

The Company Secretary Northern Ireland Electricity plc PO Box 2 Danesfort 120 Malone Road Belfast BT9 5HT

19 December 2006

Dear Sir

Electricity (Northern Ireland) Order 1992
Direction pursuant to paragraph 2.3 of Schedule 4 to the Transmission and Public Electricity Supply Licence Document.

In pursuance of paragraph 2.3 of Schedule 4 to the Transmission and Public Electricity Supply Licence Document (the "Licence Document") granted to Northern Ireland Electricity plc (the "licensee") under the Electricity (Northern Ireland) Order 1992, the Northern Ireland Authority for Energy Regulation (the "Authority") hereby directs that the method for calculating the values to be ascribed to the terms ACO<sub>t-5</sub>, Dep<sub>t</sub> and CRAB<sub>t</sub> (components of the formulae for calculating the maximum core revenue M<sub>Dt</sub>) shall be as set out in this Direction.

The Direction also sets out the calculation of the efficiency incentive in relation to network capital investments. This item is included within the  $D_t$  term of the  $M_{Dt}$  formula.

For the purpose of providing additional clarification of the overall method that shall be used in calculating  $M_{Dt}$  in relevant years t=2008 to 2012 inclusive, Tables 1 to 3 below set out indicative calculations. These indicative calculations are based on the licence formulae together with values for all the formula inputs which have either been specified in the licence or forecast as shown in Table 1 below. Forecast values in all the tables and appendices are shown shaded.

Table 1 Inputs

	2006	2007	2008 £m	2009 £m	2010 £m	2011 Em	2012 £m	Notes
ACO <sub>t-5</sub>			41.5	37.9	38.3	38.3	38.3	Appendix 1
P <sub>t-5</sub>			0.0	4.7	4.4	4.4	4.4	
FUO <sub>t</sub>			15.9	17.0	17.9	18.7	19.6	
UO,			15.9	17.0	17.9	18.7	19.6	
Capex	50.4	53.0	59.2	66.4	74.3	76.2	78.1	Appendix 2
ANNC <sub>t-5</sub>			1.0	1.8	1.6	2.3	1.6	
CAt		i be	24.1	25.7	27.9	30.1	32.4	
VWACC <sub>1</sub>			0.05545	0.05545	0.05545	0.05545	0.05545	
TAF <sub>t</sub>			0.00500	0.00500	0.00500	0.00500	0.00500	
RPI,			203.1	208.2	213.4	218.7	224.2	
RPI <sub>t-5</sub>			177.9	182.6	188.6	193.3	198.1	

Based on these inputs the calculated values derived from the various feeder formulae are shown in Table 2.

Table 2 Calculated values

	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m	Notes
Dep <sub>t</sub>	43.5	45.4	48.0	50.3	52.7	Appendix 2
Fdep <sub>t</sub>	38.5	38.3	38.5	38.3	38.0	Appendix 2
Vdep <sub>t</sub>	5.0	7.1	9.5	12.0	14.7	Appendix 2
CRAB <sub>t</sub>	841.1	881.3	922.1	971.0	1,020.6	
CRAB <sub>t-1</sub>	806.4	841.1	881.3	922.1	971.0	Appendix 2
PCA <sub>1</sub>	0.0	0.0	0.0	0.0	0.0	
CO,	47.4	43.2	43.4	43.4	43.4	
P <sub>t</sub>	0.0	5.3	5.0	5.0	5.0	
Ret <sub>t</sub>	46.2	48.3	50.6	53.1	55.9	
TĄ.	0.8	8.0	0.8	0.9	0.9	
Tax <sub>t</sub>	14.8	15.6	16.0	16.7	16.8	
RRF <sub>t</sub>	0.0	1.7	3.6	4.4	4.4	
RAB,	833.8	871.7	912.7	958.1	1,007.9	
NNC	1.2	2.0	1.8	2.6	1.8	
Int <sub>t</sub>	32.1	33.6	35.2	36.9	38.8	

Based on these calculated values for the feeder formulae, Table 3 shows indicative values for  $M_{Dt},\,PC_t,\,$  and  $CPA_t$ :

Table 3 Indicative values for M<sub>Dt</sub>, PC<sub>t</sub>, and CPA<sub>t</sub>

	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m
M <sub>Dt</sub>	165.5	172.2	179.2	186.4	193.9
M <sub>Dt</sub> PC <sub>t</sub>	165.5	172.2	179.2	186.4	193.9
CPA <sub>t</sub>	167.1	175.8	183.6	190.8	196.9

### Calculation of ACO<sub>t-5</sub>

Appendix 1 of this document shows how the values for  $ACO_{t-5}$  for relevant years 2008 to 2010 have been derived. The values for  $ACO_{t-5}$  in respect of relevant years 2011 and 2012 shall be calculated according to the same method, such method being the same as the calculation that produces the values of  $ACO_{t-5}$  in Appendix 1.

The licensee shall undertake to include a pro-forma calculation (in line with that set out in Appendix 1) in the supplementary section of the regulatory accounts each year, commencing with the submission of the 2005/06 accounts.

### Calculation of Dept

Appendix 2 shows the elements of the Dept term, i.e. fixed depreciation (Fdept) and variable depreciation (Vdept). Fixed depreciation (Fdept) represents:

- (a) depreciation on pre-vesting assets calculated in accordance with the profile determined by the Monopolies and Mergers Commission and recorded in its March 1997 report entitled "Northern Ireland Electricity plc – A report on a reference under Article 15 of the Electricity (Northern Ireland) Order 1992";
- (b) depreciation on post-vesting network assets acquired pre-2006 which are depreciation on a "kinked" basis, i.e. depreciation is charged at 3% for 20 years and 2% for the remaining 20 years: and
- (c) depreciation on non-operational capital expenditure incurred in the period 1994 to 1997, which is depreciated over 20 years on a straight-line basis, i.e. 5% over 20 years.

Variable depreciation (Vdep<sub>t</sub>) represents depreciation on network assets acquired post 2005. The assets have been depreciated on a "kinked" basis, i.e. depreciation is charged at 3% for 20 years and 2% for 20 years.

### Calculation of CRAB,

Appendix 2 of this document also shows the method of calculating the closing RAB values (CRAB<sub>t</sub>) based on the forecast network capex figures and RPI figures as shown in table 1.

CRAB<sub>t</sub> is the closing regulatory asset base in relevant year t. It shall be calculated by rolling forward the regulatory asset base from one relevant year to the next according to the following rule:

- (a) multiply the closing regulatory asset base in year t-1 (CRAB<sub>t-1</sub>) by RPI<sub>t-1</sub>;
- (b) add operational capital expenditure in relevant year t;
- (c) deduct fixed and variable depreciation in accordance with the method specified above for calculating Dept; and
- (d) deduct any proceeds from the disposal of assets.<sup>1</sup>

<sup>1</sup> The June 2002 Final Proposals document states that "where an asset is disposed of the asset base is reduced by the amount of the disposal price less any reasonably incurred costs five years after the disposal".

For the purposes of calculating CRAB<sub>t=2007</sub> only, a further deduction equal to £8.8 million \* RPI<sub>2007</sub>/RPI<sub>2003</sub> shall be applied in accordance with the agreement with the Authority made at the time of the disposal by Viridian of Moyle Interconnector Limited that the T&D RAB would be reduced by £8.8 million (02/03 prices) at the beginning of RP4<sup>2</sup>.

The licensee shall undertake to include a RAB table (in the same format as that set out in Appendix 2) in the supplementary section of the regulatory accounts each year, commencing with the submission of the 2005/06 accounts.

### Calculation of the capex efficiency incentive

In respect of approved capex efficiency gains, an increase shall be made to regulated revenue entitlement under the  $D_t$  term two years after the efficiency is made. The increase in relevant year t therefore equals  $0.389^3$  \* ( $Proc_{t-2} + Lab_{t-2}$ ).

Proc<sub>t</sub> relates to the aggregate of savings and losses made on all contracts associated with the procurement of materials and services required for the capex programme in that year. The savings for each contract will be based on the difference between (i) the actual cost of procuring the volumes required; and (ii) the cost that would have been incurred if the same volume had been purchased under the contract that was in place in 2006/07 (the last year of RP3), after adjusting for RPI (i.e. by multiplying the 2006/07 contract price by RPI<sub>1</sub>/RPI<sub>2007</sub>).

Lab<sub>t</sub> relates to labour productivity savings. The savings for each year will take account of the underlying change in productivity between year t and 2006/07 (the last year of RP3). This will be based on using key capex outputs to normalise the level of manpower employed in delivering the capex programme for year t and 2006/07. The gain in manpower employed for that year shall be based on the aggregate of savings and losses in the delivery of each capex output.

For each capex output, the assessed manpower savings shall be based on the difference between (i) the level of manpower employed in the delivery of the actual volume of output in year t (FTE<sup>4</sup><sub>t</sub>); and (ii) the equivalent level of manpower if the same volume had been delivered under the level of productivity (output per employee) that is assessed to have applied in 2006/07 (FTE<sub>2007</sub>).

The notified gain for that year shall be calculated using the aggregate of the FTE<sub>t</sub> and FTE<sub>2007</sub> for each output (AFTE<sup>5</sup><sub>t</sub> and AFTE<sub>2007</sub> respectively) and the actual cost to NIE T&D of the provision of network services by NIE Powerteam in delivering the capital programme in that year (PTL<sup>6</sup><sub>t</sub>) according to the following formula: PTL<sub>t</sub> \* (AFTE<sub>2007</sub> – AFTE<sub>t</sub>)/AFTE<sub>t</sub>.

### Amendments to or revocation of this Direction

As recorded in the document entitled "Summary of Arrangements between Moyle and the Viridian Group" The calculation of the 38.9% is shown in appendix 3 and represents five years worth of return and depreciation on £1m of efficiency.

<sup>&</sup>lt;sup>4</sup> FTE represents a Full Time Equivalent person

<sup>&</sup>lt;sup>5</sup> AFTE represents an Actual Full Time Equivalent person

<sup>&</sup>lt;sup>6</sup> PTL represents PowerTeam Labour

This Transmission and Distribution Price Control Direction shall not be capable of being revoked or modified (either by revocation or modification of this Direction or by the issue of another direction) without the prior written consent of the licensee.

Yours Faithfully

lain Osborne

For and on behalf of the Northern Ireland Authority for Energy Regulation

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### Appendix 1

			-	
	2003	2004	2005	
Actual Controllable Operating Costs	Actual	Actual £m	Actual £m	Notes
Total operating costs per the Regulatory Accounts	121.0	91.0	91.5	Pre 2005 NIE regulatory accounts were prepared on a CCA basis. In the 2005 accounts the 2004 figures were re-stated on a HCA basis. The figures that have been used in this table for 2003 represent Cost of Sales, Distribution Costs and Administrative expenses as shown on Page 4 of the 2003 Regulatory Accounts. The figures used for 2004 and 2005 have been taken from Page 9 of the 2005 Regulatory Accounts.
Deductions				
Depreciation	-42.5	-28.5	-30.8	T&D Depreciation charge
Uncontrollable Operating costs	-12.2	-13.0	-13.6	Amounts incurred in respect of Rates, Wayleaves and Licence Fees
Pension Cost Charge	0.0	-4.9	-4.6	This relates to the P&L pensions charge and is deducted since an allowance for pension costs paid is given under the Pt term.
Moyle Interconnector	-14.1			
Scottish Power UoS Charges	-2.0			
Excluded Service Income	e.e.	-2.7	4.4	Income associated with excluded services is deducted on the basis that costs associated with these match the income received. This income mainly comprises 3 <sup>rd</sup> party income and an element of recharges to other businesses within the group. It also includes income in connection with the Ballylumford Contract Buyout (CBO) Agreement. For accounting reasons this income is shown within T&D's accounts as a reduction in costs. In order to reflect the true level of T&D costs this item needs to be added back to costs.
Energy Efficiency Incentive and Levy	-3.8	-4.3	0.0	In 2003 and 2004 T&D recovered revenue through its UoS tariff to fund the Energy Efficiency Programme. These funds were made available to Suppliers who participated in the Programme. These figures represent the transfer of income from T&D to Supply. As from 2005 funds have been made available through alternative means DETI / PSO charges.
Market Opening Costs	0.0	-0.1	-1.0	Costs relating to market opening have been deducted since these are recovered separately via PSO charges.
ROF / SMART	0.0	-0.4	-0.4	Cost associated with ROF arrangements and the SMART programme have been deducted since these are recovered via the $D_t$ term.
One-off Opex Adjustments	-2.5	-1.5	0.0	Adjustments in 2003 and 2004 to implement the agreed reductions to CO <sub>t</sub> in 2008 and 2009 as specified on Page 3 of the Final Proposals paper dated September 2006.
<u>Additions</u>				
Profit on sale of fixed		0.5		Profit on the disposal of assets is dealt with through an adjustment to the Regulatory Asset

41.5 37.9 38.3	1.0 1.8 In calculating the controllable operating costs allowance any expenditure in connection with non-network capex is treated as operational expenditure and is added to the opex figure.	
37.9	010	1.8 1.6

# T&D NETWORK REGULATORY ASSET BASE (RAB) 2

T&D Regulatory Asset Base @ 200	V Ass	et B	ase	@ 2(	204/	4/05 Prices	lice													
TSD RAB @ 0405 Prices	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2008	2007	2008	2009	2010	2011	2012	Notes
	8	ā	8	8	8	5	5	S	٤	ā	S	£	Ş	ā	Ş	Ę	\$	ξ	ā	
Pre Vesting	. 300	476.9	3077	0	0.300	0.500	283.0	0000	2000	C 030	0.100	7010	9 704	+77.0	0 449	117.4	1330	0 101	000	
Operang value	4 60 60	6690	0.00	(36.90)	0334	2000	(78.3)	0000	0.000	7.002	0.162	(477)	94.0	945	345	4360	(10.8)	815	200	Fixed Dansciation
Closing value pre-vesting assets	475.3	448.5	421.8	395.0	361.9	332.0	303.8	276.5	290.2	231.0	212.5	\$ 8 8	177.8	161.9	147.4	133.9	1210	109.2	8	
Poet weeting																				
Opening value	00	29.0	77.6	132.3	187.6	238.6	288 6	358 7	426.6	474.9	206.7	538.6	584.1	588.9	615.0	643.0	673.9	703.4	737.5	
Network capex	27.1	47.6	55.4	909	69.0	59.9	82.3	82.7	65.0	50.8	52.4	502	49.2	50.5	550	60.2	65.7	2.59	65.7	
Depreciation on network capex pre 2006	(9:0)	(2.2)	(3.9)	(5.7)	(7.5)	(83)	(11.8)	(142)	(162)	(17.7)	(19.2)	(20.6)	(20.6)	(20.6)	(20 6)	(20.6)	(20.6)	(306)	(30.6)	Fixed Depreciation
Depreciation in network capex post 2005	8	0.0	00	00	0.0	0.0	0.0	00	0.0	00	0.0	0.0	(1.5)	(3.0)	(4.6)	(6.4)	(8.4)	(10.4)	(12.4)	Variable Depreciation
Asset disposals					0.0	00	00	00	00	(0.8)	(0.7)	(3.5)	(0.7)	(1.2)	6.5	0.73	(6.7)	0.0	00	Proceeds from Asset
Non-operational capex	2.6	3.6	37	1.0	0.0	0.0	00	00	0.0	000	000	0.0	0.0	00	00	0.0	000	0.0	00	
Depreciation on non-operational capex	(£9)	03	0.50	(0.5)	609	(0.5)	0.50	0.50	60	(0.5)	60	605	(0.5)	(0.5)	60	(0.5)	0.50	0.50	00	Fixed Depreciation
Closing Value Post-Vesting Assets	290	77.6	132.3	187.6	238.6	288.6	3587	426.6	474.9	2067	538.6	-55 -53	589.9	6150	6430	6239	703.4	737.5	769 6	
Closing RAB Value	5043	526.1	5540	582.6	600.4	620.7	662.5	7.03.4	725.1	737.6	751.7	758.9	7.137	776.9	790.4	807.8	024.4	846.7	868.0	
RAB Adustment Movie										(106)	(103)	(100)	(98)	(83)	(83)	(83)	(83)	(83)	(83)	
T&D RAB Closing Value										727.0	740.8	748.9	758.1	767.6	781.1	798.4	815.0	837.3	858.7	
T&D Regulatory Asset Base @ Nominal Prices	v Ass	et B	ase (	Ž (B)	omir	lal P	rice	ري اري												
T&D RAB @ Nominal Prices	Maria Company																			
	1994	1995	1936	1997	1938	1999	2000	5 5 E	2002	2003	2004	2005	2006	2007	2008	2008	2010	2011	2012	Notes
Dra Vaeting			3		1	•	•	•		5	3	i	i	5	i		•	•		
Opening value	372.5	365.9	356.3	343.9	334.0	315.6	283.1	276.4	255.5	236.0	2236	2125	199.7	166.8	1744	162.7	151.4	1403	129.8	
Depreciation on pre-vesting assets	U5D 3574	(20 <u>5)</u>	1350	(21.8) 222.1	306.0	789.5	268.2	2516	2313	217.9	205.8	194.8	(17.4)	1707	(157)	(150) 147.7	1369	13.73	1169	Fixed Depreciation
											- I									
Consider the control of the control	Š	500	ŭ	107.0	458.6	2081	8 750	206.A	204.3	448.0	490.5	538.6	578.5	6407	6633	7007	163.4	RASE	876.6	
Network capex	8 8	38.6	440	484	6.69	523	727	75.2	1.09	47.9	50.7	502	90.6	530	582	98.4	743	76.2	78.1	
Depreciation on network capex pre 2006	(0.5)	(1.7)	3.0	(4.7)	(6.3)	(8.1)	(10.4)	(13.0)	(15.0)	(16.7)	(18.5)	(20.6)	63.33	03.2	(223)	(22.8)	(23.4)	(23.9)	(24.5)	Fixed Depreciation
Depreciation in network capex post 2005	00	00	00	00	00	00	00	00	0.0	00	000	000	(3.5)	(3.1)	(6.0)	(7.1)	(3.5)	(12.0)	(14.7)	Variable Depreciation Proceeds from Asset
Asset disposals	0:0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	(0.8)	(0.7)	(3.5)	(0.7)	(12)	(1.2)	(1.9)	(7.8)	00	0.0	Disposals
Non-operational capex	σ •	2.7	29	0.0	00	00	00	0.0	00	00	00	000	0.0	00	0.0	00	00	0.0	00	
Depreciation on non-operational capex	100	62	(0.4)	0.4	10.50	6.50	60	60	(0.5)	60	(0.5)	0.50	90	(90)	(90)	90	10.61	( <u>9</u> 0)	(90)	Fixed Depreciation
Closing Value Post-Vesting Assets	218	28.7	105.1	1530	201.7	251.8	316.7	388.2	438.9	677.9	524.5	584.1	604.6	646.1	692.4	7438	7367	855.2	914.8	
Closing RAB Value	379.2	405.0	440.1	475.1	507.0	541.3	584.8	639.7	670.1	695.8	121.2	758.9	786.0	116.2	851.1	894.6	932.6	961.8	1031.7	
RAB Adjustment Moyle										99	99	100	88	88	997	-103	10.6	901-	111	
T&D RAB Closing Value	379.2	405.0	440.1	475.1	507.8	541.3	584.8	639.7	670.1	705.8	137.2	768.8	776.9	806.4	841.1	631.3	\$22.1	974.0	1020.8	

## Calculation of Capex Efficiency Percentage

0.00 0.00 0.03 0.03 0.03 0.03 0.07 0.03 0.07 0.00 0.09 0.00
0.03 0.03 0.00 0.09 0.08 0.08 0.08
Depreciation 0.03 Return 0.03 Return 0.00 Total 0.10  Ist 5 Years 0.389 Remaining 0.611 Percentage Saving 61.1% Total 1.000  Total 100.0%