

D. No. 10-385-5, Kavya Nilayam, Lakshmi Nagar Street, Railway Kodur, Cuddapah District - 516101. Andhra Pradesh, India, Ph : 91 8566 245999

The Secretary,

Secretary, APERC, 11-4-660, 4th Floor, Singareni Bhavan, Red Hills, Hyderabad –500 004

To

The Chief General Manager(RAC & IPC), 19-13-65/A, Vidyut Nilayam, APSPDCL, Srinivasapuram, Tirupathi – 517503

Sir/Madam,

Sub: Comments/Objections on the ARR& Tariff Proposals for Distribution and Retail Supply Business for the 5th Control Period for FY 2024-25 to 2028-29 - Determination of Distribution tariff.

Ref: Public Notice in O.P.No. 74 of 2023, dated 10-12-2023.

With reference to the Public Notice calling for Views/Objections/Suggestions, we would like to submit the following objections/suggestions.

Need to Determine Energy Based Transmission & distribution Charges:

1). So far, the Hon'ble Commission has determined the Transmission & Distribution Tariff based on capacity to be Wheeled or transmitted. The transmission and wheeling tariffs are exempted for Solar and Wind power plants till 2027 or 2028. The Transmission/Distribution tariffs determined

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D. No. 10-385-5, Kavya Nilayam, Lakshmi Nagar Street, Railway Kodur, Cuddapah District - 516101. by the Condina Stadeshiladia Ph. 91.8566.245999 Renewable Energy (RE) based power plants as the same are exempted by Solar and Wind Policies of 2015.

- 2). The policies issued by GoAP may end by 2027 or 2028 depending on the year of commissioning of the power Plant. The PLF of Solar Power Plant is around 20% in Andhra Pradesh depending on the Solar irradiation.
- 3). The Open Access Demand permitted to a Consumer is allowed within the CMD of a consumer. The demand charge of Rs 475/kVA/month is determined considering diversity factor of 60% to 70%. The Demand charge consists of fixed costs of Generation, Transmission and Distribution business. The same can be seen in the RST of 2017-18 or previous Tariff Orders. Presently, no Demand Charges are being determined and the Demand Tariff determined in the year 2017-18 is being continued. This means, already the transmission and distribution business costs are built in the RST tariff and are being recovered in the form of MD charges.

The RST ARR of APSPDCL is furnished below.

5.9 Summary of ARR

Aggregate Revenue Requirement (ARR) for Retail Supply Business(Form-1) (Rs. In Crores)

S.No	Revenue Requirement Item (Rs. Crs.)	2023-24	2024-25
1	Transmission Cost	1,415.79	1,628.16
2	SLDC Cost	31.16	35.84
3	Distribution Cost	4,227.29	4,490.33
4	Additional Interest on Pension bonds of APGenco Order	484.79	521.11
5	PGCIL Expenses	606.60	697.59
6	ULDC Charges	1.28	1.47
7	Network and SLDC Cost (1+2+3+4+5+6)	6,766.91	7,374.49
8	Power Purchase / Procurement Cost	15,830.71	15,094.14
9	Interest on Consumer Security Deposits	153.90	176.66
10	Supply Margin in Retail Supply Business	28.87	40.16
11	Other Costs, if any	68.07	173.79
12	Supply Cost (8+9+10+11)	16,081.55	15,484.75
13	Aggregate Revenue Requirement (7+12)	22,848.46	22,859.24



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4). Levy of Distribution tariff &Transmission tariff based on capacity contracted may not be a correct approach and is not just especially for Solar power plants for which PLF is around 20%. The DISCOM is allowing OA/Wheeling capacity within the CMD and the Consumer pays MD charges as per the terms and conditions of tariff. The Hon'ble Commission may please consider levy of reasonableenergy based Transmission/Distribution charges for the reasons mentioned below. Whenever the Solar Power is not available, the OA/Wheeling consumer will come back on to the DISCOM power as the consumer has CMD with the DISCOM and draws required power from the DISCOM. Thus, the DISCOM recovers its fixed cost in the form of MD charge. This indicates that the consumer always draws his required Demand within the CMD from the grid; be it may from the DISCOM or from the OA Generator/Exchange. In the absence of Wind/Solar/Mini-Hydal power, the short fall power required is drawn from the DISCOM and thus always uses the network to the extent of Contracted Capacityand pays the fixed cost related to Transmission and business.

As the consumer draws the power from the DISCOM in the absence of **power** from Renewable Energy (RE) source due to its inherent nature, the network capacity is fully utilised and hence there is no loss to DISCOM/APTRANSCO. The OA/Wheeling Consumer apart from paying fixed cost, he also pays the Transmission/Wheeling charges.

This means, already the transmission and distribution business costs are built in the Retail tariff and are being recovered in the form of MD charges from a consumer who is availing power through Open Access. The DISCOM is receiving transmission fixed costs built in the demand charges and APTRANSCO is levying transmission charges. It amounts to levying two charges for providing one service, viz., one is in the form of Demand Charge and the other one is in the form of Transmission/Wheeling charge.

In this regard, we submit to determine nominal energy-based Distribution Charges instead of capacity-based wheeling charges.



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-ARR in proportion to 33 kV demand reflecting at 33 kV level from

LTconsumers demand would be allocated to LT system.

There exist 33 kV, 11 kV and LT Agricultural Lift Irrigation Service owned by Irrigation Department, Panchayat Raj and Cooperative Societies. The Cost of Service determined by the Hon'ble Commission is being paid by respective consumers. These Lift irrigation scheme consumers never buy power through Open Access. In this regard, we submit to the Hon'ble Commission to exclude the network cost related LI Schemes while determining the Open Access charges.

8) The Commission has adopted different methods for determining EHT Transmission charges and Distribution charges viz, 33 kV, 11 kV and LT network wheeling charges. It seems this approach may have to be rectified.

If the same principle as mentioned in Para 7above is followed, we may have to allocate or pass on the EHT network ARR cost (by deducting pro-rata cost in proportion to Demand from EHT consumers) to 33 kV network in proportion to 33 kV demand reflecting on the EHT network from 33 kV consumers and so on to 11 kV and LT network. If it is done, the 33 kV, 11 kV and LT ARR would increase to abnormal level, and this would not reflect realistic tariff. But the ARR pertains to EHT network is distributed among all category of consumers and Retail Supply tariff is determined.

Since EHT network is handled by APTRANSCO, its ARR is recovered based on Total Transmission Capacity, without any prorate allocation of EHT Demand to EHT consumers and passing on the balance Demand to 33 kV system (Distribution business). Please note that there is no prorate allocation of network cost in between 220 kV network and 132 kV network. The Total EHT ARR is recovered based on Total Transmission capacity without any reservation based on 220 kV consumption and 132 kV consumption.



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9). The proposed Wheeling Tariff and the proposed Wheeling ARR are shown in the table below and in Para 14 respectively:

Table39: Distribution Wheeling Charges for 5th Control Period

Voltage Level	FY25	FY26	FY27	FY28	FY29
33 kV (Rs./kVA/Month)	83.17	119.60	162.45	193.84	214.42
11 kV (Rs./kVA/Month)	964.49	1,098.20	1,268.28	1,367.17	1,431.84
LT (Rs./kVA/Month)	1,262.89	1,477.11	1,740.13	1,911.89	2,041.81

Kindly see the Distribution tariff of Rs. 964.49/kVA/Month proposed for 11 kV which is more than Rs 475/kVA/Month. The proposed tariff is totally wrong and cannot be justified. No 11 kV OA consumer can afford this tariff.

For example, consider a case of conventional Generator supplying power to consumers at all the three voltages i.e., 132 kV, 33 kV, 11 kV& LT consumers.

The PLF for conventional poweris 100%. One kW purchase from conventional power would be around 720 units in a month.

The corresponding per unit costs is as shown below:

The Transmission wheeling cost at 132 kV = 221.17/720 = Rs. 0.31/kWh.

The Distribution wheeling cost at 33 kV= 83.17/720 = Rs.0.12/kWh.

The Distribution wheeling cost at 11 kV= 964.49/720 = Rs. 1.34/kWh.

The Distribution wheeling cost at LT Voltage = 1262.89/720 = Rs. 1.754/kWh.

Consider a case of Solar Generator supplying power to consumers at all the three voltages i.e., 132 kV, 33 kV, 11 kV and LT consumers.

The PLF of Solar Power plant is around 20%. One kW SPP can pump around 144 units in a month.

The Transmission wheeling cost at 132 kV = 221.17/144 = 1.54/kWh.

The Distribution wheeling cost at 33 kV = 83.17/144 = 0.58/kWh.

The Distribution wheeling cost at 11 kV = 964.49/144 = 6.70/kWh.

The Distribution wheeling cost at LT Voltage = 1262.89/144 = Rs.8.77/kWh.

150, Flat No. 2-B, Habibullah Road, T. Nagar, Chennai - 600 017. Tamil Nadu, India Ph: 91 44 4212 4512, Fax: 91 44 4212 4834. Page 7 of 18

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Voltage	RST (Tariff) . Rs /kWh.	Proposed Tr/Wheeling tariff for Fy 2025 - Rs/kW/mont h.	Proposed Transmission/W heeling Tariff in Rs/kWh.	Per unit wheeling cost for Solar Power Plant: " (Rs/kWh).	Generator Maximum selling price Rs./unit.
(1)	(2)	(3)	(4)	(5)	(6)=(2)-(5)
132 kV	5.4	221.17	0.31	1.54	3.86
33 kV	5.85	83.17	0.12	0.58	5.27
*11 kV	6.3	964.49	1.34	6.70	-0.40
LT	6.7	1262.89	1.75	8.77	-2.07

Voltage	Conventional Power	NCE Power with PLF	Difference
	with PLF of 100%. Rs	of 20%. Rs/kWh	(Additional
	/kWh	(Wheeling cost)	cost to NCE)
	(Wheeling cost)		
132 kV	0.31	1.54	1.23
33 kV	0.12	0.58	0.46
11 kV	1.34	6.70	5.36
LT	1.754	8.77	7.02

^{*}A11 kV Consumer, a generator has to sell power @ Rs (-) 0.40 per unit with reference to TO rate which is practically not possible.

This indicates that the methodology adopted by the Hon'ble Commission may not be correct approach. In this regard, we submit to the Hon'ble Commission to take corrective action and determine reasonable energy-based Transmission and wheeling tariffs.

10). The proposed Distribution tariff of 964.19 is 203 % of Demand charge of Rs 475/kVA/Month, which is very high. We are not able to comprehend the reasons for fixation of higher Distribution wheeling tariff while maintaining

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the Retail Power Supply tariffs intact. If the present tariff is built into the RST, RST perhaps would definitely go up. Or the reason behind the hiking the Distribution business Tariff alone may be to discourage Open Access consumers, which is against the spirit of the Electricity Act, 2003 and may not yield the anticipated competition, efficiency and addition of new generation.

11) Drawback in the present method:

(i) Due to apportioning of 33 kV network cost to 11 kV and LT network based on the asset base utilisation by the respective voltage level consumers, the wheeling tariff for 33 kV consumers is relatively less when compared to 11 kV tariff and EHT transmission tariff. The same can be observed from the following tables.

Table-1 MYT Tariffs for 2014 -15 to 2018-19								
Voltage	2014-15	2015-16	2016-17	2017-18	2018-19			
EHT tariff Rs./kW/month	65.30	71.66	91.36	95.37	94.44			
33 kV Rs./kW/month (EPDCL tariff)	13.46	10.98	11.38	11.80	12.22			
11 kV Rs/kW/month (EPDCL Tariff)	240.15	232.39	247.55	262.96	279.50			

Note 1: Please note that the 11 kV EPDCL tariff varies from Rs 240 to Rs. 279 for 2014 to 2019. The 11 kV wheeling tariff is almost 50 % of Demand charge of 475/kVA/Month. This indicates that there is some error in computing these charges.

Table-2MYT Tariffs for 2014 -15 to 2018-19								
Voltage	2014-15	2015-16	2016-17	2017-18	2018-19			
EHT tariff Rs./kW/month	65.30	71.66	91.36	95.37	94.44			

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33 kV Rs./kW/month (SPDCL tariff)	7.66	15.51	15.39	15.11	15.17
11 kV Rs/kW/month (SPDCL tariff)	164.61	220.82	227.14	232.16	240.6

Note: 2: Please note that the 11 kV SPDCL tariff varies from Rs 164 to Rs. 240 for 2014 to 2019. The 11 kV wheeling tariff for 2018-19 is almost 50 % of Demand charge of 475/kVA/Month. This indicates that there is some error in computing these charges. Observe the huge variation; the APSPDCL tariff begins at 164 for year 2014-15 against APEPDCL tariff of Rs. 240/kW/Month.

Table-3MYT Tariffs for 2019 - 20 to 2023-24 MYT								
Voltage	2019-20	2020-21	2021-22	2022-23	2023-24			
EHT tariff Rs/kW/month	119.28	138.88	154.54	173.79	188.38			
33 kV Rs./kW/month (EPDCL tariff)	45.24	48.38	54.73	59.51	61.92			
11 kV Rs/kW/month (EPDCL Tariff)	349.71	375.94	427.50	467.43	439.07			

Note 3: Please note that the 11 kV EPDCL tariff varies from Rs 349 to Rs. 439 for 2019 to 2023. The 11 kV wheeling tariff for 2019-20 is almost 73 % of Demand charge of 475/kVA/Month. This indicates that there is some error in computing these charges. Correspondingly the 11 kV retail tariff should reflect this cost impact. But it is not so.

Table-4	MYT Tari	ffs for 2019	- 20 to 2023	-24 MYT	
Voltage	2019-20	2020-21	2021-22	2022-23	2023-24
EHT tariff Rs/kW/month	119.28	138.88	154.54	173.79	188.38
33 kV Rs./kW/month (SPDCL tariff)	61.16	64.11	69.34	75.44	79.48
11 kV Rs/kW/month (SPDCL tariff)	432.38	447.58	478.38	514.76	536.83

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150, Flat No. 2-B, Habibullah Road, T. Nagar, Chennai - 600 017. Tamil Nadu, India

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Note 4: Please note that the 11 kV APSPDCL tariff varies from Rs 432 to Rs. 536 for 2019 to 2023. The 11 kV wheeling tariff for 2019-20 is almost 90% of Demand charge of 475/kVA/Month. This indicates that there is some error in computing these charges. Correspondingly the 11 kV retail tariff should reflect this cost impact. But it is not so.

From table (3) and (4), kindly observe the variation in wheeling tariffs in between APSPDCL and APEPDCL.

- 12). From the above tables, it can be observed that there is abnormal variation in EHT, 33 kV and 11 kV tariffs. The reasons for the abnormal variation are mentioned below:
- (a) O&M Expense allocation

Please See Para 2.3 of Page 27 of ARR of APSPDCL

1) Employee Expenses(EE) and Administrative & General Expenses (A&G)

Employee expenses and A&G expenses have been apportioned as per the distribution of No. of Consumers, Number of DTRs, Length of lines and Number of SS.

- a) Licensee projected the voltage wise No. of Consumers, Number of DTRs, Lengths of lines and Number of SS and then observed voltage-wise percentage of each of these parameters.
- b) As per employee expenses and A&G expenses projections done in section 1.6, licensee allocated these expense into SS, line length, DTR and consumer in the ratio of 49%: 21%: 10%: 20%.
- c) Expense allocation of SS, line length, DTR and consumers are then apportioned to LT, 11kV and 33kV voltage level as per the observed percentages of these parameters.