

# Maintenance & Capacity Expansion Programme

April 2013 - October 2013

Final Version 1.2

# Contents

	<b>Page</b>
Introduction	3
Maintenance work by month	4
ASEP capability table	10
Maintenance affected exit points	11

# Introduction

National Grid has produced a Final version of the National Transmission System (NTS) Maintenance programme to provide customers with information on NTS Maintenance that has an impact on entry or exit capacity.

This document covers work scheduled at compressor stations and on National Transmission System (NTS) pipelines impacting NTS exit points and Aggregate System Entry Points (ASEPs), providing an indication of the revised ASEP capability.

We work closely with our customers to ensure minimum impact to supply and endeavour to meet our firm exit obligations. Where NTS System Exit Points are affected, we will issue Maintenance Day notices to our customers at least 30 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) / 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 Tony Hanaphy, National Grid, Gas Operations, National Grid House, Gallows Hill, Warwick, CV34 6DA (Tel: 01926 655057).

We would welcome any feedback from you in relation to the information provided, if you would like to provide feedback please contact us via email on [Box.gasops.ntsmaint@nationalgrid.com](mailto:Box.gasops.ntsmaint@nationalgrid.com)

# Maintenance Work by Month

April 2013

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Warrington	Apr-Jun	Non-Return Valve Replacement
Huntingdon	Apr – May	Non-Return Valve Modifications

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 4 - Warburton to Partington	Apr – May	Pipeline Shutdown
Feeder 11 – Lockerbie to Waterbeck	Apr	Pipeline Shutdown
Feeder 4 - Warburton to Holmes Chapel	Apr – May	Pipeline Shutdown
Feeder 13 – Ovington to Lanchester	Apr – May	Pressure Restriction
Feeder 13 – Chillingham to Guyzance	Apr – May	Pressure Restriction
Feeder 10 – Aberdeen to Muirskie	Apr	Pipeline Shutdown
Feeder – 2 Frankton to Churchover Comp Tee	Apr	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 16 – Barrow to Lupton	Apr	In Line Inspection
Feeder 18 – Peterborough to Huntingdon	Apr	In Line Inspection
Feeder 13 – St Fergus to Aberdeen	Apr	In Line Inspection
Feeder 4 – Blaby to Alrewas	Apr	In Line Inspection
Feeder 8 – Theddlethorpe to Hatton	Apr – May	In Line Inspection

## May 2013

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Aberdeen	May-Jun	Routine Maintenance
Moffat	May	Routine Maintenance
Warrington	Apr-Jun	Non-Return Valve Replacement
Carnforth	May-Jul	Control system and NRV Replacement
Hatton	May – Jun	Exhaust Stack Replacement
Cambridge	May – Jun	Non-Return Valve Replacement
Huntingdon	Apr – May	Non-Return Valve Modifications

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 4 - Warburton to Partington	Apr – May	Pipeline Shutdown
Feeder 4 - Warburton to Holmes Chapel	Apr – May	Pipeline Shutdown
Feeder 7 – Tydd to Huntingdon	May	Pressure Restriction
Feeder 12 – Tow Law to Crook	May – Jun	Pipeline Shutdown
Feeder 13 – Lonformarcus to Polwarth	May	Pressure Restriction
Feeder 13 – Ovington to Lanchester	Apr – May	Pressure Restriction
Feeder 13 – Chillingham to Guyzance	Apr – May	Pressure Restriction

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 8 – Theddlethorpe to Hatton	Apr – May	In Line Inspection
Feeder 6 – Elton to Pickering	May	In Line Inspection
Feeder 15 – Wheelock to Warmingham	May - Jun	In Line Inspection

## June 2013

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Aberdeen	May-Jun	Routine Maintenance
Kirriemuir	Jun	Routine Maintenance
Avonbridge East	Jun – Jul	Routine Maintenance
Carnforth	May-Jul	Control system and Non-Return Valve Replacement
Warrington	Apr – Jun	Non-Return Valve Replacement
Hatton	May -Jun	Exhaust Stack Replacement
Cambridge	May – Jun	Non-Return Valve Replacement
Lockerley	Jun - Jul	Routine Maintenance

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 12 – Tow Law to Crook	May – Jun	Pipeline Shutdown
Feeder 12 – Longtown to Tow Law	Jun – Jul	Pipeline Shutdown
Feeder 14 – Pucklechurch to Severnside	Jun - Jul	Pressure Restriction / Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 4 – Shocklach to Weston Point	Jun	In Line Inspection
Feeder 2 – Bacton to Wisbech Nene West	Jun	In Line Inspection
Feeder 4 – Bacton to Wisbech	Jun	In Line Inspection
Feeder 15 – Wheelock - Warmingham	May - Jun	In Line Inspection

## July 2013

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Avonbridge East	Jun – Jul	Routine Maintenance
Avonbridge West	Jul	Routine Maintenance
Carnforth	May-Jul	Control system and Non-Return Valve Replacement
Churchover	Jul	Routine Maintenance
Nether Kellet	Jul-Aug	Non-Return Valve Replacement
Peterborough	Jul-Aug	Control System
Lockerley	Jun -Jul	Routine Maintenance

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 12 – Longtown to Tow Law	Jun – Jul	Pipeline Shutdown
Feeder 22 – Hatton to Braceborough	Jul	Pressure Restriction
Feeder 22 – Silk Willoughby to Aslackby	Jul - Aug	Pipeline Shutdown
Feeder 10 – Thrunton to Saltwick Isolation	Jul - Aug	Pipeline Shutdown
Feeder 3 – Bacton to Felthorpe	Jul - Aug	Pipeline Shutdown
Feeder 14 – Sapperton to Easton Grey	Jul	Pipeline Shutdown
Feeder 14 – Pucklechurch to Severnside	Jun - Jul	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 5 – Gravesend Thames S to Tatsfield	Jul	In Line Inspection
Feeder 9 – Steppingley to East Isley	Jul-Aug	In Line Inspection

## August 2013

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Wooler	Aug	Routine Maintenance
Nether Kellet	Jul-Aug	Non-Return Valve Replacement
Alrewas	Aug – Sep	Fire and Gas System Mods
Hatton	Aug – Sep	Non-Return Valve Replacement
Peterborough	Jul-Aug	Control System
Aylesbury	Aug - Sep	Control System
Wormington	Aug	Routine Maintenance
Wisbech	Aug - Sep	Control System

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 7 – Nuffield to East Isley	Aug	Pipeline Shutdown
Feeder 9 – Peterborough to Luton	Aug - Sep	Pipeline Shutdown
Feeder 10 – Thrunton to Saltwick Isolation	Jul - Sep	Pipeline Shutdown
Feeder 11 – Brechin to Kirriemuir	Aug - Sep	Pipeline Shutdown
Feeder 13 – Lochside to Barnhead	Aug	Pressure Restriction
Feeder 22 – Silk Willoughby to Aslackby	Jul - Aug	Pipeline Shutdown
Feeder 3 – Bacton to Felthorpe	Jul - Aug	Pipeline shutdown
Feeder 9 – Brocklesby to Swallow	Sep	Pressure Restriction

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 7 – Pannal to Cawood	Aug	In Line Inspection
Feeder 2 – Wormington to Treadow	Aug	In Line Inspection
Feeder 7 – Blyborough to Brigg	Aug - Sep	In Line Inspection
Feeder 17 – Theddlethorpe to Hatton	Aug	In Line Inspection
Feeder 9 – Steppingley to East Isley	Jul-Aug	In Line Inspection



## September 2013

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Bishop Auckland	Sep	Routine Maintenance
Alrewas	Aug – Sep	Fire and Gas System Mods
Aylesbury	Aug - Sep	Control System
Wisbech	Aug - Sep	Control System

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 11 – Longtown to Wetheral	Aug - Sep	Pipeline shutdown for River Eden Diversion
Feeder 9 – Brocklesby to Swallow	Sep	Pressure Restriction
Feeder 9 – Peterborough to Luton	Aug - Sep	Pipeline Shutdown
Feeder 9 – Steppingley to Whitwell	Sep	Pipeline Shutdown
Feeder 10 - Falahill to Penicuik	Sep	Pipeline Shutdown
Feeder 10 Lennel N to Lennel S	Sep - Oct	Pipeline Shutdown
Feeder 11 – Brechin to Kirriemuir	Aug - Sep	Pipeline Shutdown
Feeder 4 – Drointon to Alrewas	Jul-Aug	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 2 – Dowlais to Dyffryn Clydach	Sep	In Line Inspection
Feeder 11 – Grayrigg to Samlesbury	Sep - Oct	In Line Inspection
Feeder 14 – Sapperton to Cirencenster	Sep	In Line Inspection
Feeder 14 – Austrey to Shustoke	Sep	In Line Inspection

## October 2013

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 10 Lennel N to Lennel S	Sep - Oct	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 11 – Grayrigg to Samlesbury	Sep - Oct	In Line Inspection
Feeder 13 Arbroath to Haddington	Oct	In Line Inspection
Feeder 11 – Grayrigg to Salmesbury	Oct	In Line Inspection
Feeder 10 – Bathgate to Glenmavis	Oct	In Line Inspection

# ASEP Capability Table – 2013 Maintenance

The included table shows indicative capability for each ASEP, including the effect of the summer 2013 Maintenance Programme. The volumes are displayed in monthly tranches 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 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 figure has been generated by National Grid and assumes the particular ASEP is favoured at the expense of other terminals.

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 ASEP's 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 appropriate ASEP's.

	Apr	May	Jun	Jul	Aug	Sep
St Fergus	105 (1155)	82 (902)	No impact	98 (1078)	101 (1111)	No impact
Teesside	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
Easington	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
Bacton	No impact	No impact	No impact	No impact	No impact	No impact
Isle of Grain	No impact	No impact	No impact	64 (704)	No impact	60 (660)
Milford Haven	No impact	No impact	67 (737)	66 (726)	64 (704)	No impact

Values in MCM & (GWH)

(Conversion from MCM to GWH using CV of 39.6 MJ/m<sup>3</sup>)

# Maintenance Affected Exit Points

Some Exit Points may have supply disruptions whilst NTS maintenance is being completed. Where possible, this is co-ordinated with the end user to avoid supply disruption.

Shippers, End-Users and Distribution Networks will be advised in accordance with the Uniform Network Code timescales.

Maintenance day(s) notifications will be issued to all relevant parties for the work detailed in this Final April 2013 Maintenance plan.

Should any changes or additions to the requested Maintenance days be required, all relevant parties will be notified as per the timescales detailed in the UNC.