



GOVERNMENT OF ODISHA
OFFICE OF THE CHIEF ENGINEER-CUM - CHIEF ELECTRICAL INSPECTOR,
NORTH EASTERN ZONE ODISHA, BALASORE-756001
AT-I.G.MARG, BALASORE-1, NEAR I.T.I. SQUARE
Email Id: ceinzblsr-od@gov.in

No.....253..... / Dated .25.03.2019

From

The C.E-Cum-CEI, North Eastern Zone, Odisha,
Balasore.

To

M/s. Ardent Steel Ltd.,
At/PO- Phuljhari, Via- Suakati
Dist: - Keonjhar.

Sub: - Annual Inspection Report of Electrical Installation of M/s Ardent Steel Ltd., for the year 2018-19.
Sir,

Please find enclosed herewith a copy of the Annual Inspection Report (I.R. No. 120 /2018-19) of M/s. Ardent Steel Ltd., for the year 2018-19 for your information and necessary action.

Balance Inspection fees of Rs. 43675.00 (Rupees forty three thousand six hundred seventy five) only are to be deposited through e-Challan in the head of A/c "Inspection Fees" and hard copy is to be submitted to the undersigned.

The individual cable details / cables schedule is to be furnished for calculation of inspection fees.

Yours faithfully

Enclosed: As above


C. E-Cum-CEI, NE Zone, Odisha

Balasore

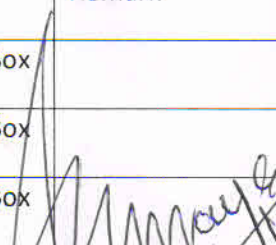
ANNUAL INSPECTION REPORT OF ELECTRICAL INSTALLATION OF M/S ARDENT STEEL LTD., KEONJHAR
FOR THE YEAR 2018-19.

1.	Report No.	:	120/2018-19
2.	Date of inspection.	:	23-03-2019
3.	i. Inspection fees Due, ii. Inspection fees paid iii. Balance Inspection to be paid	:	Rs. 185625.00 Rs. 141950.00 vide e.T.C. No. 2A1F63FB3B / 15-09-2018 Rs. 43675.00
	Voltage and system of supply.	:	33 KV, 11KV, 415V, 110V, 3-Ph, 50 Hz
5.	Name and address of the owner.	:	M/s. Ardent Steel Ltd., At/PO- Phuljhar Dist. – Keonjhar
6.	Location of the installation	:	Inside factory premises of M/s. Ardent Steel Ltd., At/Po- Phuljhar, Keonjhar
7.	Persons present.	:	1. Mr. S. Ramesh.DGM(Electrical), Mob-8280826802. 2. Mr. Aswini Kumar Nayak, A.G.M. HR & Admin Mob-9437076107
8.	Inspection conducted by. And assisted by.	:	1. Er. Satyajit Nayak, C.E.-Cum-CEI, NEZ, Odisha, Balasore 2. Er. Jagabandhu Prusty, AEE-Cum-AEI
9.	Details of the works Inspected	:	As per List enclosed in Annexure

10. Energy Meter Details:

Name of the Equipment	Meter Make	Meter Sl. No.	Meter CTR	Meter PTR	Adopted CTR	Adopted PTR	MC	Class	MF	Reading KWh
DG-1 (2250KVA)	HPL	1K082818	-/5A	3 X 240V	4000/5	3 X 240V	1	1.0	800	16689.5
DG-2 (2250KVA)	HPL	1K082786	-/5A	3 X 240V	4000/5	3 X 240V	1	1.0	800	17577.0
DG-4 (2250KVA)	HPL	1M001414	-/5A	3 X 240V	4000/5	3 X 240V	1	1.0	800	01026.5

11. Seal Details :-

Sl no.	Seal Nos.	Type	Location	Remark
DG-1 (2250KVA)	0001177/0001178	Plastic	Meter Box and CT Box	
DG-2 (2250KVA)	0001176/0001300	Plastic	Meter Box and CT Box	
DG-4 (2250KVA)	0013963/0013964 (Front Side) 0013961,0013962 (Back Side)	Plastic	Meter Box and CT Box	

12. OBSERVATIONS:-

DEFECTS AND DEFICIENCIES NOTICED AND RECTIFICATION ADVISED:-

A. DG Room:-

1. Suitable insulated mats are to be laid on in front of and around the panels.
2. Fire extinguishers of suitable type and capacity should be duly filled and kept in readiness conspicuously in the DG floor and are to be certified with signature of authority and designated Safety officer / Electrical Safety Engineer.
3. Safety equipments like Discharge rod, Safety lamp, hand gloves, testers etc. should be kept in the Control room.
4. Cable tag markers to be provided to all incoming & out going cables.
5. Danger board confirming to IS in English, Hindi and Odia with red background with white letter with voltage rating is to be provided.
6. Proper illumination are to be provided in both DG rooms.
7. Earth pit are to be identified for periodical checking and earth resistance to be measured and mentioned on the earth pits with due date of measurement.

B. 33 KV Switchyard :-

1. Painting of M.S. Channel and all rusted parts should be done during shutdown.
2. Earth pit are to be identified for periodical checking and earth resistance to be measured and mentioned on the earth pits with due date of measurement.
3. AB switch handle is to be earthed.

B. Control Room and Switchgear Room :-

1. Identification of control room building is to be made properly with voltage level in large font.
2. Nomenclature of all Panels to be done in Bold letters.
3. The fire extinguishers are to be duly filled and certified by competent authority/ Safety Officer / Designated Electrical Safety Officer regarding its validity.
4. All the emergency phone numbers as well as contact numbers of all in charge officers are to be displayed in their control room.
5. All persons / work men engaged in electrical work including supervisors are required to have valid license from ELBO.
6. First-aid box should be updated with proper medicine.
7. Earthing of all the panels are to be ensured.
8. Suitable Insulating mat are to be replaced in front of and around all the panels.
9. SLD of each area shall be displayed in the corresponding control rooms.

C. MOTORS:-

- 1) All the motors in different areas are to be identified as per the function and voltage level.
- 2) Local control switches of the motors are to be identified in accordance to the corresponding motors.
- 3) Maintenance record of the motors shall be maintained for reference.
- 4) Direction of rotation of motor is to be marked on the motors.
- 5) Insulating mats are to be placed in front of local Control Panels of motors.
- 6) Earth Connection of all the motors are to be ensured from two separate earth connections.
- 7) All motors are to be dust free time to time.

General :-

1. Panels are to be double earthed from two independent earth sources.
2. Cables are to be laid in cable tray and dressed properly with cable tag. Underground Cables are to be marked with cable tag along its route.

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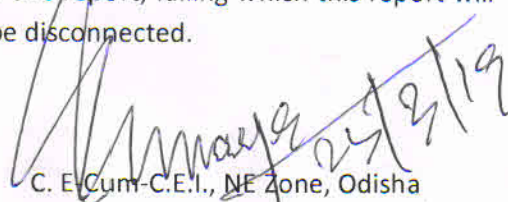
3. Danger Boards in English, Hindi & Odia shall be fixed on equipments as per I.S. Standard.
4. Shock treatment chart shall be displayed in the control room.
5. The fire extinguishers are to be dully filled and certified by competent authority regarding its validity.
6. All Earth pits are to be identified and properly numbered for periodical checking at least twice in a year. Earth resistance are to be measured and noted at/ on each earth pit with date of measurement.
7. Illumination should be improved in the premises area of the factory.
8. All persons engaged in electrical work including supervisors are required to have valid license from ELBO.
9. List of person engaged in electrical work are to be displayed in the following format and submitted to this office.

Sl.No.	Name of the authorised person	Designation	Certificate permit obtained from ELBO.	Validity	purpose of authorisation	Signature of authorised person	Signature of officer who authorised the person
1	2	3	4	5	6	7	8

10. Register of tests and checks made on system insulation, earth resistances and various technical parameters of the equipments, switchgears and protection system should be maintained duly certified by the Designated Engineer and Electrical Safety Officer during each shutdown and Produced to this Office for record.
11. An Officer with requisite qualification, experience and competency certificate as required under CEA Safety regulation 2010 needs to be designated as Safety Officer(Electrical) to look after for specific period to look after the safety aspects of all electrical works of the plant.
12. All addition, alteration and maintenance in the works are to be carried out through valid licensed electrical contractor/contractors of proper category under the supervision of valid and proper category of licensed Electrical Supervisor.
13. The details of the Designated Electrical Safety Officer and the Electrical Contractors should be furnished to this office within 30 Days of the issue of this letter.
14. A Certificate to the effect of checking the electrical works to be safe and carried out through the engaged Electrical Contractor is to be furnished to this office duly signed by the Designated Safety Officer, Electrical Contractor and the Supervisor.
15. The Equipment which have not been inspected in this report is to be intimated to the undersigned for further inspection.
16. Addition and alteration of any Electrical Installation is to be intimated to the undersigned for approval before energisation. Energisation of any electrical installation without statutory inspection attracts penalty equivalent to five times of initial inspection fees in addition to it.

CONCLUSION:-

The Electrical Installation which are in energised condition are permitted to remain energised subjected to rectification of observations pointed in the report through a licensed Electrical Contractor and submit the compliance within 30 (Thirty Days) of issue of this report, failing which this report will be invalid and power supply to this Electrical Installation will be disconnected.


C. E. Cum- C.E.I., NE Zone, Odisha
Balasore

List of Equipments of M/s. Ardent Steel Ltd. For Annual Inspection For the Year 2018-19

ESP Installations				
Sl. No.	Equipments	Qty.	Inspection fee Rate in(Rs.)	Amount
1	ESP Transformer	3	9000	27000
2	ESP MCC Panel			
3	Panel	3	500	1500
4	I/C and O/G Switchgear feeder	12	250	3000
5	900 KW Motor	1	850	850
6	HT/ MV Installations			
7	33 KV LA	3	500	1500
8	33 KV Isolator	1	500	500
9	33 KV ,3x400 sqmm Cable	2	250	500
10	NESCO Metering Cubicle	1	500	500
11	33/0.433 KV, 5.8 MVA Transformer	2	2250	4500
12	33/11 KV, 7.5 MVA Transformer	1	2250	2250
13	11/.415 KV, 2.85 MVA Transformer	1	1700	1700
14	33 KV HT Panel	6	500	3000
15	Breaker	6	250	1500
16	CT	18	250	4500
17	PT	6	250	1500
18	33 KV HT Cable(3Cx185 mmsq) < 1 Km	9	250	2250
19	11 KV HT Cable < 1km	2	250	500
20	LT Cable < 1 km	31	125	3875
21	11 KV Switch Board			
22	Panel	5	500	2500
23	Breaker	5	250	1250
24	CT	15	250	3750
25	PT	3	250	750
26	200 KVAR,11 KV Capacitor Bank	3		
27	Upto 10 KW LT Motor	162	50	8100
28	10 to 100 KW LT Motor	75	200	15000
29	100 to 500 KW Motor	11	400	4400
30	500 to 1000 KW Motor	1	900	900
31	1000 to 5000 KW HT Motor(1400 KW, 11 KV Motor)	2	2400	4800
32	FCMA Motor Control Panel	2	500	1000
33	11 KV HT Cable < 1km	5	250	1250
34	PCC-1 Panel			
35	Panel	8	500	4000
36	Breaker	8	250	2000
37	O/G Switchgear feeder	8	250	2000
38	LT Capacitor Bank 750 KVA	2	850	1700
41	PCC-2			
42	Panel	8	500	4000

M. S. S. S. S.
25/12/19

43	Breaker	8	250	2000
44	O/G Switchgear feeder	8	250	2000
45	LT Capacitor Bank 750 KVA	2	850	1700
46	FCMA Motor Control Panel	2	500	1000
47	Kiln & Cooler MCC			
48	Panel	7	500	3500
49	I/C and O/G Switchgear feeder	19	250	4750
50	TG and balling mill system MCC			
51	Panel	4	500	2000
52	I/C and O/G Switchgear feeder	17	250	4250
53	Pump House and Oil system MCC			
54	Panel	4	500	2000
55	I/C and O/G Switchgear feeder	17	250	4250
56	TG DDV MCC			
57	Panel	4	500	2000
58	I/C and O/G Switchgear feeder	20	250	5000
59	Proportioning MCC			
60	Panel	5	500	2500
61	I/C and O/G Switchgear feeder	26	250	6500
62	Servo Voltage Stabilizer	3	500	1500
63	Air Condition Control Panel	1	500	500
64	Load cell Panel	1	500	500
65	UPS 10 KVA	2	500	1000
66	UPS Junction Box	1	500	500
67	Battery Set	2	500	1000
68	Equipment list of DG-1,2 & 4 Sets of M/s. Ardent Steel Ltd. for the year 2018-19			
69	DG,2250KVA,415 V	3	2750	8250
70	Metering Panel	3	400	1200
71	C/R Panels	9	400	3600
72	Battery	4	250	1000
73	CT	9	250	2250
74	Breaker	4	250	1000
75	Fuel Oil pump 30KW	2	200	400
76	Compressor 45 KW	1	200	200
77	water suck pump 1.1kw	1	50	50
78	Light load 400W	3	50	150
79	LT Cable	4	125	500
80	HT Cable	1	250	250
	Annual Demand Bill for the year 2018-19 =			185625
	Inspection fee paid		141950	
	Inspection Fees to be paid		43,675	

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