NOTICE OF 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. National Grid Gas plc (NGG) ("the Licensee") holds a gas transporter licence in respect of its National Transmission System (NTS) ("the NTS Licence") treated as granted pursuant to section 7 of the Gas Act 1986 ("the Act").

2. In accordance with section 23(3) and (4) of the Act, the Gas and Electricity Markets Authority ("the Authority") gives notice that it proposes to:

   (i) modify Special Condition C8F of the NTS Licence in accordance with Schedule 1 of this Notice; and
   (ii) introduce new Special Condition C27 to the NTS Licence in accordance with Schedule 2 of this Notice.

3. The proposed licence modifications set out in Schedule 1 of this Notice are intended to implement proposals relating to the NTS System Operation External Cost Incentive Revenue Scheme from 1 April 2010. In summary, the effects of the proposed licence modifications are:

   (a) to remove the effect of the Operating Margins Incentive for the year 1 April 2010 to 1 April 2011;

   (b) to revise the Price Performance Measure within the Residual Gas Balancing Incentive to make this appropriate for the year 1 April 2010 to 1 April 2011 and the year 1 April 2011 to 1 April 2012;

   (c) to revise the Quality of Demand Information Performance Measure within the Quality of Information Incentive to make this appropriate for the year 1 April 2010 to 1 April 2011 and the year 1 April 2011 to 1 April 2012;

   (d) to make the Website Availability Benchmark Measure and the Website Timeliness Benchmark Measure within the Quality of Information Incentive applicable for the year 1 April 2010 to 1 April 2011 and the year 1 April 2011 to 1 April 2012;

   (e) to remove the Upgrade of Website Information Incentive Revenue within the Quality of Information Incentive;

   (f) to revise the Venting Incentive Target Volume and Venting Incentive Reference Price for the Environmental Incentive to make this appropriate for the year 1 April 2010 to 1 April 2011;

   (g) to amend the Gas Equivalent Compressor Volume Target within the calculation of the Shadow Price of Carbon Adjustment factor in line with amendments made to the targets for gas and electricity compressor usage on 22 February 2010. For further details on these amendments see: "Notice of Modification of the Special Conditions of NGG's Gas Transporter Licence under Section 23 of the Gas Act 1986", Ofgem, 22 January 2009. This document is available from the Ofgem website (www.ofgem.gov.uk);

(h) to make a number of minor amendments to the drafting and formatting of Special Condition C8F in order to clarify its intent.

4. The proposed licence modification set out in Schedule 2 of this Notice introduces a requirement on the Licensee in relation to the introduction of a gas linepack product and updated "default" cash-out price values[1].

5. Subject to the outcome of this statutory consultation, consideration of respondents' views and the consent of the Licensee being given, it is the intention of the Authority that the proposed licence modification shall have effect on and from 06:00 hours on 1 April 2010.

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

"National Grid Gas (NTS) System Operator Incentives for 1 April 2010: Initial Proposals Consultation Report", National Grid, December 2009.

"National Grid Gas (NTS) System Operator Incentives for 1 April 2010: Initial Proposals Consultation Document", National Grid, October 2009.

These documents are available from the National Grid website at http://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 1 April 2010: Final Proposals Consultation", Ofgem, 26 February 2010.

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.

8. Any representations or objections to the proposed licence modifications may be made by 26 March 2010 and sent to:

Ian Marlee
Partner, Trading Arrangements
Ofgem
9 Millbank
London SW1P 3GE

or by e-mail to gb.markets@ofgem.gov.uk.

Ian Marlee
Partner, Trading Arrangements
Duly authorised on behalf of the Gas and Electricity Markets Authority

26 February 2010

[1] Those set out in Section F 1.2.1 (a)(i) and Section F 1.2.1 (b)(i) of the licensee's network code.

SCHEDULE 1

PROPOSED 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:

$$SOOIRC_t = SC_t + OMC_t + RBC_t + SIR_t + OMIR_t + RBIR_t + QIIR_t + EIR_t + UAGIR_t$$

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 that have been paid 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 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 Part 4 Section K of the UNC 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;

EIR_t means the Environmental Incentive Revenue in respect of formula year t which shall be calculated in accordance with paragraph 6 of this condition; and

$UAGIR_t$ means the Unaccounted for Gas Incentive Revenue in respect of formula year t which shall be calculated in accordance with paragraph 7 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 $SIT_t \geq SC_t$, then:

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

Otherwise:

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

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;

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

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=8	**t=9**	**t=10**
USF_t	0.25	0.25	0.25
DSF_t	0.20	0.20	0.20
CAP_t (£million)	5	5	5
COL_t (£million)	-4	-4	-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:

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

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;

$SPCA_t$ means the shadow 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; and

$DUoS_t$ 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.

(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 $8 \leq t \leq 11$ ($GCRP_{t,q}$) 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 0.237.

(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=8**	**t=9**	**t=10**

q=1	703	449	386
q=2	350	234	197
q=3	917	644	411
q=4	856	755	504

$GCVTA_{t,q}$ 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:

$$GCVTA_{t,q} = \left(\frac{GCVT_{t,q}}{GCVT_{t,q} + 3(ECVT_{t,q})} \right) \times \left(AASFF_{t,q} - FASFF_{t,q} \right) \times 16$$

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=8**	**t=9**	**t=10**
q=1	78.7	82.5	76.4
q=2	69.2	70.6	64.3
q=3	98.5	91.4	83.9
q=4	103.2	98.3	91.8

$CVST_{t,q}$ 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:

$UAGO_{t,d}$ has the meaning given to that term in paragraph 7(a) of this condition.

(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:

$$ECRP_{t,q} = \frac{\sum_{d=e}^{f} FEP_{t,q,d}}{n} \times \left(1 + RPU_t\right)$$

where:

$FEP_{t,q,d}$ 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 years $8 \leq t \leq 10$ shall have the value 0.18.

(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=8**	**t=9**	**t=10**
q=1	0	110	105
q=2	16	67	61
q=3	116	156	177
q=4	175	175	208

$ECVTA_{t,q}$ 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:

$$ECVTA_{t,q} = \left(\frac{3(ECVT_{t,q})}{GCVT_{t,q} + 3(ECVT_{t,q})} \right) \times \left(AASFF_{t,q} - FASFF_{t,q} \right) \times \frac{16}{3}$$

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 shadow price of carbon adjustment

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

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

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:

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

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

$SPCU_t$ is the uplift required (p/kWh) to reflect the shadow price of carbon in respect of formula

year t and shall take the value set out in Table E below:

Table E

	t=8	**t=9**	**t=10**
$SPCU_t$ (p/kWh)	0.573	0.597	0.621

(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	8000 x $TDT_{t,s}$
Peterstowe	7300 x $TDT_{t,s}$
Wormington	15000 x $TDT_{t,s}$
Churchover	15000 x $TDT_{t,s}$
Felindre	35000 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:

$$DUoS_t = \sum_s \left[kVAC_{t,s} + FC_{t,s} + CC_{t,s} \right]$$

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 allowed to the licensee in respect of formula year t ($OMIR_t$) shall be derived from the following formula:

$OMIR_t = 0$

(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=9 shall take the value £2.3million and in formula year t=10 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=9,	
$PPM_{t,d}$	$DPIP_{t,d}$
$0 \leq PPM_{t,d} \leq 5$	$2500 – (PPM_{t,d} \times 1000)$
$5 < PPM_{t,d} < 78.333$	$-2500 – (375 \times (PPM_{t,d} – 5))$
$78.333 \leq PPM_{t,d}$	-30000

For formula year t=10,	
$PPM_{t,d}$	$DPIP_{t,d}$
$0 \leq PPM_{t,d} \leq 5$	$1500 – (PPM_{t,d} \times 1000)$
$5 < PPM_{t,d} < 75.667$	$-3500 – (375 \times (PPM_{t,d} – 5))$
$75.667 \leq PPM_{t,d}$	-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:

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

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 $t \geq 8$ 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 $t \geq 8$ shall take the value 1.5mcm;

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

$LPLL_t$ means the linepack lower limit (mcm) in respect of formula year t and in formula year $t \geq 8$ 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 = 9,	
$DFIPE_t$	**$QDIIR_t$**
$0 \leq DFIPE_t < 2.7$	$8.8 – (2.667 \times DFIPE_t)$
$2.7 \leq DFIPE_t < 3.0$	$1.6 - (10.667 \times (DFIPE_t - 2.7))$
$3.0 \leq DFIPE_t$	-1.6
For formula year t = 10,	
$DFIPE_t$	**$QDIIR_t$**
$0 \leq DFIPE_t < 2.5$	$8.27 – (2.667 \times DFIPE_t)$
$2.5 \leq DFIPE_t < 3.0$	$1.6 - (6.4 \times (DFIPE_t – 2.5))$
$3.0 \leq DFIPE_t$	-1.6

where:

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

$QWAIR_t$ 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=9 and t=10 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:

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

where:

$\sum_{\text{all m}}$ 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=9 and t=10 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 information 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 information 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) Environmental Incentive

(a) Natural Gas venting incentive revenue

For the purposes of paragraph 1(a) of this condition, the environmental incentive revenue allowed to the licensee in respect of formula year t (EIR_t) shall depend on the value of $VIPM_t$ and shall be derived from Table L below:

Table L

$VIPM_t$	**EIR_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 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 t=9 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 t=9 shall take the value 3157;

$VIRP_t$ means the venting incentive reference price (£/tonne of natural gas vented) in respect of formula year and in t=9 shall take the value 1100;

"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.

(7) NTS Unaccounted for Gas Incentive

(a) Principal formula

For the purposes of paragraph 1(a) of this condition, the maximum NTS unaccounted for gas incentive revenue (£) allowed to the licensee in respect of formula year t ($UAGIR_t$) shall be derived as follows:

If

$UAGO_t < UAGT_t$

then

$UAGIR_t = Min[UAGRP_t \times (UAGT_t - UAGO_t), UCAP_t]$

Otherwise

$UAGIR_t = 0$

where:

$UAGO_t = \sum_d \left| UAGO_{t,d} \right|$

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 Q paragraph 2.3; and

$\sum_d |x|$ means the sum of the magnitude of x (irrespective of whether the value is positive or negative) on all days d in formula year t.

$UAGT_t$ means the gross NTS unaccounted for gas incentive target (GWh) in respect of formula year t and shall take the value 2862;

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

$UAGRP_t$ means the NTS unaccounted for gas reference price (£/GWh) in respect of formula year t and in formula years $8 \leq t \leq 10$ shall take the value 4666; and

$UCAP_t$ means the NTS unaccounted for gas incentive revenue cap (£) in formula year t and shall be derived from table M below:

Table M

	t=8	**t=9**	**t=10**
$UCAP_t$	2,000,000	3,000,000	5,000,000

SCHEDULE 2

PROPOSED 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 C27: Balancing Arrangements

1. The licensee shall use reasonable endeavours to:

   (a) develop in consultation with shippers and interested parties (including the Health and Safety Executive) a gas linepack product by 1 April 2011 and shall report to the Authority on the conclusions of such development and consultation by 1 May 2011; and

   (b) if directed by the Authority, take appropriate steps to implement a gas linepack product by 1 October 2011 in accordance with the conclusions set out in the report required by paragraph 1(a) of this condition.

2. The implementation of a gas linepack product pursuant to paragraph 1(b) of this condition shall be subject to the licensee receiving written approval from the Health and Safety Executive of any changes to its Safety Case which the licensee considers are required to implement the gas linepack product directed to be implemented.

3. The licensee shall use reasonable endeavours to introduce updated values of the "System Marginal Buy Price" as such term is defined in Section F 1.2.1(a)(i) of the licensee's network code as at 1 April 2010 and the "System Marginal Sell Price" as such term is defined in Section F 1.2.1(b)(i) of the licensee's network code as at 1 April 2010, by 1 April 2011 in consultation with shippers and other interested parties.

4. For the four month period ending 31 July 2010 and every four months thereafter (each such four month period being a "relevant period") until 31 July 2011 or the implementation of a gas linepack product (whichever is the later) the licensee shall (unless the Authority otherwise directs in writing) provide the Authority with a written statement setting out:

(a) the actions the licensee has taken to date pursuant to its obligations under this condition; and

(b) the actions the licensee intends to take pursuant to its obligations under this condition in the following four months.

The statement shall be submitted to the Authority within one month from the end of each relevant period.

5. For the purpose of this condition:

"gas linepack product" means a product made available by the licensee to allow shippers to transfer Daily Imbalances (as such term is defined in the licensee's network code in Section E 1.2.2 as at 1 April 2010) between Days (as such term is defined in the licensee's network code) through the use of linepack; and

"Safety Case" means the safety case prepared by the licensee pursuant to the Gas Safety (Management) Regulations 1996.