

Reply to data gaps in respect of determination and approval of Cross Subsidy Surcharge

1. Though the calculation submitted is stated to be based on the formula given in the National Tariff Policy 2016 but vide para 5 of the Petition reference has also been made to Regulation 90 of Tariff Regulations, 2014 and formula prescribed therein has also been cited. However the calculations of Cross Subsidy Surcharge as per formula given in the tariff Regulation have not been furnished. Please furnish the calculation of Cross Subsidy Surcharge as per Tariff Regulations, 2014 also.

The calculation of Cross Subsidy Surcharge as per Tariff Regulations, 2014 considering the revised tariff for relevant categories as approved in the Tariff Order for FY 2015-16 dated 22nd Sep'16 is provided below:

| Category | Cost of Power Purchase C (Rs/unit) | Tariff Payable T (Rs/Unit) | System Losses L (%age) | Wheeling Charges D (Rs/Unit) | Surcharge $S=T-[C/(1-L)+D]$ |
|--------------|------------------------------------|----------------------------|------------------------|------------------------------|-----------------------------|
| NDS (11 KV) | 5.37 | 8.91 | 12.60% | 0.33 | 2.43 |
| NDS (33 KV) | 5.37 | 8.91 | 3.80% | 0.11 | 3.21 |
| NDS (132 KV) | 5.37 | 8.91 | 0.00% | 0.01 | 3.53 |
| ML (11 KV) | 5.37 | 7.64 | 12.60% | 0.33 | 1.16 |
| ML (33 KV) | 5.37 | 7.64 | 3.80% | 0.11 | 1.94 |
| ML (132 KV) | 5.37 | 7.64 | 0.00% | 0.01 | 2.25 |
| LIP (11 KV) | 5.37 | 8.72 | 12.60% | 0.33 | 2.25 |
| LIP (33 KV) | 5.37 | 8.72 | 3.80% | 0.11 | 3.03 |
| LIP (132 KV) | 5.37 | 8.72 | 0.00% | 0.01 | 3.34 |

2. In the heading of table 1, it has been shown that sales and revenue are at existing tariff for FY 2015-16. However, in the column no. 3 of the table, the revenue is stated to be on revised tariff. Please clarify the above anomaly.

It is submitted that the revenue is stated as the revenue assessed during FY 2015-16 from the respective category as per the tariff applicable during FY 2015-16 i.e. based on the tariff order issued dated 24th February 2015.

3. Since cross subsidy surcharge is proposed voltage wise, the Discoms should also indicate "T" at various voltage levels keeping in view the applicable rebate.

In the Petition, the tariff 'T' had been determined for the category as a whole on the basis of sales and revenue assessed. It is submitted that the assessment as considered by the Petitioner already covered the impact of total rebate including the voltage rebate. However, the Petitioner has revised the computation of Cross Subsidy Surcharge based on the Tariff approved vide order dated 22nd Sep'16 and considering the discrepancies/objections raised by the Commission/Stakeholders.

- 4. In table 2, Discoms have shown "C", i.e., weighted average cost of power purchase for FY 2015-16 as Rs 4.08/kWh. It has been observed that in Appendix-A, while calculating total cost of power purchase, the Discoms have also included the transmission charges. The Discoms may explain the reasoning for this, as formula given in National Tariff Policy, 2016, now requires it to be included in element "D".**

The Petitioner submits the revised computation after considering the transmission charges in element 'D' as Annexure-I. The Petitioner has also revised the computation of Cross Subsidy Surcharge based on the Tariff approved vide order dated 22nd Sep'16 and considering the discrepancies/objections raised by the Commission/Stakeholders.

- 5. In para 13 and Table 3 & 4, the Discoms have furnished Voltage Wise network losses (L) and Wheeling Charges (D) respectively based on Commission's order dated 2006, which was based on definitions given in Tariff Policy, 2006, wherein "D" was defined as the wheeling charges and "L" was defined as the system losses for the applicable voltage levels. However, as per the National Tariff Policy, 2016, "D" is aggregate of transmission, distribution and wheeling charges applicable on that relevant voltage level and "L" is defined as aggregate of transmission, distribution and commercial losses applicable to the relevant voltage level. The Discoms need to confirm that value of "D" (wheeling charges) and value of "L" (losses) are as per the Tariff Policy, 2016 and if not, reasons for the same may be indicated.**

It is submitted that the component 'D' has been recalculated as per the National Tariff Policy, 2016 and is reflecting in Annexure-I. Also the transmission losses for FY 2015-16 have been included in the revised computation. It is further submitted that the collection efficiency at relevant voltage level in the mentioned categories for which the Cross Subsidy Surcharge has been computed is 100%. Hence the losses as considered for computation, covers the commercial losses as well.

- 6. In its Prayer, the Discoms have requested to pass any interim order authorizing them to levy and collect the Cross Subsidy Surcharge at 20% of applicable tariff, i.e., at the maximum level, provided in the Tariff Policy, 2016. However, the value of maximum amount of cross subsidy surcharge has not been quantified. The same may be furnished.**

The required computation indicating 20% of applicable tariff is provided in Annexure-I. Moreover minimum of CSS computed and 20% of applicable tariff is also reflecting in Annexure-I.

- 7. Copies of audited accounts for FY 2015-16 be submitted in support of the petition. If audited accounts are not available then audited accounts for FY 2014-15 and unaudited accounts for FY 2015-16 may be furnished.**

The copy of audited accounts for FY 2015-16 is attached along with the reply.

Annexure-I

Revised computation submitted to the Hon'ble Commission in response to the data gaps observed

| Category | Voltage Level | Average Tariff (T) [#] Rs./kWh | Cost of Power Purchase (C) [^] Rs./kWh | Transmission Distribution and Comm'l Losses (L) ^{^^} | Transmission Distribution and wheeling Charges (D) [*] Rs./kWh | Per unit cost of carrying regulatory asset (R) ^{\$} Rs/kWh | Cross Subsidy Surcharge (as per NTP formula) Rs./kWh | 20% of Avg. Tariff Rs/kWh | Cross Subsidy Surcharge to be Levied |
|----------|---------------|--|--|---|--|--|---|------------------------------|--------------------------------------|
| A | B | C | D | E | F | G | H | I | Min (H,I) |
| NDS | 11 KV | 8.91 | 3.60 | 17.80% | 1.07 | 1.10 | 2.37 | 1.78 | 1.78 |
| | 33 KV | 8.91 | 3.60 | 9.00% | 0.85 | 1.10 | 3.01 | 1.78 | 1.78 |
| | 132 KV | 8.91 | 3.60 | 5.20% | 0.75 | 1.10 | 3.27 | 1.78 | 1.78 |
| ML | 11 KV | 7.64 | 3.60 | 17.80% | 1.07 | 1.10 | 1.09 | 1.53 | 1.09 |
| | 33 KV | 7.64 | 3.60 | 9.00% | 0.85 | 1.10 | 1.74 | 1.53 | 1.53 |
| | 132 KV | 7.64 | 3.60 | 5.20% | 0.75 | 1.10 | 2.00 | 1.53 | 1.53 |
| LIP | 11 KV | 8.72 | 3.60 | 17.80% | 1.07 | 1.10 | 2.18 | 1.74 | 1.74 |
| | 33 KV | 8.72 | 3.60 | 9.00% | 0.85 | 1.10 | 2.82 | 1.74 | 1.74 |
| | 132 KV | 8.72 | 3.60 | 5.20% | 0.75 | 1.10 | 3.08 | 1.74 | 1.74 |

[#] Tariff has been considered as per the revised tariff approved for relevant categories vide Tariff Order dated 22nd Sep'16.

[^] Transmission charges per unit have been excluded from 'C' and included in 'D'

^{^^} Losses include transmission loss of 5.2% (As per audited accounts). As collection efficiency is 100% of relevant categories, there is no commercial loss

^{*}Transmission charges per unit sales (Rs 0.74/unit) included in "D"

^{\$} Based on carrying cost for regulatory assets as approved vide Tariff Order dated 22nd Sep'16 and actual sales for FY 2015-16.

Annexure-II

Table 1: Approved ABR@ revised tariff vide TO dated 22nd Sep'16 (T)

| Discom | Non-Domestic | Mixed Load | Large Industry |
|------------------|--------------|-------------|----------------|
| JVVNL | 8.78 | 7.55 | 8.77 |
| AVVNL | 9.00 | 8.00 | 8.35 |
| JdVVNL | 9.07 | 7.57 | 9.30 |
| Rajasthan | 8.91 | 7.64 | 8.72 |

Table 2: Computation of carrying cost per unit (R)

| Discom | Approved Gap | Approved Carrying Cost | Actual Sales FY 2015-16 | Carrying cost per unit Sales |
|------------------|--------------|------------------------|-------------------------|------------------------------|
| JVVNL | 14800 | 1829 | 17852 | 1.02 |
| AVVNL | 14698 | 1739 | 13154 | 1.32 |
| JdVVNL | 14965 | 1682 | 16574 | 1.01 |
| Rajasthan | 44463 | 5250 | 47580 | 1.10 |