national gas transmission

2024 Exit Capacity Allocation Report

Version 1.1 (redacted)

7 November 2024

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1 Summary

This report provides details of the 2024 Exit Capacity allocation process. In line with 3.43 of the Exit Capacity Planning Guidance requirements[1] it provides details of the applications received for the Exit (Flat) Capacity, Exit (Flex) Capacity and Assured Offtake Pressures (AOP) during the Exit Capacity application windows. Definitions of these products can be found in Appendix A.

Key Outcomes are:

a. NGT's (National Gas Transmission) assessment of the agreements reached on Capacity and AOP's, is that they are risk neutral for NGT when compared to previous years allocations.
b. The agreements reached are cost neutral for NGT and in addition do not require any additional capital investment on the part of NGT in order to be met under 1 in 20 demand conditions.
c. All Exit (Flat) Capacity requests were accepted for all relevant years.
d. Requests were accepted as non-obligated capacity release, for an increase in Exit (Flat) Capacity above the obligated level at four locations, as shown in table 1.

Offtake	LDZ
This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure	

Table 1 - Offtakes with non-obligated capacity release

e. Total Exit (Flex) Capacity
   - Increased: North West, South and South West
   - Decreased: North East and North.
   - No change: East Anglia, East Midlands, North Thames, Scotland, South East, Wales North, West Midlands and Wales South.

f. All flex capacity requests have been accepted at all offtakes.

[1] ECPG- https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/exit_capacity_planning_guidance.pdf

g. An AOP increase was partially accepted at an offtake in West Midlands- The full request was not accepted as this would limit the suction pressure at a compressor. A Partial acceptance was agreed.

However, some AOP increases could not be accommodated at:

- North Thames - within several sensitivity scenarios analysed, local demand and supply could not be accommodated with the requested pressure increases. Higher AOPs at this offtake also impacts operational flexibility with regard to Isle of Grain Entry capability.

- North West and West Midlands - Additional supply was required within the analysis to meet the increased end of day AOP requests when assessing the base case, this is similar to last year.

- West Midlands - Could not be accepted due to the request causing a reduction in entry capability at Milford Haven when increased pressure is considered.

h. The following table summarises the outcomes of the requests for respective LDZs.

LDZ	Flat	Flex	Pressure
East Anglia			
East Midlands			
North East			
North			
Scotland			
South East			
South			
South West			
West Midlands			
Wales North			
Wales South			
North Thames			
North West			

Allocated as requested
Not accepted
No change requested
Partially accepted

Table 2 - Summary of Exit allocation outcomes

i. There was a significant reduction in power stations and industrial capacity bookings.

2 Capacity Overview

National Gas Transmission releases Exit (Flat) Capacity at each offtake from the NTS to comply with its Gas Transporter Licence and Uniform Network Code (UNC) obligations.

National Gas Transmission makes firm and Off-Peak capacity available to the market at each offtake point. Overview descriptions[2] of capacity products which are booked during annual Exit allocation process can be found in appendix A.

Off Peak capacity is made available to the market at all offtake points, within day and day ahead, when forecast demand is below 80% of peak demand. For further information refer to the capacity guidance website[4]

[2] For more detailed description refer to UNC Transportation Principle Document – Section B: System Use and Capacity (https://www.gasgovernance.co.uk/sites/default/files/related-files/2024-10/4%20TPD%20Section%20B%20-%20System%20Use%20and%20Capacity.pdf)
[4] National Gas - Capacity (https://www.nationalgas.com/our-businesses/system-operation/capacity)

3 Exit Allocation Process Overview

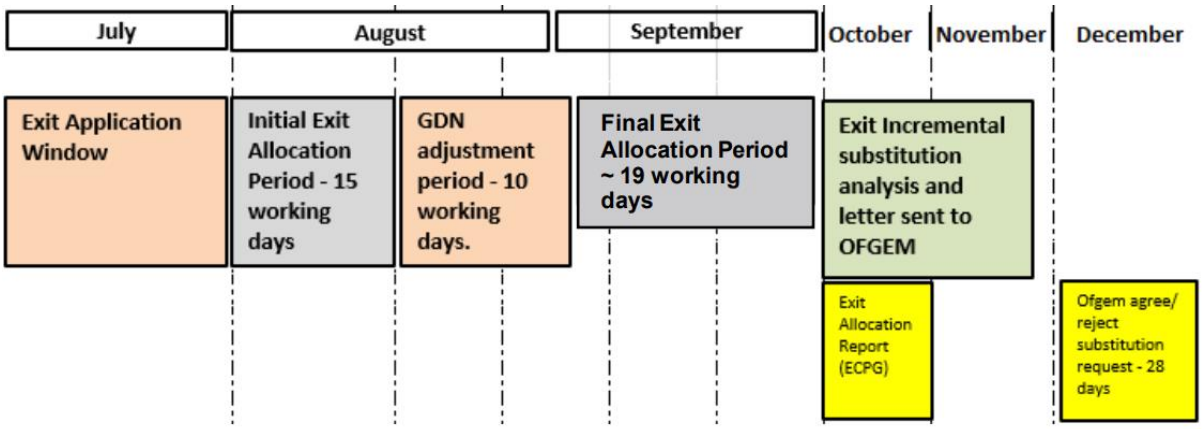


Figure 1 - ECPG timeline

3.1 Assured Offtake Pressures

Prior to the Exit Allocation period, National Gas Transmission can request reductions to AOPs, which GDNs can either accept or reject. During the Exit Allocation period GDNs are able to request AOPs increases and decreases, which National Gas Transmission can either accept or reject. Any previously agreed reductions to AOP prior to the Exit Allocation initial submission should be reflected in the GDN submissions.

Appendix A gives further details on the Exit process, and Appendix B shows a timeline for the exit period.

4 2024 Exit Capacity Allocations

Network analysis using the Simone software package is carried out to assess the Exit Capacity and AOP requests. As well as information supplied by exit users, National Energy System Operators' Future Energy Scenarios (FES) are used as inputs to the Simone network simulations. Sensitivity scenarios are further undertaken for constrained regions of the system, i.e. South East and South West, also referred to as zone 7 and zone 5[6], respectively. Additional sensitivities can optionally be carried out for other regions when there are significant local changes to expected flows, such as potential new loads, as well as in regions with substantial AOP increase requests.
Detailed description of network analysis carried out for Exit capacity allocation will be in the Methodology Statement as required by Exit Capacity Planning Guidance (ECPG).

4.1 Exit (Flat) Capacity

There was a significant decrease in GDN bookings overall with a trend towards lower booking in the later years. Figure 2- Comparison of GDNs' Peak 1 in 20 bookings with Undiversified FES Falling Short scenario, showing GDN bookings are higher than the FES forecast.

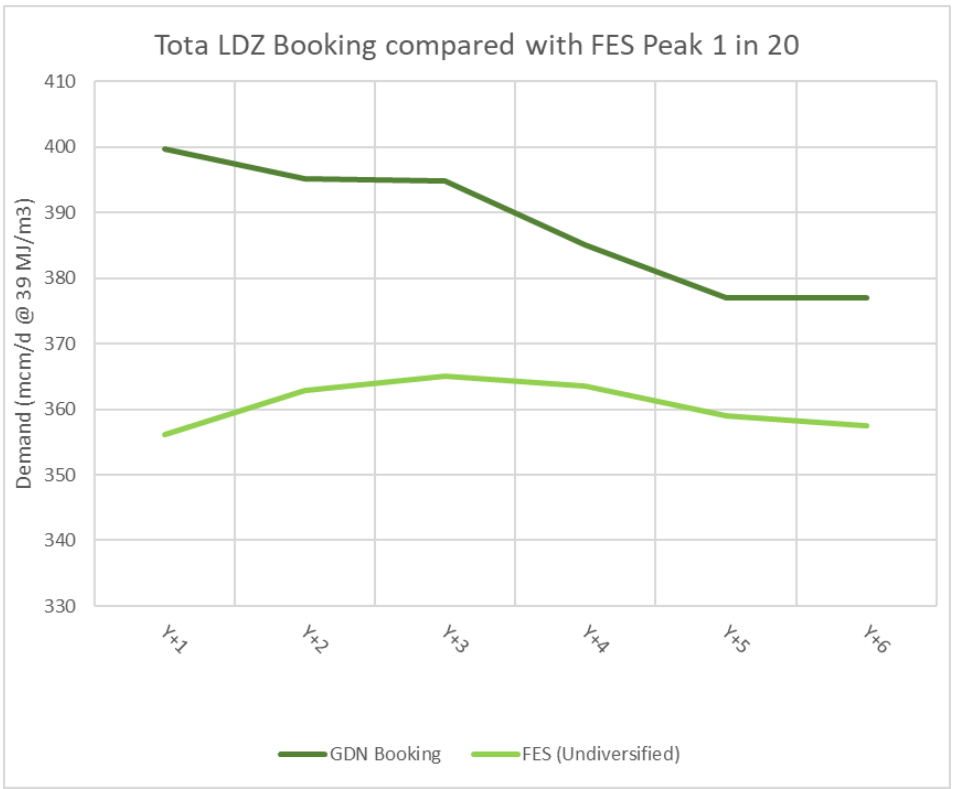


Figure 2- Comparison of GDNs' Peak 1 in 20 bookings with Undiversified FES Falling Short scenario

[6] See the Annual Network Capability Assessment Report (https://www.nationalgas.com/sites/default/files/documents/17396_NGT_ANCAR_June2024_AW04.pdf)

There was an overall slight increase in Flat capacity bookings across the NTS in Y+1, with a significant decrease in the South East offset by a significant increase in South Wales and multiple smaller changes in primarily in Scotland and the North. There is a significant decrease in bookings from Y+4 compared to previous years. The map in Figure 3 - Flow changes at LDZs offtakes for Y+1 depicts the flow changes in LDZs for Y+1 and
Figure 4 - Flow changes at LDZs offtakes for Y+4, depicts that of Y+4.

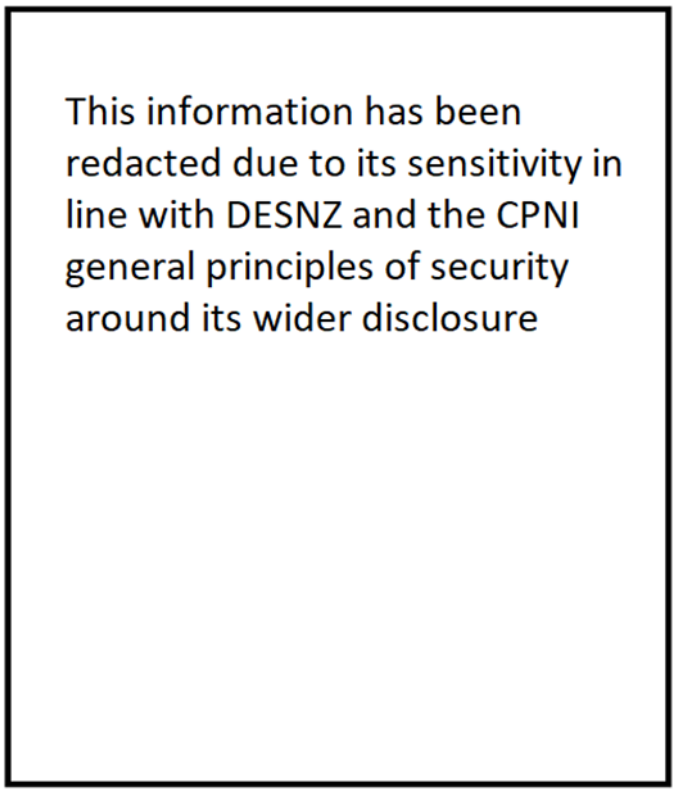


Figure 3 - Flow changes at LDZs offtakes for Y+1

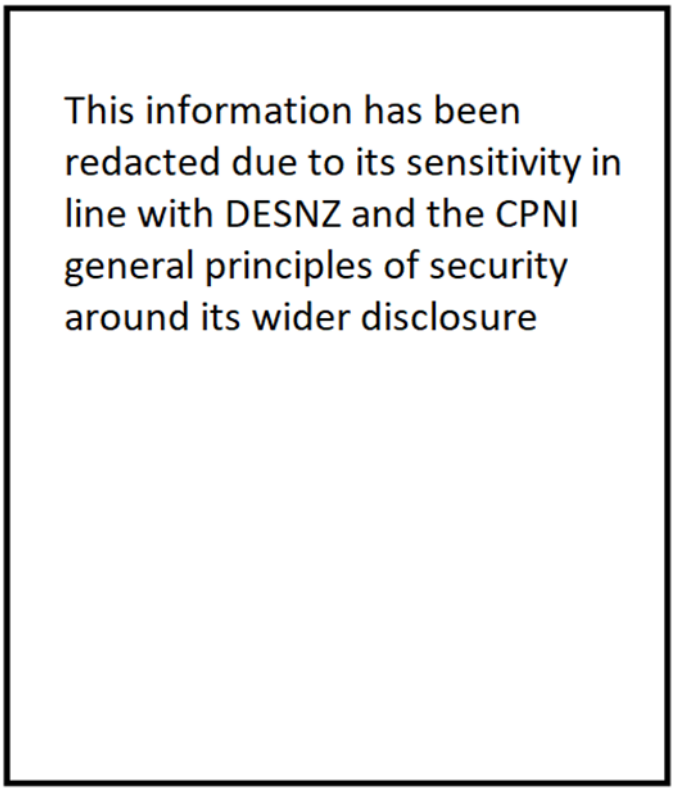


Figure 4 - Flow changes at LDZs offtakes for Y+4

4.1.1 Incremental Exit Capacity Release

There were some Exit (Flat) Capacity requests which were above baseline for years Y+1 to Y+3. The above baseline capacity for these requests was released as non-obligated capacity, as shown in Table 3 - Incremental capacity released as non-obligated capacity.

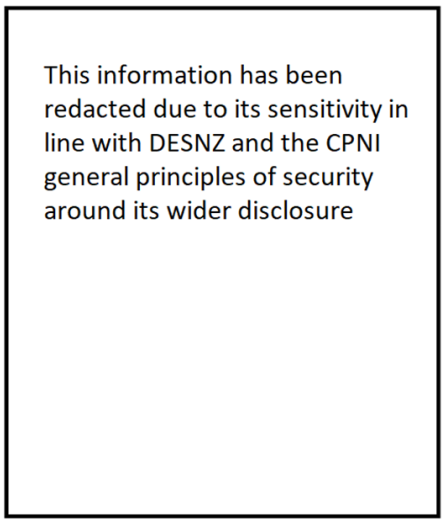


Table 3 - Incremental capacity released as non-obligated capacity

For any requests in the gas years Y+4 onwards the capacity above baseline would typically be released through Exit capacity substitution when possible. There were no Exit capacity substitution requirements this year as from Y+4 onward, as all requests were below baseline.

4.2 Exit (Flex) Capacity

There was an overall decrease in Exit (Flex). Figure 5 - Final Exit (Flex) allocation , shows the final amount of Flex that was released, compared to last year.

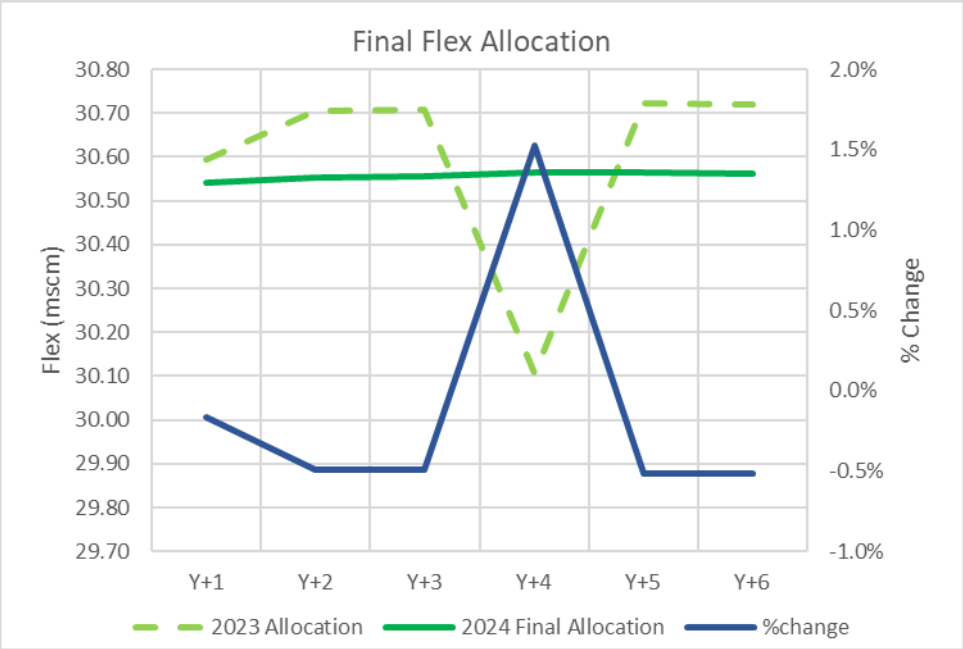


Figure 5 - Final Exit (Flex) allocation comparison

For additional information, see Section 5 which discusses specific GDN's flex allocations, while appendix D tabulates details of Flex requests and decisions for each offtake.

4.3 Assured Offtake Pressure Allocation

AOPs represent the minimum pressure limit which NGT is obliged to make available at each GDN offtake. There are two parts of the AOP, 06:00 AOP and at 22:00 AOP, also sometimes referred to start of day (SOD) and end of day (EOD), respectively. GDNs can request an increase, or can reduce at their discretion, either or both of these.
There were a number of AOP requests, for increases in EOD pressures, one of which was partially accepted.

However, at other offtakes, following assessment, AOP increases could not be accommodated due to the constrained nature of the locations. The effect of agreeing these pressure changes would negatively impact on either entry or exit capability or the ability of the network to provide the required levels of Flex.

Figure 6 - AOP Requests, shows an overview of the pressure requests received across the network.

Figure 7 - AOP Changes, shows the changes which were accepted. Section 5 discusses AOP request for each specific GDN, while appendix E tabulates details of pressure requests respective decision for the entire system.

Bilateral discussions with GDNs were carried out, prior to booking submissions, in which indicative views on the likely outcomes were communicated, as part of collaborative working with GDNs.

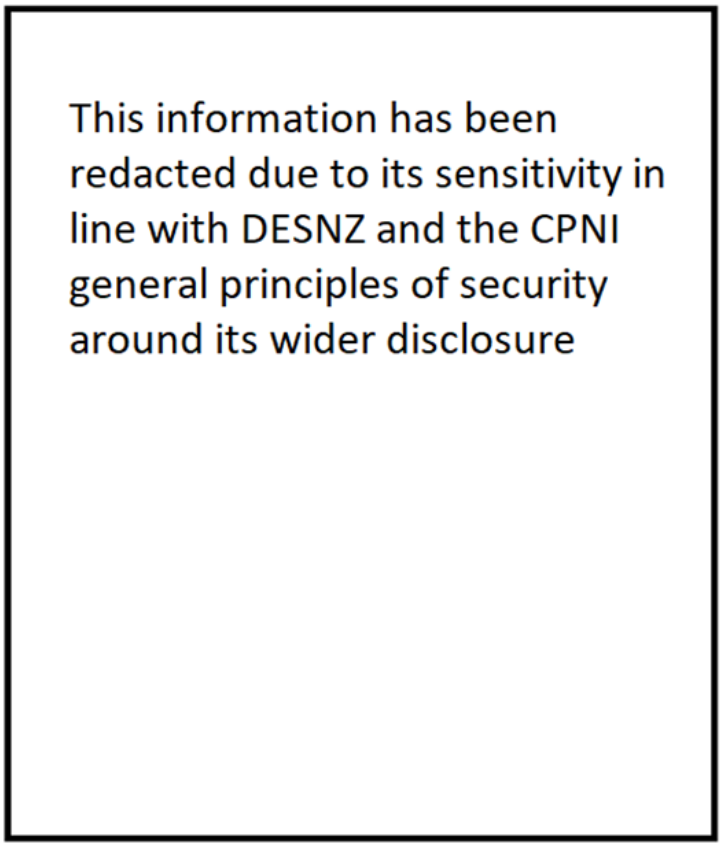


Figure 6 - AOP Requests

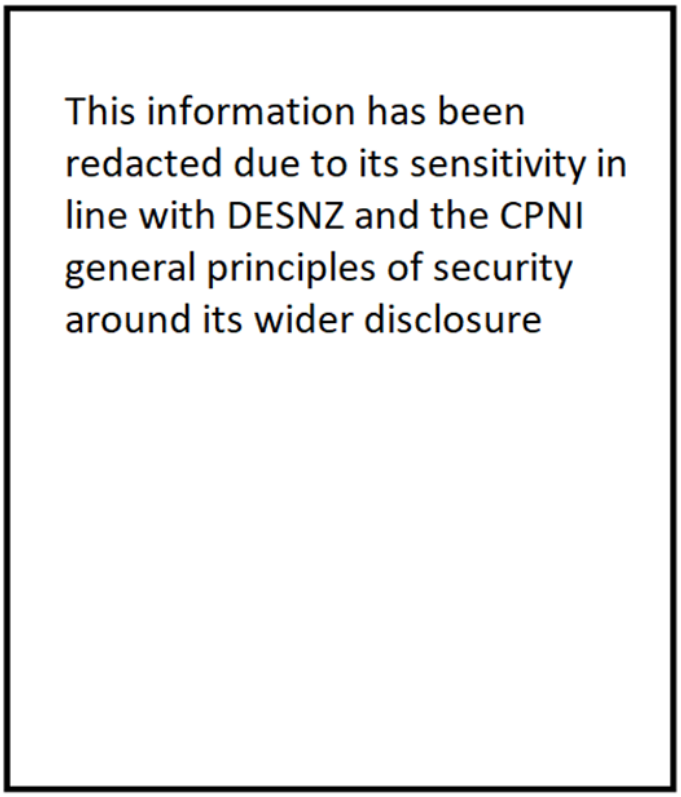


Figure 7 - AOP Changes

5 Capacity and Pressure Allocation for each Distribution Networks

5.1 Northern Gas Network Requests

Northern gas networks (NGN) owns two LDZs, Northern (NO) and Northeast (NE). Both are located in a region where pipeline and compression assets provide significant Entry and transit flow capability.

5.1.1 Flat Capacity

There was no change in the total LDZ Flat Capacity request in the NE LDZ. In the NO LDZ had an increase across all years.

All Flat capacity increases at offtakes were within baseline and were allocated.

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 4 - Northeast and Northern LDZs Flat capacity booking

5.1.2 Flex Capacity

There was an overall slight decrease in Flex requested in both LDZs, in all years, (refer to appendix D for Flex booking details).

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 5 - Northeast and Northern LDZs Flex capacity booking

All Flex capacity changes at offtakes were allocated in both LDZs.

5.1.3 Assured Offtake Pressure

No AOP increase requests were submitted for either NGN LDZs.

5.2 SGN Requests

SGN owns three LDZs, Scotland (SC), Southeast (SE), and Southern (SO). There is some interaction between SE and SO.

5.2.1 Flat Capacity

For SC LDZ there is an increase in the Y+1 bookings followed by a decrease in flat bookings in the remaining years due to an enduring reduction at a single offtake. There is also a significant decrease in SE LDZ (see appendix C). There was no change in SO LDZ.

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 6 - Scotland, Southeast and Southern LDZs Flat capacity booking

Flex Capacity

There were no changes to Flex bookings in either SC or SE LDZs but an increase in SO LDZ (see appendix D for specific offtake changes).

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 7 - Scotland, Southeast and Southern LDZs Flex capacity booking

5.2.2 Assured Offtake Pressure

No AOP increase requests were submitted for any SGN LDZs

5.3 Wales and West Utilities Requests

Wales and West Utilities owns three LDZs, Wales North (WN), Wales South (WS), and Southwest (SW). WS and SW are located in a region influenced by the uncertainty of LNG supplies at Milford Haven, with the SW also being the extremity of the network without local Entry supply, and thus a constrained area.

5.3.1 Flat Capacity

There were generally no changes in flat bookings for any of the LDZs with the exception of a significant increase in Y+1 in WS, as shown in Table 8 below

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 8 - Southwest, Wales North, and Wales South LDZs Flat capacity booking

5.3.2 Flex Capacity

There was a slight increase in flex through the years at 2 offtakes, which were both accepted.

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 9 - Southwest, Wales North, and Wales South LDZs Flex capacity booking

5.3.3 Assured Offtake Pressure

There were no request for AOP increases from WWU.

5.4 Cadent Gas Requests

Cadent Gas has five LDZs East Anglia (EA), East Midlands (EM), North Thames (NT), Northwest (NW), and West Midlands (WM).

5.4.1 Flat Capacity

Whilst there is a small increase in the West Midlands Y+1 booking. The overall trend is a decrease in flat capacity, across each LDZ, particularly from Y+4 onwards.

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 10 - East Anglia, East Midlands, North Thames (North London), Northwest, and West Midlands LDZs Flat capacity bookings

5.4.2 Flex Capacity

There was an overall decrease in flex capacity across the LDZs with a decrease in NT LDZ and an increase in NW, both of which were accepted. There were no changes requested at any other LDZ.

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 11 - East Anglia, East Midlands, North Thames (North London), Northwest, and West Midlands LDZs Flex capacity bookings

5.4.3 Assured Offtake Pressure

AOP increase requests were not accepted for North Thames, North West, and one offtake in the West Midlands. Request for increase in EOD another offtake in the West Midlands was partially accepted. The full request was not accepted as this would limit the suction pressure at the compressor station, causing a reduction in entry capability at Wales. A Partial acceptance was agreed.

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Table 12 - AOP comparison 2023 and 2024

6 Capacity Allocation for Direct Connects

There was a decrease in Exit capacity request from power stations and industrials in Y+1 and Y+2 and no change from Y+4 onward, as illustrated in Figure 8 - Total DC capacity booking trend.

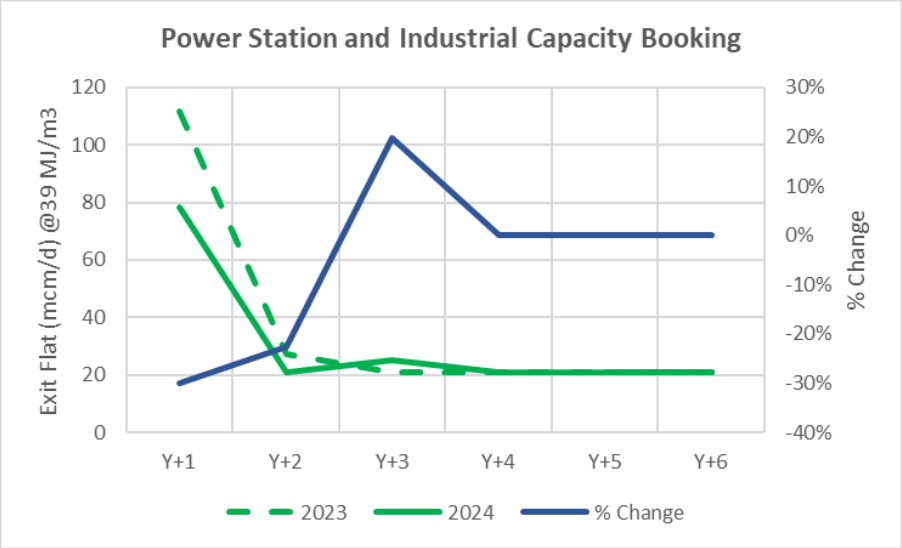


Figure 8 - Total DC capacity booking trend

7 Appendix

Appendix A: Exit Capacity Applications Process

Definitions:

a. **NTS Exit(Flat) Capacity:** is made available to permit the offtake of gas from the NTS at an even rate over the course of a Gas Day. A user can vary its rate of throughout the Gas Day provided that the daily quantity offtaken does not exceed the allocated flat capacity. Any variations must not exceed any limits on the rate of offtake made in respect of the connection.

b. **NTS Exit(Flexibility) Capacity:** applies only to GDN users. It is made available to permit, and used in, the offtake of gas from the NTS to the extent that the rate of offtake is not at an even rate over the course of a Day.

c. **Assured Offtake Pressures (AOP):** represents the minimum pressure required by a GDN at the offtake from the gas National Transmission System (NTS) in order to maintain adequate pressures in their own downstream system.

Users can request changes to their long term (Enduring) exit capacity through the long-term Exit Capacity application window, as below.

All Users: -

a. **Enduring Annual Exit (Flat) Capacity Decrease application**: - This allows a User to decrease their enduring capacity holdings from Year Y+1 (October following the July window). The application period for this process is 01 to 15 July.

b. **Annual NTS (Flat) Exit Capacity application**: - This is for capacity covering the period Y+1 to Y+3. The capacity allocated as a result of this application window is not enduring and applies only for the relevant year. The application period for this application window is 01 to 31 July

c. **Enduring Annual Exit (Flat) Capacity Increase application**: - This application window is for capacity covering the period Y+4 to Y+6. The capacity applied for in this application window is enduring capacity (i.e. applies for all future years from the first date for which capacity is requested), and is subject to User commitment (equivalent to the financial value of four years of capacity charges). The application period for this is 01 to 31 July.

GDN Users:-

Annual NTS (Flexibility) Exit Capacity :- GDN Users can apply for an increase or decrease in their NTS Exit (Flexibility) Capacity at NTS/LDZ offtakes for relevant gas year Y+1 up to gas year Y+6 (inclusive) by submitting an application during the application window period between 01 to 31 July. This is also the period when GDN Users request changes in Assured Offtake Pressure (AOP).

Users may apply for additional Enduring Annual NTS Exit (Flat) Capacity via either of two processes, which are detailed in the UNC (TPD Section B3.2). These processes allow application:

a. Within the Annual Application Window – held in July of each year; and

b. Outside of the Annual Application Window, permitted at any time from 1st October to 30th June in each Gas Year.

c.

Exit (flat and Flex) Capacity Application Timeframe

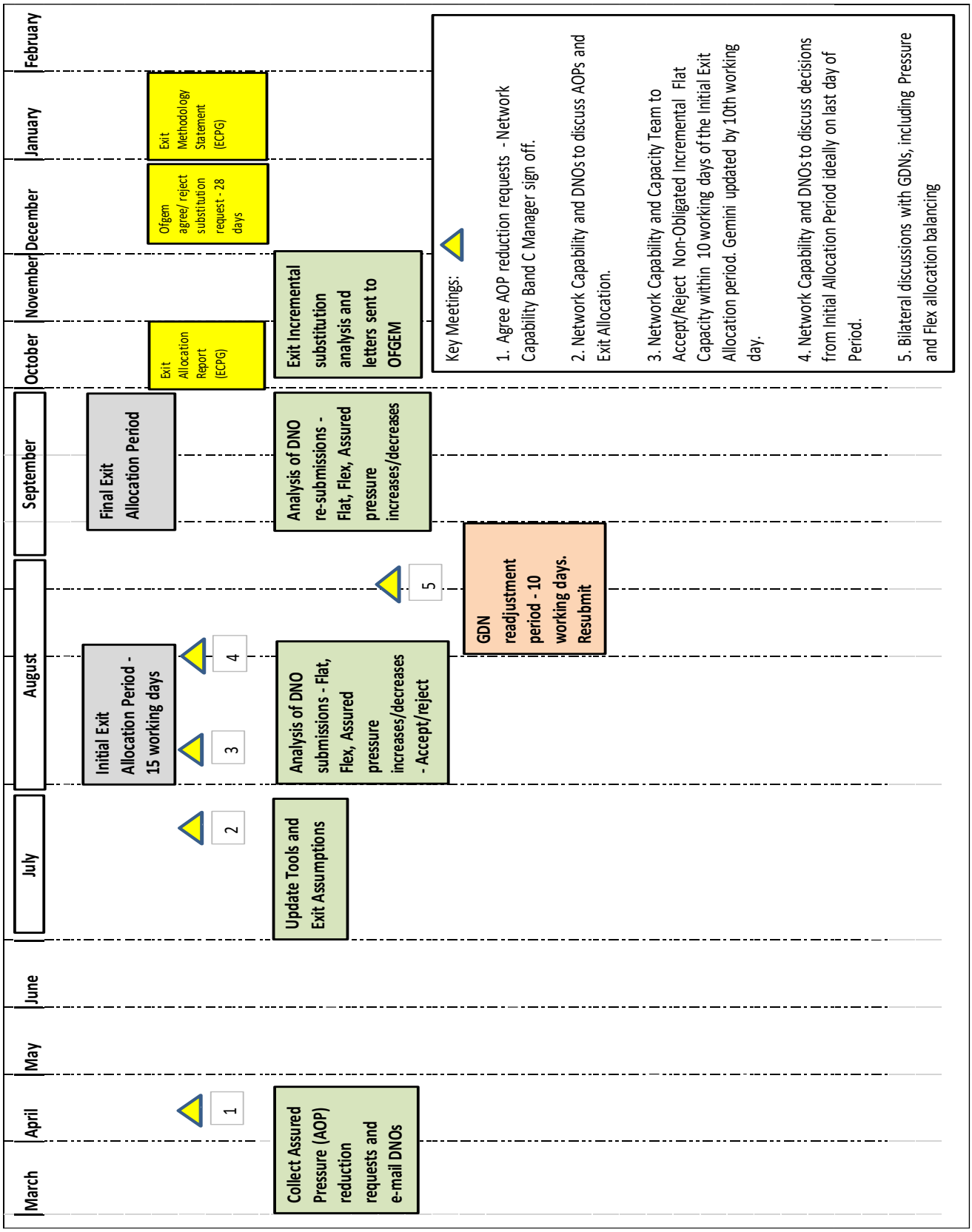
NTS Exit (Flat and Flexibility) capacity application windows close on 31st July. Requests for Exit (Flat and Flexibility) Capacity, received within the window, are processed as explained below:-

a. **Exit Allocation Period – Initial**: This period starts from the 1st working day of August and lasts for 15 working days. During this period, the Gas Network Development Team, within National Grid Transmission, carry out network analysis to take into account; requested increases/decreases in exit (Flat and Flex) capacity, system constraints/availability, sensitivities scenarios, and future projects. Following the analysis, the decisions regarding the exit capacity requests are communicated to Users via uploading the allocated quantities to GEMINI and teleconferences with the GDN Users.

b. **DN review period**: This period starts from the next working day following the expiry of the "exit allocation period – initial" and lasts for 10 working days. This is the opportunity for GDN Users to review the outcome of their requested Exit (Flex) Capacity especially where it was partly accepted and/or rejected. This is the opportunity for GDN Users to change or reallocate their Exit (Flex) Capacity requirements and resubmit their requests if needed.

c. **Exit Allocation Period – Final**: This period starts from the next working day on the expiry of the DN review period and last until the end of September. In this period we reanalyse the updated/amended exit capacity applications submitted during DN review period.

Appendix B: Exit Timeline



Appendix C: Exit (Flat) Capacity Table (Distribution Networks) (mcm/d @ 39 MJ/m3)

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Exit (Flex) Capacity Table (mcm @ 39 MJ/m3)

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure

Appendix D: Assured Offtake Pressure Table

This information has been redacted due to its sensitivity in line with DESNZ and the CPNI general principles of security around its wider disclosure