## 2<sup>nd</sup> Week (12<sup>th</sup> September - 17<sup>th</sup> September)

### 1. Energy Audit

The basic idea of an electrical energy audit is to analyze the amount of electrical energy used by every device/appliance/load. A 25W light bulb on for 4 hours per day would be 100Wh/day (25W\*4h/day). Some loads have variable states. For example, light bulbs come with a specific power rating such as 25W. For example, light bulbs come with a specific power rating such as 25W. For example, a refrigerator will have a few possible states the maximum power is when the compressor is running (and might be 500W), whereas some states are quite low (e.g. 50W). Some loads are more variable. For example, a computer might be rated at 200W, but will only consume that high rate when the computer is working hard (e.g. playing a new video game or rendering 3D).

# 2. DTLMS (Distribution Transformer Life Cycle Management Software)

The main objectives of DTLMS are to Track the movement of Transformers, to analyze performance of Transformer, to analyze failure trends, to Visualize age wise pendency for replacement, to know real time stock details, to Track repair history to take informed decision to repair/scrap, to maintain history of Transformer from procurement to scrap. The benefits of DTLMS are Each Distribution Transformer is assigned with a unique id number, which helps us to track the history of the same from the time of its purchase till it is scrapped, Mobile App is developed for survey of newly commissioned transformers by the section officers both in online and offline mode.

### 3. Geographical Information System

Sub- Transmission and Distribution systems constitute the link between electricity utilities and consumers, their revenue realization segment. For consumers, it represents the face of the utility. Efficient functioning of this segment of the utility is essential to sustain the growth of power sector and the economy. However, the present situation is characterized by unacceptably high losses (both technical and commercial), poor quality and reliability of supply, billing, revenue collection, frequent interruptions in supply and resultant consumer dis-satisfaction, etc. In this context, ST and segment of power sector

needs immediate attention and action to achieve a turn around and self-sustenance of power sector.

#### 4. VENDOR APPROVAL

The vendor base of CESC Limited is a potential network of mainly direct manufacturers, ancillaries, dealers and OEMs on a Pan India basis. They form the main backbone of our Supply Chain. Vendors are technically and commercially approved before vendor registration. Competitive Bidding among the registered approved vendors is in place to procure material of any value. Every year a Vendor Meet is organised by Materials Division to acknowledge the efforts made by the performing vendors. Materials Division of CESC Limited is solely responsible for procurement of all materials related to Power Distribution & Generation. Materials Division endeavours to sustain the supply chain of materials with the support from potential vendors.

