

Transmission System Management Principles Report

For the Period
1st April 2016 to 31st March 2017

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Executive Summary

The UK Transmission System Management Principles Statement (Transmission SMPS) sets out the principles and criteria for deploying system management services.

This report describes how National Grid Gas has complied with the Transmission SMPS in the last formula year (1st April 2016 to 31st March 2017). National Grid Gas' compliance with the Transmission SMPS is subject to an independent external review, which accompanies this report as Appendix 1.

National Grid Gas confirms that, during the period covered by this report, it has operated the NTS in accordance with the principles set out in the Transmission SMPS.

1. TRANSMISSION SMPS Part A: Introduction

This document is the System Management Principles (SMP) Report (“the Report”) which National Grid Gas is required to establish in accordance with Special Condition 8A of its Gas Transporter (GT) licence in respect of the NTS. The information provided in this Report describes the manner and the extent to which National Grid Gas has complied with the Transmission SMPS. The Transmission SMPS sets out the principles by which National Grid Gas determines the use of system management services.

Further copies of this Report may be obtained from:

<http://www2.nationalgrid.com/UK/Industry-information/Business-compliance/Procurement-and-System-Management-Documents/>, or from:

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1.1 Reporting Period

This Report has been prepared in accordance with Special Condition 8A.11. It covers the period 1st April 2016 to 31st March 2017.

2. TRANSMISSION SMPS Part B: General Principles and Criteria for System Management Actions

The criteria applied in respect of deployment of system management services take account of a range of factors; these are described in the Transmission SMPS, and include the obligation to operate the NTS in an efficient, economic and coordinated manner, the impact on SO incentives, risk management considerations, national and localised requirements, forward, day ahead and 'close to gas flow' considerations. The Special Condition recognises that, in certain circumstances, it may be necessary to depart from the Transmission SMPS; the reasons for such a departure may include circumstances where:

- the Statement would prejudice the interests of safety;
- insufficient time is available to employ particular measures in accordance with the detailed processes defined herein if required effects are to be achieved;
- the Statement has been shown to be inappropriate; or
- National Grid NTS considers it to be more economic, efficient or co-ordinated to do so.

The Transmission SMPS also states that Emergency Procedures, if invoked, shall supersede all considerations arising from the Transmission SMPS.

During the period 1st April 2016 to 31st March 2017, National Grid Gas has operated the NTS in accordance with the general principles set out in the Transmission SMPS.

3. TRANSMISSION SMPS Part C: Statement Underlying System Management Actions

National Grid Gas's system management actions, as defined in the Transmission SMPS, are intended to ensure that the actual and projected gas flows remain within acceptable ranges. National Grid Gas may seek to achieve this by utilising operational flexibility or by deploying a range of system management services available to it. The choice of a particular system management service depends on the prevailing circumstances, but a key input in the decision making process is the step by step determination of national and localised system requirements, as detailed in Part C of the Transmission SMPS. Although these requirements are identified close to the time of gas flows, the selection of the most appropriate service may also involve deployment of services well ahead of the day if it is considered efficient to do so. The aims of the system management processes well ahead of the day are addressed in section 5, whereas decisions made close to the time of gas flows are covered in section 6 of this Report.

During the period 1st April 2016 to 31st March 2017, National Grid Gas has identified the requirement for the deployment of System

Management Services in accordance with the processes outlined in Part C of the Transmission SMPS.

4. TRANSMISSION SMPS Part D: System Management (actions taken in exceptional circumstances or not involving system management services)

Exceptional circumstances include situations such as major supply failures where deployment of system management services, including the use of Operating Margins, may not adequately address the problem. In these circumstances, National Grid Gas may invoke Emergency Procedures. There may also be circumstances which do not require the use of any system management services. Small variations in gas flows onto and off the system (resulting in minor linepack variations) could be absorbed within the inherent system flexibility (linepack utilisation) and it may not be necessary or efficient to take any action immediately.

During the period 1st April 2016 to 31st March 2017, National Grid Gas has not identified the requirement to take any actions to address exceptional circumstances as laid out in Part D of the Transmissions SMPS.

5. TRANSMISSION SMPS Part E: System Management Tool Deployment Ahead of the Day

Rather than wait for imminent gas flows to imply either a National or Localised Requirement for system management actions, as detailed in section 3, it may be appropriate for National Grid Gas to take system management actions ahead of the day. Such a situation may occur where a requirement to take an action has been identified well in advance (e.g. a Supply Deficit) and where a pre-emptive action may prove to be more efficient than a 'close to gas flow' action.

The deployment of system management services well ahead of the day will be at the discretion of National Grid Gas, and will be guided by the wider licence obligations and SO incentive schemes.

During the period 1st April 2016 to 31st March 2017, National Grid Gas has not been required to make use of options agreements to manage the risks inherent in the capacity regime in order to resolve system constraints.

6. TRANSMISSION SMPS Part F: Daily System Management Considerations (aims of system management processes close to the time of gas flow)

The system management processes close to the time of gas flow are designed:

- To maintain national/local linepack levels and key operational parameters within predetermined operating ranges at all times within the Gas Day whilst ensuring safe operation.
- To address NTS entry and exit constraints where flows are forecast to exceed assessed system capability.
- To identify potential operational or commercial requirements to use storage services (including Operating Margins).
- To facilitate efficient operation of the trading arrangements (e.g. in respect of shipper to shipper trading of System Entry Capacity).

During the period 1st April 2016 to 31st March 2017, National Grid Gas has operated the system to achieve the above aims.

7. Modifications carried out to the TRANSMISSION SMPS

National Grid Gas maintains the appropriateness of Transmission SMPS and considers that the prevailing document closely reflects its practice. National Grid Gas has undertaken a consultation process to make sure that the SMPS remains current and that no modification is necessary.

Review Opinion by PricewaterhouseCoopers

At the time of publication of this report the audit by our independent examiner has not yet concluded due to a requirement to include additional tests due to the development and implementation of a new Gas Control System. This audit is expected to be completed by 31 October 2017. A statement from the auditor will be available by 31 December 2017.