Pre Modification Discussion







Amendment to the Nominations Matching Arrangements between National Grid NTS and GNI at the Moffat IP



Within Day VRF service at Moffat ROI Exit

Information Pack to Transmission Workshop

Date of Publication: 1st September 2016

Within-Day VRF at Moffat IP

1. When did the functionality go live?

Within-Day Functionality was released on GTMS on Wednesday 13th April

2. What is the daily VRF capacity limit?

Daily VRF Capacity limit = 100% of FF ROI Technical Capacity (252,642,833 kWh).

3. Is the product interruptible and how will an interruption work?

 GNI will invoke an interruption (and if required further interruptions) of VRF if necessary in line with the process outlined below (e.g. in event of a reduction in forward flow nominations)

4. What is the Criteria For Interruption(s)?

- A VRF interruption check will take place during the matching cycle at Moffat, and an interruption to VRF at Moffat will be triggered if the following is true:
- Aggregate Forward Flow CQs Proposed VRF CQs < Meterced Physical Flow + Projected Delivery (next 2 hrs) Networks Ireland
- Shippers will not be interrupted to less than their deemed flow

Within-Day VRF – Interruption Process

5. What happens to the Shipper's CQ if an interruption is invoked?

- In event of interruption a VRF shipper's new CQ will be calculated as follows:
 - Deemed Flow+((URTBD of Shippers VRF CQ/Agg VRF URTBD for all Shippers)*Agg Remaining VRF)

*URTBD = Units Remaining to Be Delivered

6. How will a shipper be notified of an interruption?

- A VRF interruption notice is issued via an automated email from GTMS to each affected Irish VRF Shipper (i.e. those who have nominated for VRF Day D). Email will be issued approx. 90 minutes prior to effective time of interruption
- A shipper will also see a new CQ on their Nominations Screen

7. What happens to the UK Counterparty Shipper in event of an interruption?

The new CQ's will be notified to National Grid as part of the matching process and the UK counterparty shipper volume adjusted accordingly. The UK counterparty shipper will be able to see their new CQ on Gemini. This process will ensure that there are no mismatches in the VRF quantity for the UK and ROI shipper on Day D. GNI recommend that ROI VRF shippers would contact their UK counterpart shipper accordingly should an interruption arise to ensure alignment of positions



Impact of VRF on Tripartite

- The Tripartite Agreement between GNI, GNI (UK), and National Grid which was agreed in 2015, does not allow for the practical implementation of an interruptible product at the Moffat IP and therefore:
 - requires amendment to describe the rules prescribing the operation of an interruptible product.
 - it is necessary to amend Sections 5 and 6 of Annex B of the Tripartite Agreement such that
 - the Confirmed Nomination Quantity for a VRF Shipper will be equal to the Processed Nomination Quantity of the relevant Transporter who declares the interruption.
 - each Transporter will notify revised Confirmed Nomination Quantities to their respective Shippers.
- The process described is being implemented in practice as agreed when developing the business rules for the VRF product
 - The proposed changes to the Tripartite are simply to reflect the agreed text of the GNI Code of Operations and the agreed inter-TSO processes in that agreement



VRF Interruption - Worked Example

- In the following example a Shipper submits a day-ahead VRF nomination. The Shipper is then interrupted twice within day
- A) Day-ahead VRF nomination (CQ of 1200)
 - This being the first approved/matched day-ahead nomination it will have effective hour of 05:00 and deemed flow will be zero '0'.
 - INFR = 1200/24 = 50 per hour
- B) Interruption triggered: Forward Flows re-nominate down @ 13:50 with effective hour
 16:00; VRF Available for remainder of Gas Day reduced to 450
 - Deemed flow for VRF = 50*(9+2) (number of hours between 05:00 and 16:00) = 550
 - New VRF Shipper CQ = Deemed flow + 450 = 550 + 450 = 1000
 - INFR for remainder of Day D = 450/13 (number of hours between 16:00 and 05:00) = 35/hr for the period 16:00 to 05:00
- C) 2nd Interruption triggered: Forward Flows re-nominate down @ 19:50 with effective hour 22:00; VRF Available for remainder of Gas Day reduced to 70
 - Deemed flow = 50*11 (no. of hours between 05:00 and 16:00) + 35*(4+2) (no. of hours between 16:00 and 22:00) = 760
 - New VRF Shipper CQ = Deemed flow + 70 = 760 + 70 = 830
 - INFR for remainder of Day D = 70/7 (number of hours between 22:00 and 05:00) = 10/hr for the period 22:00 to 05:00



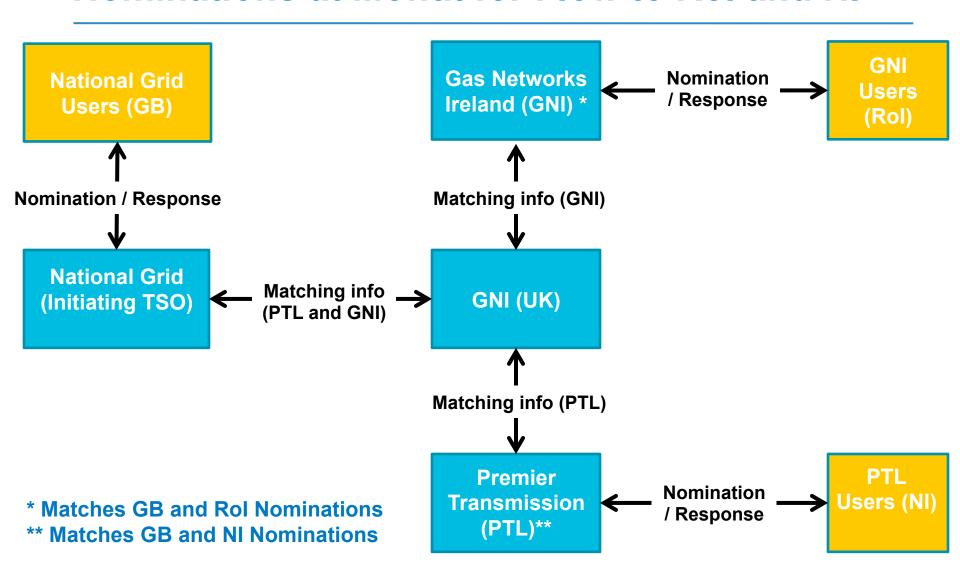
National Grid and Gas Networks Ireland GNI (UK) Tri-Partite Agreement Proposed Change







Nominations at Moffat for Flow to Rol and NI



EU Balancing Code

- Article 17(4)
- "Without prejudice to the <u>specific terms and conditions</u> <u>applicable to interruptible capacity</u> and capacity subject to congestion management rules, the transmission system operator may in principle only amend the gas quantity requested under a nomination and renomination in exceptional events, and emergency situations when there is an evident danger to system security and stability"

Instances Where GNI or NG NTS nationalgrid May Adjust Nominations (for GB/Rol flows)

Scenario	Current Arrangments	Proposed Arrangements
Normal Operating Conditions - GNI Interruption of Virtual Reverse Flow	(No current provision)	Yes - by GNI
Exceptional Event (NG) i.e. 'Transportation Constraint'	Yes - by NG NTS	Yes - by NG NTS
Exceptional Event (GNI)	Yes - by GNI	Yes - by GNI
Exceptional Event (NG and GNI)	Yes - by NG NTS and GNI	Yes - by NG NTS and GNI
Gas Deficit Emergency (NG)	Yes - by NG NTS and GNI	Yes - by NG NTS and GNI

> changes proposed



Nominations Matching Rule

Scenario	Current Matching Rule	Proposed Matching Rule
Normal Operating Conditions	Lesser Rule' i.e. lower Processed Nomination Quantity prevails	Lesser Rule' i.e. lower Processed Nomination Quantity prevails
Normal Operating Conditions - GNI Interruption of Virtual Reverse Flow	(No current provision)	GNI Processed Nomination Quantity prevails
Exceptional Event (NG) i.e. 'Transportation Constraint'	NG Processed Nomination Quantity prevails	NG Processed Nomination Quantity prevails
Exceptional Event (GNI)	GNI Processed Nomination Quantity prevails	GNI Processed Nomination Quantity prevails
Exceptional Event (NG and GNI)	Lesser Rule' i.e. lower Processed Nomination Quantity prevails	Lesser Rule' i.e. lower Processed Nomination Quantity prevails
Gas Deficit Emergency (NG)	GNI Processed Nomination Quantity prevails subject to NG specified aggregate maximum offtake volume	GNI Processed Nomination Quantity prevails subject to NG specified aggregate maximum offtake volume

> changes proposed

EU Codes Update







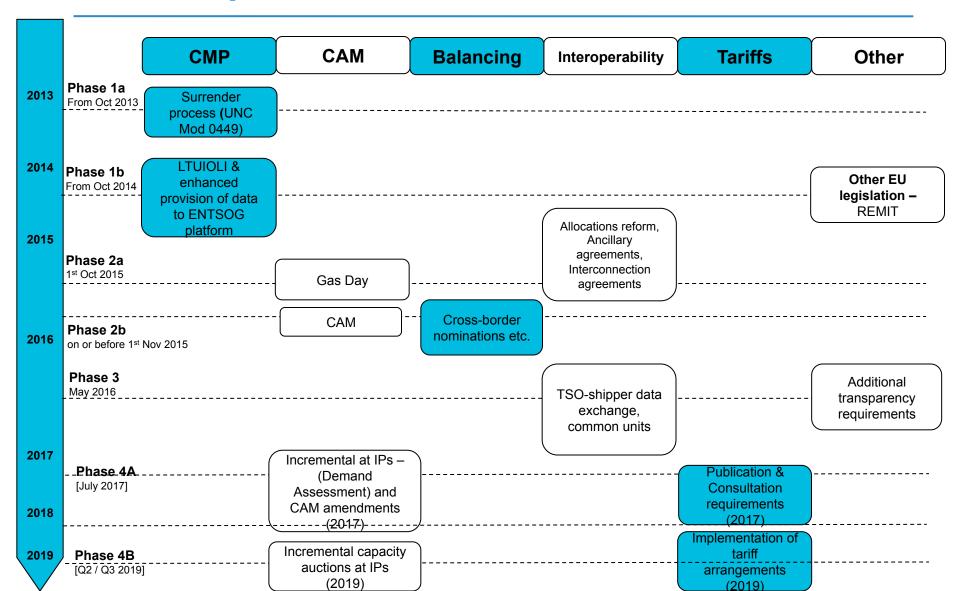
1st September 2016

1. General Update

Code Status Update

Code	Current Status	Implementation date
Congestion Management (CMP)	Implemented	1 st October 2013
Capacity Allocation Mechanism (CAM)	Implemented	1 st November 2015
Gas Balancing (BAL)	Implemented	1 st October 2015
Interoperability & Data Exchange (INT)	Code entered EU Law on 30 th April now Commission Regulation (EU) N0 703/2015	1 st October 2015, 1 st May 2016
Tariffs (TAR)	Under development	Applicable from EIF[April 2017], October 2017, 31 May 2019.
Incremental Capacity (& CAM amendments)	Under development	Applicable from [April 2017] Auctions applicable from [2019]

Road Map





Gas Codes Timeline

Status of Development of European Gas Network Codes

Future dates are subject to change

Dates shown in italics are best approximations based on current understanding.

It has been necessary to 'round' some dates for the benefits of the diagram

KEY

Activities undertaken by ACER

Activities undertaken by ENTSOG

Activities undertaken by European Commission

		TODAY																																				
Network Code /						20	15											20	16						2017													
Guideline	Jan	Pep	Mar	Apr	May	Jun	亨	Aug	Sep	og	Nov	Dec	Jan	Peb	Mar	Apr	May	Jun	Jul	Aug	de	Oct	Nov	Dec	Jan	e e	Mar	Apr	May	Jun	Б	Aug	Sep	ö	Nov	Dec		
Congestion Management Principles (CMP)	***********												***************************************					***********	**********																	20000000		
Capacity Allocation Mechanisms (CAM)											Go Live																											
Balancing										Go Live																												
Interoperability & Data Exchange										Go Live							Compliance				I																	
Tariffs	,	ACE	R R	evie	w	Comitology																																
CAM Amd/Incremental	,	ACE	R Re	evie	w									C	Coi	mi	tol	og	y		 																	
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EU Code Updates

September 2016

EU Codes – Glossary of Definitions

- ENTSOG maintains a Glossary of Definitions from the following legal acts:
 - Gas Directive, Gas Regulation, CMP, CAM NC, BAL NC, INT NC and TAR NC.
 - Latest version produced 4 August
- Glossary provides useful guide to both the meaning and source of EU code "defined terms"
- The latest version can be found on the JO website with the materials for this WG meeting



EU CAM Amendment & Incremental Update

September 2016



Expected Timeline

- Currently translations into official languages being undertaken
 - MSs can submit further comments on the English language drafts
 - Text is still subject to change during this phase most changes will be "clarifications" but....content changes by EC still possible
- 2nd Comitology Meeting 29/30th September 2016
 - Translations into official languages will be circulated 2 weeks in advance of this meeting
 - Still intended as a voting meeting even if changes made during meeting
 - Allows for completion prior to October Madrid Forum
- 1st April 2017 Entry into Force

UNC Modifications

- NGG have provided ongoing monthly updates to the industry as the Codes have developed and amended via the Comitology process
- NGG plan to bring forward two UNC modifications
 - This is subject to the ongoing Comitology process which is expected to conclude at the end of September
- Welcome industry involvement in Mod Development WG's

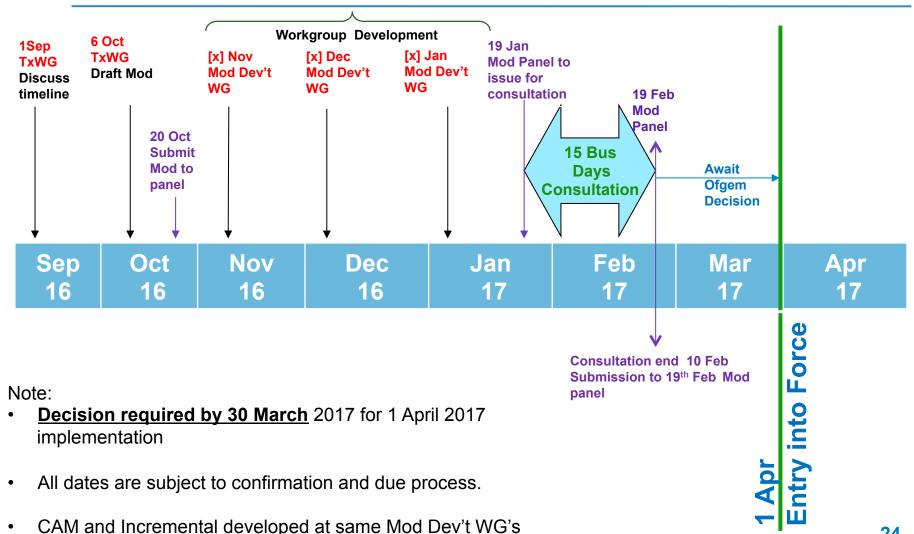
UNC Modification - CAM Amendments

- Modification for CAM Amendments to include changes to (subject to final CAM version):
 - Auction Calendar changes for Annual and Quarterly products
 - Moves to July and August respectively
 - Introduction of a Rolling Quarterly auction
 - Replaces the current once a year Quarterly auction
 - Restriction on Day Ahead Interruptible capacity
 - Only offered if all firm sold out DA
 - Technical clarifications to running of auctions (if req'd)
 - Priority of IP capacity over storage exit capacity in emergencies

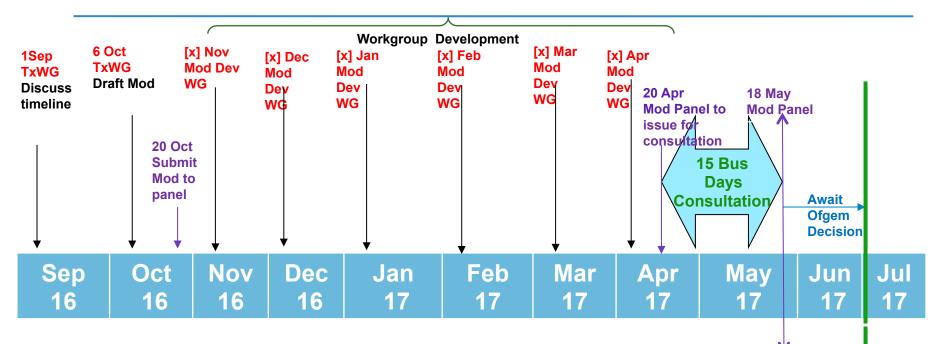
UNC Modifications - CAM Incremental

- Modification for CAM Incremental changes to include changes to (subject to final CAM version):
- The ability for Users at IP's to signal Incremental Capacity
 - Introduction of a IP Demand Assessment process
 - Collection of User Incremental demand across all EU IPs
 - A Design phase
 - TSO / TSO's network design
 - NRA approval process
 - NRA / NRA's approval to project proposals
 - Allocation of Capacity
 - Process for allocation to Users signalling incremental capacity
 - Amount to be allocated (over / under subject to agreed rules)

Mod Indicative Timeline – CAM Amendments



Mod Indicative Timeline – CAM Incremental Changes



Note:

- <u>Decision required by 30 June</u> 2017 prior to 1 July 2017 implementation
- All dates are subject to confirmation and due process.
- CAM and Incremental developed at same Mod Dev't WG's. Incremental has additional dates (**if needed**).

Consultation end 12 May Submission to 18th May Mod panel Implementation
Sprior to 1 July
2017



EU Tariffs Code Update

September 2016

EU Tariffs Code – ENTSOG activity

- Meetings rescheduled due to change in date of 2nd comitology meeting
- Last meeting of ENTSOG TAR WG held 30 August
 - Aimed to
 - discuss new issues arising from meetings with EC
 - any new changes to text arising during translation process
 - ENTSOG advising DG Translation
 - Translators have until 10 September to submit their texts
 - EC to send out final TAR NC for comitology meeting on 15 September
 - ENTSOG preparing updated position paper on TAR NC

ENTSOG "Recommendation Paper"

- ENTSOG maintaining an "analysis of changes" paper
- Purpose is to provide argumentation proposal by ENTSOG for use by TSOs in briefing Member State representative at comitology
- Latest paper produced at end of August based on 14th July version of TAR NC
- The Paper is split into three parts:
 - Part 1: Issues that have a major impact for many TSOs;
 - Part 2: Issues that have a major impact for some TSOs;
 - Part 3: Issues that have some impact for all TSOs.

EU Tariffs Code – application dates

- TAR NC sets different dates for implementation of Articles
 - Implementation of TAR requires a phased approach
 - Early implementation dates (i.e. Entry into Force & 1 October 2017) aimed at supporting CAM Amendment
 - Main requirements due until May 2019
 - Requirements gathering for first phase now underway
 - Some requirements already in place
 - Detailed discussion of requirements being held in NTSCMF



Interoperability Update

September 2016

EU Data Exchange Harmonisation

- The EU Interoperability Code requires TSOs to implement 'common data exchange solutions' and provides for CNOTs (Common Network Operation Tools) to be developed
 - A CNOT is a detailed process document(s) designed to assist implementation of the EU Codes
 - CNOT documents have been developed for nominations matching, CAM/CMP and AS4 implementation
- Whilst CNOTs are not legally binding, "a CNOT shall specify the common data exchange solution relevant for the respective data exchange requirement." (INT Code Article 24(1))
- ENTSOG is currently working with its members and stakeholders to fulfil this obligation

EU Data Exchange Harmonisation

- On 4th August 2016, the Joint Office forwarded an invitation from ENTSOG to a stakeholder workshop to be held in Brussels on 6th September 2016
- This session will:
 - Explain the EU level ambition and drivers for data exchange harmonisation and the Interoperability Code provisions designed to enable it
 - Present ENTSOG's view about what 'common solution' (e.g. AS4, web services, interactive data exchange) would be most appropriate for each relevant data exchange requirement between TSOs and their shippers
 - Launch a public consultation on these 'common solution' questions that will run from 7th September to 30th September 2016
- For further information about this area of work, please contact either philip.hobbins@nationalgrid.com or jef.dekeyser@entsog.eu

EU Gas Quality Update: Implementation of the CEN Standard via INT Code

- ENTSOG's consultation closed on 15th July 2016
- Headline results:
 - High response rate; ENTSOG received 111 responses from organisations in 19 different Member States.
 - 23 of the 111 responses were submitted by UK companies
 - Many responses identified problems with applying the standard as drafted
 - Scope of application:
 - 53 respondents put 'voluntary adoption' as first choice
 - 30 respondents put 'whole chain' as first choice
 - 'IPs only' was only supported as a compromise option
 - 'Transmission only' was the least supported

EU Gas Quality Update: Implementation of the CEN Standard via INT Code

- Headline results (cont'd):
 - All UK respondents and all upstream community respondents said that gas quality is not a barrier currently
 - No respondent identified any financial benefit of implementing the CEN standard
 - A number of respondents identified concerns about potential conflict with the EU subsidiarity principle

EU Gas Quality Update: Implementation of the CEN Standard via INT Code

- National Grid NTS advised the August Transmission Workgroup of its understanding that TSO responses to the ENTSOG consultation would not be published but all other responses would be published
- National Grid NTS has since clarified the position with ENTSOG which is:
 - None of the responses will be published
 - Results of the consultation will be published on an 'aggregated and anonymised' basis

EU Gas Quality Update: Implementation of the CEN Standard via INT Code

Next Steps

- Two more stakeholder workshops are planned
 - 13th September 2016 (Cologne) (invitation forwarded by JO on 4.8.16)
 - Present consultation feedback, proposed principles (e.g. on subsidiarity, scope, A-Deviations etc.) refined scenarios
 - Launch a second consultation on the refined scenarios
 - 16th November 2016 (location tba)
 - Present feedback received from the September consultation
 - Share ENTSOG's 'minded to' position
 - Should an amendment to the INT Code be proposed?
 - If so, what should it say?

EU Gas Quality Update: Implementation of the CEN Standard via INT Code

Next Steps (cont'd)

- December 2016: ENTSOG to publish its view on the most appropriate scenario
- Q1 and Q2 2017: If an amendment to the INT Code is proposed by ENTSOG, text will be developed during this period
- June 2017: ACER process starts (if required)

EU Gas Quality Update: Harmonisation of Wobbe Index (CEN Sector Forum Gas)



- National Grid NTS has not heard any news recently about this initiative
- The UK does not have a representative on this CEN working group



Future Topics



Future Topics

Topic Area	Provisional Date
Tariffs Code	Monthly updates whilst progressing through comitology
CAM Amendment	Monthly updates whilst progressing through comitology
EU Gas Quality	Monthly updates
Recharge of OCM costs	October 2016
Negative Implied Flow Rate	October 2016

ISS066 – Implications of Decommissioned Exit/Entry Points

Background

- Issue raised at both Transmission Workgroup and NTSCMF to explore the implications of decommissioning NTS Entry / Exit Points
- National Grid NTS committed to look at developing an initial "housekeeping" process to facilitate that removal of points from the Licence where the point has a zero baseline and it:
 - Has been physically decommissioned; or
 - Was never commissioned i.e. never connected to the NTS
- Initial examination of NTS Exit Points showed:

	ОТ	DC	STOR	INT	Total
0 Baseline	3	20	8	1	32
New Points	0	13	0	0	13
Connected	3	tbc	tbc	Reverse flow	

Code	Site type
OT	DN Offtake
DC	Direct connect
STOR	Storage
INT	Interconnector

Proposed Process a)

- Relatively simple process that mirrors the current process used to place sites within the Licence, i.e.
 - NG NTS to:
 - Identify sites that meet the current criteria
 - Establish whether the point is still required by the originating party
 - Establish whether there are new points likely to be requested to be added to the Licence in the near future (to help ensure that the number of requests can be efficiently managed)
 - Write to Ofgem requesting that they issue a consultation and Section 23 Notice to modify the Licence, the formal request will include:
 - Name of the point(s) to be removed
 - Type of facility (Power station, Storage, CSEP etc)
 - Whether it is a "Relevant Point"
 - Ensure requests to be included with any new points recently requested

Proposed Process b)

- Ofgem to:
 - Issue the Section 23 Notice seeking Industry views on the potential licence modification
 - Dependent upon the results of the consultation direct (or not as the case may be) the licence modification to remove the points from the Licence
- Points to note:
 - Not yet agreed with Ofgem, expecting to discuss as an additional item during NG NTS/Ofgem meeting scheduled for 19th September
 - Any sites removed from the Licence will feed into the next Charge Calculation process (not a bespoke rerun of charges), however they would be excluded from Capacity Auctions/Applications



Any Other Business

Ofgem's review of Xoserve's Funding, Governance and Ownership (FGO)







Seán McGoldrick National Grid Gas Transmission

Highlights

- Industry meeting with Ofgem to discuss deltas with their minded-to position on funding
 - Ofgem reinforced their view that ex-ante allowance remains the most appropriate funding mechanism for GTs
 - Ofgem stated their view that core Nexus costs should not be carried forward from pre- to post-FGO arrangements
- FGO Charging workshop held August 22nd
 - Further clarity required on allocation of Xoserve's costs
- Modification 0565 workgroup held August 23rd
 - November Mod Panel now targeted for 565 submission.



Revisions to the Entry Point Daily Quantity Delivered after D+5

To date

- Requirement in UNC to submit revisions to EPDQD data by D+5
- National Grid and Industry in breach of this to ensure accurate allocations
- Need to find solution which:
 - Incentivises sub-terminals (non-UNC parties) to provide their data by D+5;
 - Whilst also allowing amendments to be accepted after this timescale
- Feedback from sub-terminals supports this conclusion

Our Proposed Solution

- 3 key workstreams:
 - 1. Raise a UNC Modification
 - 2. Amend bilateral Network Entry Agreements
 - 3. Increase robustness of National Grid's internal processes

Modification

Currently UNC Section E 1.4.2 states that:

"The amount determined to be the Entry Point Daily Quantity Delivered in respect of any System Entry Point for the Gas Flow Day may be revised at any time up to and including the 5th following Day, but no revision will be made to such quantity after the 5th Day after the Gas Flow Day"

Suggested alternative:

"The amount determined to be the Entry Point Daily Quantity Delivered in respect of any System Entry Point for the Gas Flow Day may be revised at any time up to and including the 5th following Day, any revisions made after the 5th Day after the Gas Flow Day will be subject to a public reporting obligation"

This Modification will be raised for the September Panel

Network Entry Agreements (NEA's)

- Amend the generic contract to include D+5 requirement and reporting obligation
- Seek inclusion of D+5 requirement and reporting obligation in contracts within existing NEA's
- When existing contracts are updated we will also update with the D+5 requirement and reporting obligation

National Grid's Processes

- The current manual procedure includes a rigorous checking process to ensure all data is captured and accurate
- However, to remove the chance for transposition and data capture errors – the following opportunities will be assessed in 2017:
 - Validate data using telemetry received from sites
 - Automated upload of faxes and xml files into system

Contact Us

If you wish to discuss this issue and the proposed solution any further, please contact Angharad Williams:

- Angharad.williams@nationalgrid.com
- **01926 65 3149**



Negative Implied Flow Rates

Negative Implied Flow Rates

- As notified to the July Workgroup, we are currently progressing this issue 'offline' with a small group of interested shippers
- A meeting is scheduled at the London office of Gazprom Marketing and Trading on Monday 5th September 2016
- This meeting is open to any shipper that wishes to attend and will debate potential options for a solution to the current issue
- If any shipper wishes to attend this meeting (in person or by phone), please contact Lucy.Manning@gazprom-mt.com
- Feedback from this meeting will be presented to the October Transmission Workgroup



Gas Demand Side Response (DSR)