

# April Maintenance & Capacity Expansion Programme

Summer 2012

# Contents

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

# Introduction

This draft version of the Maintenance Programme has been produced by National Grid NTS to satisfy its obligations under Section L: 1.5 of the UNC – Transportation Principal Document (TPD) and Section G of the UNC - Offtake Arrangements Document (OAD).

This document provides information on NTS maintenance which has an impact on entry or exit capacity.

In accordance with Section L: 3.2 “Content of Programme” the 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.

National Grid works closely with its customers to ensure minimum impact to supply and endeavours to meet its firm exit obligations and notification of affected NTS System Exit Points will be through Maintenance Day notices sent directly to affected parties.

This document only includes maintenance activities on the NTS, which are to be undertaken by National Grid NTS, as defined in Section L: 1.1.4 of the UNC (TPD) and UNC (OAD) Section G 1.2.

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.

Any comments should be sent to Oliver Highway, Physical Operations Manager, National Grid, Gas Operations, National Grid House, Gallows Hill, Warwick, CV34 6DA (Tel: 01926 655474).

# Maintenance Work by Month

April 2012

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Bishop Auckland	Apr	Routine Maintenance
Warrington	Apr - Jun	Routine Maintenance
Hatton	Apr – Sep	Connection of Electric Compressor
Aylesbury	Apr – May	Non Return Valve Replacement
Lockerley	Apr – May	Routine Maintenance

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 4 - Warburton to Partington	Apr – May	Pipeline Shutdown
Feeder 9 – Hatton to Peterborough	Mar – Apr	Pig Trap Valve replacement
Feeder 3 – Great Wilbraham to Whitwell	Mar – Apr	Pipeline Shutdown
Feeder10 – Bathgate to Penicuik	Feb – May	Pipeline Shutdown
Feeder 12 – Bathgate to Pettinain	Feb – May	Pipeline Shutdown
Feeder – 14 Dowdeswell to Sapperton	Apr	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 2 – Peterborough Tee to Peterborough PS	Apr	In Line Inspection
Feeder 4 - Shocklach to Weston Point	Apr – May	In Line Inspection
Feeder 6 – Aldborough to Sproatley	Apr	In Line Inspection
Feeder 9 – Peterborough to Whitwell	Apr	In Line Inspection

## May 2012

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Kirriemuir	May	Routine Maintenance
Warrington	Apr – Jun	Routine Maintenance
Hatton	Apr – Sep	Connection of Electric Compressor
Peterborough	May – Jun	Routine Maintenance
Aylesbury	Apr – May	Non Return Valve Replacement
Lockerley	Apr – May	Routine Maintenance
Cambridge	May – Jun	Routine Maintenance

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 23 – Treadow to Llanvetherine	May – Jul	Pipeline Shutdown
Feeder 4 - Warburton to Partington	Mar – May	Pipeline Shutdown
Feeder 10 – Bathgate to Penicuik	Feb – May	Pipeline Shutdown
Feeder 11 – Samlesbury to Blackrod	May – Jun	Pipeline Shutdown
Feeder 12 – Kirriemuir to Bathgate	May	Pressure Restriction
Feeder 12 Bathgate to Pettinain	Feb – May	Pipeline Shutdown
Feeder 16 – Pennington to Sellafeld	May – Jun	Pipeline Shutdown
Feeder 11 – Aberdeen to Kirriemuir	May – Jun	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 4 - Shocklach to Weston Point	Apr – May	In Line Inspection
Feeder 7 – Hatton to Gosberton	May – Jun	In Line Inspection
Feeder 14 – Pucklechurch to Ilchester	May	In Line Inspection

## June 2012

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Avonbridge West	Jun – Jul	Routine Maintenance
Warrington	May – Jun	Routine Maintenance
Hatton	April – Sep	Connection of Electric Compressor
Peterborough	May – Jun	Routine Maintenance
Kings Lynn	Jun – Jul	Routine Maintenance
Cambridge	May – Jul	Routine Maintenance

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Paull AGI	Jun – Jul	AGI Rationalisation
Feeder 23 – Treadow to Llanvetherine	May – Jul	Pipeline Shutdown
Feeder 7 – Thrinfoft to Pannal	Jun – Jul	Pipeline Shutdown
Feeder 11 – Longtown to Grayrigg	Jun – Jul	Pipeline Shutdown
Feeder 11 – Samlesbury to Blackrod	May – Jun	Pipeline Shutdown
Feeder 14 – Alrewas to Churchover	Jun – Jul	Pressure Restriction
Feeder 16 – Pennington to Sellafield	May – Jun	Pipeline Shutdown
Feeder 11 – Aberdeen to Kirriemuir	May – Jun	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 7 Tydd St Giles to Old Warden	Jun	In Line Inspection
Feeder 7 – Gosberton to Tydd St Giles	Jun	In Line Inspection
Feeder 7 – Hatton to Gosberton	May – Jun	In Line Inspection

## July 2012

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Aberdeen	Jul	Routine Maintenance
Avonbridge West	Jun – Jul	Routine Maintenance
Avonbridge East	Jul	Routine Maintenance
Moffat	Jul – Aug	Routine Maintenance
Carnforth	Jul	Routine Maintenance
Churchover	Jul - Aug	Routine Maintenance
Hatton	April – Sep	Connection of Electric Compressor
Wisbech	Jul	Routine Maintenance
Huntingdon	Jul – Aug	Routine Maintenance
Lockerley	Jul	Routine Maintenance
Wormington	Jul	Routine Maintenance
Kings Lynn	Jun – Jul	Routine Maintenance
Cambridge	Jun – Jul	Routine Maintenance

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Paull AGI	Jun – Jul	AGI Rationalisation
Feeder 23 – Treadow to Llanvetherine	Jun – Jul	Pipeline Shutdown
Feeder 2 – Tirley PRI	Jul – Aug	Pipeline Shutdown
Feeder 3 – Bacton to Roundham Heath	Jul – Aug	Pipeline Shutdown
Feeder 23 – Tirley PRI	Jul	Pipeline Shutdown
Feeder 28 – Tirley PRI	Jul	Pipeline Shutdown
Feeder 2 – Churchover to Wormington	Jul	Pipeline Shutdown
Feeder 7 – Bishop Auckland to Pannal	Jun – Jul	Pipeline Shutdown
Feeder 11 - Longtown to Grayrigg	Jun – Aug	Pipeline Shutdown
Feeder 14 – Alrewas to Churchover	Jun – Jul	Pressure Restriction
Feeder 20 – Ilchester to Kenn	Jul – Aug	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 2 – Caldecott to Corby	Jul	In Line Inspection
Feeder 4 – Audley to Alrewas	Jul – Aug	In Line Inspection
Feeder 4 – Warburton to Audley	Jul	In Line Inspection

Feeder 6 – Little Burdon to Billingham	Jul	In Line Inspection
Feeder 22 – Hatton to Peterborough	Jul – Aug	In Line Inspection



## August 2012

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Avonbridge West	Aug	Routine Maintenance
Avonbridge East	Aug	Routine Maintenance
Moffat	Jul – Aug	Routine Maintenance
Wooler	Aug	Non Return Valve Replacement
Alrewas	Aug – Sep	Routine Maintenance
Churchover	Jul – Aug	Routine Maintenance
Hatton	April – Sep	Connection of Electric Compressor
Huntingdon	Jul – Aug	Routine Maintenance

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 2 – Tirley PRI	Jul – Aug	Pipeline Shutdown
Feeder 3 - Bacton to Roundham Heath	Jul – Aug	Pipeline Shutdown
Feeder 6 – Teeside to Cowpen Bewley	Aug – Sep	Pressure Restriction
Feeder 10 – Aberdeen to Kirriemuir	Aug – Sep	Pipeline Shutdown
Feeder 11 - Longtown to Grayrigg	Jun – Aug	Pipeline Shutdown
Feeder 20 – Ilchester to Kenn	Jul – Aug	Pipeline Shutdown
Feeder 20 – Kenn to Choakford	Aug – Sep	Pressure Restriction

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 4 – Audley to Alrewas	Jul – Aug	In Line Inspection
Feeder 5 – Bacton to Yelverton	Aug	In Line Inspection
Feeder 22 – Hatton to Peterborough	Jul – Aug	In Line Inspection

## September 2012

<b>Compressor Station Outages</b>	<b>Dates</b>	<b>Maintenance Description</b>
Nether Kellet	Sep	Routine Maintenance
Alrewas	Aug – Sep	Non Return Valve Replacement
Hatton	April – Sep	Connection of Electric Compressor

<b>Pipeline Work</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 14 – Honiton to Ottery	Sep	Pipeline Shutdown
Feeder 6 – Teeside to Cowpen Bewley	Aug – Sep	Pressure Restriction
Feeder 10 – Aberdeen to Kirriemuir	Aug – Sep	Pipeline Shutdown
Feeder 11 – Bathgate to Longtown	Sep – Oct	Pipeline Shutdown
Feeder 20 – Wormington to Sapperton	Sep	Pipeline Shutdown

<b>In Line Inspections</b>	<b>Dates</b>	<b>Maintenance Description</b>
Feeder 5 – Braintree to Horndon	Sep	In Line Inspection
Feeder 5 – Stowmarket to Braintree	Sep	In Line Inspection

# ASEP Capability Table

The included table shows indicative capability for each ASEP, including the effect of the summer 2012 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.

	April	May	June	July	August	September
St Fergus	77 (847)	81 (891)	85 (935)	81 (891)	79 (869)	79 (869)
Teesside	No impact	No impact	No impact	No impact	15 (165)	15 (165)
Barrow	No impact	No impact	No impact	No impact	No impact	No impact
Easington	109 (1199)	No impact	No impact	No impact	No impact	No impact
Theddlethorpe	39 (429)	No impact	No impact	No impact	No impact	No impact
Bacton	No impact	No impact	No impact	91 (1001)	90 (990)	No impact
Isle of Grain	No impact	No impact	34 (374)	No impact	No impact	No impact
Milford Haven	No impact	67 (737)	65 (715)	23 (253)	58 (638)	64 (704)

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 2012 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.