

**Comments by Prayas (Energy Group) on
1st Draft of Discussion Paper on Tariff Policy by Ministry of Power**

1. Context of Tariff Policy

Before going into the contents or process of Draft Tariff Policy, we wish to outline the context of this proposed policy. The overarching framework of E-Act 2003 defines this context. In practice, the E-Act is going to lead to segmentation of the society in four parts. These are: (A) the large customers, which would be allowed to access new (low cost) generation or put up their own captive plants. These customers would see a major reduction in their tariff and largely be allowed not to shoulder the historical costs (stranded costs), (B) urban small customers. Private players may be interested in taking up Distribution (DisCom) for these areas. These private players may see these urban customers as captive customers not just for distribution but also for their proposed generation plants. Hence, these customers would remain under regulated monopoly for quite some time to come. (C) The Rural small customers. These customers would also be under regulated monopoly, which is likely to be under public ownership. These customers are the largest in number and would be taking the largest brunt of tariff increase. (D) The last section is the rural un-connected population, or prospective customers. The actions for these customers under other policies are yet to be defined. There is urgency to clearly spell out what will be done for these customers.

It needs to be recognized that the proposed Tariff Policy is largely for the captive customers, under regulated monopoly (i.e. segment B and C). And these constitute majority of customers getting electricity today.

2. Guiding Principles

From this perspective, it should become clear that the Tariff Policy should aim at ensuring that investments are made to serve these captive customers, while protecting their interests (i.e. investments are made in cost effective manner). Hence, regulatory certainty (although important) should be a sub-part of this larger “public policy” objective. In fact, the policy should address a number of other important issues too.

- Policy should lay a clear road map for future (not necessarily by specifying all details). A good example of this is the section 5.8 (on co-generation and renewable sources).
- Bring clarity, minimize confusion and contradictions. Reduce possibilities of endless legal battles between utilities (which are substantial under the new Act). Examples of areas that lack clarity in the E- Act; and have very large implications on tariff and public interest include, issues related to second licensee, Surcharge(s), and definition of Captive generation. All of these have very significant implications for the sector as a whole.

- The policy has to make sure that the adverse tariff impacts on customers under section B and C are minimized (are not unreasonable and are bearable to the consumer and to the state subsidy capability).¹
- Ensure that the benefits of competition are also maximized for these captive customers (section B and C). This is discussed at length later.
- The policy should be aimed at avoiding old pitfalls, relating to lack of public scrutiny and passing the existing costs to future.²

The policy should avoid investor focus and preoccupation with short-term objectives. Section 7.1 “Broad Principles of Tariff setting”, for example, has no mention of protecting consumer interests or improving efficiency.

At this stage, in our opinion, we should not aim at micro efficiency. Rather we should focus on simple but clear and workable rules that would minimize the possibility of creation of new mega inefficiencies. A road map for future, as mentioned earlier, should clearly indicate the intent to move towards increased efficiency. An example of this would be Transmission pricing based on simple principles of variants of “postage Stamp” v/s highly involved principle of “distance travelled by energy transmitted”. This is essential if we do a reality-check of our systems in terms of metering and other infrastructure.

An example of areas where more clarity is urgently needed is regarding transmission. How we expect regulators to tackle issue of commitment for use of transmission facility. Do we expect generating companies to do a long-term contract of transmission capacity? if not, how do we ensure that planning does not go astray?³

Last issue relates to the linkages in different policies. The National Electricity Policy and Plan, Policy for stand-alone system, and for local distribution in rural areas etc., all have inter-linkages. The set of policies actually need to be seen as a group, but for the time being, the Tariff policy should clearly articulate the inter-linkages (that are important). For example, the MNES is in the process of re-drafting its policy regarding subsidy for Renewable energy sources. Last bullet of Sec. 6.4 exempts the RES from Transmission surcharge. Such piece meal approach should be avoided.

3. Some Specific Issues

3.1. Too Many Details

We feel that the policy should not be a tariff notification, as in the decade of 1990s. The Ministry should not dilute the authority given by Act to the Regulatory commissions. We have a very bad track record of tariff notifications

¹ This could only be done by doing an impact analysis – using case studies based on financial models.

² Example of these include, excluding government companies from competitive bidding all together, and allowing loop-hole of “Regulatory Assets” without any criterion / upper bound.

³ If the MoP feels that such issues are to be tackled by the regulatory commissions, the MoP policy can indicate that.

by Ministry of Power. It was on this backdrop of unaccountable policy processes, we have setup the regulatory commissions. And by and large the experience of commissions is much better than that of the Ministry of Power (in the period of IPP saga). We cannot and should not reverse this process.

The tariff policy seems to be concerned about the regulatory certainty. This is justified. But notifying incentives and PLF is not a solution to this. A better approach would be identify issues of possible regulatory uncertainty and suggest mechanisms to handle them.

But on the other hand, some sections give rise to regulatory uncertainty. For example, section 4.3 “Review of Operating Norms” does not clarify if it is applicable only for wires business or whether the tariff implicit in new PPAs that may be signed by Distribution companies would also be affected by Review of Operating Norms (like PLF and availability).

3.2. Need to Bring Clarity in Roles

The policies by Ministry of Power should be aimed at bringing in more clarity in the roles and responsibilities of various players such as CEA, CERC, SERC and MoP. It should also help in better defining their authority and the likely actions in near future. The roles of the new forums established by law also need to be clarified by MoP.

In fact, if there are any conflicts with other agencies such as Competition Commission, these need to be clarified by MoP.

3.3. Competition Issues (for Regulated Entities)

As mentioned in section 1 of this note, the Tariff Policy is largely applicable for the ‘captive consumers’ of distribution utilities. These customers are going to be worst hit due to E Act 2003. The commission and MoP should do all efforts to ensure that these captive customers benefit from competition. The Tariff Policy scores very low on this count, and needs major changes.

There should have been a clear mention that all power / capacity purchase by distribution company should be in a transparent and competitive manner. It is extremely important considering that cost of power purchase constitutes over 60% in most cases. And the benefit of competition for captive customers (in category B and C) would largely come from this aspect. In case a Distribution company wants to construct a new plant, it should announce its avoided cost. If another generating company offers power at a lower cost then the DisCo should purchase power from that company. At most, the DisCo can be given an option to match the cost of its competitor.⁴ The Regulatory Commission should oversee this process to ensure that competition exists. The commission should approve the

⁴ This should be allowed only if, the tariff quoted by the lowest competing supplier is up to say 5% lower than the “Avoided Cost” of DisCo. If the tariff quoted by competing supplier is more than 5% lower than “Avoided Cost” of DisCo then it should be assumed that the DisCo cannot match that tariff. This method appears fair for both, the DisCo and the possible competing generators.

capacity and the kind of plant (base / intermediate load or peaking). The location of the plant should not be specified (rather an area where power is needed should be specified). If the commission feels it a must, it may specify the fuel / technology for the plant. The draft PPA and bid evaluation criteria should be part of the bidding process.⁵

If the process is not competitive (for whatever reason) and fails to attract sufficient number of bidders then the commission should evaluate the “Pudency” of generation investment (of the DisCo) in a transparent manner. Without such process the small (captive) customers would not get benefit of competition and it would defeat the very purpose of the Act.

Rather than such an approach, the Tariff Policy takes a different route. (1) Policy paper does not make it mandatory that DisCo should undertake power purchase only through Transparent and Competitive process. (2) Sec 5.2 among other such sections dilute the Competitive bidding process. Even in case of several controversial IPP projects the EPC contract (or procurement of major blocks) was done through competitive bidding! (3) The government owned companies are exempted from public scrutiny of cost for their generation expansion. This should not be allowed at all. If a government company desires to construct a ‘Merchant plant’ to sell power in the market then there should be no regulation on its investment. But if it wants to supply to a distribution company, then it should only be one of the players (competitors) for supplying power. It should also participate in the competitive bidding held for supplying power to DisCo.

We understand that agencies such as World Bank have suggested that if there is only one bidder - then even negotiated tariffs with that bidder should be treated as "competitively bid tariffs"! Such a weird definition of competitive process is a sure shot route to mega inefficiencies. And we will be taking the power sector back to the regime of MoU based IPP projects. This is not the purpose of the act.

3.4. Removal of Information Asymmetry – a necessity for making competition work

It is well known that the information asymmetry is among the key reasons for mega inefficiency. As yet, the MoP does not seem to have made concrete efforts (to our knowledge) or indicated its intent to tackle this issue.

The tariff policy indicates that RCs should use “Pudency” tests. But the RCs do not have backing of a solid database from which they can draw insights. It is responsibility of the MoP and CEA to create the database. This may not be an issue for the Tariff Policy, but as mentioned earlier, the MoP should clearly indicate that it intends to do this.

⁵ With the vast experience of competitive bidding, it should now possible be possible to arrive at simple but robust method of calling for bids. One method could be to ask bidders to quote only two sets of figures (Rs/U tariff for three different PLFs) and annual escalation in the same. Implying that fuel price and Forex risk should be born by generator.

The database should contain information of ALL power plants (captive, merchant plant or otherwise), trading contracts and even bi-lateral contracts (between generation companies and consumers or DisCos). Filing information in this public database should be a mandatory requirement. To limit the size of the database, only plants more than 10 MW, trading and bilateral contracts for more than 2 or 5 MW (and more than 15 days in a year) should be registered in the database.

Such a database is essential to ensure that competition in generation is efficient and the RCs ensure that regulated utility's generation / power purchase decisions are "prudent".

3.5. Financial Principles

As per our suggestion, most contracts for power purchase (by DisCo) should be through competitive bidding. In case this cannot materialize, the question of regulated tariff would arise. In these limited cases, we believe that it is much better to take 'Cost of Capital' approach.

Unless an area has two licensees, the wires business (distribution and transmission) is a regulated monopoly, and all investments would need to be regulated. And the concept of "Cost of Capital" should be used.

The exact method to be used should be decided by the CERC. Probably a range of values can be decided, depending on the strength and credit-worthiness of the companies. It may be unfair to allow uniform values a utility in rural area and another in say Delhi or Mumbai.

Any authority deciding this method should give due justification for the numbers used / suggested by it (either for RoE or for Cost of Capital). In fact, it should also indicate the implications of using suggested numbers and give a translation (from RoE to Cost of Capital - for a given set of input conditions).

Use of Historic Cost

Use of historical cost for deciding tariff of old plants is inevitable, as we want to limit the tariff impacts. But here a precaution needs to be taken by MoP. Let us take an example. If for some old hydro generation, the tariff comes out to be say Rs 0.25 /kWh. The state government then sells that plant at very low cost (based on "revenue potential" as per E Act). The private party purchasing the plant can make windfall profit by selling power in the competitive market. To avoid this (improper business valuation), the MoP should find a way to bind these old plants to the existing DisCo.

3.6. Cross-subsidy Surcharge

It is appropriate to include "potential" customers in the net for the surcharge. But it may be noticed that with the present definition the HT industry may get a

tariff reduction (if it opts for open access) of around 20% (assuming T and back-up charges up to Rs 0.4/unit in addition to Surcharge as defined in the Tariff Policy). While, the likely surcharge is going to be small for most states.

Another issue relates with use of Marginal cost v/s use of Average cost for supply for computing Surcharge. Strictly speaking, the cost of reduced / avoided purchase because of HT industry opting out has to be considered for the calculation of Surcharge. The badly negotiated PPAs cannot be considered for this calculations for two reasons, (1) these PPAs need to be seen as exception, and (2) they do not constitute the reduced / avoided purchase.

3.7. Additional Surcharge (section 7.2.10)

This additional surcharge on the wheeling charge is to be applicable to compensate the utility for costs associated with “obligation to serve”. The policy argues that in case of shortages this cost is insignificant. Look at this from the perspective of small consumers (section B and C) with an example of a 30 MW consuming industry. Assume that this large industrial consumer opts out and starts purchasing power from an outside generator. One fine day, its contract with the outside generator goes sore. The industrial consumer demands power from the DisCo. Now the DisCo has no option but to do additional load shedding and give power to this large industry! Why should a large number of small consumers be on a tender hook and suffer load shedding for the convenience of the large industry?

We need to discourage large customers from opting out of the grid without a reliable supplier and then coming back at will, which will cause a major uncertainty for the grid operations.⁶

In fact, in case of shortages – high Additional Surcharge (corresponding to Scarcity value of power) should be charged. This is an example of Industry and investor bias of the policy. Similar is the next example.

3.8. Limiting chargeable T (& D) losses (section 6.6)

Limiting chargeable T (& D) losses in Transmission costs or wheeling costs to the normative losses (presumably technical losses) at respective voltage levels is a major decision. It implies that large consumers (from segment A) opting out – for open access are exempt from the Stranded costs of high T & D losses. This is incorrect. The costs should be shared by all consumers that use the grid (a common infrastructure). Else, as a next step, even the metered consumers may argue that they are not liable to pay the excess (above the nominal) T & D losses - this will leave only government to pay for it (or the distribution / transmission company).

Say in case of (prospective) Maharashtra Transmission utility - the T losses are about 3% higher than the losses arrived at by load flow studies. If this is

⁶ It needs to be remembered that the Act expects that the corss-subsidy will be removed in near future. And then the large customers should not have any preferential treatment.

directly disallowed it implies a cost of Rs 430 Cr (against a much lower profit). So the Transmission company in Maharashtra will make operating loss, which will have to be paid by government (tax payers). In case of DisCo the inefficiency will be loaded on small (captive) consumers while large consumers will be exempt from this.

Chargable T (or D) losses should be declining in tandem with the T&D loss reduction target applicable for DisCo or TransCo in general.

3.9. AT&C Loss

The paper argues that AT&C loss method is essential to reduce data uncertainty. This is difficult to understand. The data uncertainty is mainly in the context of energy billed (not in energy available for sale, amount of Rs billed or even money received, which are the other variables in the formula). Even in the AT&C method, the key parameter that leads to uncertainty still remains. Hence, the AT&C would only put the cost of inefficiency of bill collection on to the consumers. Whereas the present expectation is that utility recovers all bills.

In addition to this, the draft policy also allows the "Bad Debt" to be considered in the tariff calculations. This appears to be double counting.

To reduce the data uncertainty the paper suggests that sample metering of DTs should be done (most RCs are following this method) for estimation of Agricultural consumption. We have been arguing that proper sampling is the key for making this method successful. Thorough census of all IP sets in the state along with information on crops taken, area irrigated and water source (and depth) is a pre-requisite for this; which unfortunately no state utility has completed. In absence of such an approach, just random sampling (using DTs chosen by SEB) is likely to be problematic. Analysis of MSEB's monthly Distribution loss and agricultural consumption estimates clearly prove this point. The distribution loss comes down radically in the monsoon where as the agricultural consumption estimates remain more or less same as in other non-monsoon months (see page 26 Vol. II MSEB tariff proposal for year 2003-04). This implies that the agricultural sampling is wrong.

3.10. Regulatory Asset:

The E Act 2003 has several hard provisions to ensure that the cross-subsidy is removed rapidly (Captive, Open access etc.). It also aims at achieving financial discipline by mandating that the state governments pay subsidy in advance. Where as, an un-qualified provision for allowing regulatory asset seems a U turn. This can become a dangerous way of pushing present burden in future. In our opinion, the regulatory assets should be allowed only in case the tariff shock (average tariff increase) is more than say 20%. It should also be accompanied with a well-articulated plan to recover the money in future. Without such provision, it is possible that commissions may be tempted to avoid tough decisions and push the costs in future to an un-sustainable level.

In general, the regulatory asset should be applicable only in case of unforeseen costs arising out of factors such as natural calamity and other such Force-Majeure events. This is because; a prudent regulatory oversight is expected to avoid the need for such a tariff shock.

3.11. Miscellaneous Issues

The Tax liability: Section 4.5.1 says 16% RoE is pre-tax and it is said to give incentive for good tax management. But 5.1 adds tax (at actual) in the fixed cost! This appears confusing.

Hydro: In 1 in 10 years when the water availability is low (generation below design energy) the hydro stations would get full Fixed cost. And in 9 of 10 years when water availability is more than design (and generation is more) it would get incentive. This may be fine if the incentive is only a small part. But it does not become clear, as the "Primary Energy Charge" is not defined in the document.

Working Capital seems high: for generation stations it is nearly equal to sum of 2 month bill and fuel cost for two months. One wonders whether the generating company gets any credit from coal suppliers and if not what is the reasonable quantum for working capital?

It is good that the working capital as defined in section 7.2.4 given a clear incentive for reducing arrears for the distribution utility.

Above comments are without prejudice to our stand that MoP should not get into such micro details. MoP should try and concentrate on removing confusion and lay down direction and leave it to the RC's to fill in the detail.

4. The Process for Making Tariff Policy

We strongly feel that the process of making 'Tariff policy' (or any such policy) needs substantial improvements. The process should be seen as transparent and accountable – especially when MoP is leading the power sector in a new era – wherein transparency and accountability have to be the corner stones of decision-making.

To achieve this, (a) the plan of action should be outlined (such as whether draft 2 will be a draft policy or a discussion paper and whether it would be follow by policy). This will facilitate groups having limited resources to optimally focus their inputs. While making comments we have assumed that Draft 1 is only an outline. We would appreciate if clarity can be brought as regards to stage at which final decisions would be taken.

In the new document, the changes made in draft document should be clearly articulated and a covering note outlining changes should be circulated along with new draft. Else, it would be like the several Drafts of E-Bill. By the time small groups (with limited resources) could obtain a copy and read the draft, the newer draft was available. This undermines the meaningful public participation in the process.

The comments received from all stakeholders should be put up on the web or should be made available to public in some form. This would help improve the transparency in the process.

Another major lacuna in the current process is the lack of supporting analysis based on concrete data and sensitivity analysis. The tariff impact analysis should be included with any discussion paper. Without such supporting data and impact analysis, the exercise remains only academic discussion for most stakeholders. The impact of different provisions and changes should be explained with help of numbers. We urge the ministry to remove this important lacuna in future drafts.

Ideally the draft policy should be preceded with a review of preset tariff policy(ies), discussing the good practices and shortcomings. The MoP may still consider bring out such a paper.

On the whole, we request the MoP to substantially rework the policy as well as the approach it is taking in terms of defining such policies.

20th Sept 2003

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