Introduction to Law on Electricity
Professor Uday Shankar
Rajiv Gandhi School of Intellectual Property Law
Indian Institute of Technology Kharagpur
Lecture: 09
Generation and Captive Power Plant

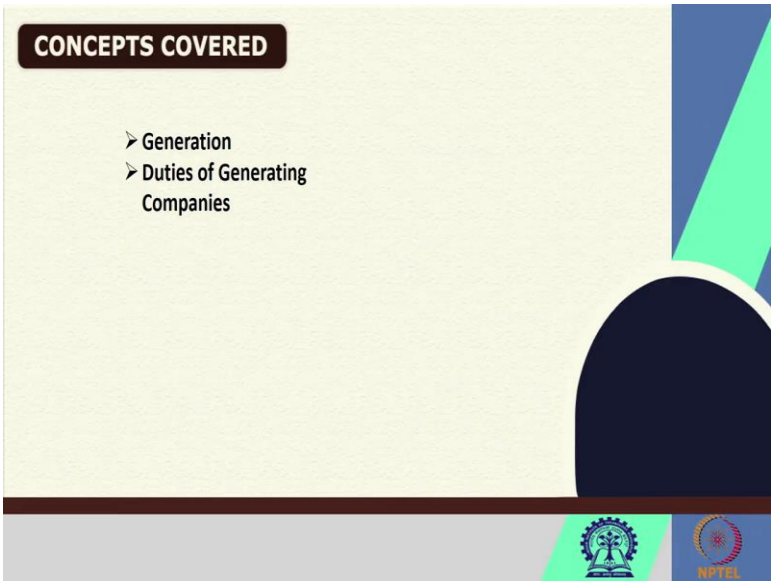
Welcome to all the learners.

(Refer Slide Time 00:24)

Now, we will start module 3, wherein we will be discussing on the law relating to the distribution, what are the duties which have been assigned to the generating companies. And then, we will also touch upon the issues of captive power plant, what are the provisions given under the law, and the rights and obligations which are assigned to the captive power plant under the Electricity Act of 2003.

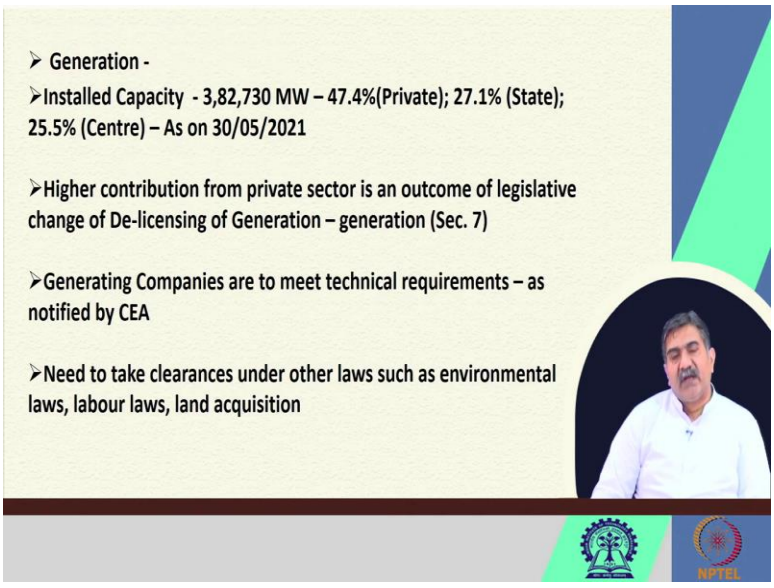
And in this module, we will also be studying about transmission and the load dispatch center. So, these are the areas which will be covering in this module. And in this module, we will try to give you a kind of overview that where the law stands on the very important subject area under the electricity sector.

(Refer Slide Time 01:20)



So, moving further, let me take you to the provisions related to generation and what are the duties of generating companies, and then obviously, we will be taking up the other subjects.

(Refer Slide Time 01:29)



Now, when I look at the very installed capacity in this country and if I draw your attention to the statistics, you find that 3,82,730 megawatt of the installed capacity is there as on 30th May 2021. And in this installed capacity, the larger share belongs to the

private players, that is almost 47.4 percent, and then followed by the share of the state government, and then the central government 27.1 and 25.5 respectively.

Now this is important to note here that the liberalization policy and consequent there upon the private players entering in the generation segment resulted into these players contributing higher than the state-owned generating companies. So, certainly, the statistics which were prevailing pre-regularization era, prior to 1991, has got reversed in the post-1991 scenario.

So, in a way, we can build the argument that the policy of the government to attract the private investment in the generation segment appears to be a successful. And this is the result of the experiment done prior to the enactment of the 2003 Act. And that is why one may say that the 2003 Act given an approval of the policy change brought in by the government by de-licensing the generation segment in this country, and that is what Section 7 of the Act provides for.

It truly demolishes the license raj, which has its own adverse effect on regressive economic growth. It is well known that how red-tapism creates a bottleneck for accelerating the growth. And thus, the approval, the legitimation process provided under Section 7 opens up the window for the private players that come and please invest in India in the generation segment.

Having said so that, there is a de-licensing of generation under the Electricity Act of 2003; it is important to learn that as far as obtaining the clearances in terms of technical standards is still there. You can very well appreciate that for setting up the generating companies complicated technical requirements are there.

Why complicated? Because it involves set of activities which ultimately results into the production of the generation of electricity. So, what shall be the standards of equipment to be used, to what extent the investors shall be allowed to install the generating capacity. Because obviously, it has the connection with the infrastructural ability of the transmission. So, all these technical details are to be supplied to the appropriate commission.

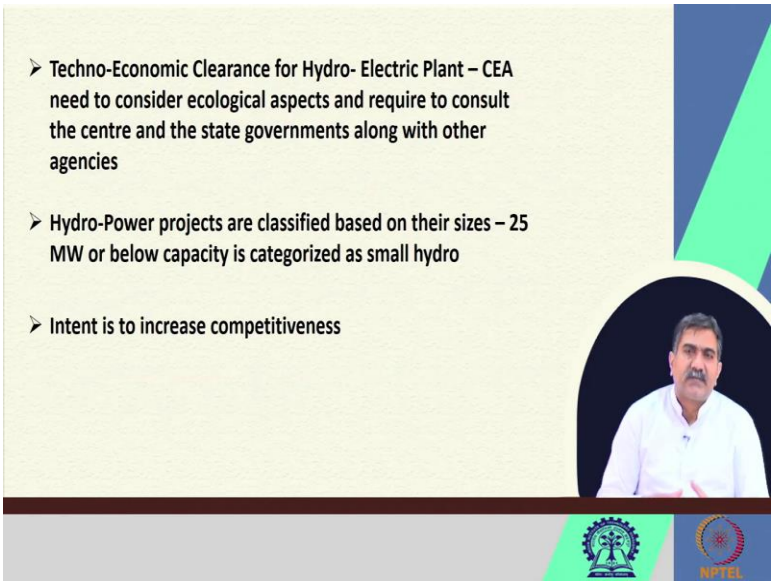
And then, the appropriate commission will look into it that whether the generating company, whatever the document submitted, met with the technical standards provided by the Central Electricity Authority. And let me refresh your memory here that Central Electricity Authority as an institution has a history prior to the 2003 Act. It came into existence under the 1948 Act.

So, the authority has been instructed, the authority has been advised to lay down the details of technical requirements to be followed by the generating companies. And therefore, these companies are required to meet those standards. Now besides this, it is also important for us to acknowledge and accept that for setting up the generating plant, it is not only the approval of the appropriate commission, it is not only the submission of the document, and then subsequent approval alone is sufficient.

It is important to take clearances from different agencies under a range of legislative provisions. For example, they need to take the necessary permission from the Pollution Control Board because we know very well that if it is a thermal-based power plant, it will generate pollution and add to the pollution level, and therefore necessary permission is to be obtained.

Necessary permission is to be also obtained from the concerned ministry in relation to manpower; if it wants to engage contract labor then the permission is to be taken from the appropriate authority for engaging contract labour. And obviously, if it is a large power project, then the necessary process to acquire land and they need to follow the mandate of the Land Acquisition Act. So, this is what we generally find is the requirement.

(Refer Slide Time 10:36)



Now, de-licensing in setting up the generation plan is provided only for thermal or gas based units or even the other related fuel. But then, when it comes to setting up a hydro plant, if hydro-electric plant is to be set up then there is a need to obtain technical and economic clearance from the Central Electricity Authority.

And Central Electricity Authority needs to consult the central government, they need to consult the state government, and also different agencies. Different agencies here would be, for example, the agencies working on the implementation of Environmental Laws.

And the reasons are very obvious, because large hydro-electric plan would probably cause adverse impact on the environment. It will be affecting the drinking water in that locality; it may affect the irrigation pattern, the supply of water needed for agricultural purposes. It may affect biodiversity.

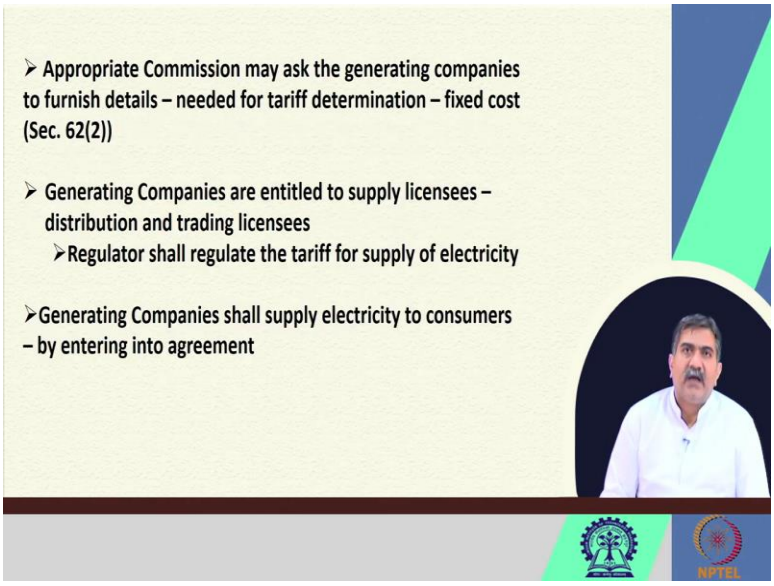
And therefore, hydro-electric plant has been categorized separately, and it has been rightly provided that they need to obtain Techno-Economic Clearance from the authority. So, this is what has been given under the law under Section 8 that when it comes to hydro plant; a separate process has been designed from what has been envisaged, what has been provided for thermal or gas based electric plant.

Now even in hydro, there are different categorization which has been done, and a small hydro has generally been considered as a project under renewable source. And the categorization which prevails in India that hydro based electricity plant if it has a capacity of less than 25 megawatt, then it will be a small hydro project.

Now this very provision is related to de-licensing, very provision to abolish the red-tapism, very policy to expedite the clearances for setting up the generating plants is all targeting towards encouraging the competition in the market. And which in a way, is aiming at furthering the consumer interest by setting up a competitive tariff. So, looking at the installed capacity, it appears that there is a success because the private players are now contributing higher than the state-owned utilities.

Now obviously, whether this situation is truly bringing the benefit to the consumer or not is something to be looked at. And there, where, the role of the distribution utility plays a significant role. Significant intervention is needed in order to realize the maximum benefit of the involvement of the private sector.

(Refer Slide Time 16:45)



Now, when you build this narrative that generating units are to be allowed to set up the power plant without obtaining any license, that does not mean that no regulatory requirements are being let down there. And that is why you find that under Section 62,

which is a provision on determination of tariff, these generating units, they need to submit the details.

And such details are being used by the appropriate commission in finalizing the tariff. If you can recall, in one of the lectures, I have said that for tariff fixation, the fixed cost and the fuel cost play role. And fixed cost is to be determined on the basis of the details submitted by the generating units to the appropriate commission.

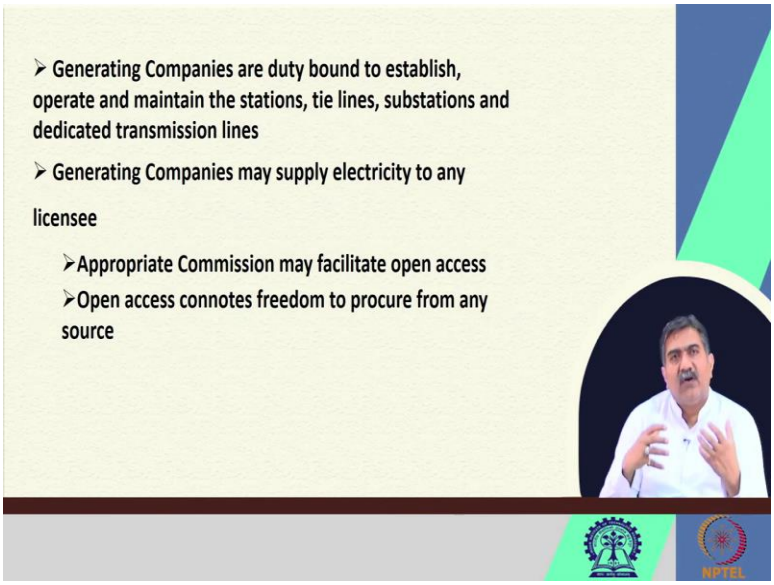
And because of the very introduction of multi-buyer model, now in multi-buyer model, the buyer can identify the seller, the seller can identify that from whom it wants to buy the electricity. Now in this process, you would find that the generating company can very well supply electricity to licensees or it can supply it to consumer as well.

So, this is a very remarkable departure from the law which was prevailing prior to 2003, where there was a single buyer model that generating units, they will be reaching to the end consumer only through the route of licensing.

Now under the 2003 Act, the market has been liberalized, and the supply can be there to licensees, and who are licensees under the Act. We will be discussing it in coming sessions. Because apart from generation, all other activities are being licensed under the Act, be it trading, transmission, or distribution, and we will be studying about it in detail.

So, generating companies are entitled to supply electricity to licensees, and it will be regulated by the appropriate commission, regulation in terms of the tariff, that what shall be the tariff those licensees need to pay. And it can also supply electricity to consumers, and there it will be based on the agreement, which we also call as Power Purchase Agreement. So, this is the benefit which is being promised under the 2003 Act to the generating companies.

(Refer Slide Time 21:02)



Now, when you look at the duty which has been given, duties which are there for the generating companies to fulfill, that is spelled out in Section 10 of the Act, where it categorically says that the generating companies, they do have an obligation to operate and to maintain the stations, tie lines, and substations.

Now, to operate and to maintain is an important obligation to ensure that the power plant works with efficiency. Because if there is any deficiency in maintaining the power plant, obviously, it will be detrimental on the very outcome, it will be detrimental on the very output of the power plant. And that is why the law categorically interests the responsibility on the generating companies.

And as I said that the generating companies are entitled to supply electricity to any licensees. Now, when I say any licensee, obviously here, open access becomes very important. And if you can recall, I was telling this while describing the salient features of the 2003 Act, that open access is one good thing which is being promised to this sector because this is a cost intensive sector.

Players, they need to invest, and it is not possible that first there would be an investment and then the true benefit of liberalization of the sector. And therefore, the law has suggested a mechanism. What is the mechanism? That let the installed infrastructure be

used by others by paying the cost of the uses. Obviously, the cost of the uses to be determined by the appropriate commission.

So, open access is all about giving a freedom. So, generating company has a freedom to whom to sell; the distribution licensee has a freedom from where to buy. And for this there is no need to first lay down the infrastructure for supply of electricity from the generating units to the distribution licensee. If the infrastructure is already laid down by others, that can be used, and the mandate of the law is to ensure non-discrimination open access.

There shall not be any discrimination because it is this very point which was causing bottlenecks in the earlier legal regime. Generating unit belonging to the state, transmission utility belonging to the state, and distribution utility belonging to the state; therefore, there was a sort of hand in glove culture prevailing. Now, non-discriminatory open access goes beyond that.

(Refer Slide Time 25:25)

And moving further, you find a very interesting provision because we have learned that the legislative arrangement made under 2003 is to keep the state away from the functioning of, from the governance of electricity sector. But then there is a provision

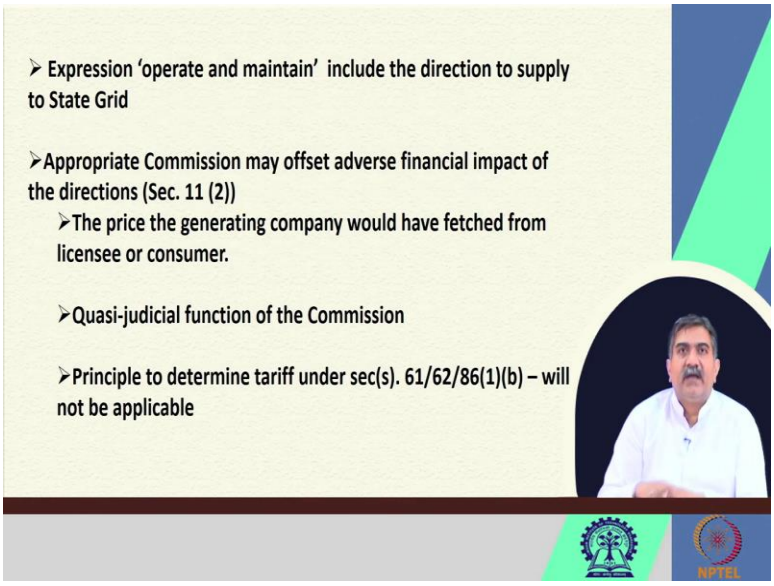
under Section 11 which allows the state government to give necessary direction to the generating companies in the situation of extraordinary circumstances.

So, Section 11 foresees a situation where market may not come forward and bail out the situation, which is the responsibility of the state, and thus the state has been authorized to pass on the instruction to the generating companies. And this can very well be connected also with the debate which I brought it before you on commercial interest versus public interest, that electricity as a commodity need not be seen only as of commercial interest.

The law attempts to explain that what extraordinary circumstances would mean. The law says it, extraordinary circumstances would be when there is a threat to the security of the state when someone is attempting to destabilize the state, when there is an issue of public order, or when there is a natural calamity or such other circumstances arising in the public interest.

Now, 'such other circumstances', in law, we need to interpret it with the help of the legal maxim Ejusdem Generis, meaning thereby that it must be related to the circumstances which are indicated hereinbefore. So, very broad unrelated meaning must not be given. What truly constitutes at public interest in contradiction with the private interest only to be brought in. So, it appears to be giving a very overarching power to the government.

(Refer Slide Time 28:37)



And you find that the state governments invoking power under Section 11 has instructed the generating company to supply the electricity to the state grid, and in contradiction with, or in non-compliance with the agreement what they have with the licensees. So, under Section 11, the state can very well compel the generating companies to not to comply with the agreement to supply electricity to the licensees.

Though the language of Section 11, when you read it, you find that it only talks about operate and maintain. And thus, a question is being raised that whether it would also include supply or whether it would only mean operate and maintain. Operate and maintain in the sense that if the power plant has not been used in its maximized sense, if optimal use has not been used, or is not ensured. Then the state government steps in and says, see, you have this much of installed capacity, why are you not generating up to that.

But then, if you limit the understanding of the law only to that extent, perhaps it would not serve the purpose for which Section 11 has been designed under the law. And because of this reason, it has been categorically indicated that if the direction of the state government causes any financial loss to the generating company, then the appropriate commission shall come up with the formula to compensate that loss to the generating companies.

Obviously, in such a situation, the appropriate commission needs to look at the scenario that what cost the generating companies would have got, had the power been sold in the market or what was the agreed terms with the licensee for selling that electricity. And accordingly, the commission would arrive at the recovery cost formula.

This very functioning of the appropriate commission is suggested to be quasi-judicial, and the significance of quasi-judicial is that let procedural laws alone not be followed. Along with that, there is a need to also comply with, adhere with the principles of natural justice.

Meaning thereby, that generating companies are to be asked that what is the loss incurred. Let them submit before the appropriate commission, that this is the loss which has been incurred and, on that submission, the appropriate commission needs to arrive at the

decision. It should not be only by complying with the procedures, the appropriate commission should be taking a call.

The reason being that the role and responsibility of the appropriate commission under Section 11 is different from what is provided under Section 61 or 62 or 86 of the Act, which primarily relates with tariff determination. Here under Section 11, the appropriate commission is not determining any tariff.

What it is doing is just compensating the loss that generating companies have incurred by following the instruction of the state government. And in this regard, possibly, the state government can also suggest certain rate to be paid to the generating companies. This is what we will be continuing in the next class. Thank you very much.