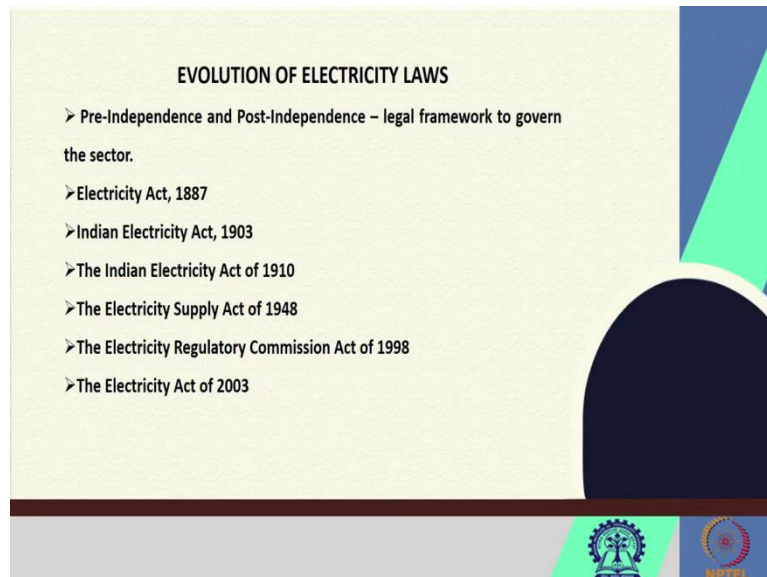


**Introduction to Law on Electricity**  
**Professor Uday Shankar**  
**Rajiv Gandhi School of Intellectual Property**  
**Indian Institute of Technology Kharagpur**  
**Lecture 2**  
**Evolution of Laws on Electricity Salient Features of Electricity Act, 2003**

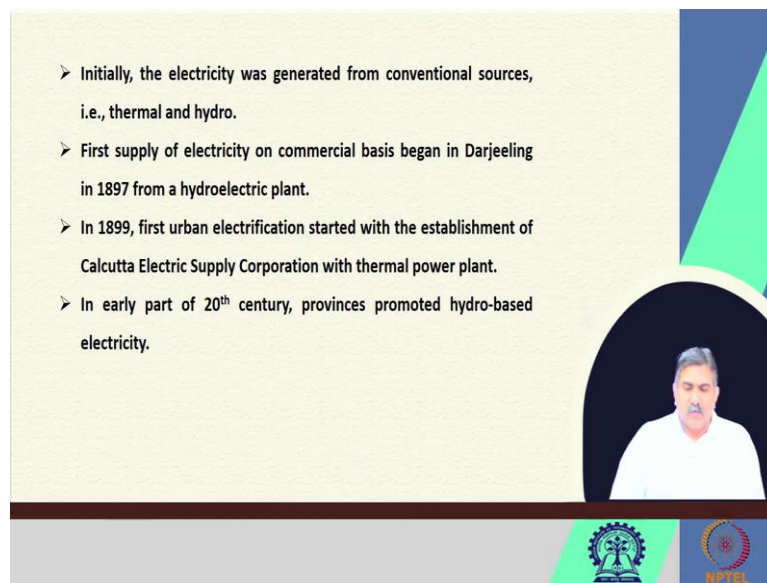
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Welcome to lecture 2 of module 1, which is an introduction aspect of this course. Now, today we will be discussing the evolution of electricity laws in this country and in the evolution, we will try to understand how the legislative growth has taken place in India right from the beginning. And then, we will discuss the salient features of the 2003 Act and then from there onwards. We will move to the main discussion of this course, where we will have a discussion. We will try to understand that what are the major provisions of the 2003 Act and how the 2003 Act governs the power sector.

Now, for the study, we have divided the legislative framework into two parts. One is the development which was there in the pre-independence era. And the second one is the post-independence era. If you look at the pre-independence era, there were three legislations Electricity Act of 1887, then there was an Act in the year 1903, and then we got an Act in 1910. And then when you look at the legislations, which were brought into existence after independence, we have a 1948 Act, which deals with electricity supply, then the 1998 Act, which was of Regulatory Commission, and then we have the Electricity Act of 2003, which is the present law and this law has subsumed all other earlier laws.

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- Initially, the electricity was generated from conventional sources, i.e., thermal and hydro.
- First supply of electricity on commercial basis began in Darjeeling in 1897 from a hydroelectric plant.
- In 1899, first urban electrification started with the establishment of Calcutta Electric Supply Corporation with thermal power plant.
- In early part of 20<sup>th</sup> century, provinces promoted hydro-based electricity.

Now, when you look at the whole development of the power sector in this country, you would find that initially, the generation of electricity was primarily dependent upon conventional sources and, to be very precise, hydro and thermal. Now the first supply of electricity on a commercial basis began in Darjeeling in 1897 from a hydroelectric plant, and then two years later, urban electrification started taking place with the establishment of Calcutta Electric Supply Corporation.

This corporation started generating electricity on the basis of (conventional) coal and thermal sources, and then, in the early part of the 20th century, we have seen that the provinces started promoting hydro-based electricity in this country. So, in the beginning, what was noticed is that, along with the hydro, thermal was also one of the main sources of power generation in this country.

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The slide is titled "Pre-Independence Framework" and contains the following text:

- Electricity Act, 1887  
On the installation of electric lighting at the Crawford Market in Bombay – need was felt to enact a law to provide for the protection of person and property, from injury and risks, attendant to the supply and user of electricity for lighting and other purposes.
- Indian Electricity Act, 1903 (Repealed the 1887 Act)
- First attempt to regulate the sector.
- The law did not recognize bulk sale of electricity and also clear demarcation of jurisdictions between the local government and Government of India were not made.

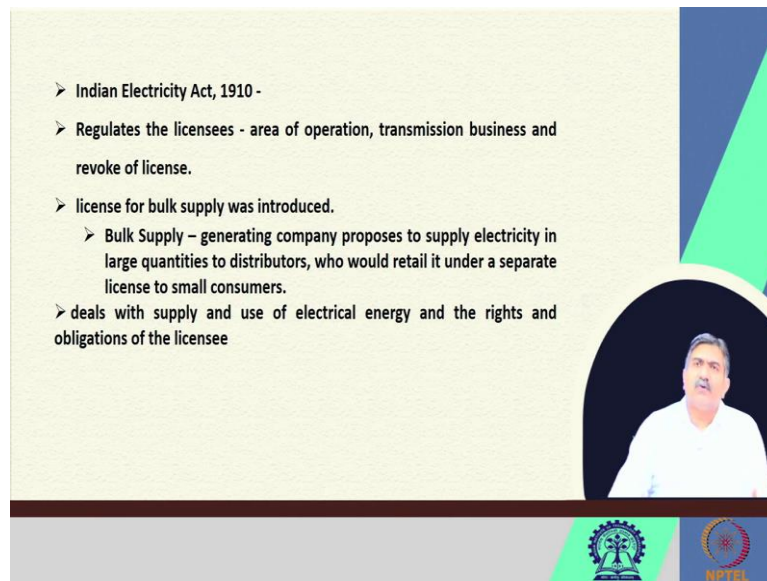
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And then, we found that, in order to deal with the generation of electricity, how it shall be available to common people, and what shall be the framework for governing the operators who are involved in this sector. In 1887, there a law was enacted. This law was enacted primarily to address the issue of safety. Because, on the installation of electric lighting at the Crawford market in Bombay, there was a need felt that we must have legal protection from any kind of injury or risk arising from electric connection and electric sources. And therefore, a law was enacted to protect a person or property.

And moving further from there, there was 1903 Act was enacted because then the commercial use of electricity started taking place, and therefore, a need was felt to regulate the sector in a much better way. And thus, the 1903 Act, which repealed the 1887 Act started acknowledging the presence of the generating units and then, in a very rubric way, it started regulating the sector.

But at the same time, the 1903 Act did not recognize the bulk sale of electricity. So, that way, commercialization was not yet either considered to be a fit subject to be dealt under the law. And also, along with that, there was an issue with the jurisdictional conflict between the local government and the Government of India that who shall have what kind of jurisdictional power on the governance of this sector.

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➤ Indian Electricity Act, 1910 -

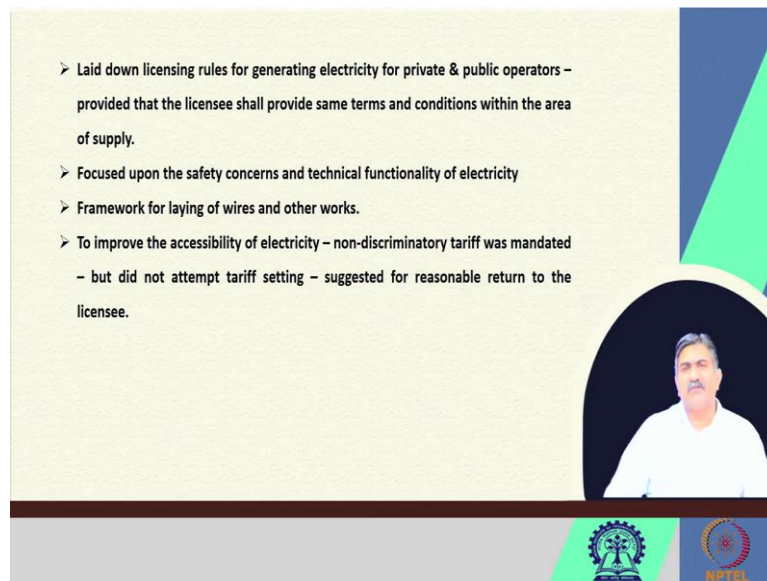
- Regulates the licensees - area of operation, transmission business and revoke of license.
- license for bulk supply was introduced.
  - Bulk Supply – generating company proposes to supply electricity in large quantities to distributors, who would retail it under a separate license to small consumers.
- deals with supply and use of electrical energy and the rights and obligations of the licensee

The slide features a video inset of a man in a white shirt speaking. At the bottom, there are logos for the Indian Institute of Technology (IIT) and NPTEL.

And then, in order to address this issue, in 1910, a new law was enacted, obviously, repealing the 1903 Act. And this law can very well be said to be the first law which attempted to regulate the players of the sector, particularly, what shall be the way to give the license, what shall be the area of operation, what shall be the norms of transmission business. And if the licensee breaches the terms and conditions of the law set or at any point of time goes against the public interest, The power was given to the government to revoke the license. So, the 1910 law introduced a license for bulk supply of electricity that is about generation company producing electricity to supply in large quantities and giving it to the licensees; that licensees can sell it in the retail market under a separate license to the retail consumers.

So, the 1910 Act formally gave the legal framework to standardize the licensing process and provide for the licensee's rights and obligations. Because prior to that, as I said, that commercialization was not envisioned or intended and therefore, the attempt was to deal with the issues in a very piecemeal manner. But one for 1910 Act, it dealt with the supply and use of electrical energy in a comprehensive manner, whereby necessary legal mechanism was developed that who shall be allowed to be a licensee.

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- Laid down licensing rules for generating electricity for private & public operators – provided that the licensee shall provide same terms and conditions within the area of supply.
- Focused upon the safety concerns and technical functionality of electricity
- Framework for laying of wires and other works.
- To improve the accessibility of electricity – non-discriminatory tariff was mandated – but did not attempt tariff setting – suggested for reasonable return to the licensee.

And in this regard, you find that the 1910 Act acknowledges the participation of both private and public operators. In fact, it was more of a private participation which initiated the very need of having a legal framework to deal with the sector. And it was categorically laid down under the 1910 Act, that the licensee shall provide the same terms and conditions within the area of supply; they cannot have a discriminatory policy. And in fact, it has also been provided that if other licensee attempts to enter the market and start supplying electricity where already license has been given to other operators then that licensee has to give a defined sum to the licensee who has been authorized to supply the electricity in that area.

So, in a way, the law has made an attempt to see that the licensee should not incur loss because of the change of the electricity supplier. And as I said, commercialization of the electricity generation and distribution of electricity started taking place, and therefore, this law was enacted.

Obviously, the law also addresses the issues of safety and technical functionality involved in the operation of the sector. And we certainly involve that, how there shall be laying of wires and the related works, and what shall be the mechanism to obtain permission from the competent authorities so that there shall not be any undue obstruction in supplying of electricity to the end consumer.

And this Act attempted to improve the accessibility of electricity. And one way of doing so was to provide for a nondiscriminatory tariff where it was suggested that the licensee should expect a reasonable return on the investment. But at the same time, it should not be leading to

a sort of undue demand from the consumer. Though the law did not attempt for any tariff setting, but then certainly provided a sort of a statutory mandate to avoid discriminatory tariff practices between the end consumers.

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**Post-Independence Framework**

- The Electricity (Supply) Act, 1948
- Earlier scheme of the supply and use of electricity in a specified area (Cantonment Board or limits of Municipality) was obsolete.
- Need felt that the benefits of electricity to be extended to semi-urban and rural areas – in efficient and coordinated manner
- Legislative design was needed to link together under one control electrical development – by establishing 'Grid System'

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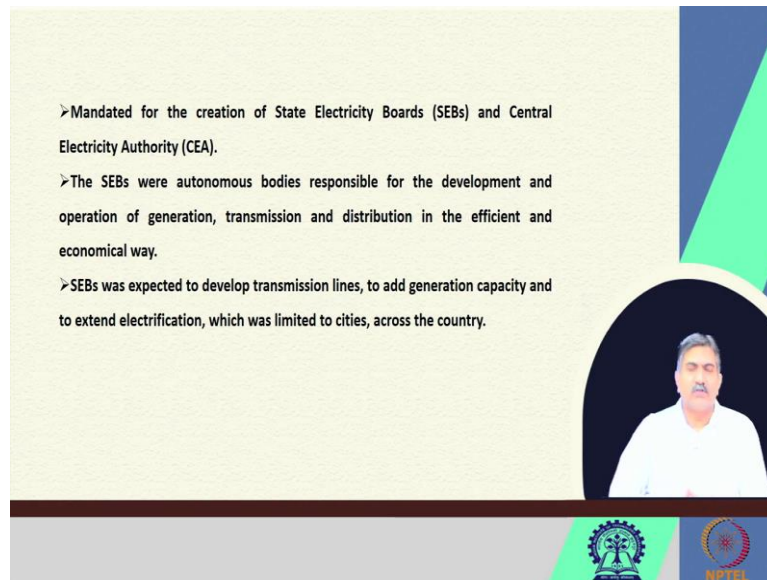
This 1910 Act, which primarily deals with the licensing aspect of the electricity sector, was seen not as a full-proof law to expand the reach of electricity to different parts of the country. And also, after India got the independence, there was a need felt to expedite economic growth. For economic growth there was requirement of electricity, there was need of drawing a balance between the resource-rich states and the resource-starved states. And thus right after getting the independence, a law was enacted in the 1948 whereby the earlier scheme of supply and use of electricity in a limited area was considered to be of archaic nature. And then, it was suggested that, let the government get involved in expanding the supply and use of electricity.

So, what was earlier within the limit of cantonment area, within the limit of municipality under the 1910 Act, was done away with under the 1948 Act. So, Electricity Supply Act of 1948 was brought into existence with multiple aims in mind. And one, as I said, to widen the reach of electricity, so that benefit of this important commodity made available to rural and semi-urban areas and that too in a well-coordinated manner by ensuring the efficiency in the sector.

Now, in order to expand the availability of electricity in every region, there was a need felt to have a coordinated development of the sector. And thus, the 1948 Act brought into the

scheme of the grid system, where one generating unit committed to supply electricity to not only nearby areas but far flung areas also, including in the neighboring states.

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- Mandated for the creation of State Electricity Boards (SEBs) and Central Electricity Authority (CEA).
- The SEBs were autonomous bodies responsible for the development and operation of generation, transmission and distribution in the efficient and economical way.
- SEBs was expected to develop transmission lines, to add generation capacity and to extend electrification, which was limited to cities, across the country.

And that is what was attempted to be done through the 1948 Act. Note the most prominent reform which has been done through the 1948 Act was the establishment of two important institutions. One at the State level and the other at the Central level. And as I said in the last lecture, electricity falls in the Concurrent List; therefore, both the State and the Center enjoy jurisdiction over the subject. And Electricity Supply Act is a central legislation which was enacted with an aim to have a very coherent, coordinated development and growth of the electric sector throughout the country.

So, in order to provide necessary impetus to the sector, it was realized that, along with enhancing the generating capacity, there is a dire need to bring in necessary infrastructural improvement in the transmission as well as distribution sector. And to fulfill this goal, State Electricity Board was created in every state. The law provided that every state shall have this state electricity board.

The law also said that if any state decides to not to create the board, it can very well authorize the board of the neighboring state to carry out the function under the law. So, the board was established as an autonomous body which was given the responsibility to develop and operate all the three segments of the sector generation, transmission and distribution. And obviously, it was suggested that the board needs to ensure that it has been done in a very efficient and economical way.

And the board was also given the task of providing electricity across the region, not only limited to the cities which were a feature during colonial rule. And this is important for us to understand why this very objective of taking the supply of electricity to semi-urban and rural areas relates to the very argument I was making in the last class on right-based understanding of access to electricity.

There it was rightly thought that it is not only about the paying capacity and the responsibility to provide infrastructure in limited geographical boundary. Electricity is one commodity which must be seen not only from a commercial perspective but also to be seen from the public perspective, where the public element is also involved; it is not only about commerce.

Obviously, this may be a point of debate and deliberation that how to balance these two. Because, at the end of the day, generation involves cost. It is a cost-intensive industry. So, how do we balance that interest, interest of recovering the cost and also getting minimum profit on the one hand and serving the public interest on the other hand? Obviously, we will be discussing all this as the course progresses.

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The slide features a light green background with a dark blue and green geometric design on the right side. It contains four bullet points detailing the role of the Central Electricity Authority (CEA) and the development of the electricity sector in India. A circular video feed in the bottom right corner shows a man with a mustache, wearing a white shirt, speaking. At the bottom of the slide, there are two logos: the Indian National Emblem on the left and the NPTEL logo on the right.

- >CEA was to develop national plans and formulate national power policy, to report the progress of the electricity supply industry and to provide technical assistance – to train as arbitrator between State or Board or licensees – role was advisory rather than executive.
- >The Industrial Policy Resolution, 1956 reserved the generation and distribution of electricity almost exclusively for the states.
- >1976 Amendment enabled central and state governments to set up generating companies - the sector essentially developed through various public sector utilities – majority of the utilities were under the state governments.
- >SEBs was managing the service by one large – vertical integrated entity – encompassing generation, transmission and distribution services.

Now along with State Electricity Boards, which was asked to be there in every State with a responsibility to develop the sector. The law also provided for the establishment of Central Electricity Authority, and what was the responsibility of this authority? To develop a national plan, formulate a national power policy, monitor the industry's growth, and report it to the legislature.



Why report it to the legislature? Because of the very fact that the representative of the people must seek accountability from the executive, that how the mandate of the law is being carried out. And that is why we find that in many laws, we do have these kinds of provisions where regulatory bodies are required to prepare a report and place it on the floor of the house.

The electricity authority was also interested in the responsibility to provide technical details. Because with the improvement in the technology, there was a need to upgrade the utilities, and at the same time, necessary safeguards are to be adopted to ensure the safety of the people. And that is why this body has been asked to provide the necessary technical assistance.

Along with that, it was also expected that the authority would be trained as an arbitrator when the dispute arises between the state or the board or the licensees. But then, as the law has suggested, it was supposed to be an advisory body. Now 1948, when this Act was enacted, it was very much kept in mind how we could augment the generating capacities and improve the other segments of the power sector to ensure a quality electricity supply.

And furthering the same, in 1956, there was a policy, industrial policy adopted by the government, wherein it was stated that the generation and distribution of electricity should almost be exclusive interest for the States. So, you can very well find it out at this stage that we do have a positioning where the monopoly of the State was introduced without disturbing those private entities, which are already involved in this sector.

This was very much in line of the global practice at that point of time because it was generally thought that electricity was once a sector where it should largely be under the control of the government. Now, as the time progressed, there was an assessment done on the functioning of the electricity boards and on the basis of that, it was found that the electricity boards are not in a position to meet the demand of the market.

And thus, an amendment was introduced in the year 1976, whereby Central Government and State Governments were being authorized to set up generating companies. And in fact, the state-owned generating companies were constituting the majority of the stake in the sector.

So, what has happened is that, electricity boards, they emerged as a vertically integrated entity. Whereby all the three segments of the sector generation, transmission and distribution fall under the sole responsibility of the electricity board. So, the electricity board became all powerful.

All powerful in terms of controlling this sector and also in deciding the availability and accessibility to different regions. Now this very control of SEB did not improve the performance of the sector. In fact, it became a liability, it became a liability because of poor financial condition, because of mismanagement, and other allied factors, because during that time, the country started experimenting with the green revolution, and there was demand of supply of electricity in rural areas for irrigation purposes.

And in order to meet that need, the government decided to charge a flat rate from the farmers. And we certainly made a dent on the revenue generation capacity of the board. Thank you very much for attending the session.