

Methodology Statement

Inter-day Linepack Product

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CONTENTS

	Page
PART A	
Introduction	
1. Purpose of the document	4
2. NGG Performance	4
3. Change Process	4
PART B	
General Principles	6
1. Overview	
2. Criteria	6
3. Inter-day Linepack Product Release Management Tools	6
4. Timing of Release	6
5. Release Process	7
PART C	
Principles Underlying Inter-day Linepack Product Release Management	9
1. Inter-day Linepack Product Manager	9
2. Overview of Inter-day Linepack Product Release of Quantity Decision Process	9
3. Primary Factors	9
4. Secondary Factors	11
PART D	
Bid Acceptance Process and Acceptance Criteria	12
1. Bid acceptance Criteria and Decision making processes	
PART E	
Glossary	13

PART A: INTRODUCTION

1. Purpose of the document

This document sets out the Inter-day Linepack Product Methodology Statement ("the Statement") which National Grid Gas (NGG) has established to provide greater transparency in respect of its decision making processes and criteria undertaken in its System Operator (SO) role as the Inter-day Linepack Manager (ILM) when determining Inter-day Linepack release quantities. The purpose of the Statement is to describe the basis on which the ILM will determine the release of, and accept bids for the Inter-day Linepack Product.

The Statement has been developed to accompany the introduction into the Uniform Network Code (UNC) of the Inter-day Linepack Product. The scope of this document is limited to NGG's activities in relation to its role as the ILM and operator of the Inter-day Linepack bulletin board. (UNC reference section X paragraph xx.xx).

NGG recognises that the introduction of an Inter-day Linepack Product may create commercial incentives that need to be considered in conjunction with its other obligations and therefore this document is designed to indicate the broad framework against which NGG will make Inter-day Linepack Product release decisions.

2. NGG Performance

In relation to undertaking the activities described in this document, NGG will seek at all times to follow these guidelines, seek to acting in good faith and in a reasonable and prudent manner in its dealings save to the extent that:

- there is any standard of performance already provided for by any statute, regulation or Gas Transporter Licence condition to which NGG is subject; or
- the continued exercise of the discretions or functions described herein could cause NGG, in its reasonable opinion, to come into conflict with any provision of statute, its Gas Transporter Licence or other regulation.

3. Change Process

This Statement has been developed by NGG and the form of the Statement has been subject to industry consultation and [approved] by the Authority [to be approved]. It may only be modified in accordance with the provisions set out in the UNC - The Principle Document (TPD) [reference]. NGG will monitor the operation and application of this Statement and ensure that any suggested amendments to it are presented to the industry for review prior to seeking Authority approval for any revisions.

This Statement makes reference to a number of provisions contained in the UNC. In the event that any of the relevant provisions in the UNC are modified it may become necessary for NGG to seek an amendment to this Statement in order that it remains consistent with the UNC. Prior to any such amendment the UNC shall take precedence over this Statement.

For the avoidance of doubt, this Statement does not form part of the UNC.

DRAFT

PART B: GENERAL PRINCIPLES

1. Overview

This Statement sets out the principles and criteria which NGG will use to determine the quantity of Inter-day Linepack services that will be released. In establishing the Statement, NGG must do so in a manner consistent with its statutory obligations to develop, operate and maintain a safe, efficient and economical pipeline system for the conveyance of gas and avoid undue preference or discrimination.

2. Criteria

The Statement cannot set out the particular system management measures to be employed by NGG in every possible operational situation.

The criteria applied in respect of determining the quantity and timing of the release of Inter-day Linepack services will take account of NGG's Licence obligation to be safe, economic, efficient and co-ordinated in the operation of its pipeline system. The detailed list of considerations are outlined in [Part C].

3. Inter-day Linepack Service

The Inter-day Linepack Service seeks to make available an Inter-day Linepack Product (ILP) that will facilitate the carry-over of a quantity of a User's daily energy imbalance to the following Gas Day. The service aims to provide Users with an additional balancing tool which affords the following opportunities:

- Price Arbitrage - benefit from daily price differentials.
- Risk mitigation - avoidance of End of Day (EoD) System Marginal Prices (SMPs).

The Inter-day Linepack Product comprises of two services:

- a 'Park' service where a User seeks to carry over a quantity of an over-delivered imbalance: or
- a 'Loan' service; where a User seeks to borrow a quantity of under-delivered imbalance.

4. Timing of Release

NGG will assess the potential quantities of ILP that can be released up to four times a day. The indicative release quantities will be notified ½ hour prior to the relevant ILP quantities release time.

The intended release times are:

Release 1	Release 2	Release 3	Release 4
13:30	16:30	19:30	23:00

These release times have been determined to allow for the timely provision of Demand Forecast notifications as prescribed under the UNC section H5.2.3, and the provision of the Predicted Closing Linepack Position (PCLP) hourly publication.

Based on operational experience in the event that, during the ½ hour period between ILP quantity notification and ILP release, there is an unanticipated or unforeseen material change in available Linepack, which may have resulted from:

- System incident
- Off system incident (i.e. notified via SFN, OPN, DFN changes); or
- Declaration of a gas supply emergency

NGG may not be in a position to continue to offer the indicative volumes for release.

5. Release Process

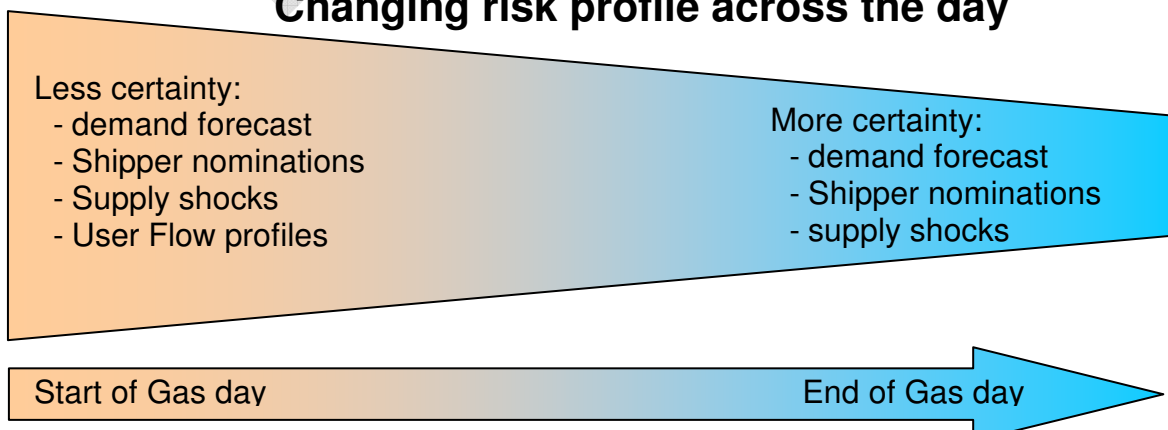
As stated in Section 4, the intended release times are:

Release 1	Release 2	Release 3	Release 4
13:30	16:30	19:30	23:00

In determining the quantities of ILP that are to be released in each of these timescales, the ILM will take into consideration the information outlined in Part C of the statement.

When assessing this data, the ILM will need to take into consideration the impact of the release quantity on system operation. As can be expected, as the day progresses, there is more certainty on the end of day position.

Changing risk profile across the day



As information quality improves throughout the day, the potential impact of the release of inter-day linepack product will also have greater certainty on system operation for the current gas day and the impact on tomorrow's gas day.

For example; the information on which the predicted closing linepack (PCLP) is determined becomes more robust and accurate across the gas day; in addition, the anticipated market position for the next gas day becomes more clear as we progress through the day.

Having increased certainty results in a greater understanding that the release of a inter-day linepack product will not have any unintended consequences such as the need to take market balancing actions due to unforeseen changes having a material impact on system operation.

It is therefore our belief that, initially, it is more likely that ILP will be released later in the gas day, primarily around Release 4 timescales.

DRAFT

PART C: PRINCIPLES UNDERLYING INTER-DAY LINEPACK PRODUCT RELEASE MANAGEMENT

1. Linepack Manager

The market for the Inter-day Linepack service will be operated and managed by NGG, who will undertake the new role as the 'Inter-day Linepack Manager' (ILM). The ILM will be responsible for the assessment of the quantities that can be released and operation of the bulletin board. The bulletin board will be used for the submission of bids by Users and for the acceptance or rejection of bids by the ILM.

2. Overview of Inter-day Linepack Product Release of Quantity Decision Process

There are a number of steps NGG is required to make when determining the potential release quantity of the ILP. These steps require NGG to consider a number of system factors, market based information and operational considerations. The relative importance of each step depends on a number of factors and can change from day to day, as well as within day. Hence there is no specific ranking in the decision making criteria as stated. To provide some relative weighting on a factor's importance, in the determination of quantities to be released, they have been grouped into primary and secondary orders. This, however, does not preclude that a secondary factor may or may not result in the release of ILP.

Neither list is exhaustive. For instance, the expected impact of a forecast prolonged spell of bad weather may impact the decision process as well as news of supply shocks in other parts of Europe. However, as these concerns are not considered as part of the 'normal' operation, they have not been included within the list of considerations.

3. Primary Factors

When determining the quantity of ILP that can be released, the interaction between factors and potential impact on future system operation needs to be assessed.

The various factors and information that the ILM needs to help decide the linepack quantity have been split into different sections. These are outlined below:

a. Market Information

The following information items available to NGG are contributing factors in assessing the projection of NTS system conditions and therefore its ability to release ILP. In considering these factors the historical forecast accuracy

and potential for volatility will be taken into account.

We have split the various information elements into sections where only NGG has access to the information and sections where the industry have access to the information.

i. Demand Position: Both on the Day & Day Ahead - Internal National Grid Information

The information in this section is provided by the industry to indicate their expected physical offtake position for the current Gas Day and for the next Gas Day. NGG uses this information to anticipate the system operations conditions that are likely to be experienced across the day and for the next day.

- Offtake Profile Notifications (OPN's):
- DNO Demand Forecast
- NTS Demand Forecast
- Storage Flow Notifications (SFN)
- Shipper Gas Flow Nominations

ii. Supply Position: Both on the Day & Day Ahead - Internal National Grid Information

The information in this section is provided by the industry to indicate their expected physical supply position for the current Gas Day and for the next Gas Day. NGG uses this information to anticipate the system operations conditions that are likely to be experienced across the day and for the next day.

- Storage Flow Notifications (SFN's)
- Delivery Flow Notifications (DFN's)
- Shipper Gas Flow Nominations

b. System Position / Considerations

In determining NGG's potential release of the ILP the market based information, outlined above, will be applied to the prevailing and projected physical system conditions. In determining the impact of any ILP release quantities on the system operation, the current and expected capability of the system must be assessed and the likely changes the release will have such as a change in compressor usage or the potential impact on maintenance and commissioning activities..

i. System Position – Internal National Grid Information

- Prevailing and projected operating pressures (against commercial / safety requirements and security of supply considerations)
- Overall Plant Availability / Risk of Disruption
- Network configuration

- Operational experience of historic flow patterns / system performance

ii. System Position – External National Grid Information

- D+1 Zonal Linepack
- Opening Linepack (OLP)
- Instantaneous flow rates at NTS entry and exit points

4. Secondary Factors

The primary factors generally consider the physical system and the system user information provided on how the system is expected to perform. The secondary factors in determining the ILP quantities that can be released are associated with the potential commercial impacts on the release of ILP.

Commercial Position

The following factors will be used in determining the overall safe, efficient and economic release of the ILP as identified through the primary factors.

Impact on System Operator Incentives, including:

- Potential impact on residual balancing
- Environmental
- Entry capacity
- Exit Capacity (Interruption)
- Operating Margins

PART D: Inter-day Linepack Product Bid Acceptance Management

1. Bid Process and Acceptance Criteria

The ILM bid acceptance process will be performed through an automated batch process that is undertaken during the Bid Evaluation Period. The batch process will evaluate and accept bids in accordance with the bid Acceptance Criteria as defined within [the UNC section x paragraph xx.xx] and in accordance with times prescribed under [UNC section x paragraph xx.xx].

N.B. (proposed arrangements currently available as Business Rules defined within Modification Proposal 0337 – ‘Introduction of an Inter-day Linepack Product’.)

DRAFT

PART E: GLOSSARY

Gas Day	The period from 0600 hours on one day to 0600 hours on the following day
EoD	End of the gas flow Day
Nomination	A nomination by a User relating to a quantity of gas to be delivered or offtaken from the NTS System
‘Park’ and ‘Loan’ Inter-day Linepack product	<p>‘Park’ Inter-day Linepack product represents an inter transfer from one gas day to the next, of a positive quantity of energy.</p> <p>‘Loan’ Inter-day Linepack product represents an inter transfer from one gas day to the next, of a negative quantity of energy.</p>
PCLP	Predicted Closing Linepack Position is published hourly through the gas day.
VLDMC	Very Large Daily Metered Component
Opening / Closing Linepack	The opening and closing NTS Linepack at the start and end of each Gas Day established in accordance with Special Condition C8f(4)f of the GT Licence.
OPN	Offtake Profile Notification
NTS	The National Transmission System
DNO	Distribution Network Operator
Re-nomination	A Nomination which revised an earlier Nomination
System	The pipeline system maintained and operated by National Grid Gas (Transmission)
System Operator Incentive Schemes	Incentive schemes established by Ofgem to incentivise certain operational and/or commercial behaviours on NGG as System Operator
User	A person other than NGG who is contractually bound by the terms of the Uniform Network Code