

<b>BHARAT HEAVY ELECTRICALS LIMITED</b>				
<b>RAMACHANDRAPURAM : : HYDERABAD-502302</b>				
<b>COMMON WORKSHOP :: 08-BLOCK</b>				
<b>Scope of work for "Repair / Rectification of faults in Lighting Accessories , Fans ,Wiring Installations and kitchen Equipments of works canteen/02 canteen and Staff Canteen including Preventive Maintenance"</b>				
<b>Annexure- I ( Electrical Repair Work )</b>				
Sl.	Description of Work	Unit	Qty.	
1	Replacement of 5A / 15A,230 V Piano Type or Similar Switches or 5/15 Amps 230 V 3 pin plug socket or 5/15 Amps 3 Pin Top on existing boards for fans and lights including checking of loose connections	Nos.	410	
2	Replacement of 5/15A,250V Swiches / switch cum sockets on existing board	Nos.	78	
3	Replacement of ceiling rose 5A,250V, including checking of loose connections	Nos.	58	
4	Fixing of TW Board with decolam top cover wherever required. of sizes 4" x 4" / 7" x 4" / 8" x 10" / 10" x 12"	Nos.	50	
5	Fixing of 3mm thick hyalam cut sheet on existing MS boxes including fixing of old accessories on it & screws, washers etc.	Sq. Mtrs.	4	
6	Laying of 1.5/2.5/4 sq.mm PVC insulated PVC sheathed single core multistranded aluminium /copper conductor cable run on existing pipe /reaper for light and power points	Mtrs.	500	
7	Fixing of PVC reaper of 3/4"/1" size run on wall/ partitions with screws etc for drawl copper /al. conductor cable.	Mtrs.	22	
8	Replacement of 16A , 240V, sheet steel double pole switches .	Nos.	28	
9	Replacement of MCBS of varius current rating .	Nos.	46	
10	Rectification & replacement of faults in tube light fittings of various capacities.			
a)	Chokes	Nos.	150	
b)	tubes	Nos.	300	
c)	Starter / Starter holder	Nos.	300	
d)	Tube light rotary / lock type holder	Nos.	150	
11	Rectification of loose connection in switch boards , cleaning of neutral and earth points etc. also hanging boards to be fixed	Points	400	
12	Cleaning and applying of one coat of red-oxide paint and two coats Admiral grey paint on switch board and distribution boards.	Sq. Mtrs.	65	
13	Cleaning with solvent and brushing and applying petroleum jelly for effective electrical contact and smooth operation in the following			
a)	Switch Boards	Nos.	73	
b)	FDB's	Nos.	17	
c)	MD Boards	Nos.	4	
14	Fixing of Tube light fittings of various capacities	Nos.	60	
15	Cleaning and washing of Tube light Fittings of various capacities including metal reflector with washing powder	Nos.	420	
16	Removal of existing enamel paint and spray painting of one coat primary and two coats of final with enamel white paint on existing Tube Light fittings.	Nos.	150	
17	Fixing of PVC pipe of 19mm /25mm with suitable clamps, screws etc , to run on wall 2.5sq.mm PVC Insulated Copper Cable	Meters	65	
18	Installation of Power points of 5/15 Amps , 250 V , 3 Pin sockets for Aircooler , Computers and other accessories from nearest FDB /ICTP	Points	20	
19	Replacement of 9KW Heater element in steam generator	Nos.	36	
20	Replacement of 32/63Amps fuse / base in ICTP switches of sigrees / coffee boiler / chapathi plates			
a)	Fuses	Nos.	70	
b)	Base of fuse	Nos.	40	
21	Repair of control wiring and replacement of the following placement of 32 / 63Amps contactors and control wiring wherever required.			
a)	32 / 63 Amps Contactors	Nos.	30	
b)	Starter	Nos.	7	
22	Replacement / Repair of following in the sigrees, Coffee boilers and Chapathi Plates			
a)	Asbestos sheets	Nos.	45	
b)	Cement bricks	Nos.	450	
c)	Cottor pins	Nos.	450	

d)	connectors	Nos.	60	
23	Replacement of 18 SWG heating element with required accessories			
a)	Sigrees	Nos.	80	
b)	Uthappa plate	Nos.	16	
c)	Chapathi plate	Nos.	16	
24	Repair of 18 SWG heating elements by proper Joining with connectors / cottor pins etc.	Nos.	900	
25	Replacement of 4 core,10/16/25 sq.mm Cu/Al cables for sigree, rice boilers, chapathi plates	Mtrs.	300	
26	Removal of old ICTP switches of following capacity and fixing new switches,giving connection by crimping new lugs.			
a)	32 Amps ICTP	Nos.	10	
b)	63 Amps ICTP	Nos.	5	
27	Earth pit Maintenance ( Once in a year )	Nos.	6	
28	Earth flat cleaning & earthing checking	Mtrs.	225	
29	Removal of Burnt motor and refixing of motor after rewinding in Grinder/ Alu Peeler / Floor mill / Dough Kneeding M/C etc.	Nos.	10	
30	Laying of new 3½ core x95/120 Sq. mm LT PVC cables at works canteen area including removal of old damaged cable	Mtrs.	85	
31	Preparation of end joints for 3½ core 95/120 Sq. mm LT cable with copper lugs using crimping tools.	Nos.	12	
32	Cleaning of ceiling /exhaust /wall and pedestal fans body and blades with VIM powder by duly bringing down and Refixing	Nos.	160	
33 a)	Complete Overhauling of 1200mm/1400mm sweep ceiling fan and refixing the same .	Nos.	45	
b)	Do for exhaust fans 300/400 mm sweep	Nos.	16	
c)	Do for wall mounting fans	Nos.	4	
34	Removal of the paints of Ceiling /exhaust /pedestal /wall mounting fans and repainting the same with one coat of primer & two coats of good quality white enamel paint and painting BHEL serial number	Nos.	80	
35	Removal of old damaged Ball bearing / Bush bearing of required size from ceiling / exhaust / walll mounting / pedestal fans and assembling new bearings	Nos.	60	
36	Rectification of faults in Ceiling / Exhaust / Pedestal /Wall mounting Fan by replacing faulty condenser / damaged oil seal /twin core wire / rubber bush / split pin / lock nut / down rod spindle /Fan Blades / One side threaded GI Pipe/ Fan Regulator etc.	Times	195	
37	Rectification of faults in Air Cooler like Pump repair , Bearing replacement , khash mat replacement , connection problem etc.	Times	28	
38	Dismantling of AC ceiling /pedestal /wall mounting fans from various Canteens & transporting the same to workshop for rewinding / for attending to major repairs /over hauling and refixing after repair	Nos.	65	
39	Maintenance of uninterrupted Power supply to canteen equipments from both the source ( at Works Canteen , 02 Canteen and staff canteen ) and changing the supply in case of failure of supply from one substation. This also includes maintaining uninterrupted power supply to all the equipments ,dining rooms,FDB , Main switches etc.( Any emergency cable replacement work/ CF switch / Main switch replacement work for maintaining power supply to equipments is included in this.	Operations	1634	
40	Laying of Armoured , PVC insulated , Sheathed Aluminum cables of size 3 ½ Core X 300 /185 Sq. mm in cable trenches and including Cable termination with suitable Copper/Aluminum lugs to meet any emergency requirement.	R.Meters	80	
41	Repair and Fixing of Combinational Fuse Switches of rating 100A / 200A / 300A / 500A to meet any emergency requirement.	Nos.	3	
42	Carrying of Aluminium Step Ladder to carry out fan fault rectification and Tube light fitting repair , transporting damaged part / New spare parts etc. <b>Suitable Ladder to be provided by the contractor</b>	Times	1500	
<b>ANNEXURE - II ( Mechanical Works )</b>				
<b>Item</b>	<b>Description of Work</b>	<b>Unit</b>	<b>Qty</b>	
1	<b>Wet Grinder</b>			

a)	Replacement of Belts ( Once in a month )	Nos.	108	
b)	Top Stone Handle Bearing Replacement ( Once In a Month )	Nos.	108	
c)	Gear Box Bearing – Total replacement ( Once In six month )	Nos.	18	
d)	Gear Oil Changing ( Once in 3Months )	Times	36	
e)	Bottom stone drum set replacement(once in a year )	Sets	9	
f)	Guard cover Repair / Replacement (once in a year)	Nos.	9	
g)	Gear oil level checking and filling the shortage (once in a 15 days)	Times	216	
h)	Electrical motor servicing and replacement of motor bearing (once in 6 months )	Times	18	
2	<b>Alu Peeler</b>			
a)	Replacement of belts (once in two months)	Nos.	18	
b)	Replacement of bearings (once in 6 months)	Nos.	6	
c)	Grinding wheel replacement (once in a year)	Nos.	3	
d)	Single phase motor servicing (once in a year)	Nos.	3	
3	<b>Idly plant (each plant with 4 chambers)</b>			
a)	Doors rubber lining to be changed (once in 6months)	Sets	42	
b)	Doors handles replacement (once in a year)	Nos.	21	
c)	Overhauling of idly plants (once in year) : opening the chambers, cleaning the	Times	6	
4	<b>Dough Kneeding Machine</b>			
a)	Replacement of belts (once in 6months)	Nos.	6	
b)	Motor servicing (once in a year)	Nos.	3	
c)	Greasing & oiling (once in 6months )	Nos.	6	
5	<b>Steam generator</b>			
a)	Water scaling to be cleaned – to open top cover, clean generator and fix the cover (once in month)	Times	96	
b)	Cleaning and re-fixing of float valve and ball (once in 15 days)	Times	192	
c)	Top cover packing replacement (once in 3 months)	Nos.	20	
d)	Replacement of damaged nuts and bolts of top cover (once in 3 months)	Fastener Sets	20	
e)	Daily maintenance of all Steam generators of weeks canteen / 02 canteen and Staff canteen(08 No's). To check and rectify whenever necessary : 1) Gate valve 2) Unions 3) Steam pipe line 4) Drain valve operation 5) Water level checking and control.	Operations	365	
6	<b>De- stoning machine:</b>			
a)	Replacement of belts (once in 6 months)	Nos.	2	
b)	Mech removal, cleaning and fixing (weekly once)	Times	52	
c)	Vibrator shaft bearings replacement ( once in a year )	Nos.	1	
d)	Greasing & oiling (once in a month)	Times	12	
7	<b>Rice boilers</b>			
a)	3/4” gate valve to be replaced (once in three month)	Nos.	48	
b)	Tilting handle replacement (once in a year )	Nos.	16	
c)	Boiler check-nut maintenance replacement of packing rope (once in a month)	Nos.	192	
d)	‘u’ clamp checking and refixing (once in a month)	Nos.	192	
e)	Boiler steam line cleaning (monthly once)	Nos.	192	
f)	Daily maintenance – checking and corrective action: Steam leakage checking ; Gate valve	Operations	678	
8	<b>Flouring machine:</b>			
a)	Grinding stones cleaning (once in 15days)	Nos.	24	
b)	Replacement of belts (once in 6 months)	Nos.	2	
c)	Vertical shaft bearing replacement ( once in 6 months)	Nos.	2	
d)	Motor servicing and replacement of bearings ( once in 6 months)	Nos.	2	
f)	Replacement of stones (once in a year)	Nos.	1	
9	<b>Sigrees</b>			
a)	Sigree MS sheet round shape cutting drilling and welding	Nos.	8	
10	<b>Salad Cutting Machine</b>			
a)	Replacement of belts (once in 6 months)	Nos.	2	
b)	Motor servicing and replacement of bearings ( once in 6 months)	Nos.	2	
c)	Greasing & oiling (once in 6months )	Nos.	2	