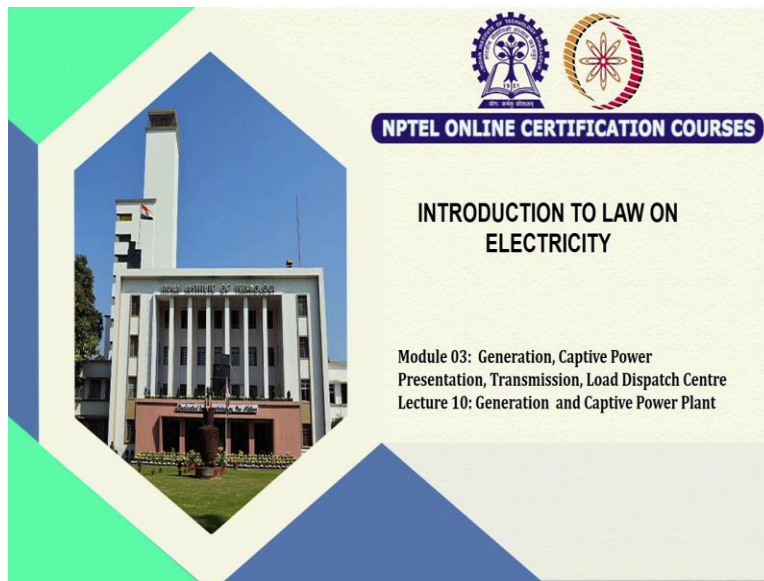


**Introduction to Law on Electricity**  
**Professor Uday Shankar**  
**Rajiv Gandhi School of Intellectual Property Law**  
**Indian Institute of Technology Kharagpur**  
**Lecture: 10**  
**Generation and Captive Power Plant (contd)**

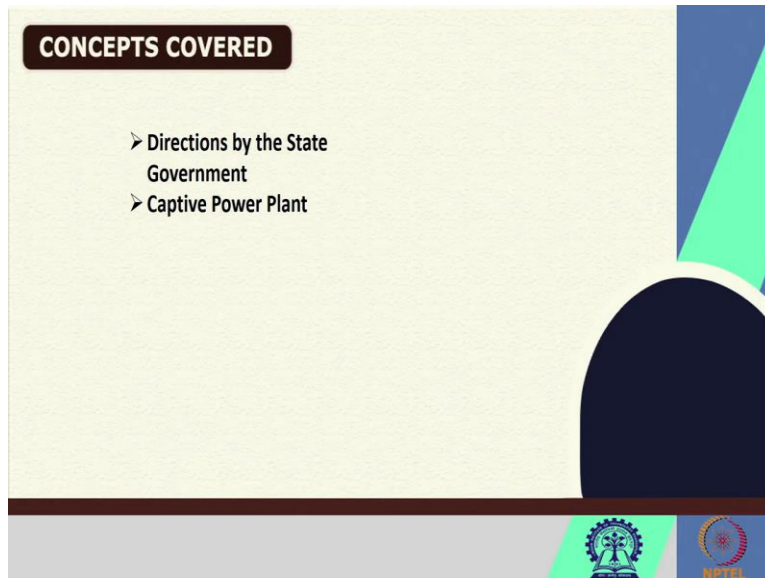
Now, welcome again to Lecture 10.

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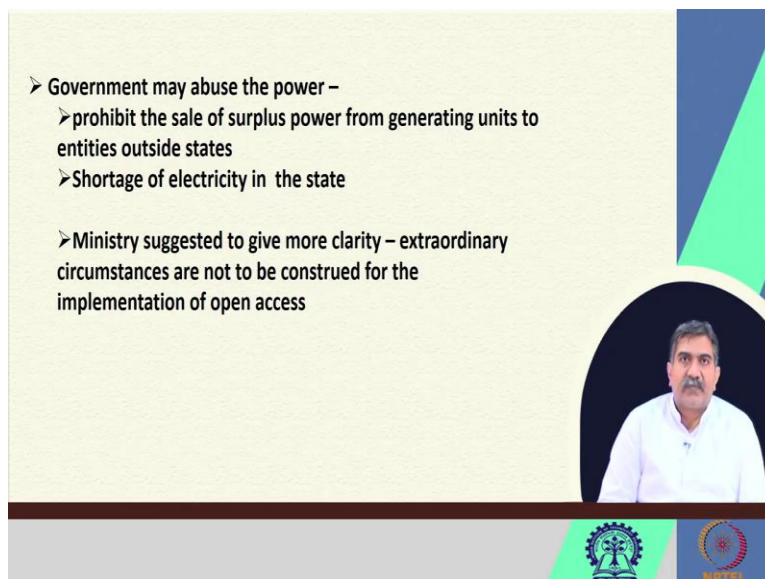
This is on again, we will continue on discussion on the topic of generation, and then we will also touch upon the issue of captive power plant.

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This is what is the concept we will be covering. In the last session, we have discussed about the significance of Section 11, which is there under the Act, and how the very provision has been used, and what are the implication of that provision that's what we will be again discussing in this session. And along with that, we will also touch upon the captive power plant; that what it is all about.

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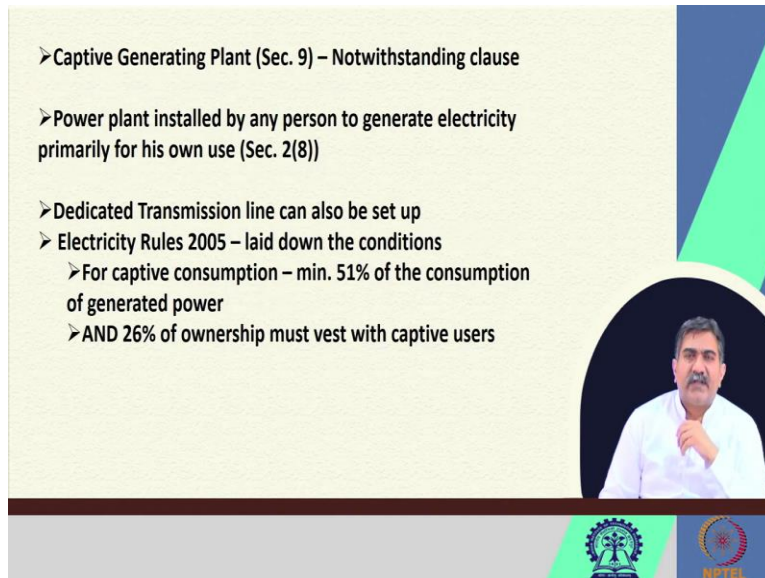
Now, continuing from where we have ended in Lecture 9, where it has been asked, where it has been authorized that the state shall give necessary direction to the generating companies in extraordinary circumstances. And it has been experienced that state governments have been giving the necessary directions, and allegedly those directions are not truly in the spirit of Section 11.

Those directions are either to ensure the availability of supply of electricity within the state in normal situations or to minimize the outage of power, which otherwise is the responsibility of distribution licensee to ensure. And this is something which has become a matter of concern, and on this premise, it has been suggested that let there be more clarity on the situation in which state government shall be allowed to pass on the direction.

And therefore, the ministry has suggested to amend the explanation attached to Section 11 and said that extraordinary circumstances are not to be construed for the implementation of open access. So, this is what was the suggestion, but it has not been implemented.

The matter has been reaching to the tribunal or the court that how the fixation of rate shall be determined, whether the situation demands invocation of Section 11 or not. And generally, it has been said that the state needs to be extra careful, and the state needs to be cautious in invoking Section 11. Otherwise, the very purpose of bringing the change through the 2003 Act will be defeated.

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➤ Captive Generating Plant (Sec. 9) – Notwithstanding clause

➤ Power plant installed by any person to generate electricity primarily for his own use (Sec. 2(8))

➤ Dedicated Transmission line can also be set up

➤ Electricity Rules 2005 – laid down the conditions

- For captive consumption – min. 51% of the consumption of generated power
- AND 26% of ownership must vest with captive users

The slide features a video inset of a man in a white shirt speaking, and logos for IIT Bombay and NPTEL at the bottom.

Now, moving further, let me give you the overview of captive power plant, which is provided under Section 9. Captive power plant is suggested as a reliable source for supply of electricity to those industries which are power intensive in nature. For example, steel industries, fertilizer industries.

It has been suggested that let those industries establish their own power plant for use. There are benefits attached to captive power plant. One significant benefit could be the cost because land need not be acquired, necessary infrastructure may be there in the related industry, and that can be used.

So, captive power plant could be based on different fuels, be it coal, diesel, hydro, solar, or wind, and it can be used for reliable supply of electricity. And perhaps because of this reason only, you find that the language of Section 9 starts with the notwithstanding clause, notwithstanding anything given in this Act.

As a law student, we read the significance of this expression that regardless of whatever has been provided that would not be applicable, that would be overlooked for giving effect to this provision. And Section 2 Subsection 8 of the Act defines that for the purpose of this Act, what shall be the meaning of captive generating plant.

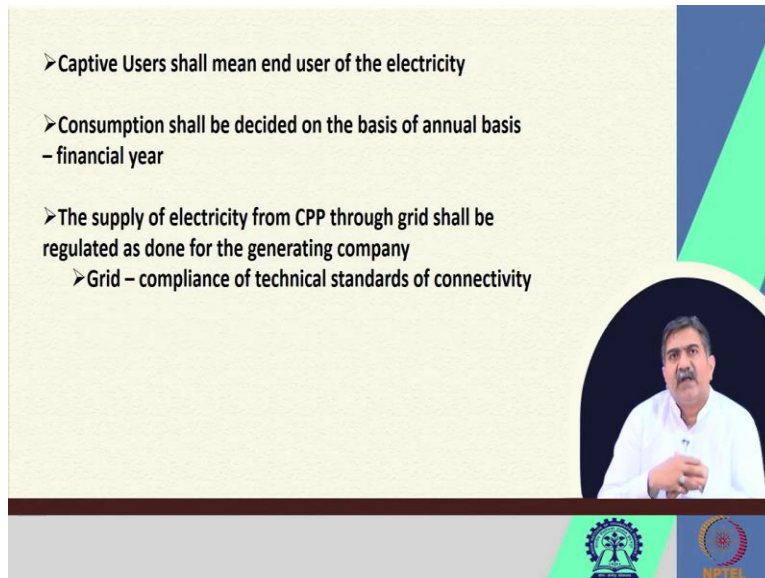
It says that these are the plants which are being installed, which are being established for the purpose of generating electricity primarily for one's own use. So, what is to be underlined is one's own use. That is what is the significant one. That is what it says. If it has been not for one's own use then it will be considered as generating company for all purposes. That is what clearly given in the law.

And Section 9 further says that the generating company, captive generating company can have its own dedicated transmission line to transport the electricity from the point of generation to the point of use. We will be discussing about dedicated transmission line in the next session. But then here, at this stage, it is important to understand that the how the law is facilitating it, facilitating the growth of captive power plant.

In order to operationalize captive power plant, rules were being made in 2005. And under that rule, two conditions were being laid down. One with regard to consumption, and the other with regard to ownership. So, for captive generating plant to be getting the benefit of the law, it is needed that the captive users consume minimum 51 percent of the generated power.

So primarily for one's own use is being quantified in the rule by saying that 51 percent is to be consumed. And second is on the ownership. It says that there shall be 26 percent of ownership. Ownership here would be meaning propriety right, voting right, and equity share. And that shall be there with the captive users.

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➤ Captive Users shall mean end user of the electricity

➤ Consumption shall be decided on the basis of annual basis  
– financial year

➤ The supply of electricity from CPP through grid shall be regulated as done for the generating company

➤ Grid – compliance of technical standards of connectivity

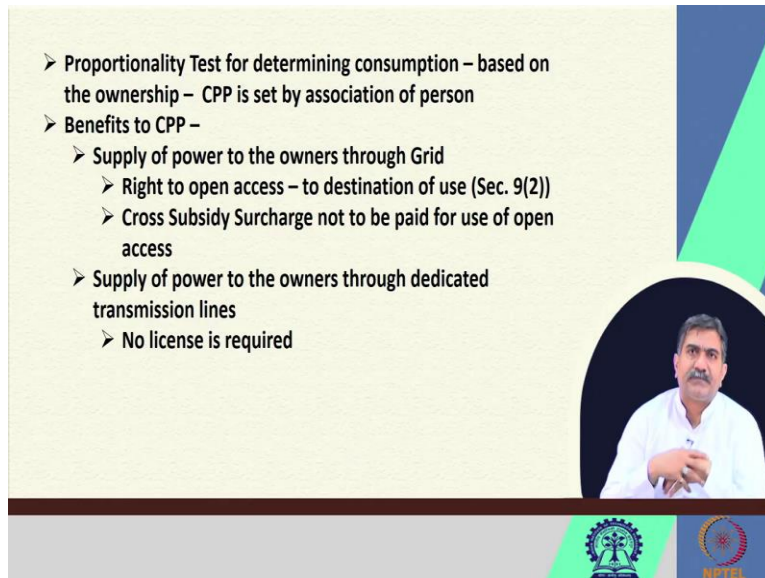
The slide features a light green background with a dark blue and light green geometric design on the right side. A circular inset in the bottom right corner shows a man with a mustache, wearing a white shirt, speaking. At the bottom of the slide, there are two logos: the Indian Institute of Technology (IIT) logo on the left and the NPTEL logo on the right.

Captive power plant can be established by an individual, by the association of persons, by cooperative society, or it can be also as special purpose vehicle. That is what is given in the rules, particularly Rule 3 of 2005 rules, rule number 3. Now, captive user would be meaning the end user. Why is this important to understand? That it is not for further sale.

The one who has established the captive power plant must use it for one's own purpose. And as I said that two requirements are there, one is consumption, and the other is ownership. On the consumption, it says that the evaluation shall be done on the basis of annual consumption. And in that timeline, at any point of time captive user fails to use the statutory requirement of 51 percent, it loses the privilege given to the plant under Section 9. And for all purposes, it would be considered as a generating company.

Now as I said, one way is through a dedicated transmission line that captive power plant can transport the electricity, and convey it through its dedicated transmission line. The other way is also through the grid. If the supply of electricity is happening through the grid then it is expected that all the technical standards which are being needed for the connectivity is been met. That is what is mandatory under the law.

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The slide contains a bulleted list of points regarding captive power plants (CPP) and their benefits. A video inset in the bottom right corner shows a man in a white shirt speaking. The slide also features logos for IIT Bombay and NPTEL at the bottom.

- Proportionality Test for determining consumption – based on the ownership – CPP is set by association of person
- Benefits to CPP –
  - Supply of power to the owners through Grid
    - Right to open access – to destination of use (Sec. 9(2))
    - Cross Subsidy Surcharge not to be paid for use of open access
  - Supply of power to the owners through dedicated transmission lines
    - No license is required

Now, when the captive power plant is being established by association of person, then how do we determine whether it is complying with that 51 percent requirement or not. In that scenario, it has been suggested that let the proportionality test be a determining factor. That in whatever percentage, they have the ownership, whether they are using in that proportion or not, and with a variation of 10 percent. That is what is the rule with regard to consumption.

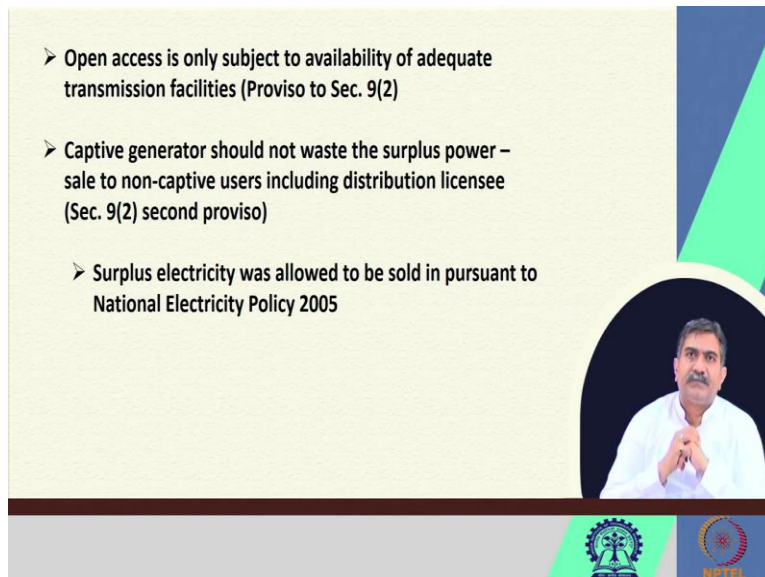
And the benefits of captive power plant, when the captive user is getting the electricity for one's own use through the grid, then it will have a right to open access. That privilege has been given under Section 9 Subsection 2, that to the destination of use grid can be used. And in such scenario, cross subsidy surcharge is not to be borne by the captive user. Now, why it is not to be borne, and what is cross subsidy surcharge?

It is all about when the distribution licensee is supplying electricity to the end user. And that end user comes up with the captive power plant then in such situation distribution licensee is losing the business. And in order to compensate that it has been suggested that there shall be a cross-subsidy surcharge, which is applicable in normal situation.

Now in order to give this privilege, this benefit to captive power plant, it has been suggested that they need not pay and the captive user need not pay cross subsidy

surcharge. And it also suggests that if they are using their own dedicated transmission line, which I said that they are very well authorized to do so, they need not take any license. If you can recall, I said that except generation all other activities under the Electricity Act, they are licensed activities. But then for supply of power to the captive users through dedicated transmission line would not require a license. License is not required. That is what is the clear mandate given in the law.

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- Open access is only subject to availability of adequate transmission facilities (Proviso to Sec. 9(2))
- Captive generator should not waste the surplus power – sale to non-captive users including distribution licensee (Sec. 9(2) second proviso)
- Surplus electricity was allowed to be sold in pursuant to National Electricity Policy 2005

Now, open access, it says to be given only when there is availability of adequate transmission facilities. That is what it says. Whether the capacity is there or not of the transmission facilities, they can bear the extra load which is coming from that captive power plant. That is to be assessed by the appropriate commission, and accordingly, it can be given.

You may very well visualize a situation that regulatory commission plays a kind of small spot by not assessing the situation in a very objective manner. Though highly unlikely, but then a situation one may consider for understanding the role of captive power plant on the one hand and, on the other hand, the power interested to the Regulatory Commission.



Now, the law also suggests that if captive power plant is generating more than what is the requirement. If there is a surplus of power, then what shall happen to that surplus of power? It suggests that let that surplus of power be sold to the licensee or to the consumer. That is what is possible. Because anyway otherwise, it will go waste. And thus in pursuant to the National Electricity Policy 2005, it has been suggested very categorically that surplus electricity is to be sold.

In this process, the captive power plant would also be performing as per the capacity and would not artificially lower down the generating ability because it has a market where it can sell the electricity. So that is what the benefit is. One is getting the electricity for one's own use, for making the system more reliable, not depending upon the licensee, and also possibility of getting that electricity in more economic way. That is also possible.

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- Sale surplus power to third parties
  - To be treated at par with generating company
  - Surcharge and additional surcharge payable
  - Open access subject to availability and applicable regulation
  
- Sale of surplus electricity to third parties through dedicated transmission lines – does it require to obtain distribution license?

So, sale of surplus power is possible to third parties. Once the captive power plant steps into that shoe, once it decides to enter into that zone where it would like to sell the surplus, then it is to be treated as generating unit. And if it is to be treated as generating unit then they need to pay surcharge or additional surcharge, which is to be again determined by the appropriate commission and, as I said, also for open access.

That open access, appropriate commission shall be determining that whether the infrastructural presence is there for that purpose or not. Now, the question here one can ask is that once the captive power plant decides to sell the electricity to third parties through dedicated transmission lines, whether it becomes distribution licensee and whether it needs to take license.

Because apparently, the law does not provide so. but at the same time, law certainly facilitates the captive power plant to sell the electricity if that plant has a surplus. So, this is what, we will be continuing in the next class. Thank you very much.