Subject – Revision in Electricity Tariff w.e.f. 1st September 2018
Reference – Commercial Circular No. 311, Mid-Term review order dated, 12.09.2018 in the case of 195 of 2017

The Maharashtra Electricity Regulatory Commission, in exercise of its power under Sections 61 and 62 of the Electricity Act (EA), 2003, and in pursuance of the MYT Regulations and all other powers enabling it in the behalf, and after taking into consideration MSEDCL’s submission, the written and oral suggestions and objections received and the responses of MSEDCL, and all other relevant material, has issued Mid-Term Review Order dated 12 September, 2018 in Case No. 195 of 2017.

Accordingly, the guidelines as under are issued for replacement of the said order of the commission without prejudice to the rights of MSEDCL to take any actions as provides in the law.

**Power Factor Incentive/Penalty:**

In view of MERC Tariff order 195 of 2017 dt. 12.09.2018, Penalty for leading Power Factor is introduced, whereas incentive is applicable in case of lag PF only.

Penalty for leading power factor also introduced. This penalty will be applicable from prospective effect. As a first step towards the kVAh billing system, which is devoid of any separate incentive / penalty for power factor, the Commission has decided to reduce the existing PF Incentive/ Penalty by 50%. Accordingly, maximum PF Incentive, which is 7% at the Unity Power Factor, has been reduced to 3.5%. Similarly, Penalty for the lower power factor has been penalized.

Whenever the avg P.F. is more than 0.95 Lag and upto 1, an incentive shall be given at the rate of percentage in Tariff order at the amount of monthly electricity bill, excluding taxes and duties. And whenever average P.F. is less than 0.9 (Lead or Lag), Penal Charges shall be levied at the rate of percentage of amount of monthly electricity bill, excluding taxes and duties.

**There is change in % of PF Penalty and Incentive as below.**

**Power Factor Incentive**

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Range of Power Factor</th>
<th>Power Factor Level</th>
<th>Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.951 to 0.954</td>
<td>0.95</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0.955 to 0.964</td>
<td>0.96</td>
<td>0.5%</td>
</tr>
<tr>
<td>3</td>
<td>0.965 to 0.974</td>
<td>0.97</td>
<td>1.0%</td>
</tr>
<tr>
<td>4</td>
<td>0.975 to 0.984</td>
<td>0.98</td>
<td>1.5%</td>
</tr>
<tr>
<td>5</td>
<td>0.985 to 0.994</td>
<td>0.99</td>
<td>2.5%</td>
</tr>
<tr>
<td>6</td>
<td>0.995 to 1.000</td>
<td>1.00</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

**Power Factor Penalty**
PF Incentive/Penalty w.e.f. Sep-2018:

Now Power Factor will be computed taking into account both Lagging RKVAH and Leading RKVAH

i. If PF Level is less than 0.90 then penalty shall be as per percentage given in MERC order.

ii. If PF Level is greater than 0.95 and RKHAV Lag consumption >= RKVAH Lead consumption then
    incentive shall be as per percentage given in MERC order.

iii. If PF Level is greater than 0.95 and RKHAV Lag consumption < RKVAH Lead consumption then
    incentive shall not be applicable.

iv. If the RKVAH Lead reading is not available then old procedure of PF computation will be followed.

Example:-

### Case 1 (Rice Mill) Tariff – HT 1A

<table>
<thead>
<tr>
<th>Reading Date</th>
<th>KWH</th>
<th>KVAH</th>
<th>RKVAH (LAG)</th>
<th>RKVAH (LEAD)</th>
<th>KW (MD)</th>
<th>KVA (MD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>8559.80</td>
<td>8569.80</td>
<td>2091.100</td>
<td>4972.600</td>
<td>27.500</td>
<td>27.500</td>
</tr>
<tr>
<td>Previous</td>
<td>80508.300</td>
<td>80916.500</td>
<td>2012.800</td>
<td>4649.600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>5051.500</td>
<td>5065.100</td>
<td>78.300</td>
<td>3278.200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiplying Factor</td>
<td>4.0000</td>
<td>4.0000</td>
<td>4.0000</td>
<td>4.0000</td>
<td>4.0000</td>
<td>4.0000</td>
</tr>
<tr>
<td>Consumption</td>
<td>20206.000</td>
<td>20260.400</td>
<td>313.200</td>
<td>13112.800</td>
<td>110.000</td>
<td>110.000</td>
</tr>
<tr>
<td>LT Metering</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Adjustment</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Assessed Consump</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Total Consumption</td>
<td>20206.000</td>
<td>20260.000</td>
<td>313.000</td>
<td>13113.000</td>
<td>110.000</td>
<td>110.000</td>
</tr>
</tbody>
</table>

Power Factor will be computed as

\[
PF = \frac{20206}{\sqrt{(20206)^2 + (313 + 13113)^2}}
\]

\[
PF = 0.833 \text{ (Power Factor Penalty 4%)}
\]
Case 2 (Steel and Iron)  Tariff – HT 1A

Power Factor will be computed as

\[
PF = \frac{8372880}{\sqrt{(8372880)^2 + (38880 + 725040)^2}}
\]

\[
PF = 0.996 \text{ (Power Factor Incentive 0%)}
\]