

## SCHEDULE OF QUANTITIES & RATES

**Biennial Rate Contract for Control and Instrumentation Systems at Surat Lignite Power Plant - 4X125 MW, Phase 1 & 2 for the year 2017-19**

### MAINPLANT ANNEXURE-A1 (CALIBRATION OF INSTRUMENTS)

SR. NO.	DESCRIPTION	MAINTENANCE TYPE	TOTAL FREQ. FOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	CO ANALYZER	CALIBRATION	16	NO	260.09	4161.50
2	CONDUCTIVITY TRANSMITTER	CALIBRATION	50	NO	195.07	9753.51
3	CONTROL ELEMENTS (pneumatic)	CALIBRATION,OVERHOULING	452	NO	582.61	263338.90
4	DP GUAGES	CALIBRATION	30	NO	128.31	3849.35
5	DP SWITCHES	CALIBRATION	150	NO	128.31	19246.76
6	DP TRANSMITTERS	CALIBRATION	372	NO	195.07	72566.15
7	FLOW INDICATING SWITCHES	CABLE AND CONTACT CHECKING	20	NO	128.31	2566.23
8	FLOW TRANSMITTER (DP TYPE)	CALIBRATION	612	NO	195.07	119383.01
9	FLOW INDICATOR/ROTAMETER	CLEANING,REPLACEMENT	90	NO	192.47	17322.09
10	LEVEL SWITCHES (COND/PROBE. TYPE)	CALIBRATION	200	NO	192.47	38493.52
11	LEVEL SWITCHES (MAGNETIC)	CONTACT CHECKING, ADJUSTMENT	218	NO	192.47	41957.94
12	LEVEL SWITCHES (PADDLE)	PROBE CLEANING,CONTACT CHECKING	48	NO	195.07	9363.37
13	LEVEL TRANSMITTER(DISPLC)	CALIBRATION	96	NO	260.09	24969.00
14	LEVEL TRANSMITTER(OTHER THAN DP TYPE)	CALIBRATION	60	NO	195.07	11704.22
15	LIMIT SWITCHES	CONTACT CHECKING, ADJUSTMENT	500	NO	96.23	48116.90
16	NOx ANALYZER	CALIBRATION	16	NO	291.30	4660.87
17	ON-OFF VALVES(PNEUMATIC)	STROKE CHECKING,OVERHOULING	244	NO	260.09	63462.87
18	OXYGEN ANALYZER	CALIBRATION	16	NO	388.41	6214.49
19	PaEX ANALYZER	CALIBRATION	8	NO	582.61	4660.87
20	pH TRANSMITTERS	CALIBRATION	62	NO	195.07	12094.36
21	POSITION TRANSMITTERS	CALIBRATION	600	NO	130.05	78028.11
22	PRESSURE GUAGES	CALIBRATION	1280	NO	128.31	164239.03
23	PRESSURE SWITCHES	CALIBRATION	900	NO	195.07	175563.26
24	PRESSURE TRANSMITTER	CALIBRATION	1812	NO	195.07	353467.35
25	RTDs/ THERMOCOUPLE	RESISTANCE & CALIBRATION CHECKING	598	NO	128.31	76730.42
26	SILICA ANALYZER	CALIBRATION	12	NO	195.07	2340.84
27	SO <sub>2</sub> ANALYZER	CALIBRATION	16	NO	291.30	4660.87
28	SOLENOID VALVES	CLEANING, OPERATION CHECKING	1000	NO	130.05	130046.86
29	SPEED SWITCHES	CONTACT CHECKING, ADJUSTMENT	260	NO	130.05	33812.18
30	SPEED TRANSMITTERS	CALIBRATION/CHECKING	32	NO	130.05	4161.50
31	TEMP. GAUGES	CALIBRATION	694	NO	128.31	89048.35
32	TEMP. SWITCHES	CALIBRATION	200	NO	130.05	26009.37
33	TEMP. TRANSMITTERS	CALIBRATION	300	NO	195.07	58521.09
34	WEIGHT TRANSMITTERS	CALIBRATION	32	NO	195.07	6242.25
35	VIBRATION SWITCH	CLEANING, ADJUSTMENT	64	NO	128.31	8211.95
36	DIGITAL DISPLAY UNITS	CALIBRATION	20	NO	194.20	3884.05
37	CABLE LAYING 1 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	14.97	5987.88
38	CABLE LAYING 2 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	14.97	5987.88
39	CABLE LAYING 4 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	22.45	8981.82
40	CABLE LAYING 6 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	42.77	17108.23
41	CABLE LAYING 8 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	42.77	17108.23
42	CABLE LAYING 12 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	42.77	17108.23
43	CABLE LAYING 24 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	42.77	17108.23
44	CABLE LAYING 48 PAIR 0.5 SQMM	CABLE LAYING	400	MTR	42.77	17108.23

45	TELEPHONE CABLE LAYING 2P ARMoured	CABLE LAYING	400	MTR	14.97	5987.88
46	TELEPHONE CABLE LAYING 5P ARMoured	CABLE LAYING	400	MTR	14.97	5987.88
47	TELEPHONE CABLE LAYING 10P ARMoured	CABLE LAYING	400	MTR	22.45	8981.82
48	TELEPHONE CABLE LAYING 20P ARMoured	CABLE LAYING	400	MTR	34.22	13686.59
49	TELEPHONE CABLE LAYING 50P ARMoured	CABLE LAYING	400	MTR	42.77	17108.23
50	TELEPHONE CABLE LAYING 100P ARMoured	CABLE LAYING	400	MTR	42.77	17108.23
51	TELEPHONE CABLE LAYING 2P UNARMRD	CABLE LAYING	400	MTR	10.69	4277.06
52	TELEPHONE CABLE LAYING 5P UNARMRD	CABLE LAYING	400	MTR	10.69	4277.06
53	CABLE TERMINATION PER PAIR	GLANDING, LUGGUNG AND TERMINATION	600	NO	43.35	26009.37
54	MAINTENANCE OF APPROX. 800 TELEPHONE LINES AND CONNECTIONS AVAILABLE AT PLANT AS WELL AS COLONY AND PUBLIC ADDRESS SYSTEM STATIONS ON REQUIREMENT BASIS INCL. KEEPING THE EXTENSIONS/LINESWORKING BY DEPLOYING REQUIRED RESOURCES/MANPOWER	LUMPSUM PER MONTH BASIS	24	NO	17708.65	425007.63
55	THERMOWELLS	REMOVAL AND REINSTALLATION	100	NO	195.07	19507.03
56	PROTECTION CHECKING	SIGNAL SIMULATIONS PER EQUIPMENT	200	NO	195.07	39014.06
57	IMPULSE TUBING 1/2"	INSTALLATION, PER METER	200	MTR	64.16	12831.17
58	IMPULSE TUBING 1/4"	INSTALLATION, PER METER	200	MTR	64.16	12831.17
59	REMOVAL/REINSTALLATION of INSTRUMENTS	PER EQUIPMENT/DRIVE	300	NO	260.09	78028.11
60	JUNCTION BOX INSTALLATION	INSTALLATION, PER JB	20	NO	388.41	7768.11
61	PVC CASING CAPING	ERECTION PER METER	100	MTR	64.16	6415.59
62	PUBLIC ADDRESS SYSTEM	INSTALLATION AND REMOVAL	20	NO	291.30	5826.08
63	AIR FILTER REGULATORS	SERVICING	150	NO	130.05	19507.03
64	VIBRATION PROBES	REPLACEMENT, SERVICING	200	NO	128.31	25662.35
65	CHLORINE LEAK DETECTORS	REPLACE, SERVICE, CALIBRATION	20	NO	128.31	2566.23

**MAIN PLANT ANNEXURE-A2 (CLEANING OF INSTRUMENTS)**

SR. NO.	DESCRIPTION	MAINTENANCE TYPE	TOTAL FREQ. FOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	CO ANALYZER	CLEANING, CONNECTION TIGHTENING	24	NO	130.05	3121.12
2	DP GUAGES	CLEANING, CONNECTION TIGHTENING	220	NO	64.16	14114.29
3	DP SWITCHES	CLEANING, CONNECTION TIGHTENING	150	NO	64.16	9623.38
4	DP TRANSMITTERS	CLEANING, CONNECTION TIGHTENING	372	NO	64.16	23865.98
5	FLAME SCANNERS	CLEANING, CONNECTION TIGHTENING	32	NO	64.16	2052.99
6	FLOW INDICATING SWITCHES	CLEANING, CONNECTION TIGHTENING	280	NO	64.16	17963.64
7	FLOW TRANSMITTER (DP TYPE)	CLEANING, CONNECTION TIGHTENING	612	NO	64.16	39263.39
8	FLOW INDICATOR/ROTAMETER	CLEANING, CONNECTION TIGHTENING	56	NO	64.16	3592.73
9	LEVEL SWITCHES (COND/PROBE. TYPE)	CLEANING, CONNECTION TIGHTENING	132	NO	64.16	8468.57

10	LEVEL SWITCHES (MAGNETIC)	CLEANING, CONNECTION TIGHTENING	436	NO	64.16	27971.96
11	LEVEL SWITCHES (PADDLE)	CLEANING, CONNECTION TIGHTENING	32	NO	64.16	2052.99
12	LEVEL TRANSMITTER(DISPLC)	CLEANING, CONNECTION TIGHTENING	96	NO	65.02	6242.25
13	LEVEL TRANSMITTER(DP TYPE)	CLEANING, CONNECTION TIGHTENING	120	NO	64.16	7698.70
14	LIMIT SWITCHES	CLEANING, CONNECTION TIGHTENING	2000	NO	32.08	64155.87
15	ON-OFF VALVES(PNEUMATIC)	CLEANING, CONNECTION TIGHTENING	488	NO	65.02	31731.43
16	OXYGEN ANALYZER	CLEANING, PROBE CLEANING	192	NO	130.05	24969.00
17	PaEX ANALYZER	CLEANING, GLASS CLEANING	96	NO	130.05	12484.50
18	POSITION TRANSMITTERS	CLEANING, CONNECTION TIGHTENING	848	NO	65.02	55139.87
19	PRESSURE GUAGES	CLEANING, CONNECTION TIGHTENING	3676	NO	42.77	157224.65
20	PRESSURE SWITCHES	CLEANING, CONNECTION TIGHTENING	986	NO	64.16	63257.69
21	PRESSURE TRANSMITTER	CLEANING, CONNECTION TIGHTENING	1812	NO	65.02	117822.45
22	PRINTERS	CLEANING, CONNECTION TIGHTENING	144	NO	65.02	9363.37
23	RTDs / THERMOCOUPLE	CLEANING, CONNECTION TIGHTENING	1196	NO	64.16	76730.42
24	SO2, NOx ANALYZER	CLEANING	16	NO	130.05	2080.75
25	SOVs	CLEANING, CONNECTION TIGHTENING	2242	NO	21.39	47945.82
26	SPEED SWITCHES	CLEANING, CONNECTION TIGHTENING	260	NO	64.16	16680.53
27	SPEED TRANSMITTERS	CLEANING, CONNECTION TIGHTENING	64	NO	64.16	4105.98
28	TEMP. GAUGES	CLEANING, CONNECTION TIGHTENING	2776	NO	42.77	118731.13
29	TEMP. SWITCHES	CLEANING, CONNECTION TIGHTENING	160	NO	64.16	10264.94
30	TEMP. TRANSMITTERS	CLEANING, CONNECTION TIGHTENING	300	NO	64.16	19246.76
31	VIBRATION PROBES	CLEANING, PROBE TIGHTENING	1296	NO	43.35	56180.24
32	WEIGHT TRANSMITTERS	CLEANING, CONNECTION TIGHTENING	32	NO	65.02	2080.75
33	FTCs	CLEANING	104	NO	96.23	10008.32
34	JUNCTION BOXES	CLEANING	7252	NO	42.77	310172.25
35	MARSHALING CABINETS	CLEANING, CONTACT TIGHTENING	36	NO	96.23	3464.42
36	SYSTEM CABINETS	CLEANING, CONTACT TIGHTENING	540	NO	97.54	52668.98
37	REALY CABINETS	CLEANING, CONTACT TIGHTENING	100	NO	97.54	9753.51
38	ACDBs	CLEANING, CONTACT TIGHTENING	36	NO	97.54	3511.27
39	DCDBs	CLEANING, CONTACT TIGHTENING	16	NO	97.54	1560.56
40	CRTs	CLEANING	648	NO	64.16	41573.00
41	SERVERs	CLEANING	96	NO	97.54	9363.37
42	VIBRATION PANELS	CLEANING, CONTACT TIGHTENING	24	NO	97.54	2340.84
43	UPS	CLEANING, CONTACT TIGHTENING	32	NO	97.54	3121.12
44	PLCs	CLEANING, CONTACT TIGHTENING	56	NO	97.54	5461.97
45	SWAS PANELS/LOCAL PANELS	CLEANING, CONTACT TIGHTENING	200	NO	130.05	26009.37
46	IGNITOR	REMOVAL INSTALLATION AND TRIAL	96	NO	195.07	18726.75
47	ANALYSER SAMPLE LINE FLUSHING	FLUSHING WITH AIR	192	NO	192.47	36953.78

**MAIN PLANT ANNEXURE-A3 (SUPPLY OF SHIFT TECHNICIAN)**

SR. NO.	DESCRIPTION	TOTAL FREQ. FOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	SHIFT TECHNICIAN (ITI INSTRUMENT TECHNICIAN)	2190	NO	567.39	1242582.76

**LLHS ANNEXURE-A1 (CALIBRATION OF INSTRUMENTS)**

SR. NO.	DESCRIPTION	MAINTENANCE TYPE	TOTAL FREQ. FOR 2	UNIT	SOR for First Year without Service tax	Total Value without Service tax Rs.
1	PRESSURE/DP GAUGE	CALIBRATION	150	No.	224.12	33618
2	PRESSURE/DP SWITCH	CALIBRATION,	125	No.	242.8	30350
3	PRESSURE TRANSMITTER	CALIBRATION	40	No.	364.2	14568
4	TEMPERATURE ELEMENT (RTD+TC)	REPLACEMENT OR CHECKING	50	No.	242.8	12140
5	TEMPERATURE GAUGE	CALIBRATION	50	No.	242.8	12140
6	TEMPERATURE SCANNERS	REPLACEMENT CONTACT CHECKING	10	No.	485.6	4856
7	TEMPERATURE TRANSMITTER	CALIBRATION	8	No.	154.79	1238.32
8	TEMP SWITCHES	CALIBRATION	50	No.	205.45	10272.5
9	FLOW SWITCHES	CONTACT CHECKING, ADJUSTMENT	15	No.	223.1	3346.5
10	AIR FILTER REGULATOR, AIR FILTER REGULATOR + LUBRICATOR	REPLACEMENT	50	No.	372.52	18626
11	AIR LIMIT SWITCH	REPLACEMENT CONTACT CHECKING	50	No.	280.16	14008
12	I/P CONVERTOR	CALIBRATION	10	No.	448.25	4482.5
13	LIMIT SWITCHES (BLS, BACK UP LS, HEAVY DUTY LS IN S/R & FLAP GATES, LS BOX, POWER CYLINDER LS)	REPLACEMENT, DEFECT	150	No.	349.23	52384.5
14	PNEUMATIC ON-OFF ACTUATOR,CYLINDER, BLOW VALVES, 2&3 WAY VALVES	REPLACEMENT,OVERHAULING	100	No.	1540.85	154085
15	POSITION/LEVEL TRANSMITTER	CALIBRATION	20	No.	304.33	6086.6
16	LEVEL SWITCHES (RF+PADDLE TYPE)	CALIBRATION/REPLACEMENT CONTACT CHECKING	20	No.	242.8	4856
17	BELT SWAY SWITCH	CONTACT CHECKING,REPAIRING/REPLACEMENT LEVER ADJUSTMENT	150	No.	605.34	90801
18	MAGNETIC/PROXYMITY SWITCH	CALIBRATION,REPLACEMENT	80	No.	197	15760
19	PULL CORD SWITCH	CONTACT CHECKING, LEVER ADJUSTMENT	500	No.	605.34	302670
20	AUTO DRAIN TRAP	OVERHAULING/REPLACEMENT WITH OPERATION CHECKING	20	No.	261.48	5229.6
21	SOLENOID VALVES (ALL TYPES)	REPLACEMENT,OVERHAULING	250	No.	261.48	65370
22	FLAME SCANNER	CALIBRATION, TERMINAL TIGHTNESS	20	No.	373.54	7470.8
23	BELT LOAD MONITOR /ZERO SPEED SWITCH	REPLACEMENT OR OPERATION CHECKING	80	No.	336.19	26895.2
24	ELECTRONIC CONTROLLERS	CALIBRATION/REPLACEMENT WITH SET UP CHECKING	25	No.	280.16	7004
25	TAIL END EPB	REPLACEMENT /DEFECT	50	No.	181.27	9063.5
26	CABLE LAYING 1 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	900	MTR	5.6	5040
27	CABLE LAYING 2 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	900	MTR	11.21	10089
28	CABLE LAYING 4 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	9.36	3744
29	CABLE LAYING 6 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	16.81	6724
30	CABLE LAYING 8 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	22.41	8964

31	CABLE LAYING 12 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	28.02	11208
32	CABLE LAYING 24 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	36.02	14408
33	CABLE LAYING 2CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	8.4	3360
34	CABLE LAYING 4CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	9.36	3744
35	CABLE LAYING 7CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	16.81	6724
36	CABLE LAYING 14CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	22.92	9168
37	CABLE LAYING 24CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	26.2	10480
38	CABLE LAYING 37CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	MTR	29.47	11788
39	GLANDING AND TERMINATION BOTH END	GLANDING AND TERMINATION BOTH END UP TO 8 PAIR(2,3,4 CORE CABLE)	300	MTR	26.15	7845
40	COPPER / PU TUBE LAYING OF 6, 8 & 10 MM OD	CABLE LAYING, DRESSING, CLAMPING	100	MTR	12.55	1255
41	PULL CORD ROPE LAYING	LAYING, DRESSING AND CLAMPING	1000	MTR	5.53	5530

**LLHS ANNEXURE-A2 (CLEANING OF INSTRUMENTS)**

SR. NO.	DESCRIPTION	MAINTENANCE TYPE	TOTAL FREQ. FOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	PRESSURE/DP GAUGE	CLEANING	900	NO	41.09	36981
2	PRESSURE/DP SWITCH	CLEANING, PLASTIC COVERING	800	No.	59.77	47816
3	PRESSURE TRANSMITTER	CLEANING, PLASTIC COVERING	120	No.	56.03	6723.6
4	TEMPERATURE GAUGE	CLEANING	300	No.	41.09	12327
5	TEMPERATURE SCANNERS	CLEANING, PLASTIC COVERING	100	No.	65.37	6537
6	TEMPERATURE SWITCHES & TEMP SWITCH CUM GAUGE	CLEANING, PLASTIC COVERING	450	No.	65.37	29416.5
7	TEMPERATURE TRANSMITTER	CLEANING, PLASTIC COVERING	8	No.	65.37	522.96
8	TEMP SWITCHES	CLEANING, PLASTIC COVERING	250	No.	65.37	16342.5
9	FLOW SWITCHES	CLEANING, PLASTIC COVERING	100	No.	65.37	6537
10	FLOW TRANSMITTER	CLEANING, PLASTIC COVERING	12	No.	65.37	784.44
11	AIR FILTER REGULATOR, AIR FILTER REGULATOR + LUBRICATOR	FILTER CLEANING	300	No.	74.71	22413
12	AIR LIMIT SWITCH	CLEANING, PLASTIC COVERING	150	No.	70.97	10645.5
13	LIMIT SWITCH BOX	CLEANING PLASTIC COVERING	50	No.	149.42	7471
14	I/P CONVERTOR	CLEANING, PLASTIC COVERING	12	No.	115.8	1389.6
15	LIMIT SWITCHES (BLS, BACK UP LS, HEAVY DUTY LS IN S/R & FLAP GATES, LS BOX, POWER CYLINDER LS)	CLEANING, PLASTIC COVERING	600	No.	102.72	61632
16	PNEUMATIC ON-OFF ACTUATOR/CYLINDER, BLOW VALVES, 2&3 WAY VALVES	CLEANING	250	No.	121.4	30350
17	LEVEL SWITCHES (RF, PADDLE)	CLEANING	260	No.	65.37	16996.2
18	MAGNETIC/PROXIMITY SWITCH	CLEANING	280	No.	65.37	18303.6
19	ZERO SPEED SWITCH	CLEANING, PLASTIC COVERING	660	No.	78.44	51770.4
20	AUTO DRAIN TRAP	CLEANING	70	No.	102.72	7190.4

21	SOLENOID VALVES (ALL TYPES)	CLEANING	1300	No.	102.72	133536
22	FIELD JUNCTION BOXES(50TB AND ABOVE)	CLEANING, PLASTIC COVERING	400	No.	121.4	48560
23	FIELD JUNCTION BOXES(BELOW 50 TB)	CLEANING, PLASTIC COVERING	600	No.	158.75	95250
24	FLAME SCANNER	CLEANING, PLASTIC COVERING	24	No.	112.06	2689.44
25	METAL DETECTOR	CLEANING, PLASTIC COVERING	40	No.	242.8	9712
26	SOUND LEVEL SYSTEM	CLEANING, PLASTIC COVERING	32	No.	205.45	6574.4
27	VIBRATION SYSTEM	CLEANING, PLASTIC COVERING	60	No.	252.14	15128.4
28	BAG FILTER PANEL	CLEANING, PLASTIC COVERING	50	No.	186.77	9338.5
29	BELT WEIGHER PANEL	CLEANING, PLASTIC COVERING	80	No.	252.14	20171.2
30	BOOM HYDRAULIC PANELWITH ALL INST.	CLEANING, PLASTIC COVERING	32	No.	420.23	13447.36
31	AIR DRIER PANEL	CLEANING, PLASTIC COVERING	10	No.	336.19	3361.9
32	CONTROL DESK WITH ALL INSTRUMENT	CLEANING, PLASTIC COVERING	80	No.	420.23	33618.4
33	STACKER RECLAIMER ANNUNCIATION PANEL	CLEANING, PLASTIC COVERING	30	No.	308.17	9245.1
34	TAIL END EPB	CLEANING, PLASTIC COVERING	200	No.	154.79	30958
35	FAS & PRU PANELS	CLEANING, PLASTIC COVERING	100	No.	252.14	25214
36	LEVEL TRANSMITTER	CLEANING, PLASTIC COVERING	20	No.	56.03	1120.6
37	SEQUENTIAL TIMER	CLEANING, PLASTIC COVERING	36	No.	93.39	3362.04
38	HAG PANEL WITH ALL INDICATORS	CLEANING OF PANEL& INDICATOR(03),CONTROLLER (3) PUSH BUTTON, CABLE TERMINATION TIGHTNESS,	32	No.	420.23	13447.36
39	PLC PANELS	CLEANING OF PANEL & CARDS, CABLE TERMI TIGHTNESS, BATTERY CHECKING	250	No.	448.25	112062.5
40	COMPUTER WITH MONITOR	CLEANING	96	No.	56.29	5403.84
41	K-PUMP PANEL WITH ALL INSTRUMENT	CLEANING	24	No.	420.23	10085.52
42	REDUNDENT UPS PANEL	CLEANING	16	No.	336.19	5379.04
43	PULL CORD/BELT SWAY CLEANING AND PLASTIC COVERING	CLEANING AND PLASTIC COVERING	800	No.	46.69	37352

**LLHS ANNEXURE-A3 (SUPPLY OF SHIFT TECHNICIAN)**

SR. NO.	DESCRIPTION	TOTAL FREQ. FOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	SHIFT TECHNICIAN (ITI INSTRUMENT TECHNICIAN)	4380	No.	498.73	2184437.4

**AHS ANNEXURE-A1 (CALIBRATION OF INSTRUMENTS)**

SRNO	DESCRIPTION	MAINTENANCE TYPE	TOTAL FREQFOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	PRESSURE GAUGES	CALIBRATION	200	No.	108.83	21766
2	PRESSURE SWITCHES	CALIBRATION, CONTACT CHECKING	100	No.	174.12	17412
3	PRESSURE TRANSMITTER	CALIBRATION	40	No.	217.65	8706
4	RESISTANCE TEMPARATURE DETECTOR(RTD)	RESISTANCE & CALIBRATION CHECKING	8	No.	141.47	1131.76
5	TEMPERATURE GAUGES	CALIBRATION	140	No.	130.59	18282.6
6	TEMPERATURE SCANNERS	CALIBRATION, CONTACT CHECKING	12	No.	357.48	4289.76

7	TEMPERATURE SWITCHES	CALIBRATION, CONTACT CHECKING	100	No.	174.12	17412
8	HT MOTOR T/C "T" TYPE	CONTINUITY & CALIBRATION /REPLACEMENT	16	No.	152.36	2437.76
9	DIFFERENTIAL PRESSURE SWITCHES	CALIBRATION, CONTACT CHECKING	40	No.	174.12	6964.8
10	FLOW SWITCHES (FLAP TYPE)	CONTACT CHECKING, ADJUSTMENT	8	No.	174.12	1392.96
11	LIMIT SWITCH BOX	CONTACT CHECKING, ADJUSTMENT	150	No.	108.83	16324.5
12	I/P CONVERTOR	CALIBRATION	8	No.	239.42	1915.36
13	LIMIT SWITCHES /PROXIMITY SWITCH	CONTACT CHECKING, ADJUSTMENT	800	No.	152.36	121888
14	PNEUMATIC ON-OFF CYLINDER	STROKE CHECKING,OVERHOULING	800	No.	438.73	350984
15	PNEUMATIC ON-OFF ACTUATOR	STROKE CHECKING,OVERHOULING	420	No.	389.98	163791.6
16	PNEUMATIC CONTROL VALVE	STROKE CHECKING,OVERHOULING	8	No.	389.98	3119.84
17	DIAPHRAM VALVE FOR BAG FILTER	STROKE CHECKING,OVERHOULING	240	No.	156.71	37610.4
18	LEVEL TRANSMITTER (ULTRASONIC/RADAR TYPE)	CONTACT CHECKING, ADJUSTMENT	20	No.	163.24	3264.8
19	LEVEL SWITCH (RF /MAGNETIC/CONDUCT.)	CONTACT CHECKING, ADJUSTMENT	400	No.	163.24	65296
20	SOLENOID VALVES	OVERHAULING/ REPLACEMENT	1000	No.	163.24	163240
21	BAG FILTER PANELWITH TIMER	CABLE CHECKING, TERMINAL TIGHTENING	16	No.	174.12	2785.92
22	TEMP GAUGE CUM SWITCH FOR HT MOTOR	CALIBRATION, CONTACT CHECKING	16	No.	174.12	2785.92
23	RUBBER HOSE /SS / COPPER TUBING 1 METER LENTH	REPLACEMENT	800	No.	32.65	26120
24	CABLE LAYING 1 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	No.	8.71	3484
25	CABLE LAYING 2 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	400	No.	8.71	3484
26	CABLE LAYING 12 PAIR 0.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	250	MTR	13.57	3392.5
27	CABLE LAYING 4CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	250	MTR	10.85	2712.5
28	CABLE LAYING 7CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	250	MTR	13.06	3265
29	CABLE LAYING 14CORE 2.5 SQMM	CABLE LAYING, DRESSING, CLAMPING	250	MTR	18.99	4747.5
30	CABLE GLANDING & TERMINATION	GLANDING, FERRULING,LUGGING,TERMINATION	200	NOS	27.13	5426

#### AHS ANNEXURE-A2 (CLEANING OF INSTRUMENTS)

SR. NO.	DESCRIPTION	MAINTENANCE TYPE	TOTAL FREQ. FOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	PRESSURE GAUGES	CLEANING/TIGHTNING	400	NO	65.3	26120
2	PRESSURE SWITCHES	CLEANING/TIGHTNING	250	No.	65.3	16325
3	PRESSURE TRANSMITTER	CLEANING/TIGHTNING	150	No.	65.3	9795
4	TEMPERATURE GAUGES	CLEANING/TIGHTNING	210	No.	65.3	13713
5	TEMPERATURE SWITCHES	CLEANING/TIGHTNING	200	No.	65.3	13060
6	DIFFERENTIAL PRESSURE SWITCHES	CLEANING/TIGHTNING	120	No.	65.3	7836
7	FLOW SWITCHES (FLAP TYPE)	CLEANING/TIGHTNING	24	No.	65.3	1567.2
8	LIMIT SWITCH BOX	CLEANING/TIGHTNING	400	No.	76.18	30472
9	LIMIT SWITCHES	CLEANING/TIGHTNING	800	No.	69.65	55720
10	PNEUMATIC ON-OFF CYLINDER	CLEANING/TIGHTNING	2000	No.	113.18	226360
11	PNEUMATIC ON-OFF ACTUATOR	CLEANING/TIGHTNING	1536	No.	108.83	167162.88
12	PNEUMATIC CONTROL VALVE	CLEANING/TIGHTNING	24	No.	108.83	2611.92

13	LEVEL TRANSMITTER (RADAR/ULTRASONIC TYPE)	CLEANING/TIGHTNING	24	No.	108.83	2611.92
14	LEVEL SWITCH (RF /MAGNETIC/CONDUCTIVITY)	CLEANING/TIGHTNING	500	No.	76.18	38090
15	SOLENOID VALVES	CLEANING/TIGHTNING	2400	No.	87.06	208944
16	FIELD JUNCTION BOXES	CLEANING/TIGHTNING	400	No.	185	74000
17	BAG FILTER PANELWITH TIMER	CLEANING/TIGHTNING	40	No.	185	7400
18	ELECTRONIC CONTROLLERS	CLEANING/TIGHTNING	24	No.	178.47	4283.28
19	CONTROL/OPREATOR DESK WITH ALL INSTRUMENT	CLEANING/TIGHTNING	18	No.	465.71	8382.78
20	PRINTER	CLEANING	6	No.	174.12	1044.72
21	PLC PANELS	CLEANING/TIGHTNING	96	No.	465.71	44708.16
22	COMPUTER WITH MONITOR	CLEANING	30	No.	87.06	2611.8
23	LOCAL CONTROL PANEL	CLEANING/TIGHTNING	125	No.	282.95	35368.75
24	TEMP GAUGE CUM SWITCH FOR HT MOTOR	CLEANING/TIGHTNING	60	No.	87.06	5223.6

**UNFORSEEN JOBS ANNEXURE-A4 (SUPPLY OF MANPOWER)**

SR. NO.	DESCRIPTION	TOTAL FREQ. FOR 2 YEARS	UNIT	SOR for First Year without Service tax Rs.	Total Value without Service tax Rs.
1	INSTRUMENT TECHNICIAN FOR NORMAL WORKING DAYS	10	DAYS	370.06	3700.60
2	ELECTRICIAN FOR NORMAL WORKING DAYS	10	DAYS	370.06	3700.60
3	FITTER FOR NORMAL WORKING DAYS	10	DAYS	370.06	3700.60
4	SEMI SKILLED FOR NORMAL WORKING DAYS	10	DAYS	360.31	3603.10
5	WELDER FOR NORMAL WORKING DAYS	10	DAYS	370.06	3700.60
6	RIGGER FOR NORMAL WORKING DAYS	10	DAYS	350.57	3505.70
7	ENGINEER / SUPERVISOR FOR NORMAL WORKING DAYS	10	DAYS	370.06	3700.60
8	INSTRUMENT TECHNICIAN FOR WORK ON GENERAL HOLIDAYS	20	HRS	88.93	1778.60
9	ELECTRICIAN FOR WORK ON GENERAL HOLIDAYS OR NATIONAL	20	HRS	88.93	1778.60
10	FITTER FOR WORK ON GENERAL HOLIDAYS OR NATIONAL	20	HRS	88.93	1778.60
11	SEMI SKILLED FOR WORK ON GENERAL HOLIDAYS OR NATIONAL	20	HRS	86.59	1731.80
12	WELDER FOR WORK ON GENERAL HOLIDAYS OR NATIONAL	20	HRS	88.93	1778.60
13	RIGGER FOR WORK ON GENERAL HOLIDAYS OR NATIONAL	20	HRS	84.24	1684.80
14	ENGINEER / SUPERVISOR FOR WORK ON GENERAL HOLIDAYS	20	HRS	88.93	1778.60

<b>ESTIMATED AMOUNT FOR TWO YEARS (Rs.)&gt;&gt;&gt;</b>	<b>12,067,005.84</b>
<b>Total estimated amount for first year (Rs.)&gt;&gt;&gt;</b>	<b>6,033,502.92</b>
<b>Estimated Amount for second year (Rs.)&gt;&gt;&gt;</b>	<b>6,033,502.92</b>
<b>5% escalation on second year estimated value (Rs.) &gt;&gt;&gt;</b>	<b>301,675.15</b>
<b>Total estimated amount for second year (Rs.)&gt;&gt;&gt;</b>	<b>6,335,178.07</b>
<b>Total estimated amount for two years (Rs.)&gt;&gt;&gt;</b>	<b>12,368,681.00</b>
<b>Note:</b> The above rates are inclusive of all labour cost, equipments, supervision, tools, tackles, all taxes (excluding Service Tax), VAT, royalties, duties, etc...	