## Major Achievements during the year 2024-25 (Upto Dec 2024)

#### Star rated AC

•122 Nos. Star rated AC Units provided at various Service Buildings, lobby and Hospitals of Mumbai Division.

#### Provision of BEE Star Rated Energy Efficient Air Conditioning System with Inverter Type (VRF Technology)

- 19 Nos. VRF type AC Plant commissioned at various locations in Mumbai Division.
- Energy Saving upto 30% as compared to Conventional AC unit.
- 19 Nos. VRF type AC unit provided at various locations of Mumbai Division.

#### **Water Coolers**

• 30 Nos. Water cooler have been replaced/ provided at various locations of Mumbai Division.

### **Energy Conservation Measures**

- •870 Nos. Energy efficient BLDC fans provided at various location/Stations of Central Railway Mumbai Division.
- •Improvement of illumination level of Station Platforms has been done by providing and replacing 8695 Nos. various capacity LED fittings.

## Additional Measures Taken During Monsoon in the year 2024

- At 18 locations Power Supply provided for dewatering pumps at suburban stations.
- At 5 locations DG sets were provided for dewatering pump.
- •In NE & SE Ghats 21 locations supply provided for CCTV and Focus lighting at vulnerable locations at bolder falling area.
- •In NE & SE Ghats 27 at Temporary Stationary Watchman Huts (SWM), supply and lighting arrangement are provided.
- •Total 42 Nos. Tunnels are lit by LED lights in South East, North East and other sections.

## Theme Based Signages at Vadala, Sandhurst, Chinchpokli, Parel, Shahad, Titwala

- Theme based Improved New LED multi coloured Signage (kalyan station).
- 270° Viewing angle due to elliptical shape.
- · More brightness with low power consumption.
- Translucent polycarbonate display sheet.
- · Anodised aluminium extrusion- Rust free & light weight.
- · Bright colours and graphics.
- · Colour coding for different lines.
- · Eye catching aesthetic designs.

## **Escalators**

Chunabhatti-01, Ghatkopar-06, RAJANPADA-02, NAWASEVA-02, Ambernath-02, SION-02, Matunga-01 & Dadar-04

### Lifts

RAJANPADA-02, NAWASEVA-02, Aasangaon-01, Mumbra-02, Titwala-01 & Bhivpuri-02

### Solar

106.5 KWp installed at t 6 locations.

# Major Achievements during the year 2022-23

- 1.Divisional Efficiency Shield for the year 2021
  - •Electrical Shield: Divisional Efficiency Electrical Shield was awarded to Electrical (GS) Department Mumbai Division on 22.04.2022 for the year 2021.

•GM's Overall Efficiency Shield: - GM's Overall Efficiency Shield was awarded to Electrical (GS) Department Mumbai Division on 22.04.2022 for the year 2021.

#### 2.Façade LED Multi Color Programmable Lighting at CSMT, Dadar & LTT Railway Stations in Mumbai Division

•The work for illuminating the façade lighting of GM building (World heritage UNESCO structure), has been completed.

#### 3. High Ambient & High Sensible Spacemaker Cooling Unit for RRI. Special Cooling System has been provided at Mankhurd RRI.

- •Twin circuit in Unitary type construction, wall mountable type with supporting foundation bolt & anti-vibration pad. Machine is in steel sheet enclosed.
- •One unit has 2X2TR capacity. Two unit have been installed on 26.02.2023.
- 4.Running Room at Roha taken over from KRCL. Air conditioning of Running Room done with 2x28HP VRF Air conditioning system. One Outdoor unit in working and other outdoor unit on standby. Energy Saving upto 30% as compared to Conventional AC unit.
  - Outdoor unit 2x28HP VRF
  - •Indoor Unit 24x2 TR High wall unit
  - One outdoor unit in working and other outdoor unit on standby.

#### 5.WEB & MOBILE APP BASED MONITORING SYSTEM FOR ESCALATORS

- •Mumbai Division of Central Railway has procured 74 Nos. Web & Mobile app based monitoring system devices for escalators.
- Installation, testing & commissioning of these devices are under process.

#### 6.Railway Bijali Samadhan App

- "Railway Bijli Samadhan Mobile App" has been released by Central Railway for speedy redressal of electricity related complaints of railway employees and esteemed railway passengers.
- •Through the Railway Bijli Samadhan App, you can also track record of the status of your complaint after registering it till its resolution.
- •All the complaints registered on this app are monitored by the higher officials of the Railway Department.

#### 7. Electrical Safety Audit

- •As per Railway Board Guidelines Electrical Safety Audit of Service Buildings, station & other electrical installation has been carried out in Mumbai Division.
- •One officer & Three Supervisors were given Electrical Safety Audit Training at IRIEEN, Nashik.

### 8. Provision of BEE Star Rated Energy Efficient Air Conditioning System with Inverter Type (VRF Technology)

- VRF AC Plant commissioned in Rapicon Hall, New Medicine Room, Post OT of Dr. BAM Hospital, BY.
- •VRF AC Plant commissioned in DRM Old meeting room & Running Room Roha.
- •Energy Saving upto 30% as compared to Conventional AC unit.

#### 9.Star rated AC

•87 Nos. Star rated AC Units provided at various Service Buildings, lobby and Hospitals of Mumbai Division.

#### 10. Fire Detection & Alarm System in Byculla Hospital

- •It is used to notify staff and patients of a fire, and to provide instructions on what to do.
- •It includes smoke detectors, heat detectors, and manual pull stations.
- •When a fire is detected, the alarm system will activate, and sound a loud alarm to notify everyone in the hospital of the fire.

# System Improvement 2020-21:-

- As green energy initiatives, provision of 750kWp capacity of Rooftop (Storage + Grid) connected Solar plant, solar water cooler(CSMT), Smart Shed, Solar tree, Solar street light at CSMT and Solar heater at BY. (Overall capacity installed: 1993 kWp)
- ❖ Provision of 125 nos. air circulator fans to improve ventilation system.
- ❖As energy conservation measures, provision of 26 nos. HVLS fans(CSMT & TNA) and 2193 nos. BLDC fans at various stations PFs of Mumbai Division.

- Commissioning of Negative Air pressure Clean room A/c system (First time in Indian Railways) as per ISHRAE Covid-19 guidelines to combat COVID-19 pandemic at isolation ward at Dr. BAM Hospital, BY and DRH, Kalyan
- ❖Provision of Icelined Refrigerators at Dr. BAM Hosp., BYfor storage of Covid-19 vaccination.
- Provision of 12 Nos. Escalators and 05 Nos. FOB Lifts at various stn of BB Div.
- ❖Improvement of Illumination level of station pf's done by providing 4271 Nos. LED Fiitings.
- ❖To generate advance revenue, 101 Nos. prepaid meters installed in stall vendors and ATMs
- •96% segregations of staff quarters done under direct metering.

## Major Work during Covid-19 lockdown

## **Electrical Work at Quarantine facilities:-**

- ❖Electrification of Isolation wards set up in Byculla Hospital and Kalyan Hospital by providing 150 nos. LED lights and 78 No. Energy efficient fans.
- Quarantine facility setup at RPF Barrack Mulund, Parel sports hostel, Dadar holiday home, Holiday home IGP and S&T Hostel Byculla. Electrification of Quarantine facility of 300 beds at 5 locations made ready by providing 300 No. LED lights and 150 No. Energy efficient fans.
- ❖3 KVA & 5KVA UPS provided for Ventilators at Kalyan Railway Hospital.
- ❖10 KVA UPS provided for Ventilators in ward No-3 at Byculla Railway Hospital.

## **Electrical Work at Ghat Section**

- ❖Power supply made available to SWM Hut by laying 3000mtrs cable of size 10 sq.mm in SE ghat section, LNL.
- ❖12 nos. Octagonal pole erected at vulnerable locations 119 to 120 KM in SE ghat sections, LNL
- 30 Nos. 100 W LED fittings provided between MHC-KAD section to facilitate night patrolling.
- Lighting arrangement have been at KM 114/400 between TKW-MCH for restoration of track.
- ❖9000 mtrs cable laid down for power supply and 80 Nos. 100 W LED fittings provided at NE Ghat section to enable the clearer view of CCTV camera.

# System Improvement 2021-22:-

- 1.Installation work of Auto-changeover panel for new Railway Transformer(100 KVA) at KLVA Parsik Cabin.
- 2.DG setinstalled at various locations- 100 KVA for running room THK, 25 KVA at ABH and 15 KVA at VGI.
- 3.Earthing checked and value measured at following Locations- KLVA,MBQ,DW,DI,THK, service buildings, LTT(120 Nos), ABY,TLA,KDV,SHD,VSD,ASO,ATG,WB(section)
- 4.Completed overhauling and bearing replacement of 20 HP Pump at KYN Railway School, Vacuum Pump at Wadibunder(Sick line),MZN F-G pump, 5 HPMonoblockpumpset Byculla, F-G Bdg Pump room (2 Nos.) and 5 HP Monoblock pump Shivneri Hostel, BY(2 Nos.).
- 5. Provision of 02 Nos. Solar light at KM/TP -111/5, 115/51 (SWM) IGP.
- 6. 2 Nos. High mast tower erection done in Titoli yard, IGP and 1 No. in Kasara Up yard.
- 7. 15 KVA DG set (new) and 25 KVA DG set (New) complete with standard accessories, AMF control panel, Battery and soundproof acoustic enclosure and commissioning done with help of off load at VGI Running room and ABH Stn. Running room respectively.
- 8. 100 KVA DG set provided at THK Running room.