**ENERGY CONSERVATION METHODS**

1. Set Mains Voltage in the range of 395-400, 3 phase at power house and lighting voltage 200 V +/- 1%

2. Balance the phase currents to within +/-5%

3. Maintain instantaneous PF @ >0.96 and Av PF > 0.95

4. Set Generator Voltage, Frequency , PF@ 395-400, 49.5-50.0, >0.85 respectively

5. Replacement, New lamps, A/Cs, Fridges should preferably be "Star rated". Lamps should be only LED.

Select lamps only with the following guidelines

Lamp watts      Useful life        Lumen Efficiency

(W)                  (Hrs)                 (L/W)

<20                >30,000              >70

20-30               >30,000             >80

>30                  >50,000              >90-100

6. For Reliability, Energy conservation, and safety, avoid individual voltage stabilisers in A/Cs and other gadgets.

7. Distribution transformer cable losses to be maintained lower than specified in ECBC-2007-Cl 8.2. (Maintain documents in power house)

8. Use A/Cs of high Energy Efficiency (EE) ratio and set the Thermostat to designed value ie 25+/- 1 degree C

9. Power intensive equipment > 500 VA, A./Cs, UPSs, Pumping systems, Heaters etc of continuous operation to be cleared for EE before permanent installation.

10. MCCBs, Fuses, MCBs to be selected for "Actual feeder load current" and not the switch rating.

11. Surge protection system to be installed in all the MV panels, SSBs and Distribution Boards, as per norms.

12. UPS to be centralised and monitored 24 /7 for "loading"  and "safe working"

13. Smaller rating UPS< 20 KVA to be removed for safety and energy conservation.

14. Never compromise on safety and adopt only approved components.

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