

## Stage 04: Final Modification Report

# 0461:

## Changing the UNC Gas Day to Align with the Gas Day in EU Network Codes.

This modification seeks to implement changes to the definition of the Gas Day within the UNC and its associated documents to facilitate compliance with European legislative changes.



Panel consideration is due on 20 February 2014



High Impact: Shippers, Distribution Network Operators and Shippers, Distribution Network Operators, National Grid NTS, Third Party Participants and Materially Affected Parties.



Medium Impact: -



Low Impact: -

At what stage is this document in the process?



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## About this document:

This Final Modification Report will be presented to the Panel on 20 February 2014.

The Authority will consider the Panel's recommendation and decide whether or not this change should be made.


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# 1 Summary

## Is this a Self-Governance Modification?

The Modification Panel determined that this is not a self-governance modification because it has a significant impact on timed processes operated by Users that are described in the UNC and its associated documents.

## Why Change?

In order to become compliant with the requirements of the Capacity Allocation Mechanism (CAM) European network code, the GB Gas Day is required to align with the Gas Day as defined in the CAM code. This effectively means a change from 06:00-06:00 to 05:00-05:00. To align with the Gas Day set out in CAM, the current Gas Day definition within the UNC will require amending.

## Solution

### a) UNC current definition and other related definitions

It is proposed that the 06:00 time references are changed to 05:00 within UNC General Terms Section C which contains the UNC current definition and other related definitions.

### b) Specific UNC times that define the start/end of the Gas Day

It is proposed that specific 06:00 time references in UNC Sections B, D, G and U that are associated with the start of the Gas Day should be changed to 05:00 to align with the start of the new Gas Day.

### c) Specific UNC times impacted by the Gemini outage

It is proposed that specified times in Sections B, C, D, E, K, Q, U and Z of the UNC should be changed as they will no longer be able to operate at their current time due to the revised Gemini outage time as a consequence of the Gas Day change.

### d) Specific UNC associated process times

It is proposed that specified times in Sections B, C and H of the UNC should change as they will no longer be able to operate at their current time due to operational constraints as a consequence of the change to the Gas Day.

## Relevant Objectives

The reference to the Gas Day being aligned is included within the EU CAM network code. Implementation of this modification would therefore facilitate compliance with European legislative requirements.

## Implementation

No implementation timescale is proposed.

The implementation date for CAM has been set as 01 November 2015. To be compliant, therefore, the change to the definition of the Gas Day will have to be implemented no later than this date.

## 2 Why Change?

### EU CAM Network Code

The current Gas Day in the UNC is 06:00-06:00, with a seasonal adjustment for daylight saving. The EU CAM network code states the Gas Day time will operate from 05:00-05:00, also with an equivalent daylight saving adjustment. This legislative requirement relating to the Gas Day timing contained within the EU CAM code supersedes any prevailing GB legislation. Therefore the implementation of the EU CAM network code directly impacts on the UNC and its associated documents, requiring the Gas Day definition to change to become EU compliant. To be compliant, the change to the definition of the Gas Day will need to be implemented no later than the date that the CAM code is implemented.

### Other EU Codes

Although CAM is only applicable at Interconnection Points (IPs), the Gas Day definition is referenced in other EU Network Codes (eg EU Balancing Code) that apply to the whole GB gas regime. The definition contained within CAM is generic and has the same meaning when referenced in other codes, therefore implying the Gas Day time has to be amended across the whole GB gas regime.

### UNC and Associated Documents Time References

The change to the Gas Day time will have a consequential impact on the UNC Gas Day definition as well as other time references and process times contained within the UNC and associated documents.

There are four categories of time references requiring change within the UNC:

- a) UNC current definition and other related definitions;
- b) Specific UNC times that define the start/end of the Gas Day;
- c) Specific UNC times impacted by the Gemini outage time; and
- d) Specific UNC associated process times.

All clauses containing time references within the General Terms, Transportation Principal Document and Offtake Arrangements Document have been reviewed. The Workgroup has concluded that the wholesale movement of all these times is not necessary or efficient and has only suggested changing times that cannot operate at their existing time.

The Workgroup has also reviewed time references contained within UNC associated documents and assessed their requirement to change. The Workgroup has agreed that any proposed changes to UNC associated documents should be progressed through the specified governance process for each document, and not be included as part of this modification proposal. It should be noted that the owners of the associated documents impacted by the Gas Day change have contributed to the aforementioned review and are aware of the changes required.

A summary of its conclusions is contained within the table below.

Topic Area	Document(s)	Workgroup Proposal
<b>Gas Day and related definitions</b>	UNC GTC - Interpretation	Change times (See section 3 Solution, table sub-section (a))
<b>Physical Regime – Assured Pressures and Flex Utilisation</b>	References contained within UNC Sections B, J, V and OAD Sections I & J	Leave all times as-is
<b>Capacity</b>	UNC Section B	<ul style="list-style-type: none"> <li>• Leave times related to the business day/working day as-is</li> <li>• Leave other times suitably detached from the start/end of Gas Day as-is</li> <li>• Leave D 02:00 reference in 3.5 – Release of Daily NTS Exit (Flat) Capacity (3.5.2) as-is to allow Shipper Users the opportunity to have further capacity allocations if required</li> <li>• Change times related to start of the Gas Day (See section 3 Solution, table sub-section (b))</li> <li>• Change times impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> <li>• Change other times related to capacity processes that can no longer operate at their current time (See section 3 Solution, table sub-section (d))</li> </ul>
<b>Nominations</b>	UNC Section C	<ul style="list-style-type: none"> <li>• Leave Nomination Timetable times as-is</li> <li>• Leave Calorific Value times as-is</li> <li>• Change times related to Renominations and Trade Nominations that are impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> <li>• Change other times related to Trade Nominations that can no longer operate at their current time (See section 3 Solution, table sub-section (d))</li> </ul>

<b>Operational Balancing and Trading Arrangements</b>	UNC Section D	<ul style="list-style-type: none"> <li>• Leave all times suitably detached from the start/end of Gas Day as-is</li> <li>• Change times related to start of the Gas Day (See section 3 Solution, table sub-section (b))</li> <li>• Change other times impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> </ul>
<b>Daily Quantities, Imbalances and Reconciliation</b>	UNC Section E	<ul style="list-style-type: none"> <li>• Leave all times related to the business day/working day as-is</li> <li>• Change time related to Incentivised Nomination Charges that are impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> </ul>
<b>Supply Points</b>	UNC Section G	<ul style="list-style-type: none"> <li>• Leave all times related to the business day/working day as-is</li> <li>• Change time related to the start of the Gas Day (See section 3 Solution, table sub-section (b))</li> </ul>
<b>Demand Estimation and Demand Forecasting</b>	UNC Section H	<ul style="list-style-type: none"> <li>• Change last LDZ Demand Forecasting time that can no longer operate at its current time (See section 3 Solution, table sub-section (d))</li> </ul>
<b>Supply Point Metering</b>	UNC Section M	<ul style="list-style-type: none"> <li>• Leave all times as-is</li> </ul>
<b>Operating Margins</b>	UNC Section K	<ul style="list-style-type: none"> <li>• Change time associated with Initial Input Nominations that is impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> </ul>
<b>Shrinkage</b>	UNC Section N	<ul style="list-style-type: none"> <li>• Leave time reference as-is</li> </ul>
<b>Emergencies</b>	UNC Section Q	<ul style="list-style-type: none"> <li>• Leave times detached from start/end of the Gas Day as-is</li> <li>• Change time associated with Storage Compensation Arrangements that is impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> </ul>
<b>Storage</b>	UNC Section R	<ul style="list-style-type: none"> <li>• Leave time reference as-is</li> </ul>

<b>Invoicing and Payment</b>	UNC Section S	<ul style="list-style-type: none"> <li>• Leave time reference as-is</li> </ul>
<b>UK Link</b>	UNC Section U	<ul style="list-style-type: none"> <li>• Change times related to start of the Gas Day (See section 3 Solution, table sub-section (b))</li> <li>• Change time associated with Contingency Arrangements that is impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> </ul>
<b>General</b>	UNC Section V	<ul style="list-style-type: none"> <li>• Leave all times detached from the start/end of the Gas Day as-is</li> <li>• Change times associated with quantity of LNG in store and SO commodity charge that relate to the start/end of the Gas Day (See section 3 Solution, table sub-section (b))</li> </ul>
<b>Energy Balancing Credit</b>	UNC Section X	<ul style="list-style-type: none"> <li>• Leave all time references as-is</li> </ul>
<b>National Grid LNG Storage</b>	UNC Section Z	<ul style="list-style-type: none"> <li>• Leave all times detached from the start/end of the Gas Day as-is</li> <li>• Change time associated with Storage Gas Transfer that is impacted by the Gemini outage time (See section 3 Solution, table sub-section (c))</li> </ul>
<b>Offtake Arrangements</b>	Offtake Arrangements Document (OAD)	<ul style="list-style-type: none"> <li>• Leave all time references as-is</li> </ul>

## 3 Solution

### a) UNC current definition and other related definitions

#### General Terms Section C - Interpretation

It is proposed that the 06:00 time references in the table below are changed to 05:00 within the General Terms Section of the UNC which contains the UNC current definition and other related definitions.

It is proposed that the 'Day' definition has to be changed to achieve legal compliance with the EU Network Codes. The other associated definitions are linked to the definition of the 'Day' and therefore also require amending for consistency and alignment of the UNC.

Definition	Document	Section	Clause
Day	General Terms Section C - Interpretation	2. Interpretation 2.2	2.2.1 (a)
Business Day	General Terms Section C - Interpretation	2. Interpretation 2.2	2.2.1 (b)
Calendar Day	General Terms Section C - Interpretation	2. Interpretation 2.2	2.2.2 (a)
Week	General Terms Section C - Interpretation	2. Interpretation 2.2	2.2.2 (b)
Month	General Terms Section C - Interpretation	2. Interpretation 2.2	2.2.2 (c)
Calendar Month	General Terms Section C - Interpretation	2. Interpretation 2.2	2.2.2 (d)
Year	General Terms Section C - Interpretation	2. Interpretation 2.2	2.2.2 (e)

## b) Specific UNC times that define the start/end of the Gas Day

As the 'Day' definition will be altered to start at 05:00, the UNC specific processes that commence when a new Gas Day begins will also require changing for the purpose of consistency and alignment.

It is proposed that the 06:00 time references in UNC Sections B, D, G, U and V that are associated with the start of the Day should be changed to 05:00 to align with the start of the new Day.

It is proposed that the 05:59 time contained in UNC Section V that is associated with the end of the Preceding Day should be changed to 04:59 hours to align with the end of the Day.

The table overleaf lists the specific sections and clauses impacted by this proposal.

Document	Section	Clause	No. Times References per Clause	New Times Proposed
Section B System Use & Capacity	2.4 Daily NTS Capacity	2.4.13	3 X 06:00	05:00
Section B System Use & Capacity	2.4 Daily NTS Capacity	2.4.14	1 X 06:00	05:00
Section B System Use & Capacity	2.4 Daily NTS Capacity	2.4.15	1 X 06:00	05:00
Section B System Use & Capacity	2.9 Curtailment of Interruptible NTS Entry Capacity	2.9.3	1 X 06:00	05:00
Section B System Use & Capacity	2.10 Surrender of NTS Entry Capacity	2.10.3	1 X 06:00	05:00

Section B System Use & Capacity	2.10 Surrender of NTS Entry Capacity	2.10.10	1 X 06:00	05:00
Section B System Use & Capacity	2.10 Surrender of NTS Entry Capacity	2.10.11	1 X 06:00	05:00
Section B System Use & Capacity	3.10 Curtailment of Off-peak Daily NTS Exit (Flat) Capacity	3.10.1	1 X 06:00	05:00
Section B System Use & Capacity	Annex - NTS Exit Capacity 3 – Capacity bids, capacity offers and capacity applications – 32	Annex B1 – 3.2	2 X 06:00	05:00
Section B System Use & Capacity	Annex – NTS Exit Capacity 3 -	Annex B1 – 3.9	2 X 06:00	05:00
Section D Operational Balancing and Trading Arrangements	Annex D-1 – Trading System Arrangements – 1 – Introduction	1.2	1 X 6:00	05:00
Section G Supply Points	Annex G-2 Mandatory Allocation Agency Terms - 2 Duration	Annex G-2-2	1 X 06:00	05:00
Section U UK Link	6.1 Contingency Arrangements – General	6.1.3	1 X 06:00	05:00
Section V General	Annex V-1	Aggregate physical LNG in store	1 X 05:59	04:59
Section V General	Annex V-2	SO Commodity Charge Information (week)	2 X 06:00	05:00
Section V General	Annex V-2	SO Commodity Charge Information (Formula Year)	1 X 06:00	05:00

### c) Specific UNC times impacted by the Gemini outage time

It is proposed that specified times in Sections B, C, D, E, K, Q, U and Z should be changed as they will no longer be able to operate at their current time due to the revised Gemini outage time as a consequence of the Gas Day change.

The table overleaf lists the specific sections, clauses and times impacted, and the new times proposed.

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Document	Section	Clause	No. of Time References per Clause	New Times Proposed
Section B System Use & Capacity	2.4 Daily NTS Entry Capacity	2.4.15	1 X 04:00	03:00
Section B System Use & Capacity	2.13 Capacity Neutrality Arrangements	2.13.3	1 X 04:00	03:00
Section B System Use & Capacity	5.2 Capacity Transfer – Procedure	5.2.2	1 X 04:00	03:00
Section B System Use & Capacity	5.6 Daily NTS Capacity Transfer	5.6.2	1 X 04:00	03:00
Section C Nominations	4.1 Renomination – General	4.1.3	1 X 04:00	03:00
Section C Nominations	5.2 Trade Nominations – Content, timing and procedure	5.2.2	1 X 04:00	03:00
Section D Operational Balancing and Trading Arrangements	2.2 Trading Arrangements – Market Transactions and Trading Arrangements	2.2.1	1 X 04:00	03:00
Section D Operational Balancing and Trading Arrangements	Annex D-1 – Trading System Arrangements – 5 – Acceptance	5.1	2 X 03:35	02:35
Section E Daily Quantities, Imbalances and Reconciliation	5.3 – Imbalance – Incentivised Nominations Charges	5.3.5	1 X 04:00	03:00
Section K Operating Margins	1.3.3 – Introduction – National NTS as NTS User	1.3.3	1 X 04:00	03:00
Section Q Emergencies	7.2 Storage Curtailment Compensation Arrangements	7.2.1	1 X 04:00	03:00
Section U UK Link	6.1 Contingency Arrangements – General	6.1.3	1 X 04:00	03:00
Section Z National Grid LNG Storage Facilities	4.3 Procedure	4.3.3	1 X 04:00	03:00

#### d) Specific UNC associated process times

It is proposed that specific times associated with processes will no longer be able to operate at their current time to due operational constraints as a consequence of a change to the Gas Day.

The table overleaf lists the specific sections, clauses and times impacted, and the new times proposed.

Document	Section	Clause	No. of Time References per Clause	New Times Proposed
Section B System Use & Capacity	2.4 Daily NTS Entry Capacity	2.4.3	1 X 02:00	01:00
Section B System Use & Capacity	2.4 Daily NTS Entry Capacity	2.4.7	1 X 02:00	01:00
Section B System Use & Capacity	2.4 Daily NTS Entry Capacity	2.4.13	1 X 02:00	01:00
Section B System Use & Capacity	2.9 Curtailment of Interruptible NTS Entry Capacity	2.9.3	1 X 02:00	01:00
Section B System Use & Capacity	2.10 Surrender of NTS Entry Capacity	2.10.3	1 X 02:00	01:00
Section B System Use & Capacity	2.12 Overrun Charges	2.12.3	1 X 02:00	01:00
Section B System Use & Capacity	2.17 Force Majeure affecting capacity at an ASEP	2.17.5	1 X 01:00	00:00
Section B System Use & Capacity	3.10 Curtailment of Off-peak Daily NTS Exit (flat) Capacity	3.10.1	1 x 02:00	01:00
Section B System Use & Capacity	3.11 Surrender of Daily NTS Exit (flat) Capacity	3.11.2	1 X 02:00	01:00
Section B System Use & Capacity	Annex NTS Exit Capacity 3 – Capacity bids, capacity offers and capacity applications	Annex B1 – 3.2	1 X 02:00	01:00
Section C Nominations	5.2 Trade Nominations – Content, timing and procedure	5.2.3	1 X 07:00	06:00
Section H Demand Estimation and Demand Forecasting	5.2 – Daily Demand forecasting – LDZ Demand Forecasting	5.2.3	2 X 02:00	01:00

## User Pays

### Classification of the modification as User Pays, or not, and the justification for such classification.

A Rough Order of Magnitude (ROM) has been obtained from the Transporters Agent which has indicated full system delivery costs for Modification 0461 to be in the region of £0.5 million. As this identifies a material change to Xoserve's system, this proposal could be classed as User Pays.

Modification 0461 seeks to amend the UNC to comply with EU Network Code delivery in the GB gas regime. It is part of a wider suite of UNC changes that will be proposed to achieve compliance with the EU Network Codes. National Grid NTS has been allocated funding through the RIIO-T1 price control process for EU market facilitation. National Grid expects to be able to utilise this funding to meet the costs of this EU-related change. Therefore no User Pays charges will be raised in relation to Modification 0461.

### Identification of Users of the service, the proposed split of the recovery between Gas Transporters and Users for User Pays costs and the justification for such view.

Not applicable

### Proposed charge(s) for application of User Pays charges to Shippers.

Not applicable

### Proposed charge for inclusion in the Agency Charging Statement (ACS) – to be completed upon receipt of a cost estimate from Xoserve.

Not applicable

## 4 Relevant Objectives

Impact of the modification on the <b>Relevant Objectives:</b>	
Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	None
c) Efficient discharge of the licensee's obligations.	None
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	None
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	None
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	Positive

### Impacts on Relevant Objective(s)

Implementation of this modification will facilitate compliance with European legislative requirements by changing the definition of the GB Gas Day in the UNC to correspond with the definition of the Gas Day contained within the EU CAM code. Implementation therefore facilitates the Relevant Objective (g) 'compliance with the Regulation and any relevant legally binding decisions of the European Commission.'

Introducing a common Gas Day across the European Union is part of the package of changes that is being introduced to support the development of effective competition in the EU gas market. Moving to a gas day that is consistent with other EU countries may therefore be expected to further facilitate the securing of effective competition between Shippers and between Suppliers in the GB gas market.

### Initial Representations considered by the Workgroup

The Workgroup considered initial representations from four parties: Claims Validation Services Ltd (CVSL), Total E&P UK (TEPUK), Marathon Oil Norge AS (MONAS) and Marathon Oil UK (MOUK). All responders objected to the proposed change of the Gas Day on the grounds that it would require extensive technical and contractual changes entailing significant costs. CVSL noted that the Claims Validation Information Agreement (CVIA) requires unanimous consent to enact changes and felt that this would be potentially impractical. While introducing costs to the market, it was also argued that there would be no benefits - the existing arrangements at the interconnectors to the UK successfully address cross-border timing differences.

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The Workgroup accepted that, where changes to systems, processes and/or contracts become necessary, changing the Gas Day will impose costs on affected parties, and that increasing the costs faced by the market could be regarded as running counter to the Relevant Objective of securing effective competition. However, the Workgroup also recognised that upstream arrangements are subject to regulations beyond the UNC and that a change in the legislative definition of the Gas Day, rather than the UNC definition, would be expected to impose the costs that have been identified. The Workgroup felt that it was the legislative change that should be regarded as driving both any upstream implications and the need to modify the UNC. As such, Modification 0461 should not be seen as creating the identified costs – if the external requirement to change the Gas Day did not exist, Modification 0461 would not have been raised.

## 5 Implementation

No implementation timescale is proposed.

The Capacity Allocation Mechanism (CAM) is to be implemented in the GB regime from 01 November 2015. Consistent with this, change to the definition of the Gas Day will need to be implemented no later than the implementation of the CAM network code.

While no implementation timescale is proposed, a practical and logical date for implementation of this modification would be 01 October 2015, corresponding with the beginning of the Gas Year whilst remaining compliant with the implementation date for the CAM European network code.

It is suggested that system compliance for implementation could be initiated on the Gas Day of 30 September 2015 in order for the Gas Day on 01 October 2015 to commence at 05:00. In reality this would mean that the Gas Day for 30 September 2015 is a 23 hour day operating from 06:00 to 05:00.

The Workgroup has discussed how historical data will be viewed once the change to the Gas Day is implemented and agreed that any data, pre-implementation date, will still be observed as a 06:00-06:00 Day.

## 6 Legal Text

### Text

The following Text has been prepared by National Grid NTS at the request of the Modification Panel; no issues were raised by the Workgroup regarding its content.

#### General Terms

##### Section C - Interpretation

*Amend paragraph 2.2.1(a) to read as follows:*

- (a) "**Day**" means the period from ~~05:0006:00~~ hours on one day until ~~05:0006:00~~ hours on the following day;

*Amend paragraph 2.2.1(b) to read as follows:*

- (b) "**Business Day**" means (except for the purposes of TPD Sections G and M) a Day other than a Saturday or a Sunday or a Day which begins at ~~05:0006:00~~ hours on a bank holiday in England and Wales;

*Amend paragraph 2.2.2 to read as follows:*

2.2.2 Unless the context otherwise requires, a reference in the Code:

- (a) to a calendar day (such as 1 January) or a day of the week (such as Sunday) is to the Day which begins at ~~05:0006:00~~ hours on that day;
- (b) to a week is to the period from ~~05:0006:00~~ hours on a day until ~~05:0006:00~~ hours on the 7th day following;
- (c) to a month (or a number of months) is to the period from ~~05:0006:00~~ hours on a day in one month until ~~05:0006:00~~ hours on the same day of the month which follows (or follows by the relevant number of months), or if there is no such day in such month ~~05:0006:00~~ hours on the first day of the next following month;
- (d) to a calendar month is to the period from ~~05:0006:00~~ hours on the first day of a month until ~~05:0006:00~~ hours on the first day of the following month, and references to a particular calendar month (such as January) shall be construed accordingly;
- (e) to a year is to the period from ~~05:0006:00~~ hours on a day in one year until ~~05:0006:00~~ hours on the same day (or where the day in the first year was 29 February, on 1 March) in the following year;
- (f) to a calendar year (such as 1996) is to be construed accordingly.

#### Transportation Principal Document

##### Section B - System Use and Capacity

*Amend paragraph 2.4.3 to read as follows:*

2.4.3 A daily capacity bid:

- (a) may be submitted at any time from the 7th Day before the Gas Flow Day until ~~01:0002:00~~ hours on the Day for which the Daily NTS Entry Capacity is applied for; and
- (b) may, subject to paragraph 2.4.4, in the case of a fixed bid be withdrawn or amended and in the case of a reducing bid withdrawn, at any time before Daily NTS Entry Capacity is allocated in respect of such bid.

Amend paragraph 2.4.7 to read as follows:

2.4.7 For each Day (or part of each such Day) in respect of each Aggregate System Entry Point, where Available Daily Capacity is available National Grid NTS will initiate a capacity allocation period. For the avoidance of doubt, where Daily NTS Entry Capacity in respect of an Aggregate System Entry Point is applied for on the Day for which such Daily NTS Entry Capacity is required, National Grid NTS will initiate a capacity allocation period on each of the next hour bars falling thereafter, until such daily capacity bid is no longer available in accordance with 2.4.14, up to and including ~~01:0002:00~~ hours on such Day where Available Daily Capacity is available at that Aggregate System Entry Point.

Amend paragraph 2.4.13(b) to read as follows:

- (b) the "**bid effective time**" is the time on the hour in relation to a daily capacity bid being the later of:
  - (i) ~~05:0006:00~~ hours on the Gas Flow Day; or
  - (ii) the time falling no earlier than 60 minutes after Daily NTS Entry Capacity has been allocated in respect of such bid;

Amend paragraph 2.4.13(c) to read as follows:

- (c) a "**capacity allocation period**" is the period of 15 minutes, in which National Grid NTS conducts capacity allocation at an Aggregate System Entry Point for a Day, and which subject to there being Available Daily Capacity and available daily capacity bids at such time:
  - (i) first commences at 13:00 hours on the Preceding Day to that for which the Daily NTS Entry Capacity is applied for;
  - (ii) commences on any hour bar falling thereafter up to and including ~~01:0002:00~~ hours on the Day for which the Daily NTS Entry Capacity is applied for (but not thereafter);

Amend paragraph 2.4.13(f) to read as follows:

- (f) the "**reserve price**" shall mean:
  - (i) in respect of Daily NTS Entry Capacity applied for and allocated prior to ~~05:0006:00~~ on the Day for which it was applied for, the reserve price for Unsold NTS Entry Capacity (in accordance with National Grid NTS's Transportation Statement); or
  - (ii) in respect of Daily NTS Entry Capacity applied for and allocated after ~~05:0006:00~~ hours on the Day for which it was applied for, zero.

Amend paragraph 2.4.14 to read as follows:

2.4.14 A daily capacity bid is "**available**" where:

- (a) submitted and not withdrawn prior to the start of any capacity allocation period; and
- (b) the bid effective time is later than ~~05:0006:00~~ on the Gas Flow Day, the implied capacity rate is less than or equal to the available capacity rate at the relevant Aggregate System Entry Point

and for the avoidance of doubt, where Daily NTS Entry Capacity is allocated in respect of a bid such bid shall be extinguished and no longer be available for the purposes of paragraph 2.7.

Amend paragraph 2.4.15(b) to read as follows:

- (b) the "capacity allocation effective time" is:
  - (i) where the capacity allocation period ends prior to ~~03:0004:00~~ hours on the Preceding Day, ~~05:0006:00~~ on the Gas Flow Day;
  - (ii) the hour bar following the next hour bar falling after the end of a capacity allocation period;

Amend paragraph 2.9.3(b) to read as follows:

- (b) the time ("**curtailment effective time**") with effect from which such curtailment is to take place, which shall be on the hour, shall not be earlier than ~~05:0006:00~~ hours nor later than ~~01:0002:00~~ hours on the Gas Flow Day, and shall not be less than 60 minutes after such notice is given; and

Amend paragraph 2.10.3 to read as follows:

2.10.3 A daily capacity offer:

- (a) may be submitted at any time from ~~05:0006:00~~ hours on the 7th Day before the Gas Flow Day until ~~01:0002:00~~ hours on the Day for which the NTS Entry Capacity is offered for surrender; and
- (b) may, subject to paragraph 2.10.4, in the case of a fixed offer be withdrawn or amended and in the case of a reducing offer be withdrawn, at any time before NTS Entry Capacity in such bid is selected for surrender.

Amend paragraph 2.10.10(a) to read as follows:

- (a) the "**offer effective time**" is the time on the hour in relation to a daily capacity offer being the later of:
  - (i) ~~05:0006:00~~ hours on the Gas Flow Day; and
  - (ii) the time not earlier than 60 minutes after Firm NTS Entry Capacity has been selected pursuant to such bid for surrender;

Amend paragraph 2.10.11 to read as follows:

2.10.11 A daily capacity offer is "**available**" where:

- (a) submitted and not withdrawn prior to the start of any capacity selection period; and
- (b) where the offer effective time is later than ~~05:0006:00~~ on the Gas Flow Day, the implied surrender rate is less than or equal to the available surrender rate at the relevant Aggregate System Entry Point  
and for the avoidance of doubt, where Firm NTS Entry Capacity is selected for surrender pursuant to an offer such offer shall be extinguished and no longer be available for the purposes of this paragraph 2.10.

Amend paragraph 2.12.3 to read as follows:

2.12.3 The System Entry Overrun Charge shall be calculated as the amount of the overrun quantity multiplied by whichever is the greatest of:

- (a)  $(8 * A)$ , where 'A' is the highest bid price in relation to a capacity bid in respect of which NTS Entry Capacity was allocated following an invitation under paragraphs 2.2, 2.3 and 2.4; and
- (b)  $(1.1 * B)$ , where 'B' is the relevant average accepted offer price;
- (c)  $(1.1 * C)$ , where 'C' is the relevant average accepted forward price;
- (d)  $(1.1 * D)$ , where 'D' is the relevant average accepted exercise price; and
- (e)  $(1.1 * E)$ , where 'E' is the highest unit price accepted by National Grid NTS

where (a), (b), (c), (d) and (e) are calculated by reference to information available to National Grid NTS at ~~01:0002:00~~ hours on the relevant Day.

Amend paragraph 2.13.3 to read as follows:

2.13.3 In relation to each Aggregate System Entry Point and a calendar month, National Grid NTS shall pay to each relevant User an amount ("**Capacity Revenue Neutrality Charge**") determined as:

$$RCR * UFAC / AFAC$$

where:

RCR is the Relevant Capacity Revenues;

UFAC is the aggregate sum of the User's Fully Adjusted Firm Available NTS Entry Capacity at each Aggregate System Entry Point; and

AFAC is the aggregate sum of all User's Fully Adjusted Firm Available NTS Entry

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Capacity at each Aggregate System Entry Point  
in each case as determined at ~~03:0004:00~~ hours on the relevant Day.

*Amend paragraph 2.17.5(g) to read as follows:*

- (g) the latest time by which a Force Majeure Option may be exercised; (which shall be no later than ~~00:0001:00~~ hours on the Day);

*Amend paragraph 3.10.1(b) to read as follows:*

- (b) the time ("**exit curtailment effective time**") with effect from which such curtailment is to take place, which shall be on the hour, shall not be earlier than ~~05:0006:00~~ hours nor later than ~~01:0002:00~~ hours on the Gas Flow Day, and shall not be less than four (4) hours after such notice is given; and

*Amend paragraph 3.11.2(a) to read as follows:*

- (a) where, in relation to an NTS Exit Constraint, National Grid NTS wishes to accept daily capacity offers in respect of NTS Exit (Flat) Capacity, National Grid NTS will initiate a capacity selection period no earlier than 15:00 hours on D-1 and no later than ~~01:0002:00~~ hours on Day D;

*Amend paragraph 5.2.2 to read as follows:*

5.2.2 A proposed System Capacity Transfer may not be notified later than ~~03:0004:00~~ hours on the Day or first Day of the Transfer Period.

*Amend paragraph 5.6.2(d) to read as follows:*

- (d) a proposed System Capacity Transfer may not be notified earlier than 16:00 hours on the Preceding Day or later than ~~03:0004:00~~ during the Transfer Period;

*Amend paragraph 3.2 of Annex B-1 to read as follows:*

3.2 A User may submit:

- (a) a capacity application in relation to an annual capacity notification during the Annual Application Window;
- (b) a capacity bid or capacity offer in relation to a daily capacity invitation (in relation to Day D):
  - (i) for NTS Exit (Flat) Capacity at any time from ~~05:0006:00~~ hours on Day D-7 until:
    - (1) 00:00 hours on Day D for capacity bids;
    - (2) ~~01:0002:00~~ hours on Day D for capacity offers;
  - (ii) for Off-peak Daily NTS Exit (Flat) Capacity at any time from ~~05:0006:00~~ hours on Day D-7 until 14:00 hours on D-1

(provided that bids or offers submitted after the commencement of a capacity allocation period or capacity selection period will not participate in the relevant allocation).

*Amend paragraph 3.9(b) of Annex B-1 to read as follows:*

- (b) such daily capacity bid or offer is "**available**" in relation to a capacity allocation or selection period where:

- (i) such bid or offer was submitted and not withdrawn prior to the start of such capacity allocation or selection period;
- (ii) if the allocation effective time is later than ~~05:0006:00~~ hours on the Gas Flow Day, the implied capacity rate is less than or equal to the available capacity rate; and
- (iii) such bid or offer was not allocated or selected in any earlier capacity allocation or selection period;

*Amend paragraph 3.9(c) of Annex B-1 to read as follows:*

- (c) the "**earliest effective time**" is the later of:
  - (i) ~~05:0006:00~~ hours on the Day; and
  - (ii) the first hour bar which falls more than sixty (60) minutes after the capacity bid or offer was submitted;

## **Transportation Principal Document**

### **Section C - Nominations**

*Amend paragraph 4.1.3(b) to read as follows:*

- (b) earlier than the Renomination Start Time, or later than ~~03:0004:00~~ hours on the Gas Flow Day;

*Amend paragraph 5.2.2 to read as follows:*

- 5.2.2 A Trade Nomination may not be made:
- (a) earlier than 30 Days before the Gas Flow Day;
  - (b) later than ~~03:0004:00~~ hours on the Gas Flow Day.

*Amend paragraph 5.2.3(b) to read as follows:*

- (b) if the corresponding Trade Nomination is not submitted, in compliance with paragraph 5.2.1:
  - (i) where the first Trade Nomination was submitted before the Gas Flow Day, by ~~06:0007:00~~ hours on the Gas Flow Day;
  - (ii) otherwise, within 60 minutes before or after the first Trade Nomination was made;

## **Transportation Principal Document**

### **Section D - Operational Balancing and Trading Arrangements**

*Amend paragraph 2.2.1(h) to read as follows:*

- (h) in relation to a Physical Market Transaction the "**Contract Renomination Time**" is the later of 19:00 hours on the Day preceding the Market Offer Date and that time falling 60 minutes after notification by the Trading System Operator to National Grid NTS of the Transaction Details, but not later than ~~03:0004:00~~ hours on the Market Offer Date;

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Amend paragraph 1.2(h)(i) of Annex D-1 to read as follows:

- (i) to effect a Physical Market Transaction:
  - (1) the "**Market Offer Specified Quantity**" is the quantity which would be the Trade Nomination Quantity in respect of the Trade Nominations to be made where the Market Offer to effect such Physical Market Transaction is accepted in full;
  - (2) the "**Market Offer Derived Rate**" is the rate in kWh/Day calculated as the Market Offer Specified Quantity multiplied by 24 and divided by the period in hours from the Transaction Effective Time to the end of the Gas Flow Day;
  - (3) the "**Market Offer Specified Rate**" is the rate in kWh/Day which would be equivalent to the Trade Nomination Quantity in respect of the Trade Nominations to be made where the Market Offer to effect such Physical Market Transaction is accepted in full and in relation to which the Transaction Effective Time is on or before ~~05:00~~ hours on the Market Offer Date;
  - (4) the "**Market Offer Derived Quantity**" is the quantity equivalent to the Market Offer Specified Rate divided by 24 and multiplied by the period in hours from the Transaction Effective Time to the end of the Gas Flow Day;

Amend paragraph 5.1 of Annex D-1 to read as follows:

- 5.1 Except in the case of Multi-Day Balancing Transactions, Market Offers in respect of a Market Offer Date will be capable of acceptance by Trading Participants between 12:00 hours on the Day preceding the Market Offer Date and ~~02:35~~ hours on the Market Offer Date. Market Offers in respect of Multi-Day Balancing Transactions will only be capable of acceptance by Trading Participants between 12:00 hours on the Day preceding the first Day to which the Multi-Day Balancing Transaction relates and ~~02:35~~ hours on the first Day to which the Multi-Day Balancing Transaction relates.

## Transportation Principal Document

### Section E - Daily Quantities, Imbalances and Reconciliation

Amend paragraph 5.3.5 to read as follows:

- 5.3.5 A Forecast Daily Imbalance Nomination may be submitted no earlier than 30 Days before the Gas Flow Day and no later than ~~03:00~~ hours on a Gas Flow Day.

## Transportation Principal Document

### Section G - Supply Points

Amend clause 2 of Annex G-2 to read as follows:

#### 2. Duration

This Agreement shall become effective at ~~05:00~~ hours on the date specified in Part 6 of the Schedule and shall continue in force until and unless terminated by agreement of all of the Shippers.

## Transportation Principal Document

### Section H - Demand Estimation and Demand Forecasting

Amend paragraph 5.2.3 to read as follows:

- 5.2.3 The Transporter will notify demand under paragraph 5.2.1 after receipt of weather data under paragraph 5.1.1 not later than the following times: 14:00, 18:00 hours, and ~~01:00~~ hours on the Preceding Day and 12:00 hours, 15:00 hours, 18:00 hours, 21:30 hours and ~~01:00~~ hours on the Gas Flow Day.

## Transportation Principal Document

### Section K - Operating Margins

*Amend paragraph 1.3.3 to read as follows:*

- 1.3.3 The general provisions of the Code are (as provided in the relevant Section) modified in respect of their application to National Grid NTS for Operating Margins Purposes as follows:
- (a) Balancing Neutrality Charges and Reconciliation Neutrality Charges are not payable by or to National Grid NTS for Operating Margins Purposes;
  - (b) Initial Input Nominations may be made at any time up to ~~03:00~~ hours on the Gas Flow Day.

## Transportation Principal Document

### Section Q - Emergencies

*Amend paragraph 7.2.1 to read as follows:*

- 7.2.1 On each Day that Storage Curtailment occurs, then each User will submit to National Grid NTS by ~~03:00~~ hours on the Day that Storage Curtailment occurs a CQ<sub>SCP</sub> Statement detailing the User's Estimated Individual Storage Curtailment Compensation Quantity in respect of each Storage Connection Point at which Storage Curtailment occurred and a SCCQ Statement detailing the User's Estimated Aggregate Storage Curtailment Compensation Quantity. Not later than 17:00 hours on the first Business Day following the Day that Storage Curtailment occurs, National Grid NTS will advise each User that submits a SCCQ Statement, in accordance with this paragraph, of the amount payable by National Grid NTS pursuant to paragraph 7.2.2.

## Transportation Principal Document

### Section U - UK Link

*Amend paragraph 6.1.3 to read as follows:*

- 6.1.3 A Code Contingency may (where so specified in the Contingency Procedures) include:
- (a) a degradation in performance of UK Link which falls short of a failure thereof (where the Contingency Procedures are likely, having regard to such degradation, to provide a superior method of communicating);
  - (b) planned UK Link downtime which occurs other than between ~~03:00~~ hours and ~~05:00~~ hours on any Day.

## Transportation Principal Document

### Section V - General

Amend the sixth row of the table in Annex V-1 to read as follows:

<p>The aggregate physical LNG in store (in kWh) at LNG Importation Facilities at <del>04:5905:59</del> hours on the Preceding Gas Flow Day: provided that, where not all LNG Importation Facilities have provided such data to National Grid NTS by the time specified in the next column as being the time for publication, then National Grid NTS shall publish that such aggregate is unknown (and shall not be required to publish the information received from any LNG Importation Facility).</p>	<p>By 16:00 hours on each Day</p>	<p>Tabular</p>	<p>Viewable</p>	<p>Public</p>
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*Amend the key at the end of Annex V-2 to read as follows:*

Where:

- t means the relevant Formula Year;
- t-1 means the Formula Year prior to the relevant Formula Year;
- week means the seven day period from ~~05:0006:00~~ hours on a Monday until ~~05:0006:00~~ hours on the following Monday;
- throughput means (actual inputs to the System + sum of UDQOs) / 2
- Relevant SO Incentive Schemes means exit capacity investment incentive, system balancing incentive and internal cost incentive schemes as defined by the Licence;
- Licence means the Transporter's Licence;
- Formula Year means a period of twelve months commencing on 1 April at ~~05:0006:00~~ hours.

**Transportation Principal Document**  
**Section Z - National Grid LNG Storage Facilities**

*Amend paragraph 4.3.3 to read as follows:*

4.3.3 A proposed Storage Transfer or a proposed Storage Gas Transfer may not be notified later than ~~03:0004:00~~ hours on the transfer date or (as the case may be) Day or first Day of the Storage Transfer Period. A proposed Storage Injectability Transfer or a proposed Storage Deliverability Transfer may not be notified later than one (1) hour prior to the commencement of the Storage Transfer Period.

## 7 Consultation Responses

Representations were received from the following parties:

Company/Organisation Name	Support Implementation or not?
British Gas	Support
ConocoPhillips	Not in support
E.ON UK	Support
EDF Energy	Support
ExxonMobil	Comments
GDF Suez	Comments
Marathon Oil Norge AS	Not in support
Marathon Oil UK LLC	Not in support
National Grid Distribution	Qualified support
National Grid NTS	Support
Northern Gas Networks	Support
Oil & Gas UK	Not in support
RWE Supply & Trading GmbH	Support
Scotia Gas Networks	Support
ScottishPower	Support
SSE	Support
Teesside Gas & Liquids Processing	Not in support
Total E&P UK Ltd	Not in support

Of the 18 representations received, 9 supported implementation, 1 offered qualified support, 2 provided comments and 6 were not in support.

### Summary Comments

The consultation sought views on the following specific question.

**Q: Please provide views on the time constraints of the process and effort required to implement this modification.**

National Grid NTS (the Proposer) explained the position in relation to the systems and processes directly and indirectly impacted. The delivery timeline as indicated in the High Level Estimate provided by the Transporters' Agent, suggested implementation of this modification is achievable by 01 November 2015. However, the UNC is only one aspect of the GB gas regulatory regime that requires change as a result of the revised gas Day time. As part of the development of this proposal National Grid NTS' stakeholders have indicated that the change to the gas Day time will impact numerous IT systems, business processes, gas metering functions, contracts, licences and agreements. Many of these are interlinked but fall outside of the proposed changes to the UNC. As a result of

Modification 0461 the UK Link system suite (including Gemini) will require changing. This system interacts with iGMS (Integrated Gas Management System), as well as a number of other systems. iGMS enables National Grid NTS to manage the physical flows of gas through the transmission network via the Gas National Control Centre. It has in excess of 20 other system interfaces, and many of these link to other systems which themselves have numerous interfaces and dependencies, e.g. Distribution Network Control System (DNCS). To test these numerous interfaces will require significant time, effort and co-ordination, and will be critical to the success of implementing Modification 0461. Other GB stakeholders have indicated that they will also need time to be ready to implement their own system changes within the same timescales proposed in Modification 0461. From industry discussions National Grid NTS is aware that the lead time to implement all the changes as a result of the new gas Day time, as well as a suite of other EU and GB industry changes (e.g. Project Nexus), is a challenge for both its customers and stakeholders. It is recognised that these combined changes place demands on both human and financial resources, and therefore increases the risk of non-delivery for Modification 0461.

Due to the short lead time available in order for GB to comply with the CAM Regulation the IT design analysis phase related to this change has already commenced, and the UK Link (including Gemini) costs to implement Modification 0461 have been estimated to be in the region of £0.5 million. National Grid NTS acknowledged that this analysis was being done with a certain level of risk; however, this is unavoidable due to the nature of the fixed date for compliance with the EU Regulation. The costs for the Modification 0461 changes to UK Link (including Gemini) do not, on their own, look sizeable. However, caution must again be applied in this instance. If approved, the UK Link changes will trigger a range of other system changes (e.g. iGMS) with associated costs.

Due to the fixed date of 01 November 2015 required by the CAM Regulation, National Grid NTS suggested that implementation must be on or before this date if Great Britain is to achieve legal compliance. It does not currently foresee any ability to extend this date, and therefore a preferred lead time cannot be suggested.

The modification proposes that a practical and logical date for implementation would be 01 October 2015, which would coincide with the start of the Gas Year, but this date is dependent on further systems analysis. This date also corresponds with the date that other EU codes (e.g. Network Code on Gas Balancing of Transmission Networks) are expected to come into effect. To assist with implementation, the modification proposes that implementation is initiated on the gas Day of 30 September 2015, in order for the gas Day on 01 October 2015 to commence at 05:00. This would mean the gas Day for 30 September 2015 is a 23 hour Day, operating from 06:00 to 05:00. It is also proposed that historical data prior to 01 October 2015 will be retained on a 06:00 to 06:00 basis.

National Grid Distribution raised a number of concerns regarding the lack of a full impact assessment of the broader effects and complexities of the change; other respondents also echoed these concerns. While National Grid Distribution accepted that the definition of the UNC gas Day needs to change to reflect European regulation, and that rescheduling a limited subset of UNC timed events throughout the day is the best approach for implementing the UNC change, there was a raft of implicit changes to business support systems and working procedures which had not been mentioned in the report. Recognising that the approach adopted has sought to minimise the changes to the UNC, this approach has not revealed the full extent of the system changes required where the process, or supporting system calculation, refers to the "Gas Flow Day". For instance, the definition of LDZ gas demand does not appear to change as part of the proposal, but the underlying calculation to determine gas demand will have to be reprogrammed to provide a value for the new gas Day period and the supporting input data will need to be rescheduled to provide data to feed the revised calculation.

Consequently, National Grid Distribution believes that discussions/considerations to date have not addressed the need for a full impact assessment of the broader effects of the change and have not revealed the full extent of the system changes that will be required to adopt the new gas Day period. For DNOs, this particularly relates to inter-control room activities and information flows where a DNO is required to calculate energies that relate to the new gas Day period.

It was not the explicit timed events that were National Grid Distribution's concern, but the implicit changes that will result from the introduction of the new gas Day period and will drive system development and change costs into its business. For DN Operators, the change is much more complex than the proposal would suggest and National Grid Distribution was still in the process of undertaking its impact assessment. It continues to work on the costs associated with changing its systems to accommodate the new gas Day period, and it continues to explore options to keep costs to a minimum. It was not yet in a position to determine optimum offset between undertaking system changes and changes to manual operating procedures. Therefore, at this stage it was unable to quantify the cost of implementation.

Other Gas Transporters (Scotia Gas Networks and Northern Gas Networks) indicated they were still evaluating the system and process changes that will be required to implement this modification. Noting that the timescales involved were tight but necessary, progress would be aided by a swift direction from the Authority.

SSE made similar comment on the importance of receiving positive determination as soon as possible so as to maximise the time available to implement the necessary system changes, both for the industry and individual companies.

E.ON observed, as did ScottishPower, that in the absence of any advice to the contrary, its working assumption remains that this change will happen in the UK and that as a prudent Shipper it must plan for it accordingly. This modification will have significant system and process impacts for E.ON and therefore the earlier that this modification can be approved (or rejected) and implementation timescales set out, the sooner it can commence making the necessary internal changes. It believed it was still just possible to implement by November 2015 but that an Ofgem decision was required as soon as possible to enable Shippers to get on with scheduling and making the required (mostly IT based) changes. E.ON also noted that the less lead time that is provided to industry generally, the more costly it will be to implement this modification.

Noting that the lead times for IT system changes is crucial, ScottishPower commented that it had not yet had a chance to evaluate those impacts precisely. Like other Shippers it was however conscious of other ongoing industry change such as Project Nexus and Smart Metering that are scheduled for delivery around the same time and that could be adversely impacted, and would urge that those possible impacts are fully considered and appropriate steps taken to address or mitigate them.

EDF Energy emphasised the potential conflict of timings of industry change deliverables that are being proposed to be delivered on or around 01 October 2015, including Project Nexus, DCC go-live for smart metering, Change of Supplier reform, and other changes due to other European network codes. It expected National Grid and Xoserve to provide efficient management of the interactions of the potentially simultaneous delivery of numerous systems changes. EDF Energy anticipated that there would be a number of changes required to its internal systems. Delivering these changes in an increasingly congested systems development programme is challenging especially in light of the number of other system developments that are taking place across the industry.

Recognising that compliance needs to be achieved by the time that the CAM code is implemented on 01 November 2015, RWE commented that it should be able to meet these timescales provided that there is a timely decision that gave sufficient certainty for it to go ahead and commit the necessary resources. A contributory factor to this would be early clarity on the outcome of ongoing discussions on the extent of any technical and/or contractual changes that the upstream gas industry will need to make to manage an 05:00 to 05:00 Gas Day downstream. If decisions are delayed or the required changes are extensive, this may necessitate an extension to the implementation date.

Total E&P commented that to implement this modification, it would need more time than is given for a 01 November 2015 implementation date due to the nature of conducting offshore maintenance works.

From a downstream industry perspective, ConocoPhillips had no view on the time for implementation, but commented on the wider complications that may be encountered.

It observed that, once implemented, Shippers will then start to receive non-validated flow data and inaccuracies will be introduced into a claims validation system that is currently working perfectly. The Shippers are likely to be the entities requesting that the upstream industry comply with this regulation in order to help them receive accurate data once more. It is highly unlikely the upstream industry will be able to comply with the regulation within the timescale laid out. There are insufficient systems engineers trained and available to undertake the work of amending existing allocations systems. Also, if the system requires completely replacing, that time extends further. It noted that a recent (fairly simple) offshore gathering platform allocations system took 2 years for the physical build, but a total of 3 years when including approvals, debugging and parallel running time. Additionally, in some of the older and more complex terminals, the cost of implementing new systems may be too great for the terminals to consider undertaking. As fields and terminals monitor economic termination, additional cost and the time taken to build it may not make economic sense.

From the perspective of a Terminal Owner, Teesside Gas & Liquid Processing (TGLP) indicated that significant changes to its systems and those of its offshore Shippers would be required, needing individual planning, implementation and testing to account for the widely differing age and capability of such systems. It was doubtful that the upstream industry had the physical capability to carry out such complex requirements to facilitate simultaneous switching of systems to achieve implementation. It also pointed out that the parallel review/amendment of all commercial agreements that this proposed change would entail would consume significant time, effort and costs. TGLP agreed with Oil & Gas UK's estimate of a potential cost to the industry of £40m - £50m and noted that these would rest upon terminal operators and other upstream operators, reducing overall tax revenue to the UK Treasury, and with no perceivable benefit to any party.

Marathon Oil UK and Marathon Oil Norge made similar comments on the wider industry implications and the ability of the wider industry to react in the timescales proposed. Should the UK's downstream gas market change the gas Day the interface between the upstream (which works on the existing 06:00-06:00 gas Day) needs to be managed. Various consultations in the industry have been held and it has become apparent that there are three options to manage this interface. The first is to maintain the current UNC gas Day. The second is to maintain the upstream gas day while changing the UNC gas Day, managing the upstream/downstream interfaces at delivery terminals. The third is to also change the upstream gas day to the same gas day as the new UNC gas Day. The latter two of these options both require significant modification to processes, IT systems and commercial agreements.

If the upstream sector does not change its gas day then terminal deliveries will be extremely difficult to validate, due to reconciling data over two differing periods. This will expose Shippers to potentially erroneous validations leading to an increased risk of scaling, with consequent significant misallocations of payments, resulting in disputes. The current validation system manages to achieve a very high degree of validation, with little requirement for scaling. For example in November 2013 it was believed that there were no over/under claims greater than 200,000kWh; with delivery averaging approximately 2,980,000,000kWh, it would appear that validation accuracy was better than 0.007%.

As the upstream industry has grown up on a 06:00-06:00 gas day the scope of work required, if the industry is expected to change gas day, is vast. Changes to commercial agreements would need to be agreed upon. It is perhaps worth highlighting that some of the agreements requiring modification may be with parties that are not active in the downstream market. It may therefore be very difficult to reach agreement. Modifications to various IT systems would also need to be designed, tested extensively and implemented. It was Marathon Oil UK's and Marathon Oil Norge's understanding that there were already large IT projects underway in the industry, working to similar schedules, so IT resource for implementing this modification are likely to be in limited supply. In addition physical changes to fiscal meters at terminals and offshore platforms would need to be designed, implemented and verified by regulators.

For these reasons Marathon Oil UK and Marathon Oil Norge believe that it would be extremely challenging for the whole industry to comply with the implementation date of 01 November 2015. The detailed scope of work required for implementation of this modification is still not wholly understood but considering the likely impact on every aspect of the gas industry, they believed that if this modification was required its implementation should be deferred as long as possible.

## Relevant Objectives

The European Commission (EC) has approved the CAM Regulation, which (as it has now become part of EU law) now supersedes existing GB legislation. Contained within this Regulation is the obligation to operate a standardised Gas Day from 05:00 to 05:00.

However agreement that the relevant objectives were facilitated by this modification was predicated on the assumption that the Proposer had made a valid interpretation of the actual requirements, and whilst a number of parties agreed that Modification 0461 meets Relevant Objective (g), others challenged this interpretation, believing it to be flawed and therefore the proposed modification to be unnecessary.

## Interpretation of the validity/extent of the change required

A number of responses noted wider industry debate in which views had been expressed that this requirement for change had been misinterpreted and was therefore both unnecessary and potentially damaging.

ExxonMobil challenged the necessity for any change to the GB gas Day. In its opinion, change was not required under EU Network Code on Capacity Allocation Mechanism (CAM NC), and attention was drawn to two extracts (Article 2 (scope) and Article 3 (10)) that supported this view. It believed that the CAM Network Code (NC) only applied to the IUK and BBL connections at Bacton; proposing to change the gas Day in the downstream GB market therefore went far beyond the minimum requirements of the CAM NC.

ExxonMobil offered an alternative operating mechanism (to provide the one hour time shift by the TSO-TSO operational balancing account), which in its view would enable the GB gas Day to remain unchanged and would still enable gas commodity products traded in the UK to be fully compatible with products traded in Belgium and The Netherlands. This would also meet the objectives of the EU NC – Gas Balancing, as products currently traded on the GB within-day market could be used by network users to manage their balancing positions in neighbouring systems.

EDF Energy recognised that whilst the CAM NC only applies to the GB interconnection points, the European Network Code on Balancing will require the application of a common gas day across Europe including the domestic markets.

ConocoPhillips contended that the proposed change was unnecessary and costly. The intention of the CAM NC was not to create obstacles to trade; instead it was to any remove barriers. It pointed out that gas has already been successfully traded and shipped across from the UK to mainland Europe (taking into account time differences) since 1998 without requiring this change.

Teesside Gas & Liquid Processing (TGLP) expressed similar views. Noting that the UK is the largest gas market in Europe and still the largest producer of gas it struggled to understand why such a change was necessary when the interface with the European markets has operated successfully and absorbed the UK/Europe time difference since the commencement of the Interconnector and BBL pipelines. Therefore TGLP does not recognise that a problem exists to be addressed. It urged the consideration of an alternative approach to avoid the unnecessary expenditure of significant time and cost and any adverse impacts on consumers and the UK gas market.

Oil & Gas UK was also of the view that Modification 0461 is a completely unnecessary and costly proposal and believed that the Panel should not approve it. It argued that the modification was not mandated by CAM NC as, strictly speaking, the EU CAM NC does not require a change to the GB Gas Day since it says clearly in Article 2, paragraph 1, that it *'shall apply to interconnection points'*, as defined in Article 3 (10). It also states that it *'shall not apply to..... entry points from LNG terminals and production facilities and entry-exit points to and from storage facilities'*. In its interpretation the CAM NC clearly applies only to the IUK and BBL connections at Bacton and at Moffatt, and not to the entire National Transmission System. Therefore there is no basis in the CAM NC to raise this modification, and the proposed changes to the UNC go far beyond what is required by the CAM NC.

Referring to the unique nature of GB interconnectors, Oil & Gas UK went on to point out that it believed it is possible for the UK to comply with the EU Network Codes without changing the gas Day in the GB market since it is possible for the two key interconnector pipelines to the continent to operate safely and efficiently with different gas days in the GB market and on the continent, as they have always done. The IUK is already the most price-responsive interconnection between hub markets in the EU and there is no reason to believe this would be adversely affected. The bundling of entry/exit capacity at each end of the two interconnector pipelines and the utilisation of linepack appears to offer the least-cost route to UK compliance with the EU Network Codes while preserving efficient commodity arbitrage. This would, of course, depend on close liaison between all TSOs involved and with the responsible entities in Ireland.

However, GDF Suez commented that it wished “ that at any points of the grid (interconnections, terminals, production, ...), the Gas Day should be defined identically. It should not be an option to consider a specific adaptation limited to the IPs in respect of the CAM network code, which will result in a more complicated balancing of gas days than it is currently.”

ConocoPhillips, Marathon Oil UK and Marathon Oil Norge saw no benefit in implementing this modification, expressing similar views to Oil & Gas UK, and commenting that the modification will not improve the efficiency of the trading of gas between the UK and continental Europe. The market currently trades with mainland Europe across different gas days and Systems are already in place and working effectively to manage the time difference.

ScottishPower recognised that the view that the change must be made was not universally held, amongst upstream producers in particular who continue to question the need for such a far reaching change with what they consider to be little perceived benefit, but ScottishPower felt that as such the presumption must remain at this point that change will be required. Allowing for the potential scope and scale of consequential IT System changes required, and related lead times, ScottishPower was of the opinion that it would not be prudent to await the outcome of any formal challenge in the EU arena before making the necessary preparations for change, and that parties should work towards it until such time as they might be directed otherwise.

## Additional Issues Identified in Responses

### Concerns regarding the perceived lack of accounting/consideration of widespread implications for the GB industry as a whole, and the consequential impacts on other sectors

British Gas drew attention to ongoing discussions (outside of the UNC related discussions) about the extent to which the GB upstream production industry may be required to change its mode of operations in order to align with the proposed onshore gas day, even though such a change is not required by the EU NCs. It is possible that there will be significant costs associated with this. British Gas believed that this upstream aspect may not have been given due consideration at the time the CAM NC was being developed and agreed.

Oil & Gas UK noted wider upstream industry impacts. Ostensibly, the scope of UNC Modification 0461 is limited to Transporters and Shippers but in fact it has significant consequences for the UK upstream sector, principally operators of offshore fields and pipelines and onshore terminals. The UK upstream sector still supplies almost half the gas that enters the National Transmission System (NTS). Oil & Gas UK observed that Ofgem has already referred to these knock-on effects as ‘wider industry impacts’. Since there is no obligation to change upstream operations arising from the EU NCs, UNC Modification 0461 would essentially create a downstream gas Day of 05:00-05:00 and an upstream gas day of 06:00-06:00. At present, it is far from certain that this mismatch of one hour can be accommodated by all entities at the upstream/downstream interface. Oil & Gas UK

believed that these issues have not been raised, examined, and satisfactorily resolved in the development of UNC Modification 0461 so far. In its view, until the 'wider industry impacts' are fully understood and the integrity, safety and efficiency of NTS operations can be assured, the UNC Modification 0461 process should be halted. There was a clear need for wider examination of UNC Modification 0461 and its impacts and repercussions. At a time when the entire industry should be seeking to minimise the cost pass-through to UK gas consumers, Oil & Gas UK strongly urged a much wider debate on the changes proposed involving not only National Grid and Shippers but also Ofgem and DECC.

ConocoPhillips drew attention to a number of serious implications for the wider industry. If the upstream industry does not comply with the changes, then Shippers will have no basis to claim terminal deliveries within CVA. Any Shipper receiving non-validated numbers from a terminal will be scaled if there is a mismatch in claims. Scheduling charges will also be more prevalent. For the upstream sector to comply with the downstream regulation, the allocation systems at terminals, and on offshore gathering platforms, would need to be amended. These allocation systems tend to be extremely complex computer programmes with hard coded timing for nominations, timeliness of nominations checks, reports issuance, and within day forecasting of flow rates. The coding in the allocation programmes would require 'unpicking', which is a huge and costly job for the systems companies to undertake. It should be noted that some of these allocation systems are up to 20 years old and may require completely replacing rather than altering, in order to achieve compliance. The more ConocoPhillips has investigated the actions necessary for the upstream sector to comply, the more it realises that it is extremely unlikely that it will be able to provide 05:00-05:00 information to National Grid by October 2015. Oil & Gas UK estimates that £40m-£50m would need to be spent by the upstream sector in order for physical meter changes at the terminals (and on the platforms) to be carried out, and for allocation systems changes at the terminals (and at offshore gathering platforms) to be amended. This does not take into consideration the time spent amending necessary offshore commercial agreements. Older terminals are unlikely to want to introduce new costs to the fields as this may impact on economic termination dates of these fields. ConocoPhillips has estimated that Theddlethorpe Gas Terminal (TGT) has ~95 flow computers, on both onshore and offshore meters, all of which will require adjustment. It should be noted also that, dependent on the terminal, there might be 'oil days' to consider in addition to the gas day. Currently, at least one Operator runs set 12 hourly allocation periods to allow alignment with an oil day of 18:00-18:00. Any change in the gas day will leave that Operator with a problem regarding its oil day. It will have one 11 hour oil day and one 13 hour oil day. Thus an amendment of the allocations computer programme for the oil day is highly likely to also be required.

## Costs versus Benefits

Many respondents believed that no perceivable benefit had been identified, with a number of parties commenting on the significant costs (yet to be quantified) relating to system changes, operational changes and changes to commercial agreements, that might be incurred in an effort to implement this proposal for change.

Scotia Gas Networks noted that this would be a potentially expensive solution to implement across the industry with no substantial benefits to the UK energy industry identified.

SSE noted that, from a UK perspective, cost would be incurred in changing systems and operational practices with little apparent benefit because gas is already successfully traded and shipped across the interconnectors. In addition, there is still uncertainty over the solution and the level of costs to ensure that the upstream production industry can function with the change of the gas day to 05:00. Although outwith the scope of the UNC this is an important issue in terms of cost to producers and ultimately customers.

ExxonMobil commented that, on the assumption there were additional benefits to changing the gas Day in the GB downstream market these should take into account any additional costs; but these do not appear to have been considered as this change is being presented as a mandatory one.

ConocoPhillips did not observe any benefits in introducing a change in the gas Day; it simply added cost and difficulty for both the downstream and, indirectly, the upstream industry. It therefore believes that a cost/ benefit analysis is urgently required prior to

implementation of this modification, as well as a 'desk top exercise' between terminal operators, the CVA and National Grid to determine how mismatched the Shipper claims will be when the modification is implemented and the upstream industry continues to provide 06:00- 06:00 data to Shippers, National Grid and the CVA. This should help determine exactly what costs will be incurred by whom and how substantial those costs will be. If the upstream industry does not comply with the proposed change, the Shippers are the parties who will face an ongoing cost of non-validated and thus scaled claims. Only if the upstream industry is expected to comply with this regulation will the producers, and terminal operators incur additional costs.

Teesside Gas & Liquid Processing (TGLP) noted that this proposal generates significant costs and potentially creates risk and uncertainty for no discernible benefit either to gas consumers or the gas market as a whole. Agreeing with Oil & Gas UK's estimate of the potential costs to the industry, TGLP noted that these would rest upon terminal operators and other upstream operators, reducing overall tax revenue to the UK Treasury, and with no perceivable benefit to any party. TGLP noted that there was no obligation on upstream operators to comply with amendments to the UNC and as there was no discernible benefit it was unlikely to receive support from this sector of the industry. This would create the prospect of a split gas day, with upstream operators remaining on a 06:00 - 06:00 day with a new time interface imposed at the terminals. This would be unworkable, in TGLP's view, and would create opportunities for significant error in allocation and attribution of gas deliveries into the onshore transportation system, making the position of the Claims Validation Service in managing and ensuring appropriate allocation extremely difficult, if not impossible. If this mechanism became unworkable/broke down this would be detrimental to the operation of the gas market as a whole.

Agreeing with others' perceptions regarding cost/benefit, Total E&P found that for Shippers and terminal operators there were significant and wide-ranging costs that would be incurred in implementation of UNC Modification 0461, with no clear benefits for the UK gas market as a whole. In order to implement the change in the gas day from an upstream point of view, Total E&P would incur costs in altering all the software for offshore and onshore metering, altering its infrastructure allocation systems as well as testing and verifying metering and allocations changes. Total E&P will also incur substantial legal costs in order to amend all commercial agreements related to upstream gas transportation and gas sales. Total E&P reiterated that it can not discern any clear benefits to the UK gas market by implementing this modification, particularly in terms of market competitiveness, price responsiveness or liquidity; nor were there perceived advantages for upstream producers, Shippers and terminal operators for whom the implementation of UNC Modification 0461 would introduce significant costs and no clear benefits for either commercial operations or the UK gas market.

A perceived lack of impact assessment and cost-benefit analysis was particularly evident to Oil & Gas UK, who observed that, in its view, there has been no reliable, published impact assessment of the proposed changes to the GB gas Day. Nor had there been a full analysis of the costs and benefits of the change. It drew attention to estimates by Oil & Gas UK member companies, suggesting a total cost of changing the gas day in the upstream sector, if such a change were required, of at least £40m-£50m. These costs comprise three elements: (1) changes to bespoke IT systems in field, pipeline and terminal operations (2) review and revision of many hundreds of upstream commercial agreements, many of which pre-date the UNC, and (3) physical and IT software changes to upstream meters. None of these indirect costs appear to be within the scope of the discussion of UNC Modification 0461 so far but Oil & Gas UK believed they still deserved to form part of a proper cost/benefit assessment. Oil & Gas UK questioned was it not appropriate that a decision to change the GB gas Day should set out the alleged benefits of the proposed change, examine alternatives and incorporate in a cost/benefit analysis all the costs incurred within the UK?

Marathon Oil UK and Marathon Oil Norge both commented that as the UK gas market is considered as one of the most liquid and transparent commodity markets in the world, they fail to see how implementation of this modification realises the intent of the EU Legislation in removing barriers to trade and competition.

As similarly remarked by ConocoPhillips, if the upstream industry does not change its gas day then Shippers will likely bear the cost of un-validated claims. Marathon Oil UK and Marathon Oil Norge understand that work is underway to attempt to establish

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the likely impact of this. However, notionally even if there is only a 0.1% reduction in validation accuracy, which is a conservative view of the impact, that potentially would result in 0.1% of produced gas delivered to the UK delivery terminals being misallocated. Considering a month with a total 89,000,000,000kWh (approximately 3 billion therms) supplied into the NTS the exposure to validation error of 0.1% could potentially misallocate £2.1MM (at 70 pence/therm) across Shippers. The ramifications for Shippers if these misallocations are realised are significant.

Marathon Oil UK and Marathon Oil Norge have provided information to Oil & Gas UK on their own expected costs if the upstream industry is expected to change its gas day. The opportunity cost of this would be felt in other UKCS projects. Operational and IT resources would be tied up in complying with this modification at the cost of other projects. Commercial resource will be required to negotiate revised terms for the relevant agreements, leading to potential delay of other commercial negotiations that may be developing new fields or work to extend the life of mature assets. Ultimately it is the opinion of both Marathon Oil UK and Marathon Oil Norge that adding to the costs through requiring a change in gas day with no benefit to the upstream sector will shorten the economic life of producing assets in the UKCS to the detriment of the UK market and consumers.

### Claims Validation Agent – Changes to Agreements

It was noted by several parties that any modification to the Claims Validation Agreement requires unanimous approval prior to implementation. ConocoPhillips pointed out that all terminal operators are required to be happy to change to the 05:00-05:00 Gas Day in order for the CVA to even consider amending its agreements. Also, for the individual terminals to agree to change they require the agreement of all their offshore producers, some of which are not involved in the downstream market and hence will not prioritise amendments of offshore agreements.

## 8 Panel Discussions

Insert Text here

## 9 Recommendation

### Panel Recommendation

Having considered the Modification Report, the Panel recommends:

- that proposed Modification 0461 [should/should not] be made.