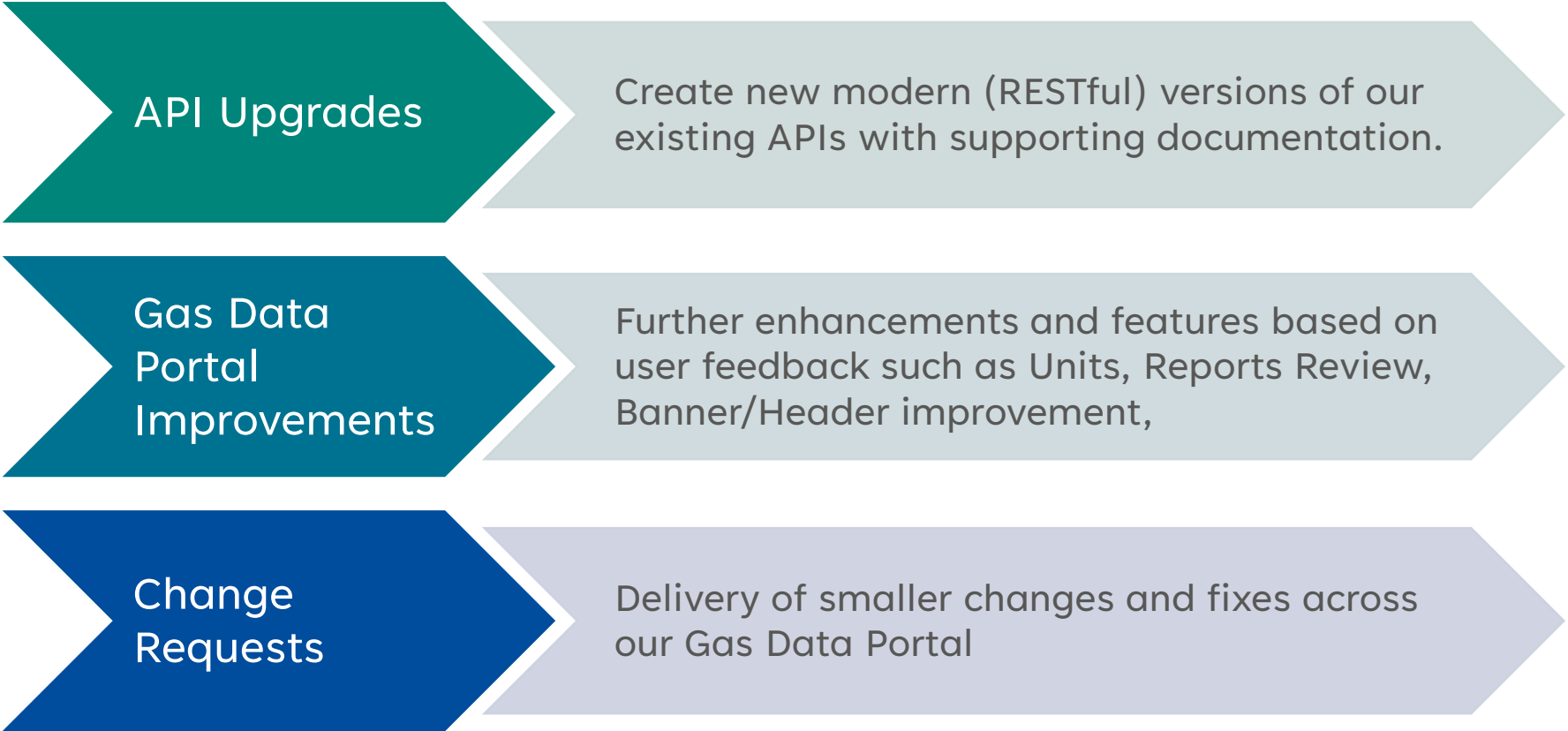
Implemented and upcoming fixes:

- Updates to graphs and visuals - Completed
- Graph legend to reflect defined timestamps – Completed
- Updates to specific reports - Completed
- Mobile friendly version – In progress
- Rest APIs development work – In Progress
- Units of measure review - Planned

If you any additional feedback please let us know so we are able to improve the Gas Data Portal to meet your needs.

Roadmap for Information Provision

What's on the horizon...

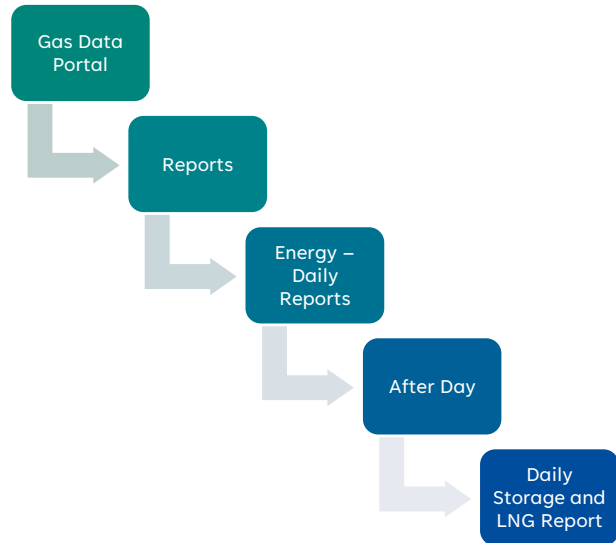


Daily Storage and LNG Operator Report

As part of our work on the Gas Data Portal we will be moving the **Daily Storage and LNG Operator Information Report** into the Gas Data Portal.

- The new report, which replicates the existing one, will be available under reports within the Gas Data Portal.
- The Data Items will then also be available in Find Gas Data and via API bringing it together with our other published data.
- The change is expected in **early October 23**. Further communications will follow in advance of this change.
- Publication Time of this report will be 13:00.

Path to Storage and LNG Report



Example of Storage and LNG Operator Report

Gas system status Gas flow data Find gas data Reports API

Storage and LNG Operator Information Report

Gas Day: 11/09/2023

Operator Type	Site Name	Opening Stock(kWh)	Inflow(kWh)	Outflow(kWh)	Available Capacity(kWh)	Injectability(kWh)	Deliverability(kWh)
LNG	Dragon	1,391,705,960	1,748,359,110	0	2,151,174,040	2,550,000,000	51,000
LNG	Isle Of Grain	2,873,955,534	458,318,111	0	4,831,241,688	749,000,000	759,000,000
LNG	South Hook	3,727,182,568	0	-2,304,978,738	2,602,817,622	89,999,999,999	89,999,999,999
Storage	Aldbrough	1,150,330,833	936,616,420	0	5,017,397,460	185,400,000	54
Storage	Hill Top	40,237,857	0	-119,000	886,465,256	246,535,500	266,535,500
Storage	Holehouse Farm	209,384,605	0	-47,100,000	128,735,520	4,000	200
Storage	Holford	1,229,603,255	0	-1,115,117,160	2,409,166,171	388,933,333	340,777,778

Download as CSV Download as XML Print report

API Upgrades

APIs account for around 80% of the way in which operational data is accessed by customers. Our stakeholder feedback suggests that we need to improve the efficiency and accessibility of these APIs for Users.

We have kicked off some analysis work of our APIs and in **2024** will be looking to deliver:

- Modern RESTful APIs for Find Gas Data / Instantaneous Flow
- Developer Portal for REST API discovery
- Modern API Version Control

Transition Period

Following our API upgrade we will continue to offer the existing SOAP APIs for a limited period to allow Customers to start the transition process.



Gas Data Portal User Community

We are creating a targeted User Community for the Gas Data Portal, to allow us to keep you updated with all Gas Data Portal changes. This will enable you to have a voice on upcoming changes and also be informed with all Gas Data Portal related activities.

Updates will include:

- ✓ Transformation Project Progress Updates
- ✓ Polls/Surveys for future Gas Data Portal changes
- ✓ Upcoming planned outages
- ✓ High priority Incident updates

A **Gas Data Portal Sign Up Form** will be circulated after the Ops Forum.

Please sign up so we can keep you updated on future developments.

Help and support

On our National Gas Transmission Operational Data page, you have access to useful documentation to help support you with queries on the Gas Data Portal.

The following support is available:

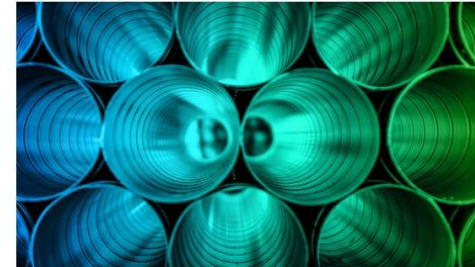
- Gas Data Portal Welcome Pack
- How to Guides
- Historical Webinars
- API Information/Support
- Gas Data Portal Community
- Glossary

For any additional queries and feedback, please email our mail box:

Box.OperationalLiaison@nationalgrid.com

[Transmission operational data | National Gas](#)

Gas Market Data Tools



National Gas Transmission Data Portal

National Gas Transmission Data Portal

Our Gas Data Portal provides up-to-date and historic operational gas transmission data. View reports and data items over your chosen date range in table and graph formats - many of these are also available to export to XML or CSV format.

[Go to our new data portal](#)

Gas Data Portal 2023 (3)

Gas Data Portal - How to... (4)

Data API service (2)

MIPI Archive (9)

Gas operations documents (1)

Digitalisation strategy and action plan (1)

Gas Data Portal 2023

> Watch the webinar here

If you would like to hear about key updates about the Gas Data Portal then please provide your information to be added to the Gas Data Portal User Community.

> Join our Gas Data Portal Community

> Glossary of Terms

Name ^

Gas Data Portal Webinar Q+A

Gas Data Portal Webinar Slides

Welcome Pack

NTS Mercury Specification Update

Nicola Lond

Operational Liaison & Business Delivery Manager

Decision

Thank you for your input regarding the NTS specification for Mercury

After considering all the information available to us, we have determined to leave the guidance limit for mercury at $10\mu\text{g}/\text{m}^3$ currently, as detailed in the Gas Ten Year Statement.

The Gas Ten Year Statement can be found on our website:

<https://www.nationalgas.com/insight-and-innovation/gas-ten-year-statement-gtys>

Background

- Mercury is not directly stated in GS(M)R but is covered indirectly in that the gas we transport “shall not contain solid or liquid material which may interfere with the integrity or operation of pipes or any gas appliance”.
- We do not measure or monitor mercury levels on the NTS
- Guidance Limit was included in 2020 due to queries received as to what a ‘negligible’ level was and what we would accept on the NTS:
 - $10\mu\text{g}/\text{m}^3$ is typically specified for heat exchangers in industrial and power plant
 - Therefore, the guidance limit was set at $10\mu\text{g}/\text{m}^3$ and published in the GTYS as a means to capture and share with industry
- We received an enquiry from an upstream operator if we would accept mercury levels above the maximum GTYS guidance limit of $10\mu\text{g}/\text{m}^3$, possibly up to $20\mu\text{g}/\text{m}^3$

Background Cont.

- A short survey was carried out with industry last year. We asked whether mercury content in natural gas presents any risks and the impact of increasing the limit would have on customers' operations
 - Survey results indicated a mixed response, confusion around the limit, and concerns around safety and equipment at the current level

- Sampling undertaken in 2022:

Points Sampled	Location	Result
23	Easington/Bacton/St. Fergus/Teesside/Lupton/Newton Noyes	<0.1µg/m ³

- Further survey was carried out May 2023 to determine what impact lowering the mercury guidance limit would have on customers' operations
 - Survey results indicated a clear divide

Survey Results

Greater clarity around current limit and background

Key themes

Environmental Poison and as such an unwanted component

Support of a reduction

Power reporting assumption

Strategic long-term decisions have been made based on the current limits

Support to remain as-is

Requests for Mercury monitoring on the NTS and regular reporting

Concerns regarding equipment at current level

Potentially unattractive for new fields

If mercury limit were to reduce, this would potentially increase costs

Rationale for Decision

- The guidance level of $10\mu/m^3$ meets our obligations in terms of GS(M)R - the gas we transport “shall not contain solid or liquid material which may interfere with the integrity or operation of pipes or any gas appliance”
 - We consider this to be a safe level in terms of metal networks and combustion components
 - Consistent with mercury limit in DNs
 - Lower than specified ‘safe’ exposure limit (EU indicative occupational exposure limit $20\mu/m^3$)
- Security of Supply
- Currently, we do not have mercury monitoring equipment, so compliance is not measurable

Future Assessment

- **Further Sampling.** Further sampling (to include mercury) is scheduled to take place on the NTS over Winter 23
- **Risk Assessment.** We are currently in the process of running a risk assessment via a 3rd party to explore what additional components there may be value in monitoring
 - (This could include mercury, radioactive material and benzene for example)
- **Device Trials.** Following the risk assessment, a desk-top exercise may be carried out to look at appropriate equipment which could provide live measurement readings (which may include mercury). This will be followed by device trials.
- **RIIO3.** If the business decides to go-ahead, we will request funds in RIIO3. Installation would happen at key points on the network, in phases, between 2027-31
 - More information to follow on how you can feed into this.

A further update on the above can be provided early next year

General Updates

Nicola Lond
Operational Liaison & Business Delivery Manager

Emergency Exercise Everest

Exercise Everest is the 2023 NEC Industry Exercise.

Across three days on 3rd, 4th and 5th October 2023

The Industry Briefing Note for this year's exercise - featuring scope, participants, aim and objectives - is available online.

[Network Gas Supply Emergencies \(NGSE\) | National Gas](#)

Questions? Contact: gasops.emergencyplanning@nationalgas.com





Demand Side Response (DSR) Update

September 2023 Operational Forum



Update

- DSR Invitation to Offer closed on 15th September 2023 where we invited Shippers and Consumers to offer a demand reduction in return for payment
- NGT have 10 business days to assess the Offers (29/09/23), if we wish to exceed £36m of aggregation Option fees we need to refer it to Ofgem where they can veto the offers which exceed £36m
 - By referring to Ofgem, an additional 10 business days is added to the assessment stage.
- Conducted a [Lessons Learnt](#) session with the industry at the September 2023 Transmission Workgroup where we shared some reflections on the reforms that have been introduced and the process we went through.
 - Any additional feedback is welcome
- Relaunching the UNC Request Group 0835 to discuss the priorities for the next DSR reforms ahead of Winter 2024/25. Discussions will start at the [October 2023 Transmission Workgroup](#) and we are also engaging with Consumers directly.
- Planning to attend the October 2023 Ops Forum to provide an update on the outcome of the DSR Invitation to Offer.

DSR Invitation to Offer (Tender) Timeline

DSR Tender Process	Key Dates	Aug-23	Sep-23	Oct-23	Nov-23
Ofgem decisions on 0844, 0845, DSR methodology changes and Licence derogations	04-Aug-23	★			
NGT preparation of tender documentation & assessment tool		→			
NGT internal procedure development, working with Xoserve and ICE Endex		→	→		
Pre-tender market communication and timetable published	15-Aug-23	★			
DSR Options tender documentation published*	24-Aug-23	★			
Tender period (15 bus days)		→	→		
Tender period closes (17:00)	15-Sep-23		★		
NGT evaluation period (10 bus days)			→		
Notify tendering parties of outcomes**	29-Sep-23			★	
Publish tender outcome (quantities and prices, anonymised)	06-Oct-23			★	
DSR options available for exercise (01 Nov 2023 to 30 Apr 2024)	01-Nov-23				★ →
* Target date, could be a little later which would push subsequent dates back.					
** Plus potentially a 10 day reference to Ofgem depending on aggregate option fees.					



Gemini Sustain Plus – Focus Group

Monday 25th September
13:00 – 15:00

In partnership with





Objectives of Focus Group

To provide an overview and details on the specifics around the changes to the Gemini system and the impacts to interested parties

Both a technical and operational perspective.

Who should attend?

It would be to the advantage of managers, technical support, and individual users of the Gemini system to attend to ensure the earliest possible visibility and engagement of the new system and processes. We hope you can join us, meeting details included.

Further details about Gemini Sustain Plus can be found at [Gemini Sustain Plus \(xoserve.com\)](https://xoserve.com)

A launch video can be accessed via [this link](#)

Microsoft Teams meeting

**Join on your computer,
mobile app or room device**

[Click here to join the meeting](#)

Meeting ID: 392 901 197 650

Passcode: UcpjVA

[Download Teams](#) | [Join on the web](#)

[Learn More](#) | [Meeting options](#)

EDSS Outage – Oct/Nov 2023

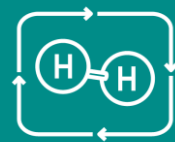


Any queries please contact:

Scott Keogh, Product Owner, GSO, National Gas at:
box.GSO.SYSTEMCHANGE@nationalgrid.com

FutureGrid

Phase 1 Facility



Offline hydrogen test facility

Testing Progress

Each hydrogen concentration is being tested in the facility for 4 weeks, operating at seven different flow rates in order to generate conditions seen on the NTS. The outputs from the testing will form a key part of National Gas' safety case for safely transporting hydrogen in the existing network.



Facility Commissioning

100% Natural Gas Testing

2% Hydrogen Testing

5% Hydrogen Testing

20% Hydrogen Testing

100% Hydrogen Testing

FutureGrid Testing Outputs

FutureGrid Control Centre

FutureGrid Safety bulletin

2%

hydrogen in natural gas

The first hydrogen blend that will flow through the FutureGrid facility will be 2% mixed with 98% natural gas. This is due to the market foreseeing the introduction of smaller scale blends while production begins to scale up. This creates demand for hydrogen produced and enables changes to Gas Safety (Management) Regulations, known as GS(M)R, to be made which allows blending on the NTS.

Offline test facility key stats



Facility constructed from 18 inch X60 pipeline



Range of representative NTS assets included



Seven different flow rates: 3 low and 4 high flow



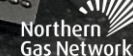
Each test is conducted for 4 weeks in total



FutureGrid@nationalgas.com



nationalgas.com/FutureGrid



national gas

Feedback

Nicola Lond

Operational Liaison & Business Delivery Manager

SLIDO Poll

#OPSFORUM

“What topics would you like to see covered in these Operational Forums”

The poll will be live for 1 day.

How to contact us

Operational Liaison Team

Note our email addresses are transitioning to nationalgas.com

- Nicola Lond: Nicola.j.lond@nationalgas.com
Team Manager (covering Rachel Hinsley maternity leave to 31st Dec 2023)
- Craig Shipley: Craig.Shipley@nationalgas.com
- Charlotte Gillan: Charlotte.gillan@nationalgas.com
- Operational Liaison Email: Box.OperationalLiaison@nationalgrid.com
- Please Note: Mat Currell has left the team for a new role in ESO

If you have any Operational enquiries or would like a liaison meeting please get in touch.

For the National Gas Website, please visit;
[Gas Transmission | National Gas](#)



2023 Operational Forums

The forums will be hybrid via Microsoft Teams and at the Clermont Hotel, London

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Clermont & Online	Clermont & Online	Clermont & Online	X	Clermont & Online	Clermont & Online	X	X	Clermont & Online	Clermont & Online	Clermont & Online	X
26/01	23/02	23/03		18/05	22/06			21/09	19/10 WINTER FOCUS	23/11	

We welcome your views - What do you want to hear about?

Registration is open for the October event at:

In Person: <https://www.eventbrite.co.uk/e/gas-operational-forum-october-in-person-tickets-704503678467?aff=oddtcreator>

Online: <https://www.eventbrite.co.uk/e/gas-operational-forum-october-online-tickets-704506055577?aff=oddtcreator>

The Clermont Hotel
Charing Cross
London
WC2N 5HX

AOB & Questions?

Thank you





national gas transmission

Key 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.

Activity	Link
Registration for Gas Ops Forums and Gas Ops Forum materials	www.nationalgas.com/data-and-operations/operational-forum
Subscription to distribution list	Please email: box.operationalliasion@nationalgrid.com
National Gas Transmission Website	www.nationalgas.com
Maintenance Planning	www.nationalgas.com/data-and-operations/maintenance

Britain's Gas Explained

April 2023

 national gas
transmission

The monthly Britain's Gas Explained information is on LinkedIn; this is information showing the key role Gas plays that is easy to digest for all; especially end consumers

Modernising energy networks data

We're modernising data from the energy networks, bringing together gas and electricity networks to address data issues, access new datasets and identify opportunities in existing datasets.

The Energy Data Request Tool to request the publication of any data is available here: [Microsoft Forms Link](#)