APPENDIX C - NETWORK ENTRY PROVISIONS

1. Gas Entry Conditions

1.1 These Gas Entry Conditions shall apply at the System Entry Point.

1.2 The gas will comply with the System's statutory safety requirements.

1.3 Gas delivered to the System at the System Entry Point shall not contain any solid, liquid or gaseous material which would interfere with the integrity or operation of the System or any pipeline connected to such System or any appliance which a consumer might reasonably be expected to have connected to the System. In addition, all gas delivered to the System at the System Entry Points shall be in accordance with the following values:-

(a)	Hydrogen Sulphide	not more than 5mg/CM.
(b)	Total Sulphur	not more than 50mg/CM.
(c)	Hydrogen Content	not more than 0.1 mol%.
(d)	Oxygen Content	not more than 10 ppm.
(e)	Hydrocarbon Dewpoint	not more than minus two degrees Celsius (-2°C) at any pressure up to the delivery pressure provided in paragraph (o).
(f)	Water Content	not more than 50 mg/CM nor such as would cause a water dewpoint more than minus ten degrees Celsius (-10°C) at the delivery pressure provided in paragraph (o).
(g)	Wobbe Number	shall be between 47.2 MJ/CM, and 51.41 MJ/CM.
(h)	Incomplete Combustion Factor (ICF)	not more than 0.48.
(i)	Soot Index (SI)	not more than 0.60.
(j)	Odour	gas delivered to the System shall be odourised with odourant NB (80% tertiarybutyl mercaptan, 20% dimethyl sulphide), and the odourant injection rate will be 7 mg/scm and may be varied at Transco's written request between 4 mg/scm and 8 mg/scm.
(k)	Carbon Dioxide	not more than 2.0 mol%.
(l)	Total Inerts	not more than 7.0 mol%.

(m) Gross Calorific Value shall:-

(i) not be lower than 36.9 MJ/CM or (if greater) the Target CV; and

(ii) not be higher than 42.3 MJ/CM;

provided that gas may be delivered to the System at the System Entry Points with a Gross Calorific Value as low as 1 MJ/CM below the Target CV (provided that the Gross Calorific Value of gas delivered to the Transco System shall not be less than 36.9 MJ/CM) where the DFO is able to demonstrate to Transco's reasonable satisfaction that the flow weighted average calorific value of gas to be delivered to the System at the System Entry Points during the Gas Flow Day in question is not anticipated to be less than the Target CV.

For the purposes of this paragraph (m):-

(A) "**Target CV**" shall mean the lowest of:-

(1) 39.1 MJ/CM real gross dry;

(2) the lowest gross calorific value of gas which Transco reasonably estimates it will be accepting for delivery into the South East LDZ from all Relevant Input Points on the relevant Day; and

(3) the flow weighted average gross calorific value of gas (the calculation of which shall be determined by Transco in accordance with all relevant legislation) which Transco reasonably estimates it will be accepting for delivery into the South East LDZ from all Relevant Input Points and the System Entry Point on the relevant Day less 1MJ/CM;

as from time to time notified by Transco to the DFO as set out below, it being acknowledged that Transco shall not have

any liability whatsoever to the DFO, the Delivery Facility Owners or any other person should its estimates above prove to be incorrect. Transco shall inform the DFO at or before 20:00 hrs on D-1 of the Target CV that the DFO must achieve during the Gas Day. In the event that Transco does not inform the DFO of a Target CV by 20:00 hrs on D-1 then it shall be considered that the Target CV for D-1 shall apply to the coming Gas Day. If Transco or the DFO wishes to change the Target CV after 20:00 hrs on D-1 then it shall be by agreement. If the DFO believes that it cannot meet the Target CV (whether before or during the Gas Day) it shall inform Transco immediately; and

(B) "**Relevant Input Points**" shall mean all System Entry Points (as defined in the Network Code) as may exist from time to time into the South East LDZ (excluding the System Entry Point), and all NTS/LDZ Offtakes (as defined in the Network Code) as may exist from time to time also into the South East LDZ.

(n) Delivery Temperature — shall be between one and thirty eight degrees Celsius (1°C and 38°C).

(o) Pressure — shall be that required to deliver gas into the Transco system taking account of the back pressure as the same shall vary from time to time. The delivery pressure shall be not less than 1.0 bar gauge and not more than 1.7 bar gauge at the valve marked "122" (and the pressure allowable within Day will be determined from actual pressures in the Local Transmission System and by agreement between Transco and the DFO, such agreement not to be unreasonably withheld or delayed) and shall not exceed 38.0 bar gauge at the valve marked "2045" in each case on the diagram in Schedule A to Appendix A.

Incomplete combustion factor (ICF) and Soot Index (SI) have meanings as defined in Part 1 of Schedule 3 of the Gas Safety (Management) Regulations 1996.

1.4 In order to meet the calibration ranges for typical analysis equipment, unless agreed otherwise by the Parties (such agreement not to be unreasonably withheld or delayed),

the concentration ranges of the following components in the gas delivered shall be as follows:-

Component	% mole Low	% mole high
Methane	84.00	98.00
Ethane	0.25	9.00
Propane	0.00	3.50
i-Butane	0.00	1.00
n-Butane	0.00	1.00
neo-Pentane	0.00	0.50
i-Pentane	0.00	0.50
n-Pentane	0.00	0.50

The Parties acknowledge that Transco may require the approval of Ofgem prior to being able to agree to any change to the concentration ranges referred to above, and Transco will act reasonably in seeking approval from Ofgem in an expedient manner, but Transco confirms that it will not otherwise unreasonably withhold or delay its agreement to any such change.

2. Measurement Provisions

2.1 The Measurement Provisions shall be as set out in Appendix D.

3. Points of Delivery

3.1 The points of delivery at the System Entry Point shall be those illustrated in the diagram contained in Schedule A to Appendix A.