

Gas National Transmission System Maintenance Programme

October 2017 - September 2019

Final Version 1.0

30th September 2017

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1. Introduction

Each year National Grid Gas Transmission undertakes a variety of maintenance and investment activities on the gas National Transmission System (NTS). This work can take many different forms, including keeping our assets in good working order, replacing ageing assets with new equipment, inspecting assets and facilitating new connections and capacity requirements.

This maintenance programme is intended to provide an indication to the gas industry of the impact of these works on the NTS, and any associated impact on entry or exit capacity from October 2017 to September 2019. This programme supersedes all previous plans.

This document provides an overview of all work scheduled at NTS compressor stations and NTS pipelines.

Although every effort is made to align work to any customer or associated asset outages which we have been made aware of, this is not always possible and where NTS Exit Points are affected, we will endeavour to issue Maintenance Day notices to our customers at least 42 days in advance of the scheduled Maintenance work.

This document only includes maintenance activities on the NTS which are to be undertaken by National Grid NTS. It does not include maintenance carried out upstream of the NTS by Delivery Facility Operators (DFO's) and Producers or downstream of the NTS by the Distribution Networks and other NTS connected parties.

2. NTS Maintenance Work Monthly Summary

The following tables provide a summary of the NTS in line inspection work, other NTS pipeline work and NTS compressor outages. The month where the work is scheduled to take place has been highlighted in the tables. If it is the case that any work listed below has an effect on the flow of gas, affected sites and associated shippers will be contacted individually. The tables indicate which month the work takes place in, not that the work will take the whole of the month.

2.1 Planned In Line Inspections

National Grid Gas Transmission is required to carry out in-line inspections of our pipelines periodically in order to monitor and maintain their integrity, ensuring that they comply with the Pressure Systems Safety Regulations (PSSR). The in-line inspection process requires a number of Pipeline Inspection Gauges (PIGs) to travel through the pipeline in order to complete a full inspection. The number of "runs", and the associated time taken for the work, can vary from pipeline to pipeline.

| = Confirmed period | |
|--------------------|--|
|--------------------|--|

= Provisional period

| | | | 2017 | 7 | | | 20 | 18 | | | | 2019 |) |
|------|--|-----|------|-----|-----|-----|-------|----|----|----|---|------|----|
| Area | In Line Inspections | Oct | Nov | Dec | Jan | Feb | March | Q2 | Q3 | Q4 | g | Q2 | 03 |
| EA | Fdr 27 – Cambridge to Matching Green | | | | | | | | | | | | |
| WS | Fdr 20 – Kenn South to Choakford | | | | | | | | | | | | |
| SC | Fdr 10 – Boon to Penicuik | | | | | | | | | | | | |
| SW | Fdr 2 – Treaddow to Dowlais | | | | | | | | | | | | |
| EM | Fdr 7 – Gosberton to Hatton | | | | | | | | | | | | |
| SC | Fdr 10 – Bathgate to Glenmavis | | | | | | | | | | | | |
| NW | Fdr 11 – Grayrigg to Samlesbury | | | | | | | | | | | | |
| EM | Fdr 18 – Brocklesby to Stallingborough | | | | | | | | | | | | |
| NE | Fdr 19 – Easington to Paull | | | | | | | | | | | | |
| EA | Fdr 26 – Huntingdon to Steppingley | | | | | | | | | | | | |
| NW | Fdr 16 – Barrow to Lupton | | | | | | | | | | | | |
| NO | Fdr 6 – Little Burdon to Billingham | | | | | | | | | | | | |
| SW | Fdr 14 – Wormington to Pucklechurch | | | | | | | | | | | | |
| WM | Fdr 14 – Churchover to Wormington | | | | | | | | | | | | |
| NW | Fdr 15 – Lupton to Bretherton | | | | | | | | | | | | |

2.2 Pipeline Work

Pipeline work listed in this table below can include diversions of existing pipelines, facilitation of connections to the NTS, and replacement or maintenance of pipeline and associated assets (pipes, valves, pig traps etc.) which require some form of pressure restriction or isolation. Some work can be performed by restricting the pressure of gas in the pipeline; however some work requires a full shut down (often termed "isolation" or "outage") of a section of the pipeline which would then be reinstated back to operational pressures once the work is completed.

| | = Pressure Restriction | = Pipel | ine Shi | utdown | Iown = Provisi | | | | | | ional period | | | | |
|------|-------------------------------------|---------|---------|--------|----------------|------|-------|----|----|----|--------------|------|----|--|--|
| | | | 2017 | | | 2018 | | | | | | 2019 | | | |
| Area | Pipeline Work | Oct | Νον | Dec | Jan | Feb | March | Q2 | Q3 | Q4 | ð | Q2 | Q3 | | |
| EA | Bacton Terminal (Phase 2) | | | | | | | | | | | | | | |
| SC | St Fergus – Connection project | | | | | | | | | | | | | | |
| EA | Bacton Terminal (Phase 3a) | | | | | | | | | | | | | | |
| EA | Bacton terminal (Phase 3b) | | | | | | | | | | | | | | |
| WA | Fdr 2 Cilfrew | | | | | | | | | | | | | | |
| EA | Fdr 2 Bacton to Brisley | | | | | | | | | | | | | | |
| EA | Fdr 2 Brisley to Setchey | | | | | | | | | | | | | | |
| NE | Fdr 7 Towton to Cawood | | | | | | | | | | | | | | |
| SW | Fdr 14 Barrington to Ottery St Mary | | | | | | | | | | | | | | |
| SC | Fdr 12 Balgray to Drum | | | | | | | | | | | | | | |
| EA | Fdr 5 Bacton (Phase 4) | | | | | | | | | | | | | | |
| WM | Fdr 14 Churchover to Austrey | | | | | | | | | | | | | | |
| WM | Fdr 14 Leamington to Eathorpe | | | | | | | | | | | | | | |
| EA | Fdr 3 Royston to Whitwell | | | | | | | | | | | | | | |
| EA | Fdr 2 Wisbech | | | | | | | | | | | | | | |
| EA | Fdr 5 Bacton (Phase 6) | | | | | | | | | | | | | | |
| NE | Fdr 9 Paull to Goxhill | | | | | | | | | | | | | | |
| EA | Bacton Terminal (Phase 7) | | | | | | | | | | | | | | |
| EA | Fdr 2 Bacton to Erpingham (Phase 7) | | | | | | | | | | | | | | |
| EA | Bacton Terminal (Phase 4) | | | | | | | | | | | | | | |
| EA | Bacton Terminal (Phase 8) | | | | | | | | | | | | | | |
| EA | Bacton Terminal (Phase 9) | | | | | | | | | | | | | | |
| SO | Fdr 7 Aylesbury to Hardwick | | | | | | | | | | | | | | |
| SO | Fdr 9 Aylesbury to Slapton | | | | | | | | | | | | | | |
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Please note: where a pipeline is required to be shut down the specific isolation points may differ from those displayed above. Any parties impacted by the works are contacted directly.

2.3 NTS Compressor Stations

Compressors are used to help move gas around the NTS to where it is needed, maintaining pressures required at exit points whilst avoiding over-pressurising pipelines. In order to maintain our capability at Compressor Stations, routine maintenance is performed as well as a variety of other projects to maintain and improve the fleet.

| | = Confirmed period = Provisional per | | | | | | | | | | onal perio | | |
|--------------------|--------------------------------------|-----|-----|-----|-----|-------|----|----|----|---|------------|----|--|
| | 2017 2018 2019 | | | | | | | | | | 2019 | | |
| Compresor Stations | Oct | Nov | Dec | Jan | Feb | March | Q2 | Q3 | Q4 | ð | Q2 | 03 | |
| Aberdeen |] | | | | | | | | | | | | |
| Alrewas | | | | | | | | | | | | | |
| Avonbridge East | | | | | | | | | | | | | |
| Avonbridge West | | | | | | | | | | | | | |
| Aylesbury | | | | | | | | | | | | | |
| Bishop Auckland | | | | | | | | | | | | | |
| Carnforth | | | | | | | | | | | | | |
| Cambridge | | | | | | | | | | | | | |
| Chelmsford | | | | | | | | | | | | | |
| Churchover | | | | | | | | | | | | | |
| Diss | | | | | | | | | | | | | |
| Felindre | | | | | | | | | | | | | |
| Hatton | | | | | | | | | | | | | |
| Huntingdon | | | | | | | | | | | | | |
| Kings Lynn | | | | | | | | | | | | | |
| Kirriemuir | | | | | | | | | | | | | |
| Lockerley | | | | | | | | | | | | | |
| Moffat | | | | | | | | | | | | | |
| Nether Kellet | | | | | | | | | | | | | |
| Peterborough | | | | | | | | | | | | | |
| Warrington | | | | | | | | | | | | | |
| Wisbech | | | | | | | | | | | | | |
| Wooler | | | | | | | | | | | | | |
| Wormington | | | | | | | | | | | | | |

3. Maintenance Affected Exit Points

We aim to minimise the impact of our maintenance on customers through transparency, aligning our work with their outages as appropriate and facilitating customer needs for flexibility.

Outages

Each year we ask when our customers' outages are to enable alignment of works. If your outages move, please get in touch as early as possible so that we can consider whether we can also realign our works to reduce any impact of these works. Please contact us to advise of any change to outage periods via email at <u>NTSaccessplanning@nationalgrid.com</u>.

Where possible, work is co-ordinated with the end user to avoid supply disruption, however in certain circumstances it may be necessary to schedule work at a time which may require disrupting the supply to an Exit Point whilst the NTS maintenance is undertaken.

Shippers, End-Users and Distribution Networks will be advised, in accordance with the Uniform Network Code (UNC) requirements and timescales, of any required disruptions to supply at an Exit Point by the issuing of a Maintenance Day(s) to the relevant party.

Maintenance Day notifications will be issued by February 1st each year to all relevant parties where our maintenance will impact gas flows for the period April to October. Where work is aligned to customer outages, or there is no anticipated impact, we will issue an Advice notice for your convenience to confirm these arrangements. Should any changes or additions to the requested Maintenance Days be required, all relevant parties will be notified in line with the timescales detailed in the UNC.

Minor Works Agreement

We recognise that sometimes standard maintenance approaches may not be optimal for our customers. Where this is the case the Minor Works Agreement can enable parties to agree different maintenance approaches through a bilateral contract with directly connected customers. Customers can pay the incremental costs of working flexibly outside normal working practices where we are able to accommodate these requests. For any questions relating to Minor Works Agreements, please contact the Business and Operations Planning Team on 01926 655625 or email via Transmission.MaintenanceRequests.NTS@nationalgrid.com.

General Queries

Further information on the maintenance activities undertaken by us is available on our website¹.

If you have any queries or questions regarding the information contained within this document, please contact:

NTS Access Planning Team National Grid Gas System Operation National Grid House Gallows Hill Warwick CV34 6DA <u>NTSaccessplanning@nationalgrid.com</u> Tel: 01926 655958

¹<u>http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/maintenance/</u>

We would welcome any feedback from you in relation to the maintenance programme or the way in which this information is provided. If you would like to provide feedback please contact us via email at: NTSaccessplanning@nationalgrid.com