

Monthly Progress Report **Guntur-August 2020**

1. Project Execution Status :

1. Civil work allotted to M/s Ceekay Associates - Boiler, ACC, and TG House & FGCS:-

Name of Contractor :- M/S CeeKay Associates Pvt. Ltd.							
S.no	Description of Work	Unit	Quantity		Achieved Up to AUGUST 29	Quantum of work done	Remarks
			As per drg	Achieved Up to JULY 29			
Boiler							
1	Earthwork	Cum	6506	6506	6506	0	
2	P.C.C.	Cum	166	166	166	0	
3	R.C.C.	Cum	2217	2217	2217	0	
4	Formwork	Sq.m	6525	6525	6525	0	
5	Reinforcement work	Mt	398	398	398	0	
MSW Pit							
1	Earthwork	Cum	9651	7100	7100	0	
2	P.C.C. and Plum Conc.	Cum	649	600	600	0	
3	R.C.C.	Cum	6685	6202	6250	48	
4	Formwork	Sq.m	15276	13482	13786	304	
5	Reinforcement work	Mt	1280	1080	1096	16	
TR Hall							
1	Earthwork	Cum	5868	5815	5815	0	
2	P.C.C. and Plum Conc.	Cum	198	198	198	0	
3	R.C.C.	Cum	2376	2374	2374	0	
4	Formwork	Sq.m	6306	5301	5301	0	
5	Reinforcement work	Mt	460	460	460	0	
ACC							
1	Earthwork	Cum	1286	1286	1286	0	
2	P.C.C. and Plum Conc.	Cum	105	41	41	0	
3	R.C.C.	Cum	772	772	772	0	
4	Formwork	Sq.m	3588	3588	3588	0	
5	Reinforcement work	Mt	137	137	137	0	
FLUE GAS							
1	Earthwork	Cum	2858	2858	2858	0	
2	P.C.C. and Plum Conc.	Cum	130	130	130	0	
3	R.C.C.	Cum	860	855	855	0	
4	Formwork	Sq.m	1819	1819	1819	0	
5	Reinforcement work	Mt	108	104	104	0	
TG Building							
1	Earthwork	Cum	4100	4025	4025	0	
2	PCC and Plum Conc.	Cum	290	261	261	0	
3	R.C.C.	Cum	1754	1747	1747	0	
4	Formwork	Sq.m	6550	5630	5630	0	
5	Reinforcement work	Mt	276	269	269	0	
6	Brick work	Cum	400	386	386	0	
7	plastering	Sq.m	5500	5350	5420	70	
WTP							
1	Earthwork	Cum	4800	2915	2980	65	
2	PCC and Plum Conc.	Cum	391	300	323	23	
3	R.C.C.	Cum	1450	1406	1418	12	
4	Formwork	Sq.m	5220	3805	3867	62	
5	Reinforcement work	Mt	295	279	286	7	
Weigh Bridge and RCC bridge							
1	Earthwork	Cum	1231	1231	1231	0	

2	PCC and Plum Conc.	Cum	110	42	73	31	
3	R.C.C.	Cum	350	346	346	0	
4	Formwork	Sq.m	1300	1298	1298	0	
5	Reinforcement work	Mt	60	51	55	4	
PIPERACK							
1	Earthwork	Cum	1566	1398	1423	25	
2	PCC and Plum Conc.	Cum	75	71	73	2	
3	R.C.C.	Cum	286	260	262	2	
4	Formwork	Sq.m	1332	770	770	0	
5	Reinforcement work	Mt	34	29	29	0	
LEACHATE TREATMENT PLANT							
1	Earthwork	Cum	2600.00	80	389	309	
2	P.C.C.	Cum	316.00	23	36	13	
3	R.C.C.	Cum	1519.00	91	259	168	
4	Formwork	Sq.m	6776.00	174	691	517	
5	Reinforcement work	MT	170.00	11	32	21	
BOUNDARY WALL							
1	Earthwork	Cum	1377.00	702	893	191	
2	P.C.C.	Cum	16.00	8	14	6	
3	R.C.C.	Cum	103.00	26	49	23	
4	Formwork	Sq.m	508.00	115	207	92	
5	Reinforcement work	MT	19.00	2.6	7.0	4.4	

Site Photos:



TG BUILDING



EAST SIDE BOUNDRY WALL



Tipping Floor & SNCR Area



MSW Pit Boiler Feed Area



Leachate Treatment Plant

Weigh Bridge & MSW Truck Entry Gate



Security Post at Gate No. 2



Trench Casting for Fire Fighting Line

Name of Contractor :- M/S GEOSOL ASSOCIATES							
Construction of RE wall and RAMP							
S.no	Description of Work	Unit	Quantity			Quantum of work done	Remarks
			As per BOQ	Achieved Upto JULY 29	Achieved Upto AUGUST 29		
1	Earthwork	Cum	2600	2505	2505	0	
2	Reinforced earth	Cum	14500	8999	9079	80	
3	PCC	Cum	160	112	112	0	Road
4	RCC	Cum	735	242	292	50	Road
5	RE wall Panels	Sqm	3500	3154	3154	0	
6	RE wall erection	Sqm	3500	2180	2180	0	
7	Shuttering	Sqm	1220	185	185	0	coping beam
8	Reinforcement Work	MT	80	23	35	12	
9	RE wall Blocks	No's	11500	11684	11684	0	Casting only
10	RE wall Erection	No's	11500	3420	3660	240	Erection



RE WALL RAMP

WORKS DETAILS:

- MSW pit columns Ready for erection from grid H1 to H11 and C3 to C11.
- TG building internal painting under progress in at +00 level and control room at +8000 lvl.
- Fixing of MS doors and rolling shutters is completed in TG building.
- Internal painting is under progress in Boiler MCC room.
- WTP Lab internal painting works under progress.
- Boundary wall foundations, columns and Plinth beam works is in progress.
- False ceiling works completed in Security post at gate no 3.
- Security post modification works under progress at gate no 2.
- Area development works at beside ceekay office is under progress.
- Firefighting precast pedestals erection is under progress.
- Firefighting pipe line road crossing culverts under progress.
- RCC for RE wall ramp road is completed in sector 1 to 5.
- Reinforcement fixing for RE wall ramp carriage width is under progress.
- Reinforcement and shuttering fixing under progress for crash barrier wall in RE wall ramp sector 1 to 6.
- Soil filling and RE blocks erection under progress in sector 8 of RE wall ramp.
- RCC road at MSW truck entry gate and Weigh bridge area is under progress.

2. Mechanical Work:

BOILER:

I. Tonnage Basis work:

- Layer adjuster fixing completed inside incinerator section in Boiler-1.
- Silencer for drum and main steam header fixing completed in Boiler-1.
- Economizer Hopper erection and full welding completed in Boiler-1.
- 2nd pass to 3rd pass hopper full welding completed in Boiler-1.
- Slag extractor -2 Nos supporting legs fixing with alignment completed in Boiler-1.
- Slag extractor Discharge chute fit up completed, welding -70% completed in Boiler-1.
- Vibrio feeder -2 Nos erection completed with alignment in Boiler-1.
- Magnetic separator -2 Nos erection completed with alignment in Boiler-1.
- Start-up burner -2 Nos fixing completed in incinerator section in left and right side in Boiler-1.
- Auxiliary Burner-3Nos fixing completed in incinerator section in Front side in Boiler-1.
- Economizer outlet duct erection fit up and welding with top casing completed in Boiler-1.
- Start-up burner fan -4 Nos -silencer, expansion bellow, vibration absorber fixing completed with alignment at 14.1 m level in Boiler-1&2.
- Sealing fan & Cooling fan -2 Nos each -silencer, expansion bellow, vibration absorber fixing completed with alignment at 11.77m level in Boiler-1&2.
- Auxiliary Buner fan placed at 14.1 m level, bottom frame fixing -50% completed in Boiler-1.
- Fire Observation assembly -6 Nos fixing completed in incinerator section in Boiler-1.
- Economizer Casing alignment completed, welding -70% completed in Boiler-1.
- Primary Air preheater inlet ducting casing fit up completed in Boiler-1.
- Cooling air fan duct pipe shifting from yard near Boiler area.
- Economizer & Superheater Soot Blower -24 Nos alignment and support fixing completed in Boiler-1.
- Balance Platform fixing -90% completed in Boiler-1.
- Stoker platform fixing -85% completed in Boiler-1.
- Bending flue duct top tie rod tightening and plate welding completed in Boiler-1.
- Scrap channel cutting from water wall panel and incinerator section in Boiler-1.
- Feed hopper column -20 Nos erection and alignment completed in Boiler-1.
- Feed hopper supporting pipe fixing completed in Boiler-1.
- Manhole door fixing completed in Boiler-1.

- Upper Chute casing erection & fit up -30% completed in Boiler-2.
- Layer adjuster fixing completed inside incinerator section in Boiler-2.
- Silencer for drum and main steam header fixing completed in Boiler-2.
- 2nd pass to 3rd pass hopper full welding completed in Boiler-2.
- Slag extractor -2 Nos supporting legs fixing with alignment completed in Boiler-2.
- Slag extractor Discharge chute fit up & welding completed in Boiler-2.
- Vibrio feeder -2 Nos erection completed with alignment in Boiler-2.
- Magnetic separator -2Nos erection completed with alignment in Boiler-2.
- Start-up burner -2 Nos fixing completed in incinerator section in left and right side in Boiler-2.
- Auxiliary Burner-3Nos fixing completed in incinerator section in Front side in Boiler-2.
- Economizer outlet duct erection fit up and welding with top casing completed in Boiler-2.
- Auxiliary Buner fan placed at 14.1 m level in Boiler-2.
- Fire Observation assembly -6 Nos fixing completed in incinerator section in Boiler-2.
- Instrumentation pipe in stoker and water wall panel fixing and welding completed in Boiler-2.
- Economizer Casing alignment completed, welding -60% completed in Boiler-2.
- Primary Air preheater inlet ducting casing fit up completed in Boiler-2.
- Economizer & Superheater Soot Blower -24 Nos alignment and support fixing completed in Boiler-2.
- Balance Platform fixing completed in Boiler-2.
- Stoker platform fixing -90% completed in Boiler-2.
- Bending flue duct top tie rod tightening and plate welding completed in Boiler-2.
- Feed hopper column -20 Nos erection and alignment completed in Boiler-2.
- Feed hopper supporting pipe fixing completed in Boiler-2.
- Manhole door fixing completed in Boiler-1 & 2.
- Extra Winch machine shifting from 8 m floor to 0m level in Boiler-1 & 2.

II. Manpower Basis work:

- No Work

III. Extra Basis work:

- First pass bottom header anchor V-90 welding -912 Nos completed in Boiler-2.

FLUE GAS CLEANING SYSTEM:

- No Work

AIR COOLED CONDENSER:

- No Work

WATER TREATMENT PLANT:

- No Work

M/s Mandal: CHEQUERED PLATE & Misc. Structure

- De-aerator 3 Mtr Platform Erection Work -65% Completed.
- Boiler – 1 to FGCS – 1 bridge gallery -1 & 2 Fit up Completed
- Boiler -1 TO FGCS-1 Bridge Gallery-1&2 Welding 70 % Completed
- Boiler -1 To FGCS-1 Column's sandblasting & red oxide 2 coats completed

M/s Sri Krishna – Erected structure Painting & Sand Blasting Works:

- MSW pit Column's -22 No's Final Painting Work Completed
- MSW pit Girder's -20 No's Final Painting Work Completed

M/s Sri Krishna – Canopy Sheeting Work:

- Canopy Sheeting -70% completed in Boiler-1.
- Canopy Sheeting -75% completed in Boiler-2.

M/s Pioneer Insulation: BOP

- Service water pipeline erected, and water given to TRL at Boiler area up to 33mts level.
- Firefighting tank makeup pipeline (service water & RO water) erection and trail completed.
- Raw water pump suction pipeline, valve and strainer fixed.
- Boiler-2, TG side at 6.0M level Non-IBR piping (Cooling water supply & Return, service water, compressor line (100NB&50NB) erection work completed
- Bore well pump to service water pipe and recirculation line erection work completed at Filter water tank area.
- Compressor pipeline (50NB) fit-up work completed at SNCR floor & compressor pipe rack area.
- Cooling water pump alignment verified & found ok and half grouting completed.
- PSF erected at respective place.

M/s Pioneer Insulation: Misc. Structure

- TR-8 to Deaerator extension platform erection completed
- TR-8 to Deaerator 3.984 Elevation Platform Erection -70 % Completed

M/s Simon Project Engineering:

- MSW pit crane girder foundation bolt holes completed.
- MSW Pit Structure Truss-2 Fit Up work completed.
- MSW Pit Structure Truss-3 Fit up Complete & Welding -80% Completed

- MSW pit Structure Truss-4 Fit Up Complete & Welding -55% Completed
- MSW Pit Structure Truss-5 Fit up Completed
- MSW Pit Structure Truss-6 Fit Up -90 % Completed
- MSW pit Top chord & Bottom chord fit up complete welding work -10 % completed
- MSW Pit Truss to Truss VBR Fit Up complete Welding -25 % Completed
- MSW Pit GPBR Fit up Completed
- MSW Pit Gusset plates, Buffer plate, Stiffener & packing plates Cutting & grinding work for Truss, Gable post bracings
- DM tank inside liner leakages 2 no's identified,
- Boiler - 1 & 2 Firefighting pipeline painting completed.
- Firefighting pumps placed in respective foundations.
- Site boundary line and material yard area firefighting pipeline 200mts layed and full welding completed.

Refractory –Boiler Refractory Work:

- Scaffolding fixing in Ash Hopper completed in Boiler-1.
- Cross Over Duct scaffolding fixing -60% completed in Boiler-1.
- Cross Over Duct V-60 anchor welding -400 Nos completed in Boiler-1.
- Scaffolding fixing in incinerator section completed in Boiler-2.
- Scaffolding fixing in Ash Hopper section completed in Boiler-2.
- Cross Over Duct HF-75 Castable casting -423 bags (10575 kgs) completed in Boiler-2.
- Cross Over Duct Inside V-60 Anchor welding - 6629 Nos completed in Boiler-2.
- Ash Hopper HYSIL block-34 boxes of 100mm thick and 14 boxes of 65mm thick fixing inside completed in Boiler-2.
- HF -75 Castable shifting from SNCR section to 8 m floor in Boiler 2.



Slag Extractor- Discharge mouth fixing in Boiler-1



Magnetic Separator erection in Boiler-1



Slag Extractor discharge chute fit up in Boiler-1



Economizer outlet duct casing erection in Boiler-1



Feed Hopper column erection in Boiler-1



Layer Adjuster fixing and alignment in Boiler-1



Economizer hopper erection & fit up in Boiler-1



Stoker side platform fixing in Boiler-1



Soot Blower support fixing & welding in Boiler-1



Soot blower alignment completed in Boiler-1



Balance Platform fixing near water wall panel in Boiler-1



Slag Extractor Discharge Chute full welding in Boiler-1



Slag Extractor & Slag Hole discharge chute fit up in Boiler-2



Magnetic Separator erection in Boiler-2



Feed Hopper column and supporting pipe erection in Boiler-2



Silencer erection & fit up with support completed in Boiler-2



Primary Air preheater casing fit up in Boiler-2



Layer adjuster fixing in Incinerator section in Boiler-2



Economizer outlet duct casing erection and fit up in Boiler-2



Fire Observation Hole fixing in incinerator section in Boiler-2



Upper chute casing fit up in Boiler- 2



Bending flue top casing welding in Boiler-2



Economizer casing welding in Boiler-2



Slag extractor discharge chute welding in Boiler-2



Sealing & Cooling fan alignment at 11.77 in Boiler-1 & 2



Start -up burner fan alignment at 14.1 m level in Boiler-1& 2



Auxiliary Buner fixing in incinerator section in Boiler-1 &2



Start-up Buner fixing in incinerator section in Boiler-1 &2



Manhole door fixing in Boiler-1 &2



Winch Machine shifting to 0 m level in Boiler -1



Canopy top roof sheet fixing completed in Boiler-1



Drum front side sheet fixing completed in Boiler-1



Canopy top roof sheet fixing completed in Boiler-2



Drum top side sheet fixing completed in Boiler-1



Scaffolding fixing in incinerator in Boiler-2



Scaffolding fixing in Ash hopper in Boiler-2



Anchor welding in COD in Boiler-2



HYSIL fixing in Ash Hopper in Boiler-2



HF -75 Castable casting in COD in Boiler-2



MSW Building Girder Final Painting Work



MSW Building Column Final Painting Work



MSW Building Truss-1 To 6 Fit Up & Welding Work



MSW Building Gusset Plate Cutting Work



MSW Building Bracings Welding work



MSW Building VBR Welding Work



Deaerator 3 Mtr Platform Election Work



Tr8 To Deaerator 3.984 level Platform Erection Work



PSF erected at respective place



Firefighting tank makeup pipeline work completed.



Raw water pump suction line valve & strainer fixed



Non-IBR piping erection completed at Boiler-2, TG side at 6.0mts lvl



Service water pipeline completed at Boiler area up to 33mts level



Firefighting pump placed in foundation



Firefighting pipeline painting work at Boiler



Firefighting pipeline painting work at Boiler

3. Electrical and Instrumentation work:

- 1C X 630 Sq.mm Cable laying, glanding, dressing and termination at LTPCC side 19F2, 2F2 completed from LTPCC to PDB-2.
- 1C X 630 Sq.mm Cable laying, glanding, dressing and termination at LTPCC side 3F2 completed from LTPCC to ACC VFD.
- 1C X 630 Sq.mm Cable laying completed for Auxiliary transformer-2 & 3 from LTPCC.
- 3.5C X 300 Sq.mm Cable laying, glanding, dressing & termination completed from LTPCC to B-1 VFD & B-2 VFD.
- 3.5C X 300 Sq.mm Cable laying completed from LTPCC to MLDB.
- 3.5C X 95 Sq.mm Cable laying completed from LTPCC to PDB-5.
- 3.5C X 185 Sq.mm Cable laying, dressing completed for Construction DB at Boiler +8.0 Mtrs from PDB-1 1F3.
- 3.5C X 25 Sq.mm Cable laying, glanding, dressing & termination completed at TG +3.0 Mtr LDB, TG +8.0 Mtr LDB, Boiler +8.0 Mtr LDB & FGCS LDB from MLDB.
- 4C X 2.5 Sq.mm Cable laying from LDB to SDB at TG +0 Mtr, TG +8.0 Mtr completed.
- 2.5 Mtr of 50mm cable tray laid for WDB incoming at TG 14 Mtr
- Cable tray supports, tray erection & earth strip laying completed at Pumphouse area.
- Perforated cable tray laid at Boiler +8.0 Mtr MCC SDB & to LDB-12 & 13.
- MLDB at TG +3.0 Mtr, LDB at TG +3.0 Mtr & +8.0 Mtr, 2 No's of LDB's at Boiler +8.0 Mtr charged.
- 14 Mtr of Boiler +1 structure earthing with earth grid completed.
- 70 % of cable tray supports, walkway & earth strip laying below Boiler +8.0 Mtr completed.
- 750 kVA DG shifted to its deck near TG area and cranking done.
- 750 kVA DG alternator handed over to M/s Cummins authorized dealer at Vijawada for overhauling.

- 70 % of Instrument tapping points at Boiler-2 completed.
- 38 No's of earth pits completed out of 104 No's.
- 31 Nos of Switch boards & switches fixing completed.
- Welding DB fixed at Boiler +23 Mtr & +32 Mtr elevation and power supply charged.
- 85 % Illumination cable tray erection for Boiler-1 completed from +20.5 Mtr to +32.7 Mtr floor wise.
- 100 % of 4C X 2.5 Sq.mm cable laying, glanding & termination completed for Boiler-1 from +20.5 Mtr to +32.7 Mtr.
- 46 No's of Lighting JB's erected for Boiler-1 from +20.5 Mtr to +32.7 Mtr.
- 100 % of 3C X 1.5 Sq.mm cable laying, glanding & termination completed from Boiler-1 Lighting JB's to Lights floor wise.
- 56 No's of 40W permanent lights fixed and charged for Boiler-1 from +20.5 Mtr to +32.7 Mtr floor wise.
- 70 % of illumination cable tray erection for Boiler- 2 completed from +20.5 Mtr to +32.7 Mtr floor wise.
- 154 Meters of 4C X 2.5 Sq.mm cable laying, glanding & termination completed for Boiler-2 from +20.5 Mtr to +32.7 Mtr.
- 22 No's of Lighting JB's erected for Boiler-2 from +20.5 Mtr to +32.7 Mtr.
- 28 No's of 40W permanent lights fixed and charged for Boiler-2 from +20.5 Mtr to +32.7 Mtr floor wise.
- 143 Mtr of 3C X 1.5 Sq.mm cable laying, glanding & termination completed from Boiler-1 Lighting JB's to Lights floor wise.
- 50*10mm GI earth strip laid at weigh bridge for grid earthing.
- 90 % of Cable tray erection & cable gantry connectivity completed below +14 Mtr of Boiler- 1 & 2.
- 50 % of cable tray erection completed below Boiler +8 Mtr.
- Met JAO Mr. Sambasiva Rao and Mr. Bhaskar to collect account summary statement for power bills of JUWMGL and collected form 16 copy same forwarded to JUWMGL Accounts department for further process.
Date 17.08.2020.
- Annual inspection compliance report of construction power submitted to DE CEIG Mr. Bala Krishna.
- Met APCPCL DE. Mr. Hari Babu to collect evacuation sub-station bay extension work sanctioned letter
Dated:18.08.2020.



1CX630 Sq.mm Power cable laying, dressing from LTPCC to PDB-2



1CX630 Sq.mm Power cable laying, dressing from LTPCC to ACC VFD



Cable dressing for PDB-4



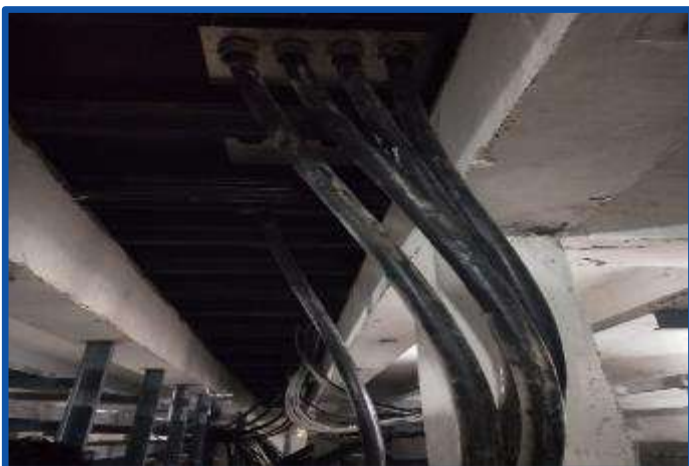
1CX630 Sq.mm Power cable laying for Aux. Transformer-2 &3



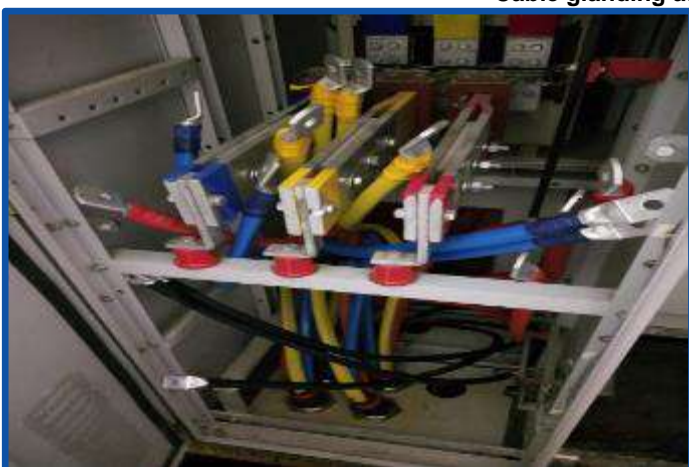
Cable laying for Boiler-2 VFD



Cable laying from LTPCC to MLDB



Cable glanding at LTPCC & ID fan VFD panel side



Cable glanding & Lugging for PDB-4 panel



Cable glanding for Boiler-2 VFD panel



Cable from MLDB to LBD's at TG +3 &13 Mtrs



Cable from PDB-1 to construction DB



Cable Glanding at LTPCC



Cable termination, lugging for firefighting MCC



Welding DB's at Boiler +23 & +32 Mtrs



Cable from MLDB to LDB at TG +3.0 Mtrs



Cable from TG +3.0 Mtr LDB to TG +0 Mtr



Cable tray at Boiler +8.0 Mtrs Control room LDB



Cable tray at Boiler +8 mtr MCC SDB



Cable glanding at FGCS Incomer-2 feeder



MLDB charged at TG +3.0 Mtr



LDB charged at TG +3.0 Mtr



LDB charged at TG +13.0 Mtr



Glanding at TG +13.0 Mtr SDB



SDB charged in TG +8 Mtrs



750 kVA DG shifted to its foundation near TG area



Firefighting area to Cooling tower cable tray & it's supports



Earth strip raiser at Weigh Bridge



Earth strip for cable tray at Firefighting area to Cooling tower



At TG +14 Mtrs, Cable tray to WDB



Control room cable tray connectivity below Boiler +14 Mtrs



Cable tray erection at Boiler-1, below +14 Mtrs



Illumination JB's at Boiler-1 & 2





Cable laying to Illumination JB's and from JB's to Lights at Boiler-1 & 2



Cable dressing at Boiler-1 & 2



Welding DB at Boiler +23 Mtrs



Cable tray supports below Boiler +8.0 Mtr



Cable glanding & termination for Boiler-1 & 2 T Lighting JB's



Boiler-1 Illumination



Structural earthing for Boiler-1



Illumination at Boiler +8.0 Mtr control room



Earth pit at FGCS area



750 kVA DG set cranking



Walkway below +8.0 Mtr of Boiler

3. Inspection carried out and others Visits: -

- Mr. K Senthil Kumar visited Vishakhapatnam site along with Deputy Director of Boilers and successfully completed official hydrotest of both Boilers on 28.08.2020.



HEALTH

1. Thermal screening conducted to all contractor workmen/staff at Main gate and labor colonies with infra-red Thermometer and record maintained.
2. Sodium Hypochlorite spraying at all site areas, Office areas, labor colonies and guest houses.
3. Social distancing maintained while entering into the main gate.
4. Sanitizing all utility vehicles / staff vehicles while entering to the site.
5. Providing Health drink (Kashayam) to all employees to boost up the immunity
6. General health check-up has been carried out.
7. Monitoring of pulse and oxygen level for all employees.



Thermal screening at main gate



Hand sanitizing.



Social distancing



Vehicles sanitizing



Pulse Oximeter



Sodium hyochlorite spraying at site, offices, Labour Colonies and Employee's houses at Lalpuram.



Vibration sensors from M/s Enexio



IT software material from M/s Intec Infonet



Instruments from Solution point



Server PC & Operating PC from Classic Automation



CEP, CDP & Fin Cleaning Pump Unloading



CEMS System Unloading