

ELECTRICITY (Amendment) BILL 2014 – NOT IN THE PUBLIC INTEREST

Electricity Act 2003– Failed in it's objective – Needs Review

The primary objective of arresting losses has not been met

Electricity Act 2003 Act replaced the Electricity (Supply) Act 1948 notwithstanding the seminal role played by the Electricity (Supply) Act of 1948. The 1948' Act had transformed the nature and the outreach of the power sector by integrating the erstwhile licensees with limited operations into State Electricity Boards that became the prime movers of rural electrification and the resultant all round economic development across the length and the breadth of the country.

The main justification for changing legislation was reduction of financial and line losses. The financial crisis has worsened, even a decade after the Act coming into force. That is clearly indicated by the data in the table given below:

(Rs. Lakh Crore)

	2013-14	2014-15	2015-16
Accumulated loss	3.06	3.59	4.14
Total outstanding loan	3.65	4.03	4.22

UDAY and the NPAs of Banks and Financial institutions indicate the gravity and urgency of the financial crisis. There is nothing to indicate that change in legislation resulted in reduction of line losses. Line losses have reduced only due to improvement in both technology and investment.

Consequences of structural changes in the institutions supporting the supply industry

The Electricity Act 2003 changed the structural character and charter of vital institutions like Central Electricity Authority and the State Electricity Boards.

Removal of Techno- Economic approval of CEA

Experience has shown that as consequence of removal of approval by CEA has resulted in

- a) Unplanned growth and capacity addition, particularly the thermal capacity (coal and gas-based) by the private sector has accentuated the already acute hydro-thermal mix of generation. This has a steep decline in the thermal PLF resulting in stressed assets. In addition, the State Electricity Boards have been forced to back down and even shut down their stations to provide load against load guarantees given in the PPAs through regressive deemed generation clauses
- b) Besides creating problems for the power sector, the stressed assets are threatening the health of Banks and Financial Institutions like the Power Finance Corporation and Rural Electrification Corporation.
- c) Faulty fuel linkages, particularly in the case of import of coal has resulted not only in high prices but also recent shut down of ultra-mega power plants. Also over-invoicing of imported coal is under investigation by the Directorate of Revenue Intelligence. The lack of supply of Natural gas has resulted in several stations, including new ones, being shut down.
- d) Government's bias in favour of private gas companies resulted in unconscionably high prices for gas being conceded in their favour, which in turn resulted in a sharp increase in the price of electricity, imposing losses on PSU utilities. The inability of the private gas companies to deliver sufficient quantities of gas led to serious power shortages, especially in the Southern States.
- e) Excess import of capital goods resulting in losses to the Indigenous manufacturers. Imported power equipment has also added to the cost of electricity.
- f) Load guarantees in PPAs forcing State units to back down or even shut down.

- g) Long-term "Deemed Generation" and / or "Capacity Charges" clauses incorporated in the PPAs not only for coal and gas-based private thermal power plants but also for private centralized solar power developers.

- h) Under the guise of power trading, private licensees were allowed to cherry pick remunerative loads at the cost of viability of the PSU utilities, accentuating the latter's inability to cross-subsidize unremunerative consumer groups.

It is unfortunate that not only has the role of CEA been watered down, but it is not being allowed to function efficiently. In non-compliance of Section 70 of the 2003 Act, a Chairman has not been appointed in CEA since the beginning of this year and several posts are lying vacant against 14 members stipulated in the section.

Unbundling of State Electricity Boards

The creation of multiple companies in a State, has not improved the service, but instead it has added to the overhead costs and lack of clear policy for the States as a whole. Partial measures like UDAY only reduce the intensity of the financial and technical crisis but do not resolve it.

Starting with Odisha, the policy of privatization of distribution has failed. Delhi's privatization has not been a financial success and it is only the "low hanging fruits" where there has been reduction of AT&C losses. What is worrying is the huge regulatory assets that the private DISCOMS in Delhi and Mumbai have accumulated. This is a "Tariff Sword Of Damocles" hanging on the consumers in Delhi and Mumbai. We fail to understand why a public utility, that too a monopoly should be exempted from public scrutiny in the form of RTI and CAG Audit. The franchisees in Agra, Nagpur and Aurangabad have failed. It is truly shocking that inspite of mounting evidence the Niti Ayog advocates immediate and extensive privatization

Even in developed countries there is a debate on restoring vertical integration in the power sector. In India, the experience of unbundling has been very unsatisfactory. There is a need for a serious introspection and course correction by way of integrating power utilities. It is time to review the success or failure of the Electricity Act 2003.

Electricity (Amendment) Bill 2014

The core issue is that the Bill envisages segregation of carriage and content. This has far reaching implications not only for the industry but also the consumer. Some of the critical concerns are:

- The Amendment Bill recognizes the need for a Government licensee, so that the loss making sector of the supply industry can be served by the tax payer's company, while the private licensees cream of the high paying sections.
- There is a shift in emphasis of the prime interest that is to be safeguarded. While Section 61 D of the Electricity Act 2003 stipulates: *"the principle of safeguarding of consumers interest and at the same time recovery of the cost of electricity in a reasonable manner"* Section D of the Amendment Bill 2014 safeguards the interest of the licensee *"Safeguarding the consumer interests and at the same time recovery of cost of electricity by the licensees without any revenue deficit"*
- With respect to tariff fixation, the Amendment Bill enables the Central Government officials to usurp the purpose and powers of the regulatory commissions and thereby undermined the consultative process. Whereas the Electricity Act 2003 stated *"In discharge of its functions, the Central Commission **shall be guided** by the National Electricity Policy, National Electricity Plan and Tariff policy published under section 3."* The Amendment Bill 2014 states, *"Notwithstanding anything contained in this Act, the provision of Tariff Policy **shall be followed** by the appropriate Commission for the purpose of Tariff determination. What is the purpose of ARR and stakeholder consultations if the quasi-judicial commissions "shall follow" the policy formulated by the executive. Even the Hon'ble Supreme Court order in the Adani Tariff Case dated 11th April 2017 has relied upon the Statement of objects and reasons for the Electricity Act 2003 wherein distancing of government from determination of tariffs is stated.*
- The burden of serving the unviable PPA would be the responsibility of the intermediary company, while exempting the private licensee. This would ensure that the intermediate company is born and survives as a sick unit. The provision of Fixed Cost payment enforced by the PPAs has proved not only very costly but

also counter-productive. State after State are annually paying private Independent Power Producers thousands of Crores of rupees only as capacity charges, even when not a single unit is consumed by the state. There is a need to re-examine the PPA and ensure that such payments are not made.

- Even the present open access has worsened the financial health of power companies and made it difficult for DISCOMS to serve the agricultural and domestic consumers. To overcome this, in any states, additional surcharge has been levied, making electricity more costly.
- Implementing segregation of wire and content would require huge investment in metering, computerization and Information Technology. This cost burden would be passed on to the consumers who even today do not have the paying capacity.

A misguided analogy is made with consumer choice in mobile phones. Whereas the mobile tariff is based on cost to serve and the tariff is the same of all class of consumers that is not applicable for the electricity supply industry. Also mobile is a wireless system, whereas electricity is a wired system.

NCCOEEE demands Government of India to put on hold the proposed electricity amendment Bill till the modified draft of the Bill is discussed in detail with all the State Govt's and other stake holders including power engineers & power workers and their concerns are addressed. NCCOEEE also demands review of power policies of last 25 years before going on for any further amendments & experiments in already ailing power sector.

Government of India should recognize and accept that the conditions prevailing in the power sector are not at all favorable for introducing far reaching changes in distribution. The major issues which includes turnaround of financial health and restoring financial viability , curbing / minimizing of thefts of electricity , development of energy accounting, metering and IT systems and last but not the least the practical impossibility of successful operation by the Intermediate company should be examined in detail before processing the amendments in electricity bill.

However power engineers & employees have to be watchful and vigilant on any unilateral move of Central Govt to pass Electricity (Amendment) Bill 2014 and for this all power engineers and power workers will have to campaign and mobilise for LIGHTNING ACTION whenever it is required.

Integration of state power utilities

With the enactment of Electricity Act 2003, different states re-structured the State Electricity Boards as per their own whims. While in some states there were multiple distribution Companies like Karnataka (5 DISCOMS), UP (5 DISCOMS), MP (3 DISCOMS), Haryana (2 DISCOMS), other states retained the entire state under one DISCOM as in Maharashtra & Utrkhand. In case of Punjab and Tamil Nadu generation and distribution were retained as one company while transmission was separated out. In case of Kerala and Himachal Pradesh the integrated structure of generation, transmission and distribution was retained.

2. It is seen that there is no uniformity and wide diversity in structure of state power utilities across the country.
3. The experience since 2003 has however shown some results and lessons which are summarized.
 - a) One common argument for creating multiple DISCOMS within a state was that smaller DISCOMS would be more efficient and better managed. This has not been proved as correct. On the other hand multiple DISCOMS with their separate Board of Directors create coordination and inter-organization problems within the state.
 - b) The other argument for multiple DISCOMS was that it would create competition and peer pressure to improve performance has not been proved practically for example if the T&D losses in different DISCOMS are widely different it is explained by the type of consumer mix-for example a DISCOM with higher industrial load would have lower loses as compared to a DISCOM with higher agricultural load.

FACTORS IN FAVOUR OF INTEGRATED STRUCTURE

- i) Every state has one SLDC where the entire state is considered as one control area. This gives SLDC a clear advantage to manage load dispatch over the state as one entity. For example if there is load crash in one portion of state (due to rain, storm etc.) SLDC can order additional supply or loading in other areas of state to offset load crash, so that overall drawl by State remains without deviation.
- ii) With one state DISCOM concept the state thermal and hydro generation can be optimally dispatched by SLDC in the most economic and optimum manner.
- iii) Manpower and HR functions are performed more efficiently and with uniformity with one organization as opposed to multiple companies. In some states, like Karnataka the entire engineering manpower is under TRANSCO, i.e. KPTCL while the DISCOMS draw their manpower requirement from KPTCL. IF there is only one DISCOM instead of 5 the problem is automatically solved.
- iv) In regulatory matters of state level, and dealing with SERC, it is practically effective with one DISCOM and generation and transmission combined. Creation of multiple units only complicates SERC issues.
- v) Similarly, in dealings with CERC and APTEL etc. it is practically possible and justified considering the state as one entity in case of Rajasthan, for example, it is only on paper that the three Discoms are shown as separate parties.
- vi) IN several states a separate coordination body has been created which is the controlling body of multiple DISCOMS. This body is the URJA VIKAS NIGAM. In states like Gujarat, MP, Rajasthan the Urja Vikas Nigam has been established it is opined that instead of having multiple companies in distribution, generation and transmission controlled has Urja Vikas Nigam, It would be more effective, coordinated and economical to have one organization integrating the functions of distribution, generation and transmission as in case of KSEB Ltd and HPSEB Ltd.

AIPEF therefore is of firm opinion that GOI should introduce a separate section in National electricity Policy whereby the objective to integrate the state power sector is contained. The objective of combining generation, distribution and transmission under one integrated in one company is stated as a matter of policy for the States to adopt. Even

without a provision in National Electricity Policy the States are empowered and at liberty to re structure their respective power utilities so as to achieve the objective of integrated operation since Electricity is a Concurrent subject.

Shutting Down Of State Thermal Power Stations

The policy of Govt. of India as contained in the Electricity Act 2003 has resulted in deregulation of thermal power generation whereby a project developer does not need any permission from CEA or Ministry of Power or any other Govt. for setting up a new thermal power station anywhere in the country. However, two related issues are vital for the setting up of the thermal station. First is that no developer is willing to take the risk of finding a purchaser for the power in case the power station is to be setup as merchant plant. As a result most or majority of the new or private power plants are setup on the basis of a long term power purchase agreement which could be with the state in which the power plant is setup or also with any other purchaser in the country through long term open access. The second condition for setting up of the plant is the long term coal linkage. While the project developer can source the coal supply from anywhere in the country on spot purchase basis or even import the coal from any source outside India, the generator or developer generally minimizes the fuel risk by securing a long term coal linkage through Coal India Limited.

The availability tariff regime is in force throughout the country wherein capacity charges are to be paid on the basis of declared capacity whereas energy charges (fuel charges) are payable on the basis of scheduled energy.

With uncontrolled and unplanned capacity addition by private sector developers several states in the country are now having surplus

generation capacity available with the result that a considerable percentage of thermal power capacity in the state sector is being shut down for extended periods going upto six months or more even every year in order to accommodate the private sector plants to enable these plants to operate at high PLF by which they can maximize their profits.

The principle generally adopted is summarized as under

- a) Fixed charges representing capital investment in the project are payable (as per declared capacity) irrespective of energy scheduled. In the extreme case in case the purchaser gives a generation schedule of NIL, the power station would be entitled to the capacity charges even if it is completely shut down due to NIL schedule.
- b) Fuel charges or variable charges determine the merit order of the station. Those stations with better heat rate and / or lower fuel cost have a better merit order in terms of Rs. Per Unit. On the other hand stations with lower efficiency (higher heat rate) and / or higher cost of fuel would be having a variable rate on the higher side.

The state generally schedules the various power stations in the merit order with the stations having lower / lowest variable charges are given the full schedule and this process is carried out in the ascending order of variable charges which becomes the merit order for that state.

2. There are instances when private sector plants having higher variable charges and lower schedules are still allowed to run to full capacity while the state thermal plants having lower variable charges may be kept shut down to enable the private plants to run.

3. The following steps are required to be taken in the situation of surplus capacity resulting in prolonged shut down of the state thermal stations.

a) Merit order scheduling procedure to be followed strictly without giving any undue preference to private sector plants for keeping this plants in operation while shutting down state thermal capacity. This proposal is within the prevailing ABT regime and principle of merit order scheduling.

b) The present PPA's signed between the state DISCOM and private / IPP developer need to be amended as under

i) The state DISCOM / State must be given the option to give the monthly MW requirement from that IPP station and the capacity charges for that month should be payable only up to the requisition or requirement given for that month. The surrendered MW capacity is at the disposal of the IPP / developer who should be free to sell power from that surrendered capacity to any purchaser at any rate, as a merchant sale or a third party sale. The fixed charges for that surrendered capacity should not be payable by the state DISCOM.

In case the IPP / developer do not agree to this monthly requisition procedure, the state govt. should take measures for cancellation of the PPA totally. A consensus amongst all states must be developed so that a common procedure can be evolved to be followed for cancellation of PPA's under these circumstances.

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