SLIDO – Interaction Tool

nationalgrid

Gas Operational Forum – October 2017

Log on wifi Open Network:

RadissonBlu

Please ensure you register at the table at the back of the room

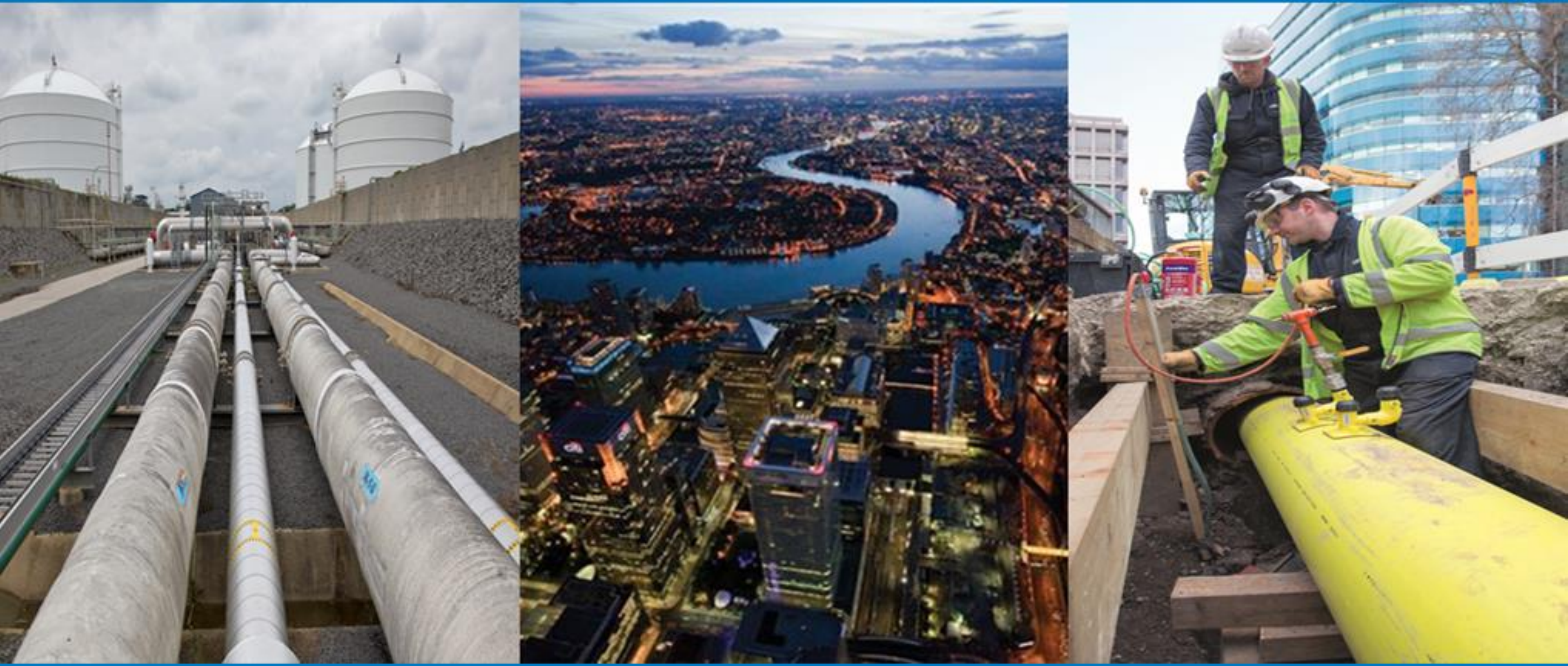
Join at Slido.com

Please ensure you register at the table at the back of the room

#gasoct

slı.do

Gas Operational Forum



19th October 2017 09:30AM

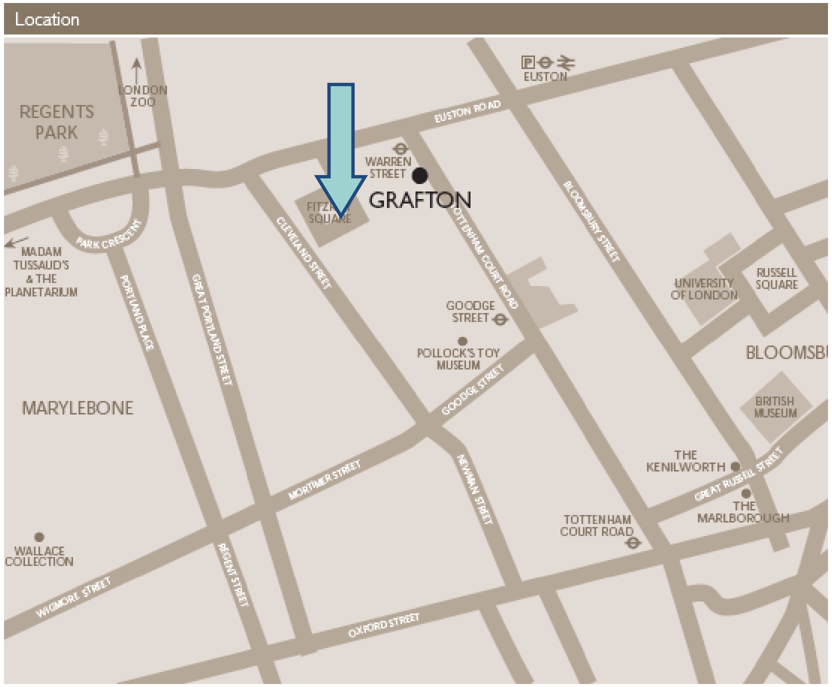
Radisson Blu Hotel, 130 Tottenham Court Road, London

Health & Safety Brief

No fire alarm testing is planned for today.

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

At the rear of the hotel by Fitzroy Court



Agenda

- 09:30 - **Previous Ops Forum Actions**
- 09:35 - **Operational Overview**
  - Supply Breakdown
  - Demand Breakdown
- 09:45 – **Winter Outlook Report**
- 09:55 – **Future Energy Scenario Framework**
- 10:00 - **UNC Modifications/Topics from Transmission Work Group**
- 10:10 - **Reviewing Communication Process**
- 10:15 – **Change Programme (GB REMIT, MIPI DR TEST, MIPI STATISTICS)**
- 10:30 – Break
- 10:45 – **Customer & Stakeholder Feedback**
- 11:15 – **AOB**
- 11:30 **- Close**

Actions From Previous Forums

Discussion Topic	Action	Due Date
Gas Quality Consultation	NG to provide details of next Gas Quality Consultation and summarise covered content.	October Ops Forum
Operational Overview	Following discussion, it was agreed that NG would seek to re-categorise the storage figures as these are currently presented in a number of slides as one category (MRS & LRS combined).	October Ops Forum
Update on UIG	NG to explore recent re-nomination behaviour and update industry at a future Operational Forum.	October/November
Xoserve Service Desk	Following session NG has promised to collate all feedback provided during the session and update customers at next Operational Forum.	November Ops Forum

ACTION Update: Re-nominations

ACTION: NG to explore recent re-nomination behaviour and update industry

National Grid maintain an overview of shipper behaviour and take action when this leads to inefficiency in the market, actions range from formal letters to ad hoc phone calls.

Examples of recent behaviour monitoring undertaken:

- Monitoring and contacting shipper’s at non-IP’s to challenge behaviour with regard to NIFR.
- Ongoing discussions with DN’s regarding accuracy of NDMA forecast.

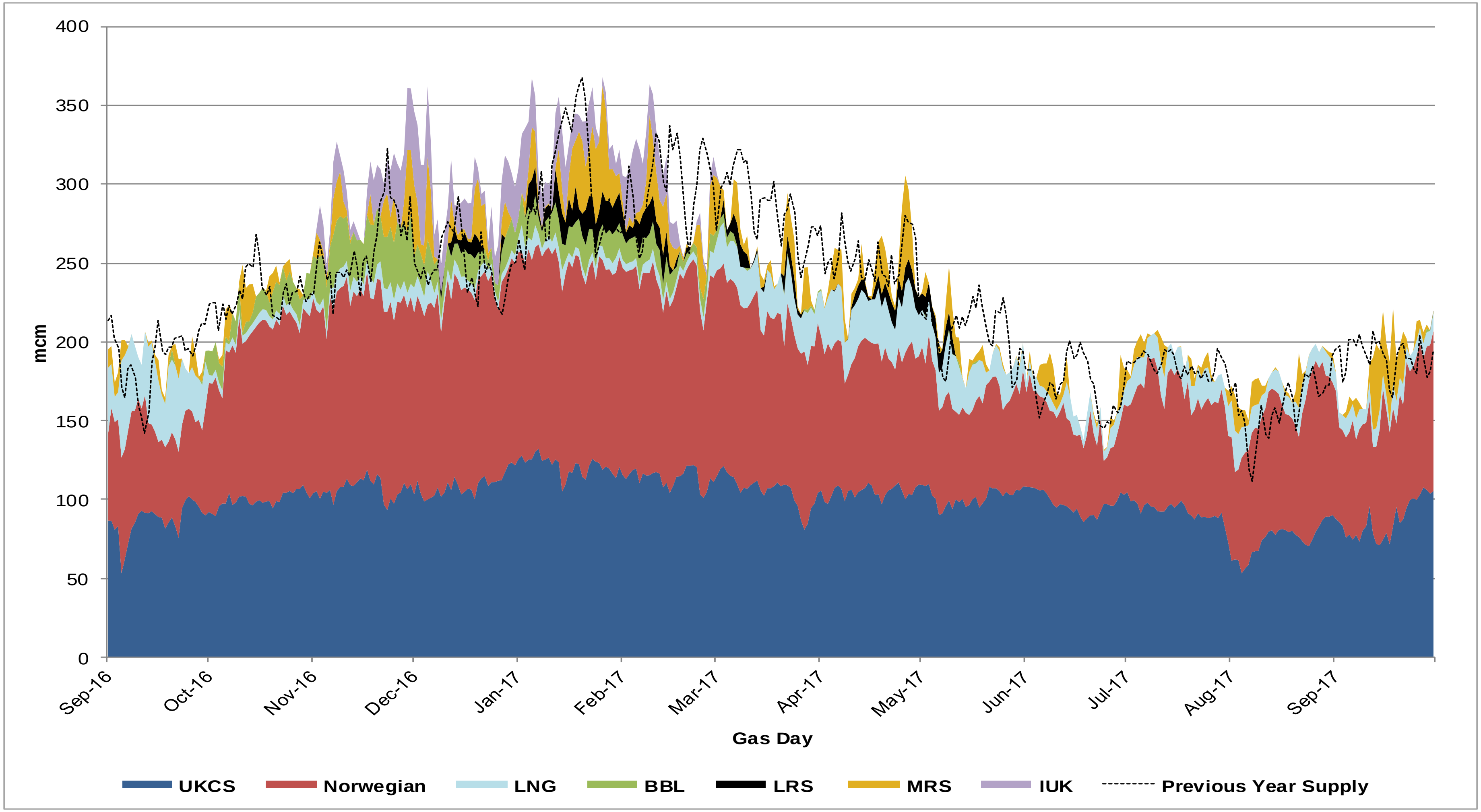
In light of concerns on re-nominations NG have reinstated the functionality for NIFR at Bacton IP’s and will continue to develop our monitoring of the wider nominations area; we welcome feedback regarding improvements you’d like to see.

A more detailed update will be provided at the January Ops Forum in line with feedback received.

Operational Overview

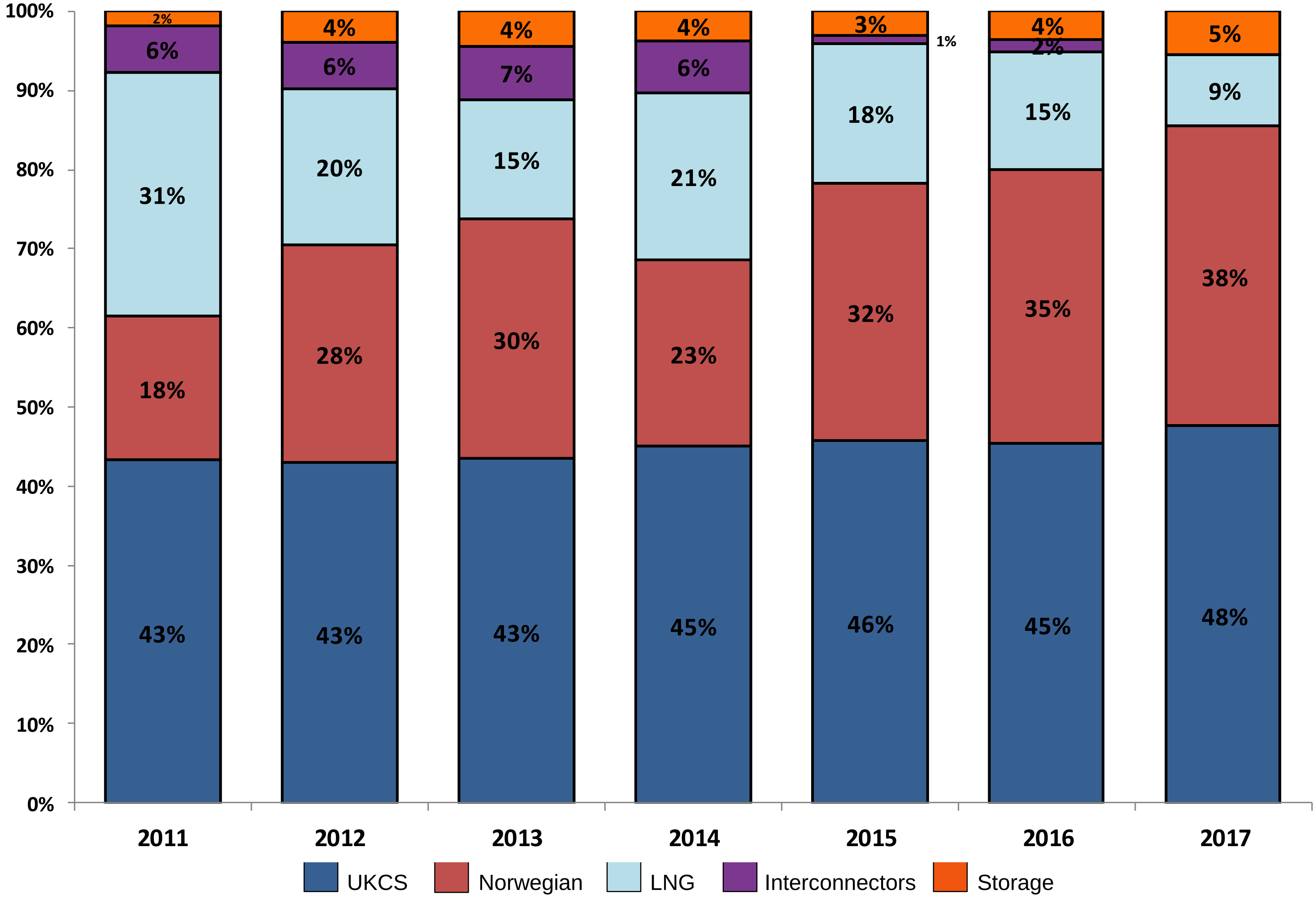
Operational Forum – October 2017
Karen Thompson

Gas Supply Breakdown
1st August 2016 to 30th September 2017 vs Previous Year



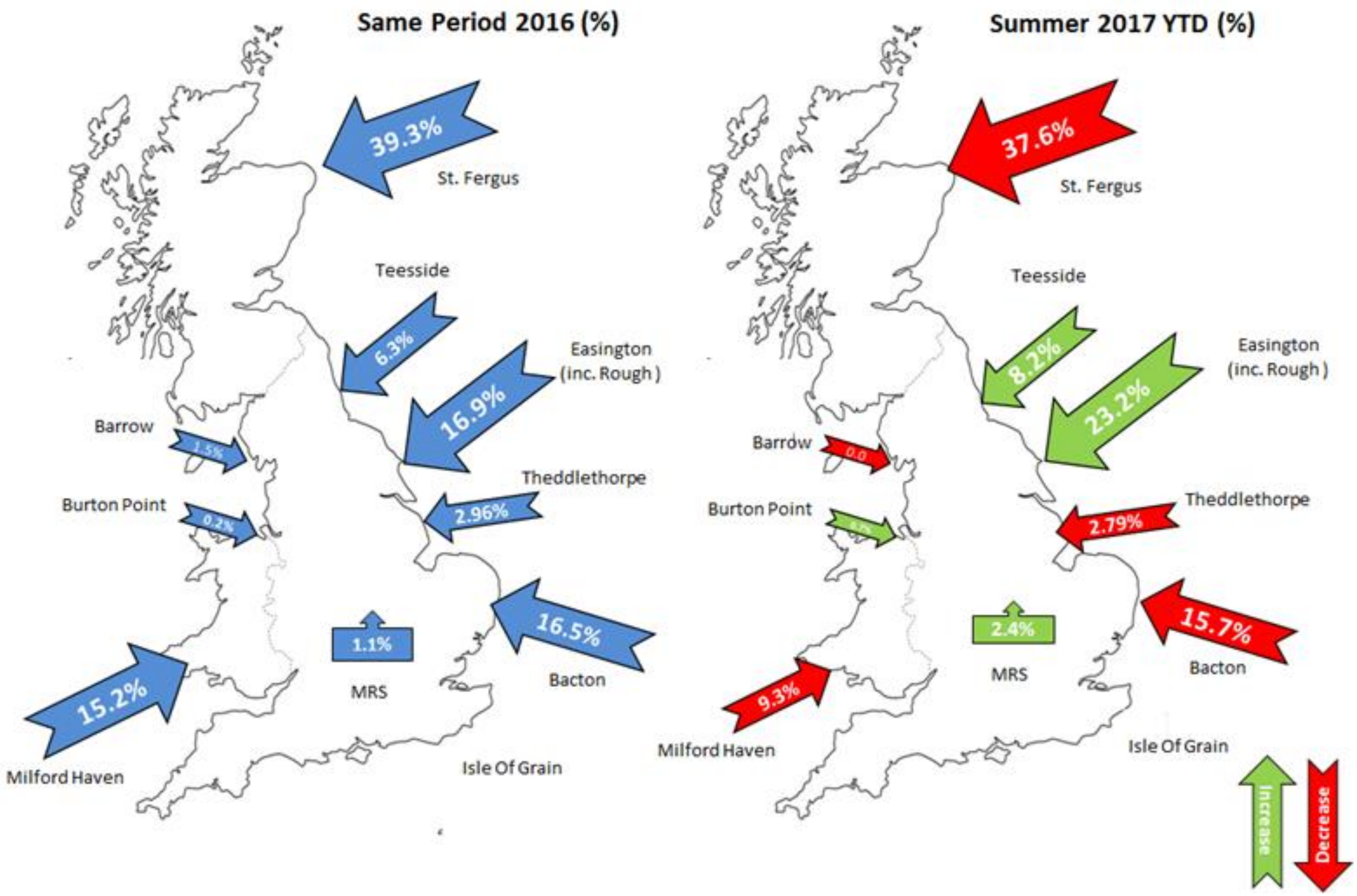
Gas Supply Breakdown

1st April 2017 to 30th September 2017 vs same period over the previous 6 years



Gas Supply Map

1st April 2017 to 30th September 2017 vs Same Period Last Year



NTS Supply Summer (mcm): 1st April 2017 to 30th September 2017

Entry	Min	Max	Avg	Summer Actual Range Apr 2016 - Sep 2016
UKCS	53.1	110.7	92.8	45- 107
NORWAY est*	27.2	108.5	73.8	44 - 111
INTERCONNECTORS BBL	0.0	2.5	0.1	0 - 23
INTERCONNECTORS IUK	0.0	0.0	0.0	0 - 5
LNG	5.0	43.7	17.7	5 - 62
	0.0	68.8	10.5	0 - 39

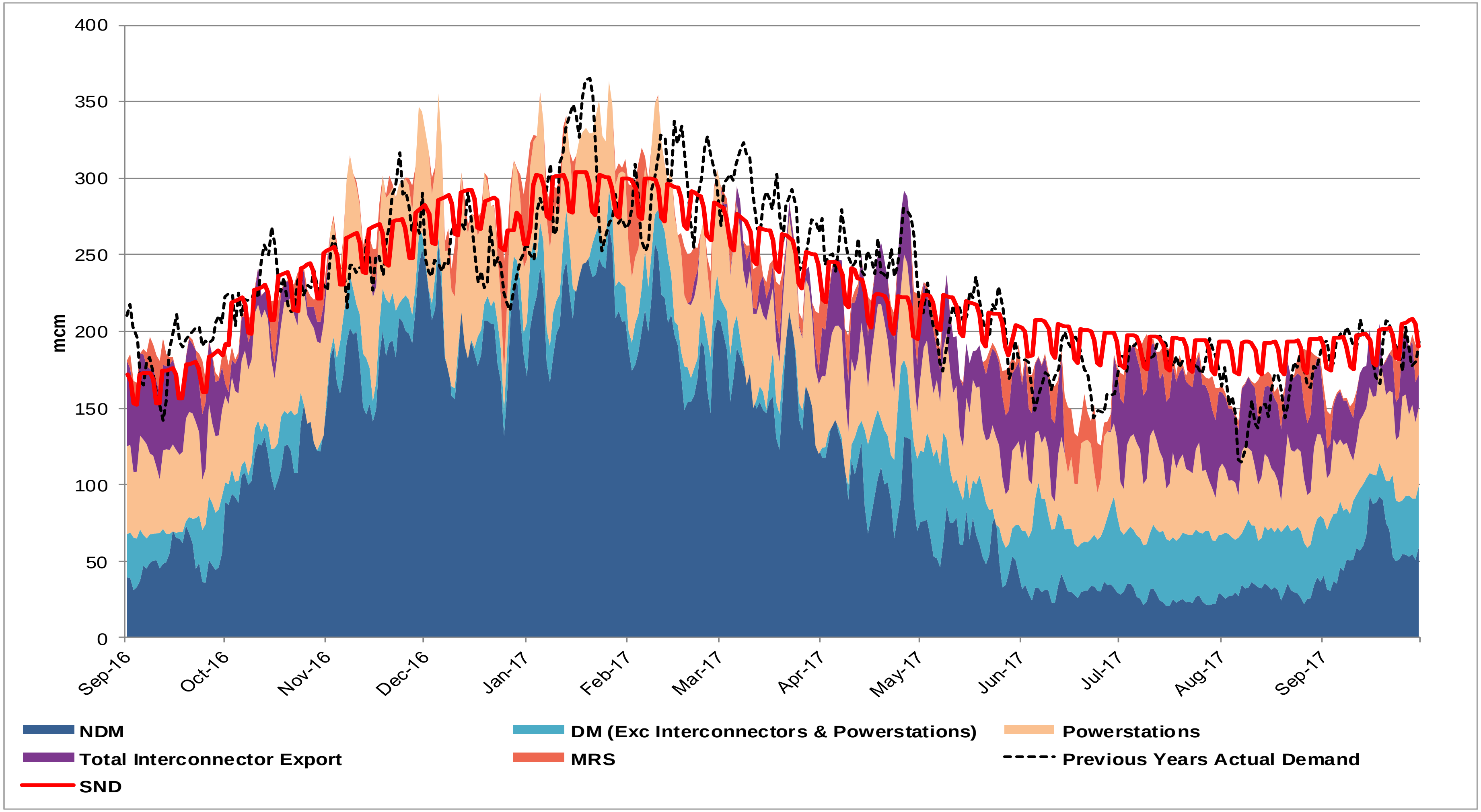
Comments

- Easington Terminal has increased from an average flow of 31.26mcm/d in the period Apr to 30th Sept 2016 to an average flow of 42.60mcm in Apr to 30th Sept 2017. This increase has been due to an increase in Norwegian continental shelf flows via Langeled.
- LNG average flow 17.76mcm/d in the period Apr to 30th Sept 2017 compared to 29.04mcm/d in the same period last year; this relates to increased competition in the LNG market, and therefore a reduction in cargos seen to the UK which drove lower flows.
- Bacton Interconnector average Imports <1mcm/d in the period Apr to 30th Sept 2017 compared to 3.0mcm/d in the period Apr to 30th Sept 2017 . Minimal BBL imports were seen during the 2017 period.
- Barrow Terminal has been on outage since mid February.

Entry	Min	Max	Avg
Actual Supply	131.4	305.6	194.9
Actual Supply Exc. Storage	130.6	240.7	184.5

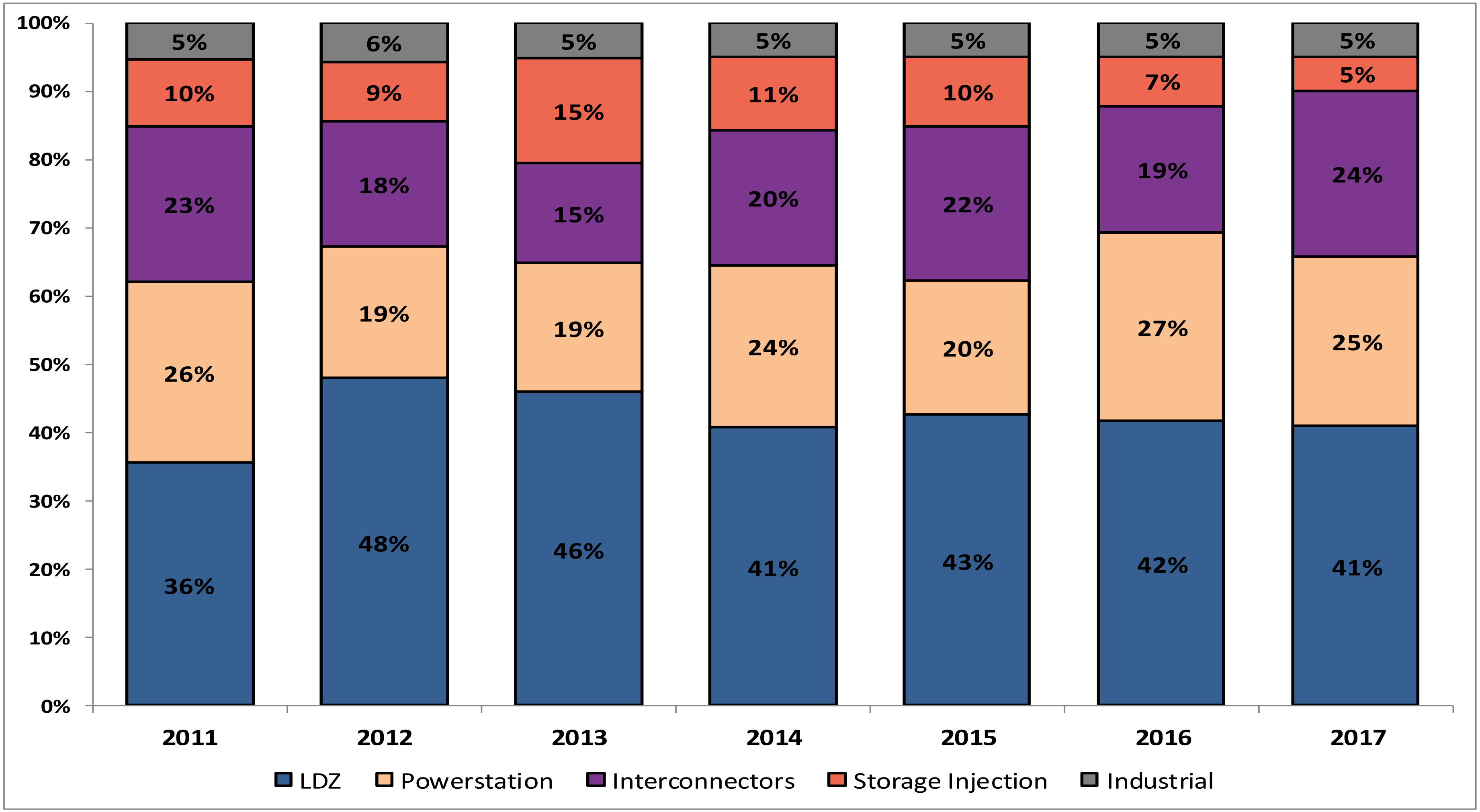
Gas Demand Breakdown

1st August 2016 to 30th September 2017 vs Previous Year



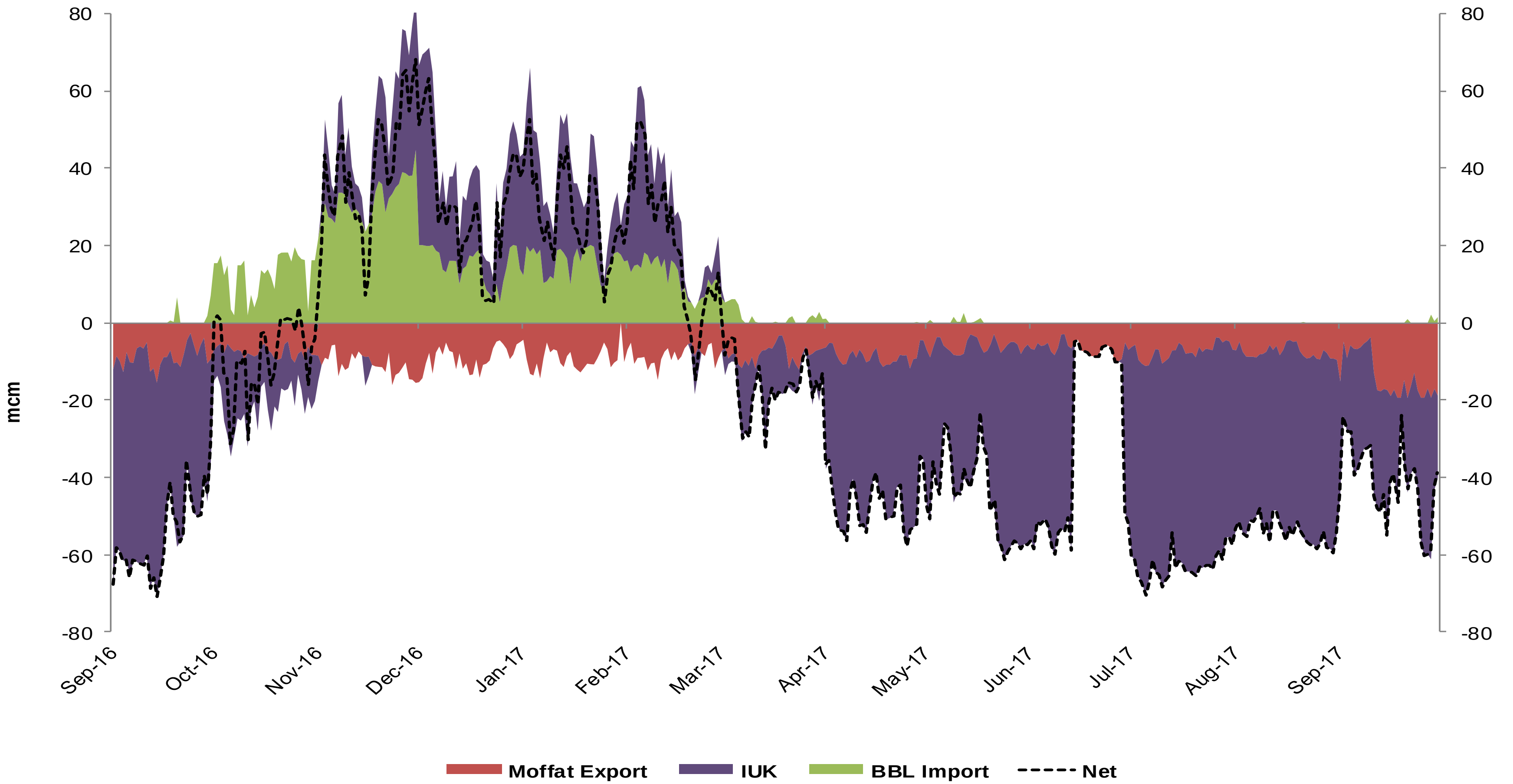
Gas Demand Breakdown

1st April 2017 to 30th September 2017 vs same period over the previous 6 years



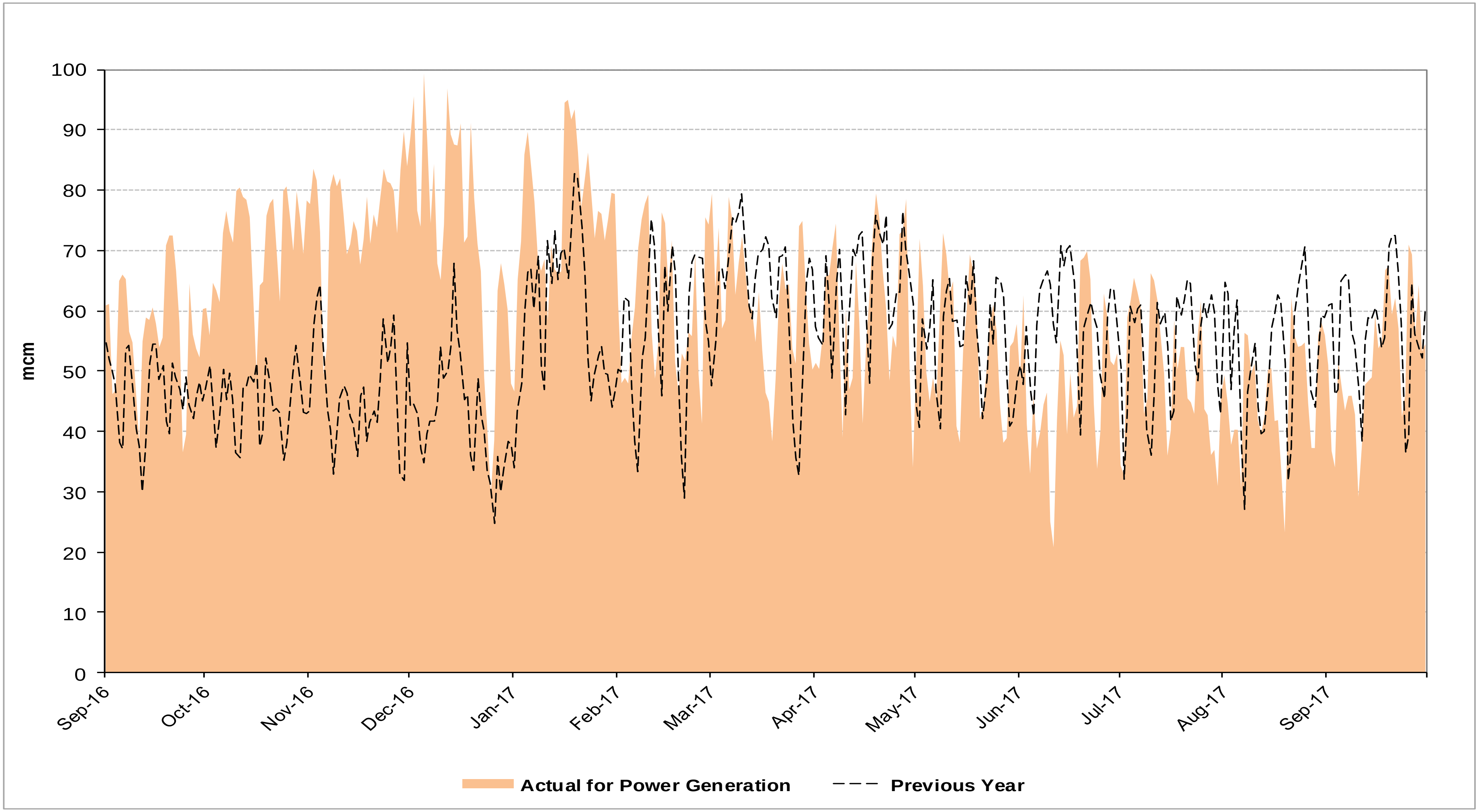
Gas Supply / Demand Interconnectors

1st September 2016 to 30th September 2017



Gas Consumption for Power Generation

1st September 2016 to 30th September 2017 vs Same Period Last Year



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NTS Demand Summer (mcm): 1st April 2017 to 30th September 2017

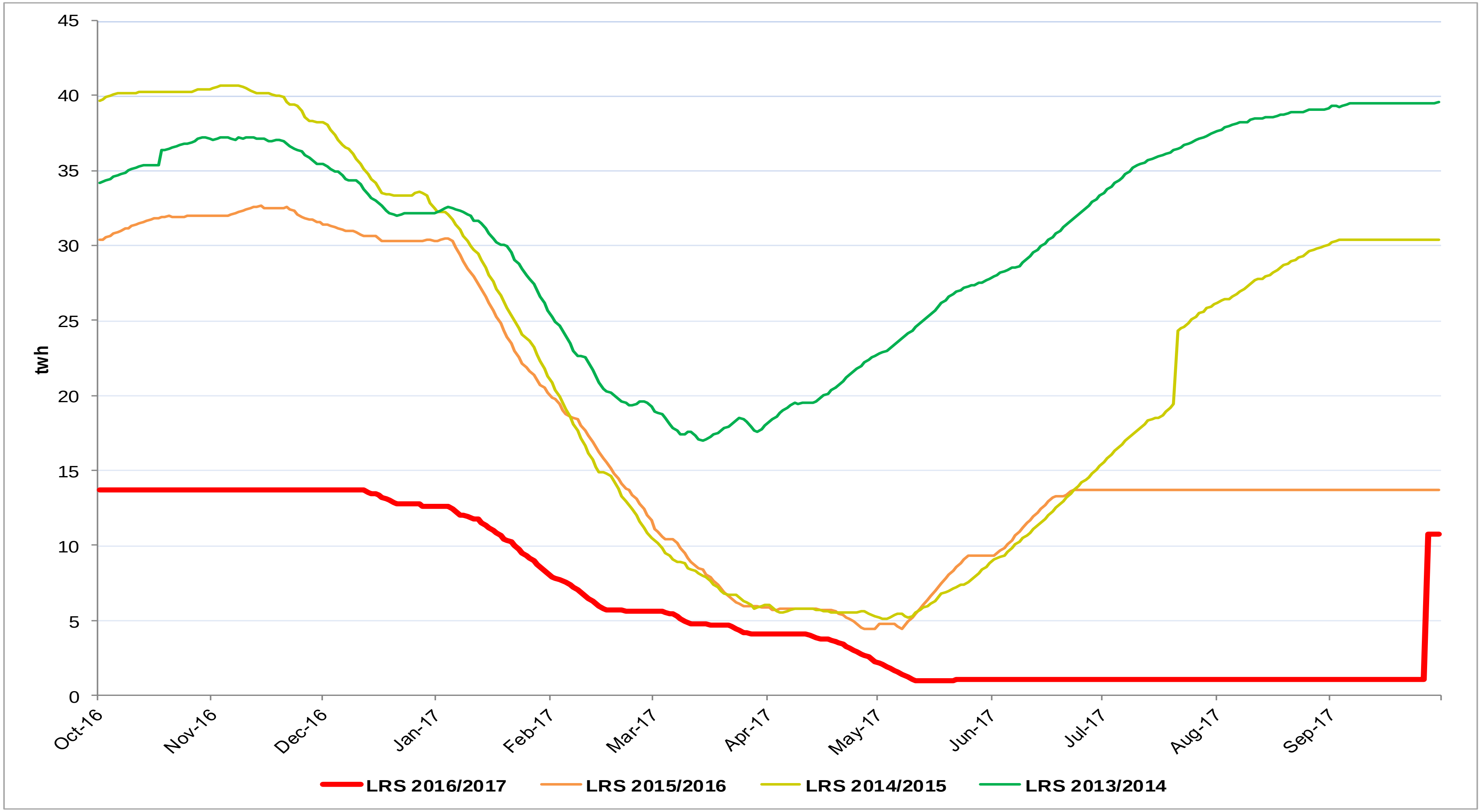
Exit	Min	Max	Avg	Summer Outlook Range Apr 2017 - Sep 2017	Summer Actual Range Apr 2016 - Sep 2016
LDZ	49.1	171.6	79.8	32 - 140 (NDM)	47- 183
INTERCONNECTORS Ireland	2.9	19.4	8.4	7 - 9	2 - 16
INDUSTRIAL	7.4	13.0	9.4	18 - 26 (DM + Ind)	6- 15 (DM + Ind)
POWERSTATION	17.8	75.6	48.4	8 - 81	24 - 72
STORAGE INJECTION	0.0	47.2	9.9	7 - 9	0 - 66
INTERCONNECTORS IUK	0	59.3	38.7	0 - 46	0 - 56

Comments

- IUK Exports during the period April - 30th Sept 2017 are significantly larger than the same period last year (average 38.7mcm/d vs 28mcm/d). We believe this is due to Rough storage facility being unavailable meaning supply volumes have been diverted to IUK exports.
- There has been more volatility in Powerstation demand during the period April - 30th Sept 2017 than the same period in 2016, resulting in a lower min and a higher max demand. We believe this is due to both the increase in renewable generation sources and reduction in coal generation sources meaning gas is the primary flexible generation source.

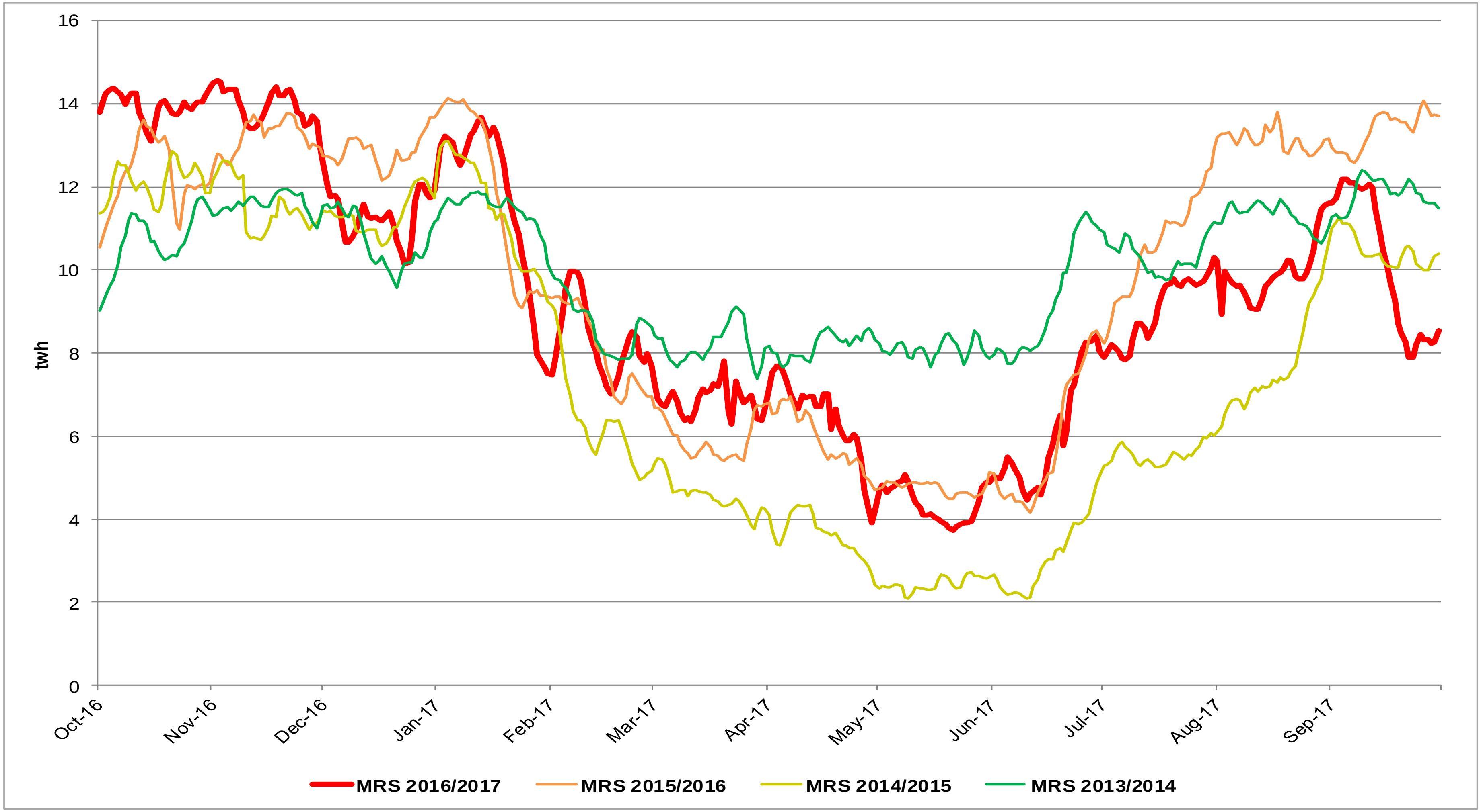
Exit	Min	Max	Avg	2017 Summer Outlook Range
Demand exc. IUK & SI	91.9	262.1	146.0	76 - 241
SND exc. IUK & SI	100.0	236.0	144.0	

Storage Stocks: LRS
Position as at 30th September 2017



Storage Stocks: MRS

Position as at 30th September 2017



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Capacity Neutrality: 1st April 2017 to 30th September 2017

Revenue / Costs	Apr 17 to Sep 17	Apr 16 Sep 16	Comments
WDDSEC/DAI Entry Capacity Revenue	-£421,512	-£339,811	* Entry Capacity Overrun Revenue data not yet available for September 2017
Total Entry Constraint Management Operational Costs	£293,495	£0	
Entry Capacity Overrun Revenue	-£1,469,424*	-£521,054	
Non-Obligated Sales Revenue (Entry only)	-£1,287	-£2,624	
Revenue from Locational Sells and PRI Charges	£0	£0	
Net Revenue	-£1,598,728	-£866,489	

APX Market Prices (p/th)
Min / Max

	SAP	SMPB	SMPS
Apr 17 to Sep 17	26.1 - 49.3	27.3 - 50.4	24.9 - 48.1
Apr 16 to Sep16	21.0 - 37.7	22.2 - 39.0	19.9 - 36.6

Net Balancing Costs

	Imbalance	Scheduling	OCM	Net
April 2017 to Aug 2017	£15,158,315 (CR)	£1,714,887 (CR)	£9,574,369 (DB)	£7,298,832 (CR)

Energy Balancing: 1st April 2017 to 30th September 2017

NGG Balancing Actions	Apr 17 to Sep 17	Apr 16 to Sep 16	Comments
Buy Actions	83 (84%)	23 (33%)	• **Buy actions remain significantly higher than Sell actions in FY 2017; this being at disparity to FY 2016 where Sell Actions exceeded Buy Actions.** • **There have been 16 Sell actions so far in Summer 2017 [Apr: 14, May: 2].** • **There have been 83 Buy actions so far in Summer 2017 [Apr: 2, May: 2, June: 17, July: 16, Aug: 23, Sep: 23].**
Sell Actions	16 (16%)	47 (67%)	
Buy Actions [Volume: Gwh]	1495	433	
Sell Actions [Volume: Gwh]	-377	-970	
Number of Balancing Actions	99	70	
NGG set Default Marginal Prices [SMPB: Average %]	10%	5%	
NGG set Default Marginal Prices [SMPS: Average %]	1%	6%	

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Winter Outlook Report

Operational Forum – October 2017

Karen Thompson

Winter Outlook Report 2017/18 Headlines G&E

- First delivery year of the Capacity Market
- The electricity margin has increased compared to last year – De-rated margin 10.3% (6.2GW) Underlying basis
- Diverse and flexible sources of gas supply to meet demand
- Gas demand will be slightly lower than forecast last year

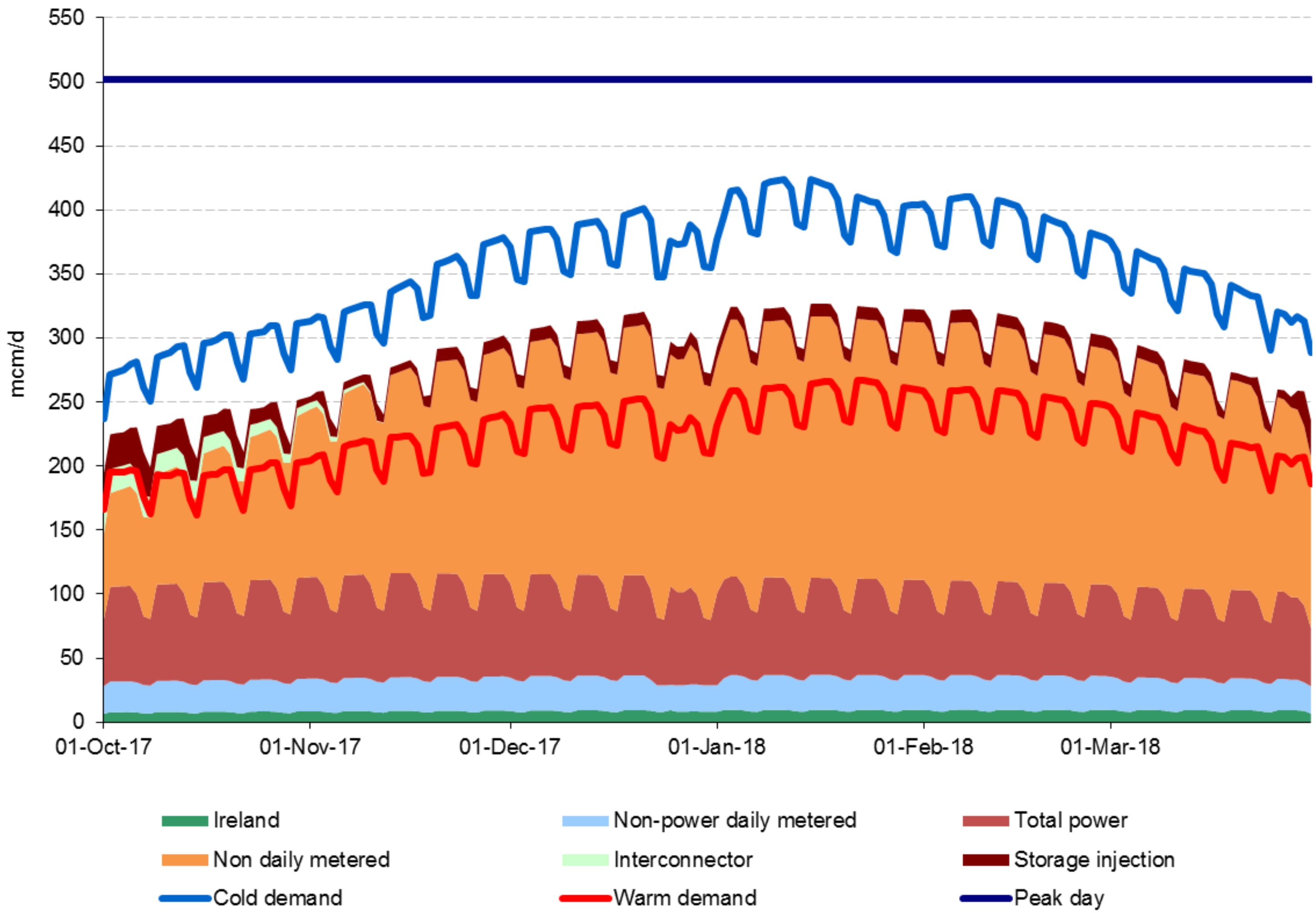
Gas Outlook

Operational Forum – October 2017
Karen Thompson

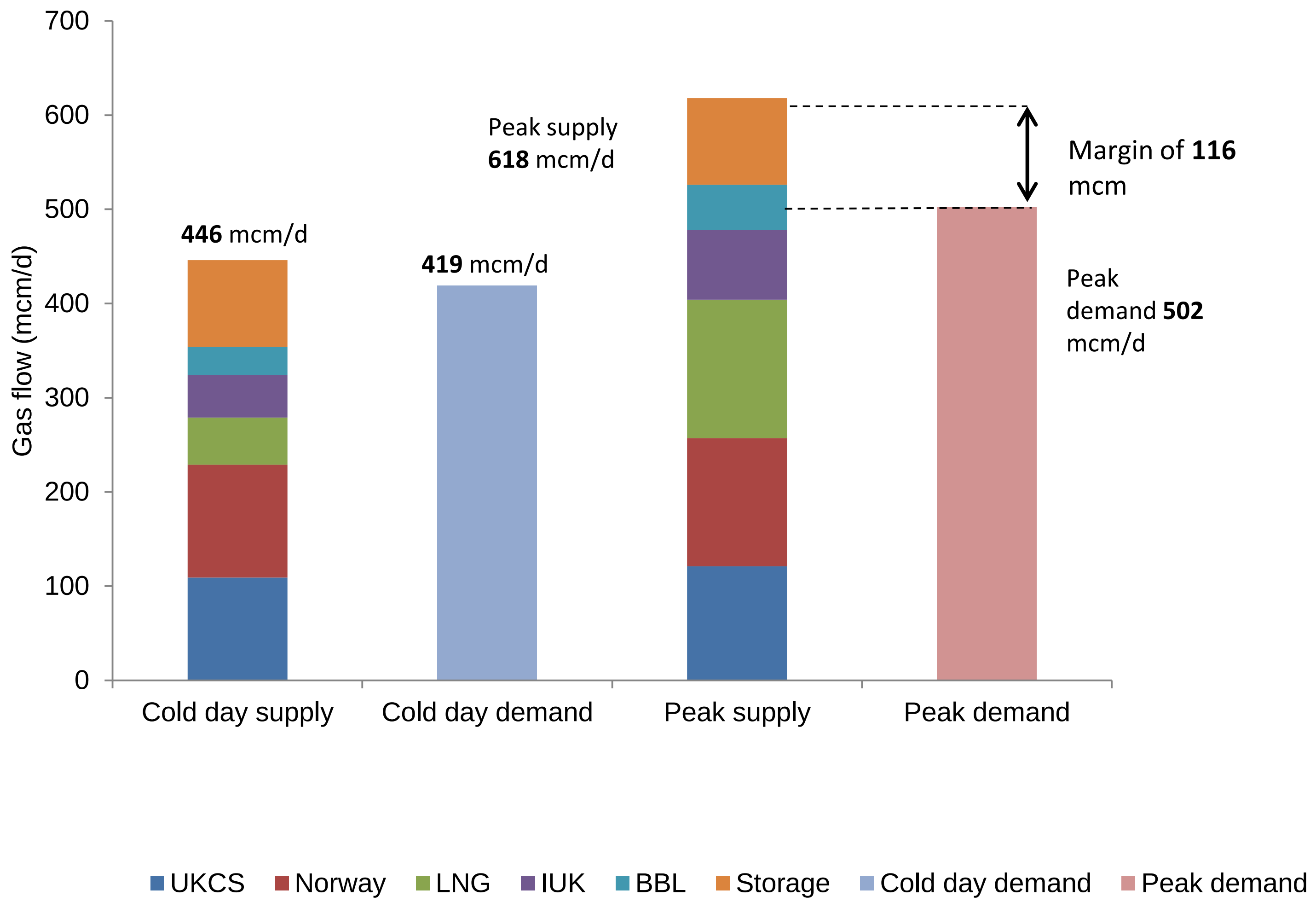
Gas key messages

- Demand is expected to be lower than winter 2016/17
- Demand for electricity generation is expected to be high but lower than last year's actual
- Sufficient diverse and flexible supplies of gas to meet demand
- Beach supplies continue to be stable

Gas demand is expected to be lower than last year



Sufficient gas supply is available to meet demand



Storage

Long-range storage

- Return of storage withdrawal capability from Rough.
- In the process of transferring from storage facility to production facility.
- Intention is to produce all recoverable cushion gas.
- We forecast withdrawals to last from early October through until the end of January.

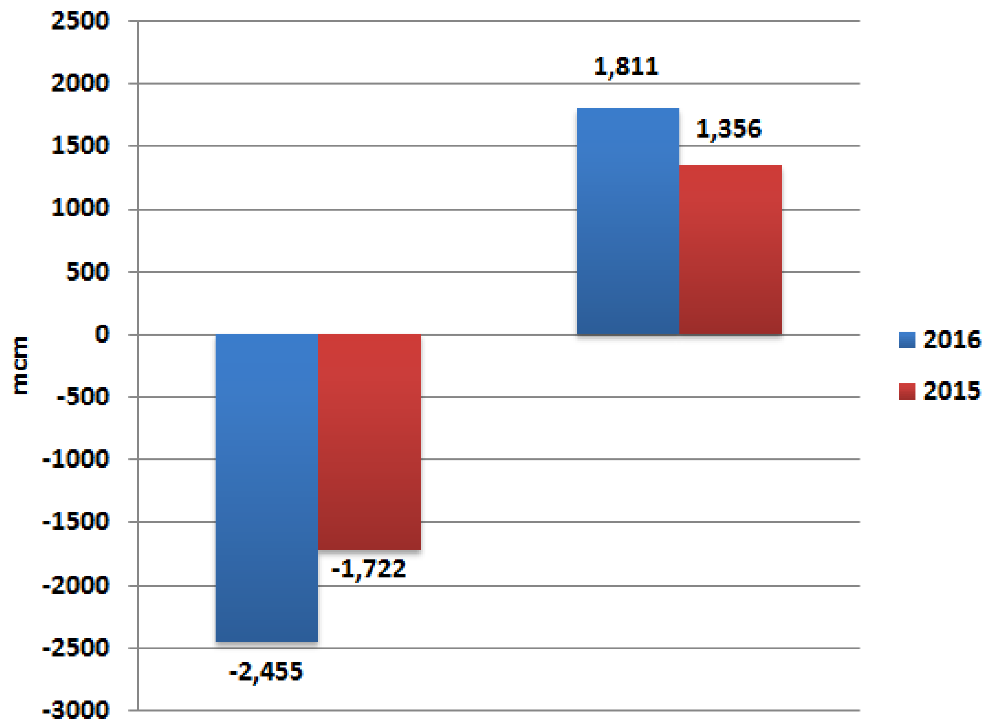
Medium-range storage

- Supplies from MRS are dynamic rather than seasonal ranging from no flow to maximum flow, from all facilities, at times of high gas demand or price.
- Facilities are capable of being constantly replenished to ensure maximum supplies throughout periods of high demand.
- Last winter MRS responded well to market conditions providing flexibility in response to restrictions at the long-term storage facility, Rough.

Medium-Range Storage

- In any winter, non-beach supplies are expected to show the greatest variability and flexibility of all of the supply sources.
- This versatility was predominantly demonstrated by MRS for last winter.

Injection and withdrawal volumes (mcm)



Continuing the Conversation

- You can find the *Winter Outlook Report* using the following link: http://www2.nationalgrid.com/UK/Industry-information/Future-of-Energy/FES/Winter-Outlook/
- Join our mailing list to receive email updates on our Future of Energy documents.
  http://www.nationalgrid.com/updates
- Email us with your views on the *Winter Outlook Report* at marketoutlook@nationalgrid.com and we will get in touch.
- Keep up to date on key issues relating to National Grid via our Connecting website: www.nationalgridconnecting.com
- Or alternatively you can write to us at:
  Future Outlook team
  System Operator
  National Grid House
  Warwick Technology Park
  Gallows Hill
  Warwick
  CV34 6DA

Safety Monitors

Operational Forum – October 2017
Karen Thompson

Safety Monitor Overview

The focus of the Safety Monitor is public safety rather than security of supply

Customers who <u>cannot</u> be isolated

'protected by monitor'

'keep supplied'

Customers who <u>can</u> be isolated

'protected by isolation'

'isolate safely'

SAFETY MONITOR

SPACE
and
DELIVERABILITY

Please provide any feedback to Toby Thornton – NTS Access Planning Manager (toby.thornton@nationalgrid.com)

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UNC Modifications/Topics from Transmission Work Group

Operational Forum – October 2017
Karen Thompson

UNC Modification 0607S

- Mod 0607S proposes to increase the CO_2 limit at the NSMP NTS entry point at St Fergus from 4% to 5.5%
- - It also contains a provision for National Grid to review this increased limit in the event of similar requests being made
- - Originally assessed as self-governance, an Ofgem decision is now proposed
- - The workgroup report has been completed
- - The Modification Panel meets on Thursday 19th October to decide whether to issue it for consultation

  - The Modification Panel are due to meet on Thursday 19th October to decide whether to issue as a consultation.

- Further information may be found at: http://www.gasgovernance.co.uk/0607

UNC Modification 0621

- UNC Modification 0621 raised in June 2017 proposes changes to the gas transportation methodology and delivering compliance with EU Tariffs Code for 2019.
- Proposing change to the calculation method for Entry & Exit capacity charges and the additional charges in the methodology delivering substantive change to the methodology. This is to deliver changes to the Gas Transportation Charging Methodology for improvements over the current framework and also deliver compliance with EU Tariffs Code.
- Engagement with industry via NTSCMF, Tx Workgroup and separate Gas Charging review sub-groups continuing. Updated Mod to be published ahead of and discussed at NTSCMF on 25th October.
- Expecting to deliver updated mod in October and workgroup report for January 18 as per UNC Panel timescales.

National Grid Gas Quality Consultation

- National Grid has published a gas quality consultation via ENA and at http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/gas-quality/
- Industry views are sought on:
  - Processes for agreeing gas quality limits at NTS entry points
  - Potential National Grid gas quality services
- The consultation is open until Friday 17 November 2017
- We will report on the results in January 2018
- For further information, please contact philip.hobbins@nationalgrid.com or by phone on 01926 653432

Reviewing Communication Process



Operational Forum – October 2017
John McNamara

Reviewing Communication Process: Initiative 1

- National Grid Gas is seeking to improve electronic communication between the gas community
  - In response to your feedback
  - Provision of Fax is increasingly expensive and difficult to maintain
- Starting with replacing Fax for Notifications followed by Settlements (ATD)
  - Building on current processes and systems
  - Needs to be a secure, accurate and efficient exchange of information
  - A range of methods including email, file transfer and API (web service)

Reviewing Communication Process: Initiative 2

- Some discussions have already taken place and this is a continuation of the process.
- Our ambition is to design a flexible system
  - Incorporate your way of working as much as possible
  - Provide simplified standard proformas and protocols
  - Providing assistance with creating EDSS file types

- Moving towards this aspiration
  - National Grid carried out a survey to customers, based on our contact list
  - Expectations are that this will take some time to implement and will continue to communicate with you on progress.

Reviewing Communication Process: Initiative 3

- This process will require your support in order to succeed
- If you like to contact us for any discussions around the process or to move now to remove the fax process the contact to initiate or for any queries is:
- Email Contact: simon.hill@nationalgrid.com
- Telephone Contact: +44 (0)1926 656 590

GB REMIT

  

Operational Forum – October 2017
John McNamara

GB Remit – Project Closure

- National Grid continues to host a free portal for GB that users are welcome to use for publishing Urgent Market Messages (UMM)
- This is using the latest version of the Schema from ACER
- Site has been live since 29/12/2016 and to date there have been no outages or loss of service
  - Changes implemented since go live to, having listened to our customers:
    - Multi Editing Capability within a company
    - Single UMM XML Uploading
    - UMM Display (Table and CVS Export)
- The Project phase has now closed and is managed as a Business as Usual Process and thank you for all your input.
- Contact mail for Account Set Up / Changes & queries: box.remit@nationalgrid.com

MIPI Disaster Recovery Test Plan

Operational Forum – October 2017
John McNamara

MIPI Disaster Recovery Test Plan

- National Grid plans to carry out a full Data Centre Switch over from our Primary Site to our DR Site for MIPI (including GMRS)
- Current Plan:
  - Move from Primary Site to DR Site on Tuesday 14th November
  - Run on the DR Site for the day of Wednesday 15th November
  - Return to Primary Site from DR Site Thursday 16th November
- The cut over process on Tuesday and Thursday will take place during office hours
  - The exact detail timings of the outage period required is still being worked on and will be published via MIPI News Page in the build up to the day
  - Will also alert you via ANS that we have put out a notice

MIPI Disaster Recovery Test Plan

- During the outage we will go to normal contingency process and GNCC will be publishing data via ANS
- Messages will be sent out to inform you that the process for moving sites is starting
- An ANS Message will go out to confirm we have completed and MIPI is fully available
- National Grid and its Providers will carry out a number of QA checks to try and ensure the System has returned correctly
  - All data will be recovered from during the outage period
  - However if you do see any issues we have not identified please contact us: Box.operationalliaison@nationalgrid.com
- Be aware that the Web Tier may be up accessible but may not be getting any Data Refresh

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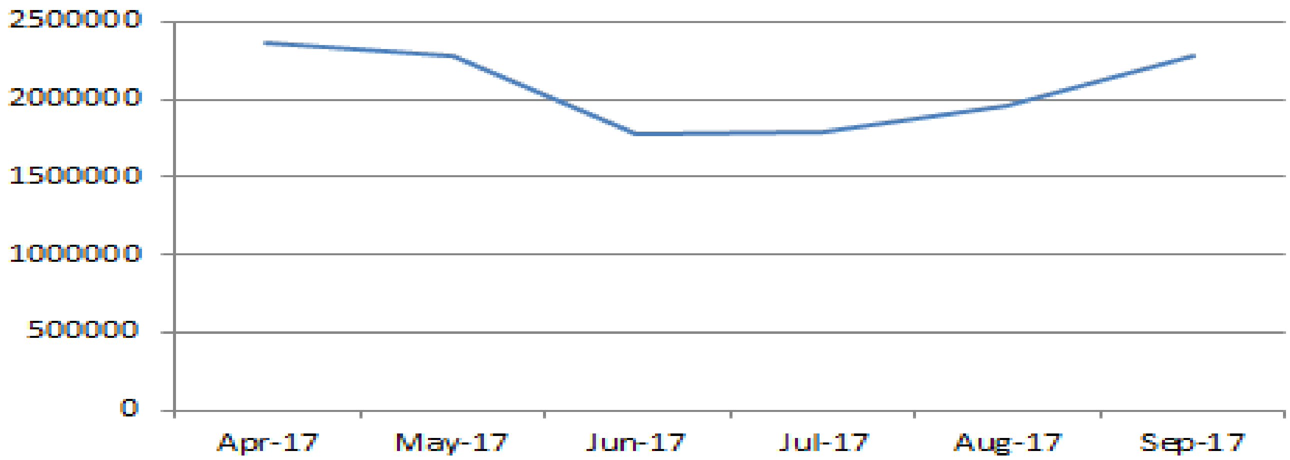
MIPI Statistics

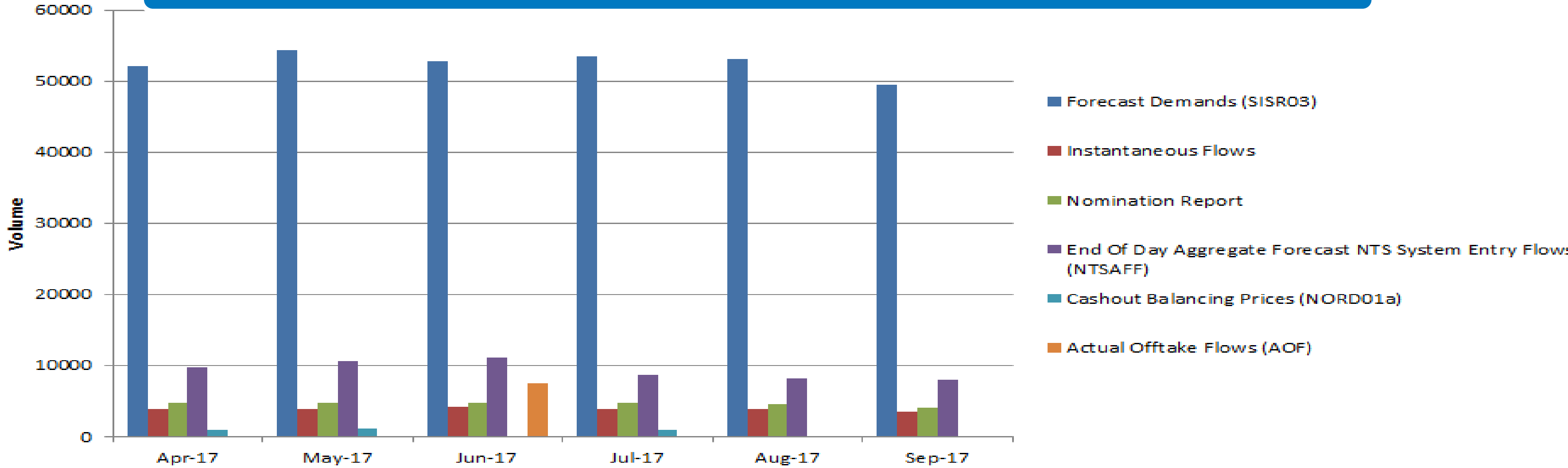
Operational Forum – Oct- 2017
John Mcnamara

MIPI Performance – September Statistics

Average Hits Per Month Apr 17 – Sept 17



TOP 5 – Popular Reports



Break

Remember to use SLIDO - Your feedback is really important to us!

Overview of Exercise Yield & Customer Feedback

Ops Forum 19/10/2017

Robert Gibson
Emergency and Incident Framework Manager National Grid Gas
gasops.emergencyplanning@nationalgrid.com

YIELD

- NEC Obligation
- Test Industry Emergency Procedure
- Wide Range of Participants

Improvements on Feedback

Criticall failures reduced

Criticall messaging issues

Further Tested "Pre Emergency" Actions

Communications with BEIS

Yield Feedback

Industry feedback survey is open and closes 27th of October:
http://mailchi.mp/nationalgrid/nec-exercise-yield-feedback

Degree to which shippers participate in the exercise

Communications to shippers and directly connected consumers could be improved

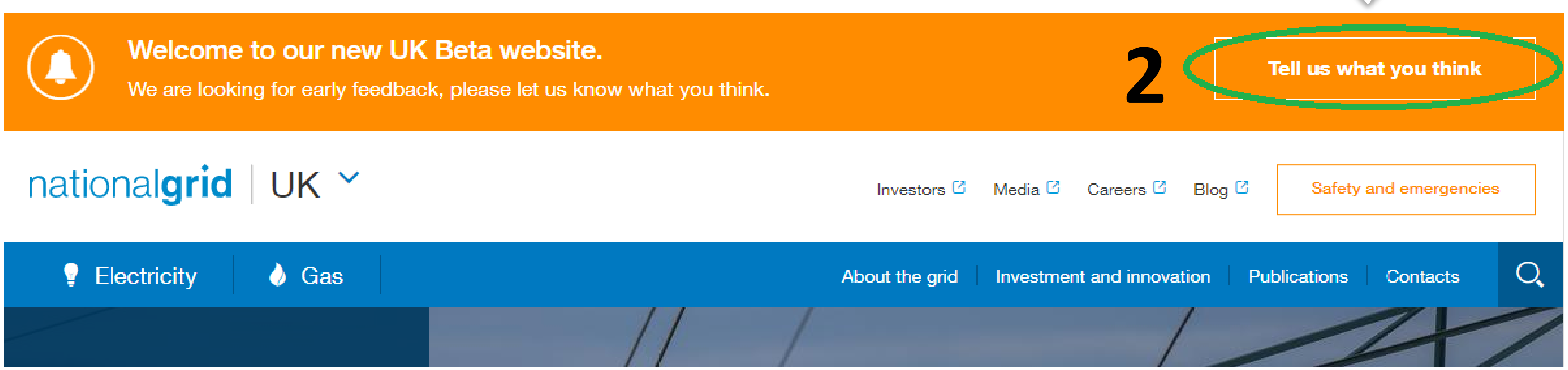
Customer & Stakeholder Feedback

Operational Forum – Oct 2017
Vinny Thiara

Launch of National Grid ‘BETA’ Website

1. Visit the new ‘BETA’ website

2. Give us your feedback!



Customer & Stakeholder Feedback – You Said, We Did.

"The information on the website needs to be updated, a lot is very old."

All original website content has been reviewed and streamlined in new 'BETA' version of website.

NG WEBSITE

"The website uses too much industry jargon."

Content leads have been asked to review their use of industry related jargon. This has hopefully led to a reduction seen on the new website.

NG WEBSITE

"It's not always easy to find things…"

Implemented a more sophisticated search facility which has helped improve navigation.

NG WEBSITE

"Responses to emails can be slow."

In response, SLAs have been put in place by various teams across Gas Operations.

GENERAL FEEDBACK

Customer & Stakeholder Feedback – Operational Forum

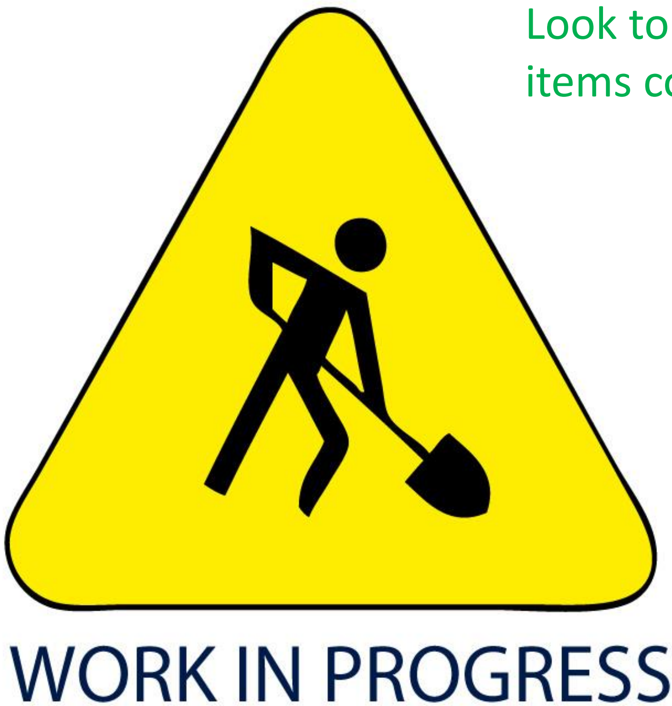
+ Changed the room layout to help encourage greater attendee participation.

+ Greater National Grid representation at forums.

+ Forum now starts at 9.30am as opposed to 10.30am.

+ NG ensures that the agenda is sent out 7 day prior to event.

Customer & Stakeholder Feedback – We're working on it…



Operational Forum

Forum can drag on a little

Look to reduce the number of agenda items covered at each forum

Managing Relationships

C&S confused as to who they should be contacting in certain circumstances

Share up-to-date organisation charts at liaison meetings

National Grid Website – Ops Forum

Often difficult to find what I'm looking for

Webpage has been designed to allow users to find information more quickly and easily – improved usability

Customer & Stakeholder Feedback – Satisfaction Surveys

“…**value** your **feedback**…”

“…better **understand** your **requirements**…”

“…ensure we continually meet, and look to **exceed expectations**.”

Wish to take part? Get in touch:
Hayley.Johnson@NationalGrid.com

AOB

Operational Forum – October 2017
Karen Thompson

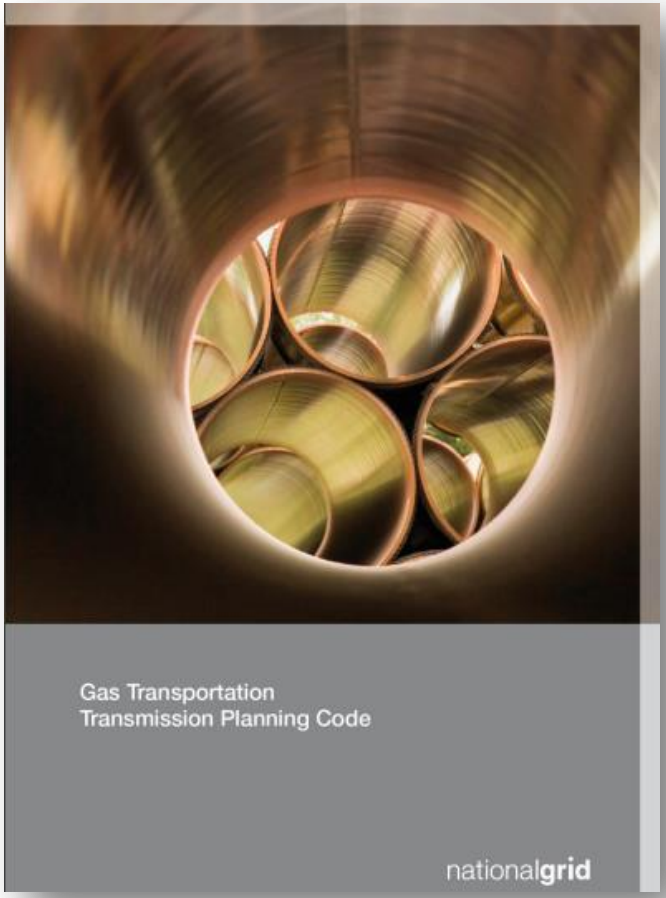
Shaping the Future of the Gas Transmission
Have your say!

nationalgrid

- **Dates and locations**: Monday 30th October London & Friday 3rd November - Edinburgh
- **Topics covered**:
  - Current/short term focus:
    - How we're performing and what we should be focusing on in the short term
    - Compressor strategy – meeting customer needs whilst becoming compliant with environmental legislation
  - Longer term:
    - What does agility mean to you and how would it help your business?
    - Market attractiveness and accessibility – What potential blockers are their for you in our commercial products/services/ frameworks and what does good would look like
    - Innovation - Gain insight on FOG thoughts around decarbonisation tools, i.e. heat, gas in transport, CCS and hydrogen
    - Valuing Risk – How we value risk when developing our asset health work. Is this right and what are your output priorities
    - Planning the network – how we currently plan the network and what scenarios you'd like to us model
- **Why you should attend**:
  - Detailed engagement plans will be agreed with stakeholders at the events on each key topic
  - Insight gained will feed directly in to our current and future business plans
- **To register:**
  - 30th October: https://www.eventbrite.com/e/shaping-the-gas-transmission-network-of-the-future-have-your-say-tickets-37870867785
  - 3rd November: https://www.eventbrite.com/e/shaping-the-gas-transmission-network-of-the-future-have-your-say-tickets-38141139174

Gas Transmission Planning Code Update

- On 26th September, Ofgem approved our proposed changes to our Gas Transmission Planning Code document
- These changes were required to reflect the changes made to our network planning processes, following the completion of our Gas Planning & Operating Standard Project
- These include changes to how we will assess the impact of “foreseeable” within-day variations in supply and demand in our network capability assessments, plus how we will ensure that the NTS has sufficient resilience for “unforeseeable” within-day variations
- The current version of our Gas Transmission Planning Code can be found here: http://www2.nationalgrid.com/UK/Industry-information/Developing-our-network/Gas-Transportation-Transmission-Planning-Code/
- Ofgem’s decision letter can be found here: https://www.ofgem.gov.uk/publications-and-updates/decision-approve-further-changes-proposed-national-grid-gas-plc-transmission-planning-code-2017



Gas Operating Margins – Consultation

On the 10 October, National Grid Gas opened a 4 week consultation for you to review and provide feedback with respect to its template Gas Operating Margins 2018/19 Agreements.

- The Contract Services team have developed the OM Agreements to incorporate any learning from service providers in the previous tender round, whilst ensuring consistency and alignment across the agreements.
- The list of documents below are uploaded to National Grid's website on the following link under the "Tender Documentation" tab: http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/balancing/operating-margins/
  - Industry Consultation Letter 2017
  - TEMPLATE Gas Capacity Agreement (Storage) 2017
  - TEMPLATE Gas Delivery Agreement (LNG Storage) 2017
  - TEMPLATE Gas Delivery Agreement (Demand Reduction_Supply Increase) 2017
- Please submit your feedback by the deadline of **Tuesday 7 November** to: tahir.mahmood@nationalgrid.com

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Box.operationalliaison@nationalgrid.com

Emergency Exercise

MIPI Common Queries

Future Operational Forum Dates 2017

Finding a better way

Month	Date
November	Thursday 23rd November 2017

Future Agenda Items	
Xoserve Service Desk	Capacity Mod 616
Nominations	NDMA Accuracy Report
Future Energy Scenarios	Trading/Balancing

For any queries or proposed agenda items please contact the Operational Liaison Team:
Box.operationalliaison@nationalgrid.com