

Brief on Electrical General Department

As On Date 01/05/2014

Train Lighting Section :

A. Coach Holding :

SG AC Coaches	63
EOG AC Coaches	18
TL Coaches	265
Power Cars	3

B. Staff Position :

	Sanctioned strength	MOR
Group C	212	191
Group D	87	83

Power Supply Installations (O.S.M.)

A. Maintenance depots :

S. N.	Name of depot
1	Nagpur (Major depot)
2	Nagpur (AC maintenance)
3	Ajni (Major depot)
4	Main store, Ajni
5	Wardha (Major depot)
6	Ballarshah (Major depot)
7	Amla (Major depot)
8	Junnardeo (Minor depot)

B. Staff Position :

Group	Sanctioned Strength	MOR
Group 'C'	170	156
Group 'D'	150	135

Important Assets :

Items	Holding
Station Electrified	94
Connected loads in KW	18576
Water coolers	179
11 kV substations	26
Transformers	49
Stand- by DG set	45
Electric pumps	234
Window /Split type Air Conditioners	255
Ductable Package 17 Ton cap. A/C plant	6
Staff Quarters electrified	8457

PATTERN OF ENERGY CONSUMPTION

Approximate consumption of the electricity for non traction field is divided in the following various fields : –

	In %age
○ Railway Stations	- 09.30
○ Staff Quarters	- 38.00
○ Pumping Installation	- 15.00
○ C & W Shed	- 08.00
○ Water cooler	- 00.70
○ Service building	- 21.00
○ Road light	- 02.00
○ Hospital & health Units	- 03.50
○ Others	- 02.50
	<u>100.00</u>

ACTION PLAN FOR REDUCTION OF ENERGY CONSUMPTION

Action to be taken for reduction of energy consumption –

No cost method :

- General awareness campaign by fixing stickers and counseling to staff and users for energy conservation.
- Daily monitoring of HT consumption at Major load centres and to take suitable measures to control excess consumption.
- Controlling utilization of high mast lighting towers in goods shed and other places.
- Operation of circuits for Platform lighting of 30% and 70% to be ensured by all Station Managers. Special drive has been launched.
- To replace storage type geysers with instant type geysers at Rest houses etc.
- Identification of areas of energy theft in colonies & service buildings & disconnection of unauthorized connections.
- Regular shutdown on HT feeder at major load centres ie at Nagpur, Ajni, Wardha, Ballarshah, Amla and Junnardeo for system maintenance.
- Optimum use of pumping installation- At Ballarshah pump house installed pumps with low head requirement and high capacity has been identified and pumps have been replaced with lower capacity pumps. Similarly other locations are under review.
- To avoid direct pumping to quarters and service buildings- Engg. Deptt. requested to provide storage tank.

Scrap Disposal

Year	Ferrous	Non- Ferrous	Battery scrap
2011-12	23.889 Tons	4.781 Tons	16.448 Tons
2012-13	6.5 Tons	0.012 Tons	Nil
2013-14	20 Tons	5 Tons	12 Tons

Human Resource Development

- Infrastructural development of Training Centre at Ajni for Train Lighting & AC and OSM staff has been developed.
- Trouble shooting chart / booklets for all major electrical equipments are being prepared and shall be supplied to maintenance staff.
- Training schedule for maintenance staff is being prepared and all staff will be imparted training in their respective field.
- Working models are being developed for educating the staff.