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Impact analysis: National Tariff Policy

January 2006

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The government has finalised the National Tariff Policy for the power sector, which addresses some important issues like method of calculation of cross-subsidy under open access and the competitive bidding route for the private players. However, it has left certain issues like the transmission pricing framework unaddressed.

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Impact analysis: National Tariff Policy - January 6, 2006

Introduction

On January 6, 2006, the Central government notified the National Tariff Policy (NTP) for the power sector in compliance with Section 3 of the Electricity Act and in continuation of the National Electricity Policy passed on February 12, 2005. It basically deals with various parameters with respect to the fixation of tariffs, like providing adequate return on investment to the power generator and supplier and ensuring reasonable user charges for the consumers. It provides uniform guidelines to the state electricity regulatory commissions (SERCs) for the fixation of tariffs for their respective entities (as there are independent SERCs for each state) as well as CERC. This will override CERC's guidelines for fixation of tariffs dated April 1, 2004.

The Electricity Policy has set some objectives like assured electricity to consumers at reasonable and competitive rates, financial viability of the sector, promoting transparency, consistency and predictability in regulatory approaches across jurisdictions and encouraging competition.

The NTP deals with the general approach to tariffs, wherein it talks about issues such as return on investment and equity norms to be abided by project developers. It discusses various other norms for charging depreciation and cost of debt. It lays down certain operating norms to be followed in order to improve efficiency. Besides, it revisits various parameters like renovation and modernisation costs, and multi-year tariffs (MYT) and talks about promoting captive and renewable energy. The policy states the MYT must be adopted for determination of any tariffs from April 1, 2006.

On generation, the policy talks about setting up of separate capacities for meeting peak demand and introduction of differential rates for peak and non-peak power. In transmission, the policy talks about putting in place a transmission pricing framework, but does not specify a specific methodology for doing so. The same is the case with transmission loss allocation.

On the legal front, the Centre has constituted the Forum of Regulators under the provisions of the Act to facilitate consistency in approach, especially in the area of distribution. The CERC and SERCs would be members of the regulatory body.

Although the policy has not addressed some issues, like transmission pricing framework, it deals with issues like calculation of cross-subsidy and tries to revisit various parameters. On an overall basis, this much-awaited policy tries to clarify various issues to improve efficiency and transparency in the power sector. It also emphasises the need for sharing the efficiency gains, as it specifies that a part of the gains should be passed on to the consumer. But, on several issues, it has left the responsibility of working out the specifics to the Forum of Regulators.

Two main issues were dealt with in the final National Tariff Policy - competitive bidding for all private projects and the method for determination of cross-subsidy surcharge. Apart from this, there are no major differences between the draft policy and the final policy as far as other guidelines are concerned (the draft

policy was discussed in our Power Update dated May 2005). We have analysed some of the important parameters that have been discussed in the National Tariff Policy and its impact on various stakeholders.

National Tariff Policy - January 2006: A brief comparison with CERC guidelines

	CERC terms and condition for tariff fixation	Final policy
Legal position	No Forum of Regulators	A Forum of Regulators (FOR) has been formed by the Central government under the provisions of the Act, which would facilitate consistency in approach, specially in the area of distribution.
General approach to tariff		All future power requirements to be met compulsorily through bidding route for private players; CPSUs and state players exempted from bidding for the next 5 years.
	No clarification on debt equity of 70:30	More clarification regarding 70:30 norms for debt to equity Suggestions to adopt alternative approach of return on capital as against prevalent return on equity
	Return on equity at fixed at 14 per cent.	No change Suggestions to adopt distribution margin approach for returns in distribution business.
	It states entitlement of advance against depreciation.	No necessity for advance against depreciation
	Detailed norms relating to target PLF for incentives, gross station heat rate, secondary fuel oil consumption and auxiliary consumption.	Dealing of MYT in detail. To be introduced from April, 2006 It specifies certain benchmark performance standards to improve efficiency.
Generation		It talks about separate capacities for peaking purposes, differential tariff for peak and off-peak load
Transmission		No change, fails to address the issue of transmission pricing framework
Distribution	It does not deal with distribution. No mention about cross- subsidy surcharge	It specifies the use of avoided cost method for calculating cross-subsidies under open access

Source: CERC Guidelines, Tariff Policy & CRIS INFAC

Issue: Competitive bidding for future power requirements

The policy states that the distribution licensee should, in future, procure power solely through competitive bidding. But this norm does not apply in the case of expansion of existing projects. Further, Central generating units and state controlled/owned units are exempted from competitive bidding. However, the expansion of generating capacity by the private developers for this purpose would be restricted to a one-time addition of not more than 50 per cent of the existing capacity. The tariff for all new generating and transmission projects by the public sector would be decided through the competitive bidding route after a period of 5 years or when the regulatory commission thinks the situation is ripe for such competition.

Impact

- The time from which the new guideline would be applicable is not specified. It does not clarify whether it is applicable to the projects that are already under construction. Many projects that are

under construction have already entered into power purchase agreements (PPAs). Also, the whole procedure of bidding would involve a lot of time, thus delaying the process.

- The Electricity Act had provided the much-needed impetus to the power sector by opening it up to private investment. However, the competitive bidding guideline would restrict private investments, as the private player would have to wait till a particular state electricity board (SEB) decides to invite a tender for its power requirement. It is only after the tender is floated that they can bid and decide on setting up the plant.

Impact on various stakeholders

- Private players: *Negative* - Private players are expected to be hit by this guideline, as the Central and state sectors are exempted from it till the next 5 years (at least). However, the returns for a private player through the competitive bidding route will not be regulated. In a deficit scenario, the power has to be evacuated. In such a case, the private players are likely to benefit through better returns.
- Central and state sectors: *Positive* – The guideline is probably aimed to give some breathing space for state controlled units, given the time taken and approval processes involved. They can use the regulatory route until the next 5 years and escape the bidding process.

General approach to tariff

Issue: Return on investment

The policy states that any cash resources available to the company from its share premium account can be used to fund the equity commitments of the project. However, the 70:30 debt to equity norms would apply for the same. The equity in excess of 30 per cent will be treated as loans advanced at the weighted average rate of interest and for a weighted average tenor of the long-term debt component of the project after ascertaining the reasonableness of the interest rates and taking into account the effect of debt restructuring, if it has been undertaken. The policy ensures that there is a reasonable return on additional equity (linked to return on debt) and also puts the onus on the project developer to control interest costs. But no clear benchmark rates have been specified.

The policy also states that the Central Commission may adopt the return on capital route rather than the return on equity route. However, the guideline does not offer any specifics on the subject.

Further, it states that the state commission may introduce ‘distribution margin’ as the basis for allowing returns in the distribution business at an appropriate time. As per the distribution margin approach, the collection risk and commercial losses risk will be borne by the government. This process would hamper the initiatives taken to reduce transmission and distribution (T&D) losses, as the risk related to T&D would lie with the government.

In this case, too, the time and the methodology are not specified. The policy specifies that the Forum of Regulators should evolve a comprehensive approach on the issue within a year.

Impact on various stakeholders

The impact is neutral on all players as there are no changes in the guideline. However, the impact of moving to a return on capital-based methodology cannot be assessed at this stage.

Issue: Cost of management of foreign exchange risk

The policy states that foreign exchange risk will not be a pass-through. It specifies that the appropriate costs of hedging and swapping to take care of foreign exchange variations should be allowed as debt obtained in foreign currencies. However, there are no long-term hedging contracts available in the Indian markets. The maximum tenure of a hedging contract is around 6 months. In such a scenario, the cost of hedging is likely to offset the whole purpose of hedging for foreign exchange variations.

Issue: Multi-year tariff (MYT)

The NTP states that the MYT framework has to be adopted for the determination of any tariff from April 1, 2006. The Appropriate Commission would be guided by MYT for determining the terms and conditions for the determination of tariff.

The NTP specifies that in case of operations being below normal for many previous years, the initial starting point in determining the revenue requirement and the improvement trajectories should be recognised at “relaxed” levels and not the “desired” levels. It states that suitable benchmarking studies would be taken up for determination of the desired performance standards.

This is likely to minimise risk for utilities and consumers, promote efficiency and appropriate reduction in system losses and attract investments. It would also bring greater predictability to consumer tariffs. The framework should be implemented for both public and private entities.

Issue: Electricity duties, taxes, cess, etc...

The policy states that the state government has the right to impose duties, taxes, cess etc on sales or consumption of electricity. However, certain consumers like the captive users are charged exorbitant electricity duties, which is against the provisions of the Electricity Act 2003. The Act opens up the sector to competition and encourages private and captive players to set up more capacities.

The policy acknowledges that this would be used as a tool by state governments to dissuade competition from captive generators but has no clear directions to curb such practices or cap the level of taxation. In that sense, it is negative as the captive players have to pay higher electricity duties as compared to other generators.

Issue: Procurement of power

The policy moots the procurement of electricity separately for base load requirements and peak load requirements. This would facilitate the setting up of generation capacities specifically for meeting peak load. It also states that the Appropriate Commission may introduce differential rates of fixed charges for peak and off-peak hours for better management of load. However, how this will be operational is not very clear.

Issue: Calculation of cross-subsidy

Finally, the policy states the method for calculation of cross-subsidy surcharge under open access. Earlier, the Forum of Indian Regulators (FOIR) had suggested the use of avoided cost method for calculation of cross-subsidy, among other methods. However, different states had come out with different methods for calculation. This is because there are various issues regarding availability of information, metering etc.

The final tariff policy has suggested the use of avoided cost method, as was decided earlier. In this method, subsidy is calculated as a difference between the customer-wise tariff and the marginal power purchase, which can be avoided due to the consumer moving out under open access. The cost of supply for this purpose will be calculated as the weighted average of power purchase costs (inclusive of fixed and variable charges) of the top 5 per cent at the margin, excluding fuel-based generation, in the merit order approved by the SERC, adjusted for average loss compensation of the relevant voltage level and the distribution charges determined on the principles as laid down for intra-state transmission charges.

Impact

Certain states have announced the use of other methods like embedded cost. It is not very clear whether these states will have to use the avoided cost method instead. This is expected to open up a bunch of issues, as certain states would not find a particular method suitable for use. Also, all states do not have 100 per cent metering, which makes it impossible to get category wise, voltage-wise data.

Impact on various stakeholders

- In a way, it gives a clear framework for the calculation of cross-subsidy by each state. It is, thus, a positive development for the states, as they now have a firm method for calculation.
- The presence of higher cross-subsidy charges offsets the prime motive of open access. A consumer who wants to shift to another licensee on account of lower tariffs may actually end up paying higher tariffs due to cross-subsidy surcharge. Unless the cross-subsidies are bought within limits, it will act as a disincentive for consumers opting for open access.

Method of calculating surcharge

Region/State	Open access	Average cost	Embedded cost	Avoided cost
Western Region				
-Chhattisgarh	Y		Y	
-Gujarat	Y			Y
-MP	Y			Y
-Maharashtra	Y			
Eastern				
-Jharkand	Y			
-Orissa	Y			
-W Bengal	Y			Y
Northern				
-Delhi	Y			
-Haryana	Y		Y	
-H P	Y			Y
-Punjab	Y			
-Rajasthan	Y		Y	
-U P	Y			
-Uttaranchal	Y			Y
Southern				
-A P	Y		Y	
-Karnataka	Y			
-Kerala	Y			
-Tamil Nadu	Y		Y	
North-eastern				
-Assam	Y			
Total	19		5	5

Source: CRIS INFAC

Certain issues that continue to remain unaddressed

Issue: Transmission pricing framework

The policy does not clearly define as to which transmission pricing methodology needs to be used for inter-state transmission. Issues such as transmission of electricity across territories of an intervening state and conveyance within the state, which is incidental to such inter-state transmission, needs to be addressed. It only states that the tariff framework should be sensitive to distance, direction and be related to the quantum of power flow. The tariff mechanism is to be developed by CERC taking into consideration the advice of the CEA by April 2006.

The policy also states that losses should be charged on the basis of average losses arrived at after appropriately considering the distance and directional sensitivity, as applicable to relevant voltage level, on the transmission system. It states that the loss compensation is reasonable and linked to applicable technical loss benchmarks.

Currently, the regional postage stamp method is being used. However, as the market moves towards open access and more inter-regional capacities come up, an efficient transmission pricing methodology needs to be developed.

Based on the methodology laid down by the CERC for inter-state transmission, the SERCs will adopt a similar approach for intra-state transmission. In the case of transmission loss allocation, the Forum of Regulators will evolve a similar approach for intra-state transmission.

Impact on various stakeholders

Again, the private investment in this sector would be affected unless the policy clearly states the guidelines related to transmission pricing framework.

Issue: Subsidies

The policy talks about providing subsidy directly to a needy consumer rather than cross-subsidising the tariff across the board. It says that the subsidies should be targeted effectively and in a transparent manner. As a substitute, the government has the option of raising resources through mechanisms such as electricity duty and giving subsidies to only needy consumers. As per the National Electricity Policy, consumers below poverty line who consume 30 units per month may receive a special support through cross-subsidy.

For this, the government has targeted that the tariff progressively reflects the cost of supply of electricity. A benchmark is set that by the year 2011-12 tariffs are within +/- 20 per cent of the average cost of supply.

The policy, however, does not speak about completely eliminating cross-subsidies. It only speaks about limiting the cross-subsidies to a certain per cent of the cost of supply. Further, it does not set a year-wise target for reduction of cross-subsidies. The fixing of a limit at the end of next 5 years is not expected to work in an effective way. A systematic year-wise reduction target should have been fixed in order to rationalise the subsidies.

Impact on various shareholders

The concept of cross-subsidies affects the industrial and commercial consumers who have to pay higher charges as compared to domestic consumers and agricultural consumers who sometimes pay less than the cost of supply. This is evident from the fact that many industrial consumers have opted for the captive route to avoid the cross-subsidy burden.