

# HOSPITALS



**CENTRAL HOSPITAL NORTH WESTERN RAILWAY  
Jaipur (Rajasthan)**

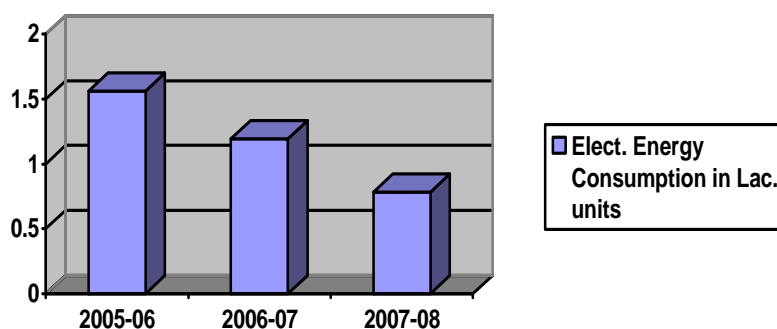


**Hospital Profile**

Railway Hospital Jaipur was founded in the year 1970 for Medical treatment & Health benefit of Rly. Staff as well as private personals. This Hospital has been reformed and converted into Central hospital in the year 2002 from the formation of North Western Railway. Since the Headquarter of NW Railway is situated at Jaipur, therefore, there was need for provision of central hospital for treatment of staff over the zone. The Central hospital is situated in prime location of the Jaipur near railway station Jaipur. The hospital was design for 350 beds. The building of Central Hospital is well illuminated & surrounded with garden & lush green area to make pollution free environment.

**Energy Consumption**

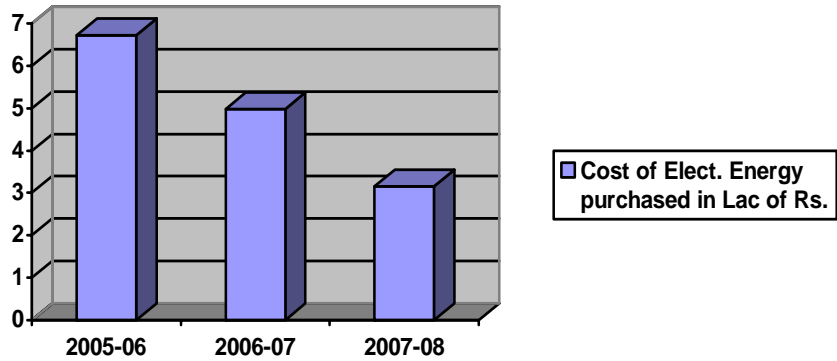
The source of Electrical energy for hospital is 11 KV supply received from Jaipur Vidhyut Vitaran Nigam Limited at Railway sub-station situated in zonal headquarter building. The energy bill for year 2007-08 was Rs. 3.16 Lac. The connected load is 302 KW. The electrical consumption for last three years is as:-



Electrical Consumption				
Energy used	Units	2005 - 06	2006 - 07	2007 - 08
Electricity Purchased	Lac. kWh	1.557	1.190	0.780

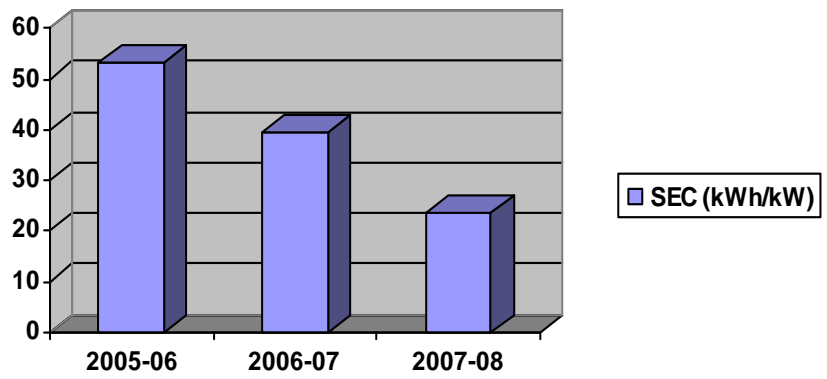
**Electricity Cost**

The cost of electricity purchased during last three years is shown as -



Cost of Electrical Energy Purchased				
Energy purchased	Rs.	2005 - 06	2006 - 07	2007 - 08
Electricity Purchased	Lac. of Rs.	6.725	4.973	3.16

Specific Energy Consumption (SEC) in KWh / kW for last 3 year is as –



Year	2005 - 06	2006 - 07	2007 - 08
SEC kWh/kW/month	53.33	39.5	23.58

**Energy Conservation Commitment, Policy and Set up**

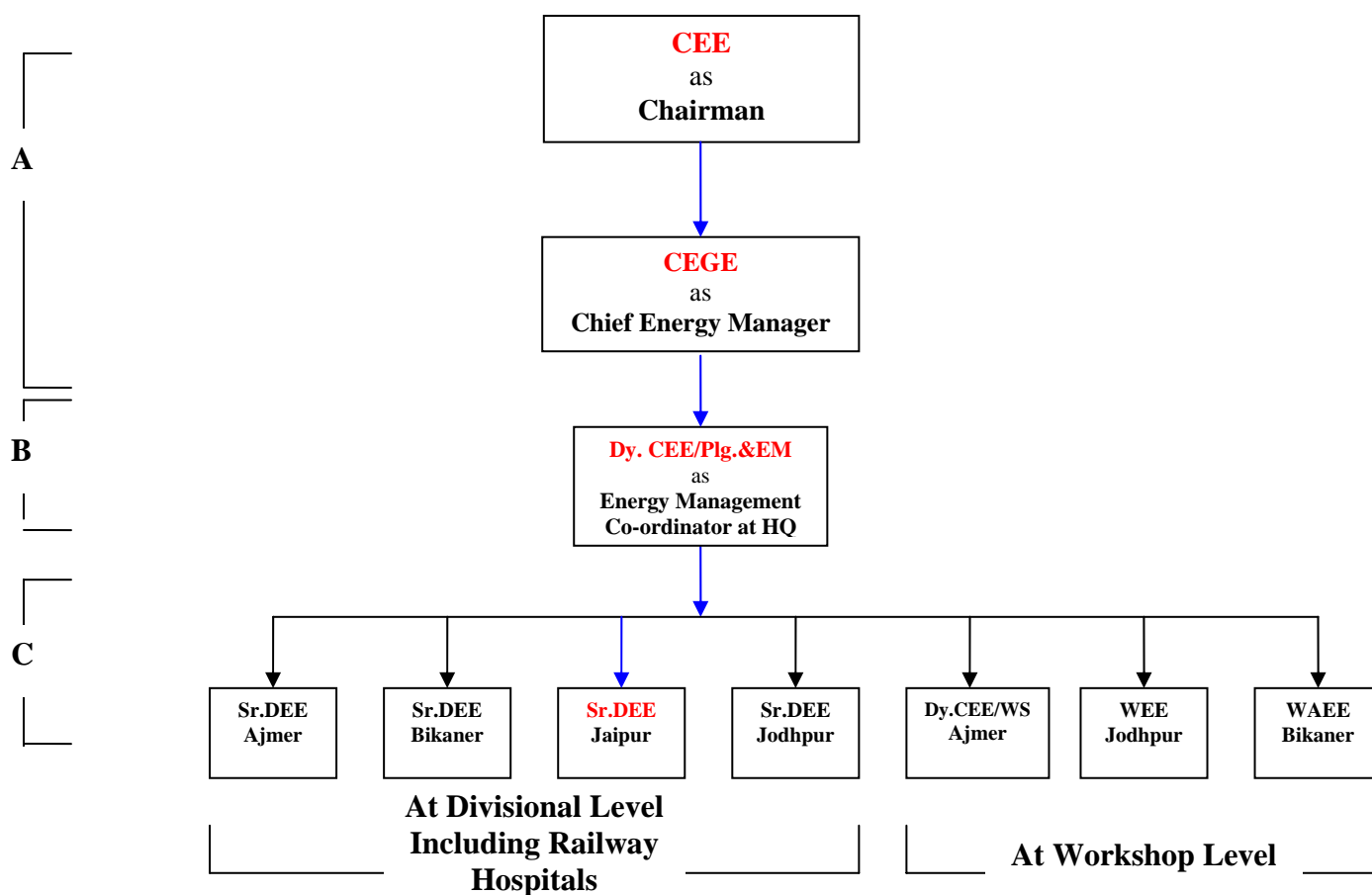
Railway Organization of Energy Efficiency and Renewable Energy (RE) Management Group on this Railway, monitor the energy consumption intensively. Electrical staff has been regularly counseled about energy conservation & its importance.

## Energy Management Policy

- Adopt Cleaner and Eco - friendly Renewable Energy (RE) sources on Railways.
- Striving to reduce specific energy consumption (SEC) by continuously taking energy efficiency improvement measures & minimizing energy wastages.
- Incorporate energy efficient designs and technology in all future projects complying with Energy Conservation Building Code, 2007.
- To carry out internal and external Energy Audits on regular basis to identify areas for improvement.
- Involvement of employees at all levels in the energy conservation efforts.
- Extensive use of 3 star (★★★) & above labeled electrical products/equipments.
- Implementation of Energy Conservation Act, 2001 by involving all stake holders.
- Extensive use of LED based lighting products.

## Organization of Energy Efficiency and Renewable Energy (RE) Management Group

The set up of Energy Efficiency & Renewable Energy Management Group is as:



## Energy Conservation Achievements

### (1) Use of energy efficient fittings

- In the years 2004-05 & 2005-06 energy conservation measures like provision of CFL fitting replacing incandescent lamp in toilets and galleries, replacement of conventional choke/ballast by electronic ballast, replacement of resistance type regulator with electronic regulator, electronic tube light fittings.
- In year 2006-07, 380 nos. energy efficient T-5 tube light 1x28W, 2x28W fitting, were provided by replacing T8/T12 36W/40W tube lights, which results in electrical energy saving of 3394 kWh / Year.



T-5 tube light 1x28W fitting



T-5 tube light 2x28W fitting

### (2) Use of Renewable energy sources

- **Solar Water Heaters:** Solar Water Heaters of capacity 1000 LPD & 500 LPD was provided to fulfill the requirement of hot water in hospital, which results in electrical energy saving of 10950 kWh /Year.



- **Solar Lighting:** Two solar lights having 11W CFL with solar panel have been provided in the circulating area of central hospital during 2007-08, which results in electrical energy saving of 519 kWh / Year.



- (3) **Power Factor Improvement:** APFC panel of 1x33KVAR provided to maintain power factor 0.99 to avail power factor rebate from DISCOM & to improve efficiency of the system.
- (4) **Provision of Sterilizer:** 3kW capacity Sterilizer has been provided in place of 18 kW Sterilizer which results in electrical energy saving of 22500 kWh/Year.
- (5) **ISO Certification:** Railway Sub-station feeding Electrical supply to Hospital is certified ISO – 9001 – 2000.

