

NTS and NGN capacity interactions

December 2019

As a part of the NGGT Business Plan Submission

nationalgrid

Consideration of mutually efficient trade-offs between Northern Gas Networks RIIO GD2 business plan and National Grid Gas Transmission RIIO-T2 business plan.

Overview

Northern Gas Networks Ltd (NGN) and National Grid Gas Transmission (NGGT) are mutual stakeholders in each other's business, primarily through the interface between the gas distribution network owned by NGN and the National Transmission System (NTS) owned by NGGT, at the 23 Offtakes across the North East of England and Northern LDZ.

In addition, with the opportunities and mutual benefit for consumers that are presented by a whole system approach, both NGN and NGGT consider there are further benefits that can be delivered through a coordinated and collaborative approach to developing, agreeing and delivering the respective business plans, for asset specific activities, in addition to business and workforce resilience.

NGN and NGGT are both subject to concurrent price control reviews RIIO-GD2 and RIIO-T2 which set the price controls for the period 1 April 2021 to 31 March 2026.

NGN and NGGT maintain a positive relationship and communication channels across several areas of their businesses and recognise the importance of collaborative engagement as a part of the respective price control reviews. More importantly both companies understand that they have responsibility to their customers and wider stakeholders to ensure that their respective business plans include consideration of the economic trade-offs between the two networks and wherever possible the companies choose the most efficient option including where this involves the other company's network.

NGN and NGGT have considered the trade-offs between the two networks for RIIO GD2 and RIIO T2 and have concluded that:

- 1. The most efficient solutions have been agreed across both networks for the period 2021-2026. This is manifest in
 - a. Agreed enduring peak day NTS exit flat and flexibility capacities,
 - b. Agreed enduring peak day assured offtake pressures at the 23 offtakes connecting both networks.
 - c. Alignment of the forecast long term demand and solutions through the core energy scenario.
 - d. Engagement and understanding of our mutual whole systems energy strategies and opportunities for collaboration.
- 2. To the best of their knowledge, neither company is proposing investments or initiatives as a part of RIIO GD2 or RIIO T2 that could be undertaken more efficiently on the other company's network.

This joint statement by NGN and NGGT:

- Summarises the interactions that have enabled them to evaluate any trade-offs between them over RIIO GD2 and RIIO T1.
- Sets out the intentions of both companies for future engagement with each other over RIIO GD2 and RIIO T2

Engagement between NGN and NGGT for RIIO GD2 and RIIO T2

The two companies interact through several forums, including cross industry working groups and direct contact on issues related to exit capacity and demand forecasting. As was the case in RIIO 1, NGN and NGGT identified that the main interactions between them relate to:

- NGN's Gas distribution network capacity and storage that can be allocated with NTS Exit Flat and Flexibility Capacity.
- National grid NTS's transmission system compressor station operation and investment that can be mitigated with agreed reduced assured offtake pressure with NGN.

These trade-offs are considered annually through the Offtake Capacity Statement (OCS) process under section B3.7 of the Uniform Network Code (UNC), Transportation Principal Document (TPD), and NTS exit capacity arrangements under UNC TPD section B3.2 for NTS Exit (Flat) capacity and section J2.5 for Assured Offtake Pressure.

OCS Process.

The amount of gas NGN requires to satisfy its 1 in 20 Peak Day Firm commitment is secured from National Grid on an annual basis via the Offtake Capacity Statement (OCS) process.

This process involves NGN requesting an Offtake Daily Quantity (Flat Capacity) and an amount of Storage (Flexibility) for each offtake. NGN also indicate the peak hourly flow and associated minimum inlet pressure required for each offtake. After discussion between the two parties, National Grid will allocate these products.

The below summarises the main interactions between NGN and NGGT during the OCS process.

April

- NGGT request permanent reductions in NGNs Assured Offtake Pressures
- NGGT propose changes to off-peak NTS pressure for NGN offtakes for load curve planning

June

- Teleconference between NGN and NGGT to discuss capacity and pressure requirements ahead of the application period
- NGN formally respond to NGGT Assured and off-peak Offtake Pressure reduction requests by 30th June

July

- NGN apply for NTS Exit (Flat) Capacity increases between 1st 31st July
- NGN apply for NTS Exit (Flat) Capacity decreases between 1st 15th July
- NGN apply for NTS Exit (Flex) Capacity and Assured Pressure requests between 1st 31st July
- Section H Planning data submitted to NGGT by the end of July, as per the below table:-

Part 3 - Forecast Flow Information to be provided by DNO

NTS/LDZ Offtake	Gas Year	Assumed calorific Value	Level of demand for gas (ref. Note 1)	Data elements required per demand level
			1 in 20 peak day demand Day 13 of 1 in 50 load duration curve Day 46 of average load duration curve Day 150 of average load duration curve Day 300 of average load duration curve	Forecast rate of volume flow (MCM/day) peak rate (MCM/hour) Offtake Flexibility Quantity (MCM/day)

Note 1 – 1 in 20 peak day demand and Day 13 assume all interruptible load is not supplied. Day 46, Day 150 and Day 300 assume all interruptible is supplied.

August

- NGGT share indicative OCS statement, no later than 15 business days from the end of the July
 application window. NGN then has the opportunity to reconsider and resubmit applications
 for flat, flex and assured offtake pressures within 10 days
- NGN to notify NGGT of any offtakes which are to be categorised as Significant Offtakes no later than 30th August, in accordance with UNC TPD Section J2.5.2

September

- NGGT share final flat and flex capacity allocations before 30th September
- NGGT share Assured Pressure allocations
- NGGT confirm which offtakes have been designated as a Significant Offtake.

Whole Systems approach.

NGN and NGGT worked collaboratively on the cross-sector core scenario project which outlined the future scenarios that might influence network companies RIIO 2 business plans. Through this group NGN and NGGT aligned their thinking on whole systems and ensured that each considered options consistently to maintain a consistent view of the future.

In addition, NGGT and NGN have developed their own whole systems strategies for RIIO 2 and have engaged through the development of these to ensure that mutual trade-offs have been considered.

The following enablers have been agreed as being central to delivering each company's whole system objectives:

- Information sharing, specifically operational forecasts and scenarios
- Open innovation

- Operationalising the whole systems approach
- Stakeholder engagement and communication
- Embedding solutions and services

In addition, NGN and NGGT were contributors to the development of the future energy pathways report through the ENA that outlined low and no regrets risk pathways to achieving net zero carbon by 2050. Because of this collaboration and engagement, NGN and NGGT see great strength in collaborating in the deployment of their respective whole systems strategies.

In a meeting on 10 October 2019 each company shared their whole system approach based on the second business plan submission to the Customer Challenge Group and agreed further areas of working moving forward particularly around research into the feasibility of Hydrogen.

Each company made a commitment to meet and review progress or potential for whole systems on at least a quarterly basis moving forward.

Outcome

NGN confirm that based on its 2019 demand forecast, the 2019 OCS allocation of NTS exit capacity and agreed assured Offtake Pressures will facilitate NGN's GD2 business plan. These will be reviewed annually through the OCS process.

NGN confirm that to the best of their knowledge, following the 2019 OCS process, there are no initiatives or investments in NGN's RIIO 2 business plan that could be delivered by NGGT.

NGGT confirm that there are no costs or investments in its RIIO2 business plan that are driven by or attributable to NGN.

As both companies have confirmed that their respective RIIO2 requirements can be delivered without any additional cost to either company this represents the most efficient solution for both companies and their customers.

Next steps and Future engagement

NGN and NGGT have agreed that a collaborative and joined up approach is beneficial to the business planning and business as usual approach.

Both companies commit to maintain a frequent dialogue regarding the NTS capacity and ensuring that investments where there is potential for interaction between the two companies are delivered in the most efficient way. NGN will be actively involved in the Capacity Access Review to review the principles and establish long-term strategy for the NTS capacity access regime. The review seeks to make recommendations for change and addressing short-term problems in accordance with the long-term ambition.

The companies commit to regular engagement on whole systems and will look for opportunities to share knowledge information and costs to arrive at the most efficient solutions. As a minimum the companies in principal, agree to quarterly meetings in RIIO 2 to share progress on the implementation of their whole systems thinking and will look for further opportunities to bring other partners on board.