

GOVERNMENT OF TELANGANA
ELECTRICAL INSPECTORATE
(An IS/ISO 9001: 2015 Certified Department)



From

The Chief Electrical Inspector to Government,
Flat No.127 Block No.7,
New MLA Quarters,
Adarsh Nagar,
Hyderabad - 500 063
Phone No: 040-23453023



To: M/s: G.V. Research Centers Private Limited

Street: MG Road

H.No/D.No.: 542(P)/3

Sy. No.: 542(P)/3

(V): Koltthur

(M): Shamirpet

(D): Medchal

Pincode: 500101 , Phone No: 9100126998



Lr.No.CEIG/TS/EI Ex. 650V/HT-MDL-2021-10595/D.No. 359/2022 Dated: 17/02/2022

Sub : The Electricity Act-2003 and Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 - Electrical Installation of Voltage Exceeding 650 V of M/s **G.V. Research Centers Private Limited, Koltthur Shamirpet Mandal Medchal District - Statutory Approval under Section 54 of the Electricity Act-2003 and Regulation - 43(3) of CEA (Measures Relating to Safety and Electric Supply), Regulations 2010 Accorded.**

Ref:- 1) Inspection Dated **12/02/2022**

2) Your Lr. received on dated., 17/02/2022

Under Section 54 of The Electricity Act-2003 and Regulations **43(3)** of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, the following equipment of your Electrical Installation of voltage Exceeding 650V are approved for energisation.

AS PER ANNEXURE ENCLOSED.

Under Regulation 43(4) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, any additions or alteration in your installation shall not be connected to supply until the same are approved in writing by this office and offer for annual inspection under Regulation 30 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 every year to the concerned Deputy Electrical Inspector.

Under Regulation 13(4), 46(7) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, you are at all times solely responsible for the maintenance of the above installation on such condition as to be free from danger.

The above approval accorded is without prejudice to the statutory/ mandatory obligations to be fulfilled by you under various other acts and rules as the case may be. The approval accorded for energizing the electrical equipment is the safety for men and machine from electrical hazards in your installation and ipso facto does not confer any right to be used for any other purpose other than for which the approval is accorded.

Yours faithfully

S. Nini - E
17/2/22

CHIEF ELECTRICAL INSPECTOR
TO GOVERNMENT

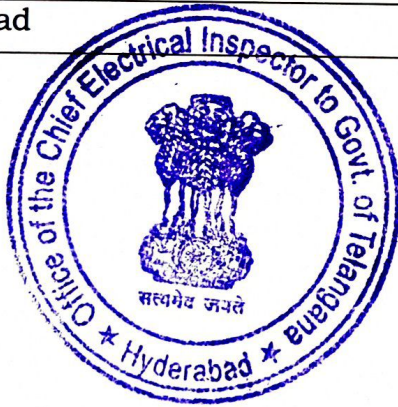
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Encl:- List of Load Particulars

Annexure to Lr.No.CEIG/TS/EI-Ex 650V/HT-MDL-2021-10595/D.No 359 /2022,
Dt. 17-02-2022.

M/s G V Research Centers Pvt Ltd Sy No: 543(P)/3, Biotech Park,
Kolthur (V), Shameerpet (M), Medchal District Telangana – 500101

S.No.	Name of the Equipment	Details of the equipment.
I. H.V. INSTALLATION (11 KV)		
1.	VCBs	Make:ABB Cap:1250 A, 36 KV Sl.No: 1VYN020221003458, 1VYN020221003466, Qty No:02
1.	Transformer	Make:- Esenar SNo:- ET2-6960 Cap.: 2500 KVA, 33 KV/433 V.
II. M.V. INSTALLATION (415V)		
1.	MV Load	1175.4 KW, 415 V
2.	Capacitors	1000 KVAR, 415 V
3.	Generator	Make: Stamford Sl.No: N21H335959 Cap: 2250 KVA , 415 V
	Generator-2	Make: NORM Sl.No: P217503 Cap: 250 KVA , 415
III. L.V. INSTALLATION.(230V)		
1.	Lighting Load	20 KW, 230V
2.	LV Load	30 KW, 230 V



S. Kani - E
13/2/22
CHIEF ELECTRICAL INSPECTOR
TO GOVERNMENT.

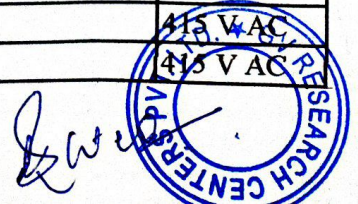
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G V RESEARCH CENTERS PVT.LTD

SY.NO: 543(P)/3, BIOTECH PARK, KOLTHUR(V), SHAMEERPET(M), MEDCHAL DIST-500101

LOAD DETAILS

SL.NO	DESCRIPTION OF EQUIPMENT	CAPACITY		MAKE	SL.NO'S	VOLTAGE
	HV LOAD					
1	Vacume circuit breaker -1	1250	A	ABB	IVYN02022100	33 KV AC
2	Vacume circuit breaker -2	1250	A	ABB	3458 3466	33 KV AC
3	Vacume circuit breaker -3	1250	A	ABB		33 KV AC
4	TRANS FORMER	2500	KVA	ESENNAR	ET2-6960	33/433KV
	DG SET'S					
1	DIESEL GENERATOR 1	2250	KVA	STAMFORD	N21H335959	415 V AC
2	DIESEL GENERATOR 2	250	KVA	NORM	P217503	415 V AC
	LIST OF MV EQUIPEMENT					
1	LIFT 1	7.5	KW			415 V AC
2	LIFT 2	7.5	KW			415 V AC
3	RAW WATER PUMP 1	7.5	KW			415 V AC
4	RAW WATER PUMP 2	7.5	KW			415 V AC
5	RAW WATER PUMP 1	7.5	KW			415 V AC
6	RAW WATER PUMP 2	7.5	KW			415 V AC
7	SOFT WATER PUMP 1	7.5	KW			415 V AC
8	SOFT WATER PUMP 2	10	KW			415 V AC
9	CHILLER 1	425	KW	TRANE	Q21G02495	415 V AC
10	CHILLER 2	425	KW	TRANE	G21G02496	415 V AC
11	CHILLED WATER PUMP 1	18.530	KW	GRUNDFOS	NM08215492	415 V AC
12	CHILLED WATER PUMP 2	18.530	KW	GRUNDFOS	NM09211708	415 V AC
13	CHILLED WATER PUMP 3	18.530	KW	GRUNDFOS	NM09211705	415 V AC
14	CHILLED WATER PUMP 4	18.530	KW	GRUNDFOS	NM08215493	415 V AC
15	CHILLED WATER PUMP 5	18.530	KW	GRUNDFOS	NM08215495	415 V AC
16	AIR COMPRESSOR	45	KW			415 V AC
17	BOOSTER PUMP 1	6.9	KW			415 V AC
18	BOOSTER PUMP 2	7.5	KW			415 V AC
	ETP					
19	RAW EFFLUENT PUMP 1	2.2	KW			415 V AC
20	RAW EFFLUENT PUMP 2	2.2	KW			415 V AC
21	FLASH MIXTURE	0.37	KW			415 V AC
22	FLOCCULATOR	0.37	KW			415 V AC
23	ALUM DOSING	0.75	KW			415 V AC
24	NAOH DOSING	0.75	KW			415 V AC
25	POLY DOSING	0.75	KW			415 V AC
26	PRIMARY SLUDG TRANSFER 1	0.75	KW			415 V AC
27	PRIMARY SLUDG TRANSFER 2	0.75	KW			415 V AC
28	ANEROBIC FEED PUMP 1	1.5	KW			415 V AC
29	ANEROBIC FEED PUMP 2	1.5	KW			415 V AC
30	BLOWER1	2.2	KW			415 V AC
31	BLOWER2	2.2	KW			415 V AC
32	COGGULATION DOSING SYSTEM	0.75	KW			415 V AC
33	SCREW PUMP 1	0.75	KW			415 V AC
34	SCREW PUMP 2	0.75	KW			415 V AC

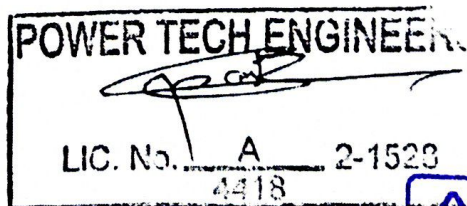


	STP					415 V AC
35	RAW EFFLUENT PUMP 1	0.75	KW			415 V AC
36	RAW EFFLUENT PUMP 2	0.75	KW			415 V AC
37	PRIMARY SLUDG TRANSFER 1	0.75	KW			415 V AC
38	PRIMARY SLUDG TRANSFER 2	0.75	KW			415 V AC
39	FILTER FEED PUMP 1	1.1	KW			415 V AC
40	FILTER FEED PUMP 2	1.1	KW			415 V AC
41	BLOWER 1	5.5	KW			415 V AC
42	BLOWER 2	5.5	KW			415 V AC
43	CHLORINE DOSING	0.2	KW			415 V AC
	FIRE FIGHTING					415 V AC
44	FIRE SPRINCKLER	90	KW	LUB2	142216287	415 V AC
45	FIRE HYDRENT	90	KW	LUB2	52204841	415 V AC
46	JOCKY PUMP 1	7.5	KW	LUB2	322808252	415 V AC
47	JOCKY PUMP 2	7.5	KW	LUB2	322808253	415 V AC
	LIST OF LV LOADS					
1	LIGHTING	20	KW			230 V AC
2	LV POWER	30	KW			230 V AC

HV	TOTAL LOAD DETAILS:	
	TRANSFORMER	: 2500 KVA, 33/0.433KV
MV	MV LOAD	: 1000 KW, 415V <i>1175.4 KW, 415V</i>
	DG SET	: 2250KVA+250KVA, 415V
	CAPACITORS	: 1000 KVAR, 415V
LV	LV LOAD	: 30KW, 230V
	LIGHTING LOAD	: 20 KW, 230V

For. G V RESEARCH CENTERS PVT.LTD

[Signature]
Authorised Signatore



ESENNAR TRANSFORMERS PVT LTD

Office & Works: Plot No. 2, Phase - I IDA, Pashamailaram, Sanga Reddy (Dist) - 502307.
TEL : 224205 224206 FAX : 08455-224173, CELL 9440080716

TRANSFORMER TEST CERTIFICATE

Customer : M/s.GV RESEARCH CENTERS PRIVATE LIMITED.,SITE AT INNOPOLIS,Sy No.542,GENOME VALLEY,THURKAPALLY,HYDERABAD,TELANGANA-508112

W.O : ET2-6960 SL. No: ET2-6960 Standard Ref: IS: 1180 (Part 1):2014
Energy Efficiency Level : 3
with up to date amendments

Customer Order Ref : PO. NO: 77187/182877,Dt:20-05-2021.

Rating KVA : 2500 OLTC 3 Phase 50 Hz Cooling : ONAN

Vector Group : Dyn11 Voltage Ratio in Volts Rated Amps

Temp. Rise : 40/45 HV : 33000 HV : 43.74

Type : Oil LV : 433 LV : 3333.53

Tappings : +10 % to -10 % in steps of 1.25 % on HV BIL (1.2/50 μ S Wave)

Tap Switch Position	1	2	3	4	5	6	7	8	9
Phase U (A)	Sheet enclosed								
Phase V (B)									
Phase W (C)									

WINDING RESISTANCE AT 75°C

(a) HV Winding.	3.776 Ohms	Between Terminals:	Average per phase
(b) LV Winding.	0.000171 Ohms	Between Terminals:	Average per phase

LOAD LOSS & IMPEDANCE AT 75°C

		TESTED
(a) Losses AT (50 %) Loading	Watts	6246
(b) Losses AT (100 %) Loading	Watts	18276
(c) Impedance	Percentage	7.23

DIELECTRIC TESTS

(a) Separate Source Voltage Withstand Test :

HV Winding to LV Winding Core Frame & Tank applied 70 kV For 60 Secs. And Withstood OK

LV Winding to HV Winding Core Frame & Tank applied 3 kV For 60 Secs. And Withstood OK

(b) Induced Over Voltage Withstand Test :

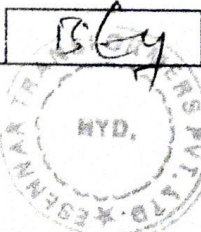
Applied 2 X Rated Voltage LV side at 150 Cycles for 40 Secs. And Withstood. OK

INSULATION RESISTANCE & OIL TEST

HV Windings to Earth	500	M Ohms	Oil Test as per IS:335-2018
LV Windings To Earth	500	M Ohms	Method IS:6792-1992
HV Windings to LV Winding	500	M Ohms	Average B.D.Voltage <u>64</u> kV

At 30.6°C 2.5 mm gap setting

Tested By :



Date of Test : 22-Aug-2021

ACCEPTED

J. heni - S
12/2/22
Chief Electrical Inspector *J.G.*