Energy Conservation Bill-2001 Highlights

The Energy Conservation Bill-2001 was passed by the Parliament in August-2001 and was expected to clear the way for to check Wastage Energy. This Bill was supposed to control huge wastage of Power.

The Indian Power sector scenario remains gloomy, surrounded by the dark clouds. Although Power reforms started about a decade back, the achievements are only dismal. Financial health of most of the State Electricity Boards (SEBs) remains critical, mainly due to the uncontrolled use of low efficiency, Power wasting Equipment and Appliances, back breaking heavy subsidies for agricultural and some other sectors, and huge power thefts and pilferage resulting in heavy loss of revenue for the State Electricity Boards (SEBs) and other Utilities.

The Energy Conservation Bill 2001 prepared by group of expert committees discussed and debated at various forums, was passed by the Indian Parliament in august-2001. This a bureau called the Bureau of Energy Efficiency (BEE) was established and managed through Governing council.

All the Assets, Liabilities and Employees of the existing Energy management center was suppose to be transferred to this bureau. The central government through its Ministry of Power, the Bureau of Energy Efficiency and the State Governments will have a major role to achieve the desire objectives.

The major problems faced by the Power sector are due to increasing gap in the Demand and Supply of Power, High Transmission and Distribution (TandD) losses as well as Power theft/Pilferage and wastage of expensive and limited Energy due to the use of Low Efficiency Equipment in various sectors.

In view of this the powers and major functions of this bureau, as defined as follows

- Recommend to the Central Government the norms for processes and Energy Consumption Standards required.
- Recommend to the Central Government the manufacture and uses of high Efficiency Equipment and appliances.
- Recommend for notifying any user or class of users of Energy as Designated consumers.
- Prescribe guidelines for Energy Conservation building codes.
- Create awareness for efficient use of Energy and Energy Conservation.
- Arrange and organize training of personnel and specialists in the Techniques for efficient use of Energy and its conservation.
- Strengthen Consultancy services in the field of energy conservation.
- Develop Testing and Certification procedure.
- Promote use of Energy Efficient Processes, Energy Auditing Equipment with User Interface Software support, Handy Instruments to Measure Different Electrical Parameters without shutdown, Devices and systems.
- Promote innovative financing of Energy Efficiency Projects.

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- Specify by Regulations qualifications for the accredited Energy Auditors.
- Maintain a list of Accredited Energy Auditors.
- Specify certification procedures for Energy Managers.
- Specify detailed scheme for Regular Energy Audits.
- Implement international co-operation for Energy Conservation.

All the above functions are to be performed by the bureau as per the directions from the central government, having the powers as follows.

- Specify the norms for processes and Energy Consumption Standards for all Equipment and Appliances.
- Prohibit manufacture of sale or purchase or Import of Equipment or Appliance not confirming to the prescribed standards.
- Establish and prescribe the Energy Consumption norms and standards.
- Direct all Energy Intensive Industries for compulsory Energy Audit through Accredited Energy Auditors.
- Enforce efficient use of Energy and its conservation for all designated consumers.
- Direct any designated consumer to designate or appoint Energy Manager.
- In charge of all such activities prescribe minimum qualification for Energy Managers and Energy Auditors.
- With the help of the states concerned prescribe Energy Conservation building codes for efficient use of Energy and its conservation.
- Direct Energy Audit for designated buildings/offices and other large commercial users with connected load of 500KW or contract demand of 600 KVA and above.

The prescription and implementation of Energy Conservation building codes has to be done in Consultation and co-operation by' State Governments which will have the majors powers.

Provision for Penalties Adjudication:

If any person fails to comply with the provisions of this bill applicable

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Penalties and provisions for adjudication has been made. Provision also has been made for Appellate Tribunal for the appeals by any aggrieved person.

The objective of this bill is to improve the Quality of all the Electrical Equipment and Appliance mainly to ensure manufacture and use of high quality Equipment and Appliance to minimize the Energy used by all type of Electrical, Mechanical and other Equipment/Appliances.

All the users particularly designated consumers will be responsible to follow best Engineering practices which will be possible only when the Manufacturers of Electrical and all other type of Equipment, Manufacture and supply low consumption high Efficiency Equipment which has become essential to save scarce and expensive Energy as per some of the following examples

- The manufacture and use of incandescent type GLS lamps may be banned, since the light efficiency of these lamps is as low as 10%. There are crores of such lamps being used. This provision will save Power worth thousands of MW. These GLS lamps can be easily replaced by economically available low power high efficiency CFL lamps.
- Discontinue the use of Electrical Chokes and encourage the use of Energy efficient Tubelight with Electronic chokes. Each Tubelight will save above 30/35W saving a Power worth several thousand MW.
- To encourage manufacture and use of high efficiency Refrigerators and Air-conditioning systems.
- To ensure efficient process controls by using Energy management systems / packages readily available for different process industries.
- To encourage manufacture and use of high efficiency motors particularly LT motors in process industries as well as agricultural motors and pump sets.
- To ensure manufacture and use of low loss high efficiency Distribution Transformers manufactured from low loss Core material using Copper wires/ windings in place of Aluminum-wound Transformers extensively being used by State Electricity Boards and other utilities wasting thousands of MW Power continuously.
- To recommend and ensure use of copper wires of adequate rating for commercial and industrial wiring wherever aluminum wiring wherever aluminum wiring is still being used at many places.