

National Grid House Warwick Technology Park Gallows Hill, Warwick CV34 6DA

To all interested parties,

Chris Logue
Head of Markets
chris.logue@nationalgrid.com
Mobile +44 (0)7880784888

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Dear Colleague

National Grid Transmission's Consultation on Entry Capacity Release Methodology Statement

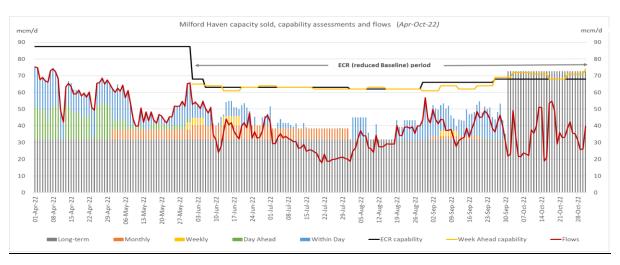
National Grid Gas plc's ("National Grid") Gas Transporter Licence in respect of the NTS ("the Licence") sets out the obligation to develop and modify the Entry Capacity Release (ECR) Methodology Statement.

As part of the review process for this statement, we are obliged to consult with interested parties on the proposed changes for a period of 28 days before formally submitting to the Authority for a decision. This letter identifies the proposed changes to the Entry Capacity Release Methodology Statement, and the reasons for them.

Background / Summer 2022

In April 2022 National Grid issued an ECR Methodology statement consultation which proposed to restrict the release of entry capacity for a defined period in summer 2022 at the Milford Haven ASEP. Ofgem agreed with National Grid that the nature of the immediate geopolitical circumstances imposed challenges regarding entry capacity release. The Authority approved the change with the interest of consumers in mind; mitigating against the potential consumer costs that might have arisen if entry constraints did occur as an outcome of high LNG flows.¹

Despite high exports of gas to Europe throughout summer 2022, Milford Haven flows were significantly below the restricted level of capacity. Furthermore, on average 30% of the restricted quantity of capacity remained unsold during the baseline reduction period between beginning of June and end of September (please see the chart below). The chart also demonstrates that the capability identified via the ECR consultation process was similar to the capability at the week ahead stage and that where capability was greater, this was released via the weekly auctions. Day ahead capability assessments were also undertaken throughout the period.



¹ https://www.ofgem.gov.uk/publications/decision-entry-capacity-release-methodology-statement-held-national-grid-gas-plc

To date we have no certainty of flows in summer 2023, or any firm capacity bookings placed in that time period. Our customers have told us that the capacity restriction introduced earlier this year created uncertainty in the market and potentially resulted in less cargos being delivered to Milford Haven. It's also been suggested that less LNG being delivered could have a negative impact on the GB wholesale gas prices, and therefore any potential constraint cost should be measured against any potential consumer price increases.

Even though the high LNG flows have not materialised this summer, we think that there are additional reasons to believe that the risk we identified earlier this year will persist into summer 2023 and that, once again, it is our role as a prudent operator to put forward a proposal which will mitigate it. In the next part of this letter, we explain the factors which we think should be taken into account to assess the potential of high LNG deliveries to GB, and the risk of high constraint costs this might cause if flows over the level of physical network capability materialise.

Drivers for change

Continuous geopolitical situation in Europe

Since April, the UK has been consistently exporting circa 75mcm/d to the EU via the interconnectors at Bacton (except for periods of physical unavailability). National Grid believe that the UK will continue playing an important role in supporting Europe in filling storage ahead of winter 2023/24. For that reason, and as in summer 2022, it is likely that we will continue seeing more LNG being delivered to GB to support interconnector flows to the EU. In comparison to the previous year, the overall LNG flows on the network this summer were circa double historic levels. The diverse supply of gas to GB from Norway and UKCS has also increased during the summer to facilitate the additional European demand.

Norwegian pipeline maintenance

The Norwegian Transmission System Operator, Gassco, released its summer 2023 maintenance plans at the beginning of November². According to these plans, there are going to be periods of reduced GB gas supply in summer 2023 between Norway and St Fergus due to pipeline maintenance. Although the reduction in the Vasterled gas pipeline supply (this pipeline runs from the Heimdal field in the North Sea to the St Fergus Entry terminal) is likely to mean that Norway will step up the production elsewhere, it is unclear whether that gas would be delivered to GB. In a scenario where European gas prices are higher; the Norwegian supply would be expected to flow to the EU instead. The current summer 2023 forward prices continue being higher in the EU in comparison to GB (14p/therm higher as of 7/12/22) which indicates that gas is more likely to flow to the EU.

We anticipate that the market will respond to any potential reduced Norwegian supplies in the most commercially efficient way. As LNG operates flexibly, we believe it is reasonable to anticipate that any reduction in Norwegian supply will mean an increased number of cargos being delivered to GB when the additional demand is needed.

We are fully aware of the key part LNG plays in the GB and global energy security of supply chain and, as a transporter, we recognise our role in ensuring that we maximise LNG flows to the GB as well as into the EU. At the same time, we realise that our physical network limitations restrict our ability to make the full baseline capacity available next summer without an increased risk of our customers and consumers potentially incurring a high financial cost of constraints.

Lower Summer Network Capability

For most Entry Points the baselines are based on the principle that they should closely reflect the maximum theoretical physical capability of the point under peak conditions, and as such, cannot necessarily be met 365 days of the year. It's also worth noting that the sum of all the entry baselines is roughly double the 1:20 peak day demand and as such, all baselines cannot be delivered on the same day. Capability on the NTS is linked to supply and demand, specifically locational supply and demand patterns, asset availability and capability, local linepack and pressures.

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² Gassco UMM

The NTS in normal operation is not designed to be able to deliver the baseline at Milford Haven during the summer or for that matter at any other system Entry point. Lower national demand impacts our ability to move gas away from the area, which coupled with reduced local demand in summer means that more gas would have to be transported further, impacting the capability of the Network.

Risk to customers and consumers

With the current ongoing geopolitical market dynamic likely to last (i.e., EU gas prices will be higher than GB therefore interconnector exports will continue), plus the added factor of Norwegian pipeline maintenance taking place next summer (as well as lower summer network capability), we believe that the risk of LNG flows exceeding network capability at Milford Haven exists.

We continue to believe that releasing capacity over the network capability carries a risk. Offering full baseline capacity would mean selling it in excess (circa 20 to 25 mcm/d at Milford Haven) of the forecast network capability. If the flows from Milford Haven exceed physical network capability for an extended period of time, this will result in National Grid taking frequent constraint management actions. Considering the current gas prices, the cost of constraint actions could quickly run up to millions of pounds in customer and consumer costs. It is our opinion that releasing forward capacity up to capability level would offer the most certainty to the market, whilst reducing the significant industry costs potential of managing constraints throughout the summer.

While we have no certainty constraints will occur (due to the lack of certainty around flows), we have calculated the potential severity of constraint costs should the risk materialise. It's worth stressing that there might be a variety of different tools³ used to mitigate the constraint, and the overall cost of making sure flows are maintained at safe operational levels will depend on market responsiveness to the constraint actions taken. It will also depend on the range of commercial interests of parties responding to actions, as well as the gas price on the day(s) constraint occur.

We have made high level assumptions when calculating the potential constraint costs to consumer:

- All baseline capacity is sold, and flows are equal to baseline (baseline at Milford Haven: 87mcm, average Summer capability: 65mcm, therefore constraint volume = 22mcm)
- 50% of the constraint volume is sold via locational sell actions (half of which required corresponding locational buys to maintain wider network integrity) and another 50% is managed by capacity buybacks.
- Price utilised was £3.50/therm. Prices assumed for locational actions are based on average deviations from SAP of historic transactions at Milford Haven.

Based on the above assumptions the daily net cost of a constraint would stand at approximately £20.6m. In a scenario of prolonged system stress, the daily cost could rise significantly in a short period of time.

ECR changes required

We recognise that there are two different consumer risks; the potential costs of constraints vs the impact on wholesale gas prices if LNG cargoes aren't delivered to GB. Therefore, we believe that as these both have different consumer impacts, a decision needs to be taken as to which carries the greater risk.

Whilst all parties will have a view on the level of risk exposure, we recognise that LNG Operators and Shippers at Milford Haven will be best placed to articulate the GB LNG cargo delivery risk, but we believe that, as a prudent network operator, we should articulate the constraint risk and protect our customers from undesired consequences of high constraint costs. We also believe that proposing an ECR change and opening it up for consultation is the best vehicle for all parties to understand the issues, express views, and ultimately for a decision to be made upon the best approach for GB customer and consumers.

³ Summary of NGG's capacity constraint management tools can be found here: https://www.gasgovernance.co.uk/sites/default/files/ggf/2022-06/July%202022%20TWG%20%281%29.pdf

In order to mitigate the risk of high constraint costs, the ECR Methodology Statement change needs to be considered to allow National Grid to restrict the capacity release at the Milford Haven ASEP for the period between 1st May and 30th September 2023. This ties in with the Norwegian outages and therefore potential need for higher LNG deliveries to the GB.

If the specific system conditions allow, as for summer 22, we propose to make available any withheld capacity (in full or in part) in the weekly or daily auctions (day ahead and within day) to maximise the availability of capacity within capability for our customers. We would use the same methodology to assess Milford Haven capability as we did in April this year. This method, although set well in advance of summer, has proven to accurately portray network capability in comparison to when re-assessed closer to the Gas Day. The analysis conducted on weekly basis in the last couple of months demonstrate that the network capability assessment made in April 2022 was reflective of the actual physical network capability conducted on the week ahead stage.⁴

The table below summarises the capability levels based on the last six years of median⁵ demand (May 2017 – September 2022, excluding 2020-21 due to reduced demand through Covid). For each month, we propose to release capacity equivalent to the maximum median capability observed in the 6-year period. The proposed quantity of capacity to be released would exceed the highest LNG flows we have seen on the network in the last 6 years.

| Month | Maximum median capability mcm/d | Month / Year Observed May 2017-Sep2022 | Capacity to be released in summer 2023 kWh/day** |
|-----------|---------------------------------|---|--|
| May | 68 | May 2017 | 748,000,000 |
| June | 66 | June 2022 | 726,000,000 |
| July | 63 | July 2018 | 693,000,000 |
| August | 64 | August 2022 | 704,000,000 |
| September | 66 | September 2017 | 726,000,000 |

The following changes to the wording of the methodology would be applicable to restrict the capacity:

- Paragraph 74 referring to National Grid's right to withhold capacity in a scenario where it foresees a constraint would be amended to:

'Where, in respect of any given Gas Flow Day, circumstances arise in which National Grid foresees a capacity constraint occurring at an ASEP, National Grid may withhold capacity from sale for that ASEP in DSEC auction. Furthermore, National Grid may also withhold capacity from an ASEP in WSEC or RMTNTSEC auctions in the period between 1st May 2023 to 30th September 2023 at the Milford Haven ASEP – such quantities may subsequently be released in part or in full in the WSEC or DSEC auctions. In all cases the quantity withheld will be limited to that which National Grid considers necessary to avoid the constraint or to avoid increasing the extent of the constraint, and hence to avoid, or limit, the cost of any actions needed to manage the constraint.

Given the current circumstances, we know there is a fine balance between our responsibility to encourage maximum LNG flows to support GB and EU gas supply and helping keep gas prices for UK consumers as low as possible. Investment in the physical Network to increase the Milford Haven summer capability would take a number of years to deliver, therefore in our opinion releasing Obligated capacity in line with the levels of capability in summer 2023 will effectively limit the constraint cost risk for customers and UK consumers.

We recognise that there are different industry views regarding the appropriate balance of consumer risk and feel it is our role to consult on these issues so that customers can put forward their views. We encourage through this consultation alternative ideas on how to achieve the correct balance of risk, so that we attract LNG to the UK, whilst not going beyond the physical capability of our Network (and thus incurring significant constraint management costs). Feedback received via the consultation will be shared with Ofgem for consideration in the decision-making process.

⁴ Record of additional capacity released in Weekly auctions in summer 2022: download (nationalgrid.com)

⁵ The median relates to the middle value when all end of day flows for a month are ranked in a list from smallest to largest

To assist in reviewing the proposed changes to the Entry Capacity Release Methodology Statement a comparison of the current document version 7.0 to version 7.1 is available on our website (please go to Entry capacity release (ECR) section and 'Current consultation – Dec 2022-Jan 2023' folder): https://www.nationalgrid.com/uk/gas-transmission/capacity/capacity/methodology-statements.

National Grid would appreciate the comments of all interested parties on the draft changes to the capacity statements. Responses should arrive at National Grid by **17:00 on Friday, 6th January 2023** and be sent by email to: box.gsoconsultations@nationalgrid.com.

Responses will be placed on our website and incorporated within the consultation conclusions report. If you wish your response to be treated as <u>confidential</u>, then please mark it clearly to that effect.

Your sincerely

Chris Logue Head of Markets