

## **FORUM OF INDIAN REGULATORS**

### **MINUTES OF THE MEETING HELD ON 17<sup>TH</sup> & 18<sup>TH</sup> DECEMBER, 2004** **TO DISCUSS THE ISSUES OF SURCHARGE (CROSS – SUBSIDY) AND** **ADDITIONAL SURCHARGE**

In the meeting of Forum of Indian Regulators held on 2<sup>nd</sup> December and 3<sup>rd</sup> December 2004, at Ranchi, a Group was constituted for the purpose of recommending methodology for computation of surcharge and additional surcharge on account of Open Access. The composition of the Group is as under:

1. Shri. K N Sinha, Member, CERC
2. Shri. R D Gupta, Member, UPERC
3. Shri. K Sreerama Murthy, Member, APERC
4. Shri. B C Jena, Member, OERC
5. Shri. Surinder Pal, Member, APERC
6. Shri A.K. Jain, Member, WBERC
7. Shri. Vivek Sharma, TERI

A few Papers/Notes, received from various Commissions/Members, were circulated and the meeting was held on 17<sup>th</sup> and 18<sup>th</sup> December, 2004 at the conference room of CERC, New Delhi to deliberate on the issues mandated.

The meeting was attended by all the members, except Shri A.K. Jain, Member, WBERC. Shri Sunil Kumar of PWC also attended the meeting on a special request of the Group.

- 1) The Group started the deliberations keeping in view the intent of the Electricity Act, 2003 to promote interalia open access, thereby forcing incumbent utilities to improve efficiency. The Group felt that the surcharge

should have least possible financial impact on existing Licensees and at the same time it should promote competition.

**2)** Four options for determining surcharge were discussed. These were:

1. Average Cost Method;
2. Embedded Cost Method (or Cost of Supply Method)
3. Marginal Cost Method; and
4. Avoided Cost Method

**a. Average Cost Method:**

The simplest method to calculate surcharge (or cross subsidy) for the base year by taking the difference between the average realization from a consumer category and the average cost. The method is simple and the computation is easy to make, but since the method assumes that losses and costs are same for LT and HT and EHT consumers, it does not capture the reality. Also the extent of cross subsidy will be understated under this methodology. Also this approach does not provide correct economic signals to the Licensee or the consumers likely to move out. The Group observed that it will discourage open access since generation will not be available at such a low price at which it can be implemented.

**b. Embedded Cost Method (or Cost of Supply Method)**

The second method that was discussed was taking the difference between the average realization and the consumer category-wise/voltage-wise cost of supply (embedded cost). Even though this method is an improvement over the average cost method, it results in high level of surcharge. This would imply that competitive rates of generation at which open access can be implemented have to be very low, which again does not seem to be a reality. The net result would be that the method would not encourage open access.

### **c. Marginal Cost Method:**

An alternative method of computing the quantum of surcharge is by taking the difference between the average realization for the respective consumer and the Marginal cost of supply by the Distribution Company. The different assumptions involved and the methodology adopted are:

1. The Marginal cost of supply by a distribution company is equivalent to the sum of –
  - (i) Marginal cost of purchase of electricity by the distribution Company,
  - (ii) Applicable Transmission and Wheeling charges,
  - (iii) Applicable system losses
2. The Marginal cost of purchase of electricity to be equated to the highest power purchase cost of the utility including fixed and variable costs.

It was discussed and agreed that surcharge arrived at from this method is not revenue neutral and will adversely impact the licensees financials. The Group observed that surcharge in this method could be negative also.

### **d. Avoided Cost Method:**

The methodology for computing the Avoided Cost is as follows:

- (i) As a first step, the projected capacity that is likely to move away due to open access will be estimated.
- (ii) Since, it will avoid purchase of power from marginal sources of supply, the weighted marginal cost of power purchase (variable cost) from such sources would be considered as avoided cost for variable components of power purchase.

- (iii) To that avoided cost, other charges viz. applicable fixed charges of power purchase, and applicable transmission and wheeling charges will be added to arrive at the cost of supply.
- (iv) The difference between the average realization of a category and the avoided cost of supply, discussed above, shall provide the cross-subsidy surcharge amount.

3. After detailed deliberation on various scenarios and examples, the Group came to the conclusion that avoided cost approach balances the twin objectives of safeguarding the financial viability of the licensee and promotion of competition. The Group therefore recommended the Avoided Cost Method over other methods. However, in adopting avoided cost approach, each Commission will have to look into certain specific and peculiar characteristics of their system. Nevertheless, this has to be dealt under the broad framework of avoided cost approach.

**Additional Surcharge:**

The Group was of the view that in the present scenario of shortage of generation, any generation capacity is not likely to get stranded due to migration of load. In the case of Intra-State transmission lines and distribution system, assets shall continue to be used by the open access consumer by paying wheeling charges etc. even after migration. Therefore, the question of stranded capacity does not arise. As and where, however, situation of stranded generation or intra-state transmission and distribution assets do arise, it (these) will have to be dealt with by the respective Commissions, on the basis of petition to be filed by the Licensees, on case to case basis. The Group felt that no cut and dry methodology could be or needs to be prescribed in this regard.