

Regulation in electricity sector: Indian scenario

Suji Pillai

BBA. LLB. (Hons.) VII Sem. JLU, Bhopal, Madhya Pradesh, India

Abstract

India having the lowest per capita energy consumption in spite of that fact it is having a huge energy demand due to its increasing population. Power therefore, is considered to be one of the essential elements for the well-being and growth of the nation, hence, backbone of the nation. The economic Planning has time and again laid special emphasis on the development of Power sector. Some of the International Conventions like Convention On The Elimination Of Discrimination Against Women (CEDAW) and International Convention On Economic, Social And Cultural Rights (ICESCR) has even recognised Electricity as Human Right in Article 14 and 11 respectively.

In Countries like India Access to electricity is a prerequisite for the satisfaction of human needs such as adequate living, maintaining good health and implementation of right to education and right to clean environment. 1.2 billion people in the world are without access to Electricity and 600 million people have electricity access. Lack of access to electricity, is a major cause for increase in income disparity, increase in population especially in rural areas. The Electricity Act, 2003 is one of those acts that intends to create a liberal framework for the development of Power Industry, promoting competition, protecting interests of consumers and supply of electricity to all the areas, rationalization of electricity tariff and ensuring transparent policies and promotion of efficiency among others. This Paper therefore examines the need of regulation in Electricity Sector wherein Privatization is highly recommended in power sectors of developing countries like India. Therein, The Indian model tries to encourage the competition in generation while keeping transmission in the State Control.

Keywords: regulation, electricity sector, Indian

Introduction

Electricity has become one of the basic necessities of life, not only does it drives the economic growth but also determines the Standard of living of People

Ex-Prime Minister Shri Atal Behari Vajpayee

India is one of those countries which is having the lowest per capita energy consumption^[1]. In spite of this there has been huge energy demand due to the ever increasing population of India. The Integrated Energy Policy Report prepared by an expert committee under the aegis of the Planning Commission of India mentioned in its report that the power generating capacity must increase to 8,00,000 from 1,60,000 MW.

India is often considered to be as one of those countries which prioritize economic development over environmental concern^[2]. Being a Developing nation it has to create a balance between energy goals and to survive the nature in the form of climatic change.

Regulatory Reforms has become a policy of the economic reforms throughout the world in the past two decades. However, they are the complex reforms and are the progressive that cannot be done away overnight. The history could be traced back in US and then in Europe and further to the rest of the world^[3]. India having several years of experience with the regulatory reforms and establishment and functioning of regulatory bodies in several infrastructure sectors, has seen the creation of independent regulators. The First regulatory institution came into force in the year 1996 in

Orissa Power Sector and the recent one is the oil and gas sector in 2007^[4].

Governments around the world are transforming their infrastructure to better meet the needs of their People. Regulatory Reform has become an essential part of the process. Electricity is an essential requirement for all facets of life. The Socio-Economic development of the country is dependent on this structure.

With Regard to the implementation of regulation, competition and the perceived role of the private sector, the Indian Electricity Sector has seen few major changes. Electricity sector in India is in the Concurrent list of the Constitution^[5], hence both federal and provincial government are responsible for the development. Seperate Regulatory bodies has been set up at the federal level and provincial level as well. The Growth of Power Sector has been noticeable in India post independence. The Economy is witnessing few remarkable changes. Post Liberalization reform of 1991-92, the electricity sector has been subject to few major policies and regulatory initiatives.

Overview of electricity sector

India's Power Industry accounts for about four percent of world's electricity consumption, and is set to grow rapidly^[6]. Power is one of the essential elements for the well being and growth of the nation. The economic planning has laid down a special emphasis on development of Power sector. Power is considered to be as the backbone of the economy. It has been

doubling every ten to fifteen years. To understand it, a categorization could be made in two phases, The Pre-Reform Phase and the Post-Reform Phase. The Pre-Reform Phase is further divided into two categories of Pre-Independence and Post-Independence.

1. The Pre-Reform Phase (Pre-Independence up to 1947)

The very first instance of generation of commercial electricity can be traced back in 1879 in Kolkata. In 1897, an exclusive 21 year license has been granted to Calcutta Electricity Supply Corporation to supply electricity by government of Bengal. The Electricity Act 1910 has been the first Act in the Power Industry, which has been introduced before independence in 1910. The Act provides the framework for the supply of Electricity in India. The Act has encouraged the growth of the industry by issuing license to Private Companies.

2. Post Independence (1947-1990)

During Independence Electricity generation and supply were concentrated in the hands of private electricity suppliers and particularly in urban areas. Electricity supply is considered to be must to promote overall growth and development and therefore, the Electricity Supply Act, 1948 was introduced. Under the aforesaid Act, Central Electricity Authority was established at the central level and State Electricity Authority was established at the State level.

3. Post Reform Phase (after 1991)

The post reform phase is as follows

First Phase: The First Phase has started in the year 1991 where investments were made to produce electricity with the expected economic growth. The government has then liberalized the sector and opened it for foreign investments to increase availability of funds. Few Amendments were made to the Electricity Act, 1910 and Electricity (Supply) Act 1948 through an Amendment Act of 1991. It has allowed private participation in thermal, solar and various others sectors.

The Government in the year 1995 has introduced Mega Power Policy to increase private investments in 1000 MW projects that would enable them to supply electricity to more than one state. The projects were to awarded on the basis of bidding. The main objective is to ensure reliable and quality power supply at affordable cost.

Second Phase: In this Phase the Mega Power Policy was revised in the year 1998 and it has included fiscal concessions. The Power Trading Corporation was set up to purchase from identified projects and to sell it to identified SEB's. During this Phase the performance has reached to 70% however commercial losses continued.

Third Phase: This Phase Started from 2003 and it was this year when Electricity Act, 2003 came into effect from June 10, 2003 and has replaced the earlier laws governing the Power Sector. The Electricity Bill was by the Parliament in the year 2003 and it became an Act in 2003. The Bill provided a legal framework for enabling reforms and restructuring power sector.

Electricity and human rights

Electricity is considered to be as very essential for the survival and therefore, at the international level access to electricity is

seen as a Human Right. Some of the international conventions are as follows.

Convention on the elimination of discrimination against women (Cedaw)

CEDAW explicitly recognizes electricity as human right in the context of adequate living standards, and on the other face of it a committee on elimination of discrimination against women has linked it as human right to health. Article 14(2)(h) of the CEDAW, "the parties are obliged to take all appropriate measures to eliminate discrimination against women in rural areas and to ensure the women the right to enjoy adequate living conditions in relation to electricity"^[7].

International Convention on Economic, Social and Cultural Rights (Icescr)

According to Article 11(1) "everyone has the right to adequate standard of living including adequate food, clothing and improvement of living conditions"^[8]. It is pertinent that right to food engages the electricity in several aspects. Further, according to Article 12(1) of the ICESCR individuals enjoy the right to highest standard of mental health and that could be possible only when there is access to electricity.

Access to electricity in India

The Right to Electricity has been recognized in various international instruments like Convention on Elimination of Discrimination against Women, 1979. The United Nations Sustainable Energy has set up all initiatives to provide access to energy to all by the year 2030. It has been estimated that by the International Energy Agency that 48 billion is required each year in order to make universal energy access as reality by 2030^[9]. Recently even the judiciary has recognized access to electricity as human right.

India has the fifth largest electrical system in the world with a capacity of 180GW^[10]. Access to electricity is a prerequisite for the satisfaction of human needs such as adequate living, maintaining good health and implementation of right to education and right to clean environment^[11]. 1.2 billion people in the world are without access to Electricity and 600 million people have electricity access. Lack of access to electricity, is a major cause for increase in income disparity, increase in population especially in rural areas^[12].

T.M. Prakash & Ors. v. The District Collector & The Superintending Engineer, Tamil Nadu Electricity Board ("T.M. Prakash Case")^[13].

In this case the petitioners were residing in Government poramboke lands, for the past 2 centuries and about 180 members are engaged in Laundry work. They have put up huts in the working place. Their children are studying in Schools and Colleges, but they do not have electricity connection. When they have made applications to the respondents, to provide electricity supply, the Superintending Engineer, Tamil Nadu Electricity Board, has directed them to obtain "No Objection Certificates" from the District Collector, Tiruvannamalai, the 1st respondent herein. Therefore, they made a representation, dated 11.08.2010 to the 1st respondent, for grant of No Objection Certificate. Another representation, dated 31.05.2011, was also made to the Superintending Engineer, Tamil Nadu Electricity Board, Tiruvannamalai, 2nd

respondent herein, to provide electricity. But the 2nd respondent has rejected the said request on 07.06.2011, citing irrelevant reasons.

The issue in this case is “Whether a mandamus must be issued by the Court directing the respondent to provide the petitioner with electricity connection based on an indemnity bond?”

The petitioners contended that the petitioners are residing in Periyar Nagar, Tiruvannamalai District, and that they have been issued with Ration Cards by the Civil Supplies Corporation. Attention of this Court was also invited to the property tax receipts issued by Tiruvannamalai Municipality, for the years 2011-12, Voter's I.D., issued by the Election Commission of India, to prove that the petitioners are residing at Polur Road, 7th Street, Thiruvannamalai District.

Further referring to Section 43 of the Electricity Act, 2003, which mandates the 2nd respondent to provide electricity supply, to an occupier of the land or premises and Regulation 27(12) of the Tamil Nadu Electricity Distribution Code, 2004, The petitioner further submitted that a duty is cast upon the 2nd respondent to provide electricity supply, upon receipt of applications, along with an undertaking from the petitioners, as provided for.

The petitioners further submitted that when the Statute contemplates supply of electricity to even persons, in occupation of Government poramboke lands, the restriction imposed by the authorities, on the basis of the abovesaid memo, runs contrary to the Electricity Act, 2003 and Tamil Nadu Electricity Distribution Code, 2004. He further submitted that though the petitioners are residing in the abovesaid place, for long number of years, patta has not been given, despite request.

The Respondent then made the following arguments that with a view to implement the orders of the Hon'ble Supreme Court, dated 03.10.2005, a meeting was conducted on 23.11.2005, at the Tiruvannamalai District Collectorate, in which, eminent persons of various walks of life, officials of various Government Departments, including Tamil Nadu Electricity Board, in Tiruvannamalai Town, participated and that the meeting was presided over by Hon'ble Justice Mr.Venkataswamy (Retired). In the said meeting, on the basis of the views expressed by various participants and with a view to prevent further encroachments on both sides of Girivalam path, Tamil Nadu Electricity Board has been instructed not to effect new service connections and also, to disconnect all electricity service connections effected on both sides of Girivalam path.

Further the respondent submitted that when the 1st petitioner has sent a written representation, dated 31.05.2011, to the Assistant Engineer, O & M, Town, East, Tiruvannamalai, requesting to effect service connection to his premises, a reply, dated 07.06.2011, has been given, stating that since the 1st petitioner's premises, is situated in Periyar Nagar, which falls between the Hill and Girivalam path, service connection cannot be effected, as per the directives of the Hon'ble Supreme Court. The 1st petitioner was also informed that service connection could be effected to his premises, only if he obtains a "No Objection Certificate" from the District Administration.

Referring to Regulation 27(12) of the Tamil Nadu Distribution Code, 2004, the respondent further submitted that unless and

until, a No Objection Certificate is produced from the Revenue Authorities, Electricity supply cannot be given.

Justice S.Manikumar held that the petitioners were entitled to electricity supply connection and directed the TNEB to give electricity supply to more than 180 families of launderers living in Tiruvannamalai within four weeks. The Following observation was made.

Firstly the provision i.e Section 43 of Electricity act, 2003 and Regulation 27(12) of Tamil Nadu Distribution Code, 2004 are mandatory in nature. Secondly, Right to Electricity of a person occupying government land has been recognized by Distribution Code. Thirdly, electricity is indispensable and it would be inappropriate to deny the same to the petitioners. Fourthly, access to Electricity must be construed as Human right and has to read with Article 21 of Indian Constitution.

This case is therefore considered as a landmark case for the first time “access to electricity” has been declared as Human Rights in India.

Electricity Act, 2003

The Act intends to create a liberal framework for the development of Power Industry, promoting competition, protecting interests of consumers and supply of electricity to all the areas, rationalization of electricity tariff and ensuring transparent policies and promotion of efficiency among others. This Act repealed and replaced the Electricity Supply Act, 1948.

One of the key objectives as described in the Preamble of Electricity Act, 2003 is the *Protection of Consumer's interest*. The Preamble Provides that “An Act to consolidate the laws relating to the generation, transmission, distribution, trading and use of electricity and for taking the measures which are conducive to the development of electricity industry promoting the competition therein, protecting interest of consumers and supply of electricity to all the areas”.

Generation

Section 6 of the Act, provides for the State Government and Central Government to work together for supplying electricity to every village. Through Section 7 of the Act, the Government has tried to liberalise the process of generation by doing away with the requirements. The Act has further waived the requirement of license, if a person intends to generate electricity^[14]. Section 8 brings down more regularization in the process of setting up of hydro power plant. Any generating company has to submit a report stating the norms and the design. Section 44 of the Act further provides for captive generation. Section 61(h) of the act lays down an important step in Electricity Generation where the government decided to promote generation from non-conventional sources. Section 81(1) (e) gives the Regulatory Commission.

Open Access

Open Access is a non-discriminatory provision for the use of transmission lines and generating utility for consumer. This system provides the seller the right to use transmission lines and to generate the right to sell their power at any location in any region. Thus, they can trade without having the right of transmission.

Transmission

It has introduced a non-discriminatory open access in the transmission segment enabling the generator to sell to the customer and thereby giving the buyer this option of choosing through the transmission network. Section 38 provides for the Central Transmission Utility and thereby laying down its functions. Section 15 provides for the procedure of granting license for the transmission of electricity. Further the transmission companies to be provided license after giving due consideration to the view of transmission utility^[15]. The duties of transmission licensees has been laid down in Section 40. For the purpose of this Act, transmission licensee is a licensee who has been authorised to establish transmission lines^[16]. The duties of such licensee includes building, maintaining and operating an efficient transmission system on payment of transmission charges. At the national level Power grid system which was Central Transmission Utility provides for an open access while at the State Level the State Transmission Utilities provide for an open access.

Distribution

The Distribution segment has been given more consideration in earlier regulations. It was considered that by increasing power generation, the demand of power could be met to some extent while the industry has suffered huge losses on the side of distribution, SEB's being the main body involved in power generation was in a bad shape, which has made difficulty for them to pay for the electric supply. The risk from SEB's has hindered new players from entering the market. The Electricity Act, 2003 has come up with few measures to improve the performance of the distribution sector on all fronts. Section 12 provides for the distribution which is to be licensed by the State Electricity Regulatory Commissions (SERCs).

One such development has come in the form of Section 55 wherein metering system has been made compulsory. A consumer who is requiring electricity may be required by the licensee to provide a security for the price of meter and enter into an agreement with licensee to hire such meter.

Restructuring of SEB's

The State Electricity Board (SEB's) owe their genesis to the Electricity (Supply) Act which has mandated their constitution by States. The Electricity Act, 2003 does not provide for any such provisions. The Act however provides for continuance of SEB. After the expiry of the said period the undertaking of SEB may be transferred.

Regulation: Need of the hour in Electricity Sector

During 1980s the political interference in the tariff settings has eroded the financial health of the public sector electronic entities. The Utilities were unable to raise sufficient resources so to invest in the generation, transmission and distribution facilities that have affected the quality of electrical supply to the consumers^[17]. In the past, privatization came in the spotlight as a solution to the inefficiencies of State and paved a path to the economic development of developing countries. Privatization is highly recommended in power sectors of developing countries. *Privatization was important in power sector because renovating and expanding power distribution*

system requires investment, which the state government could not provide and a culture that would make efficiency and minimizing losses a real priority^[18]. The independent regulatory agencies have become an important part of governance model of countries like India. The Indian model tries to encourage the competition in generation while keeping transmission in the State Control.

Conclusion

The Electricity Act, 2003 is a massive Step in the liberalization of the Power Sector in India. The said Act is viewed in a longer line of Reforms^[19]. The Electricity Amendment Bill, 2005 seeks to introduce further reforms. To quote a report by KPMG, "With the growing maturity of the Indian Power sector and also growing realization by the Indian power utilities a number of elements of the new act are getting operational"^[20].

Reference

1. India had the per capita energy consumption of 439 kgoe in the year 2003. See IEA (2005) Key World energy statistics 2005, International Energy Agency, Paris (www.iea.org) accessed on, 2017.
2. Divya Badami Rao, Ramana MV. The Indian approach to climate an energy policy, available at <http://www.thebulletin.org/web-edition/features/the-indian-approach-to-climate-change>, 2017.
3. Marta Isabel Da. Costa Paiva Pinto A Study on Deregulation of Electricity sector and its implications 2001. At Page no. 1 <http://in3.dem.ist.utl.pt/master/thesis/99files/thesis02.pdf>, 2001-2017.
4. See Editors Sarkar SK, Aggarwal Veena, Malik Sumit. Regulatory Performance In India: Achievements, Constraints and Future Action" Teri Press at, 1-2.
5. Entry 38, List III. Seventh Schedule, Constitution of India.
6. Dr. Manish Yadav. Energy Laws Regulation in Electricity Sector and Protection of Consumer Rights: Critical Analysis, (Kamal Publishers, New Delhi, Edn.1st), 2016
7. Article (h) Convention on the Elimination of Discrimination Against Women, UN Doc. A/34/46/, 1979, 14(2).
8. Article ICESCR, 11(1).
9. UNIDO, Energy must be fully integrated into the Post-development agenda, say Vienna forum participants, available at <http://www.unido.org/news/press/energy-parti.html> accessed on, 2013-2015-2017.
10. Sonia Luthra, India's Energy Policy, available at <http://www.nbr.org/research/activity.aspx>, accessed on, 2017.
11. United Nations Development Programme, (UNDP), World Energy Assessment, Nairobi, 2000, 44.
12. Vineeta Pandey. Electricity will solve India's Population Problem: Azad, DNA, available at <http://www.dnaindia.com/report-electricity-will-solve-india-s-population-problem>, accessed on, 2009-2017.
13. Prakash TM, Ors V. The District Collector & The Superintending Engineer, Tamil Nadu Electricity Board.

- 2013; (6):261.
14. Proviso to Section 14 of the Act.
 15. Section (b) of the Act, 15(5).
 16. Section of the Act, 2(73).
 17. Navroz k. Dubash, *The Practice and Politics of Regulation: Regulatory governance in Indian Electricity*, Macmillan India, 224.
 18. OED Report, available at http://ieg.worldbank.org/Data/reports/precis_206.pdf, 2017.
 19. Navneet Vibhaw, *Energy Law & Policy in India*, (Lexis Nexis, Gurgaon, I Edn), 2014, 90.
 20. KPMG in India, *India Energy Outlook* at, [hereinafter KPMG Report], Available at <http://www.kpmg.ie/DestinationIndia/pubs/IndiaEnergy.07.pdf> accessed on, 2007-2017.