MODIFICATION OF THE SPECIAL CONDITIONS OF NATIONAL GRID GAS PLC'S GAS TRANSPORTER LICENCE IN RESPECT OF THE NATIONAL TRANSMISSION SYSTEM UNDER SECTION 23 OF THE GAS ACT 1986

NOTICE OF REASONS FOR DECISION TO MODIFY THE SPECIAL CONDITIONS OF NATIONAL GRID GAS PLC'S GAS TRANSPORTER LICENCE UNDER SECTION 38A OF THE GAS ACT 1986

Whereas:

1. National Grid Gas plc (the "licensee") holds a transporter licence (the "licence") in respect of its National Transmission System ("NTS") treated as granted under section 7 of the Gas Act 1986 (the "Act").

2. In accordance with sections 23(3) and (4) of the Act, the Gas and Electricity Markets Authority (the "Authority"):

   (i) gave notice (the "Notice") on 14 December 2011 that it proposed to modify the special conditions of the licence in accordance with the Schedules to the Notice;

   (ii) published the Notice in the manner it considered appropriate; and

   (iii) served a copy of the Notice on the licensee.

3. The Authority received two representations in relation to the proposed licence modifications before the relevant time specified in the Notice, neither of which was marked confidential. No responses were withdrawn.

4. The Authority has carefully considered the representations made in relation to the proposed licence modifications and considers that no amendments are necessary to the Notice in relation to the responses received. We have today published the following decision letter where we have responded to the key points raised by respondents to our consultation:

   "National Grid Gas System Operator Incentives from 1 April 2012", Decision Letter, Ofgem, February 2012.

   This letter and all non-confidential representations made in relation to the proposed licence modifications are available free of charge from the Ofgem Research and Information Centre, 9 Millbank, London SW19 3GE or from the Ofgem website at www.ofgem.gov.uk.

5. The Authority sent a copy of the Notice to the Secretary of State. The Authority did not receive a direction from the Secretary of State not to make the proposed modifications before the relevant time specified in the Notice.

6. Information in relation to the licence modifications is contained in the following document:

   "National Grid Gas (NTS) System Operator Incentives for 1 April 2012: Initial Consultation", National Grid, July 2011.

   This document is available from the National Grid website at www.nationalgrid.com/uk.

7. The reasons why the Authority proposes to make the licence modifications were published by the Authority in the following document:

   "National Grid Gas System Operator Incentives from April 2012", Ofgem, December 2011.

8. This document is available free of charge from the Ofgem Research and Information Centre, 9 Millbank, London SW1P 3GE or from the Ofgem website at www.ofgem.gov.uk.

THEREFORE:

In accordance with section 23 of the Act, the Authority hereby modifies the licence in accordance with the Schedules to this Modification with effect on and from 06:00 hours on 1 April 2012.

This document constitutes a notice of reasons for the decision to modify the special conditions of the licence under section 38A of the Act.

The Official Seal of the Gas and Electricity Markets Authority here affixed is authenticated by the signature of:

Martin Crouch
Partner, European Wholesale
Duly authorised on behalf of the Gas and Electricity Markets Authority

1 February 2012

SCHEDULE 1

MODIFICATION OF THE SPECIAL CONDITIONS OF NATIONAL GRID GAS PLC'S GAS TRANSPORTER LICENCE IN RESPECT OF ITS NATIONAL TRANSMISSION SYSTEM UNDER SECTION 23 OF THE GAS ACT 1986

1. For Special Condition C8F (NTS System Operator external incentives, costs and revenues) substitute:

Special Condition C8F: NTS System Operator external incentives, costs and revenues

(1) External cost incentive revenue ($SOOIRC_t$)

(a) Principal formula

For the purposes of paragraph 3(a) of Special Condition C8C (NTS System Operation Activity Revenue Restriction), the maximum external cost incentive revenue allowed to the licensee in respect of formula year t ($SOOIRC_t$) shall be derived from the following formula:

$SOOIRC_t = SC_t + OMC_t + RBC_t + SIR_t + OMIR_t + RBIR_t + QIIR_t + GHGIR_t + GHGC_t$

where

SC_t means the total costs incurred by the licensee in formula year t in respect of system costs which shall be derived from the following formula:

$$SC_t = \sum_q \left[GC_{t,q} + ECC_{t,q} \right]$$

where:

$GC_{t,q}$ means the total costs incurred by the licensee (less any revenues received from DN operators) in respect of relevant quarter year q in formula year t in the provision of NTS Shrinkage (which has the meaning given to that term in the network code) other than those payments included in the calculation of $ECC_{t,q}$;

$ECC_{t,q}$ means the total costs incurred by the licensee in respect of relevant quarter year q in formula year t in procuring electricity for the purposes of operating Electric Compressors; and

$\sum_{q}$ means the sum over all relevant quarter years q in the relevant formula year t.

OMC_t means the total costs incurred by the licensee in respect of formula year t in respect of the procurement of availability and utilisation of Operating Margins services for the purposes of satisfying Operating Margins Requirements (having the meaning given to those terms in the network code) including all capacity fees, gas delivery service fees, standby fees and costs associated with reprofiling, withdrawing and injecting gas into and out of storage and costs that may arise as a result of the difference between the Operating Margins WACOG and Net Margins WACOG as calculated in accordance with Section K of the uniform network code in the event of service utilisation multiplied by the relevant utilisation volume;

RBC_t means an amount equal to the revenue equivalent to the net residual balancing costs incurred by the licensee in respect of formula year t and shall be equal to the sum of the Basic Net Neutrality Amount and the Adjustment Neutrality Amount (having the meanings given to each of those terms in the network code) across all days in formula year t;

SIR_t means the NTS Shrinkage Incentive Revenue in respect of formula year t which shall be calculated in accordance with paragraph 2 of this condition;

$OMIR_t$ means the Operating Margins Incentive Revenue in respect of formula year t which shall be calculated in accordance with paragraph 3 of this condition;

$RBIR_t$ means the Residual Balancing Incentive Revenue in respect of formula year t which shall be calculated in accordance with paragraph 4 of this condition;

$QIIR_t$ means the Quality of Information Incentive Revenue in respect of formula year t which shall be calculated in accordance with paragraph 5 of this condition;

$GHGIR_t$ means the Greenhouse Gas Incentive Revenue in respect of formula year t which shall be calculated in accordance with paragraph 6(a) of this condition; and

$GHGC_t$ means the efficient Greenhouse Gas Emissions Project Costs in respect of formula year t which shall be calculated in accordance with paragraph 6(b) of this condition.

(b) For the purposes of this condition, "relevant quarter year" and "q" means each quarter in formula year t, where a quarter is a continuous period of three calendar months and where q=1 is the period between 1 April and 30 June, q=2 is the period between 1 July and 30 September, q=3 is the period between 1 October and 31 December and q=4 is the period between 1 January and 31 March (each inclusive).

(c) For the purposes of this condition, "Electric Compressor" means electrically powered gas compression equipment forming part of the pipe-line system to which this licence relates that is used by the licensee to increase the pressure of gas in part of that pipe-line system.

(d) for the purposes of this condition, subscript "s" means a relevant compressor site being a location at which one or more Electric Compressors are installed.

(e) For the purposes of this condition, "mcm" means millions of cubic meters of gas.

(2) NTS Shrinkage Incentive

(a) Maximum Shrinkage incentive revenue

For the purposes of paragraph 1 of this condition, the maximum total NTS Shrinkage Incentive Revenue allowed to the licensee in respect of formula year t (SIR_t) shall be derived from the following formula:

If $SIT_t \geq SCMR_t$, then:

$$SIR_t = \text{Min}\left[USF_t \times (SIT_t - SCMR_t), CAP_t\right]$$

Otherwise:

$$SIR_t = \text{Max}\left[DSF_t \times (SIT_t - SCMR_t), COL_t\right]$$

where:

SIT_t means the NTS shrinkage incentive target in respect of formula year t and shall be calculated in accordance with paragraph 2(b) of this condition;

$SCMR_t$ means the NTS shrinkage incentive cost performance measure in respect of formula year t and shall be derived from the following formula;

$$SCMR_t = SC_t + MR_t$$

where:

SC_t has the meaning set out in paragraph 1 of this condition;

MR_t means the net amount of revenues received by the licensee due to the reconciliation of Measurement Errors (as defined in the network code OAD D1.2.1) and/or meter errors (as described in the network code TPD M1.9) in respect of formula year t for the formula years $t \geq 8$;

Min [x,y] is the value which is the lesser of x and y;

Max [x,y] is the value which is the greater of x and y;

$USF_{t,}$ means the upside sharing factor in respect of formula year t as set out in Table A below;

DSF_t means the downside sharing factor in respect of formula year t as set out in Table A below;

CAP_t means the maximum shrinkage incentive revenue in respect of formula year t set out in Table A below; and

COL_t means the minimum shrinkage incentive revenue in respect of formula year t set out in Table A below:

Table A

	t=11
USF_t	0.25
DSF_t	0.20
CAP_t (£million)	5
COL_t (£million)	-4

(b) The NTS Shrinkage Incentive Target

(i) For the purposes of paragraph 2(a) of this condition, the NTS shrinkage cost incentive target (£million) in respect of formula year t (SIT_t) shall be derived from the following formula:

$$SIT_t = \frac{\sum_q \left[\left(GCRP_{t,q} \times GVT_{t,q}\right) + \left(ECRP_{t,q} \times EVT_{t,q}\right)\right]}{100} + TPCA_t + TNUoS_t + DUoS_t + CRCEES_t$$

where:

$GCRP_{t,q}$ means the NTS shrinkage gas cost reference price (p/kWh) in respect of relevant quarter year q in formula year t and

shall be calculated in accordance with paragraph 2(c) of this condition;

$GVT_{t,q}$ means the NTS shrinkage gas volume target (GWh) in respect of relevant quarter year q in formula year t and shall be calculated in accordance with paragraph 2(d) of this condition;

$ECRP_{t,q}$ means the NTS shrinkage incentive electricity cost reference price (p/kWh) in respect of relevant quarter year q in formula year t and shall be calculated in accordance with paragraph 2(e) of this condition;

$EVT_{t,q}$ means the NTS shrinkage incentive electricity volume target (GWh) in respect of relevant quarter year q in formula year t and shall be calculated in accordance with paragraph 2(f) of this condition;

$TPCA_t$ means the traded price of carbon adjustment (£million) in respect of formula year t and shall be calculated in accordance with paragraph 2(g) of this condition;

$TNUoS_t$ means the Transmission Network Use of System (TNUoS) costs (£million) to be incurred by the licensee in operating its Electric Compressors in respect of formula year t and shall be calculated in accordance with paragraph 2(h) of this condition;

$DUoS_t$ means the Distribution Use of System costs (£million) to be incurred by the licensee in operating its Electric Compressors in respect of formula year t and shall be calculated in accordance with paragraph 2(i) of this condition; and

$CRCEES_t$ means the Carbon Reduction Commitment Energy Efficiency Scheme costs (£million) incurred by the licensee in operating its electric compressors in respect of formula year t.

(c) The NTS shrinkage gas cost reference price ($GCRP_{t,q}$)

(i) For the purposes of paragraph 2(b) of this condition, the NTS shrinkage gas cost reference price (p/kWh) in respect of relevant quarter year q in formula years $8 \leq t \leq 12$ ($GCRP_{t,q}$) shall be derived from the following formula:

$$GCRP_{t,q} = \frac{\sum_{d=a}^{b} GQFP_{t,q,d}}{nq} * 0.75 + \frac{\sum_{m=g}^{h} \left(\frac{\sum_{d=y}^{z} GMFP_{t,q,m,d}}{nm} \right)}{3} * 0.25 + GCRPU_{t,q}$$

where:

a means 1 April in formula year t-1;

b means 31 March in formula year t-1;

$\sum_{d=a}^{b}$ means the sum over all business days d between day a and day b (both inclusive);

$GQFP_{t,q,d}$ means the mid-point of the forward bid/offer price (expressed in p/kWh) as quoted in the "ICIS Heren European Spot Gas Markets" published price reporting service (or any similar reporting service directed by the Authority) on business day d for a gas contract for delivery at the national balancing point (having the meaning given to that term in the published price reporting service);

g means the first calendar month in relevant quarter year q;

h means the last calendar month in relevant quarter year q;

$\sum_{m=g}^{h}$ means the sum over all relevant calendar months m in relevant quarter year q;

$GMFP_{t,q,m,d}$ means the mid-point of the forward bid/offer price (expressed in p/kWh) as quoted in the "ICIS Heren European Spot Gas Markets" published price reporting service (or any similar reporting service directed by the Authority) on business day d for a gas contract for delivery at the national balancing point (having the meaning given to that term in the published price reporting service);

nq means the number of business days between a and b inclusive;

y means the first business day of the calendar month preceding the relevant calendar month m of relevant quarter year q;

z means the last business day of the calendar month preceding the relevant calendar month m of relevant quarter year q;

nm means the number of business days between y and z inclusive;

$\sum_{d=y}^{z}$ means the sum over all business days in the month preceding relevant calendar month m of relevant quarter year q; and

$GCRPU_{t,q}$ means the Gas Cost Reference Price Uplift (p/kWh) in respect of relevant quarter year q in formula year t and shall take the value 0.1185.

(d) The NTS Shrinkage Gas Volume Target

(i) For the purposes of paragraph 2(b) of this condition, the NTS shrinkage gas volume target (GWh) in respect of relevant quarter

year q in formula year t ($GVT_{t,q}$) shall be derived from the following formula:

$$GVT_{t,q} = Max(GCVT_{t,q} + GCVTA_{t,q}, 0) + CVST_{t,q} + CVO_{t,q} + NOUAG_{t,q}$$

where:

Max [x,y] is the value which is the greater of x and y;

$GCVT_{t,q}$ means the NTS compressor gas volume target (GWh) in respect of relevant quarter year q of formula year t set out in Table B below:

Table B

$GCVT_{t,q}$ (GWh)	**t=11**
q=1	415
q=2	318
q=3	510
q=4	343

$GCVTA_{t,q}$ means the NTS compressor gas volume target adjustment (GWh) in respect of relevant quarter year q of formula year t and shall be derived from the following formula:

$$GCVTA_{t,q} = \left(\frac{GCVT_{t,q}}{GCVT_{t,q} + 3(ECVT_{t,q})} \right) \times \left(AASFF_{t,q} - FASFF_{t,q} \right) \times 9.3$$

where:

$ECVT_{t,q}$ has the meaning given to that term in paragraph 2(f) of this condition;

$AASFF_{t,q}$ means the actual average daily gas flows through the St. Fergus Entry terminal (mcm/day) in relevant quarter q in formula year t; and

$FASFF_{t,q}$ means the forecast average daily gas flows through the St. Fergus Entry terminal (mcm/day) in relevant quarter q in formula year t set out in Table C below:

Table C

$FASFF_{t,q}$ (mcm/day)	**t=11**
q=1	55
q=2	49
q=3	62
q=4	65

$CVST_{t,q}$ means the calorific value shrinkage gas volume target (GWh) in respect of each relevant quarter year q of formula year t and shall take the value 35.5GWh;

$CVO_{t,q}$ means the calorific value outturn which shall be calculated as the aggregate of the daily volumes of NTS shrinkage (GWh) in respect of the relevant quarter year q in formula year t that is attributable to the calculation of daily calorific values – alternative method, under section 4A(1)(b) of the Gas (Calculation of Thermal Energy) (Amendment) Regulations 2002 in respect of (i) gas taken off the NTS at the following NTS offtakes: ROSS, DYFFRYN CLYDACH, COWPEN BEWLEY and/or (ii) gas entering a Distribution Network without passing through the NTS; and

$NOUAG_{t,q}$ means the net outturn NTS SO unaccounted for gas volume (GWh) which in respect of each relevant quarter year q of formula year t and shall be calculated from the following formula:

$$NOUAG_{t,q} = \sum_{d \in q} UAGO_{t,d}$$

where:

$UAGO_{t,d}$ means the amount of gas (GWh) that remains unaccounted for on each day d in formula year t after the Entry Close-out Date (as defined in the network code TPD Section E) following the assessment of NTS Shrinkage for each such day d performed in accordance with the network code TPD section N paragraph 2.3.

(e) The NTS shrinkage incentive electricity cost reference price

(i) For the purposes of paragraph 2(b) of this condition, the NTS Shrinkage incentive electricity cost reference price (p/kWh) in respect of relevant quarter year q in formula year t ($ECRP_{t,q}$) shall be derived from the following formula:

$$\mathrm{ECRP}_{t,q} = \frac{\sum_{d=e}^{f} \mathrm{FEP}_{t,q,d}}{n} \times \left(1 + \mathrm{RPU}_{t}\right)$$

where:

$\mathrm{FEP}_{t,q,d}$ means the mid-point of the forward bid/offer price (expressed in p/kWh) as quoted in the "ICIS Heren European Daily Electricity Markets" published price reporting service (or any similar reporting service directed by the Authority) on business day d for a baseload electricity contract for delivery in respect of relevant quarter year q in formula year t;

$\sum_{d=e}^{f}$ means the sum over all business days d between day e and day f (inclusive);

e means the first business day of the calendar month preceding relevant quarter year q;

f means the last business day of the calendar month preceding relevant quarter year q;

n means the number of business days between e and f inclusive; and

RPU_t means the retail price uplift in respect of formula year t and in formula year t = 11 shall have the value 0.23.

(f) The NTS Shrinkage incentive Electricity Volume Target

(i) For the purposes of paragraph 2(b) of this condition, the NTS shrinkage incentive electricity volume target (GWh) in respect of relevant quarter year q in formula year t ($EVT_{t,q}$) shall be derived from the following formula:

$$EVT_{t,q} = Max(ECVT_{t,q} + ECVTA_{t,q}, 0)$$

where:

Max [x,y] is the value which is the greater of x and y;

$ECVT_{t,q}$ means the NTS compressor electricity volume target (GWh) in respect of relevant quarter year q in formula year t and as set out in Table D below:

Table D

$ECVT_{t,q}$ (GWh)	**t=11**
q=1	1
q=2	0
q=3	32
q=4	124

$ECVTA_{t,q}$ means the NTS compressor electricity volume target adjustment (GWh) in respect of relevant quarter year

q of formula year t and shall be derived from the following formula:

$$ECVTA_{t,q} = \left(\frac{3(ECVT_{t,q})}{GCVT_{t,q} + 3(ECVT_{t,q})} \right) \times \left(AASFF_{t,q} - FASFF_{t,q} \right) \times \frac{9.3}{3}$$

where:

$AASFF_{t,q}$, $FASFF_{t,q}$ and $GCVT_{t,q}$ have the meanings set out in paragraph 2 (d) of this condition.

(g) The traded price of carbon adjustment

(i) For the purposes of paragraph 2(b) of this condition, the traded price of carbon adjustment (£million) in respect of formula year t ($TPCA_t$) shall be derived from the following formula:

$$TPCA_t = \frac{\sum_q \left(GECVT_{t,q} - GECVP_{t,q} \right) \times TPCU_t}{100}$$

where:

$GECVT_{t,q}$ means the gas equivalent compression volume target (GWh) in respect of relevant quarter year q in formula year t and shall be derived from the following formula:

$GECVT_{t,q} = Max(GCVT_{t,q} + GCVTA_{t,q}, 0) + 3*EVT_{t,q}$

where:

Max [x,y] is the value equal to the greater of x and y;

$GCVT_{t,q}$ and $GCVTA_{t,q}$ have the meanings set out in paragraph 2(d) of this condition; and

$EVT_{t,q}$ has the meaning set out in paragraph 2(f) of this condition.

$GECVP_{t,q}$ means the aggregate of the volume of gas in GWh and electricity in gas-equivalent GWh (gas-equivalent GWh being the volume of electricity in GWh multiplied by a factor of 3) purchased for the purpose of operating compressors in respect of relevant quarter year q in formula year t; and

$TPCU_t$ is the uplift required (p/kWh) to reflect the traded price of carbon in respect of formula year t and shall take the value set out in Table E below:

Table E

	t=11
$TPCU_t$ (p/kWh)	0.268

(h) Transmission Network Use of System Cost Target

(i) For the purposes of paragraph 2(b) of this condition, the Transmission Network Use of System costs (£million) in respect of formula year t ($TNUoS_t$) to be incurred by the licensee in operating its electric compressors shall be derived from the following formula:

$$TNUoS_t = \frac{\sum_s TNUoS_{t,s}}{1{,}000{,}000}$$

where:

$TNUoS_{t,s}$ means the Transmission Network Use of System costs in respect of each relevant compressor site s in respect of formula year t and shall be derived in accordance with Table F:

Table F

Relevant Compressor Site s	**TNUOS $_{t,s}$**
Lockerley	16000 x $TDT_{t,s}$
Felindre	30000 x $TDT_{t,s}$
Churchover	15000 x $TDT_{t,s}$
Wormington	15000 x $TDT_{t,s}$
St. Fergus	48000 x $TDT_{t,s}$
Kirremuir	35000 x $TDT_{t,s}$

where:

$TDT_{t,s}$ means the TNUoS Demand Tariff (£/kW) in respect of formula year t and in respect of the charging zone in which the relevant compressor site s is located, published by National Grid Electricity Transmission plc in its Statement of Use of System Charges at 1 April in relevant year t.

(i) Distribution Use of System Cost Target

(i) For the purposes of paragraph 2(b) of this condition, the Distribution Use of System costs (£million) in respect of formula year t ($DUoS_t$) to be incurred by the licensee in operating its Electric Compressors shall be derived from the following formula:

$$DUoS_t = \sum_s \left[\mathrm{kVAC}_{t,s} + \mathrm{FC}_{t,s} + \mathrm{CC}_{t,s} \right]$$

where:

$kVAC_{t,s}$ means the capacity charge (£million) applicable to that relevant compressor site s in respect of formula year t calculated as the Chargeable kVA specified in the electricity connection agreement for that site s multiplied by the relevant kVA tariff in respect of formula year t applicable to that site published in the "Use of System Charging Statement" (or otherwise

made available) by the relevant distribution network operator;

$FC_{t,s}$ means the fixed charge (£million) applicable to that relevant compressor site s in respect of formula year t as published in the "Use of System Charging Statement" (or otherwise made available) by the relevant distribution network operator; and

$CC_{t,s}$ means the distribution use of system consumption charge (£million) for relevant compressor site s in respect of formula year t calculated from the half-hourly metered consumption of electricity at that site multiplied by the relevant consumption tariff in respect of formula year t applicable to that site as published in the "Use of System Charging Statement" (or otherwise made available) by the relevant distribution network operator.

(3) Operating Margins Incentive

(a) Maximum operating margins incentive revenue

For the purposes of paragraph 1(a) of this condition, the maximum Operating Margins incentive revenue (in £) allowed to the licensee in respect of formula year t ($OMIR_t$) shall be derived from the following formula:

If $OMOPC_t \leq OMIT_t$, then:

$$OMIR_t = \text{Min}\,[OMUSF_t \times (OMIT_t - OMOPC_t), OMCAP_t]$$

Otherwise:

$$OMIR_t = \text{Max}\,[OMDSF_t \times (OMIT_t - OMOPC_t), OMFLO_t]$$

where:

Min [x,y] is the value which is the lesser of x and y;

Max [x,y] is the value which is the greater of x and y;

$OMIT_t$ means the operating margins incentive target (in £) in respect of formula year t and shall be derived using the following formula:

for formula year t=10

$$OMIT_t = £17,318,792 + OMA_t$$

where:

OMA_t means the operating margins incentive target adjustment (in £) in respect of formula year t whether of a positive or zero value in respect of the full recovery of the increase in costs efficiently incurred by the licensee as a result of booking

deliverability at the Avonmouth LNG Storage facility. In the event the licensee incurs deliverability costs or a liability for deliverability costs at Avonmouth in formula year t=10, the licensee shall provide a statement to the Authority detailing the costs incurred or anticipated to be incurred and justification that these costs are efficient. This statement shall also detail the reduction in reprofiling and utilisation costs resulting from the licensee incurring deliverability costs. This statement shall be provided not later than 14 days after the licensee books deliverability at the Avonmouth LNG Storage facility. Upon receipt of the statement, the Authority will determine the extent to which the licensee's costs are efficient and, if appropriate, shall issue a direction specifying the value of OMA_t. In formula year t=10 OMA_t shall take the value zero unless otherwise directed by the Authority.

for formula year t=11

$$OMIT_t = 0.95 \times OMIT_{t-1} + OMLS_t$$

where:

$OMLS_t$ means the operating margins incentive target adjustment in respect of formula year t (in £) whether of a positive or zero value in respect of the full recovery of the costs efficiently incurred by the licensee for locational - Scotland operating margins. In the event the licensee will incur locational – Scotland operating margins costs or a liability for locational – Scotland operating margins costs in formula year t=11, the licensee shall within 14 days of booking locational – Scotland operating margins provide a statement to the Authority detailing these costs and justification that these costs are efficient. Upon receipt of the statement, the Authority will

determine the extent to which the licensee's costs are efficient and, if appropriate, shall issue a direction specifying the value of $OMLS_t$. In formula year t=11 $OMLS_t$ shall take the value zero unless otherwise directed by the Authority.

For the relevant formula year t, for formula year t=10 and formula year t=11 $OMIT_t$ shall take the value derived from the formula above unless the Authority directs that an alternative value (either higher or lower) shall apply. Such alternative value shall only be directed by the Authority to apply if the applicable prices specified in Special Condition C3 of the licensee's transportation licence for the Avonmouth LNG Storage facility change from those specified in the Authority's Notice of Modification under Section 23 of the Gas Act of 2 March 2011 (the "Notice") such that the value of $OMIT_t$ would vary by an amount in excess of £100,000. The Authority shall direct a change to this value in line with any change to the prices set out in the Notice.

$OMUSF_t$ means the operating margins upside sharing factor in respect of formula year t and in formula year t=10 and formula year t=11 shall take the value 0.2;

$OMDSF_t$ means the operating margins downside sharing factor in respect of formula year t and in formula year t=10 and formula year t=11 shall take the value 0.2;

$OMCAP_t$ means the operating margins incentive cap in respect of formula year t and in formula year t=10 and formula year t=11 shall take the value £1,000,000;

$OMFLO_t$ means the operating margins incentive collar in respect of formula year t and in formula year t=10 and formula year t=11 shall take the value -£1,000,000;

$OMOPC_t$ means the operating margins overall performance cost measure (in £) in respect of formula year t and in formula year t=10 and formula year t=11 shall be derived using the following formula:

$$OMOPC_t = OMAPC_t + OMUPC_t$$

where:

$OMAPC_t$ means the operating margins availability performance cost measure (in £) in respect of formula year t and is equal to the total costs incurred by the licensee in respect of formula year t in respect of the procurement of availability of Operating Margins services for the purposes of satisfying Operating Margins Requirements (having the meaning given to those terms in the network code) including all capacity fees, gas delivery service fees, standby fees and costs associated with re-profiling, withdrawing and injecting gas into and out of storage;

$OMUPC_t$ means the operating margins utilisation performance cost measure (in £) in respect of formula year t and shall be derived using the following formula:

if: $OMUV_t \leq OMUVC_t$, then:

$$OMUPC_t = OMAUC_t$$

if: $OMUV_t > OMUVC_t$, then:

$$OMUPC_t = OMAUC_t \times \left[\frac{OMUVC_t}{OMUV_t} \right]$$

where:

$OMUV_t$ means the total volume (in GWh) of utilisation of operating margins (as defined in accordance with Section K paragraph 1.1.2 (c) of the uniform network code as at 1 March 2011) in formula year t;

$OMUVC_t$ means the operating margins utilisation volume cap (in GWh) in respect of formula year t and in formula year t=10 and in formula year t=11 shall take the value 78.1GWh; and

$OMAUC_t$ means the operating margins actual utilisation cost (in £) in respect of formula year t and shall be equal to the total costs incurred by the licensee in respect of formula year t as a result of the utilisation of Operating Margins as defined in accordance with of Section K paragraph 1.1.2 (c) of the uniform network code as at 1 March 2011. Such costs include costs incurred as a result of the withdrawal of gas from an Operating Margins Facility (as such facility is defined in the network code), the cost of the Operating Margins WACOG as calculated in accordance with Section K of the uniform network code multiplied by the relevant utilisation volume and costs incurred as a result of re-profiling required as a result of the utilisation of Operating Margins including capacity fees, gas delivery service fees and costs associated with the injection of gas into an Operating Margins Facility. For the avoidance of doubt, costs reported under $OMAUC_t$ will not also be reported under $OMAPC_t$ and vice versa.

(4) Residual Gas Balancing Incentive

(a) Maximum residual gas balancing incentive revenue

For the purposes of paragraph 1(a) of this condition, the maximum residual gas balancing incentive revenue allowed to the licensee in respect of formula year t ($RBIR_t$) shall be derived from the following formula:

$$RBIR_t = \text{Min}\ [RBCAP_t, \text{Max}\ (STIP_t, RBF_t)]$$

where:

$RBCAP_t$ means the maximum residual gas balancing incentive revenue (£million) in respect of formula year t, and in formula year t=11 shall take the value £2million;

RBF_t means the minimum residual gas balancing incentive revenue (£million) in respect of formula year t, and in formula year t≥8 shall take the value £-3.5million;

$STIP_t$ means the sum of the total daily incentive payments (£million) under the residual gas balancing incentive in respect of formula year t and shall be calculated in accordance with paragraph 4(b) of this condition;

Min[x,y] means the value equal to the lesser of x and y;

Max[x,y] means the value equal to the greater of x and y;

(b) The sum of the total daily incentive payments under the residual gas balancing incentive

For the purposes of paragraph 4(a) of this condition, the sum of the total daily incentive payments under the residual gas balancing incentive in respect of formula year t ($STIP_t$) shall be derived from the following formula:

$$STIP_t = \frac{\sum_d DPIP_{t,d} + \sum_d DLIP_{t,d}}{1{,}000{,}000}$$

where:

$\sum_d$ means the sum across all days d in formula year t;

$DPIP_{t,d}$ means the daily price incentive payment (£) and shall be calculated in accordance with paragraph 4(c) of this condition; and

$DLIP_{t,d}$ means the daily linepack incentive payment (£) and shall be calculated in accordance with paragraph 4(e) of this condition.

(c) The daily price incentive payment

For the purposes of paragraph 4(b) of this condition, the daily price incentive payment (£) in respect of day d of formula year t ($DPIP_{t,d}$) shall depend on the value of $PPM_{t,d}$ and shall be derived from Table G below:

Table G

For formula year t=11,	
$PPM_{t,d}$	$DPIP_{t,d}$
$0 \leq PPM_{t,d} \leq 5$	$1500 – (PPM_{t,d} \times 1000)$
$5 < PPM_{t,d} < 75.667$	$-3500 – (375 \times (PPM_{t,d} – 5))$
$75.667 \leq PPM_{t,d}$	-30000

where:

$DPIP_{t,d}$ means the daily price incentive payment (£) in respect of day d of formula year t;

$PPM_{t,d}$ means the daily price performance measure (%) in respect of day d of formula year t and shall be calculated in accordance with paragraph 4(d) of this condition;

(d) The daily residual balancing price performance measure

For the purposes of paragraph 4(c) of this condition, the licensee's daily residual balancing price performance measure in respect of day d in formula year t ($PPM_{t,d}$) shall be derived from the following formula:

$$PPM_{t,d} = \left(\frac{\left(TMIBP_{t,d} - TMISP_{t,d} \right)}{\left| SAP_{t,d} \right|} \right) \times 100$$

where:

$TMIBP_{t,d}$ means the price in pence per kilowatt hour which is equal to the highest market offer price (having the meaning given to that term in the network code) in relation to an eligible balancing action (having the meaning given to that term in the network code) excluding any locational actions taken in respect of day d of formula year t unless the licensee took no such eligible balancing action in which case $TMIBP_{t,d}$ shall equal $SAP_{t,d}$;

$TMISP_{t,d}$ means the price in pence per kilowatt hour which is equal to the lowest market offer price (having the meaning given to that term in the network code) in relation to an eligible balancing action (having the meaning given to that term in the network code) excluding any locational actions taken in respect of day d of formula year t unless the licensee took no such eligible balancing action in which case $TMISP_{t,d}$ shall equal $SAP_{t,d}$; and

$SAP_{t,d}$ means the system average price (having the meaning given to that term in the network code) in respect of day d of formula year t.

(e) The daily linepack incentive payment

For the purposes of paragraph 4(b) of this condition, the daily linepack incentive payment (£) in respect of day d of formula year t ($DLIP_{t,d}$) shall depend on the value of $LPM_{t,d}$ and shall be derived in accordance with Table H below:

Table H

$LPM_{t,d}$	**$DLIP_{t,d}$**
$0 \leq LPM_{t,d} \leq LPUL_t$	$LDCAP_t$
$LPUL_t < LPM_{t,d} < LPT_t$	$LDCAP_t \times \left(\frac{LPT_t - LPM_{t,d}}{LPT_t - LPUL_t} \right)$
$LPM_{t,d} = LPT_t$	0
$LPLL_t > LPM_{t,d} > LPT_t$	$LDF_t \times \left(\frac{LPT_t - LPM_{t,d}}{LPT_t - LPLL_t} \right)$
$LPM_{t,d} \geq LPLL_t$	LDF_t

where:

$DLIP_{t,d}$ means the daily linepack incentive payment (£) in respect of day d of formula year t;

$LPM_{t,d}$ means the daily linepack performance measure (mcm) in respect of day d of formula year t and shall be calculated in

accordance with paragraph 4(f) of this condition;

LPT_t means the linepack performance target (mcm) in respect of formula year t and in formula year t ≥ 8 shall take the value 2.8mcm;

$LPUL_t$ means the linepack upper band limit (mcm) in respect of formula year t and in formula year t ≥ 8 shall take the value 1.5mcm;

$LDCAP_t$ means the linepack daily cap amount (£) in respect of formula year t and in formula year t ≥ 8 shall take the value £4000;

$LPLL_t$ means the linepack lower limit (mcm) in respect of formula year t and in formula year t ≥ 8 shall take the value 15mcm; and

LDF_t means the linepack daily floor amount (£) in respect of formula year t and in formula year t ≥ 8 shall take the value £-30,000.

(f) The linepack performance measure

For the purposes of paragraph 4(e) of this condition, the linepack performance measure, in respect of day d of formula year t ($LPM_{t,d}$) shall be derived from the following formula:

$$LPM_{t,d} = Max\ [(OLP_{t,d} - CLP_{t,d}),\ (CLP_{t,d} - OLP_{t,d})]$$

where:

Max [x,y] is the value equal to the greater of x and y;

$OLP_{t,d}$ means the total NTS linepack in respect of day d of

formula year t as at 06:00 hours on day d;

$CLP_{t,d}$ means the NTS linepack in respect of day d of formula year t as at 06:00 hours on day d+1; and

NTS linepack means the volume of gas within the NTS as calculated by the licensee in accordance with the methodology proposed by the licensee for that purpose from time to time and approved by the Authority.

(5) Quality of Information Incentive ($QIIR_t$)

(a) Principal formula

For the purposes of paragraph 1(a) of this condition, the quality of information incentive revenue (£million) allowed to the licensee in respect of formula year t ($QIIR_t$) shall be derived from the following formula:

$$QIIR_t = QDIIR_t + QWAIR_t + QWTIR_t$$

where:

$QDIIR_t$ means the quality of demand information incentive revenue (£million) in respect of formula year t and shall depend on the value of $DFIPE_t$ as derived in accordance with Table I below:

Table I

For formula year t = 11,	
$DFIPE_t$	**$QDIIR_t$**
$0 \leq DFIPE_t < DFA_t$	8.27
$DFA_t \leq DFIPE_t < 2.5 + DFA_t$	$8.27 - (2.667 \times (DFIPE_t - DFA_t))$
$2.5 + DFA_t \leq DFIPE_t < 3.0 + DFA_t$	$1.6 - (6.4 \times (DFIPE_t - 2.5 - DFA_t))$
$3.0 + DFA_t \leq DFIPE_t$	-1.6

where:

$DFIPE_t$ means the demand forecasting incentivised performance error as defined in paragraph 5(b) of this condition;

DFA_t means the demand forecasting adjustment in respect of formula year t and shall be derived from the following formula:

$$DFA_t = \text{Min}\,[DFSA_t\ ,\ 0.35]$$

where :

$DFSA_t$ means the demand forecasting short-cycle storage adjustment in respect of formula year t and shall be derived from the following formula:

$$DFSA_t = 0.01 \times \left(AIC_t - RAIC_t \right)$$

where:

AIC_t means the average annual capability to have gas injected (expressed in mcm/d) of the short-cycle storage facilities connected to the NTS at Holehouse Farm, Aldbrough, Holford Byley and Hilltop Farm in respect of formula year t and shall be derived from the following formula:

$$AIC_t = \left[\frac{\sum_d HHF_{d,t}}{365} \right] + \left[\frac{\sum_d ALD_{d,t}}{365} \right] + \left[\frac{\sum_d HOL_{d,t}}{365} \right] + \left[\frac{\sum_d HTF_{d,t}}{365} \right]$$

where:

$\sum_d x$ means the sum of x for all days d in the formula year t;

$HHF_{d,t}$ means the capability of the short-cycle storage facility connected to the NTS at Holehouse Farm to have gas injected (expressed in mcm/d) on day d of formula year t as specified in the storage capacity notice submitted by the Storage Operator to the licensee (and updated from time to time) pursuant to the Storage Connection Agreement;

$ALD_{d,t}$ means the capability of the short-cycle storage facility connected to the NTS at Aldbrough to have gas injected (expressed in mcm/d) on day d of formula year t as specified in the storage capacity notice submitted by the Storage Operator to the licensee (and updated from time

to time) pursuant to the Storage Connection Agreement;

$HOL_{d,t}$ means the capability of the short-cycle storage facility connected to the NTS at Holford Byley to have gas injected (expressed in mcm/d) on day d of formula year as specified in the storage capacity notice submitted by the Storage Operator to the licensee (and updated from time to time) pursuant to the Storage Connection Agreement;

$HTF_{d,t}$ means the capability of the short-cycle storage facility connected to the NTS at Hilltop Farm to have gas injected (expressed in mcm/d) on day d of formula year t as specified in the storage capacity notice submitted by the Storage Operator to the licensee (and updated from time to time) pursuant to the Storage Connection Agreement;

$RAIC_t$ means the average annual capability to have gas injected (expressed in mcm/d) during the reference period of the short-cycle storage facilities connected to the NTS at Holehouse Farm, Aldbrough, Holford Byley and Hilltop Farm which in respect of formula year t=11 shall take the value of 19.3;

Min[x,y] is the value which is the lesser of x and y.

$QWAIR_t$ means the quality of website availability incentive revenue (£million) in respect of formula year t and shall be derived from the following formula:

$$QWAIR_t = \frac{\sum_{\text{all m}} QWAIR_{t,m}}{1{,}000{,}000}$$

where:

$\sum_{\text{all m}}$ means the sum over all relevant calendar months m in formula year t;

$QWAIR_{t,m}$ means the quality of website availability incentive revenue in each relevant calendar month m in formula year t and shall depend on the value of $WAPM_{t,m}$ and shall be derived from Table J below:

Table J

$WAPM_{t,m}$	**$QWAIR_{t,m}$**
$WAPM_{t,m} \leq (0.64 \times WABM_{t,m})$	-£4,167
$(0.73 \times WABM_{t,m}) \geq WAPM_{t,m} > (0.64 \times WABM_{t,m})$	$\left[\frac{(0.73 \times WABM_{t,m}) - WAPM_{t,m}}{0.09 \times WABM_{t,m}}\right] \times (-£1{,}042) - £3{,}125$
$WABM_{t,m} > WAPM_{t,m} > (0.73 \times WABM_{t,m})$	$\left[\frac{WABM_{t,m} - WAPM_{t,m}}{0.27 \times WABM_{t,m}}\right] \times (-£3{,}125)$
$WAPM_{t,m} = WABM_{t,m}$	£3,125
$WABM_{t,m} < WAPM_{t,m} \leq 1$	$\left[\frac{WAPM_{t,m} - WABM_{t,m}}{1 - WABM_{t,m}}\right] \times £1{,}042 + £3{,}125$

where:

$WAPM_{t,m}$ means the quality of website availability incentive performance measure in respect of each relevant calendar month m in formula year t as defined in paragraph 5(c) of this condition;

$WABM_{t,m}$ is the website availability benchmark measure for each relevant calendar month m in formula year t and in t=11 shall take the value 0.993;

$QWTIR_t$ means the quality of website timeliness incentive revenue (£million) in formula year t, and shall be derived from the following formula:

$$QWTIR_t = \frac{\sum_{all\,m} QWTIR_{t,m}}{1{,}000{,}000}$$

where:

$\sum_{all\,m}$ means the sum over all relevant calendar month m in formula year t;

$QWTIR_{t,m}$ is the quality of website timeliness incentive revenue in each relevant calendar month m in formula year t and shall depend on the value of $WTPM_{t,m}$ and shall be derived from Table K below:

Table K

$WTPM_{t,m}$	**$QWTIR_{t,m}$**
$WTPM_{t,m} \leq (0.64 \times WTBM_{t,m})$	-£4,167
$(0.73 \times WTBM_{t,m}) \geq WTPM_{t,m} > (0.64 \times WTBM_{t,m})$	$\left[\frac{(0.73 \times WTBM_{t,m}) - WTPM_{t,m}}{0.09 \times WTBM_{t,m}}\right] \times (-£1{,}042) - £3{,}125$
$WTBM_{t,m} > WTPM_{t,m} > (0.73 \times WTBM_{t,m})$	$\left[\frac{WTBM_{t,m} - WTPM_{t,m}}{0.27 \times WTBM_{t,m}}\right] \times (-£3{,}125)$
$WTPM_{t,m} = WTBM_{t,m}$	£3,125
$WTBM_{t,m} < WTPM_{t,m} \leq 1$	$\left[\frac{WTPM_{t,m} - WTBM_{t,m}}{1 - WTBM_{t,m}}\right] \times £1{,}042 + £3{,}125$

where:

$WTPM_{t,m}$ means the quality of website timeliness incentive performance measure in respect of each relevant calendar month m in formula year t as defined in paragraph 5(d) of this condition; and

$WTBM_{t,m}$ is the website timeliness benchmark measure in respect of relevant calendar month m in formula year t and in t=11 shall take the value 0.905.

(b) Demand forecasting incentivised percentage error

For the purposes of paragraph 5(a) of this condition the demand forecasting incentivised percentage error ($DFIPE_t$) shall be derived from the following formula:

$$DFIPE_t = \left(\frac{\sum_{d}^{D} \left| DADF_d - AD_d \right|}{\sum_{d}^{D} AD_d} \right) \times 100$$

where:

d means the first day of formula year t;

D means the final day of formula year t;

$DADF_d$ means the day-ahead forecast NTS throughput value (mcm) published by the licensee (in accordance with the network code) on its website not later than 14:00 hours at day ahead (d-1) in respect of each day of formula year t. Where the day ahead 14:00 forecast NTS throughput value is not published by 14:00 hours at day ahead (d-1), the next forecast published on the licensee's website for the gas day concerned shall be used;

AD_d means Actual NTS Throughput (mcm) on a given day d, calculated five days following the day (d+5), on each day of formula year t where:

Actual NTS Throughput

means the total offtake of gas from the NTS on each day (measured in mcm), including gas offtakes by DN Operators, Storage Facilities, interconnectors and Very Large Daily Metered Consumers (VLDMC) connected to the NTS, plus the physical elements of NTS Shrinkage; and

DN Operators, Shrinkage, Storage Facilities and VLDMC shall have the meaning given to those terms in the network code.

(c) Quality of website availability incentive performance measure

For the purposes of paragraph 5(a) of this condition the quality of website availability performance measure ($WAPM_{t,m}$) in respect of each relevant calendar month m in formula year t shall be derived from the following formula:

$$WAPM_{t,m} = \frac{\left(\frac{n_{t,m} - WAPPV_{t,m}}{n_{t,m}}\right) + \left(\frac{n_{t,m} - WAPDE_{t,m}}{n_{t,m}}\right) + \left(\frac{n_{t,m} - WAPRE_{t,m}}{n_{t,m}}\right)}{3}$$

where:

"$n_{t,m}$" means the number of minutes in the relevant calendar month m in formula year t over which website availability performance is measured, which is derived in the following manner:

$$n_{t,m} = N_{t,m} - POM_{t,m}$$

where:

$N_{t,m}$ means the number of minutes in the relevant calendar month m in formula year t; and

$POM_{t,m}$ means the number of minutes of planned downtime in each relevant calendar month m in formula year t which shall not exceed 240 minutes in each month and which shall not include any minutes that fall between the hours of 07:00 and 19:00 Monday to Friday (inclusive) and which shall not include any minutes relating to a planned outage where the licensee has not published a notice of the planned outage on its website at least 48 hours in advance of the commencement of the planned outage.

$WAPPV_{t,m}$ means the website availability performance measure for the licensee's Gas Operational data, Prevailing View screen expressed

as the number of minutes of downtime of the Prevailing View screen published on the licensee's website in each relevant calendar month m in formula year t;

$WAPDE_{t,m}$ means the website availability performance measure for the licensee's Gas Operational data, Data Explorer screen expressed as the number of minutes of downtime of the Data Explorer screen published on the licensee's website in each relevant calendar month m in formula year t; and

$WAPRE_{t,m}$ means the website availability performance measure for the licensee's Gas Operational data, Report Explorer screen expressed as the number of minutes of downtime of the Report Explorer screen published on the licensee's website in each relevant calendar month m in formula year t.

(d) Quality of website timeliness incentive performance measure

For the purposes of paragraph 5(a) of this condition the quality of website timeliness performance measure ($WTPM_{t,m}$) in respect of each relevant calendar month m in formula year t shall be derived from the following formula:

$$WTPM_{t,m} = \frac{(WTPL_{t,m} + WTPNN_{t,m} + WTPNA_{t,m} + WTPDF_{t,m})}{4}$$

where:

$WTPL_{t,m}$ means the website timeliness performance measure for the licensee's Predicted Closing Linepack Data Item or Report, and has a value between 0 and 1, representing the proportion of occasions during each relevant calendar month m in formula year t that hourly data updates were posted within 10 minutes of the start of the hour (i.e. the 12:00 update published by 12:10 at the latest), expressed as a proportion of all publication occasions;

$WTPNN_{t,m}$ means the website timeliness performance measure for the licensee's National Forecast Flow Data Item or Report, and has a value between 0 and 1, representing the proportion of occasions during each relevant calendar month m in formula year t that hourly data updates were posted within 10 minutes of the start of the hour (i.e. the 12:00 update published by 12:10 at the latest), expressed as a proportion of all publication occasions;

$WTPNA_{t,m}$ means the website timeliness performance measure for the licensee's National Physical Flow Data Item or Report, and has a value between 0 and 1, representing the proportion of occasions during each relevant calendar month m in formula year t that hourly data updates were posted within 10 minutes of the start of the hour (i.e. the 12:00 update published by 12:10 at the latest), expressed as a proportion of all publication occasions; and

$WTPDF_{t,m}$ means the website timeliness performance measure for the licensee's NTS Throughput Data Item or Report, and has a value between 0 and 1, representing the proportion of occasions during each relevant calendar month m in formula year t that the 14:00 hours (day ahead), 02:00 hours (day ahead), 12:00 hours (within day), 15:00 hours (within day), 18:00 hours (within day) and 21:30 (within day) publication deadlines are met;

NTS Throughput Data Item or Report means

a data item or report published by the licensee showing, amongst other data, the forecast level of Actual NTS throughput;

Predicted Closing Linepack Data Item or Report means

an hourly data item or report published by the licensee showing, for each day, the opening NTS Linepack, two projected closing NTS Linepack figures, and Forecast Total System Demand (measured in mcm). NTS Linepack and Forecast Total System Demand have the meaning given to those terms in the network code;

National Forecast Flow Data Item or Report means

an hourly data item or report published by the licensee showing, for each day, aggregate forecast flows of gas into the NTS based on delivery flow nominations (measured in mcm); and

National Physical Flow Data Item or Report means

an hourly data item or report published by the licensee showing, for each day, aggregate forecast flows of gas into the NTS based on actual (aggregate) physical flows into the NTS (measured in mcm).

(e) Exceptional events

(i) where:

(aa) the licensee has notified the Authority of an event (the "notified event") which it considers to be an exceptional event within 14 days of its occurrence; and

(bb) the Authority is satisfied that the notified event is an exceptional event,

the Authority may issue a direction excluding from the demand forecasting incentivised percentage error ($DFIPE_t$) and/or the quality of website timeliness performance measure ($WTPM_{t,m}$) and/or the quality of website availability performance measure ($WAPM_{t,m}$) a specified period within formula year t during which the exceptional event has occurred.

(ii) A notice provided to the Authority by the licensee under paragraph 5(e)(i) of this condition must give particulars of the notified event and the reasons why the licensee considers it to be an exceptional event.

(iii) A direction made by the Authority under paragraph 5(e)(i) of this condition may be made subject to such terms and conditions as may be specified in the direction.

(iv) A direction issued by the Authority under paragraph 5(e)(i) of this condition shall not have effect unless, before it is made, the Authority has given notice to the licensee:

(aa) setting out the terms of the proposed direction;

(bb) stating the reasons why it proposes to make the direction; and

(cc) specifying the period (not being less than 14 days from the date of the notice) within which the licensee may make representations or objections,

and the Authority has considered such representations or objections and given reasons for its decision.

(v) For the purposes of this paragraph 5(e), an "exceptional event" means an event or circumstance that is beyond the reasonable control of the licensee and shall include, but not be limited to, catastrophic loss of power, sabotage, act of vandalism, flood, fire and any third party product or service failure having an industry wide impact.

(6) Greenhouse Gas Emissions Incentive

(a) Greenhouse Gas Incentive Revenue

For the purposes of paragraph 1(a) of this condition, the Greenhouse Gas Incentive Revenue (in £) allowed to the licensee in respect of formula year t ($GHGIR_t$) shall depend on the value of $VIPM_t$ and shall be derived from Table L below:

Table L

$VIPM_t$	**$GHGIR_t$**
$VIPM_t < VITL_t$	$(VITL_t - VIPM_t) \times VIRP_t$
$VITL_t \leq VIPM_t \leq VITU_t$,	0
$VIPM_t > VITU_t$	$(VITU_t - VIPM_t) \times VIRP_t$

where:

$VIPM_t$ means the venting incentive performance measure (tonnes of natural gas) in respect of formula year t which shall be the aggregate amount of natural gas released to the atmosphere by venting from all relevant compressors;

$VITL_t$ means the venting incentive target volume lower limit (in tonnes of natural gas) in respect of formula year t and in formula year t=10 shall take the value 2857 and in formula year t=11 shall take the value 2857;

$VITU_t$ means the venting incentive target volume upper limit (in tonnes of natural gas) in respect of formula year t and in formula year t=10 shall take the value 3157 and in formula year t=11 shall take the value 3157;

$VIRP_t$ means the venting incentive reference price (in £/tonne of natural gas vented) in respect of formula year t and shall be derived using the following formula:

$VIRP_t = NTCP_t \times VF_t$

where

$NTCP_t$ means the Non Traded Carbon Price (in £/tCO2e) in respect of formula year t and shall be derived using the following formula:

$$NTCP_t = \frac{\sum_{m=1}^{12} \left[NTMCP_{m,t,y} \times IF_{m,t,y} \right]}{12}$$

where:

$NTMCP_{m,t,y}$ means the latest Non Traded Central Carbon Price (£/tCO2e) for month m in formula year t as published in advance of month m by the Department of Energy and Climate Change (or any other government department from time to time) in year y prices;

$\sum_{m=1}^{12} \left[x_{m,t} \right]$ means the sum of $x_{m,t}$ for months m=1 to m=12 where m=1 is the first month of formula year t and m=12 is the last month of formula year t;

$IF_{m,t,y}$ means the inflation factor from year y to month m in formula year t as derived using the following formula:

$$IF_{m,t,y} = \frac{AI_t}{AI_y}$$

where:

AI_t means the annual inflation index for formula year t and is equal to the arithmetic average of the retail prices index numbers published or determined with respect to each of the six months from July to December (both inclusive) in formula year t-1;

AI_y means the annual inflation index for year y and is equal to the arithmetic average of the retail prices index numbers published or determined with respect to each of the six months from July to December (both

inclusive) in year y-1;

and

VF_t	means the venting equivalent factor that represents the number of tonnes of CO2 equivalent of each tonne of natural gas vented in respect of formula year t and in formula year t=10 shall take the value 20.84 and in formula year t=11 shall take the value 20.86.
"relevant compressor"	means gas and electrically powered gas compression equipment forming part of the pipe-line system to which this licence relates that is used by the licensee to increase the pressure of gas in part of that pipe-line system; and
"venting"	means the release of natural gas from a relevant compressor as a result of: (a) starting a compressor; (b) purging a compressor; (c) depressurising a compressor; or (d) the leakage of gas through a seal around the shaft of a compressor.

(b) Greenhouse Gas Emissions Project Costs

For the purposes of paragraph 1(a) of this condition, the greenhouse gas emissions project costs (in £) allowed to the licensee in respect of formula year t ($GHGC_t$) shall be of a positive or zero value as directed by the Authority for the purposes of paragraph 7 of Special Condition C28 (Requirement to develop and undertake a Scheme of Work to facilitate the establishment of a long term external gas system operator incentive to reduce targeted greenhouse gases). In the event the licensee incurs costs under Special Condition C28 (Requirement to

develop and undertake a Scheme of Work to facilitate the establishment of a long term external gas system operator incentive to reduce targeted greenhouse gases) that it considers should be recovered via $GHGC_t$, the licensee shall by 31 July in the formula year t following the formula year in which those costs are incurred provide a statement to the Authority detailing the costs incurred in formula year t-1 and justification that these costs were efficiently incurred. Upon receipt of the statement, the Authority will determine the extent to which the licensee's costs were efficiently incurred and, if appropriate, shall issue a direction specifying the value of $GHGC_t$. The value of $GHGC_t$ in formula year t=10, formula year t=11 and formula year t=12 shall be zero or as directed by the Authority.

SCHEDULE 2

MODIFICATION OF THE SPECIAL CONDITIONS OF NATIONAL GRID GAS PLC'S GAS TRANSPORTER LICENCE IN RESPECT OF ITS NATIONAL TRANSMISSION SYSTEM UNDER SECTION 23 OF THE GAS ACT 1986

Add the following Special Condition:

Special Condition C29: Requirement to undertake UAG Projects to investigate the causes of Unaccounted for Gas (UAG)

1. The licensee shall use reasonable endeavours to undertake the UAG Projects as specified in this condition for the purposes of investigating the causes of Unaccounted for Gas in the formula year t=11. The UAG Projects shall include but need not be limited to those set out in paragraph 4. Where the licensee does not undertake certain UAG projects it shall clearly set out its reasoning in the UAG Reports referred to in paragraph 2.

2. The licensee shall publish UAG Reports of the findings of these UAG Projects on its website and provide a copy of the UAG Reports to the Authority. The licensee shall publish the UAG Reports by 1 August 2012, 1 February 2013 and 1 May 2013, or such other dates as agreed by the Authority.

3. Within one month of publishing a UAG Report the licensee shall publish on its website all the relevant data referred to in the UAG Report. Where there are legitimate reasons for not publishing certain data on the website the Authority may consent for the licensee not to do so.

4. For the purposes of this condition:

"UAG Projects" means the projects currently undertaken by the licensee including:

(i) the witnessing by the licensee of the validation of Measurement Equipment (as defined in the network code OAD Section D1.2.1) at NTS System Entry Points (as defined in the network code TPD Section A2.2.1) or Supply Meter Installations (as defined in the network code TPD Section M1.2.2) at NTS Exit Points (as defined in the network code TPD Section A3.4.1); and

(ii) investigation and analysis of data in order to seek to identify causes of UAG (which may include data-mining analysis and a pilot project to consider the assessment of inherent NTS measurement uncertainty).

"UAG Report" means the report of the findings of the UAG Projects undertaken by the licensee. The UAG Report shall detail the UAG Projects the licensee has undertaken in the previous period, the UAG Projects it proposes to undertake in the next period and the licensee's views on how the findings of the UAG Projects may be taken forward in order to reduce the volume of UAG. The UAG Report shall also detail the reasons why any UAG Projects have not been undertaken in the formula year t=11.

"Unaccounted for Gas" (UAG)

means the amount of gas (GWh) that remains unaccounted for after the Entry Close-out Date (as defined in the network code TPD Section E) following the assessment of NTS Shrinkage performed in accordance with the network code TPD section N paragraph 2.3.