

## The Remedy for Energy Conservation

*Due to non-implementation of the Energy Conservation Act – 2001, since more than five years, the State owned utilities & other energy intensive consumers could not avoid immense and unabated waste of power. And the absence of regular energy audits is the key reason for not improving energy efficiency for substantial savings of power*

*- G. G. Dalal*

Unprecedented power crisis is hitting all the states every year, resulting in much uproar and the usual blame game. Authorities of State Power Utilities start blaming farmers for over – utilizing pumps, resulting in unendurable power shortage. Politicians generally create such indiscipline by giving free & unrestricted energy to the farm sector without metering or keeping a ceiling – as a populist measure. Though it is imperative to subsidize farmers, there is need to maintain requisite discipline. In Kerala, genuine poor farmers are given metered supply; however, the State Agriculture Department regularly pays the energy bills.

The remedy for this power crises is seen by the planners at the Centre and States only in the two options: (1) addition of power capacity & (2) enforcing desperate load shedding, leading to severe discontent among the majority of the consumers. There is total disregard shown to the time tested options of (1) End-Use-Efficiency improvement (2) Reduction of avoidable energy losses in the distribution systems (3) Demand Side Management (DSM) and (4) Energy efficiency improvement by carrying out regular energy audits.

The State Electricity Regulatory Commissions, who have been assigned the onerous tasks of controlling darkness, give last two ultimate choices to the consumers: either (1) pay for costly power or (2) suffer longer power cuts. Occasionally, they advise Power Utilities to launch energy conservation campaigns in an aggressive manner. This is like digging a well for quenching thirst!

*It would be worthless increasing power capacity & pouring it into a bottomless pit, without addressing power thefts and substandard, inferior efficiencies of the transmission & distribution system.*

In view of the fact that a major portion of the distributed energy disappears with lightning speed to bottomless pits, the Hon'ble Prime Minister had to give the highest priority to cutting the energy losses by 25% in order to bring down State Transmission & Distribution (T & D) losses to 15% by 2010 – with a view to add costly generating capacity of 70,000 MW in the 11<sup>th</sup> Five-Year-Plan, as per the approach paper, approved by the National Development Council.

### Reasons of poor capacity addition:

Monopolistic control by State Electricity Boards is the main cause of low capacity addition. There is an absence of any payment security mechanism, high aggregate technical & commercial losses, and risky debt management. Once the generation capacity gets added, the power producers are forced to sell electricity to the bankrupt SEBs or their new outfits called DISCOMs, which have a miserable liquidity position & lack of performance accountability.

In the backdrop of practically no improvement in the supply situation with long durations of power cuts across the country, DISCOMs with their passive performance are seen preparing people to get ready for future energy breaks or shocks. The deficient & erratic power supply at rising rates of tariff is truly shaking people's faith; as a result, the gullible consumers become the immediate victims, predestined to suffer mutely.

By adding generation capacity with the government's ambitious plan of "ultra mega power project" schemes, in the 11<sup>th</sup> Plan by 2012, for providing un-interrupted electricity supply with world-class services – and aiming to make India, a superpower, will remain a pipe dream, without the basic requisites for nursing such a mighty goal. While it is important to add more power capacity, it would be a worthless exercise to keep on adding & pouring it into a bottomless pit, without addressing power thefts and substandard, inferior efficiencies of the transmission & distribution system. How can, therefore, the ultra mega power projects & open access systems only be considered crucial to ensure and sustain an above 9% economic growth?

### **Unabated waste of power**

Due to non-implementation of the Energy Conservation Act – 2001, since more than five years, the State owned utilities & other energy intensive consumers could not avoid immense and unabated waste of power. And the absence of regular energy audits is the key reason for not improving energy efficiency for substantial savings of power.

### **Misleading message given by law-makers**

The Energy conservation Act implemented by the Bureau of Energy Efficiency (BEE) – a statutory body under Government of India (Ministry of Power), envisages creation of a cadre of professionally qualified energy managers and auditors – with expertise in energy management, project management, financing and implementation of energy efficiency projects, as well as policy analysis.

As per BEE, “It is a law to force firms to make profit, and not an act to control and monitor energy consumption of industry.”

If the law forces business firms to make more profit without controlling or monitoring energy consumption, then firms will see that their gains out-perform, since many defaulting industries have been making windfall benefits by mis-using precious energy most inefficiently.

The E. C. Act – 2001 is brought into force, not for conservation or saving of energy by improving energy efficiency gains alone, but also for making the industries realize the trade-off by stopping gross misuse by inefficient use of power for profit.

The prolonged delay in the implementation of the E. C. Act – 2001 till today, is surely adding to the profits of those who misuse and waste precious energy. The various profit making industries now stand exempted from audit requirement, so long as the implementation of the E. C. Act – 2001 is delayed.

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Briefly – one can make profit by two ways: (1) by improving efficiency and (2) by pilfering energy. In order to elicit and impart a right meaning to the above-mentioned statement, it is necessary to re-word it correctly to avoid confusion.

### **E. C. Act – 2001 turned martyr:**

It appears that the E. C. Act – 2001, is enjoying the status of martyr, and again would continue to be ineffective for the next five years, due to the industry's satiety for cheap power – and that of the farm sector for free power. This will go on unless wisdom dawns on the lawmakers.

### **Reasons why energy audit is not taking off:**

As per the E. C. Act – 2001, no person shall be liable to pay penalty within five years from the date of commencement of the Act, since the initial phase of five years was treated as promotional and for creating infrastructure for implementation of the Act.

On 1<sup>st</sup> March 2007, penalty could not be imposed even after completion of five years as there is no “Appellate Tribunal” established as yet, due to the remarkable inefficiency of the MOP & BEE. In addition, there are no “adjudicating officers” appointed by the State Regulatory Commission for holding an enquiry in connection with the penalty imposed.

### **Greatest loophole in the Act:**

The Act shall come into force on such date as the Central Government by notification in the official gazette, appoints different dates for different provisions of the Act – and any such provision to the commencement of the Act shall be construed as a reference to the “coming” into force” of that provision.

It will be an illusory mirage therefore for energy auditors, certified by BEE, to believe that high level conversations about energy saving in the country will soon get transformed into real energy conservation as the quickest & cheapest remedy for solving India's acute energy scarcity crises.

Expansions of industries are pumping crores of rupees, but nothing is done to tackle power shortage. Why cannot a mis-happening be pre-empted? Power shortage is generally quoted to short-circuiting economic growth and behind rising inflation in the country. Sustainability of much talked-about economic growth surge is therefore uncertain.

### **Energy being wasted on giant scale:**

In the present scenario of worst power crisis in the whole country, about 4000 certified energy auditors are made redundant & non-participating spectators, due to imposing highly impractical conditions of producing eight energy audit reports in the last three years – in the absence of notifying designated consumers – thus putting roadblocks on the energy audit route, which would uncover significant energy savings in the country.

### **Much hyped reform-linked APDRP:**

In the recent interview with the power secretary, MoP (GoI), published in the Economic Times Mumbai on 30 August 2007, the spokesperson inquired whether by modeling & re-modeling the “Accelerated Power Development and Reform Programme “ (APDRP), has it failed to deliver results? The Power Secretary replied that it has played a significant role for improving the power situation in the country!

The Rs. 40,000 cr, highly incentive approach APDRP, had targeted 9% reduction per year in aggregate technical & commercial losses (AT&C) over the 10<sup>th</sup> Plan (2002-2007). The actual progress by 2004-05 was only 1.6% per annum and AT&C losses, nationwide, were still placed at 34%. In fact, in many States, the losses had actually increased during that period. For 24 States, the data was not available due to basic Distribution Transformers remaining un-metered-which is not a secret as per the report of the CAG. This is in spite of the fact that the basic bench-marking data itself was flawed – making it most vulnerable for manipulations by the vested interests, and ultimately to difficulties in measuring post – commissioning performance!

### **No expression of interest shown for improving T & D sector:**

Further, the Bureau of Energy Efficiency under MoP, published an “Request for Expression of Interest” to improve performance of thermal power plants in 2005, but not for the Transmission & Distribution sector where losses are substantial – well over 40% with yearly financial losses of Rs 25,000 cr and above.

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Despite huge irretrievable losses, the recent gazette notification did not enlist the “Transmission & Distribution” sector, which is a “designed consumers” as per the Energy Conservation Act – 2001. How is the new system being built up with “complete energy audit & accounting” – to be carried out every year, under APDRP? This certainly does not reflect an increase in the power index by any measure, nor justify the claim to ride on “innovations” to ensure Power. Only such retrograde measures should not bring darkness in the country.

### **High penalty for Energy misuse:**

The E. C. Act-2001 designates “electricity transmission & distribution companies” as energy intensive consumers – and in case of excessively high-energy losses, it would attract a penalty of Rs. 10,000 per failure & Rs. 1000 per day during which failure to reduce losses to a specified level continues – after issue of notification by Ministry of Power on the recommendation of the Bureau of Energy Efficiency.

### **Conclusion:**

Tiny European & Asian countries have made tremendous progress in many technological spheres, in the last 30 years; however, we are still continuing to excel only in carrying on awareness programs of energy saving in the crucial power sector without any significant achievements. In case – time-tested strategies like (1) Proper pricing policy of coal to improve efficiency performance of thermal plants (2) Combating energy theft menace to reduce AT & C losses (3) Effective open access system (4) Improving efficiency of transmission & distribution system and (5) Providing coverage of extended

energy audit of all above average energy intensive consumers in the country on a regular basis – are in place, there may not be need to keep on adding costly power for meeting peaking shortages & keeping it idle during prolonged periods of off-peak hours. Otherwise the rosy slogan of energy independence, “remodeled reforms & electricity to all by 2012’ will be similar to “Garibi Hataav” catchwords.

**Reference Book:**

Electrical India  
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