Tariff Rationalisation

Key considerations for a simpler, more transparent and efficient price structure

India's current consumer tariff structure is a highly complex one, characterised by numerous categories and tariff slabs across various states. Further, there is inconsistency in the categorisation of certain consumer segments across states. With a view to simplifying electricity tariffs, the power ministry recently constituted a committee for developing a framework for the creation of tariff categories that enable uniform and homogeneous electricity tariff categorisation across the country. Sector experts share their views on how the tariff structure can be rationalised and the key considerations in doing so...

What, according to you, should be the key considerations of regulators while rationalising the tariff structure?

Pramod Deo

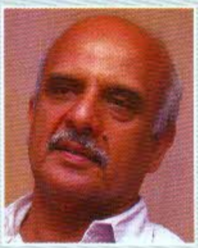
The first thing is that the Ministry of Power (MoP) should not believe that it can run the state discoms remotely from Delhi. In real life, tariffs are a state subject and the regulators will be guided by what the political powers in the states want them to do. Also, the situation on the ground varies from state to state. For example, in Chhattisgarh, we have a separate tariff category for mining; however, such a category may not be relevant in other states. Another issue is that supply to agriculture is not metered. Even though a metering system has been introduced for agriculture, in many states it is not effective and as a result, there is a very large percentage of consumers that are not metered at all.

Another issue relates to high tension consumers, that is, consumers with consumption of 1 MW and above, who are the real revenue generators. A common template for industries and commercial users may be possible across the states. But within one category, like hospitals, there are different types of consumers – government, municipal and private. Since government and municipal hospitals cater to socially and economically disadvantaged patients, their tariffs are kept low. However, for private hospitals that are run on a commercial basis, there cannot be lower tariffs. We have come across many private hospitals registered as charitable trusts and demanding lower rates. In real life, they cater to only affluent patients and the quotas for poor patients are never met. Thus, it is important to have separate tariffs even in the "same" category.

While rationalising the tariff structure is an attractive idea, we will have to live with the reality that each state follows a tariff structure that is more conveniently suited for its social objectives. No doubt state regulators need to periodically undertake the exercise to reduce the number of categories, as having too many categories creates its own problems. It is well to remember that when rationalising, there will always be political and economic considerations, resulting in the introduction of new categories or redefining older ones.

Sabyasachi Majumdar

The central government is in discussion with the state governments to rationalise the tariff structure for distribution utilities by reducing the number of tariff categories. This proposal was also discussed at the state power ministers' conference in May 2017. This is in view of the complex tariff structure across the states with multiple categories and subcategories and a high level of cross-subsidisation by industrial and commercial consumers. While rationalising the tariff structure, the state electricity regulatory commissions (SERCs) should take into consideration the cost structure of the utilities including their fixed cost obligation, payment capabilities of various consumer categories and competition from open access power sellers. The SERCs should also provide a roadmap to reduce cross-subsidies with the objective of keeping



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tariffs across categories within 80 per cent to 120 per cent of the average cost of supply (ACS) of a distribution utility.

Rajesh Mokashi

The Economic Survey 2015-16 had suggested simplification of power tariffs with no more than two to three tariff categories, which would improve transparency and collection efficiency along with governance benefits. As per the survey, the current tariff structure in most of the power distribution companies is complex with myriad rates/categories for different types of consumer classes. Further, the complexity may prevent consumers from fully responding to tariffs due to the high cost of processing the price information. The resolution on tariff rationalisation was also adopted at the union and states power minsters' conference in October 2016, with most of the states agreeing to the idea of having uniform tariff categories of electricity consumers.

Against this backdrop, the importance of this issue cannot be less emphasised. Over the years, the regulators have been moving towards a rationalisation of the tariff structure. In our view, the considerations for regulators while rationalising the tariff structure should be four-pronged: the tariff should aim at the recovery of prudent cost; subsidy to the needy should be well targeted and allocated; the tariff should progressively reflect the ACS; and there should be a simplification of tariffs and slab structures.

Tariff structuring should also aim at addressing areas like smoothening the demand curve (through time-of-day [ToD] metering) and putting in place a framework of penalties for erring consumers, with incentives for law-abiding/punctual consumers.

Dr S.L. Rao

Unfortunately, electricity is a concurrent subject in our Constitution. Consumers, therefore, come under the state governments and their regulators. This has made a heavy capital essential service into a highly uneconomic one, with no surplus generated for regular maintenance and investment. Electricity was in short supply and ensuring that the marginalised people got it regularly was an unsuccessful effort. We now have a situation where there is plenty of electricity and more is to come. This is the time to make price lists more sensible. In a sensible market, prices are related to volume. We have been going in the opposite direction, charging more for higher consumption and less (or even free) for the smallest consumers. This must change.

We must ensure that all supply is metered. If a particular consumer or group or industry is to be favoured and supplied free or below-cost electricity, we must identify each such consumer and know how much electricity is to be supplied at those lower rates (or free), and the government must reimburse the discom without delay. The discom must not be asked to cross-subsidise one consumer or group by charging more from the larger consumer. This requires complicated accounting and is not the business of the discom.

We must have tariffs that vary with time of day and night as well as season. The discom can then maximise sales and this will lead to maximum use of generation capacity and gains due to better efficiencies. Tariffs could also be varied over distance so that the cost of supplying to distant consumers does not have to be subsidised by closer ones. There could also be a discount for steady and large purchases made consistently.

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Arun Srivastava

World over, including in India, the regulator is expected to take a neutral position, balancing the interests of all stakeholders. While doing so, it must also ensure sectoral development and business viability. The Electricity Act, 2003 also clearly outlines the role of the regulators – to stabilise, guide and nurture the sector comprehensively. Tariff setting is one of the key responsibilities of the regulator and that is an important tool to ensure business viability, stakeholder protection and well-being and also for sending out the right signals for the future. Such signals are essential triggers for new technological shifts and investment requirements, besides preparing consumers for changed service standards/conditions and the likely associated costs. In a country like India, where momentous changes are taking place in the sector, in terms of service provisions and costs as well as the technological shifts, the role of the regulator assumes greater importance. It would be the prime responsibility of the regulator to prepare the sector, mainly consumers, for embracing the expected changes, be it on account of rolling out of smart grids and smart meters, increasing penetration of renewable technologies, net metering and energy storage solutions, substitution of fossil and petroleum fuels in transportation or domestic cooking by electricity.

The key considerations for tariff rationalisation could include:

- A realistic assessment of costs of service to various consumer categories at different voltage levels of supply and setting cost-reflective retail tariffs.
- Elimination of cross-subsidy as well as

the concept of regulatory assets.

- Enhanced focus on efficiency in service delivery through appropriate structural realignments and operational cost optimisation.
- Encouraging the adoption of advanced technologies at various levels through an appropriate regulatory framework and market structure.
- Lowering of retail tariffs through efficiency and realignment of the generation mix.
- Ensuring high reliability and standards of service.

However, one must realise that, notwithstanding the electricity commissions, the government still has significant regulatory roles and responsibilities. The effectiveness of the regulatory system would depend on the convergence of approaches between these two sets of regulators. We must also recognise that the energy sector in India is currently structured in an inherently inefficient manner. Almost 70 per cent of the cost of delivered electricity is on account of fuel costs and is completely outside the purview of the regulator. If we take out the assured returns on deployed equity and the taxation components, there is hardly any room left for the regulator for tariff manoeuvring. One must also bear in mind that in most cases, the regulators in India regulate government owned and managed entities, which itself is challenging.

Nitin Zamre

The basic rationale in tariff design has to be to reflect the cost of service each consumer category and at the same time provide reasonable returns to the utility and incentivise efficient performance. In India, the tariffs have been generally distorted. We have a high level of cross-subsidy in tariffs, ToD tariffs are not widely adopted and in general, incentives for efficient performance (both on the supply and the demand side) are absent, with only a few exceptions. Further, the multiple slabs have created multiple consumer categories and we get a very complex structure, which leads to multiple inefficiencies. Too many tariff slabs, which may not necessarily reflect the cost of supply, lead to much higher administrative costs for monitoring consumers.

> "From the consumer perspective, the rationalisation and simplification of the tariff/slab structure would enable transparency, better compliance and reliable power supply."
>
> Rajesh Mokashi

How would the proposed move impact discoms and consumers?

Pramod Deo

Rationalisation cannot be done to the extent that it is being talked about. Rationalising is always a good and an attractive concept, but the problem is that you have a telescopic system of charging. For example, for domestic consumers, there is a slab for those who consume only 100-200 units. As soon as consumption crosses 200 units, consumers move into the next slab for which the tariffs are higher. This gives a clear message that as you consume more, you have to pay more. This also gives a clear signal to consumers that they should save energy and opt for five-star-rated appliances. While fixing tariffs, the regulator must consider these aspects.

> "In a sensible market, prices are related to volume. We have been going in the opposite direction, charging higher for more consumption and less or even free for the smallest consumers. This must change."
>
> Dr S.L. Rao

A key issue is how to reduce aggregate technical and commercial (AT&C) losses, for which the most important requirement is to have 100 per cent metering. If a large category like agriculture is not metered, the AT&C numbers will not be reliable. We talk about how the percentage of AT&C losses has come down, but in reality we find that the numbers keep fluctuating. Another key issue that must be taken into account before rationalising tariffs is that discoms should adopt advanced meter reading or automatic meter reading and eliminate the involvement of any human element.

Today, for industries, the tariffs are really high. This is so because industries have to cross-subsidise agriculture. However, such high tariffs based on connected load are not feasible for other categories such as public drinking water supply schemes. It would create problems because municipal corporations will find it difficult to recover these costs from their consumers by levying higher water charges.

Today, the entire burden of cross-subsidising agriculture finally falls on industrial and commercial users. Commercial users can at least pass on a part of the higher cost to their consumers, although the alarming rate of closure of newly constructed malls and commercial complexes suggests that there is a limit to which such a burden can be borne by this class of users. If Indian industries have to compete globally, they cannot be asked to pay the highest tariffs in the world. When we talk of tariff rationalisation, this is the real issue. Political economy of state-owned utilities needs to be acknowledged and viable political solutions need to be found. Only then would the tariff rationalisation exercise make sense.

Sabyasachi Majumdar

Tariff rationalisation would bring in greater transparency for consumers and provide better control on operations for discoms. This, along with the gradual reduction in cross-subsidies, would encourage industrial and commercial consumers to increase their

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Arun Srivastava

power consumption from discoms, rather than opting for supply under open access. This would, in turn, improve the revenue prospects for the utilities and reduce their losses. While tariff rationalisation is an important reform for the sector, the financial sustainability of the distribution segment is also dependent on the ability of the discoms to reduce their distribution losses and on timely and cost-reflective tariff revisions by the SERCs.

Rajesh Mokashi

From the discom perspective, tariff rationalisation will aid in improving discom financials, which are currently riddled with losses, high debt levels with adverse capital structures and weak debt coverage indicators. The minimisation of the gap between the ACS and the average revenue realised will address the issue of accumulated losses and higher debt. Also, the National Tariff Policy calls for a progressive revision in tariffs for judicious recovery of the cost of service such that cross-subsidy is reduced and is within +/- 20 per cent of ACS. Timely tariff revisions will go a long way in addressing the revenue gap faced by the utilities, which is prudently allowed by the regulator by way of tariff revisions/creation of regulatory assets. There is also a case for subvention in tariffs by way of targeted subsidies to the needy, by the respective state government, but the same should be paid timely which, otherwise, leads to cash flow issues with the utilities.

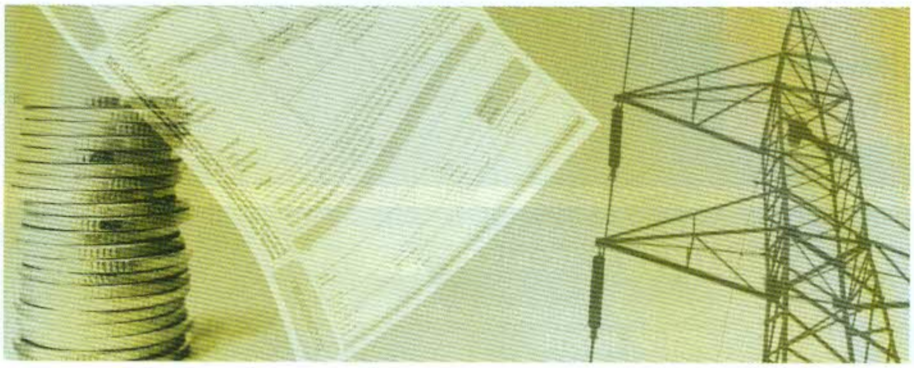
From the consumer perspective, the rationalisation and simplification of the tariff/slab structure would enable transparency, better compliance and reliable power supply, and may well yield consumption. Tariff rationalisation would possibly do away with high tariffs and cross-subsidisation by the commercial/industrial segments, which partly cover for the unbilled power/commercial losses.

Dr S.L. Rao

Rationalisation of tariffs will enhance efficiency, stop complicated and inefficient accounting cross-subsidies, ensure demand consistency through the year, improve capacity utilisation in generation and even distribution, and benefit the steady buyer. Further, this will discipline those who are supplied below-cost power because they know they are being measured.

Arun Srivastava

The power sector in India is at the cusp of an unprecedented transformation, essentially driven by technology. In the next decade or so, not only would the nature of businesses within the sector undergo major changes, but the electricity market would perforce get



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Nitin Zamre

aligned with the new realities. The role of discoms as well as consumers would change unbelievably with neither the discoms remaining the sole source of power supply to end-users nor consumers being just consumers. A vast majority, if not all, consumers would also turn into generators of some scale and size, reducing their dependence on discoms to only a fraction of their total power requirement. Such developments would have a widespread impact in the long run for all stakeholders.

It will also augur well for the country in terms of ensuring long-term energy security and a clean, sustainable environment. Retail tariff patterns are also likely to see appreciable variations in the coming years, with tariffs going up in the short to medium term but settling to really low levels in the longer run.

Nitin Zamre

The proposed move to reduce slabs would certainly reduce the administrative burden for both utilities as well as consumers. However, we believe that the proposed move will not only rationalise the slabs but also align tariffs with the cost of supply. This is a long-pending need of the sector and is clearly emphasised in the National Tariff Policy. Cost-reflective tariffs will provide the appropriate price signals to both consumers and utilities and reduce the distortions. ■

(Note: Arun Srivastava's views are his personal views as a power professional and may not necessarily be aligned to Tata Power's views.)