

Main Plant Package for First Unit of NCTPP, Stage-II (2x490MW)

Annexure-I PART I

Power Cycle Piping (PCP) Material

PER UNIT TENTATIVE BREKAUP

	PGMA	DESCRIPTION	IBR	ACTY	Weight (In Kgs.)	P91 PPG	P22 PPG	OTHER PPG	OTHER MATL
	80301	MS FROM BOILER STOP VALVE TO ESV	I	SB	117,300	117,300			
	80303	MS HEADER TO AUX PRDS	I	SB	13,300		9310	3,990	
	80304	MS HEADER TO HPBP VALVE	I	SB	22,500	22,500			
	80310	HRH FROM REHEATER TO INTERCEPTOR VALVE	I	SB	149,600	149,600			
	80311	HRH FROM INTERCEPTOR VALVE TO TURBINE	I	SB	15,200	15,200			
	80312	LPBP VALVE UPSTREAM & DOWNSTREAM	I	SB	61,500	61,500			
	80320	CRH FROM TURBINE TO REHEATER	I	SB	134,200		22000	112,200	
	80321	HPBP VALVE TO CRH PIPING	I	SB	11,500		11,500		
	80324	CRH HEADER TO AUX.PRDS	I	SB	880			880	
	80340	AUX STEAM HEADER	I	LU	4,700			4,700	
	80341	AUX STEAM HEADER INTERCONN BETWEEN UNITS	I	LU	69,400			69,400	
	80352	AUX STEAM TO UNLISTED USERS - TG SCOPE	I	SN	1,900			1,900	
	80373	AUX STEAM HEADER SV EXHAUST	N	LU	4,300			4,300	
	80418	ERECTION MATERIALS FOR INSTRUMENTS	N	LU	540			540	
	80431	SPRAY WATER TO AUX PRDS	I	SN	2,300			2,300	
	80452	HP PIPING DRAINS - SG SCOPE	I	LU	10,700		10,700		
	80453	LP PIPING DRAINS - SG SCOPE	I	LU	2,500			2,500	
	80812	H&S FOR AUXILIARY STEAM PIPING FOR LU	N	LU	14,000				14,000
	80818	AUX STR OF AUXILIARY STEAM PIPING FOR LU	N	LU	28,800				28,800
	80830	H&S OF CRITICAL PIPING FOR SB - STEAM LINES	N	SB	105,300				105,300
	80840	AUX STR FOR MAIN STEAM PIPING FOR SB	N	SB	227,300				227,300
	80901	SUB DELIVERY VALVES FOR LIGHT UP	N	LU	6,500				6,500
	80902	SUBDELIVERY VALVES FOR STEAM BLOWING	N	SB	190				190
	80906	BHEL VALVES FOR STEAM BLOWING	N	SB	3,900				3,900
	80992	IMPORTED ELECTRODES*	N	HT	2,800				
	81318	FIX COM FOR MISCELLANEOUS PPG INSULATION	N	SB	16,700				16,700
	81325	MINERAL WOOL MATTRESS	N	LU	156,700				156,700
	81341	SEALING COMPOUND FOR INSL	N	LU	420				420
	81350	ALUMINIUM CLADDING FOR INSULATION	N	LU	31,300				31,300
	81411	DIRECT GAUGES FOR STEAM LINES	N	LU	290				290
	81412	DIRECT GAUGES FOR NON-STEAM LINES	N	LU	20				20
	81413	LOCAL CONTROL EQPTS FOR STEAM LINES	N	LU	10				10
	81414	LOCAL CONTROL EQPT FOR NON-STEAM LINES	N	LU	240				240
	81415	TEST THERMOWELLS	N	LU	400				400
	81416	PERFORMANCE GUARANTEE TEST MATERIALS	N	SN	1,200		1,200		
	81421	SENSING ELEMENTS FOR STEAM LINES	I	LU	1,800				1,800
	81432	CONSUMABLES AND ERECTION MATERIALS*	N	LU	6,600				
	81435	JUNCTION BOXES	N	LU	10,800				10,800
Total Weight (Tentative)					1,228,190	366,100	54,710	202,710	604,670
						P91	P22	CS	OTHERS

* not considered for erection purposes
EXCLUDES 30T-P91 MATL AGAINST 80-300

TG and LP Piping Material

TENTATIVE BREKAUP

BBU NO	PGMA	DESCRIPTION	IBR	ACTY	Weight (In Kgs.)	P22	SS	OTHER PPG	OTHER MATL
TGP 01	80307	HP & LP BYPASS WARM UP	I	SN	1,600	1,600			
TGP 02	80322	CRH PIPING TO DEAERATING HEATER	I	SN	7,200			7,200	
TGP 03	80323	STEAM TO BFP DRIVE TURBINE	I	SB	2,600			2,600	
TGP 04	80329	EXTRACTION STEAM TO BFP DRIVE TURBINE	I	SN	7,600			7,600	
TGP 05	80331	EXTRACTION STEAM TO LP HEATER-2	I	SN	5,400			5,400	
TGP 06	80332	EXTRACTION STEAM TO LP HEATER-3	I	SN	12,700			12,700	
TGP 07	80335	EXTRACTION STEAM TO DEAERATING HEATER	I	SN	15,600			15,600	

TGP 08	80336	EXTRACTION STEAM TO HP HEATER NO.1	I	SN	6,000	6,000			
TGP 09	80337	EXTRACTION STEAM TO HP HEATER-2	I	SN	3,900			3,900	
TGP 10	80339	AUX STEAM TO BFD TURBINE	I	SN	1,600			1,600	
TGP 11	80345	AUX STEAM TO DEAERATING HEATER	I	LU	3,000			3,000	
TGP 12	80349	AUX STEAM TO GLAND SEALS - TG SCOPE	I	SN	1,500			1,500	
TGP 13	80363	EXHAUST STEAM FROM PRIME MOVERS-TG SCOPE	N	SN	22,700			22,700	
TGP 14	80371	DRAIN FLASH TANK VENT TO CONDENSER	N	SN	9,600			9,600	
TGP 15	80375	UNLISTED SV EXHAUSTS - TG SCOPE	N	SN	1,600			1,600	
TGP 16	80379	HPH SV EXHAUST TO FLASH TANK	N	SN	3,800			3,800	
TGP 17	80381	HP HEATER VENTS - TG SCOPE	N	SN	3,500			3,500	
TGP 18	80382	LP HEATER VENTS	N	SN	1,400			1,400	
TGP 19	80385	VENT FROM UNLISTED PPG/EQPT TO COND	N	SN	8,700			8,700	
TGP 20	80388	CONDENSER AIR EVACUATION PIPING	N	SN	3,100			3,100	
TGP 22	80401	CD FROM PUMP TO LPH1/DC INLET TEE&RECIR	N	LU	28,800			28,800	
TGP 23	80402	CD FROM LPH1/DC INLET TEE TO TG TP	N	LU	19,400			19,400	
TGP 24	80403	CD FROM TG TP TO DEAERATING HEATER	N	LU	9,700			9,700	
TGP 25	80407	CONDENSATE FOR SEALING OF VACUUM	N	LU	3,200			3,200	
TGP 26	80408	CONDENSATE DUMP FROM HEADER	N	LU	760			760	
TGP 27	80412	CONDENSATE TRANSFER	N	LU	1,400		1,400		
TGP 28	80419	DEAERATOR SAFETY VALVE EXHAUST TO ATM	N	LU	3,500			3,500	
TGP 29	80420	BOILER FEED PUMP SUCTION	N	LU	19,200			19,200	
TGP 30	80421	BOILER FEED PUMP RECIRCULATION	I	LU	26,200			26,200	
TGP 31	80423	BOILER FEED PUMP TO HPH INCLUDING BYPASS	I	LU	73,200			73,200	
TGP 32	80424	BFD BETWEEN HTRS & GROUP PROTECTION VLV	I	LU	28,600			28,600	
TGP 33	80425	BFD FROM FINAL HPH TO SG TP	I	LU	129,200			129,200	
TGP 34	80430	SPRAY WATER TO HPBP	I	SN	4,400			4,400	
TGP 35	80432	SPRAY WATER TO BOILER DESH UPTO SG TP	I	SN	16,900			16,900	
TGP 36	80433	SPRAY WATER FROM BFP INTERSTAGE	I	SN	4,300			4,300	
TGP 37	80436	SPRAY WATER TO LPBP DESH	N	SN	5,700			5,700	
TGP 38	80439	TURBINE FLASH TANK DRAIN TO CONDENSER	N	SN	670			670	
TGP 39	80442	GLAND STEAM COOLER DRAINS	N	SN	280			280	
TGP 40	80443	LP HEATER-1 TO CONDENSER	N	SN	3,800			3,800	
TGP 41	80444	LP HEATER-2/3/4/5 DRAINS&DRIP PUMP INCL	N	SN	6,400			6,400	
TGP 42	80446	DEAERATING HEATER OVER FLOW AND DRAIN	N	LU	4,400			4,400	
TGP 43	80447	HP HEATER DRAINS	N	SN	13,700			13,700	
TGP 44	80448	DRAIN FROM UNLISTED EQPT/VESSEL-TG SCOPE	N	SN	9,500			9,500	
TGP 45	80449	TG CYCLE PIPING DRAINS & VENTS	N	SN	3,100			3,100	
TGP 46	80452	HP PIPING DRAINS - SG SCOPE	I	LU	17,500	9000		8,500	
TGP 47	80453	LP PIPING DRAINS - SG SCOPE	I	LU	8,000			8,000	
TGP 48	80457	MANIFOLDS FOR HP FLASH BOX & CONDENSER	N	SN	1,800	1,800			
TGP 49	80459	HP FLASH TANK DRAIN TO CONDENSER	N	SN	1,500			1,500	
TGP 50	80463	TG AUX COOLING WATER	N	SB	69,000		2000	67,000	
TGP 52	80473	DEMINERALISED WATER SYSTEM	N	LU	5,700		5,700		
TGP 53	80477	SERVICE WATER PIPING	N	LU	3,900			3,900	
TGP 54	80493	HP FLASH TANK VENT TO CONDENSER	N	SN	3,100			3,100	
TGP 55	80494	LP FLASH TANK VENT TO CONDENSER	N	SN	2,700			2,700	
TGP 56	80495	LP FLASH TANK DRAIN TO COND	N	SN	2,100			2,100	
TGP 57	80601	LOW PRESSURE DOSING PIPING	N	LU	880		880		
TGP 58	80610	SERVICE AIR-COMP SUCT & DIS TO RECEIVER	N	LU	4,600			4,600	
TGP 59	80614	INST AIR COMP SUC & DIS TO RECEIVER	N	LU	4,500			4,500	
TGP 60	80673	LUBE OIL PIPING SYSTEM	N	TR	6,400			6,400	
TGP 61	80901	SUB DELIVERY VALVES FOR LIGHT UP	N	LU	1,100				1,100
TGP 62	80928	H&S FOR BOILER LIGHT UP - TG	N	LU	116,600				116,600
TGP 63	80930	H&S FOR SYNCHRONISATION - TG	N	SN	31,100				31,100
TGP 64	80992	IMPORTED ELECTRODES*	N	HT	450				
Total Weight (Tentative)					819,890	18,400	9,980	642,710	148,800
ONLY SUBDELIVERY ITEM - FLEXIBLE HOSES COVERED UNDER PGMA 80-901					P22	SS	CS	OTHERS	

* not considered for erection purposes

ANNEXURE I PART II

BOILER SCOPE

SI No	Workorder	PGMA Description	Weight in (KGs)	Stage	Mtrl	Remarks
			Estimate			
1	Main stm pipe from S	0635-777-1-80300	32000	H	P91	
2	Aux Steam To Scaph	0635-606-1-80342	13100	L	CS	
3	Aux Steam To Sootblo	0635-607-1-80343	3100	L	CS	
4	Aux.Steam To F.O.Pum	0635-608-1-80344	27000	L	CS	Unit 5 only
5	Aux Steam To Unliste	0635-759-1-80351	15050	N	CS	
6	Steam Tracing Line O	0635-609-1-80355	21000	L	CS	Unit 5 only
7	Cbd Tank Vent To Sys	0635-708-1-80364	2900	N	CS	
8	Cbd Tank Vent/Sv Exh	0635-760-1-80365	1150	L	CS	
9	Ibd Tank Vent To Atm	0635-666-1-80366	13000	L	CS	
10	Scaph Drain Tank Ven	0635-564-1-80368	1750	L	CS	
11	Aux Steam To Fo Atom	0635-667-1-80395	850	L	CS	
12	Ecection Materials F	0635-761-1-80418	240	L	CS	
13	Cbd And Emergency Dr	0635-668-1-80450	2150	L	CS	
14	Boiler Integral Pipi	0635-669-1-80451	20500	L	CS	
15	Lp Piping Drains-Sg	0635-709-1-80453	6850	L	CS	
16	Scaph Drains	0635-710-1-80454	8300	L	CS	
17	Drain From Ulisted E	0635-762-1-80455	5000	N	CS	
18	Sg Aux Cooling Water	0635-610-1-80460	63050	L	CS	
19	Hp Dozing	0635-612-1-80600	1350	L	SS	
20	Service Air For Unit	0635-613-1-80612	18900	L	GI	
21	Heavy Fuel Oil Main	0635-615-1-80650	93000	L	CS	Unit 5 only
22	Hangers & Supports -	0635-576-1-80812	17850	L		
23	Aux.Structure-Drains	0635-579-1-80820	29500	L		
24	Sd Valves&Specialiti	0635-670-1-80901	8050	L		
25	Bhel Valves-Boiler L	0635-616-1-80905	23150	L		
26	STANDARD HANGER COMP	0635-999-1-80934	2000	L		
27	Imported Electrodes	0635-711-1-80992	220	H		
	UNIT 5		431010			
	UNIT 6		290010			
	UNIT 5 PIPES		409240			
	OTHERS		21550			
	UNIT 6 PIPES		289869			

OTHERS

21550

SI No	Workorder	PGMA Description	Weight in (KGs)	Stage	Mtrl	Remarks
			Estimate			
28	Cont Blow Down Expan	0635-617-1-81003	4400	L		
29	Inter Blow Down Expa	0635-618-1-81009	6850	L		
30	Clean Drain Flash Ta	0635-676-1-81012	5150	N		
31	Mixing Tanks For Che	0635-516-1-81018	550	L		
32	Metering Tanks For C	0635-568-1-81019	550	L		
33	Cw Store Tank - 16-2	0635-565-1-81036	6800	L		
34	Impure Condens Tank	0635-693-1-81041	4050	N		
35	Make Up Water Store	0635-700-1-81042	7950	L		
36	Cooling Water Pump	0635-444-1-81110	740	L		
37	Hp Dozing Pump	0635-517-1-81120	530	L		
38	Bcw Heat Exchanger	0635-445-1-81161	12500	L		
39	Fix Comp For Insuln	0635-580-1-81318	6450	L		
40	Mineral Wool Mattres	0635-637-1-81325	55150	S		
41	Sealing Compound-Ext	0635-671-1-81341	590	S		
42	Aluminium Sheet-Exte	0635-672-1-81350	27800	S		
43	Direct Gauges For St	0635-765-1-81411	990	N		
44	Direct Gauges For No	0635-766-1-81412	1250	S		
45	Local Control Eqpt-N	0635-767-1-81414	1050	S		
46	Sensing Elements In	0635-725-1-81422	3050	L		
47	Consumable & Erectio	0635-713-1-81432	10	S		
48	Field Junction Boxes	0635-728-1-81435	8500	N		
49	Lv Cables	0635-729-1-81436	80	L		
50	Supervisory Control	0635-584-1-81437	400	L		
	UNIT 5		155390			
	UNIT6		155390			