

# Gas National Transmission System April Maintenance Programme

April 2016 - March 2018

Draft Version 1.0

29<sup>th</sup> January 2015

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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 April 2016 to March 2018. This programme supersedes all previous plans.

This document provides an overview of work scheduled at NTS compressor stations and NTS pipelines. Where this work affects the capability at an Aggregate System Entry Points (ASEPs), an indication of the revised ASEP's minimum daily capability is included for each month.

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.

### 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.

Area	In Line Inspections	2016							2017				2018	
		Apr	May	Jun	Jul	Aug	Sep	Q4	Q1	Q2	Q3	Q4	Q1	
SC	Feeder 10 Kirriemuir to Bathgate													
SC	Feeder 10 Aberdeen to Kirriemuir													
WM	Feeder 23 Honeybourne to Churchover													
NO	Feeder 12 Longtown to Bishop Auckland													
NO	Feeder 15 Longtown to Plumpton Head													
EM	Feeder 07 Gosberton to Tydd St.Giles													
EM	Feeder 04 Tixover To Blaby													
SE	Feeder 18 Shorne to Farningham													
NO	Feeder 06 Teesside to Cowpen Bewley													
SC	Feeder 10 Penicuik to Bathgate													
NT	Feeder 05 Roxwell to Luxborough lane													
SC	Feeder 10 Penicuik to Boon													
SC	Feeder 11 Kirriemuir to Bathgate													
NO	Feeder 11 Longtown to Grayrigg													
NE	Feeder 6 Burton Agnes to Paull													
NE	Feeder 21 Warburton to Paull													
NW	Feeder 15 Lupton to Breatherton													
EM	Feeder 24 Hatton to Silk Willoughby													
NE	Feeder 06 Paull to Saltend													

## 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

= Pipeline Shutdown

= Provisional period

Area	Pipeline	2016							2017				2018	
		Apr	May	Jun	Jul	Aug	Sep	Q4	Q1	Q2	Q3	Q4	Q1	
SC	Feeder 10 Penicuik to Soutra													
SC	Feeder 10 Soutra to Boon													
SC	Feeder 10 Bathgate to Glenmavis													
SC	Feeder 10 Bathgate to Glenmavis													
NO	Feeder 10 Humbleton to Wooperton													
SC	Feeder 10 St Fergus to Stuartfield													
SC	Feeder 11 Stirling to Larbert													
SC	Feeder 12 Bathgate to Pettinain													
NO	Feeder 12 Langholm to Longtown													
SW	Feeder 14 Sapperton to Cirencester													
NW	Feeder 15 Bretherton to Warburton													
EA	Feeder 02 Kings Lynn T to Castle Acre													
WS	Feeder 02 Dowlais to Gilwern													
NW	Feeder 21 Burton Point to Mickle Trafford													
WM	Feeder 21 Weston Bank to Alrewas													
EA	Feeder 05 Yelverton to Morningthorpe													
SE	Feeder 05 Shorne to Isle of Grain													
NO	Feeder 06 Ingleby Greenhow to Gillamoor													
NO	Feeder 06 Yarm Tees South to Kirklevington													
NO	Feeder 06 Yarm Tees South to Kirklevington													
NO	Feeder 06 Pickering to Burton Agnes													
SO	Feeder 07 Chalgrove to Didcot P.S													
SC	Feeder 13 St Fergus to Cairnorrrie													
SW	Feeder 14 Pucklechurch to Ilchester													
EA	Feeder 03 Bacton to Roundham													
SC	Feeder 10 Aberdeen to Crathes													
NW	Feeder 21 Treales to Nateby													
NW	Feeder 4 Warburton to Partington													
SC	Feeder 12 St Fergus to Aberdeen													

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 period

Compressor Station Outages	2016							2017				2018
	Apr	May	Jun	Jul	Aug	Sep	Q4	Q1	Q2	Q3	Q4	Q1
Aberdeen	Confirmed			Confirmed								
Alrewas	Confirmed	Confirmed	Confirmed									
Avonbridge East		Confirmed	Confirmed									
Avonbridge West		Confirmed	Confirmed									
Aylesbury	Confirmed	Confirmed	Confirmed		Confirmed							
Bishop Auckland	Confirmed	Confirmed										
Carnforth			Confirmed	Confirmed	Confirmed	Confirmed	Confirmed			Provisional		
Cambridge												
Chelmsford	Confirmed	Confirmed	Confirmed	Confirmed	Confirmed							
Churchover				Confirmed								
Diss	Confirmed	Confirmed	Confirmed		Confirmed							
Felindre		Confirmed										
Hatton												
Huntingdon	Confirmed	Confirmed	Confirmed	Confirmed	Confirmed	Confirmed	Confirmed		Provisional	Provisional		
Kings Lynn		Confirmed	Confirmed	Confirmed	Confirmed	Confirmed			Provisional	Provisional		
Kirriemuir				Confirmed						Provisional		
Lockerley					Confirmed							
Moffat					Confirmed							
Nether Kellet		Confirmed	Confirmed						Provisional	Provisional		
Peterborough				Confirmed					Provisional	Provisional		
Warrington					Confirmed							
Wisbech			Confirmed						Provisional			
Wooler				Confirmed								
Wormington						Confirmed						

### 3. ASEP Capability

The table below shows an indicative flow capability for each Aggregate System Entry Point (ASEP), taking into account the effect of the draft maintenance programme. The volumes are displayed month by month and are based on appropriate seasonal normal conditions.

In generating the ASEP capabilities, no account has been taken of any supply side (DFO) maintenance outages.

The value represents the ASEP's daily capability for each month, based on Seasonal Normal Demand conditions and for the period in the month where scheduled maintenance has most impact on capability. The analysis performed to produce the figures uses the assumption that a supply at a particular ASEP is favoured over other ASEPs. For example, in producing capability figures for St Fergus, it would be assumed that St Fergus ASEP would be flowing at its maximum for the season and the rest of the NTS supply was spread over other ASEPs.

Where "no impact" has been stated, this indicates that the maintenance scheduled is expected to have no adverse effect on the ASEP capability.

The capability volumes shown for the individual ASEPs are indicative only, but do represent a consistent operational view.

On any given day, the amount of capability that may be available at any ASEP will depend upon the level and distribution of the demand and the level of supplies at other terminals. In cases where scheduled maintenance has an adverse effect on an ASEP's capability, National Grid may be able to make additional capability available at other ASEPs.

	Apr	May	Jun	Jul	Aug	Sep	Oct
St Fergus	No Impact	93 (1023)	87 (957)	82 (902)	83 (913)	84(924)	No impact
Teesside	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
Barrow	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
Easington	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
Theddlethorpe	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
Bacton	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
Isle of Grain	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
Milford Haven	No Impact	61 (671)	No Impact	64 (704)	No Impact	66 (726)	No impact

Values in millions of cubic metres & (GWh)

(Conversion from millions of cubic metres to GWh using Calorific Value of 39.6 MJ/m<sup>3</sup>)

## 4. Maintenance Affected Exit Points

We aim to minimise the impact of our maintenance by working with our customers and 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 [NTSaccessplanning@nationalgrid.com](mailto:NTSaccessplanning@nationalgrid.com) or via phone (01926 655958)

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 have been issued directly to all relevant parties for the work detailed in this maintenance programme for the period April to October 2016. Where work has been aligned to outages, or there is no anticipated impact for other operational reasons, we have issued Advice Notices 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.

### General Queries

Further information on the maintenance activities undertaken by us is available on our website<sup>1</sup>.

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  
[NTSaccessplanning@nationalgrid.com](mailto:NTSaccessplanning@nationalgrid.com)  
Tel: 01926 655958

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](mailto:NTSaccessplanning@nationalgrid.com)

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