

**SOUTHERN POWER DISTRIBUTION COMPANY OF A.P LIMITED :: TIRUPATI**

**BRIEF NOTE ON PROPOSED ARR & FPT for FY 2023-24, DT. 30.11.2022**

<b>Energy Sales for FY 2023-24</b>	<b>26,280.91 MU</b>
<b>Power Purchase Requirement</b>	<b>29,559.04 MU</b>
<b>Power Purchase Cost</b>	<b>13,555.63 Crs</b>
<b>Network &amp; SLDC Cost</b>	<b>6,651.58 Crs</b>
<b>i)Transmission Cost</b>	<b>1,415.79 Crs</b>
<b>ii) SLDC Cost</b>	<b>50.81 Crs</b>
<b>iii)Distribution Cost</b>	<b>4,414.29 Crs.</b>
<b>iv) PGCIL Expenses</b>	<b>769.41 Crs</b>
<b>v) ULDC Charges</b>	<b>1.28 Crs.</b>
<b>Interest on Consumer Security Deposits</b>	<b>137.57 Crs</b>
<b>Supply Margin in Retail Supply Business</b>	<b>45.04 Crs</b>
<b>Other Costs, if any</b>	<b>68.43 Crs</b>
<b>Additional Interest on pension bonds (As approved in APGENCO MYT order)</b>	<b>412.53 Crs</b>
<b>Aggregate Revenue Requirement</b>	<b>20,870.78 Cr</b>
<b>Revenue at Current Tariffs (12905.98) + NTI (1312.10)</b>	<b>14,218.08 Cr</b>
<b>Revenue from Cross Subsidy Surcharge (81.63) &amp; Grid Support charges (24.55)</b>	<b>106.18 Cr</b>
<b>Revenue Gap @current tariffs</b>	<b>6,546.53 Crs</b>
<b>Revenue through proposed Tariffs</b>	<b>90.89 Crs</b>
<b>Revenue Gap @ Proposed tariffs</b>	<b>6,455.63 crs</b>
<b>Revenue through Full cost Recovery as per GO Rt. No.161 ,dt:15.11.2021</b>	<b>20,870.78 Cr</b>
<b>Revenue Gap at full cost recovery</b>	<b>0</b>
<b>Average Cost of Supply (Rs/unit)</b>	<b>7.94</b>
<b>Average Power Purchase Cost (Rs/ unit)</b>	<b>4.59</b>

## Retail Supply Tariff Proposals for FY 2023-24 :

### (i) Proposals on HT-III (C) Energy Intensive Industries:

- a) Presently Energy Intensive Industries is categorised as a separate sub category under HT-Industry-III, in the Retail Supply Tariff Order. This tariff is applicable to Ferro Alloy Industries, PV ingots and cell manufacturing units, Poly Silicon Industry and Aluminium Industry.
- b) Energy Intensive Industries category has been conferred separate sub category under Industry-General for several years, with a concessional tariff without any Demand Charges. Comparison of the Voltage wise tariffs for HT General Industry and Energy Intensive Industry is presented below:

Category	Demand Charges (Rs/kVA/Month)	Energy Charges (Rs/Kwh)				
		11kV	33 kV	132 kV	220kV	Time of the Day Tariff (ToD)
Energy Intensive	NIL	5.80	5.35	4.95	4.90	NIL
Industry – General	475	6.30	5.85	5.40	5.35	Applicable

- c. For the current financial year CFY 2022-23, the estimated quantum of consumption in this sub-category is around 505.55 MU and for the ensuing financial year EFY 2023-24, the consumption is expected to grow at 2% and may attain to a level of 515.66 MU. There are 37 services across different voltages in this sub-category.
- d. The basic premise to categorise Energy Intensive Industries as a separate sub-category is that they are bulk loads that operate at higher load factors of these of more than 85 percent and thus resemble a flat load curve which would contribute to a stable grid operation. This is the reason for extending concessional tariff to these consumers. There is a guarantee that these units offtake energy from the grid on constant basis.
- e. Approved Cost of Service for the Current Financial Year as per the Retail Supply Tariff Order is Rs 7.18/Unit, where as the Revised estimate based on six months (April\_September 2022) actuals is higher by almost 63 paise per unit at Rs 7.81/Unit. For the ensuing financial year FY 2023-24, the CoS is estimated to increase to Rs 7.94/Unit. When compared to the CoS the concessional tariff applicable to Energy Intensive Industry is almost lower by Rs 2.0-Rs 3.0/Unit across voltages.
- f. Till the last financial year, with regard to the Energy intensive consumers, there is a specific condition in the retail supply tariff order that these consumer shall draw entire power requirement from DISCOMs only. This is imposed since, the tariff is concessional when compared to Industry General category. Peak Time of the Day (ToD) in disincentive / incentive tariff is also not made applicable to these Units. Consequent to an order of the Hon'ble APTEL in an appeal by the one of these consumers, the condition of offtake of 100% energy requirement from DISCOMs has been waived with effect from the current financial year FY 2022-23.
- g. It is felt that, the waiver of this tariff condition is enabling the Energy Intensive Units to procure power from short term market in time periods whenever the same is available at lesser than DISCOM's concessional tariff. Thus the Energy intensive consumers are availing the double benefit of concessional DISCOM tariff and cheaper market power. This is stranding the committed generation of DISCOMs procurement as the DISCOMs have planned for long term procurement of power to meet load requirement from this segment keeping in view of its consistent/ flat nature. The DISCOMs are ending up paying higher fixed costs towards generation availability which was not utilised.

- h. Further, it is observed that till the FY 2016-17, there was a specific tariff condition applicable to Energy Intensive- Ferro Alloy Industries, as stated below:  
*HT Supply-Specific Conditions (2) H.T-I (B)-FERRO ALLOY UNITS Guaranteed energy off-take at 6701 kVAh per kVA per annum on Average Contracted Maximum Demand or Average Actual Demand whichever is higher. The energy falling short of 6701 kVAh per kVA per annum will be billed a deemed consumption.*
- i. The above guaranteed energy consumption of 6701 kVAH per annum is derived from an annual Load Factor of 85%.
- j. It is to submit that by virtue of Open Access permission, these Energy intensive Industries also get a chance to procure cheaper power from the market within their contracted capacity as and when available, even in intermittent time blocks/periods. This will vitiate the very purpose of according concessional tariff to Energy Intensive Industries that they would draw power from the DISCOM's sources on a constant basis. In every time block/period the Energy Intensive Industry procures market power, the Generating Sources with whom the DISCOMs have contracted for have to be backed down to that extent, thus imposing additional fixed cost liability and increased wear & tear cost of generation (Balancing Cost) which ultimately has to be borne by the DISCOMs.
- k. Section 62 (3) of Electricity Act-2003 states that:  
*The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.*
- l. Since this sub category has been devised with a commitment from both sides (DISCOMs and Consumer) that concessional tariff is given provided they maintain constant drawal from DISCOMs to enable stable operation and enhancing the reliability & security of the Grid to the Consumer to draw power from other sources (other than DISCOM) at his whims & fancies can not be entertained in the best interest of the DISCOMs.
- m. If the OA is to be allowed, the Consumer shall bind to a minimum of 85% Load Factor Consumption with DISCOM as per the tariff condition and any incremental consumption over & above 85% of the Contracted Demand with DISCOMs can be permitted to be drawn from OA sources. Any event of failure to comply to this Load Factor restriction, the consumer shall be made liable to pay deemed consumption charges for the shortfall consumption from APDISCOMs.
- n. There has been no tariff change for the energy intensive industries category during the last five years.
- o. In view of the above, the following proposals are made in order to modify the tariff of Energy Intensive Industries, so as to make this beneficial to DISCOMs as well as the Industry to provide a level playing field. Each option is distinct and exclusive.

S. No	Proposal	Estimated Annual Revenue Impact (Rs Crs)	Justification
	Levy of Demand Charges to Energy Intensive Industry on par with HT industry demand charges	60.86	<ul style="list-style-type: none"> <li>Energy Tariff is concessional and Rs 0.50/Unit lesser than Industry-General</li> <li>Consumers in this category are availing Open Access/Market purchases when prices are low.</li> <li>Due to this, the load factor of the consumer from the DISCOM supply is similar with other HT industries</li> <li>Levying of Demand Charges on par with HT industry is justified.</li> </ul>

S. No	Proposal	Estimated Annual Revenue Impact (Rs Crs)	Justification
	Make Applicable the ToD Charges to Energy Intensive category	3.61	<ul style="list-style-type: none"> <li>No ToD tariff is applicable to Energy Intensive currently.</li> <li>Tariff is concessional when compared to other HT categories including industry general.</li> <li>ToD may be made applicable on par with Industry General</li> </ul>
	Make Applicable the Guaranteed Consumption @ 85% Load Factor.	26.42	<ul style="list-style-type: none"> <li>Commission can discriminate the tariff based on Load Factor.</li> <li>Since concessional tariff is extended, the Consumer has to guarantee to take 85% of their requirement from DISCOMs failing which deemed consumption charges shall be levied.</li> <li>This practice was in vogue till FY 2016-17 @ 85% LF or 6701 Units/KVA/Year. The same is proposed to be re-imposed.</li> </ul>
<b>Total</b>		<b>Rs 90.90Crs</b>	

The Hon'ble APERC is requested to consider the above proposals of APDISCOMs in the best interests of sustainability of distribution utilities.

*(ii) There is no change in tariff & terms and conditions of other categories except HT Cat-III(C) Energy intensive Industries.*

### Revenue Impact

The overall revenue gain due to above Tariff Proposal is Rs. 90.90 Crores with an overall impact of 0.64% as shown in the Table below:

Revenue impact due to proposed Tariffs							
Category	LT Supply			HT Supply			Total Impact (LT+HT)
	FY 2023-24 as per present tariffs (Crs.)	FY 2023-24 as per Proposed tariffs (Crs.)	Impact	FY 2023-24 as per present tariffs (Crs.)	FY 2023-24 as per Proposed tariffs (Crs.)	Impact	
Domestic	2990.49	2990.49	0.00	14.51	14.51	0.00	0.00
Commercial & Others	1268.84	1268.84	0.00	556.77	556.77	0.00	0.00
Industry	530.38	530.38	0.00	5589.08	5679.97	90.90	90.90
Institutional	663.30	663.30	0.00	948.47	948.47	0.00	0.00
Agriculture & Related	360.31	360.31	0.00	1191.79	1191.79	0.00	0.00
Resco				104.14	104.14	0.00	0.00
<b>Total</b>	<b>5813.32</b>	<b>5813.32</b>	<b>0.00</b>	<b>8404.76</b>	<b>8495.65</b>	<b>90.90</b>	<b>90.90</b>