

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

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 section 23(3) and (4) of the Act, the Gas and Electricity Markets Authority (the "Authority"):
 - (i) gave notice (the "Notice") on 27 February 2009 that it proposed to modify the special conditions of the licence in accordance with the Schedule 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. It has come to the attention of the Authority that the Notice contained a minor drafting error. Paragraph 2(d)(i) of the proposed Special Condition C8F includes the following formula for the NTS Shrinkage Gas Volume Target:

$$GVT_{t,q} = GCVT_{t,q} + GCVTA_{t,q} + CVST_{t,q} + CVO_{t,q} + UAGT_{t,q}$$

The term "UAGT_{t,q}" is not defined in the proposed paragraph 2(d)(i) and should be replaced in the formula above with the term "NOUAG_{t,q}" which is defined in the proposed paragraph 2(d)(i). This change does not affect any other part of Special Condition C8F 2(d).

4. The modification takes account of the minor error noted in paragraph 3 above.
5. The Authority received five representations in relation to the proposed licence modification before the relevant time specified in the Notice, none of which were marked confidential. No responses were withdrawn.
6. The Authority has carefully considered the representations made in relation to the proposed licence modification and considers that no further amendment is necessary to the Notice in relation to the responses received.

All non-confidential representations made in relation to the proposed licence modification 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.

7. 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 modification before the relevant time specified in the Notice.

8. On 26 March 2009 the licensee gave its written consent to the licence modification proposed in the Schedule to the Notice, subject to an amendment being made to the Schedule to rectify the minor error noted in paragraph 3 above.

9. Information in relation to the licence modification is contained in the following documents:

"National Grid Gas (NTS) System Operator Incentives: Initial Proposals Consultation Report", National Grid, January 2009.

"National Grid Gas (NTS) SO Incentives for 1 April 2009: Initial Proposals Consultation", National Grid, November 2008.

These documents are available from the National Grid website at www.nationalgrid.com/uk.

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

"National Grid Electricity Transmission and National Grid Gas System Operator incentives from 1 April 2009: Final Proposals Consultation", Ofgem, February 2009.

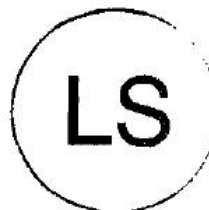
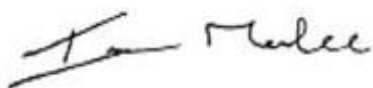
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THEREFORE:

In accordance with section 23 of the Act, and with the consent of the licensee, the Authority hereby modifies the licence in accordance with the Schedule to this Modification with effect on and from 06:00 hours on 1 April 2009.

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:



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

31 March 2009

SCHEDULE

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:

$$\text{SOOIRC}_t = \text{SC}_t + \text{OMC}_t + \text{OMPC}_t + \text{RBC}_t + \text{SIR}_t + \text{OMIR}_t + \text{RBIR}_t + \text{QIIR}_t + \text{EIR}_t + \text{UAGIR}_t$$

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:

$$\text{SC}_t = \text{GC}_{t,q} + \text{ECC}_{t,q}$$

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 $ECC_{t,q}$; and

$ECC_{t,q}$ 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.

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;

$OMPCT$ means the total costs incurred by the licensee in respect of formula year t in respect of the procurement and utilisation of services that have been paid for the purposes of establishing and testing potential future Operating Margins services and which are not included in the calculation of OMC_t ;

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;

$\text{Min} [x,y]$ is the value which is the lesser of x and y;

$\text{Max} [x,y]$ 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:

$$SIT_t = \frac{\sum_q \left[\text{GCRP}_{t,q} \times GVT_{t,q} \right] - \left[\text{ECRP}_{t,q} \times EVT_{t,q} \right]}{100} + SPCA_t + TNUoS_t + DUoS_t$$

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:

$$\text{GCRP}_{t,q} = \frac{\sum_{d=a}^b \text{GQFP}_{t,q,d}}{nq} * 0.75 + \frac{\sum_{m=g}^h \left(\frac{\sum_{d=y}^z \text{GMFP}_{t,q,m,d}}{nm} \right)}{3} * 0.25 + \text{GCRPU}_{t,q}$$

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:

$$GVT_{t,q} = GCVT_{t,q} + GCVTA_{t,q} + CVST_{t,q} + CVO_{t,q} + NOUAG_{t,q}$$

where:

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:

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

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 ($ECRP_{t,q}$)

- (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:

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

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:

$$EVT_{t,q} = ECVT_{t,q} + ECVTA_{t,q}$$

where:

$ECVT_{t,q}$ 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:

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

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:

$$SPCA_t = \frac{\sum^t (GECVT_{t,q} - GECVP_{t,q}) \times SPCU_t}{100}$$

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:

$$GECVT_{t,q} = GCVT_{t,q} + GCVTA_{t,q} + 3(ECVT_{t,q} + ECVTA_{t,q})$$

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

$ECVT_{t,q}$ and $ECVTA_{t,q}$ have the meanings 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:

$$DUoS_t = \sum_s kVAC_{t,s} + FC_{t,s} + CC_{t,s}$$

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:

$$\text{OMIR}_t = \text{OMAIR}_t + \text{OMUIR}_t$$

where:

OMAIR_t means the maximum operating margins availability incentive revenue (£million) allowed to the licensee in respect of formula year t and in formula year t=8 shall take the value zero; and

OMUIR_t means the maximum operating margins utilisation incentive revenue (£million) allowed to the licensee in respect of formula year t and shall be derived from the following formula:

if: $\text{OMUP}_t \geq \text{OMUC}_t$, then:

$$\text{OMUIR}_t = \text{OMUT}_t - \text{OMUC}_t$$

otherwise:

$$\text{OMUIR}_t = \text{OMUT}_t - \text{OMUP}_t$$

where:

OMUP_t means the operating margins utilisation performance measure (£million) in respect of formula year t and shall be the total costs incurred by the licensee in

respect of gas delivery service fees (including storage delivery overrun charges) for the purposes of satisfying Operating Margins Requirements (having the meaning given to that term in the network code);

OMUC_t means the operating margins utilisation incentive collar (£million) in respect of formula year t and in formula year t=8 shall take the value £0.5million; and

OMUT_t means the operating margins utilisation target (£million) in respect of formula year t and in formula year t=8 shall take the value £0.27million.

(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:

$$\text{RBIR}_t = \text{Min} [\text{RBCAP}_t, \text{Max} (\text{STIP}_t, \text{RBF}_t)]$$

where:

RBCAP_t means the maximum residual gas balancing incentive revenue (£million) in respect of formula year t, and in formula year $t \geq 8$ shall take the value £3.5million;

RBF_t means the minimum residual gas balancing incentive revenue (£million) in respect of formula year t, and in formula year $t \geq 8$ 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; and

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

PPM_{t,d}	DPIP_{t,d}
$PPM_{t,d} < PPT_t$	$PDCAP_t \times \left(\frac{PPT_t - [Max(0, PPM_{t,d})]}{PPT_t} \right)$
$PPM_{t,d} = PPT_t$	0
$PILL_t > PPM_{t,d} > PPT_t$	$PDF_t \times \left(\frac{PPT_t - [Max(0, PPM_{t,d})]}{PPT_t - PILL_t} \right)$
$PPM_{t,d} \geq PILL_t$	PDF_t

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;

PPT_t means the price incentive target (%) in respect of formula year t and in formula year t ≥ 8 shall take the value 5;

PDCAP_t means the price incentive daily cap amount (£) in respect of formula year t and in formula year t ≥ 8 shall take the value £5000;

PILL_t means the price incentive lower limit (%) in respect of formula year t and in formula year t ≥ 8 shall take the value 85; and

PDF_t means the price incentive daily floor in respect of formula year t and in formula year t ≥ 8 shall take the value £-30,000.

(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 $t \geq 8$ 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:

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

where:

$\text{Max} [x,y]$ 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 allowed to the licensee in respect of formula year t (QIIR_t) shall be derived from the following formula:

$$QIIR_t = QDIIR_t + QWAIR_t + QWTIR_t + (UWIIC_t \times 1.06)$$

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 QDIP_t as derived in accordance with Table I below:

Table I

QDIP_t	QDIIR_t
$QDIP_t \leq -0.05$	-£1.6m
$-0.05 < QDIP_t < 0$	$(QDIP_t \times 100) \times \text{£}0.32\text{m}$
$QDIP_t = 0$	0
$0 < QDIP_t < 0.05$	$(QDIP_t \times 100) \times \text{£}0.32\text{m}$
$QDIP_t = 0.05$	£1.6m
$0.05 < QDIP_t < 1$	$[((QDIP_t - 0.05) \times 100) \times \text{£}0.08\text{m}] + \text{£}1.6\text{m}$
$QDIP_t \geq 1$	£9.2m

where:

QDIP_t has the meaning set out in paragraph 5(b) of this condition;

$QWAI R_t$ means the quality of website availability incentive revenue in respect of formula year t and shall be derived from the following formula:

$$QWAI R_t = \sum_{\text{all } m} QWAI R_{t,m}$$

where:

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

$QWAI R_{t,m}$ 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

$WAPM_{t,m}$	$QWAI R_{t,m}$
$WAPM_{t,m} \leq (0.64 \times WABM_{t,m})$	-£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 formula year $t=8$ shall take the value 0.993;

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

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

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=8 shall take the value 0.905.

UWIIC_t means the agreed cost of upgrading the website in formula year t, and shall be derived in accordance with paragraph 5(f) of this condition.

(b) Quality of demand information performance measure

For the purposes of paragraph 5(a) of this condition the quality of demand information performance measure (QDIP_t) shall be derived from the following formula:

$$QDIP_t = \frac{\left(0.030 - \frac{\sum_d^D |DADF_d - AD_d|}{\sum_d^D AD_d} \right)}{0.030}$$

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;

$WTPNA_{tm}$ 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

$WTPDF_{tm}$ 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 quality of demand information performance measure (QDIP_t) and/or the quality of website information performance measure (QWIP_t) 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.

(f) Upgrade of website information incentive revenue

(i) where:

(aa) the licensee has notified the Authority of the potential to upgrade its website to provide additional or more timely information; and

(bb) the Authority is satisfied that the upgrade will deliver the proposed benefits and that the costs are reasonable,

the Authority may issue a direction defining a value for $UWII C_t$ for the formula year $t=8$.

(ii) Where the Authority has not issued a direction under paragraph 5(f)(i) of this condition, $UWII C_t$ shall be equal to 0.

(iii) A direction issued by the Authority under paragraph 5(f)(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(f)(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.

(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=8 shall take the value 1688;

$VITU_t$ means the venting incentive target volume upper limit (in tonnes of natural gas) in respect of formula year t and in t=8 shall take the value 1865;

VIRP_t means the venting incentive reference price (£/tonne of natural gas vented) in respect of formula year and in t=8 shall take the value £574/tonne;

“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

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

Otherwise

$$UAGIR_t = 0$$

where:

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

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 network code TPD Section E) following the assessment of NTS Shrinkage for each such day d performed in accordance with 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 2862GWh;

$\text{Max } [x,y]$ is the value equal to the greater 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/GWh; 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