



# Summer Maintenance Plan Final

April 2019 – March 2022

24<sup>th</sup> April 2019

**nationalgrid**

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# 1. Introduction

Each year National Grid 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 2019 to March 2022. This programme supersedes all previous plans.

This document provides an overview of all work scheduled at NTS compressor stations and NTS pipelines. Where this work affects the capability at an Aggregate System Entry Point (ASEP), 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 by 1<sup>st</sup> February and any revisions 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 (DFOs) 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 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

Area	In Line Inspections	2019							2020				2021				2022	
		Apr	May	Jun	Jul	Aug	Sep	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
SC	Feeder 12 Bathgate to Longtown																	
SC	Feeder 11 Bathgate to Longtown																	
SW	Feeder 14 Wormington to Pucklechurch																	
SO	Feeder 07 Old Warden to Chalgrove																	
EM	Feeder 2 Duddington to Churchover																	
EM	Feeder 09 Brocklesby to Stallingborough																	
SC	Feeder 12 St Fergus to Aberdeen																	
SW	Feeder 14 Pucklechurch to Seabank																	
SC	Feeder 12 Kirriemuir to Bathgate																	
SE	Feeder 5 Shone to Isle of Grain																	
EA	Feeder 27 Bacton to Kings Lynn																	

WM	Feeder 2 Churchover to Wormington																		
WM	Feeder 14 Churchover to Wormington																		
NT	Feeder 5 Horndon to Tilbury Thames																		
NW	Feeder 04 Audley to Shocklach																		
SW	Feeder 14 Barrington to Kenn South																		
NO	Feeder 15 Plumpton to Lupton																		
NE	Feeder 06 Beeford to Hornsea																		
NO	Feeder 06 Pickering to Elton																		
SC	Feeder 24 St Fergus to Lochside																		
SC	Feeder 13 St Fergus to Aberdeen																		
SC	Feeder 10 Boon to Coldstream																		
NE	Feeder 09 Easington to Paull																		
EA	Feeder 18 Matching Green to Rye House																		
SW	Feeder 14 Sapperton to Cirencester																		
SC	Feeder 11 Aberdeen to Kirriemuir																		
NO	Feeder 13 Cowpen Bewley to Yafforth																		
NO	Feeder 15 Longtown to Plumpton																		
SO	Feeder 07 Michelmersh to Braishfield																		
EA	Feeder 02 Peterborough to Eye																		

NT	Feeder 05 River Thames Crossing (East)																
NT	Feeder 05 River Thames Crossing (West)																
NW	Feeder 04 Warburton to Audley																
SW	Feeder 14 Ilchester to Barrington																
SC	Feeder 10 St Fergus to Aberdeen																
NW	Feeder 21 Warburton to Audley																

## 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. The 2020 and 2021 pipeline works are yet to be fully planned.

 = Pressure Restriction

 = Pipeline Shutdown

 = Provisional period

Area	Pipeline	2019								2020				2021				2022	
		Mar	Apr	May	Jun	Jul	Aug	Sep	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
EA	Feeder 04 Kings Lynn to Bacton	Blue	Blue	Blue	Blue														
SC	Feeder 11 Bathgate to Armadale		Blue																
NW	Feeder 21 Burton point	Blue	Blue																
NE	Feeder 06 Paull to BP Saltend		Blue	Blue															
SC	Feeder 10 Armadale to Broxburn			Blue															
SW	Feeder 2 Wormington to Ross			Blue	Blue	Blue	Blue	Blue											
SW	Feeder 14 Pucklechurch to Ilchester				Yellow	Yellow													
SC	Feeder 10 Broxburn to Penicuik				Blue	Blue													
SW	Feeder 2 Kings Lynn				Blue	Blue	Blue	Blue											
SC	Feeder 10 Glenmavis to Penicuik					Yellow													
NO	Feeder 12 Longtown to Haltwhistle				Blue	Blue													
WN	Feeder 04 Shocklach to Maelor						Yellow												
NO	Feeder 7 Bishop Auckland to Little Burdon					Blue	Blue												
EA	Feeder 05 Bacton to Salhouse					Blue	Blue	Blue											

SO	Feeder 09 Aylesbury to Slapton																		
NO	Feeder 11 Weatherall to Melkintorpe																		
SO	Feeder 07 Aylesbury to Hardwick																		
EA	Feeder 04 Bacton																		
EA	Feeder 03 Bacton																		
NE	Feeder 09 Paul to Hatton																		
WM	Feeder 02 Newbold Pacey to Frankton																		
WM	Feeder 02 Newbold Pacey to Churchover																		
NE	Feeder 09 Paul to Hatton																		
WM	Feeder 05 Lower Thames Crossing																		
EA	Feeder 18 Lower Thames Crossing																		

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	2019							2020				2021				2022
	Apr	May	Jun	Jul	Aug	Sep	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Aberdeen																
Alrewas																
Avonbridge 1																
Avonbridge 2																
Aylesbury																
Bishop Auckland																
Carnforth																
Cambridge																
Chelmsford																
Churchover																
Diss																
Felindre																
Hatton																
Huntingdon																
Kings Lynn																
Kirriemuir																
Lockerley																
Moffat																
Nether Kellet																
Peterborough																
Warrington																
Wisbech																
Wooler																
Wormington																

### 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 (Delivery Facility) maintenance outages.

The values represent 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.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>St Fergus</b>	No Impact	84 (924)	89 (979)	91 (1001)	83 (913)	No impact	90 (990)	No impact
<b>Teesside</b>	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
<b>Barrow</b>	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
<b>Easington</b>	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
<b>Theddlethorpe</b>	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No impact
<b>Bacton</b> <small>(including IUK)</small>	121 (1331)	109 (1199)	96 (1056)	No Impact	No Impact	No Impact	No Impact	No impact
<b>Isle of Grain</b>	No Impact	No impact	No impact	49 (539)	51 (561)	40 (440)	51 (561)	No impact
<b>Milford Haven</b>	No Impact	54 (594)	53 (583)	55 (605)	55 (605)	57 (627)	52 (572)	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 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 [NTSaccessplanning@nationalgrid.com](mailto:NTSaccessplanning@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 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 1<sup>st</sup> 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 [box.SCM.GTO@nationalgrid.com](mailto:box.SCM.GTO@nationalgrid.com).

## 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  
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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> <https://www.nationalgridgas.com/data-and-operations/maintenance>

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