

**CODE MODIFICATION PROPOSAL No 0337**  
**Introduction of an Inter-Day Linepack Product**  
**Version 5.0**

**Date:** 30/03/2011

**Proposed Implementation Date:**

**Urgency:** Non Urgent

**Proposer's preferred route through modification procedures and if applicable, justification for Urgency**

(see the criteria at [http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/11700\\_Urgency\\_Criteria.pdf](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/11700_Urgency_Criteria.pdf))

N/A

**1 Nature and Purpose of Proposal (including consequence of non implementation)**

**Background**

**Licence Obligation**

In February 2010 Ofgem published its Final Proposals Consultation on the National Grid Gas System Operator (SO) Incentives. The Authority effected these Final Proposals on the 1<sup>st</sup> April 2010 through revisions to National Grid PLC's Gas Transporter Licence Special Licence Condition 27 ('C27'): Balancing Arrangements, which in part places an obligation on National Grid NTS to use reasonable endeavours to:

- Develop, in consultation with the industry, a Linepack product by 1<sup>st</sup> April 2011 and report to the Authority on the conclusions of such development and consultation by 1<sup>st</sup> May 2011; and
- If directed to do so by the Authority, implement such product by 1<sup>st</sup> October 2011.

C27 also provides obligations to update the default System Marginal Buy and Sell Prices (default SMPs), as stated in Section F of the UNC, by 1<sup>st</sup> April 2011. For the avoidance of doubt, this Proposal is solely proposing to introduce a Linepack Product to satisfy paragraphs 1 and 2 of C27. Modification Proposal 0333 – "Update of the default System Marginal Buy Price and System Marginal Sell Price" is seeking to update the fixed System Marginal Price differentials and satisfy paragraph 3 of C27.

Review Group 0291 (RG0291) – 'NTS Licence Special Condition C27 – Balancing Arrangements' was initiated in order that National Grid NTS and the industry may develop and assess the feasibility of a recommended approach to both the introduction of a Linepack Product and the default SMP revisions.

Over the course of the RG0291 meetings several proposed Linepack Product options were put forward by National Grid NTS for consideration, however National Grid considers that the general consensus of the Group was that only one of the options, the Inter-day Linepack Product Bulletin

Board, merited further development.

The recommendation of the RG291 report stated that, *“The Group did not conclude that this review had identified deficiencies in the UNC which meant that a recommendation could be made in support of a Modification. However, it was recognised that potential Modifications could be assessed and developed on their own merits if any UNC party were to raise a Modification.”*

National Grid NTS was mindful that further development of the Linepack Product must be undertaken in conjunction with the industry if a robust report is to be provided to the Authority for consideration. We believe that the development required does not only relate to the appropriate drafting of proposed business rules, but is also required to:

- address issues associated with the cost versus the benefits of providing the new service.
- address the key measures identified by the review group; and
- respond to other issues outlined below.

### **Further Analysis**

RG0291 agreed that Modification Proposal 0337 required further development and analysis. The Review Group suggested that the analysis of options should address the following areas;

- “Commercial mechanisms  
*The Group believed the mechanisms for releasing the proposed product should be as simple as possible, ensuring they were commensurate with the product on offer.*
- Interaction with SO Incentives  
*While outside the scope of the UNC, it was accepted that it would be logical for the present Linepack incentive to be removed were the proposed product to be introduced. While some attendees did not consider it appropriate for National Grid NTS to be rewarded for making Linepack available, others felt this would be necessary to help ensure that appropriate behaviours and innovation were encouraged.*
- DN interaction  
*Since the scope of the suggested product was NTS only, no direct DN interaction was identified. It was noted that the DNs would not be a user of the product.*
- Charging implications  
*National Grid NTS indicated that supporting charging arrangements would be included as part of the intended Modification.*
- IS system impacts  
*National Grid NTS indicated that systems impacts could not be reliably assessed until the Business Rules were firmer.*

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- Costs and Benefits  
*Neither costs nor benefits were quantified by the Group. National Grid NTS indicated that they would expect this to be considered as part of the development process for the Modification they intended to raise.*
- ROM/DCA of preferred option  
*National Grid NTS indicated that a ROM would be provided once the Business Rules were firmer.”*

### **Inter-day Linepack Methodology Statement**

The RG0291 report states that, *“The Group indicated that they were not convinced there would be sufficient benefits to justify the costs of implementing this [the Inter-day Linepack Bulletin Board] approach, especially if the volume available was limited and only made available at National Grid NTS’s discretion.”*

National Grid has sought to address some of the concerns, documented above, through the publication of an Inter-day Linepack Methodology Statement and a presentation of our initial analysis at the Transmission Workgroup that outlines the potential volumes and likelihood of product release. The methodology statement seeks to provide the industry with a greater insight into the processes National Grid proposes to undertake as part of its determination of the Inter-day Linepack quantities it can offer each day. National Grid considers that the provision of such information may assist Users and other interested parties to evaluate whether there is sufficient benefit in the introduction of the Linepack Product to justify the implementation and on-going operational costs associated with the provision of this new User Pays Service.

We propose that the Methodology Statement is referenced within the UNC, and that it may be updated by National Grid, from time to time, following consultation with the Users.

### **Interactions with the Residual Balancing Role**

We are mindful that the prevailing SO Incentive structure, and any future revisions, may have an impact on the interactions between the Residual Balancing role and the role of the Inter-day Linepack Manager. We believe that through the development of this Proposal some of the issues associated with these interactions may be clarified and in some part appropriately addressed. For the avoidance of doubt the role of the Inter-day Linepack Manager should not be considered as any type of replacement for the Residual Balancing role; these roles would continue as two entirely discreet entities.

### **FSA considerations**

RG0291 noted that the activities proposed to be undertaken by National

Grid NTS, as the Inter-day Linepack Manager, may be required to be FSA compliant. National Grid sought legal advice, which determined that FSA compliance would not be required as National Grid's existing derogation is suitable to cover the activities of both National Grid, in its role as the Inter-day Linepack Manager, as well as eligible Users of the Inter-day Linepack Service.

### **Transparency of Inter-day Linepack values**

Under prevailing arrangements the value of Linepack and its utilisation to accommodate Users' daily imbalance positions is believed, by some industry participants, to be opaque. It has been argued that Linepack utilisation for this purpose creates the potential for a misallocation of costs between Gas Days and therefore the potential for a cross subsidy from one User group to another. Whilst National Grid considers that the Linepack Mechanism SO Incentive goes some way to mitigating the risk of transferring the imbalance costs from one day to the next, there is still the possibility for such costs to be transferred to a subsequent day and thus incurred by different Users. This Proposal seeks to improve this area of the regime by introducing a mechanism to identify and value the use of a product that specifically allows an energy imbalance to be transferred from one day to the next.

### **Nature of the Proposal**

This Proposal, if implemented, will make available an Inter-day Linepack Product. This new service will facilitate the carry-over of a quantity of a User's daily imbalance to the following Gas Day. This will be achieved by the User placing a bid onto an Inter-day Linepack Bulletin Board. The Bulletin Board will be operated and managed by National Grid NTS, who will undertake a new role as the proposed 'Inter-day Linepack Manager'. The product will be released as a discretionary quantity on a daily basis.

The Inter-day Linepack Product may be made available as a 'Park' service; where Users may wish to carry over a quantity of an over-delivered (also known as a long) imbalance, or a 'Loan' service; where a User may wish to borrow a quantity of imbalance to cover an under-delivered (or short) imbalance. The Inter-day Linepack Manager may release one or both 'Park' and 'Loan' services on a Gas Day.

It is proposed that accepted Inter-day Linepack bids will be transacted through the registration of a matched pair of NBP Trade Nominations on the relevant Gas Day; and a further matched (but opposite) pair of NBP Trade Nominations for the following Gas Day. The latter pair of NBP trade nomination will reverse-out the inter-day Linepack quantity for the following Gas Day, thereby achieving a "carry-over" of the imbalance quantity between the two relevant Gas Days but ultimately a net energy imbalance of zero across both days. Both pairs of NBP trade nominations (for the Gas Day and the following Gas Day) will be registered on the Day the bid is accepted.

This service is seeking to introduce greater transparency associated with

the value of providing the opportunity to “carry over” an imbalance quantity from one Gas Day to the next, where Linepack has the capability to accommodate such transactions. For the avoidance of doubt this service is not seeking to trade gas between the User and the Inter-day Linepack Manager, but merely provide a mechanism for Users to transfer an energy imbalance from one day to the next.

It is proposed that, all primary receipts from the sale of the IDLP service will be returned to Shipper Users through Balancing Neutrality as stated in UNC section F4 – Balancing Neutrality Charges.

## **The Business Rules**

To help clarify how the proposed service will operated in practice National Grid NTS has drafted the following set of Business rules to support this Proposal.

### ***Inter-Day Linepack Product***

#### ***Proposed Business Rules V0.2***

**(in the context of these Business Rules ‘User’ refers to Shipper User and not DN User)**

## **1. Inter-day Linepack Product Overview**

### **1.1. Introduction**

- 1.1.1. The **Inter-Day Linepack Product (IDLP)** furnishes Users with the ability to undertake an inter-day transfer of a specified energy quantity.
- 1.1.2. There are two types of IDLP, which can be represented as a ‘Park’ and a ‘Loan’ product.
  - (a) ‘Park’ product – represents an inter-day transfer, from one Gas Flow Day to the next, of a positive quantity of energy.
  - (b) ‘Loan’ product – represents an inter-day transfer, from one Gas Flow Day to the next, of a negative quantity of energy.
- 1.1.3. For both of the above products an equal and opposite energy transfer will occur on the subsequent Gas Day so that the net energy transferred across both days is equal to zero.

**1.2.** The IDLP will be released within-day by National Grid NTS through the market mechanism detailed below.

**1.3.** In the event of a Network Gas Supply Emergency (Gas Deficit Emergency (GDE)) the provisions of these business rules for the IDLP service will not apply.

## **2. The Inter-day Linepack Bulletin Board**

## **2.1. Introduction**

- 2.1.1. The IDLP will be made available (within Gemini) on the **Inter-day Linepack Bulletin Board**.
- 2.1.2. The Inter-day Linepack Bulletin Board will be operated by the **Inter-day Linepack Manager** (or the Inter-day Linepack Manager's agent).
- 2.1.3. Separately for each of the Park and Loan products, the Inter-day Linepack Bulletin Board will show bid quantities, bid prices, quantities made available, and release times.
- 2.1.4. The identity of a User bidding on the Inter-day Linepack Bulletin Board will not be disclosed to other Users.

## **2.2. The Inter-Day Linepack Manager**

- 2.2.1. National Grid NTS will be the Inter-Day Linepack Manager (IDLP Manager) for the purposes of;
  - (a) determining the amount of IDLP available for release (based on the published IDLP methodology); and
  - (b) operating the Inter-day Linepack Service (accepting bids on the Inter-day Linepack Bulletin Board), including, where permitted by the IDLP Manager, netting off bids received.
- 2.2.2. The IDLP Manager will have an UK Link account, but will not be subject to cashout charges and balancing neutrality, and any imbalances and subsequent charges it creates will be suppressed.
- 2.2.3. The IDLP Manager will be the counterparty to all accepted IDLP transactions on the Inter-day Linepack Bulletin Board.

## **2.3. Inter-Day Linepack Methodology Statement**

- 2.3.1 The methodology associated with the services provided by the IDLP Manager, in particular the determination of Inter-Day Linepack Product quantities to be made available at each release, are contained in the 'Inter-day Linepack Methodology Statement', published and revised from time to time by National Grid NTS (following consultation with Users) unless any proposed methodology change is vetoed by Ofgem within 28 days of receipt of any such proposal, in which case the existing methodology will continue unchanged, and such document does not form part of the UNC."

#### **2.4. Access to the Inter-day Linepack Service**

- 2.4.1. A User may place up to 10 bids on the Inter-day Linepack Bulletin Board for each release subject to a minimum bid size of 100,000kWh.

#### **2.5. Product Release**

IDLP shall be released within-day for the Gas Day.

- 2.5.1. When the IDLP Manager has accepted bids, the associated NBP trades shall be completed before the end of the Gas Day relevant to the trade.

#### **2.6. Posting IDLP Bids**

- 2.6.1. A User may post (and withdraw) bids on to the Inter-day Linepack Bulletin Board up to and including 7 Gas Days prior to the relevant release.

- 2.6.2. Bids are subject to a zero reserve price i.e. negatively priced bids will be rejected.

- 2.6.3. All relevant posted bids which are posted prior to the time of the first IDLP release for the Gas Day will be included in the first IDLP release allocation process.

- 2.6.4. The remaining quantity associated with any bids which are not wholly accepted in an IDLP release allocation process will be carried forward to the next IDLP release allocation process within that Gas Day, subject to paragraph 2.6.6 if past the last release and not having been withdrawn and remaining greater than the minimum size.

- 2.6.5. Bids for further releases within the Gas Day may be posted after a Bid Evaluation Period as defined in paragraph 2.9.

- 2.6.6. A bid can either be accepted by the IDLP Manager, or at the end of the relevant Gas Day the bid will expire and be dropped from the bid list.

- 2.6.7. Once a bid is posted no changes can be made to the bid (but the bid may be withdrawn).

#### **2.7. Submitting Bids information**

- 2.7.1. Where the User places a bid onto the Bulletin Board; the User shall;
- (a) Indicate whether a 'Park' or 'Loan' product is required,
  - (b) the required IDLP release allocation day
  - (c) Specify price (pence per kWh) to 4 decimal places.
  - (d) Specify Quantity (kWh)

- (e) Indicate whether the bid may be partially accepted subject to a minimum acceptable quantity of 100,000 kWh
- (f) User ID, which will be visible only to the IDLP Manager and the User.

**2.8.** For the avoidance of doubt the identity of the bidding Users disclosed to the IDLP Manager pursuant to paragraph 2.6 and 2.7 will not be disclosed to other Users.

## **2.9. Timing of Release**

2.9.1. At least ½ hour prior to each IDLP release the IDLP Manager will notify Users of the volumes available for the 'Park' product and for the 'Loan' product, in the relevant release, calculated in accordance with the IDLP Methodology Statement.

2.9.2. In accordance with the IDLP Methodology Statement; in the event that, during the period between IDLP quantity notification and IDLP release, there is an unanticipated or unforeseen material change (as defined in the IDLP Methodology Statement) in available Linepack that may have resulted from either or a combination of the following:

- System Incident (i.e plant / pipeline failure)
- Off system i.e. changes in Storage Flow Notification (SFN), Offtake Profile Notification (OPN), Delivery Flow Notification (DFN);

the IDLP Manager may revise the volumes available for release.

2.9.3. In-accordance with the IDLP Methodology Statement where the IDLP Manager is aware of a potential locational constraint, on the gas system, the IDLP Manager may not carry-out the netting off process for the relevant IDLP Release.

(NGG should not knowingly impact other incentive arrangements through its actions undertaken as the IDLP Manager. In certain instances NGG believe that netting off 'park' and 'loan' bids may exasperate the build up to a locational constraint.)

2.9.4. Where para 2.9.2 and/or 2.9.3 applies NGG will notify Users of the reason for the determination, associated with being unable to continue to accept the published volume or carry out the net off process.

2.9.5. There will be four releases of the IDLP during the Gas



Day at the defined times in the table below

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

### **2.10. Bid Evaluation Period**

2.10.1 The Bid Evaluation Period is a period in which the IDLP Manager evaluates relevant Inter-day Linepack Bids in accordance with these Business Rules in order to accept or reject against the release quantity.

2.10.2 The Bid Evaluation Period will commence at the time that an Inter-day Linepack release is initiated.

2.10.3 The IDLP Manager will ensure that the Bid Evaluation Period is not longer than is reasonably necessary to enable the IDLP Manager to carryout the actions described in paragraph 3.

2.10.4 During a Bid Evaluation Period Users may not post or withdraw 'Available' Inter-day Linepack bids for the relevant release.

2.10.5 For the purposes of these Business Rules an Inter-day Linepack Bid is 'Available' where the Inter-day Linepack Bid is made before the start of the Bid Evaluation Period (Release).

## **3. IDLP Bid Acceptance process**

3.1. During the Bid Evaluation Period the IDLP Manager will undertake the bid acceptance process.

3.2. The outcome of the bid acceptance process will be made available to the bidding Users within 1 hour following the relevant release time stated in paragraph 2.9.5.

### **3.3. Acceptance Criteria**

3.3.1. Bids, for each product type ('Park' and 'Loan'), will be stacked separately in descending price order.

3.3.2. Subject to paragraph 3.3.1 where there are two or more equally priced bids, these bids will be additionally stacked in time-stamp order, with earliest time-stamp first.

### **3.4 Netting Off Bids Process**

3.4.1 In relation to each IDLP Release:

The "Sets" of IDLP Bids are:

- a) the set of all eligible IDLP Bids for IDLP Park product;
- b) the set of all eligible IDLP Bids for IDLP Loan product

3.4.2 In relation to a Set, the "Aggregate Bid Quantity" is the aggregate of the IDLP Bid Quantities for all eligible IDLP Bids in the Set;

3.4.3 In relation to an IDLP Bid, the "direction" of the IDLP Bid means whether the bid is for the IDLP Park product or an IDLP Loan product.

3.4.4 Where, for an IDLP Release, there are eligible IDLP Bids in both directions:

- a) the "Smaller" Set is the Set for which the Aggregate Bid Quantity is smaller; and
- b) the "Larger" Set is the other Set;

and where there is only one Set it shall be treated as the Larger Set.

3.4.5 The "**Available IDLP Quantity**" in relation to an IDLP Release and a direction means, subject to paragraph 3.4.6, the aggregate quantity of Inter-day Linepack which the IDLP Manager determines it can make available for the purposes of accepting IDLP Bids in that direction.

3.4.6 Where, in relation to an IDLP Release, there are eligible IDLP Bids in both directions:

- a) the Available IDLP Quantity in the direction of the Smaller Set shall be the amount equal to the Aggregate Bid Quantity for the Smaller Set; and
- b) the Available IDLP Quantity in the direction of the Larger Set shall automatically be increased (from the amount determined in accordance with the IDLP Methodology Statement) by the amount of the Aggregate Bid Quantity of the Smaller Set.

### **3.5 IDLP Release Bid Acceptance Process**

3.5.1 IDLP Manager will accept bids in accordance with this paragraph 3.5.

3.5.2 Bid acceptance will proceed until all Inter-Day Linepack release quantity has been allocated.

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3.5.3 In relation to each IDLP Release and each Set of IDLP Bids, bids will be accepted as follows:

- a) the Set of IDLP Bids shall be ranked in order of bid price (the highest priced ranking first);
- b) where two or more bids specify the same bid price, the first submitted bid shall be ranked higher;
- c) the Available IDLP Quantity shall be allocated to the IDLP Bids in descending order, allocating the Available IDLP Quantity to the highest ranked IDLP Bid first until such time as the quantity allocated in aggregate is equal to the Available IDLP Quantity or there are no further IDLP Bids to satisfy;
- d) subject to paragraphs (e) and (f), where the IDLP Bid Quantity exceeds the amount ("remaining unallocated amount") of the Available IDLP Quantity which remains unallocated after allocation to the higher ranked bids, the next ranked bid will be partially allocated equal to the remaining unallocated amount;
- e) where the partial allocation amount is to be allocated relate to a bid where the User has **not** indicated that the bid may be partially accepted, such a bid will be disregarded and the allocation will made in respect of the next ranked bid; and
- f) where the amount to be allocated in respect of a bid would be less than the minimum bid size (100,000 kWh), no allocation shall be made to the bid (and no further allocation shall be made).

#### **4. Post bid acceptance process**

Where the IDLP bid is accepted the associated transactions will be effected as NBP trades.

##### **4.1. Automated Nominations**

4.1.1. All IDLP trade nominations will be automatically generated by the UK link system.

#### **5. Information Provision**

5.1. Within 1hour of each IDLP release, the IDLP Manager will notify Gemini Users for each release:

5.1.1 In relation to the IDLP Park product:  
amount previously published as being available, aggregate amount bid for, aggregate amount accepted, price range of accepted bids and volume weighted average prices of accepted bids.

5.1.2. In relation to the IDLP Loan product:  
amount previously published as being available, aggregate amount bid for, aggregate amount accepted, price range of bids accepted, volume weighted average price of accepted bids.

5.2. The identity of the bidding Users will not be disclosed pursuant to paragraph 5.

## 6. Invoicing and Charging

6.1.1. The value (financial) of the accepted bid will be calculated as the accepted bid quantity multiplied by the bid Price (i.e. pay as bid).

6.1.2. The IDLP bid payments will be made through an Energy Balancing invoice item in-accordance with Section S of the UNC.

6.1.3. Receipts from the IDLP bid payments will be included in the Basic Net Neutrality Amount for the each relevant Gas Day when the product was allocated.

7. The making available of a specified Inter-Day Linepack quantity should not in itself and at the time, give rise to an Operational Balancing Requirement (but it is recognised that such quantities may contribute to any such requirements at any later time.)

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## User Pays

### a) **Classification of the Proposal as User Pays or not and justification for classification**

This Modification Proposal will require changes to xoserve's systems and is therefore a User Pays Modification Proposal.

This Proposal will, if implemented, create a new functionality within the UK Link (Gemini) system to allow users to transfer imbalance energy from one day to the next.

Additionally the Proposal seeks to introduce greater transparency in the value of Linepack utilisation, it seeks to reduce the potential for a cross subsidy between EoD Linepack utilisation and balancing costs by enabling Users to undertake their primary balancing role through the utilisation of Linepack.

We consider that the introduction of this additional Shipper balancing tool

and the potential reduction in cross-subsidy of costs associated with Linepack utilisation is to the benefit of both the Users who utilise the service and those who receive the additional Balancing Neutrality revenues that may result from the redistribution of the revenues from the sale of Inter-Day Linepack Product.

**b) Identification of Users, proposed split of the recovery between Gas Transporters and Users for User Pays costs and justification**

As previously stated this Proposal seeks to introduce and charges for a new Inter-Day Linepack service which enables Users to utilise Linepack as an additional balancing tool. The introduction of such a tool will solely benefit Shipper Users and we therefore consider that this Proposal should be funded 100% by Shipper Users.

**c) Proposed charge(s) for application of Users Pays charges to Shippers**

**Development and Implementation costs**

Xoserve has provided a Rough Order of Magnitude (ROM) Analysis for the required UK Link (Gemini) changes based on the Business Rules within this proposal which estimates costs as:

- o The development and implementation costs will be at least **£213k**, but probably not more than **£288k** per annum
- o Ongoing Application Support costs will be at least **£6k**, but probably not more than **£22k** per annum

National Grid has previously stated that it believed the revenues and costs of this service could be included within Balancing Neutrality and invoiced to Users accordingly. However, after analysis and investigation by our legal department it has come to light that as the Development and Implementation costs associated with the Proposal are not Energy Balancing charges, enabling these User Pays costs to be recovered through the Energy Balancing Neutrality mechanism would require fundamental changes to the UNC and the Agency Charging Statement (ACS).

To reduce the legal complexity, National Grid is now proposing a pragmatic solution whereby the one-off and ongoing costs are recovered from Users via monthly User Pays charges as per the following;

Development and implementation costs will be recovered from Users over a 2 (two) year period. This cost will be divided into 24 (twenty-four) equal amounts with a User's individual proportion of this monthly 1/24 amount based on the Users proportion of the total system throughput for the month in which the invoice relates. For clarity these amounts will be invoiced monthly in arrears commencing the month after the implementation of this proposal and will cease after the 24<sup>th</sup> (twenty-fourth) invoice has been issued.

Ongoing costs will be recovered from Users over a 12 month period. The total Xoserve ongoing annual operating costs will be divided into a 12 equal amounts and each 1/12 amount will be invoiced on a monthly basis through User Pays charges. Costs will be apportioned to each Users based

on their proportion of throughput for the month in which the invoice relates. For clarity these amounts will be invoiced monthly in arrears commencing the month after the implementation of this proposal. It is proposed that the ongoing costs for subsequent years of operating the Inter-Day Linepack Product will be recovered in line with this method.

### **Inter-day Linepack Product Revenue**

The revenues of the IDLP service are proposed to be apportioned to Users based on their proportion of throughput on each relevant day, with such credits being settled through the neutrality mechanism on a monthly basis

Based on conservative projections of the IDLP service take up, we estimate that in its initial year of implementation the service's revenues will be greater than the total estimated Development and Implementation costs. This estimate is based on National Grid releasing an average of 2 MCM each day, with predicted bid prices based on 2009/10 SAP to Day ahead SAP price spread.

It is expected that over a year revenues received by Users, through Balancing Neutrality, will be greater than the Xoserve ongoing annual operating costs.

**d) Proposed charge for inclusion in ACS – to be completed upon receipt of cost estimate from xoserve**

It is proposed that the following charges will be included in the ACS:

### **The Agency Charging Statement**

Exert of proposed Service Item 13

### **Modification Proposal 0337- Introduction of an Inter-Day Linepack Product**

#### **1. Development and Implementation Cost**

○ **Description**

- i. Set up service;
- ii. The implementation of functionality to facilitate the Inter Day Linepack Product

○ **Type**

- i. Code Service

○ **Service recipient**

- i. Shippers under UNC

○ **Service Detail**

- i. The development costs incurred as a result of the implementation of modification 0337. Cost recovery over a 24 month period

○ **The charging basis is:**

- i. The total development costs divided into 24 monthly charge instalments. The monthly charge to each shipper will be based

upon:

- ii. Each shipper's throughput value each month as a proportion of the each month's total throughput.
- iii. Charge will be invoiced 1 month in arrears.

**2. Annual Ongoing Support Costs**

o **Description**

- i. Annual Ongoing support service

o **Type**

- i. Code Service

o **Service recipient**

- i. Shippers under UNC

o **Service Detail**

- i. The ongoing costs associated with the provision and maintenance of the Inter Day Linepack Product.

o **The Charging Basis**

- i. The charging basis is:
  - ii. The total ongoing costs each year divided into 12 monthly instalments. The monthly charge to each shipper will be based upon:
    - iii. Each shipper's throughput value each month as a proportion of the each month's total throughput.
    - iv. Charges will be invoiced 1 month in arrears.

**3**

**Basis upon which the Proposer considers that it will better facilitate the achievement of the Relevant Objectives, specified in Standard Special Condition A11.1 and 2 of the Gas Transporters Licence**

National Grid considers that the intent of the Modification Proposal is to introduce a new service that seeks to achieve two principle objectives:

- Creates an arbitrage opportunity between prices on the gas day and the next day; and
- The introduction of an additional balancing tool for Users to manage their End of Day imbalance positions.

The introduction of an additional balancing tool through which Users may manage their EoD balance position may better facilitate **SSCA11.1(d): So far as is consistent with sub-paragraph (a) to (c) the securing of effective competition**. The inclusion of an additional balancing tool should improve competition as it increases the possible ways a users is able to manage the provision of gas commercially. Dependent on the quantity and likelihood of its release this service could potentially lead to cost reductions for Shippers.

National Grid is mindful that in practise these improvements may be marginal and should be balanced against the uncertainties listed below;

- o uncertainties relating to the quantity of product made available

each day;

- o uncertainties as to the time of release and the potential for zero release; and
- o uncertainties with regard to the netting off process;

After implementation, as the service develops over time, these uncertainties will decrease, with the corresponding increase in the value of a more certain service.

The development of this service is in line with National Grid's C27 licence requirements. The implementation is dependent on the expected benefits to the industry; there are no direct benefits to National Grid of the implementation of this new service, and so, we do not believe that the implementation of this modification does not better facilitate the SSCA11.1(c): Efficient discharge of the licensee's obligations.

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**Any further information (Optional), likely impact on systems, processes or procedures, Proposer's view on implementation timescales and suggested text**

#### **UK Link System Impacts**

In respect of the UK Link system changes required to support the implementation of this Proposal, and based on the business rules provided with this Proposal, Xoserve has provided a Rough Order of Magnitude (ROM) Analysis which estimates costs as:

- o The development and implementation costs at least £213k, but probably not more than £288k per annum
- o Ongoing Application Support will cost at least £6k, but probably not more than £22k per annum

#### **Operational Impacts**

We anticipate that the proposed changes will require National Grid NTS to appoint an Inter-Day Linepack Manager to operate and manage the Inter-day Linepack Bulletin Board. This implementation of this Proposal may also require the introduction new operational processes and procedures which support the registration of the trade nominations associated with accepted bids on the IDLP Bulletin Board.

If implemented NGG estimates that the ongoing costs associated with the NGG operational support required for this Modification Proposal will be within the region of £126k a year. These costs are not included in the User Pays arrangements.

#### **Suggested Text**



**UNIFORM NETWORK CODE**  
**CODE MODIFICATION PROPOSAL 0337**  
**INTRODUCTION OF AN INTER-DAY LINEPACK PRODUCT**

[Draft] legal text

**TRANSPORTATION PRINCIPAL DOCUMENT**

**SECTION C - NOMINATIONS**

*Insert new paragraph 6.1.2 to read as follows:*

"6.1.2 During the period of a Class A Contingency paragraph 7.4 shall not apply, and the IDLP Manager will not be required to undertake an IDLP Release."

*Insert a new paragraph 7 to read as follows:*

**7. INTER-DAY LINEPACK (IDLP)**

**7.1 Introduction**

7.1.1 For the purpose of this paragraph 7:

- (a) the "**bid evaluation period**" is, in relation to an IDLP Release, the period during which the IDLP Manager conducts an allocation in accordance with paragraph 7.5.2;
- (b) an "**IDLP Bid**" is an offer by a User to make an IDLP Trade;
- (c) an "**IDLP (Borrow) Trade**" is an IDLP Trade under which the User makes an Acquiring Trade Nomination for Day D and a Disposing Trade Nomination for Day D+1;
- (d) an "**IDLP (Lend) Trade**" is an IDLP Trade under which the User makes a Disposing Trade Nomination for Day D and an Acquiring Trade Nomination for Day D+1;
- (e) "**IDLP Manager**" means National Grid NTS acting for the purposes of this paragraph 7;
- (f) the "**IDLP Methodology Statement**" is the methodology from time to time established, published and revised by the IDLP Manager setting out the methodology which the IDLP Manager will apply for the purposes of determining the Available IDLP Quantity and such statement shall not form part of the Code (and shall not be subject to modification pursuant to the Modification Rules);
- (g) an "**IDLP Release**" is an occasion on Day D where the

Available IDLP Quantity is greater than zero (0) in either direction and the IDLP Manager selects IDLP Bids for acceptance in accordance with paragraph 7.5;

- (h) an **"IDLP Trade"** for a Day D is a transaction pursuant to which a User and the IDLP Manager will, in accordance with paragraph 7.5.3, make Trade Nominations for Day D and equal and opposite Trade Nominations for Day D+1; and
- (i) the **"minimum eligible amount"** is 100,000 kWh.

**7.1.2** An IDLP Bid is **"eligible"** in relation to an IDLP Release where the IDLP Bid:

- (a) was submitted and not withdrawn prior to the IDLP Release;
- (b) was not rejected by the IDLP Manager in accordance with paragraph 7.3.5.

**7.1.3** Where in relation to an IDLP Release an IDLP Bid was not accepted or it was only partially accepted the IDLP Bid shall remain eligible, in the case of a partially accepted IDLP Bid for the amount of the remaining IDLP Bid Quantity which exceeds any minimum amount specified in the IDLP Bid (and the minimum eligible amount), for the purposes of the next following IDLP Release on the Day in respect of which the IDLP Bid was made.

## **7.2 IDLP Manager**

**7.2.1** The IDLP Manager shall be a User for the sole purpose of making Acquiring Trade Nominations and Disposing Trade Nominations.

**7.2.2** Section F2 shall not apply in relation to the IDLP Manager and the IDLP Manager will not make or receive payments in respect of Balancing Charges.

## **7.3 IDLP Bids**

**7.3.1** Users may make IDLP Bids for Day D in accordance with this paragraph 7.3.

**7.3.2** An IDLP Bid shall specify:

- (a) the identity of the User;
- (b) the Day in respect of which the IDLP Bid is made;
- (c) whether the IDLP Bid is for an IDLP (Borrow) Trade or an IDLP (Lend) Trade;

- (d) the amount (in kWh, and not less than the minimum eligible amount) in respect of which the bid is submitted ("**IDLP Bid Quantity**");
- (e) if any, the minimum amount (not less than the minimum eligible amount) which the User is willing to be allocated for the purposes of paragraph 7.5.2; and
- (f) the amount (to four decimal places, the "**bid price**"), which shall not be less than zero (0), which the User is offering to pay by way of an IDLP Charge.

### 7.3.3 An IDLP Bid may:

- (a) subject to paragraph (b), be:
  - (i) submitted at any time from the seventh Day before Day D until 23:00 hours on Day D;
  - (ii) withdrawn (but not amended) at anytime before it is accepted in accordance with paragraph 7.5.2;
- (b) not be submitted or withdrawn during a bid evaluation period on the Day for which the IDLP Bid is made.

7.3.4 In relation to an IDLP Release a User may have, at any one time, up to but no more than ten (10) eligible IDLP Bids.

7.3.5 The IDLP Manager may reject an IDLP Bid where any requirement of paragraph 7.3.2 is not complied with.

## 7.4 IDLP Release

7.4.1 In relation to each IDLP Release:

- (a) the "**Sets**" of IDLP Bids are:
  - (i) the set of all (if any) IDLP Bids for IDLP (Borrow) Trades;
  - (ii) the set of all (if any) IDLP Bids for IDLP (Lend) Tradeswhich are eligible IDLP Bids in relation to that IDLP Release;
- (b) in relation to a Set, the "**Aggregate Bid Quantity**" is the aggregate of the IDLP Bid Quantities for all eligible IDLP Bids in the Set;

- (c) in relation to an IDLP Bid, the "**direction**" of the IDLP Bid means whether the bid is for an IDLP (Borrow) Trade or an IDLP (Lend) Trade, and direction in relation to a Set shall be construed accordingly.

7.4.2 Where, for an IDLP Release, there are eligible IDLP Bids in both directions:

- (a) the "**Smaller**" Set is the Set for which the Aggregate Bid Quantity is smaller; and
- (b) the "**Larger**" Set is the other Set

and where there is only one Set it shall be treated as the Larger Set.

7.4.3 The "**Available IDLP Quantity**" in relation to an IDLP Release and a direction means, subject to paragraph 7.4.4, the aggregate quantity of inter-day linepack which the IDLP Manager determines (in accordance with the IDLP Methodology Statement) it can make available for the purposes of accepting IDLP Bids in that direction.

7.4.4 Where, in relation to an IDLP Release, there are eligible IDLP Bids in both directions:

- (a) the Available IDLP Quantity in the direction of the Smaller Set shall be the amount equal to the Aggregate Bid Quantity for the Smaller Set; and
- (b) subject to paragraph (c), the Available IDLP Quantity in the direction of the Larger Set shall be increased (from the amount determined in accordance with the IDLP Methodology Statement) by the amount of the Aggregate Bid Quantity of the Smaller Set;
- (c) where the IDLP Manager is of the opinion that an increase in the Available IDLP Quantity in the Larger Set in accordance with paragraph (b) may give rise to an Operational Balancing Requirement (or may increase the extent of any such requirement) paragraph (b) shall not apply (and the Available IDLP Quantity in the direction of the Larger Set shall be the quantity determined in accordance with the IDLP Methodology Statement).

7.4.5 The IDLP Manager will notify Users of the Available IDLP Quantity in each direction no later than thirty (30) minutes prior to an IDLP Release (including where such amount is zero (0) in one or both directions).

7.4.6 Following notification of the Available IDLP Quantity pursuant to paragraph 7.4.5 the IDLP Manager may revise the Available IDLP

Quantity in either direction for the purposes of the IDLP Release in the circumstances set out in the IDLP Methodology Statement.

- 7.4.7 Where the Available IDLP Quantity is revised pursuant to paragraph 7.4.6 the IDLP Manager will notify Users of the reasons for its revision.
- 7.4.8 An IDLP Release shall occur on a Day at each of 13:30, 16:30, 19:30 and 23:00 hours, and where the Available IDLP Quantity at such time is greater than zero (0) in either or both directions the IDLP Manager will initiate a bid evaluation period at such time and select eligible IDLP Bids for acceptance in accordance with paragraph 7.5.2.

## 7.5 Allocation

- 7.5.1 For the purposes of this paragraph 7.5 the "**Accepted IDLP Bid Quantity**" is the amount of the Available IDLP Quantity allocated to an IDLP Bid in accordance with paragraph 7.5.2.
- 7.5.2 In relation to each IDLP Release and each Set of IDLP Bids, bids will be accepted as follows:
- (a) the Set of IDLP Bids shall be ranked in order of bid price (the highest priced ranking first);
  - (b) where two (2) or more bids specify the same bid price, the first submitted bid shall be ranked higher;
  - (c) the Available IDLP Quantity shall be allocated to the IDLP Bids in descending order, allocating the Available IDLP Quantity to the highest ranked IDLP Bid first until such time as the quantity allocated in aggregate is equal to the Available IDLP Quantity or there are no further IDLP Bids to satisfy;
  - (d) subject to paragraphs (e) and (f), where the IDLP Bid Quantity exceeds the amount ("**remaining unallocated amount**") of the Available IDLP Quantity which remains unallocated after allocation to the higher ranked bids, the User will be allocated an amount equal to the remaining unallocated amount;
  - (e) where the amount to be allocated in respect of a bid is less than the minimum amount specified in the bid, the bid will be disregarded and an allocation made in respect of the next ranked bid; and
  - (f) where the amount to be allocated in respect of a bid would be less than the minimum eligible amount, no allocation shall be made to *the bid (and no further allocation shall be made)*.

**7.5.3 Where an IDLP Bid is accepted:**

(a) an IDLP Trade shall be made, and the IDLP Manager and the User shall be treated as having made Trade Nominations for Day D and equal and opposite Trade Nominations for D+1 in each case for the Accepted IDLP Bid Quantity in the manner set out in the table below:

	IDLP (Borrow) Trade		IDLP (Lend) Trade	
	<b>D</b>	<b>D+1</b>	<b>D</b>	<b>D+1</b>
<b>User</b>	Acquiring Trade Nomination	Disposing Trade Nomination	Disposing Trade Nomination	Acquiring Trade Nomination
<b>IDLP Manager</b>	Disposing Trade Nomination	Acquiring Trade Nomination	Acquiring Trade Nomination	Disposing Trade Nomination

(b) and no further action need be taken by the IDLP Manager or the User for the purposes of giving effect to the IDLP Trade.

7.5.4 Where, following the IDLP Release at 23:00 hours on a Day, there remain IDLP Bids for such Day which have not been accepted such bids shall lapse and have no further effect for the purposes of this paragraph 7.

7.5.5 In relation to an IDLP Release the IDLP Manager will, not later than one (1) hour after the start of the bid evaluation period, inform each User of those of its IDLP Bids which have been accepted and the amount of the Available IDLP Quantity which has been allocated in respect of each such IDLP Bid.

7.5.6 Each User who has an IDLP Bid accepted shall be liable to pay to the IDLP Manager a charge ("**IDLP Charge**") in an amount determined as the Accepted IDLP Bid Quantity multiplied by the bid price specified in the IDLP Bid.

7.5.7 IDLP Charges will be invoiced and payable in accordance with Section S.

**7.6 Auction Information**

7.6.1 In relation to an IDLP Release the IDLP Manager will, not later than one (1) hour after the end of a bid evaluation period notify Users of: in respect of each direction:

- (i) **the Available IDLP Quantity notified to Users pursuant to paragraph 7.4.5;**
- (ii) **where different, the Available IDLP Quantity made available at the IDLP Release;**

for each Set of IDLP Bids:

- (iii) the Aggregate Bid Quantity;
- (iv) the aggregate quantity allocated to each Set of IDLP Bids;
- (v) the highest bid price of any accepted bid and the quantity for which such bid was accepted;
- (vi) the lowest bid price of any accepted bid and the quantity for which such bid was accepted; and
- (vii) the weighted average price of accepted bids calculated in accordance with paragraph 7.6.2.

7.6.2 For the purposes of paragraph 7.6.1(b)(v) the "weighted average price" in relation to an IDLP Release is calculated as follows:

$$\frac{\sum_{i=1}^n Q_i * P_i}{\sum_{i=1}^n Q_i}$$

where:

$i$  represents each IDLP Bid which was accepted;

$n$  is the number of IDLP Bids which were accepted;

and where in relation to each accepted IDLP Bid  $i$ ,

$Q_i$  is the amount of the Available IDLP Quantity allocated to each successful IDLP Bid; and

$P_i$  is the bid price.

## **SECTION D – OPERATIONAL BALANCING AND TRADING ARRANGEMENTS**

*Amend paragraph 1.1.1(c) to read as follows:*

" ...

- (c) after taking into account estimated shrinkage and intended

changes in NTS Linepack and LDZ stock (including pursuant to acceptance of IDLP Bids under Section C7); and

...".

## **SECTION F – SYSTEM CLEARING, BALANCING CHARGES AND NEUTRALITY**

*Amend paragraph 4.1.2(a) to read as follows:*

" ...

(a) "relevant User" means subject to paragraph 4.1.2(e) below, any User other than the IDLP Manager, a Shrinkage Provider ...".

*Amend paragraph 4.4.2 to read as follows:*

" ...

(g) ...; ~~and~~

(h) ...; and

(i) the IDLP Charges payable to the IDLP Manager on that Day."

*Amend paragraph 4.5.3(a)(ii) to read as follows:*

" ... Total Incentivised Nomination Charges, IDLP Charges, Balancing Charges ..."

*Amend paragraph 4.5.3(b)(ii) to read as follows:*

" ... Total Incentivised Nomination Charges, IDLP Charges, Balancing Charges ..."

## **SECTION Q – EMERGENCIES**

*Add new paragraph 4.1.3 to read as follows:*

"4.1.3 During a Gas Deficit Emergency at Stage 2 and higher Section C7.4 shall not apply, and the IDLP Manager will not be required to undertake an IDLP Release."



**SECTION V – GENERAL**

*Add new paragraph 7.1.2(a)(vi) to read as follows:*

- " ...
- (vi) the provisions of Section C7 under which the Transporter is a User for the purposes of making Trade Nominations;"

**SECTION X – ENERGY BALANCING CREDIT MANAGEMENT**

*Amend paragraph 2.5.2(d) to read as follows:*

**""Outstanding Relevant Balancing Indebtedness"** for each User  
...

...

(iii) ...; **and**

(iv) ...; **and**

(v) in relation to IDLP Charges the sum of:

- (1) the aggregate amount of IDLP Charges payable by the User in the period from the first Day of the earliest billing period in respect of which no Invoice for IDLP Charges has been submitted to the User up to and including the relevant day;
- (2) the Invoice Amounts under each Invoice in respect of IDLP Charges which has been submitted for which the Invoice Due Date is on or after the calculation day; and
- (3) the Invoice Amounts under each Invoice in respect of IDLP Charges which has been submitted for which the Invoice Due Date is before the calculation day and which has not been paid by the User."

5 **Code Concerned, sections and paragraphs**

- a) Uniform Network Code  
b) Transportation Principal Document

**Section(s)** TPD section C Nominations, section D – Operational Balancing and Trading Arrangements , section F System Clearing, Balancing Charges and Neutrality, section Q – Emergencies, section V – General, section – Energy Balancing Management

**Proposer's Representative**

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