

EPC PACKAGE FOR LARA SUPER THERMAL POWER PROJECT, STAGE-II (2x800 MW)
Amendment No. 01A to Technical Specifications Section-VI of Bidding Document No.: CS-9587-001R-2

S. No.	SPECIFICATION REFERENCE				Instead of	Read as
	Section / Part	Sub-Section	Clause No.	Page No.		
1.	VI/A	I-B	6.03.00	2 OF 22	Coal Quality The primary fuel for the main steam generator shall be coal. The coal quality parameters are indicated in Annexure-IV-2 are to be considered for steam generator design. Annexure-IV-2	Coal Quality The primary fuel for the main steam generator shall be coal. The coal quality parameters are indicated in Annexure-IV-2R are to be considered for steam generator design.

Doc. No.: CS-9587-001R-2-TECH AMDT- 01A	LARA SUPER THERMAL POWER PROJECT STAGE-II (2X800 MW)	Amendment No. 01A to Technical Specifications Section-VI
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LARA II 2 x800 MW Domestic Coal Characteristics						
S.No.	Characteristics	Range of coal supplies 95%			Range of coal supplies 5%	
	(as received basis)	Column - 1	Column - 2	Column - 3	Column - 1	Column - 2
1.0	PROXIMATE ANALYSIS	Design	Worst	Best	Worst	Best
1.1	Total Moisture (%)	16	17	13	17.5	13
1.2	Ash (%)	40	43	33.5	44	31
1.3	Volatile Matter (%)	21	19	23	19	23
1.4	Fixed Carbon (%)	23	21	30.5	19.5	33
1.5	Total (%)	100.00	100.00	100.00	100.00	100.00
2.0	ULTIMATE ANALYSIS					
2.1	Carbon (%)	34.7	30.4	42.85	29.1	43.03
2.2	Hydrogen (%)	2.8	2.3	1.7	2.3	3.58
2.3	Sulphur (%)	0.4	0.5	0.35	0.5	0.35
2.4	Nitrogen(%)	1	0.9	1.23	0.84	1.37
2.5	Oxygen(%) (By difference)	5.1	5.9	7.37	5.76	7.17
2.8	Total Moisture (%)	16	17	13	17.5	13
2.9	Ash (%)	40	43	33.5	44	31.5
	Total	100	100	100	100	100
2.10	GCV (Kcal/Kg)	3550	3000	3750	2900	4100
2.11	Hard Groove Index	50.00	48.00	65.00	45.00	70.00
2.12	YGP	75.00	80.00	70.00	85.00	65.00
3.0	ASH ANALYSIS					
3.1	Silica (%)	58.59	56.81	60.20	56.29	60.42
3.2	Alumina(%)	26.77	27.42	26.10	27.52	25.90
3.3	Iron Oxide (%)	8.80	9.80	7.80	10.10	7.60
3.4	Titania	1.66	1.78	1.56	1.86	1.52
3.5	Phosphoric Anhydride (%)	0.19	0.10	0.24	0.08	0.32
3.6	Lime (%)	1.38	1.48	1.32	1.52	1.28
3.7	Magnesia (%)	1.00	1.13	0.97	1.17	0.92
3.8	Sulphuric Anhydride (%)	0.05	0.04	0.10	0.04	0.15
3.9	Sodium Oxide (%)	0.10	0.08	0.15	0.08	0.17
3.10	Balance Alkalies (by difference)	1.46	1.36	1.56	1.34	1.72
	Total	100.00	100.00	100.00	100.00	100.00
4.0	ASH FUSION RANGE					
	REDUCING ATMOSPHERE					
4.1	Initial Deformation Temp.(oC)	1150.00	1100.00	1200.00	1100.00	1200.00
4.2	Hemispherical Temp. (oC)	1300.00	1250.00	1350.00	1250.00	1350.00
4.3	Fusion Temperature (oC)	1400.00	1400.00	1400.00	1400.00	1400.00