nationalgrid

Gas National Transmission System April Maintenance Programme

April 2014 - March 2016

Final Version 1.1

01st May 2014

Contents

May Update	**Version 1.1**	**1st May 2014**

Introduction

Every year we perform a variety of activities on the gas National Transmission System (NTS) to maintain and develop the network. The 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 Final maintenance programme is intended to provide an indication to the gas industry of the impact of work on the NTS, and any associated impact on entry or exit capacity, during the summer maintenance period (April 2014 to March 2016). This programme supersedes all previous plans.

We have provided, in this document, an overview of work scheduled at NTS compressor stations, NTS pipelines potentially impacting NTS exit points and Aggregate System Entry Points (ASEPs), and have included an indication of the revised ASEP's daily capability.

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 System 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.

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

Juliana Pollitt (NTS Access Planning Manager)

National Grid
Gas System Operation
National Grid House
Gallows Hill
Warwick
CV34 6DA
NTSaccessplanning@nationalgrid.com
(Tel: 01926 656195).

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

Further information on the maintenance activities undertaken by us is available on our website at: http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/maintenance/

NTS Maintenance Work Monthly Summary

The tables over the next few pages provide a summary of the NTS compressor outages, in line inspection work and other pipeline work. The month where the work is scheduled to take place has been highlighted in the tables. If it is the case that any work which listed above has an effect on the flow of gas, affected sites are contacted individually.

Planned In Line Inspections

National Grid 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.

2014/15

In Line Inspections	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Feeder 2: Bacton to Wisbech												
Feeder 3: Bacton to Roudham Heath												
Feeder 4: Bacton to Wisbech												
Feeder 7: Susworth Trent Crossing (North)												
Feeder 7: Susworth Trent Crossing (South)												
Feeder 10: St Fergus to Aberdeen												
Feeder 14: Sapperton to Cirencester												
Feeder 14: Austrey to Shustoke												
Feeder 15: Bretherton to Warburton												
Feeder 21: Treales to Burscough												
Feeder 21: Carnforth to Treales												
Feeder 21: Audley to Alrewas												

2015/16

	2015			2016
In Line Inspections	**Q2**	**Q3**	**Q4**	**Q1**
Feeder 5: Yelverton - Stowmarket				
Feeder 9: Hatton - Peterborough				
Feeder 10: Thrunton - Saltwick				
Feeder 12: Bathgate - Longtown				
Feeder 23: Wormington - Tirle				
Feeder 4: Shocklach - Western PT				

Pipeline Work

= Pressure Restriction = Pipeline Shutdown

Pipeline work listed in this table can include diversions of existing pipelines, facilitation of connections to the NTS, and replacement or maintenance of pipeline equipment (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.

2014/15

Pipeline Work	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Feeder 2: Dowlais to Dyfryn												
Feeder 4: Warburton to Holmes Chapel												
Feeder 4: Warburton to Partington												
Feeder 6: Pickering to Elton												
Feeder 6: Little Burdon to Billingham												
Feeder 9: Brockelsby to Swallow												
Feeder 9: Steppingley to East Ilsley												
Feeder 10: Thrunton												
Feeder 10: Bathgate to Glenmavis												
Feeder 10: Lennel North to Lennel South												
Feeder 11: Lockerbie to Waterbeck												
Feeder 11: Longtown to Grayrigg												
Feeder 11: River Eden												
Feeder 11: St Fergus to Aberdeen												
Feeder 12: Tow Law to Crook												
Feeder 12: St Fergus to Aberdeen												
Feeder 13: St Fergus to Aberdeen												
Feeder 14: Barrington to Kenn												
Feeder 14: Dinder to Ham Street												
Feeder 15: Longtown to Plumpton												

Feeder 21: Brockton and Weston Bank												
Feeder 23: Treaddow												

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.

2015/16

	2015			2016
Pipeline Work	**Q2**	**Q3**	**Q4**	**Q1**
Feeder 14: Pucklechurch to Seabank Severnside Diversion 1				
Feeder 4: Audley to Alrewas Diversion				
Feeder 14: Pucklechurch to Seabank Pipeline Severnside Diversion 2				
Feeder 3: Felthorpe to Hardingham Pipeline Diversion				
Feeder 6: Yarm Tees South - Kirklevington Pipeline Diversion				

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.

2014/15

Compressor Station Outages	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Aberdeen												
Alrewas												
Avonbridge East												
Avonbridge West												
Aylesbury												
Bishop Auckland												
Carnforth												
Cambridge												
Chelmsford												
Churchover												
Hatton												
Huntingdon												
Kings Lynn												
Kirriemuir												
Lockerley												
Moffat												
Nether Kellet												
Peterborough												
Warrington												
Wisbech												
Wooler												
Wormington												

2015/16

Compressor Station Outages	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Aberdeen				
Alrewas				
Avonbridge East				
Avonbridge West				
Aylesbury				
Bishop Auckland				
Carnforth				
Cambridge				
Chelmsford				
Churchover				
Hatton				
Huntingdon				
Kings Lynn				
Kirriemuir				
Lockerley				
Moffat				
Nether Kellet				
Peterborough				
Warrington				
Wisbech				
Wooler				
Wormington				

Entry Capability: Summer 2014 Maintenance

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 volume has been given, 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	No Impact	No Impact	No Impact	No Impact	No Impact	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	54 (594)	55 (605)	50 (550)	44 (484)	46 (506)	50 (550)	No impact
Milford Haven	No Impact	No Impact	68 (748)	69 (759)	54 (594)	71 (781)	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^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.

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 Central Planning at GTX.CentralPlanning@nationalgrid.com

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 being completed.

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 to all relevant parties for the work detailed in this maintenance programme for the period April to October 2014.

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.

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.