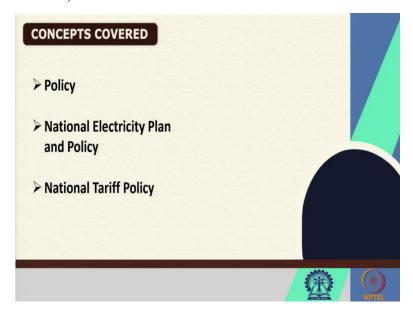
Introduction to Law on Electricity Professor Uday Shankar Indian Institute of Technology Kharagpur Rajiv Gandhi School of Intellectual Property Law Lecture 7

National Electricity Plan and Policy

Welcome to all the learners. In today's session, we will study the significance of the national electricity policy and plan. And along with that, we will also study the salient features of national tariff policy.

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This is what are the concepts we are going to cover today. We will be covering policy, national electricity plan, and policy, national tariff policy and its salient features. We will also critically look into it. In order to understand what has been the thought process of the policymakers to develop the electricity sector.

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Now, there is one unique feature that you find under the Electricity Act, and that is the statutory status to policy and plan. Generally, we read that policy precedes law. So, a policy comes into picture, a policy is being formulated, and then it is followed by law. Now, in this case, what the lawmakers have done, and rightly so, they have entrusted the task of formulating the policy and the plan. And that task goes along with the implementation of the law.

So, you have a law which defines the boundary for the players in the market. Along with that, you also do have the scope of laying down the broader guidelines for the players, and that is what is the significance of the policy. It has generally been said that the underlying feature of policy is the flexibility involved in it.

The opportunities with the policymakers to revisit and re-articulate with the changed circumstances and with ease which is not the case when you discuss about, when you analyse, the law as an instrument to bring in change. Because the law is passed by the parliament, and in order to bring in any change, it has to be placed before the parliament and with the parliamentary process, it needs to be approved. So, that necessary flexibility gives a sort of leeway to policy in comparison to law. What purpose policy serves?

Generally, it is seen that it is a sort of statement of intention that what the government intends to do. Why this becomes significant for infrastructural sector, I would say, so that it would serve as a guideline. It would serve as a long-term vision for the investors. They would understand what is the thought process going on in the government sector.

And that is why it has been said that it is something which reflects on the intention. It is a statement of intention, which is what is important to take note of. Because certain sectors are very dynamic, and it suddenly requires revisiting on a regular basis because you cannot allow the archaic system to continue. You cannot allow the older version to continue when there are enough changes happening in the market. And that is why this regular revisiting, regular relook is desirable.

Policy also presents an opportunity for all the stakeholders to participate on a regular interval. Because one for law, you can very well visualize that it is a deliberation which takes place prior to the enactment of law. The lawmakers deliberate on the nuances of the proposal and the bill presented on the floor of the house.

And then, after deliberation, they give a rigid or concrete shape to the proposal. And the next opportunity to revisit is only when, it is again brought to the notice of the parliament, which is not the case with the policy. In policy, the policymakers can very well solicit the opinion of the stakeholders as and when situation changes, as and when the dynamics of the market changes.

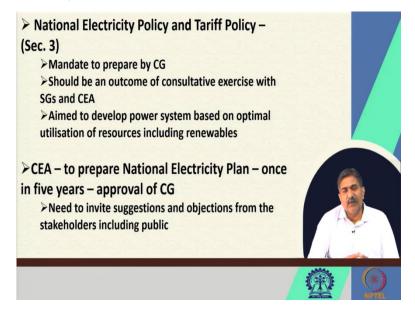
And that is the benefit in case of allowing policy framework to be part of a legal scheme, allowing enabling the government to make a policy along with the operation of law on the area concerned. It also adds up to efficiency and quality of government services. Because it acts as a sort of check and balance, the moment it finds that, the regulations is going overboard.

The moment it has been found that the regulation is instead of facilitating the activities of the players, and activities of the participants of the market, it is causing a bottleneck. Then obviously, the best way is to assess the situation and then make the changes accordingly or suggest what changes are to be done. So, that way, it ensures efficiency and quality in the government services, the way the government is required to regulate the market, and one for electricity as a subject.

If you recall, we have discussed it in the first module that this is a subject which falls under the concurrent list. And, therefore it is constitutionally mandated that both the central government and the state governments would be involved in the promotion of this market. And thus, the very nature of the subject requires a regular relook on the front of policy deliberation. And, when you look at the purpose what it serves, it attempts to draw a sort of balance between the industry on the one hand and consumer on the other hand. And that

balancing somewhere, you would agree with me, requires sort of regular evaluation, regular assessment that the fine line balance should always be maintained for the growth of the market.

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Now, when you look at the mandate in the law, you find that section 3 categorically says that the central government shall prepare the national electricity policy. And then it also imposes an obligation on the central government that any such exercise must be an outcome of the consultation between the state governments and the central electricity authority. Why state government?

Because of very obvious reason, as I said, the subject matter falls in the concurrent list, state has also been entrusted with the responsibility in the Constitutional scheme. And thus, we cannot think of a policy, we cannot think of a framework, unless and until all the parties are taken on board.

And the reason for consulting CEA is that CEA is supposed to be an advisory arm of the ministry, technical experts are member of that. And therefore, what has been suggested through the policy must have the approval of the domain experts, that is what it says. And what is the aim of this policy. If you look at it, it says that the overall development of the power market. And that is possible only when, a sort of direction has been given that how to utilize resources.

If you analyze it with the last session, which I took on energy mix and prior to that energy security. The resources which are available, and the utilization of resources for generation of

electricity is a very nuance task. Because it is not only about increasing the installed capacity of generation, it is also about efficient and effective operation of the generating units, and it is also about ensuring robust infrastructural setup at the other end, transmission or distribution.

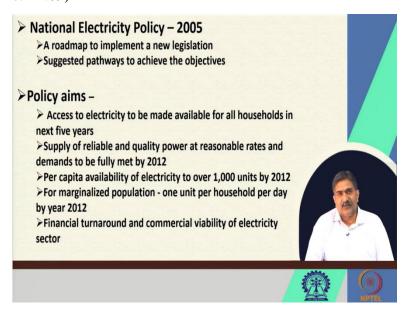
Apart from that, whether the resources which are being used, they are serving the larger purpose of clean environment or not. And not only clean environment, but also the financial health of the country. If the country for energy and for production of electricity heavily relies upon import of fuel, then, it would certainly do it at the cost of financial health.

And therefore, a constant search is required to look for the resources indigenously which I highlighted in the last session. Apart from the policy, which is the responsibility of the central government to draft and to prepare, the law also provides for making of the plan, national electricity plan, and this plan is to be made by Central Electricity Authority. And it has been suggested that let the plan be made once in 5 years.

And it must have the approval of the central government. This plan is being made considering the interest of the stakeholders. That, how the market would perform in coming years, how the market is growing, what shall be the necessary steps for scaling of the investment? All this needs to be planned, and therefore, it has been suggested that let the plan be an outcome of a dialogue.

Let it not be an outcome of imposition, from the top to the players of the market. And that is why it is suggested that, that whatever plan the CEA is being formulating, it must have the necessary input from the stakeholders. So, CEA has an obligation to invite suggestions, to invite objections and not only from the ones who are directly participating, the utilities, the generating companies, the licensees, traders. But then, it is also suggested that they need to also consult the public. Public can also give because, at the end of the day, it is for consumer interests.

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So, consumer interest needs to be fulfilled. In pursuant to the mandate of section 3, just after two years of the Electricity Act 2003 brought into existence, the government has prepared the policy in the year 2005. The policy has been prepared, considering that what shall be the roadmap for the growth of the power sector.

Because, providing the guidelines in the form of statutes, in the form of provisions in the statute is one way of disciplining the participants. But then, keeping the sort of flexibility of accommodating the views of the participants is another important approach. And that is what the policy suggests. And that is why I say, there is sort of roadmap that what has been aimed to be achieved under the law, how that is going to get implemented. And that is what exactly the policy suggests, it prescribes the way.

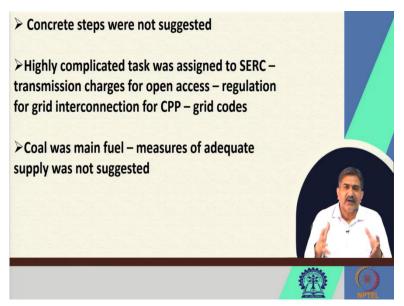
So, what 2005 policy aims? It promises, access to electricity for all, for all households it says in the next 5 years. Not very difficult to accept that too ambitious was a target. And, we have seen that it has not been fulfilled. And then it was also suggested that let there be a reliable supply of electricity, quality supply of electricity. There should not be any blackouts. There should not be any voltage fluctuation. Otherwise, that electricity is of no value for the consumer. It suggested that let there be a reliable and quality supply at a reasonable price.

And this is something which is to be met by 2012. That is what was suggested in 2005. Per capita consumption in India is not really very comparable with the developed countries. And that is why it is suggested that per capita availability should be over 1000 units by 2012. And along with that it also suggested that we cannot leave a large section of population, which is living on periphery, the marginalized section, and therefore the policy suggests that one unit

per household per day should also be the target. And it is important to note that this target being a part of policy is a testimony that public interest has a role to play in the development of the sector. It is not only about increasing the generating capacity and ensuring that the one who has the ability to pay is getting electricity; it is not only about that.

And then also policy suggested that let there be revamping done to strengthen the financial position of the licensees. Because unless and until we make the generation of electricity commercially viable, the desired growth in the sector is not attainable, it is not possible. That is what it says.

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Apparently appears that 2005 policy lays down a roadmap and tries to give direction to the regulatory bodies, to the utilities, and promises to the consumer. But then, in 2005 policy somewhere the concrete steps of what should be done for fulfilling that promise was missing. The terminologies which were being used were like efforts are to be made.

Now, how those efforts are to be made, was missing in the policy. And that is something which is important. Because, unless and until, you suggest something on a very concrete ground that what is to be done. How are you going to ensure electricity to every household? How are you going to increase consumption? Otherwise, it becomes a sort of kind of ambitious document only.

There is no design to implement it at the ground level. The policy also suggested, many initiatives are to be taken by the state electricity regulatory commission, knowing very well that as far as the capacity, as far as the ability is concerned, they are not placed in such a

situation where they can undertake those responsibilities or tasks. They have been asked to decide on the transmission charges for open access. They have been asked to decide on the regulation for grid interconnection for captive power plant. They have been asked to design for the grid codes at the intra-state level.

Now, it is important to remind that much of the malice in the system was because of the non-performance of state electricity boards. And, the reform that started in the last two decades only, when you consider 2005 as the baseline. So, entrusting so much of responsibility on the regulatory commission was not really welcome still. Other important aspect was that coal was continuing to be a preferred fuel for generation of electricity.

And the last segment was coming from coal-based thermal power plant. But then, there were challenges with regard to efficient supply of fuel to the thermal power plant. Because coal mining was heavily regulated by the government, a sort of monopoly of the government and therefore nothing was suggested that, how that is something which is going to be addressed. How supply side constraints are going to be improved?

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After 2005, an attempt has been made to revisit, relook at the policy. Now, we have a draft of 2021, which focuses on multiple aspects and not very difficult to visualize, not very difficult to imagine, not very difficult to convince ourselves that why this approach of widening the ambit of policy document. Because in the last two decades or so, enough technological improvement has taken place. Renewable has come, has been seen as serious competitor of conventional sources and thus, it is being suggested that let there be a new outlook to the

policy dimension. And that is why you find that 2021 suggests for facilitating retail competition.

The idea is that you allow the market to be operational in a fuller sense, so that buyers and sellers will have complete freedom. And more is the interaction between buyer and seller, higher is the satisfaction of the consumer. That is one reform which is still awaiting in power sector in this country, reform at the retail segment, where as a consumer, I should have a choice of whether I should buy electricity from licensee one or licensee two.

And you can very well visualize that if such choices are there with the consumer, then it will certainly guarantee the growth of the market because consumer plays a very defining role. Policy also suggested energy mix in a big way where renewables will also have considerable share. And 2021 policy also suggested that let there be a complete reform at the last segment of the power market that is of distribution utilities or distribution companies.

Because distribution utilities or distribution companies, they have not yet completely been reformed. And that is the reason why you find that the vision has not been fulfilled. The market growth has not been completely accelerated. If the distribution companies are getting that kind of choice, if there is a necessary reform brought in, in the distribution segment, no denial it will improve the financial health of the entire segment. Because ultimately, the cost of electricity is being charged on the end consumer.

And, the subsidy cannot be ever-lasting proposition under the law. It has to be over a time, we brought to a minimal range, only to give it to needy people. It also focuses on quality, reliable and affordable supply and service. Much has been achieved by ensuring grid discipline which you will be studying in detail in the coming session that how the grid discipline has been achieved by fixing a shorter range of 49.5 hertz to 50.2 or 50.3 Hertz. So, that is what has been suggested.

And then, it says that let there be a strong regulatory governance so that indiscipline cannot be allowed. And as we are promoting renewables, it is certainly suggested to have environmental concern on all the planning. Because anything which is being planned, it must be sustainable for 50 years down the line, and climate change is really emerging as a very big issue for the mankind.

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Now, in this 2021, it has been suggested that let the technology markets, metering be considered as an important factor, supply of electricity should be based on the consumption. And the revenue should be asked as per the consumption, and that is why metering becomes important. Technology is important to make the generation cleaner. Technology is important to make the supply very reliable; real-time trading is possible when you have robust technology in place.

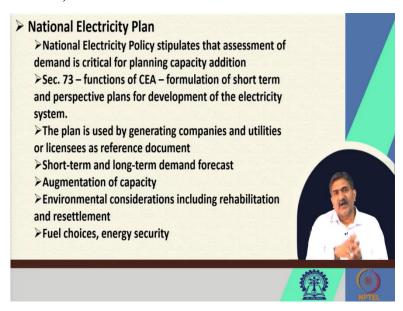
And obviously, the free market is no doubt a boom for the sector. But then, still, the situation is same if you compare in 2005 that coal is still considered to be a preferred source. Why preferred source? Because of the costs. Though, as I said, that renewables are also becoming competitive so obviously, in time to come, there will be larger presence of renewables in the power market. We will get more generated electricity from renewables than the conventional sources.

So, cost factor would not be a kind of guiding factor or a compelling factor, I would say in this case. Because of the cost factor, we are going for coal based and we import coal. Because our coal is not very clean in terms of the final value of the raw material for generating electricity, we get a lot of waste from that coal. We import it from Australia and other countries.

Now, on the issue of safety concern, the 2021 policy also suggest that there is a need to minimise the accidents which are taking place because of electricity. Human lives are being lost, and not only human lives even lives of animals are at stake because of unplanned wiring,

because of unscientific wiring, and that is why it is being suggested that let there be also considered.

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As I said that the plan is something which is being prepared by CEA every 5 years. Now, this is a document on which the assessment of the market happens. And if you look at the language of section 73 which lays down the responsibility and identifies the function of CEA, it says that it has a function to formulate short term plan and a long-term perspective plan.

So, 5 years short term plan and then 15 years perspective plan for the development of the power market, for the development of electricity system. So, this plan helps the generating companies and utilities to plan the investment, to build a strategy that how they would be planning their growth, how they would be channelizing their resources in time to come.

And that is why, in the plan it is being suggested that what is the forecast in the short-term sense and in long term sense, so that a define kind of projection has been given. There should not be any kind of blind drive here. Plan also suggests augmentation of capacity. It also suggests that environmental considerations are to be taken into account. If big thermal power plant is being established, then what will happen to the displacement issues? And then plan also talks about energy security to make less dependent upon others and also about fuel choices.

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Then now, the national electricity policy and plan and then section 3 also talks about the tariff policy. Now, the tariff policy was formulated in 2006, just after a year when electricity policy was being notified. In this, it was categorically suggested that we need to promote renewables. Because when you look at the salient features of the 2003 Act, you will find that there is more on electricity being generated through conventional sources. On renewables, there are very scant provisions. We will have a session on it, that how renewables are being governed under the electricity act.

So, I would say that those scant provisions are now getting supplemented with this tariff policy. Because they are to be read together. And therefore, it is being suggested that the commission shall determine a certain quantum of electricity to be procured from renewables to promote, to put an obligation on the distribution utilities that you have to buy. And for that, it was suggested that for determination of tariff, they can always go for preferential tariff. Tariff policy suggests that you make a plan so that they are to be placed in advantageous position, preferential tariff, advantageous position when you compare with rest. The mandate of the policy itself.

And then it says, why it has to be done because then only they can be competitive. Otherwise, they cannot be competitive one. And ultimately, it is suggested that procurement is to be done on the basis of competitive bidding. If you allow competition to play a role, obviously, the consumer welfare will get addressed.

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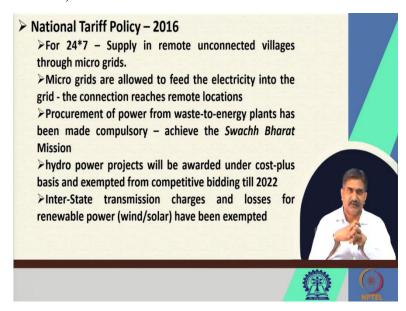


But then in this, it has been suggested that public sectors are to be exempted for 5 years, or till the time the regulatory commission is satisfied. Now, this has some kind of shortcomings. Because if you are allowing the market to be open, then you should also allow public sector undertakings to participate.

One can really understand the concern at that point of time because these were being completely owned and regulated by the government prior to the 2003 Act. Obviously, in 1991 unbundling was suggested. But then, there has to be a sort of same-level playing field given. Then, multi-year tariff framework was suggested in the tariff policy which was a very good step because multi-year tariff in a way gives a conviction to the investor that if they come and invest, they will have a return. Return is assured in the form of multi-year tariff.

So, that was a very welcome step. It was also suggested that to bring in transparency on the transfer of subsidy that let there be targeted, let there be identification of targeted beneficiaries in a very meticulous manner. Let price not be a factor, let consumption be a factor for identifying the beneficiaries. And then it was also suggested that the tariff should have a kind of two components, one is the fixed one, the other is the variable charges. And it is suggested that let it be implemented for the large consumers who will be consuming more than 1 megawatt and above.

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This 2006 policy has been amended in 2016 where it is being suggested that let every village, which are remotely located in this country be given 24 into 7 electricity supply. That is what it says. And then further that as the rural electrification largely is going to be achieved through mini-grid and microgrid, let there be also a plan that the electricity from the microgrid can be supplied to the main grid, that is also is allowed, that is also being suggested.

This is for a sort of sustainable model: if more generation is happening, let the electricity be feeded in the grid. It has also been suggested that waste to energy plant be promoted, and procurement of electricity from those plants are to be made mandatory. And this was aligned with the plan, aligned with the agenda, and the mission of Swachh Bharat.

So, waste to energy plan was a good suggestion that any electricity generated from these kinds of plants, the utilities will also have a responsibility to procure electricity from that. And then, it has been suggested that hydropower projects which will be awarded a cost-plus basis are to be exempted from comparative breeding.

This is again to minimize the reliance on imported fuel. This is about the support to the indigenous sources. And then, it was said that interstate transmission charges and losses for renewable is to be exempted. The idea is to promote renewables and the idea is to make them more comparative. One may ask question that why only wind or solar generating are being given exemption. Why not other segments? Why not biogas? Why not other resources from where we get energy? That is certainly a question.

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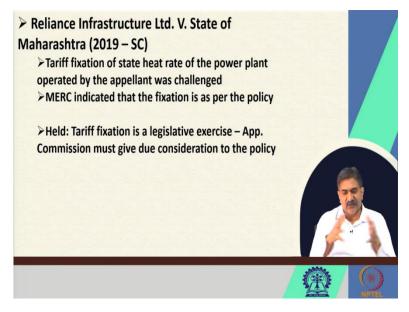


Tariff policy of 2016 also says that the power plants are allowed to sell surplus energy on spot market, and real-time market. That is what it is allowed through the power exchanges. And this, you can very well visualize that this can give necessary push, necessary impetus necessary kind of acceleration, in terms of becoming financially strong. And then, it was suggested also that the renewable purchase obligation from solar should be increased to 8 percent by 2022. That is what it also suggested.

The 2016 tariff policy was further amended, amendment was proposed in that, where it says that all future power requirements are to be procured through competitive bidding by distribution licensees. This is, in a way, an attempt to push necessary reform in the retail markets sense that you allow distribution licensees to procure it through competitive market, then certainly we will be having more retail consumers in the market, and real time trading will become.

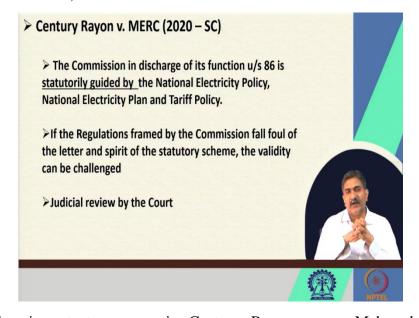
Another important suggestion was made is that any change in law, suppose the government is changing the tax structures, some cess structures, then that can be automatically part of the agreement and that need not be approved by the appropriate commission. And then, it was suggested that return on investment becomes important feature. But for that, it was said that return on investment must be planned in such a way so that there will be enough money at the hand of the investor to invest it back in the growth of the market, and at the same time the consumer interest is also not to be hampered because of that.

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I will just indicate two cases which highlights the significance of the policy. Reliance Infrastructure Limited versus the State of Maharashtra, wherein the question was being raised, that what role the policy plays when the appropriate commission fixes a tariff. And then, the court said that tariff fixation is primarily a legislative exercise. It is a legislative exercise then appropriate commission must give due consideration to the policy. If the appropriate commission ignores it or overlooks it, perhaps it may be fatal, and it can be very well taken up in the court of law.

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This is another important case, again Century Rayon versus Maharashtra Electricity Regulatory Commission decided by the Supreme Court in 2020 wherein the court said and I

read that this is something where the commission, while determining tariff is statutorily guided by the policy. Now, this word statutorily guided which I have underlined, is to draw your attention, is to stress on this fact that this is what is the benefit of giving a legal context to policymaking exercise. And court said that if the regulations are being framed overlooking the policy prescription, then such regulations can very well be assailed in the court of law.

And that can be done by reviewing the regulation. And reviewing the regulation can happen only the court of law. It is said that tribunal cannot review the regulation. So, regulation is to be reviewed only either in the High Court or in the Supreme Court. Appellate Tribunal cannot review the regulation.

But what is important to understand the significance of section 3 in the scheme of electricity act. What is important to understand that how the very provisioning of policymaking exercise in the act gets reflected in the observation of what the court has given in Century Rayan. It says it is statutorily guided. So, it is not merely a wish that you are advised to follow. It is not your advice to follow. You are mandatorily advised to follow this. And that becomes very significant in the language of law. So, this is what is the significance of electricity policy, tariff policy and electricity plan. Thank you very much.