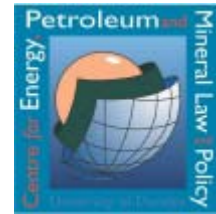


## **Review of the Electricity Act 2003 of India**

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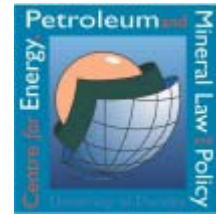
November 2003



## **Abstract**

The Electricity Act 2003, which has come to force in India since mid-June 2003, consolidates and replaces a number of older legislations on electricity. The act has introduced significant changes in industry structure by moving from a single-buyer market to a multi-buyer multi-seller system. The regulatory regime has been made flexible, with a multi-year approach and without requiring the regulatory commissions to follow rate-of-return regulations. The act brings clarity to the roles of different organisations and provides for better financial management of the regulatory commissions. The penal provisions for dishonest use of electricity have been tightened and special courts are created to provide speedy justice. The act puts in place some time bound targets for licensees and for the restructuring of the electricity industry. This paper reviews the changes brought about by the new act and analyses their economic rationale.

Key words: Electricity Act, India,



## 1. Introduction

With effect from 2<sup>nd</sup> June, 2003 India has adopted a new legislation called the Electricity Act 2003<sup>1</sup> to replace some age-old existing legislation on electricity operating in the country. The new act consolidates the position of the existing laws and aims to provide for measures conducive to development of the electricity industry in the country. The act has attempted to address certain issues that have prevented or slowed down the reform process in the country and consequently, has generated new hope in the electricity industry. This paper reviews the Electricity Act 2003 to highlight how the new features are different from the existing legal provisions and whether these measures have economic rationale.

The organisation of the paper is as follows: section 2 discusses the existing industry structure and the structure envisaged in the new act. Section 3 discusses the roles of different organisations involved in the electricity sector, while section 4 discusses the tariff-related provisions of the act. Section 5 covers a number of other areas such as licensing, consumer protection and finally the last section contains some concluding remarks.

## 2. Industry structure

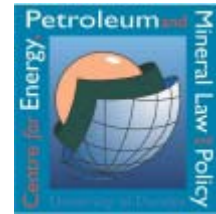
### 2.1 Early developments

The development of electricity industry in India was fashioned by two legislations, namely the Indian Electricity Act, 1910 (IE-1910 for short) and the Electricity (Supply) Act, 1948 (ESA-1948 for short). The IE-1910 introduced the licensing system in the electricity industry while ES 1948 was responsible for greater state involvement in the industry. IE-1910 was introduced at a time when the electricity supply industry was fragmented and mostly concentrated in urban areas. The industry at this phase was highly competitive and the act attempted to instil some cohesion in the industry by introducing licensing mechanism and promoting safety standards.

The ESA-1948 promoted a state-owned, vertically integrated structure of electricity industry through the creation of the State Electricity Boards (SEB). The industry passed through a phase of nationalisation of licensee businesses. SEBs were responsible for generation, transmission and distribution of electricity within the geographical limits of a state. Where SEBs were not set up, a government department was responsible for the electricity supply. It is worthwhile to mention that electricity comes under the concurrent list of responsibilities in the Indian Constitution and both the state and central governments can exercise legislative powers in this area.

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<sup>1</sup> The act is downloadable from [http://powermin.nic.in/The\\_Electricity\\_Act\\_2003.pdf](http://powermin.nic.in/The_Electricity_Act_2003.pdf)



While the electricity supply industry made significant progresses under the SEB regime, a number of problems appeared due to poor financial health of SEBs. These problems were addressed through amendments to the ESA-1948 and IE-1910, thereby bringing incremental changes to the system. In the 1970s, the ESA-1948 was amended to allow participation of the central government in the power generation through large-scale projects that serve more than one states. These big projects were mostly outside the financial capability of individual state governments and the central participation led to the creation of successful generating companies like NTPC and NHPC.<sup>2</sup> This helped in reducing the gap between supply and demand to some extent. The industry structure remained vertically integrated, with some part of generation coming from central-sector projects. Captive power generation was allowed as well under certain circumstances with a view to reduce supply-demand gaps.

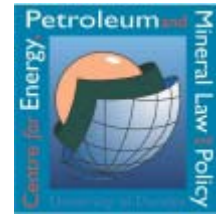
In the early 1990s, private participation in the generation was allowed, again through amendments to the IE-1910 and ESA-1948. The IPPs, as they are called, were allowed attractive terms to set up power stations but they had to work with the vertically integrated SEBs. IPPs entered into power purchasing agreements with the SEBs but as there were few bankable SEBs, IPPs tended to flock to the better performing SEBs. The credible commitments of the SEBs were limited by their earning capacity and soon it was noticed that SEBs are entering into a trap, where they would not be able to keep their commitments.

In the mid-1990s, some states took the initiative to restructure their electricity supply industry through promulgation of reform acts. These reform acts chartered restructuring of the state's electricity industry by de-integrating the SEBs into separate generation, transmission and distribution companies. Generation segment was considered as potentially competitive and kept outside the purview of the regulatory supervision. Transmission and distribution are considered as monopolistic activities within the geographic area and regulated businesses. Licensing was chosen as the form of regulatory control and rate of return regulation was introduced. All the reform acts introduced a single buyer model, where the transmission and bulk supply licensee acts as the buyer of all electricity produced by the generators and sell electricity to the distribution and retain supply licensees for further supply and distribution. Transmission and bulk supply was controlled by a single company while a number of distribution companies were introduced having monopoly supply rights in their area of supply. A regulatory commission was set up in each state to oversee and regulate the electricity supply industry in these states.

This was followed by a central act called the Electricity Regulatory Commissions Act, 1998 (ERC-1998 for short). Although this is a new piece of legislation, its scope was limited to install an independent regulatory set up at the central level and state level, without each state requiring its own legislation and without any prior restructuring of the electricity supply industry.

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<sup>2</sup> NTPC stands for National Thermal Power Corporation while NHPC stands for National Hydro Power Corporation.



But there was a growing realisation that these incremental changes are not helpful in managing, regulating and co-ordinating the developments of the electricity industry in India. In 2000, a first attempt was made to consolidate the existing acts and to prepare a new legislative framework to stimulate further growth. The debate over the draft continued for quite sometime and a new draft was prepared by the Ministry of Power. After much debate and discussion, the draft got parliamentary approval. The act received President's assent on May 26, 2003 and was published in the Official gazette on June 2<sup>nd</sup>, from which date it became effective.

## **2.2 Industry structure as envisaged in the Electricity Act, 2003**

The act has made an attempt to create a multi-buyer, multi-seller system of some sort without introducing a balancing system and provided for some retail competition by allowing them choice of supply to certain consumers. This is somewhat different from the previous structure followed in India.

### **2.2.1 Generation**

Electricity generation has been made a non-licensed activity<sup>3</sup> and the techno-economic clearance from the Central Electricity Authority (CEA) has been done away with for any power plant, except hydro-electric power stations above a certain amount of capital investment.<sup>4</sup> The generators can sell electricity to any licensee<sup>5</sup> or where allowed by the state regulatory commissions, to consumers directly. The provision of direct sale of electricity by the generators, when and where allowed, would promote more IPP participation in the power generation, as these consumers are more creditworthy and bankable compared to many SEBs. However, the act provides for imposition of a surcharge by the regulatory body to compensate for some loss in cross-subsidy revenue to the SEBs due to this direct sale of electricity by generators to the consumers.

In addition, no restriction is placed on setting up of captive power plant by any consumer or group of consumers for their own consumption.<sup>6</sup> Earlier, captive power generation required approval from the SEB (exercising regulatory power) or the regulatory commission. The ESA-1948 required the decisions on captive power to be based on two considerations: whether the SEB could supply the power at a cheaper rate than it costs to the consumer to produce and whether the SEB could ensure the supply of required volume at the desired time. Removal of restriction on captive generation acts as a real threat to maintaining cross-subsidies, as many such creamy customers would find it cheaper to set up their own captive stations. In the states

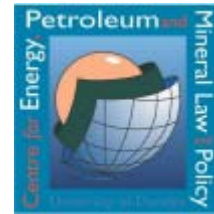
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<sup>3</sup> See section 7 of the act.

<sup>4</sup> Section 8 deals with this. The act does not specify the limit but leaves it to the central government to specify it by notification.

<sup>5</sup> Section 10(2) allows this but under sections 38(1), 39(1) and 41, transmission licensees are not allowed to trade electricity, implying purchase of electricity for reselling.

<sup>6</sup> See section 9.



where reform was initiated earlier, the commissions have allowed captive power to come up relatively freely. This act frees big consumers in other areas as well from the monopoly supply of the boards or licensees. The act protects the captive generation from paying any surcharge on wheeling of power, which provides financial incentive to large consumers to set up their own captive generation and exit the grid. Even relatively small consumers who are subjected to cross-subsidy may find it beneficial to set up co-operatives or associations for the purpose of setting captive power plants as allowed in the act. However, sale of excess power to third parties would require approval of the appropriate commission.<sup>7</sup>

While removal of entry barriers to captive generation is likely to erode the cross-subsidy base of the electric utilities and thereby exert pressure to reduce the level of cross-subsidies in tariffs, promotion of captive power is likely to result in sub-optimal use of resources and systems. This generally results due to reliability concerns of the entire system, economy of scale and scope of operation and inappropriate technology selection for captive power plant, etc. Proliferation of grid-connected captive power plants could also lead to system instability, difficulties in grid management and energy accounting and increase in related disputes.

Although entry barriers to the generation segment have been removed, the regulatory commissions would determine the tariff for sale of generated electricity to any distribution licensee.<sup>8</sup> The Central Commission has the jurisdiction over generating stations in the central sector and those stations catering to more than one state. The state commissions have jurisdiction over generating stations within the state boundaries, except those under the central commission's jurisdiction. These provisions are quite similar to those existed under the ERC-1998 and take care of the diverse nature of generating companies operating in the country. The projects selected through competitive bidding have been protected through a provision that requires the commissions to adopt tariffs as determined through the bidding process. For others, the commission would determine the tariff following national electricity policy and tariff policy and on the basis of guiding criteria specified in the act.

Regulation of generation tariff is not compatible with the idea of creating a competitive electricity generation market. The prevalent system is bureaucratic in nature and the new act would maintain the same. Moreover, the existing system of differential treatment of central sector, state sector and private sector generation is not logical and creates market distortion. While the tariff policy would elaborate on the tariff determination method, there is no promise that the new system would be much different from the present, which has provided wrong signals to generators.

### **2.2.2 Transmission**

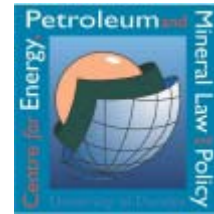
Transmission, both at the inter-state and intra-state levels, is a regulated activity requiring a licence.<sup>9</sup> The act prohibits a transmission utility to undertake generation<sup>10</sup>

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<sup>7</sup> See section 9.

<sup>8</sup> See section 62(1)(a).

<sup>9</sup> See section 12(a) of the act.



or trading.<sup>11</sup> This provision is quite contrary to the state reform acts, where the state transmission utility performs both the functions of transmitter and bulk supplier. This condition helps avoiding conflict of interest in transmission and supply activities but as this condition is in contradiction with the state reform acts, the state transmission utilities of those states where the reform act is in operation would have to undertake necessary changes to rectify the contradiction.

In line with the provisions of the earlier acts, the act requires the central government to designate one government company as the central transmission utility (CTU), which would be deemed as a transmission licensee. Similarly, each state government would designate one government company as state transmission utility (STU), which would also be deemed as a transmission licensee. Each transmission licensee would normally enjoy monopoly over a geographical service area but the act allows for licensing more than one utility in the same service area subject to the condition that the central government can specify additional requirements before granting a licence.<sup>12</sup> Allowing more than one licences could result in duplication of assets that may be underutilised, resulting in an inefficient use of resources and producing a desirable outcome.

The CTU and STU shall be responsible for transmission of electricity, planning and co-ordination of transmission system, provision of non-discriminatory open-access to any users and development of a co-ordinated, efficient and integrated inters-state and intra-state transmission system respectively. This provision allows the state to play a significant role in the planning and development of the transmission system. State-ownership of at least part of the transmission business leaves room for government control and interference in the electricity business.

While the act requires the licensee to provide open access to the grid by any other licensee or generators<sup>13</sup>, the act does not address the issue of ensuring fair and efficient use of transmission capacity by different users. However, an appropriate commission may direct any transmission licensee to allow use of any excess capacity by another licensee on payment of fees and charges either mutually agreed or set by the commission.

A transmission licensee can engage in other businesses by intimating the Commission. A part of the revenues from such other businesses may be required to reduce the transmission charges but the transmission business shall not be required to subsidise the other business. Separate accounts have to be maintained for each business.

### **2.2.3 Trading**

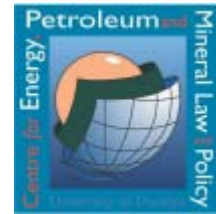
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<sup>10</sup> This restriction applies only to central transmission utility, as per section 38(1).

<sup>11</sup> Trading is restricted for all transmission licensees or deemed transmission licensees such as central transmission utility and state transmission utilities. See sections 38(1), 39(1) and 41.

<sup>12</sup> Proviso to section 14 of the act.

<sup>13</sup> See sections 38(2)(d), 39(2)(d) and 40(c).



The act specifies trading as a licensed activity<sup>14</sup> but provides little detail about traders' functions. Trading has been defined as purchase of electricity for resale. This could involve wholesale supply (i.e. purchasing power from generators and selling to the distribution licensees) or retail supply (i.e. purchasing from generators or distribution licensees for sale to end consumers). As the act does not make distinction between distribution and retail supply, it is not clear whether a licensed trader would require a distribution licence for retail supply.

Trading was not recognised as a separate activity in the previous acts and its separation at least from the functions of a transmission licensee is a step in the right direction.

#### **2.2.4 Distribution and retail supply**

The act does not make any distinction between distribution and retail supply of electricity. It appears that distribution has been considered to imply both distribution and supply activities. Distribution is a licensed activity and distribution licensees are allowed to undertake trading without any separate licence. Thus a distribution licensee can undertake three activities: trading, distribution and supply through one licence. The reason for combining these three activities in a licence is not clear. A distribution licensee is also allowed to carry out distribution activity in its area of supply through an agent, who does not require a licence. The licensee is responsible for the functioning of the agent. This new provision is somewhat awkward, as it leaves room for misuse.

The act provides for progressive introduction of retail competition in electricity supply but leaves the timing and degree of such competition to the discretion of the state commissions.<sup>15</sup> This new provision coupled with fairly easy entry to captive power would imply that the commissions would have little option but to allow choice to large consumers, at least. This is expected to set in competition among generators to search for consumers, by-passing the unhealthy distribution licensees. Generators could sale electricity to consumers at a mutually agreed rate, which lies outside the scope of tariff regulation by the commission.

#### **2.2.5 Unregulated rural markets**

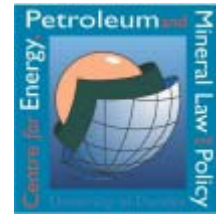
The licensing requirement does not apply for generation and distribution of power in notified rural areas<sup>16</sup> but the supplier has to comply with the requirements specified by the CEA. It is understood that this exclusion aims at promoting rural electrification. This provision makes certain rural markets outside the purview of the regulatory regime and would create regulated and unregulated electricity markets in the country. The act does not specify any market structure for such rural areas and it does not appear to prohibit vertically integrated monopolies to operate in such areas.

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<sup>14</sup> Section 12(c).

<sup>15</sup> Section 42(2).

<sup>16</sup> Proviso to section 14.



It is not clear who will monitor the supplier in the unregulated rural market and how the consumers would be protected.<sup>17</sup>

### **3.0 Roles of key organisations and players**

The act retains the existing organisations created under the previous acts and streamlines some of their functions to bring more effective operation of the electric power system. In addition, the act has created a few new organisations such as an appellate tribunal and special courts. It also clarifies the role of governments (central and state) in the functioning of the power sector. This section examines the clarity of roles of different players as outlined in the act.

#### **3.1 Central and state Governments**

The act reserves a significant involvement of the central government in the functioning of the power sector. It has been assigned a number of duties, including plan and policy formulation and approval, rule making, appointing/ establishing/ designating authority, prescribing duties and other tasks, funding, and issuing directions.

On the policy front, the central government is responsible for preparing, publishing and revising the following in consultation with the state government<sup>18</sup>:

- a) national electricity policy and tariff policy;
- b) national policy for stand-alone systems for rural areas based on renewable and non-conventional energy sources;
- c) national policy for rural electrification and local distribution in rural areas.

It is also responsible for approving the national electricity plan prepared by the CEA every five years. The central government can issue written policy directions to the CEA and CERC on matters of public interest.<sup>19</sup> It is also empowered to issue directions in case of joint commissions where the participants ask it to issue such directions or the participants fail to reach an agreement among themselves about such directions.<sup>20</sup> The tariff policy is an area which led to a lot of litigation and confusion under the earlier regime. The act now places the responsibility of formulating the tariff policy on the central government<sup>21</sup>, and the commissions have to take the guidelines into consideration for fixing the tariff.<sup>22</sup>

The central government appoints the chairperson and members of the central electricity regulatory commission (CERC), the CEA, and the Appellate Tribunal.<sup>23</sup> It also decides on their salary and allowances. It approves the appointment of the secretary of the CEA, and provides the requisite staff and employees to the appellate

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<sup>17</sup> It is likely that the rural electrification policy paper would deal with these issues.

<sup>18</sup> See sections 2, 4 and 5 of the act.

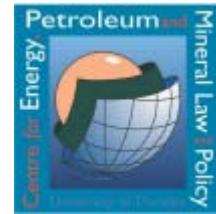
<sup>19</sup> See section 107 of the act.

<sup>20</sup> See section 109(b) of the act.

<sup>21</sup> See section 3(2).

<sup>22</sup> See section 61(j).

<sup>23</sup> Refer to sections 76(6), 70(4), and 113(2) and 113(3).



tribunal. The central government is also responsible for suspending a member of the CERC and appellate tribunal on grounds of misbehaviour. The members of the appellate tribunal, including the chairperson can submit their resignation to the central government.

The central government designates a CTU and establishes the National load dispatch centre (NLDC), regional load dispatch centres (RLDC), the Appellate Tribunal, the Coordination Forum, and the Regulators' Forum.<sup>24</sup> It has the power to vest the property of a CTU in a company or companies and decides on the jurisdiction of benches of the appellate tribunal. It prescribes the duties and functions of the CEA, NLDC and RLDC, and can make rules on a wide range of areas and has the power to remove difficulties through issue of orders within two years of commencement of the act.<sup>25</sup> It also has the power to amend the schedule of states where reform acts continue to be applicable, except where they are inconsistent with this act.

The central government provides loans and grants to the central commission and decides on other sources of funds for the commission. It decides how the commission should spend all its revenues and specifies the manner the accounts should be maintained. The central commission is required to send its audited accounts to the central government.

It is responsible for inter alia: a) specifying additional requirements for granting more than one distribution licensee;<sup>26</sup> b) providing no-objection certificates for granting licence if the service area includes central government installations such as cantonment, aerodrome, defence area, etc.;<sup>27</sup> c) demarcating the country into transmission regions for the purpose of inter-state transmission; d) issuing guidelines for transparent bidding process; e) approving the salary and benefits of the employees of the CEA, CERC and appellate tribunal;<sup>28</sup> f) referring cases to the tribunal for removal of members on the ground of misbehaviour; and g) prescribing the procedures for inquiry into misbehaviour by members.

The state government has relatively less statutory role. It exercises appointing/designating powers, provides funds and makes rules/ notifications, etc. It appoints the members of the state regulatory commission including the chairman, approves the terms and conditions of appointment of the secretary to the commission and other staff, and can remove or suspend a member.<sup>29</sup> It is also responsible for constituting the selection committee for appointing members of the state commission.

It establishes the SLDC, notifies the STU, vests property of STU in companies, draws up reorganisation of the SEB through acquiring its assets and re-vests it through a

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<sup>24</sup> See section 38(1) for CTU, 26(1) for NLDC, section 27(1) for RLDC, section 110 for Appellate Tribunal, sections 166(2) and 166(4) for regulators forum and coordination forum.

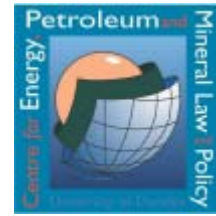
<sup>25</sup> See section 176.

<sup>26</sup> See sections 14 and 176(2)(b).

<sup>27</sup> Section 12.

<sup>28</sup> Sections 70, 89, 115, and 119.

<sup>29</sup> Sections 82(5), 89 and 90.



transfer scheme.<sup>30</sup> It can also transfer employees through a transfer scheme. It is empowered to constitute special courts, and state coordination forum.

The state government creates the state ERC fund and can provide loan or grants for running the ERC. It decides how the ERC should utilise the fund and how it should maintain accounts. The state government can also provide subsidy to consumers, but the act requires it to compensate the licensee in advance by the amount of loss expected to be suffered by the licensee in implementing the subsidy.

The state government notifies rural areas where exemption of licence conditions would apply, resolves disputes over public place (assembling more than 100 persons) and issues directions to the commission on public interest issues. It can decide not to apply the provisions of this act for a certain period,

Learning from the past experience, the act has provided more clarity in defining certain roles of the government and removing difficulties faced with earlier acts. For example, under the earlier acts, funding of electricity commissions became a serious issue. Certain SERCs saw their activities severely affected due to inadequate funding either due to poor financial health of the state government or due to political vindictiveness of the government. All fees collected by the commissions went to the government and payments from the government were often less than the fees received. Creation of an ERC fund<sup>31</sup> where all the contributions of the government and all other income are collected and from where all expenses are made should prove beneficial to the ERCs.

Another novelty of the act is the requirement of advance payment of subsidy compensation by the state governments willing to provide some subsidy to any class of consumers.<sup>32</sup> The earlier acts required a promise of compensation from the state government, which proved to be inadequate as many state governments did not keep their promises. The new requirement is likely to discourage state governments to provide large subsidies.

A particular problem with the previous acts was with the interpretation of policy directives. Governments have the power to issue policy directives to the commissions or the CEA and at times there were differences in opinion as to whether they are really policy directives or not. The act now makes it clear that the government would be the authority to decide on this issue and such directives should not be inconsistent with the intent of the act. However, governments may misuse this authority to impose their unjust wishes on the commission.

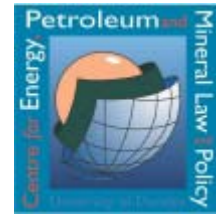
### **3.2 Central Electricity Authority**

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<sup>30</sup> See sections 31 for SLDC, 39(1) for STU, 131 for transfer scheme related to reorganisation of the SEB.

<sup>31</sup> See sections 99 and 103 of the act.

<sup>32</sup> Section 65.



The Central Electricity Authority (CEA) was an agency created under the ESA-1948 and the present act retains the agency by relegating it mostly to a consultative role. There was some overlap of duties and power between the central commission and the CEA in the earlier period, which the act has now removed. The technical clearance required for power projects by the ESA-1948, which made CEA a powerful agency and created a technocratic system, has been eliminated, except for hydro projects above a certain capital investment. It will now be responsible for formulating short-term and perspective plans, co-ordinating activities of planning agencies, and specifying technical standards for safe and sound operation of the power system. It would advise the central government on plan and policy issues and the commissions and others on technical issues. The CEA is responsible for preparing a national electricity plan every 5 years and shall seek central government's approval on the plan.

Partly because of its powerful legacy and partly because of its expertise in the Indian power system, CEA was perhaps retained in the new act. There was a lot of debate over the issue and ultimately CEA managed to bargain for a statutory position, with an elaborate set-up, quite similar to the one existed under ESA-1948. But the justification for such a set-up with reduced duties is not quite clear.

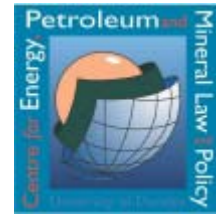
Regional Electricity Boards created under the ESA-1948 have been abolished. Instead the act refers to Regional Power Committees but does not elaborate on their constitution, duties and functions.

### **3.3 Commissions**

The act retains the two-level regulatory system for the power sector. At the central level, the Central Electricity Regulatory Commission (CERC) would be responsible for regulating tariff of generating stations owned by the central government, or those involved in generating or supplying in more than one states, and regulating inter-state transmission of electricity. The state commissions on the other hand regulate intra-state transmission and supply of electricity within the jurisdiction of each state. The commissions would have quasi-judicial powers as before and the act provides protection to members against any arbitrary removal.

As mentioned earlier, the funding arrangement for the commissions has been modified, thereby improving the prospects for better financial independence of the commissions. Moreover, the condition attached to grant of subsidy to consumers would help improve independence of the commissions in respect of tariff determination. However, the commissions would have to respect policy directives of the governments and the possibility of conflicts arising from politically motivated directions cannot be ruled out. Similarly, the selection process may not prevent politically motivated appointments to the commissioner's position, as the act does not require any check on this account. This has been reported to be a problem in some cases under the earlier acts.

### **3.4 Appellate tribunal**



This is a new organisation created by the present act to deal with appeals against the orders of the commissions or adjudicating officers set up by the commissions in settling disputes.<sup>33</sup> Earlier the High Court was the appellate authority and they have dealt with most of the cases quite logically. The Appellate Tribunal would help reduce the burden on the High Courts and should settle the disputes more expeditiously.<sup>34</sup> The tribunal would possess certain amount sector specific expertise, which should help in discharging its duties better than a High Court. The orders of the tribunal can be challenged in the Supreme Court by the aggrieved party. The act however does not specify any funding mechanism for the Appellate Tribunal.

### **3.5 Load dispatch centres**

The act has created a three-tier load dispatching system, namely a national load dispatch centre (NLDC), regional load dispatch centres (RLDC) and state load dispatch centres (SLDC). RLDC and SLDC were already existed under the earlier act but there was some confusion about their power and organisational hierarchy. The present act has attempted to resolve the problem.

The load dispatch centres are now separate government companies and they should not participate in trading or generation of electricity. The functional separation of the transmission and system operation activities would instil confidence among all participants. The RLDCs and SLDCs would be responsible for ensuring integrated system operation, monitoring of grid operations, maintaining of accounts of electricity transmission, and collection of charges and fees at the regional and state levels, respectively. They shall follow the guidelines and procedures set up by the appropriate commission but will have powers to issue directions to any participants to the grid for ensuring efficient and safe operation of the grid. They are also empowered to impose fines on the violators of its directions.

### **3.6 Special courts**

To try offences like theft of electricity or electrical lines and equipment, the act empowers the state governments to establish special courts with single judges for certain area or areas.<sup>35</sup> Such courts shall have jurisdiction over the specified area and all cases relating to offences under this act shall be tried by the special court only. Other courts of that area shall transfer the cases to the special court. The special court shall try the offence in a summary way but if in the course of the examination it considers that it is undesirable to try in a summary way, the court can call for witnesses and re-hear them. The special court can order a sentence up to a five year term.

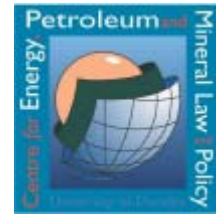
The special court shall determine the civil liability against a consumer or a person in terms of monetary value of theft of energy and this shall not be less than two times the

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<sup>33</sup> See sections 110 and 111.

<sup>34</sup> The act specifies a time limit of 180 days for the Tribunal to dispose of the appeal.

<sup>35</sup> Section 153.



tariff rate applicable for 12 month period prior to the detection of the theft or the actual period of theft whichever is less. If the consumer or person has already paid a sum in excess of the civil liability, the excess sum shall be returned within a fortnight together with an interest at the rate of RBI prime lending rate for the period of deposit so held. The special court can review its case on grounds of a mistaken fact, error apparent on the face of the judgement or ignorance of any material.

These courts are expected to ensure speedy trial of cases booked under the act and may act as a deterrent.

### **3.7 Ombudsman for grievance redress**

This is another new entity under the new act. The distribution licensee shall set up a grievance redress system following the guidelines of the commission. Any consumer aggrieved by non-redressing of grievances can refer the case to an Ombudsman to be set up by the state commission.<sup>36</sup> The Ombudsman shall settle the grievance in accordance with the procedures established by the Commission. Earlier, the commissions could take up grievances if they were not attended to by the licensee, although most commissions avoided doing so. The new entity would reduce the commission's involvement in this potentially messy affair.

## **4.0 Tariff-related provisions**

### **4.1 Tariff policy**

As mentioned earlier, the act empowers the central government to formulate the national tariff policy in consultation with the state governments and the CEA. Earlier, there was no national tariff policy as such for retail tariffs, although the 'common minimum programs' provided some guidance. There was also a policy guideline for determination of generation tariff. The national tariff policy is expected to provide a general perspective on the government's vision about generation, transmission and retail supply tariffs to shape up and how it wants to achieve this goal.<sup>37</sup> The commissions would be guided by the tariff policy in discharging their duties.

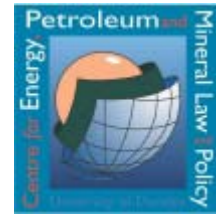
### **4.2 Tariff principles**

The act has introduced significant changes in terms of tariff principles. Earlier, the rate of return regulation as prescribed in the Sixth Schedule of the ESA-1948 was the basis of tariff determination. Even in the case of state reform acts, this Sixth Schedule was retained as the basis. The present act has done away with that provision. In fact, it does not prescribe the method of tariff regulation and leaves it to the commissions to decide.

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<sup>36</sup> See section 42(2)(6).

<sup>37</sup> Unfortunately, the draft tariff policy issued by the Ministry of Power provides guidance on the principles of tariff determination rather than providing guidance on policy issues related to tariff setting.



The commissions however should be guided by the principles set out by the central commission regarding tariffs of generating companies and transmission licensees, multi-year tariff principles, and national tariff policy formulated by the central government.<sup>38</sup> The tariff principles should encourage efficiency, competition, economic use of resources, good performance and optimum investments, and should allow companies to run their businesses on commercial principles. The tariffs should gradually be cross-reflective and thereby reduce cross and eliminate cross-subsidies. The commissions are also advised to promote cogeneration and renewable energies through tariffs.

Given the flexibility of the tariff determination given in the act, commissions are free to use a range of approaches for tariff determination. The time period for which the tariff has to be set is left open and the multi-year tariff principle would suggest a less frequent tariff revision proceedings. The act does not even make annual reporting of revenue reports mandatory, although the commissions can specify the frequency of such reporting. However, if the draft tariff policy provides any guide, the tariff determination process may not change significantly, and commissions may still follow a rate of return type of arrangement and inappropriate/ inadequate incentive systems.

### **4.3 Subsidy and cross-subsidy issues**

Compared to the state reform acts or ERC-1998, the provisions relating to subsidies and cross-subsidies are well spelt out. The commissions should attempt to reduce and eliminate cross-subsidies. As mentioned earlier, to ensure that cross-subsidies are removed at least from big consumers, the restriction on captive power generation has been removed and no surcharge is payable for wheeling such power. The commissions are empowered to levy a surcharge for allowing open access but the surcharge shall be reduced over time.

The loss of cross-subsidies would result in a move towards cost-reflective tariff for all categories of consumers, unless the government through policy directive intends to provide subsidy to any consumer categories. However, governments have to pay an adequate compensation in advance. Moreover, as the subsidy is gradually removed, consumers would surely ask for fair tariff, thereby declining to pay for the inefficiency of the licensee or the government in improving the performance.

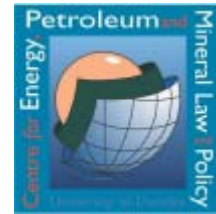
## **5.0 Other aspects**

### **5.1 Licensing**

The act generally retained the licensing procedure of the earlier acts, with a few exceptions. The act ensures non-refusal of grant of licences to all acceptable

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<sup>38</sup> See section 61.



applicants<sup>39</sup>, even if it implies duplication of licensees for a particular area of supply. The act imposes a time limit on commissions for taking a decision on licence applications, which would restrict the cases of prolonged inaction on the part of the commissions on such applications. The notice period for receiving objections has been reduced to 30 days, whereas earlier acts allowed for 60 to 90 days of notice period. The licence period has been fixed at 25 years, which is somewhat strange for traders, given the potentially competitive nature of the business and low asset specificity. Long licence could promote long-term contracts even in the case of traders, which would make the market less flexible.

## **5.2 Supply through meters**

The act makes it mandatory to supply electricity through correct meters within two years of the date of commencement of the act.<sup>40</sup> However, this requirement can be relaxed by the state commission for a class or classes of consumers or for specific areas. The licensee is allowed to charge security for hiring and installing a meter. The CEA may direct to install meters at appropriate stages and levels of generation, transmission, trading and distribution. This is an important provision of this act, as many consumers at present receive supply without meters and many more have incorrect meters. Metering or lack was a major problem in setting correct prices and undertaking improvement of the system. Implementation of this requirement would clear ways for quick improvement of the system.

## **5.3 Time limit for release of new connections**

The distribution licensee has to supply electricity to a premise within one month of receipt of application from the owner or occupier of the premise in normal circumstances (implying absence of natural calamities).<sup>41</sup> Where system extension is required, the supply shall be given on completion of the necessary work or within the time as specified by the Commission. In case of non-electrified villages or hamlets, the Commission may specify a time limit for achieving rural electrification. Failure to supply electricity within the specified time shall attract a penalty of 1000 rupees per day for each day of default.

## **5.4 Default in payment**

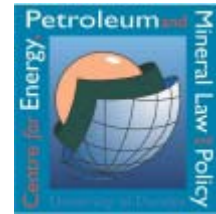
In case of default of payment of charges and dues to the licensee or the generating company (in case of supply, transmission, distribution or wheeling), the licensee or the generating company can cut off the supply by giving a clear 15-days notice in writing to the party concerned and can discontinue supply till the time the charges along with additional cost involved in cutting off and reconnecting the supply are cleared. However, in case of dispute of bills where the consumer has paid the bill under protest, the supply cannot be cut-off. Moreover, if the arrear is due for more

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<sup>39</sup> This means those applicants who meet all requirements.

<sup>40</sup> See section 55(1).

<sup>41</sup> See section 43(1).



than two years, it cannot be collected unless it has been shown continuously as recoverable.

### **5.5 Consumer protection: Standards of performance**

The appropriate commission can set standards of performance of each licensee or a class of licensees after consulting the licensees and the affected parties. A licensee failing to meet the performance standards may have to pay compensation or may be prosecuted as determined by the commission. The penalty is payable within 90 days of the decision. The standards of performance can be different for different licensees. The licensees are required to submit information about their performance to the Commission and the Commission shall arrange to publish them at least once a year.

### **5.6 Electricity theft and penalty**

The act has made strict provisions to deal with electricity theft by consumers and reduce employee-consumer nexus in this regard. The act empowers the licensee to impose punitive tariffs on consumers upon detection of theft of power and the offence could attract imprisonment and/or penalty. No civil court would have power to give injunctions to such cases. The act similarly provides for stringent penal measures for offending employees of the utility.

The penal provisions are much stricter than the earlier laws on electricity. This should act as a deterrent for theft by common consumers. However, the act does not provide any protection against misuse of these powers by licensees or utilities. The onus now lies on the consumers to prove that they are not stealing power. This presumption can prove to be dangerous and potentially a source of much consumer dissatisfaction.

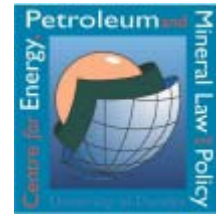
The act has introduced a distinction between unauthorised use<sup>42</sup> and dishonest use of electricity<sup>43</sup>. Any unauthorised use is liable to a penalty as assessed by the assessing officer and the consumer can appeal against such assessment to an appellate authority constituted by the central government. This provision appears somewhat bizarre as most of the cases would be taking place at the local level and the aggrieved consumer would find it difficult to seek justice if the appellate authority is centrally located in Delhi or in state even in capitals. The transaction cost would be too high for the consumer to seek justice. The state government or the state commission should have been given the power to establish such local appellate authorities.

The dishonest use of electricity is a criminal offence under the act. As the penalty for such an offence is much strict than the previous case, the utility would prefer to book any case as dishonest use of electricity. The thin line of distinction is not quite clear and would create a lot of discomfort to the consumers.

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<sup>42</sup> The following are defined in clause 126(6)(b) to constitute unauthorised use of electricity: usage of electricity by a) an artificial means, or b) by a means not authorised by the concerned person or authority or the licensee, or c) through a tampered meter, or d) for the purpose other than for which the usage of electricity was authorised.

<sup>43</sup> According to clause 135, dishonest use of electricity occurs if



## **Conclusions**

The recently introduced Electricity Act 2003 of India has consolidated a number of legislations on electricity operating in India. The new act has attempted to move away from the single buyer model being followed so far and has allowed relatively free entry to generation and captive power generation. Removal of restriction on captive power and broadening the scope of captive generation by including association of consumers would help promote proliferation of captive power, which in turn would reduce the creamy consumers providing cross-subsidy to the distribution companies. Loss of creamy consumers would allow introduction of open-access to certain class of consumers and perhaps entry of IPPs in generation. The above phenomenon is expected to allow removal of cross-subsidies and promotion of cost-reflective tariff regime in the distribution business. In absence of such tariffs, the distribution business is expected to suffer and thereby affecting the entire supply chain. However, the acceptability of such tariff to consumers would remain an issue.

The act has introduced a few new entities and has clarified the roles of different players. It has introduced a better arrangement for funding of commissions and strict provisions for subsidy provision by governments. The tariff determination has been made flexible and commissions are now empowered to move to a multi-year tariff regime and decide the tariff principles. The provisions related to power theft, collusion of employees are also strong and should help check the menace.