

Annexure-IV

Customers as per simulation file	Customer names as per exit point (simulation file)	Contracted qty (MMSCMD)	Contractual pressure	Contractual temperature	Gas Quality/Composition	Extract of Gas contract provided (Yes/No)	Remarks
Cust 1	GGL CGS_Sarigam	0.140	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 2	GGL-Amboli	0.724	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 3	GNFC (Fertilizer- Bharuch)	0.210	30 bar to 49 bar (both Inclusive)	Not more than 45 degree celsius	Methane - 80 - 97 %, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 4	NTPC Jhanor	0.001	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 5	Apraava Energy Private Limited	0.000	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 6	GSFC fertilizer (Baroda)	0.348	35 Kg/Cm2 to 48 Kg/Cm2 (both Inclusive)	Not More than 45 degree celsius	Methane > 80%, Ethane < 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 7	CGSML Gana	0.081	20 - 50 barg	Not more than 45 degree Celcius	Methane - 80 - 97 %, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 8	SGL Ambapur	0.280	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 9	GGL IFFCO CNG	0.020	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 10	Arvind mill Santej	0.020	21b to 27b	Shipper responsible to increase the temperature upto desired level, at entry < 45°	H2S ppm < 5 CO2 mole - 6 % Temperature max - 55Deg Total Inerts mole - 8% Total Sulphur by ppm < 10	Yes	

Cust 11	SGL Himmatnagar	0.140	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 12	SGL Mehsana	0.170	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 13	GPPC	1.120	20 bar to 45 bar (gauge) (both inclusive).	Not more than 45 Degree C	Methane - 80%- 97%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 14	GGL Rajkot	0.470	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 15	GGL Navagam	0.282	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 16	GGL Morbi	0.861	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 17	GGL Halol	0.095	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 18	NAYARA	1.000	Prevailing pressure in transporter's network	lower than ambient soil pressure	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 19	SGL Sedrana	0.059	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 20	GGL Valsad	0.040	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 21	GGL Navsari	0.080	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 22	GGL Bilimora	0.015	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 23	GGL Gundlav	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 24	GGL Atul TOP	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 25	Raymond Industries	0.001	20 bar to 40 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 26	Welspun-Vapi	0.037	20 bar to 40 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 27	GGL Dabhan	0.070	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 28	GGL Chapra	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 29	RIL Naroda	0.001	20 bar (g) to 45 bar (g)	lower than ambient soil pressure	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 30	HPCL	0.046	20 - 50 barg	Not more than 45 degree Celcius	Methane - 80 - 97 %, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 31	SGL Syntax	0.040	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 32	SGL Mubarakpur	0.170	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 33	SGL Ambavpura (Kadi)	0.140	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 34	SGL Mandali	0.000	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 35	Jubilant	0.048	30 bar to 49 bar (both inclusive)	Not more than 45 Degree C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 36	GGL Kelod	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 38	GGL Vartej	0.020	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 39	GGL Petlad	0.040	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 40	GGL Surendra Nagar	0.071	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 41	Ajanta	0.000	20-40 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 42	Sumanglam Glass	0.000	20-40 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 43	Euro Ceramics	0.010	20-40 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 44	Metrade	0.010	20-40 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 45	Ratnamani	0.003	20-40 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 46	Welspun CGS Anjar	0.124	20-40 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 47	GGL Motimoldi	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 48	GGL Sajod	0.004	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 49	GGL Occhan	0.070	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 50	GSFC Sikka	0.10	35 Kg/Cm2 to 48 Kg/Cm2 (both Inclusive)	Not More than 45 degree celsius	Methane > 80%, Ethane < 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 52	Adani Ahmedabad (vatva)	0.940	25 - 49 barg	Not more than 45 degree Celcius	As per PNGRB Reg	Yes	
Cust 53	Nirma	0.180	20-49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 54	Suzlon	0.050	20b to 50b	Temp 4.5 to 45 Deg C	Methane 80-97% Ethane 1-8% Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25% H2S mg < 7/SCM CO2 mole - 6 % Total Inerts mole - 8% Total Sulphur mg < 50/SCM, GHV -8853 to 10517 Kcal/SCM,	Yes	
Cust 55	GSPC	0.060	5 Bar (gauge) to 49 bar	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 56	Chimique	0.002	20 -40 barg	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 57	Piramal Glass	0.100	20 -40 barg	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 58	Banas Dairy	0.028	20 - 40 barg	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 59	GGL Chela	0.001	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 60	SGL Hansalpur	0.006	20 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 61	Suzuki	0.051	21 - 48 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 62	GGL Amreli	0.041	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 63	IRM Gundala	0.023	25 bar to 49 bar (both inclusive)	Shipper responsible to increase the temperature upto desired level	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 64	GGL Chapri	0.027	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 65	AGL Thasra	0.075	25 - 49 barg	Not more than 45 degree Celcius	As per PNGRB Reg	Yes	
Cust 66	GGL Ambardi	0.005	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 67	GGL Vantevad	0.000	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 69	GGL Nagor	0.026	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 70	Parle	0.004	20 bar to 25 bar (both Inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 71	Styrolution INEOS	0.010	20 bar to 49 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 72	Panch Mahal Dairy	0.027	20 bar to 49 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 73	Roechling	0.016	20 bar to 49 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 75	IFFCO fertilizer	1.120	40 bar to 50 bar (both Inclusive)	Not less than - 4.45 Deg Cel and not more than 55 degree celsius	Methane - 80 - 97 %, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 76	GSEC, Dhuvaran CCPP 1 & 2 & 3	0.783	30-50 bar	Shipper responsible to increase the temperature upto desired level	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 77	GGL CGS_Vapi	0.478	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 78	HNG float glass	0.150	20 bar to 49 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 79	Adani Baroda	0.100	25 - 49 barg	Not more than 45 degree Celcius	As per PNGRB Reg	Yes	
Cust 80	GGL Sanad (Nano)	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 82	Indian Peroxide Limited	0.020	25 - 49 barg	Not more than 45 degree Celcius	As per PNGRB Reg	Yes	
Cust 83	BASF	0.016	25b to 49b	Shipper responsible to increase the temperature upto desired level	Methane - Not less than 80% Ethane - 1 to 8% Propane < 3.3% iC ₄ < 2% iC ₅ + nC ₅ < 0.25%	Yes	

Cust 84	Styrolution Dahej	0.005	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 85	GACL Dahej	0.000	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 86	Roxule	0.003	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 87	Sarju Impex	0.060	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 89	DIC Finechem	0.002	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 90	Torrent DGEN	0.000	na	na	na	No	No contract

Cust 91	Opal	0.080	38 bar (g) to 49 bar (g)	not greater than 45 degree	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 92	Indobaijin	0.074	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 93	GGL Dahej	0.008	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 94	GNFC TDI	0.127	30 bar to 49 bar (both Inclusive)	Not more than 45 degree celsius	Methane - 80 - 97 %, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 95	China Steel	0.020	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 96	Grasim	0.046	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 97	GGL Ankhi	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 98	GGL Takarwada	0.000	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 100	GGL Wadhela	0.008	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 101	GGL GNFC CNG	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 102	IRM Energy	0.224	25 bar to 49 bar (both inclusive)	Shipper responsible to increase the temperature upto desired level	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 103	GGL Palitana	0.002	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 104	RAMA Cylinders-Bhimaser	0.004	20 bar to 25 bar (both Inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 105	Navin Fluorine	0.003	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 106	GGL Dhruva	1.500	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 107	GGL Bhodi Ghodi	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 108	GGL Saparpattia	0.010	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 109	GGL Lonthpur	0.003	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 110	GGL Sihor	0.002	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 111	RIL Jamnagar	5.250	35 bar (g) to 38.5 bar (g)	lower than ambient soil pressure	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 112	UPL	0.050	5 bar to 19 barg (both inclusive)	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 113	GSEC, Utran	0.765	20 bar to 49 bar (both Inclusive)	Shipper responsible to increase the temperature upto desired level, at entry < 45°	Methane - 80 - 97 %, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 114	Chromeni	0.120	25 Bar (gauge) to 49 bar	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 115	JBF	0.001	20 bar to 49 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 116	GGL Mora CNG	0.020	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 117	GSPC	0.020	5 Bar (gauge) to 49 bar	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 118	GSPC	0.010	5 Bar (gauge) to 49 bar	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 119	Torrent Sugem	4.150	45 bar (g) to 50 bar (g)	lower than ambient soil temperature	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 121	GGL Gala	1.000	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
Cust 122	GGL Golana	0.020	26 - 49 barg	Not more than 45 degree Celcius	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	

Cust 123	SNF flopan	0.009	20 bar to 40 bar (both inclusive)	Not more than 45 Deg C	Methane - Not less than 80%, Ethane - 1 to 8%, Propane < 3.3% iC4 < 2% iC5 + nC5 < 0.25%	Yes	
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2. Acceptable Pressure Range

The Acceptable Pressure Range at the Exit Point shall be 30 (thirty) Bar (gauge) to 49 (forty nine) bar gauge (both inclusive).

- i) shall have a temperature of not more than 45 degrees Celsius

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- h) shall have a temperature not more than 45 degrees Celsius, provided the temperature shall not be more than 55 degrees Celsius at the Entry point. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities

- c) Acceptable Pressure Range:

Transporter shall deliver Gas to the Shipper at the Exit Point within a pressure range of 35 Kg/cm² to 48 Kg/cm² (both inclusive).

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- 2) Acceptable Pressure Range

The Acceptable Pressure Range at the Exit Point shall be 40 Bar (gauge) to 50 bar guage (both inclusive). Provided if the Shipper undertakes expansion of the Shippers Facilities and enters into an agreement with the Transporter for increase in contracted capacities for transmission of additional Gas, the minimum pressure for delivering Gas at the Exit Point shall be revised to 45 Bar (gauge) by amending this Agreement.

- h) shall have a temperature of not less than - 4.45 degrees Celsius, and not more than 55 degrees Celsius; and Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities.

Gas composition for all shippers.

k) shall have the following range of composition at any Point:

Component	Range
Methane	Not less than 80 %
Ethane	1% - 8%
Propane	< 3.3%
iC ₄	< 2%
iC ₅ + nC ₅	< 0.25%



i) shall have the following range of composition at any Point as prescribed under PNGRB (Access Code for Common Carrier or Contract Carrier Natural Gas Pipelines) Regulations, 2008:

Parameters	Limit
Hydrocarbons dew pt (Degree Celsius, max.)*	0
Water dew pt (Degree Celsius, max.)*	0
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole %)	8
Temperature (Degree Celsius, max.)	55
Oxygen(% mole vol. max.)	0.2

* At the pipeline operating pressure

ANNEXURE 3 EOL EXIT POINT

1. Location & Identification of the Exit Point

Exit Point shall be located at Essar Oil Limited plant in Jamnagar, Gujarat. Details of the Exit Point shall be as per the attached schematic.

2. Acceptable Pressure range

The Transporter shall deliver Gas to the Shipper at the operating pressure prevailing in the Transporter Facilities at or near the Exit Point from time to time.

3. Measurement Arrangements

Transporter shall install, own, operate and maintain Measurement Equipments at Exit Point.

4. Allocation Methodology:

The Measured Quantity of Gas at the Essar Exit Point shall be allocated towards each CT. The Parties agree that the Transporter would be the allocation agent for allocating the quantities delivered at the Exit Point. At the end of each Day, Transporter shall issue to the Shipper and each of the Commingled Shippers, a statement for allocation of gas for such Day ("Allocation Statement"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point for such Day.
- (b) GCV/NCV (in Kcal/SCM) as may be applicable for such Day.
- (c) Allocated Quantity under each CT for the Shipper and each of the Commingled Shipper, for such Day provided that the sum of Allocated Quantities on each Day shall always be equal to the Measured Quantities at the Exit Point on such Day.

5. Temperature

Parties agree that the temperature of Gas at the Exit Point may be lower than ambient soil temperature. The Shipper shall provide necessary hardware/equipment for heating of the Gas at the Exit Point. ("Heating Equipment") and shall be responsible to operate the Heating Equipment alongwith providing steam and/or any other utility as may be required for heating of gas at the Exit Point. The ownership of the Heating Equipment shall rest with the Shipper.

Shipper shall use and operate the Heating Equipment as a Reasonable and Prudent Operator in compliance with the statutory requirements.

ANNEXURE - 4
RELIANCE NARODA EXIT POINT

1. Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment at which the Transporter delivers Gas to the Shipper, located within the Shipper Facilities at RIL Naroda.

2. Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 20 Bar (g) to 45 Bar (g) (both inclusive).

3. The Shipper in relation to Exit Point, shall:

- (a) grant in favor of the Transporter and / or its Affiliate:
 - (i) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;
 - (ii) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and
 - (iii) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;
- (b) construct, operate and maintain, if applicable, as a Reasonable and Prudent Operator, the interface facilities that connects the Transporter Facilities at Exit Point
- (c) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

4. Allocation Methodology

Unless agreed otherwise, the allocation of Measured Quantities of Gas at the Exit Point under various CTs shall be done on *pro-rata* basis in accordance with the Scheduled Quantities at Exit Point under such CTs, so that aggregate of Allocated Quantity at Exit Point under such CTs is equal to Measured Quantities at the Exit Point. Provided if there is only one CT under the Agreement then Allocated Quantity at Exit Point shall be equal to Measured Quantities at Exit Point.

5. Temperature

Notwithstanding anything contained in Annexure 5, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("Heating Equipment"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

ANNEXURE - 5
RELIANCE DTA EXIT POINT

1. Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment at which the Transporter delivers Gas to the Shipper, located within the Shipper Facilities at Reliance Industries Limited, DTA unit, Jamnagar.

2. Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 35 bar (gauge) to 38.5 bar(gauge) (both inclusive).

3. The Shipper in relation to Exit Point shall:

- (d) grant in favor of the Transporter and / or its Affiliate:
 - (iv) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;
 - (v) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and
 - (vi) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;
- (e) construct, operate and maintain, if applicable, as a Reasonable and Prudent Operator, the interface facilities that connects the Transporter Facilities at Exit Point
- (f) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at

the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

4. Allocation Methodology

Allocation methodology shall be agreed separately.

5. Temperature

Notwithstanding anything contained in ANNEXURE 5, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point ("Heating Equipment"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

ANNEXURE 3 - OPaL EXIT POINT

(a) Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment at which the Transporter delivers Gas to the Shipper, located within the Shipper Facilities located at Z/1,Z/83, plot of Dahej SEZ Part I, District Bharuch, Gujarat.

(b) Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 38 bar (guage) to 49 bar (guage) (both inclusive).

(c) Acceptable Temperature Range

Transporter shall deliver Gas to Shipper at the Exit Point at a temperature not greater than forty five (45) degrees Celsius

HINDALCO – BIRLA COPPER

ANNEXURE 3 HINDALCO EXIT POINT

1. Location & Identification of the Exit Point

The Exit Point shall be located at Hindalco Industries plant (Unit: Birla Copper) at Dahej

2. Acceptable Pressure Range

The Acceptable Pressure Range at the Exit Point shall be 40 Bar (gauge) to 50 Bar (gauge) (both inclusive).

3. Temperature

Notwithstanding anything contained in Annexure 5, the Gas temperature at Birla Copper Exit Point may be lower than ambient soil temperature. The Transporter shall provide necessary hardware/equipment for heating of the Gas at the Exit Point. (“**Heating Equipment**”) The Shipper shall be responsible to operate the Heating Equipment along with providing steam and/or any other utility as may be required for heating of gas at the Exit Point. The ownership of the Heating Equipment shall rest with the Transporter.

Shipper shall use and operate the Heating Equipment as a Reasonable and Prudent Operator in compliance with the statutory requirements. Shipper shall not make any modifications to the facilities without prior written consent of the Transporter.

ANNEXURE 4 – SUGEN EXIT POINT

(a) Location & Identification

The SUGEN Exit Point shall be as indicated in the schematic (which is not to scale) attached as Exhibit E to this Agreement.

(b) Acceptable Pressure Range:

The Acceptable Pressure Range at the Exit Point shall be 45 (forty five) bar to 50 (fifty) bar (both inclusive).

(c) The Shipper in relation to Exit Point for the currency of this Agreement, shall:

- (A) grant in favor of the Transporter and / or its Affiliate:
 - (i) use of adequate land of approximately 3,000 square meters for construction, operations and maintenance of gas terminal at no cost to the Transporter (within the facilities of the Shipper at the Exit Point);
 - (ii) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and
 - (iii) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;
- (B) construct, operate and maintain, if applicable, as a Reasonable and Prudent Operator the interface facilities that connect the Transporter Facilities at Exit Point
- (C) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

(d) The Transporter in relation to the SUGEN Exit Point shall provide to the Shipper appropriate point where Shipper shall at its own cost, connect a data cable to have access to real time information on quality, quantity, pressure and temperature of Gas being delivered at such Exit Point.

(e) The Transporter shall install, own, operate and maintain the Measurement Equipment including a Gas Chromatograph as may be required at the SUGEN Exit Point. Chromatography shall be performed in accordance with the gas industry practices for analysis of Gas delivered at SUGEN Exit Point, which shall have the capability to determine composition upto C6, Oxygen and Nitrogen.

(f) Non-Hydrocarbon Tests:

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The costs of tests conducted at Exit Point jointly by the Parties in accordance with the Operating Code shall be shared equally between the Parties.

(g) Allocation Methodology:

Unless agreed otherwise, the allocation of Measured Quantities of Gas at the Exit Point under various CTs shall be done on pro-rata basis in accordance with the Scheduled Quantities at Exit Point under such CTs, so that aggregate of Allocated Quantity at Exit Point under such CTs is equal to Measured Quantities at the Exit Point. Provided if there is only one CT under the Agreement then Allocated Quantity at Exit Point shall be equal to Measured Quantities at Exit Point.

(h) Temperature

Notwithstanding anything contained in Annexure 6, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("Heating Equipment"). The Shipper shall also be responsible to operate the Heating Equipment alongwith providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas upto the desired temperature level.

BASF CONTRACT - CONTRACT EXTRACT Cust 85

ANNEXURE 4 BASF EXIT POINT

(a) Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment at which the Transporter delivers Gas to the Shipper, located within the Shipper Facilities at BASF's plant located at plot 4B, Dahej Industrial Estate, Gujarat Industrial Development Corporation (GIDC), Gujarat.

(b) Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 25 bar (gauge) to 49 bar (gauge) (both inclusive).

(c) The Shipper in relation to Exit Point, shall:

(A) grants in favor of the Transporter and / or its Affiliate:

(I) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;

(II) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and

(III) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;

(B) constructs, operates and maintains, if applicable, as a Reasonable and Prudent Operator the interface facilities that connects the Transporter Facilities at Exit Point

(C) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

(d) Allocation Methodology:



Unless agreed otherwise, the allocation of Measured Quantities of Gas at the Exit Point under various CTs shall be done on *pro-rata* basis in accordance with the Scheduled Quantities at Exit Point under such CTs, so that aggregate of Allocated Quantity at Exit Point under such CTs is equal to Measured Quantities at the Exit Point. Provided if there is only one CT under the Agreement then Allocated Quantity at Exit Point shall be equal to Measured Quantities at Exit Point.

(e) Temperature

Notwithstanding anything contained in Annexure 5, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("**Heating Equipment**"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

Arvind Mills Limited – Contract Extract Cust 10

ANNEXURE 5 SANTEJ EXIT POINT

1. Location & Identification

The Exit Point is located at-

The Arvind Limited
P.O. Khatraj
Taloka : Kalol
District – Gandhinagar – 382721, Gujarat

2. Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 21 bar (gauge) to 27 bar (gauge) (both inclusive).

3. Measurement Arrangements

Shipper shall arrange the Measurement Equipment's at Santej Exit Point and notwithstanding anything contained in this Agreement any dispute related to measurement, the Shipper agrees to pay Transmission Charges for Allocated Quantities of Gas as determined and notified by the Transporter to the Shipper.

4. Allocation Methodology:

The allocated quantity for the Shipper at Santej Exit Point shall be agreed separately between the Parties.

5. Temperature

Notwithstanding anything contained in Annexure 6, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("**Heating Equipment**"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

ANNEXURE 6 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- i) shall have the following range of composition at any Point as prescribed under PNGRB (Access Code for Common Carrier or Contract Carrier Natural Gas Pipelines) Regulations, 2008:

Parameters	Limit
Hydrocarbons dew pt (Degree Celsius, max.)*	0
Water dew pt(Degree Celsius, max)*	0
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole %)	8
Temperature (Degree Celsius, max.)	55
Oxygen(% mole vol. max.)	0.2

* At the pipeline operating pressure

Suzlon Energy Contract Extract - Cust 55

(c) Acceptable Pressure Range

The Acceptable Pressure Range at the Exit Point shall be 20 (twenty) bar (guage) to 50 (fifty) bar guage (both inclusive).

(d) Allocation Methodology

All Gas measured at the Exit Point shall be allocated to the Shipper. The Allocation Data shall be directly determined from the measurement data.

(e) Measurement Equipment:

The Transporter shall install, own, operate and maintain the Exit Point Measurement Equipment to perform Gas volume measurement at or near the Exit Point. However, the Parties agree that if the Transporter is unable to install such Exit Point Measurement Equipment by the Start Date, the Parties shall use any alternate meter or any other method to determine the Allocated Quantities at the Exit Point.

(f) The Shipper shall for the currency of this Agreement:

- 1) grant and maintain a right in favour of the Transporter in respect of a adequate plot of land allowing the Transporter the right to uninterrupted use and exclusive possession of the plot of land to install and carry out the operations and maintenance of the Measurement Equipment and other facilities installed by the Transporter at the Exit Point.

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- 2) provide the Transporter, for its use throughout the currency of this Agreement, supply of electricity needed by the Transporter, other utilities such as water, drainage facilities for Transporter's use at no cost to the Transporter
- 3) provide to the Transporter (including its personnel) or representatives of the Transporter free and unrestricted access at all times to the site(s) on which the Measurement Equipment is to be located and allow the Transporter to construct the Measurement Equipment
- 4) allow the Transporter to lay gas pipeline(s) for any Third Party by providing a tap off at or near the Exit Point at no cost to the Transporter. Such gas pipeline(s) may be routed through the premises of the Shipper at the Exit Point.

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Dhuvaran

ANNEXURE 4 DHUVARAN EXIT POINT

1. Location & Identification of the Exit Point

Village Dhuvaran, District Anand.

2. Acceptable Pressure range

Acceptable Pressure Range at Exit Point shall be thirty (30) to fifty (50) Bar (both inclusive).

3. Measurement Arrangements

Transporter shall install, own, operate and maintain Measurement Equipments at Exit Point.

4. Allocation Methodology:

The Measured Quantity of Gas at the Dhuvaran Exit Point shall be allocated towards each CT. The Parties agree that the Transporter would be the allocation agent for allocating the quantities delivered at the Dhuvaran Exit Point. At the end of each Day, Transporter shall issue to the Shipper and each of the Commingled Shippers, a statement for allocation of gas for such Day ("Allocation Statement"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point for such Day.
- (b) GCV/NCV (in Kcal/SCM) as may be applicable for such Day.
- (c) Allocated Quantity under each CT for the Shipper and each of the Commingled Shipper, for such Day provided that the sum of Allocated Quantities on each Day shall always be equal to the Measured Quantities at the Exit Point on such Day.

ANNEXURE 5 UTRAN EXIT POINT

1. Location & Identification of the Exit Point

Village Utran, District Surat.

2. Acceptable Pressure range

The Acceptable Pressure Range at the Exit Point shall be twenty (20) to thirty four (34) Bar (both inclusive).

3. Measurement Arrangements

Transporter shall install, own, operate and maintain Measurement Equipments at Exit Point.

4. Allocation Methodology:

At the end of each Day, Transporter shall issue to the Shipper, a statement for allocation of gas for such Day ("**Allocation Statement**"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point for such Day.
- (b) GCV/NCV (in Kcal/SCM) applicable for such Day.
- (c) Allocated Quantity under each CT for Shipper and each of the Commingled Shipper, for such Day provided that the sum of Allocated Quantities under each CT on each Day shall always be equal to the Measured Quantities at the Exit Point on such Day.

... shall not contain any untreated hydrogen sulphide treatment chemical (solvent) or its by-products);

k) shall have the following range of composition at any Point:

Component	Range
Methane	80 - 97%
Ethane	1% - 8%

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Propane	< 3.3%
iC ₄	< 2%
iC ₅ +nC ₅	< 0.25%

ANNEXURE 2 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not less than 10 degrees Celsius and not more than 55 degrees Celsius; and Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	80 % -97%
Ethane	1% - 8%
Propane	< 3.3%
iC ₄	< 2%
iC ₃ + nC ₃	< 0.25%

ANNEXURE 4 GPPC EXIT POINT

(a) Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment at which the Transporter delivers Gas to the Shipper, located within the Shipper Facilities at GPPC's plant at Kovaya, near Pipavav in Saurashtra region in Gujarat.

(b) Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 25 bar (gauge) to 49 bar (gauge) (both inclusive).

(c) The Shipper in relation to Exit Point, shall:

(A) grants in favor of the Transporter and / or its Affiliate:

- (I) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;
- (II) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and
- (III) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;

(B) constructs, operates and maintains, if applicable, as a Reasonable and Prudent Operator the interface facilities that connects the Transporter Facilities at Exit Point

(C) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

(d) Allocation Methodology:

Unless agreed otherwise, the allocation of Measured Quantities of Gas at the Exit Point under various CTs shall be done on *pro-rata* basis in accordance with the Scheduled Quantities at Exit Point under such CTs, so that aggregate of Allocated Quantity at Exit Point under such CTs is equal to Measured Quantities at the Exit Point. Provided if there is only one CT under the Agreement then Allocated Quantity at Exit Point shall be equal to Measured Quantities at Exit Point.

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(e) Temperature

Notwithstanding anything contained in Annexure 5, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("**Heating Equipment**"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

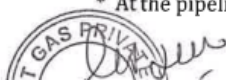
ANNEXURE 5 - SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar);
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- i) shall have the following range of composition at any Point as prescribed under PNGRB (Access Code for Common Carrier or Contract Carrier Natural Gas Pipelines) Regulations, 2008:

Parameters	Limit
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole %)	8
Temperature (Degree Celsius, max.)	55
Oxygen(% mole vol. max.)	0.2

* At the pipeline operating pressure



ANNEXURE 3 - TGPL AMRELI EXIT POINT

1) Location of the Exit Point

The TGPL Amreli Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment on GSPL's pipeline at which the Transporter delivers Gas to the Shipper, located at RT Amreli of Tana-Amreli Pipeline, Taluka Liliya, District- Amreli, Gujarat.

2) Acceptable Pressure Range:

The Transporter shall deliver Gas at the TGPL Amreli Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 25 (twenty five) bar (guage) to 49 (forty nine) bar gauge (both inclusive). The acceptable pressure range is subject to provisions of Clause 2.2 of the Connectivity Agreement.

3) The Shipper in relation to TGPL Amreli Exit Point, shall:

- (A) grants in favor of the Transporter and / or its Affiliate:
 - (I) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;
 - (II) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and
 - (III) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;
- (B) constructs, operates and maintains, if applicable, as a Reasonable and Prudent Operator the interface facilities that connects the Transporter Facilities at TGPL Amreli Exit Point
- (C) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the TGPL Amreli Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

4) Allocation Methodology:

The Transporter shall notify the Shipper the principle for allocation of gas at TGPL Amreli Exit Point separately.

5) Temperature

Notwithstanding anything contained in Annexure 5, the Gas temperature at TGPL Amreli Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the TGPL Amreli Exit Point. ("Heating Equipment"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as



may be required for heating of gas downstream of the TGPL Amreli Exit Point to bring the temperature of Gas up to the desired temperature level.

Transporter's Facilities at the Entry Point and thereafter to inspect, operate and maintain the same. Shipper shall also provide unrestricted access upto the Measurement Equipment at the Entry Point to the Transporter.

ANNEXURE 3 JIL EXIT POINT

1. Location & Identification of the Exit Point

The Exit Point shall be located at or near JIL SEZ at Vilayat GIDC, District.: Bharuch

2. Acceptable Pressure Range

The Acceptable Pressure Range at the Exit Point shall be 30 Bar (gauge) to 35 Bar (gauge) (both inclusive).

3. Acceptable Temperature Range

The temperature at Exit Point shall not be more than 45 degrees Celsius

4. Measurement Arrangements

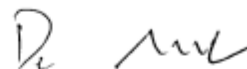
The Transporter shall install, own, operate and maintain the JIL Exit Point Measurement Equipment to perform Gas volume measurement at or near the Exit Point. However, the Parties agree that if the Transporter is unable to install such Exit Point Measurement Equipment by the CT Start Date, the Parties shall use any alternate meter or any other method to determine the Allocated Quantities at the Exit Point subject to mutual agreement.

5. Allocation Methodology

All Gas measured at the Exit Point shall be allocated to the Shipper. The Allocation Data shall be directly determined from the measurement data obtained from Measurement equipment installed at JIL premises..

6. The Shipper shall for the currency of this Agreement:

- 1) grant and maintain a right in favour of the Transporter in respect of an adequate plot of land allowing the Transporter the right to uninterrupted use and exclusive possession of the plot of land to install and carry out the operations and maintenance of the Measurement Equipment and other facilities installed by the Transporter at the Exit Point.
- 2) provide the Transporter, for its use throughout the currency of this Agreement, supply of electricity needed by the Transporter, other utilities such as water, drainage facilities for Transporter's use at no cost to the Transporter
- 3) provide to the Transporter (including its personnel) or representatives of the Transporter free and unrestricted access at all times to the site(s) on which the Measurement Equipment is to be located and allow the Transporter to construct the Measurement Equipment
- 4) allow the Transporter to lay gas pipeline(s) for any Third Party by providing a tap off at or near the Exit Point at no cost to the Transporter. Such gas pipeline(s) may be routed through the premises of the Shipper's plot of allotted land as in 1) above at the Exit Point.
- 5) The Shipper's Facilities will be technically and operationally compatible with Transporter's Facilities.
- 6) The Shipper's Facilities will be maintained in good working order and condition and so operated as to be compatible with the operation of Transporter's Facilities.



Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not more than 45 degrees Celsius Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	Not less than 80 %
Ethane	1% - 8%

D *my*

Propane	< 3.3%
iC₄	< 2%
iC₅ + nC₅	< 0.25%

1. **Location & identification**

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment on GSPL's pipeline at which the Transporter delivers Gas to the Shipper, located at RT Gundala on Pipava-Gundala pipeline section at Village Gundala, Taluka Una, District Gir-Somanth, Gujarat

2. **Exit Point MDQ**

With effect from the Start Date, the Exit Point MDQ shall be equal to 137 MMBTU on GCV basis.

3. **Acceptable Pressure Range**

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 25 (twenty five) bar (gauge) to 49 (forty nine) bar gauge (both inclusive). The acceptable pressure range is subject to provisions of Clause 2.2 of the Connectivity Agreement.

4. The Shipper in relation to Exit Point, shall:

(A) grants in favor of the Transporter and / or its Affiliate:

- (I) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;
- (II) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and
- (III) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;

(B) constructs, operates and maintains, if applicable, as a Reasonable and Prudent Operator the interface facilities that connects the Transporter Facilities at Exit Point

(C) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

5. **Allocation Methodology:**

The Transporter shall notify the Shipper the principle for allocation of gas at Exit Point separately.

6. **Temperature**

Notwithstanding anything contained in Annexure 4, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("Heating Equipment"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

ANNEXURE 4 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	Not less than 80 %
Ethane	1% - 8%
Propane	< 3.3%
iC ₄	< 2%
iC ₅ + nC ₅	< 0.25%

1. Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment on GSPL's pipeline at which the Transporter delivers Gas to the Shipper, located at a plot of land within IRMEPL premises (located near CH. 3.985 km approx. on Banas Dairy Spurline), Village - Takarwada, Taluka - Palanpur, District - Banaskantha, Gujarat

2. Exit Point MDQ

With effect from the Start Date, the Exit Point MDQ shall be equal to **250 MMBTU** on GCV basis.

3. Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 25 (twenty five) bar (guage) to 49 (forty nine) bar guage (both inclusive).

4. The Shipper in relation to Exit Point, shall:

(A) grants in favor of the Transporter and / or its Affiliate:

- (I) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;
- (II) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and
- (III) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;

(B) constructs, operates and maintains, if applicable, as a Reasonable and Prudent Operator the interface facilities that connects the Transporter Facilities at Exit Point

(C) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

5. Allocation Methodology:

The Transporter shall notify the Shipper the principle for allocation of gas at Exit Point separately.

6. Temperature

Notwithstanding anything contained in Annexure 4, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("Heating Equipment"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the

ANNEXURE 4 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	Not less than 80 %
Ethane	1% - 8%
Propane	< 3.3%
iC₄	< 2%
iC₅ + nC₅	< 0.25%

ANNEXURE 4 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	Not less than 80 %
Ethane	1% - 8%
Propane	< 3.3%
iC₄	< 2%
iC₅ + nC₅	< 0.25%

ANNEXURE 4 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- i) shall have the following range of composition at any Point as prescribed under PNGRB (Access Code for Common Carrier or Contract Carrier Natural Gas Pipelines) Regulations, 2008:

Parameters	Limit
Hydrocarbons dew pt (Degree Celsius, max.)*	0
Water dew pt(Degree Celsius, max)*	0
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole %)	8
Temperature (Degree Celsius, max.)	55
Oxygen(% mole vol. max.)	0.2

* At the pipeline operating pressure

ANNEXURE 2 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not less than 10 degrees Celsius and not more than 55 degrees Celsius; and Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	80 % -97%
Ethane	1% - 8%
Propane	< 3.3%
iC ₄	< 2%
iC ₅ + nC ₅	< 0.25%

ANNEXURE 3 GIPCL EXIT POINT

1. Location & Identification of the Exit Point

GIPCL plant, [Baroda..](#)

2. Acceptable Pressure Range

Acceptable Pressure Range at Exit Point shall be twenty (20) to fifty (50) Bar (both inclusive).

3. Measurement Arrangements

The Transporter shall install, own, operate and maintain the Measurement Equipments at the Exit Point.

4. Allocation Methodology:

The Measured Quantity of Gas at the GIPCL Exit Point shall be allocated towards each CT. The Parties agree that the Transporter would be the allocation agent for allocating the quantities delivered at the GIPCL Exit Point. At the end of each Day, Transporter shall issue to the Shipper and each of the Commingled Shippers, a statement for allocation of gas for such Day ("Allocation Statement"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point for such Day.
- (b) GCV/NCV (in Kcal/SCM) as may be applicable for such Day.
- (c) Allocated Quantity under each CT for the Shipper and each of the Commingled Shipper, for such Day provided that the sum of Allocated Quantities on each Day shall always be equal to the Measured Quantities at the Exit Point on such Day

ANNEXURE 20 GAS SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) Shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm ;
- i) shall have a temperature of not more than 45 degrees Celsius
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	not less than 80 %
Ethane	1% - 8%
Propane	< 3.3%
iC4	< 2%
iC5 + nC5	< 0.25%

1. Location & Identification

Raymond Limited's plant premises at Tehsil Pardi, Dist. Valsad.

2. Acceptable Pressure Range

The Acceptable Pressure Range at the Exit Point shall be twenty (25) to forty (48) Bar (both inclusive).

3. Measurement Arrangements

The Transporter shall install, own, operate and maintain the Measurement Equipments at the Exit Point.

4. Allocation Methodology

The Measured Quantity of Gas at the WGSRL Exit Point shall be allocated to the Shipper and all other Commingled Shippers. The Parties agree that the Transporter would be the allocation agent for allocating the quantities delivered at the WGSRL Exit Point. At the end of each Day, Transporter shall issue to the Shipper and each of the Commingled Shippers, with a copy to Shipper's Customers, a statement for allocation of gas for such Day ("**Allocation Statement**"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point (in SCM and Gcals) for such Day.
- (b) NCV (in Kcal/SCM) applicable for such Day.
- (c) Allocated Quantity for Shipper and each of the Commingled Shipper, in Gcals for such Day provided that the sum of Allocated Quantities on each Day shall always be equal to the Measured Quantities at the Exit Point on such Day.

5. If the Shipper's Customer under Shipper's GSA is liable to make payments for any take or pay obligations, then the Shipper agrees to reimburse / pay to the Transporter, the portion of Transmission Charges out of such take or pay amounts received by the Shipper from the Shipper's Customer. For the same, Transporter shall raise an appropriate debit note which shall be payable by the Shipper.

4) Measurement Arrangements

Shipper shall install, operate and maintain (or cause same) Measurement Equipment at the Entry Point. The Measurement Equipment will establish the volume, Gross Heating Value passed through such Entry Point at all times during the Day.

5) Shipper undertakes that throughout the Contract Period: -

- (1) The Entry Point Facilities will be technically and operationally compatible with Transporter's Facilities;
- (2) The Entry Point Facilities will be maintained in good working order and condition and so operated as to be compatible with the operation of Transporter's Facilities; and
- (3) It will allow Transporter all reasonable rights of access at any time to inspect the Entry Point Facilities for purposes connected with this Agreement.

ANNEXURE 3 HPCL EXIT POINT

1. Location & Identification of the Exit Point

The Exit Point shall be located at at Naroda ToP 6-A..

2. Acceptable Pressure Range

Acceptable Pressure Range at the Exit Point shall be 20 Bar (gauge) to 50 Bar (gauge) (both inclusive)

3. Temperature

Notwithstanding anything contained in Annexure 4, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("Heating Equipment") The Shipper shall also be responsible to operate the Heating Equipment alongwith providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas upto the desired temperature level.

Shipper shall use and operate the Heating Equipment as a Reasonable and Prudent Operator in compliance with the statutory requirements.

Shipper shall provide land, electricity, gas, water, steam for heating or any other utility required for operation of Measurement Equipment at no cost to the Transporter.

4. Allocation Arrangement

All Gas measured at the Exit Point shall be allocated to the Shipper. The Allocation Data shall be directly determined from the measurement data.

5. Shipper undertakes that throughout the Contract Period: -

- (1) The Exit Point Facilities will be technically and operationally compatible with Transporter's Facilities;

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- a) During the subsistence of this Agreement and until the Exit Point Measurement Equipment is delivered back to Shipper, Transporter shall keep the Exit Point Measurement Equipment at all times in its possession and control.
- b) Transporter shall affix a nameplate or other mark on the Exit Point Measurement Equipment identifying the ownership.
- c) Transporter shall use, operate and maintain the Exit Point Measurement Equipment as a Reasonable and Prudent Operator. Transporter shall comply with all statutory obligations and other requirements of the Law.
- d) In the event of any loss, damage or destruction to the Exit Point Measurement Equipment due to any negligence of the Transporter, Transporter shall as soon as practically possible replace or repair the equipment and reinstate the same in the original working condition. The cost of such repairs shall be born by Transporter, provided that if the damage was caused by negligence on the part of Shipper then the costs shall be born by Shipper. Transporter shall not be liable for any loss, damage or destruction to the Exit Point Measurement Equipment or any integral part thereof other than in the case of negligence by Transporter.
- e) Transporter shall obtain and keep effective, at its own expense, all necessary licences, permissions and consents for use, operation and maintenance of the Exit Point Measurement Equipment.
- f) Transporter shall permit Shipper with prior notice in writing, and at Shipper's own cost, to inspect, view, and examine the state and condition of the Exit Point Measurement Equipment. For this purpose, Transporter shall permit Shipper entry on to the premises where the Exit Point Measurement Equipment are located.
- g) No Party shall make any addition, alterations, improvements or modifications to the facilities or change the condition thereof without prior written consent of the other Party, and such consent shall not unreasonably be withheld.
- h) Cost of any addition, alterations, modifications improvements to the facilities in so far as it pertains to Transporter's requirements shall be borne by Transporter, and in so far as it pertains to Shipper's requirements shall be borne by Shipper.
- i) Upon expiry or on termination of this Agreement either:
 - i) Transporter shall buy the Exit Point Measurement Equipment from Shipper for a price to be mutually agreed upon; or
 - ii) The Parties will agree to continue the above arrangements where by ownership rests with Shipper but custody rests with Transporter

ANNEXURE 4 GAS SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water;

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- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) Shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not more than 45 degrees Celsius; and Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities.
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	80 - 97%
Ethane	1% - 8%
Propane	< 3.3%
iC ₄	< 2%
iC ₅ + nC ₅	< 0.25%

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WHEREAS

- (I) GSPL and GGL (formerly GSPC Gas Company Limited) have executed a Gas Transmission Agreement dated 30th July 2009 (hereinafter referred to as "GTA")
- (II) The Parties are desirous of amending the GTA to the limited extent of recording the provisions related to inclusion of new CT for transmission of gas for additional Exit Points and recording the amended provisions thereof.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in the GTA and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. **Definitions**

All capitalized terms used in this Agreement and not otherwise defined herein, unless the context otherwise requires, have the meanings given to such terms in the GTA.

2. **Amendments to the GTA**

- 2.1 A new annexure – ANNEXURE 72 – GALA EXIT POINT shall be included after ANNEXURE 71 to the GTA as follows:

"ANNEXURE 72 – GALA EXIT POINT

1. **Location & Identification**

Tap off point located at at SV-1, Gala Terminal on Morbi-Mundra Pipeline, District Rajkot.

2. **Acceptable Pressure Range**

Acceptable Pressure Range at Gala Exit Point shall be Twenty Six (26) to Forty Nine (49) Bar (both inclusive). Any change in Acceptable Pressure Range shall be notified by the Transporter to the Shipper and such revised Acceptable Pressure Range shall be deemed to be acceptable to the Shipper.

3. **Measurement Arrangements**

Transporter shall install and operate the Measurement Equipments at Gala Exit Point and notwithstanding anything contained in this Agreement any dispute related to measurement, the Shipper agrees to pay Transmission Charges for Allocated Quantities of Gas as determined and notified by the Transporter to the Shipper.

4. **Temperature**

Notwithstanding anything contained in Annexure 28, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/ equipment for heating of the Gas downstream of the Exit Point ("Heating Equipment"). The Shipper shall also be responsible for operating the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas upto the desired level."

ANNEXURE 28 GAS SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) Shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm ;
- i) shall have a temperature of not more than 45 degrees Celsius
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point

Component	Range
Methane	not less than 80 %
Ethane	1% - 8%
Propane	< 3.3%
iC4	< 2%
iC5 + nC5	< 0.25%

ANNEXURE 3 IPL EXIT POINT

1. Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment at which the Transporter delivers Gas to the Shipper, located within the Shipper Facilities at Dahej.

2. Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 25 bar (gauge) to 49 bar (gauge) (both inclusive).

3. The Shipper in relation to Exit Point, shall:

(A) grants in favor of the Transporter and / or its Affiliate:

(I) use of adequate land at no cost to the Transporter (within the facilities of the Shipper at the Exit Point) that is adequate for the necessary connections and equipment at such Exit Point;

(II) the right to connect Transporter Facilities with the Measurement Equipment at the Exit Point; and

(III) Unrestricted rights of access and other rights of easement to such land, connections and Measurement Equipment free from any adverse claims or rights;

(B) constructs, operates and maintains, if applicable, as a Reasonable and Prudent Operator the interface facilities that connects the Transporter Facilities at Exit Point

(C) provide and maintain, at no cost to the Transporter, supplies of utilities including power, water and drainage and telephone connections for operating the Measurement Equipment or such other purposes that the Transporter may require at the Exit Point to enable the Transporter to perform all its obligations under this Agreement and the Operating Code. If the Shipper fails to comply with the provisions of this sub clause, the Transporter shall not be liable for any Shortfall Quantity under this Agreement.

4. Allocation Methodology:

Unless agreed otherwise, the allocation of Measured Quantities of Gas at the Exit Point under various CTs shall be done on *pro-rata* basis in accordance with the Scheduled Quantities at Exit Point under such CTs, so that aggregate of Allocated Quantity at Exit Point under such CTs is equal to Measured Quantities at the Exit Point. Provided if there is only one CT under the Agreement then Allocated Quantity at Exit Point shall be equal to Measured Quantities at Exit Point.

5. Temperature

Notwithstanding anything contained in Annexure 4, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. (“**Heating Equipment**”). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

ANNEXURE 4 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- i) shall have the following range of composition at any Point as prescribed under PNGRB (Access Code for Common Carrier or Contract Carrier Natural Gas Pipelines) Regulations, 2008:

Parameters	Limit
Hydrocarbons dew pt (Degree Celsius, max.)*	0
Water dew pt(Degree Celsius, max)*	0
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole %)	8
Temperature (Degree Celsius, max.)	55
Oxygen(% mole vol. max.)	0.2

* At the pipeline operating pressure

Shipper shall install, operate and maintain (or cause same) Measurement Equipment at the Entry Point. The Measurement Equipment will establish the volume, Gross Heating Value passed through such Entry Point at all times during the Day.

- 5) Shipper undertakes that throughout the Contract Period: -
- (1) The Entry Point Facilities will be technically and operationally compatible with Transporter's Facilities;
 - (2) The Entry Point Facilities will be maintained in good working order and condition and so operated as to be compatible with the operation of Transporter's Facilities; and
 - (3) It will allow Transporter all reasonable rights of access at any time to inspect the Entry Point Facilities for purposes connected with this Agreement.

ANNEXURE 3 CGSML EXIT POINT

1. Location & Identification of the Exit Point

The Exit Point shall be located at Village Gana, Taluka Anklav.

2. Acceptable Pressure Range

Acceptable Pressure Range at the Exit Point shall be 20 Bar (gauge) to 50 Bar (gauge) (both inclusive)

3. Temperature

Notwithstanding anything contained in Annexure 4, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("Heating Equipment") The Shipper shall also be responsible to operate the Heating Equipment alongwith providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas upto the desired temperature level.

Shipper shall use and operate the Heating Equipment as a Reasonable and Prudent Operator in compliance with the statutory requirements.

Shipper shall provide land, electricity, gas, water, steam for heating or any other utility required for operation of Measurement Equipment at no cost to the Transporter.

4. Allocation Arrangement

All Gas measured at the Exit Point shall be allocated to the Shipper. The Allocation Data shall be directly determined from the measurement data.

5. Shipper undertakes that throughout the Contract Period: -

- (1) The Exit Point Facilities will be technically and operationally compatible with Transporter's Facilities;
- (2) The Exit Point Facilities will be maintained in good working order and condition and so operated as to be compatible with the operation of Transporter's Facilities; and

- c) Transporter shall use, operate and maintain the Exit Point Measurement Equipment as a Reasonable and Prudent Operator. Transporter shall comply with all statutory obligations and other requirements of the Law.
- d) In the event of any loss, damage or destruction to the Exit Point Measurement Equipment due to any negligence of the Transporter, Transporter shall as soon as practically possible replace or repair the equipment and reinstate the same in the original working condition. The cost of such repairs shall be born by Transporter, provided that if the damage was caused by negligence on the part of Shipper then the costs shall be born by Shipper. Transporter shall not be liable for any loss, damage or destruction to the Exit Point Measurement Equipment or any integral part thereof other than in the case of negligence by Transporter.
- e) Transporter shall obtain and keep effective, at its own expense, all necessary licences, permissions and consents for use, operation and maintenance of the Exit Point Measurement Equipment.
- f) Transporter shall permit Shipper with prior notice in writing, and at Shipper's own cost, to inspect, view, and examine the state and condition of the Exit Point Measurement Equipment. For this purpose, Transporter shall permit Shipper entry on to the premises where the Exit Point Measurement Equipment are located.
- g) No Party shall make any addition, alterations, improvements or modifications to the facilities or change the condition thereof without prior written consent of the other Party, and such consent shall not unreasonably be withheld.
- h) Cost of any addition, alterations, modifications improvements to the facilities in so far as it pertains to Transporter's requirements shall be borne by Transporter, and in so far as it pertains to Shipper's requirements shall be borne by Shipper.
- i) Upon expiry or on termination of this Agreement either:
 - i) Transporter shall buy the Exit Point Measurement Equipment from Shipper for a price to be mutually agreed upon; or
 - ii) The Parties will agree to continue the above arrangements where by ownership rests with Shipper but custody rests with Transporter

ANNEXURE 4 GAS SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar) ;

- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) Shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm;
- i) shall have a temperature of not more than 45 degrees Celsius; and Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities.
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;
 - ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas. Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
 - iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products);
- k) shall have the following range of composition at any Point:

Component	Range
Methane	80 - 97%
Ethane	1% - 8%
Propane	< 3.3%
iC ₄	< 2%
iC ₅ + nC ₅	< 0.25%

EXHIBIT 1 FIRM DAHEJ CAPACITY TRANCHE

1. Entry Point: Dahej Entry Point
2. Exit Point: CGSML Exit Point
3. CT Entry Point MDQ and CT Exit Point MDQ:

The CT Entry Point MDQ and CT Exit Point MDQ shall be as follows:

ANNEXURE 5 – DASHRATH EXIT POINT

1. Location & Identification

The Exit Point shall mean the agreed outlet flange, weld or agreed mark downstream of the Measurement Equipment at which the Transporter delivers Gas to the Shipper, located within the Transporter Facilities at Dashrath Terminal in village Dashrath, Vadodara, Gujarat.

2. Acceptable Pressure Range

The Transporter shall deliver Gas at the Exit Point within the Acceptable Pressure Range. The Acceptable Pressure Range at the Exit Point shall be 25 bar (gauge) to 49 bar (gauge) (both inclusive).

3. Measurement Arrangements

Shipper shall arrange the Measurement Equipment's at Dashrath Exit Point and notwithstanding anything contained in this Agreement any dispute related to measurement, the Shipper agrees to pay Transmission Charges for Allocated Quantities of Gas as determined and notified by the Transporter to the Shipper.

4. Allocation Methodology:

The allocated quantity for the Shipper at Dashrath Exit Point shall be agreed separately between the Parties.

5. Temperature

Notwithstanding anything contained in Annexure 8, the Gas temperature at Exit Point may be lower than ambient soil temperature. The Shipper shall arrange to provide necessary hardware/equipment for heating of the Gas downstream of the Exit Point. ("**Heating Equipment**"). The Shipper shall also be responsible to operate the Heating Equipment along with providing steam and/or any other utility including Gas as may be required for heating of gas downstream of the Exit Point to bring the temperature of Gas up to the desired temperature level.

ANNEXURE 7 SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) Degree Celsius below 100 Bar (One Hundred Bar) ;
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen ;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) shall have a temperature of not more than 45 Degree Celsius. Shipper shall furnish, install, maintain and operate, or cause such activities to occur, such drips, separators, heaters and other mechanical devices as may be necessary to effect compliance with such quality Specifications. Shipper shall obtain the prior approval of Transporter with regard to the design and construction of such facilities
- i) shall have the following range of composition at any Point as prescribed under PNGRB (Access Code for Common Carrier or Contract Carrier Natural Gas Pipelines) Regulations, 2008:

Parameters	Limit
Hydrocarbons dew pt (Degree Celsius, max.)*	0
Water dew pt(Degree Celsius, max)*	0
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole %)	8
Temperature (Degree Celsius, max.)	55
Oxygen(% mole vol. max.)	0.2

* At the pipeline operating pressure

The Transporter shall install, own, operate and maintain the Measurement Equipments at the Exit Point. Shipper agrees to utilize the Measurement Equipment installed by the Transporter at the Exit Point and the same shall be deemed to be the Measurement Equipment for the Exit Point at Sonasan.

4) Allocation Methodology

The Measured Quantity of Gas at the Kalol Exit Point shall be allocated to the Shipper. At the end of each Day, Transporter shall issue to the Shipper a statement for allocation of gas for such Day ("Allocation Statement"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point (in SCM and MMBTU) for such Day.
- (b) GCV (in Kcal/SCM) applicable for such Day.
- (c) Allocated Quantities at the Exit Point (in SCM and MMBTU) for such Day

ANNEXURE 11 - MEHSANA EXIT POINT

1) Location & Identification

Exit Point shall be the flange or weld or agreed mark at which the Transporter delivers Gas back to the Shipper and the same shall be located at Nagalpur gas station of GSPL in district Mehsana.

2) Acceptable Pressure Range

Acceptable Pressure Range at the Exit Point shall be twenty (20) to forty-eight (48) bar (both inclusive). Any change in Acceptable Pressure Range shall be notified to the Shipper and the same shall be deemed to be acceptable to the Shipper.

3) Measurement Arrangements

The Transporter shall install, own, operate and maintain the Measurement Equipments at the Exit Point. Shipper agrees to utilize the Measurement Equipment installed by the Transporter at the Exit Point and the same shall be deemed to be the Measurement Equipment for the Exit Point at Sonasan.

4) Allocation Methodology

The Measured Quantity of Gas at the Mehsana Exit Point shall be allocated to the Shipper. At the end of each Day, Transporter shall issue to the Shipper a statement for allocation of gas for such Day ("Allocation Statement"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point (in SCM and MMBTU) for such Day.
- (b) GCV (in Kcal/SCM) applicable for such Day.
- (c) Allocated Quantities at the Exit Point (in SCM and MMBTU) for such Day

ANNEXURE 12 - MANDALI EXIT POINT

1) Location & Identification

Exit Point shall be the flange or weld or agreed mark at which the Transporter delivers Gas back to the Shipper and the same shall be located at Mandali gas station of GSPL in district Mehsana.

2) Acceptable Pressure Range

Acceptable Pressure Range at the Exit Point shall be twenty (20) to forty-eight (48) bar (both inclusive). Any change in Acceptable Pressure Range shall be notified to the Shipper and the same shall be deemed to be acceptable to the Shipper.

3) Measurement Arrangements

The Transporter shall install, own, operate and maintain the Measurement Equipments at the Exit Point. Shipper agrees to utilize the Measurement Equipment installed by the Transporter at the Exit Point and the same shall be deemed to be the Measurement Equipment for the Exit Point at Sonasan.

4) Allocation Methodology

The Measured Quantity of Gas at the Mandali-Exit Point shall be allocated to the Shipper. At the end of each Day, Transporter shall issue to the Shipper a statement for allocation of gas for such Day ("Allocation Statement"). Such Allocation Statement for any Day shall contain:

- (a) Measured Quantities at the Exit Point (in SCM and MMBTU) for such Day.
- (b) GCV (in Kcal/SCM) applicable for such Day.
- (c) Allocated Quantities at the Exit Point (in SCM and MMBTU) for such Day

ANNEXURE 13 GAS SPECIFICATION

Gas shall be determined to meet the Specifications if the Gas: -

- a) shall be merchantable Gas commercially free from objectionable odours, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with its intended purpose, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow;
- b) shall not contain free water ;
- c) shall contain no hydrocarbons in liquid form at the temperature and pressure at which the Gas is delivered at the Entry Point ;
- d) shall not exceed a hydrocarbon Dew Point in excess of minus three (3) degrees Celsius below 100 Bar (One Hundred Bar);
- e) shall contain not more than 0.2 volume percent by quantity of oxygen and Shipper shall make every reasonable effort to keep the Gas free of oxygen;
- f) shall contain not more than 3.0 volume percent by quantity of carbon dioxide;
- g) shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the Gas, results in an unacceptable risk to health, is injurious to pipeline facilities, is a limit to merchantability or contrary to applicable governmental standards;
- h) Shall have a Gross Heating Value between 8853.83 kcal / scm and 10517.58 kcal/scm and have a Wobbe-Index in the range of plus or minus 10 (ten) percent from the base Wobbe-Index of 11739.65 kcal/scm ;
- i) shall have a temperature of not more than 45 degrees Celsius
- j) shall have the following limits of Composition
 - i. Shall contain not more than a combined total of 8 (eight) percent by volume of inerts, including carbon dioxide, nitrogen and any other inert compound;

- ii. Shall contain not more than 15 (fifteen) milligrams of mercaptan sulphur per Standard Cubic Metre of Natural Gas, Shall contain not more than 50 (fifty) milligrams of total sulphur per Standard Cubic Metre of Natural Gas.
- iii. Shall contain not more than 7 (seven) milligrams of hydrogen sulphide per Standard Cubic Metre of Natural Gas (the Natural Gas shall not contain any entrained hydrogen sulphide treatment chemical (solvent) or its by-products).

k) shall have the following range of composition at any Point:

Component	Range
Methane	Not less than 80%
Ethane	1% - 8%
Propane	< 3.3%
iC4	< 2%
iC5 + nC5	< 0.25%

ANNEXURE 14 FORMAT OF CAPACITY TRANCHE

1. Entry Point and Exit Point:
2. CT Entry Point MDQ and CT Exit Point MDQ:
3. CT Start Date:
4. CT End Date:
5. Transmission Rate and Spur Rate