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**भारत संचार निगम लिमिटेड**  
(भारत सरकार का उपक्रम)  
**BHARAT SANCHAR NIGAM LIMITED**  
(A Govt. of India Enterprise)

NO. : 7-1/2012-NWO-CFA/MSE/

Dated 9/08/2012

To,  
All Chief General Managers,  
BSNL Telecom Circles/Distts

**Subject: Maintenance of VRLA Battery sets in field units.**

It has been observed from the Exchange failure reports & letters from NCES that VRLA battery sets are not being maintained properly in Exchanges resulting in less power backup time which leads to frequent failure of Exchanges in case of Mains Fail.

The TEC has issued Guidelines & recommended a Monitoring schedule for VRLA Batteries vide no. **GL/BAT-04/02 MAR 2007**, which may please be followed. Some major points mentioned in the GL are as below:-

**Monitoring Schedule:**


**Daily:** Measurement & recording of Temperature & float Voltage of each cell.

- Monthly:**
1. Physical inspection for any damage, crack, leakage or deformation.
  2. Recording of Voltage of each cell during partial test discharge (Discharge of battery for a short duration say 30 minutes to 1 hour).
  3. Measurement of float current in fully charged battery.

**Precaution for better performance & longer life of Battery:**

1. It is preferable that the battery may be installed in controlled environment (not mandatory). Alternately keep the ambient temperature of the battery room reduced by employing the natural air convection (ventilated room) with exhaust fan & maintain the average temperature around 35°C.
2. Weak cells need to be identified & remedial action should be taken well in time.
3. The battery should not be allowed to discharge beyond 80% of its rated capacity.
4. SMPS Power plant should be deployed with sufficient number of modules & proper voltage/current setting (Charging voltage shall be such that it does not contribute to rise in temperature of Bty i.e. 2.25V for float and 2.30V for charge). Do not resort to fast charging setting of higher float/charge voltage.

All concerned field units may please be instructed to follow the above and other points mentioned in the Guidelines issued by TEC & take proper care in maintaining & upkeep of Battery sets so that they can serve properly for specific life and failure of Exchanges due to non availability of power backup can be avoided.

  
**(RAJESH KUMAR)**  
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