STUDY OF AN ELECTRICITY ACT, 2003.

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#  **ABSTRACT**

The Indian Electricity Sector has gone through a lot of metamorphosis. The three major acts concerning the electricity sector were t he Indian Electricity Act, 1910 , the Electricity (Supply) Act, 1 948 and the Electricity Regulatory Commissions Act, 1998.With the changing times many of the acts had become passé and thus had to be reviewed. The Electricity Act 2003, enacted by the Parliament of India, received the P resident’s assent on 26th May 2003 and came in to force on June 10, 2003. The main aim of the Act was to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity and generally for taking measures conducive to development of electricity industry, promoting competition therein, protecting interest of consumers and supply of electricity to all areas, rationalization of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal and for matters connected therewith or incidental thereto. However even after many deliberations there are some major issues that were promptly so that the power sector can be truly the engine of growth for the Indian Economy. This paper will briefly try to point out the troublesome issues and will try to suggest remedial measures.

*Reference:*Indian Electricity Act 2003.

 ***1. INTRODUCTION***

Electricity is one of the key inputs for the overall socio-economic development of the country. The basic responsibility of the power supply industry is to provide adequate electricity at economic cost, while ensuring reliability and quality of the supply. Despite significant

progress in capacity addition since Independence, the demand for electricity continues to outstrip the supply with the result that energy and peaking shortages continue to plague the economy. With the increasing pace of economic development facilitated by the reforms initiated by the Government, the demand for power in both rural and urban areas is likely to increase rapidly in the coming years. The major task of the power sector will, therefore, be to ensure that the anticipated demand is met adequately and in a reliable and cost-effective manner. The power sector is currently witnessing a critical phase. State Electricity Boards (SEBs) are responsible for providing electricity to the people. Most of the SEBs are cash strapped. They are not even able to earn a minimum Rate of Return (RoR) of 3% on their net fixed assets in servicing after providing for depreciation and interest charges in accordance with Section 59 of the Electricity (Supply) Act, 1948. The power sector in the country has accumulated a huge deficit, dues to Central Power Generating Companies because of the deteriorating financial performance. The structure of the electricity industry in independent India was laid down by the Electricity (Supply) Act, 1948 that created the State Electricity Boards (SEBs). In their initial years, the SEBs performed yeomen service in carrying electric power everywhere, but over the years they have become unsustainable, thanks to their mismanagement and politicization coupled with the economic and technological developments of the past decade. It is high time that the electricity industry is denationalized, and restructured on commercial principles. Even though, the legal framework was amended in 1998 to facilitate private investment in generation and transmission, respectively, it enabled private entities to sell or transmit power only through long-term contracts with state-owned entities. Such contract-driven privatization through state-owned monopolies can have little chance of enduring success. Similarly, the setting up of regulatory commissions under the 1998 Act, though a welcome move, only had a limited impact on the state-owned monopolies. It should surprise no one that these piecemeal changes in the name of reform have not been able to arrest the deterioration of this industry. To overcome these teething problems that the sector faces, The Electricity Act, 2003 (referred to as The Act from here on) was introduced in the Indian parliament after a lot of political debate. The Act came into force (except for section 121) on June 10, 2003 is stated to be the ‘distilled wisdom’ of a series of commissioned international and national consultancy studies and seminars and conferences held at the all-India level during the last three years. It replaces the three existing legislations, namely, Indian Electricity Act, 1910, the Electricity (Supply) Act, 1948 and the Electricity Regulatory Commissions Act, 1998. The objectives of the Act are to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity and generally for taking measures conducive to development of electricity industry, promoting competition therein, protecting interest of consumers and supply of electricity to all areas, rationalization of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies, constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal. It is acclaimed to be the roadmap for the electricity industry, which will help hasten the pace of economic reforms in the country. When the Bill on this subject was under consideration of the standing committee of parliament, a number of issues deserved closer examination. Several of these remain unattended. The Act, which is a halfway house, raises a number of new issues, which are likely to pose serious problems in the coming years.

***2.POWER***

***GENERATION SCENERIO***

The all India installed capacity of electric power generating stations under utilities was 107972.80 MW as on 31.3.2003 consisting of 26,910.23 MW hydro, 76,606.91 MW thermal and 2,720 MW nuclear and 1,735.66 MW wind. A capacity addition target of 4109.10 MW consisting of 607.00 MW of Hydro and 3502.10 MW of thermal was envisaged for the year 2002-03. As against the a fore said capacity addition target, the capacity of 2979.40 MW consisting of 649.00 MW of hydro and 2330.40 MW of thermal has been achieved up to 31.3.2003.

The year wise generation in the electricity sector is as follows:





***3.ELECTRICITY ACT 2003***

Electricity is a concurrent subject at Entry 38 in List III of the Seventh Schedule of the Constitution of India The growth of the economy, calls for a matching rate of growth in infrastructure facilities. The growth rate of demand for power in developing countries is generally higher than that of Gross Domestic Product (GDP). In India, the elasticity ratio was 3.06 in the first Plan and peaked at 5.11 during third plan and comedown to 1.65 in the Eighties. For the Nineties, a ratio of around 1.5 is projected.

Therefore, in order to support a rate of growth of GDP of around 7 percent per annum, the rate of growth of power supply needs to be over 10 percent annually. Power Sector, hitherto, had been funded mainly through budgetary support and external borrowings. At the outset, it must be mentioned that the whole scheme of the Act gives an impression that the subject of electricity, instead of being in the Concurrent List, is in the Central List. There is far too much centralization and standardization. Policies on all matters, namely, the national electricity policy and plan, and even the national policy on stand- alone systems for rural areas and non-conventional systems, and the national policy on electrification and local distribution in rural areas are to be formulated by the central government. National policy on any subject must be rooted in realities. Importance of this is amply borne out by the provisions of the Act which envisages, among other things, functional disaggregation of generation, transmission and distribution with a view to creating independent profit centres and accountability; competition, economy and efficiency to be promoted in the best interests of the consumer and the national economy; creation of transmission highways that would enable viable public and private investments in the electricity industry; trading in electricity; choice to the consumers, especially large consumers, to take power from the cheapest and most reliable source; rational tariff fixation based on cost of supply; transparent subsidies; steep reduction in transmission and distribution (T and D) losses and substantial reduction in theft of power; and privatization of the sector. The Act strikes a balance, which takes into account the complex ground realities of the power sector in India with its intractable problems. Some of the salient features of the Act are:

1. The Central Government to prepare a National Electricity Policy in consultation with State Governments. (Section 3)

2. Thrust to complete the rural electrification and provide for management of rural distribution by Panchayats, Cooperative Societies, non-Government organizations, franchisees etc. (Sections 4, 5 & 6)

3. Provision for licence free generation and distribution in the rural areas. (Section 14)

4. Generation being delicensed and captive generation being freely permitted. Hydro projects however, would need clearance from the Central Electricity Authority. (Sections 7, 8 & 9)

5. Transmission Utility at the Central as well as State level, to be a Government company – with responsibility for planned and coordinated development of transmission network. (Sections 38 & 39)

6. Provision for private licensees in transmission and entry in distribution through an independent network, (Section 14)

7. Open access in transmission from the outset. (Sections 38-40)

8. Open access in distribution to be introduced in phases with surcharge for current level of cross subsidy to be gradually phased out along with cross subsidies and obligation to supply. SERCs to frame regulations within one year regarding phasing of open access. (Section 42)

9. Distribution licensees would be free to undertake generation and generating companies would be free to take up distribution businesses. (Sections 7, 12)

10. The State Electricity Regulatory Commission is a mandatory requirement.

(Section 82)

11. Provision for payment of subsidy through budget. (Section 65)

12. Trading, a distinct activity is being recognized with the safeguard of the Regulatory Commissions being authorized to fix ceilings on trading margins, if necessary. (Sections 12, 79 & 86)

13. Provision for reorganization or continuance of SEBs. (Sections 131 & 172)

14. Metering of all electricity supplied made mandatory. (Section 55)

15. Appellate Tribunal to hear appeals against the decision of the CERC and SERCs. (Section 111)

16. Provisions relating to theft of electricity made more stringent. (Section 135-150)

17. Provisions safeguarding consumer interests. (Sections 57-59, 166)

Ombudsman scheme (Section 42) for consumers’ grievance redressal. These are indeed far-reaching reforms and will lead to an electricity sector quite different from that we have known during the past 50 years. For the first time, the electricity sector is being recast to severely downplay the social objectives that had been built into the sector. Instead, what is being attempted is a sector that will function on “commercial lines”, that is, generate enough profits to fund its own expansion. The state’s role will be limited to regulating the sector and providing explicit subsidies to any group of consumers that it considers economically vulnerable and requiring such subsidies.

***4.IMPLICATION OF THE ACT FOR THE ELECTRICITY SECTOR:***

Once it is accepted that the state governments may not find it possible or be in a hurry to privatise the SEBs wholly, it is imperative to examine as to what implications the Act will have on the finances of the state governments. If the states show unwillingness or are unable to privatise distribution, the paying customers of SEBs, namely, industrial, commercial as also domestic consumers whose consumption is more than, say, 300 units a month and therefore are in the highest slab of tariff for the domestic consumers are likely to desert the SEBs. The ministry of railways has already announced plans to take supply of electricity directly from the central PSUs. This process is expected to complete in the next five years. It is necessary to note in this context that the Act defines captive generating plant as one “set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such co-operative society or association”. This definition is wide and covers a number of situations as compared to the restrictive definition of captive generation adopted in the past. As a result, any consumer can become a share holder of a co-operative society or a company floated for power generation and distribution. Obviously, consumer groups which are presently being heavily subsidized will not be interested in getting power supply from such new ventures and will continue to be the responsibility of the SEBs functioning as new distribution licensees. It is important to note that, under the Act, when a consumer is accorded an open access to avail supply from a source other than the distribution licensee of his area, he is liable to pay a transmission charge as also a surcharge. The surcharge is to be levied until the cross-subsidies are not eliminated and is to be used for meeting the requirement of current level of cross-subsidy. The Act also lays down that such surcharge and cross-subsidies are to be progressively reduced and eliminated as prescribed by the relevant commission. Most importantly, the Act places down that such surcharge will not be levied when open access is provided to a person who has established a captive generating plant for carrying electricity to the destination for his own use. These provisions raise a number of pertinent issues. Significantly, the Act does not lay down any definite timeframe either for provision of open access or for abolition of cross-subsidization and leaves these decisions to the SERCs. As seen earlier, the level ofcross-subsidisation has comedown steeply over the years due to the decline in the sales to industry and increased sales to domestic and agricultural consumers. The act should have laid down a time limit of say five years within which open access is to be provided or cross-subsidies and the surcharge based thereon is to be abolished. Second, the surcharge is to be based only on current level of cross-subsidy and therefore cannot take note of or compensate for change in future consumer mix and demand elasticities, or backing down of generating sets and costs thereof etc. Third, the surcharge apparently applies to an existing consumer of a distribution licensee and shall not apply to new consumers in the area of a licensee who prefer to take supply directly from a source outside the area. Fourth, since the surcharge is not to apply for captive generation, there will be greater impetus to setting up captive generation. Power from such a source may be cheaper than from the SEB as it does not have to bear the burden of cross-subsidy but it may not be the most cost-effective option. Over a period of time, this will lead to the country being saddled with high cost generation, thereby adversely affecting its international competitiveness.

***5.CONCLUSION:***

It will be important to ensure that the Act sub serves its objectives and does not lead to more problems than it claims to solve. This will call for continuous reassessment of its underlying strategies in the light of implementation experience. After the unprecedented power blackout on both sides of US-Canada border in August 2003, Governor of New Mexico and former US Energy Secretary is reported to have said that his country was a major superpower with a third world electrical grid. The California experience of power sector reforms too brings out that there are no ready-made answers and ‘one size fits all’ approach is not the best strategy for a road map for reforms.

***REFERENCES:***

1. The Electricity Act 2003(2003), Ministry of Law and Justice, Government of India, New Delhi, India.
2. The Political Economy of Power (2002), Rao S. L., Economy and Political weekly, August 18, 2002, Mumbai, India.
3. Annual Report 2002-03, Ministry of Power, Government of India, New Delhi, India.
4. Power Sector Policies and New Electricity Bill: From Crisis to Disaster (2001), Purkayastha P., Economy and Political weekly, June 23, 2001, Mumbai, India.
5. Electricity Act 2003 – Comments (2003), Godbole M., Economy and Political weekly, September 29, 2003, Mumbai, India.
6. Electricity Bill, 2001: Need for a Fresh Look (2002), Godbole M., Economy and Political weekly, May 18, 2002, Mumbai, India.
7. Annual Report (2001-02) on The Working of State Electricity Boards & Electricity Departments, Planning Commission (Power & Energy Division) Government of India, New Delhi, India.