



ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

4th Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

TUESDAY, THE SIXTEENTH DAY OF AUGUST
TWO THOUSAND AND TWENTY TWO
(16.08.2022)

Present

Justice C.V.Nagarjuna Reddy, Chairman

P.Rajagopal Reddy, Member

T.Rama Singh, Member

O.P.No.60 of 2017

In the matter remitted by the Hon'ble APTEL to the Commission for fresh determination of separate retail supply tariffs voltage wise for all HT consumers, including for those connected at the voltage level of 220 kV.

Abhijeet Ferrotech Limited

..... Petitioner

AND

APEPDCL & APSPDCL

..... Respondents

The Commission held the final hearing of O.P.No.60 of 2017 on 20.07.2022 in the presence of Sri M. Sreedhar, learned counsel representing Sri Challa Gunaranjan, learned counsel for the petitioner and Sri P. Shiva Rao, learned Standing Counsel for the respondents and passes the following after carefully considering the submissions of the respective counsel and the material available on record:

ORDER

- 1) Abhijeet Ferrotech Limited, the petitioner, filed an Appeal No 248 of 2018 before the Hon'ble APTEL challenging the common tariff determined by the Commission for consumers at 132 kV and above voltage level in the Retail Supply Tariff Order (RSTO) for FY 2018-19 in OP.Nos.60 & 61 of 2017. The contention of the petitioner in the above Appeal is regarding the non-determination of separate tariffs by the Commission for EHT consumers drawing power at 132 kV, 220 KV, and 400 kV voltage levels in the said RSTO.
- 2) The Hon'ble APTEL disposed of the above appeal vide judgment dated 18.02.2022 with the following observations and directions:

“30. In light of the above, we are of the considered view that the issues raised in the Appeal have merits and hence the Appeal is allowed. The Impugned Order dated 27.03.2018 in Original Petition No. 60 of 2017 passed by Andhra Pradesh Electricity Regulatory Commission is hereby set aside to the extent of our observation.

31. We remit the matter, involving the issue of determination of Tariff voltage wise, to the State Commission for a fresh decision for determining separate retail supply tariff, voltage wise, for all HT consumers, including for those connected at voltage level of 220 kV.

32. Needless to add that the State Commission shall also proceed to examine as to how the differential in the applicable tariff for the period in question is to be determined and recovered, and issue all necessary directions in such regard as well.

33. The issue having persisted for long, we would expect the State Commission to pass the fresh order in terms of above directions expeditiously, not later than three months from the date of this judgment. The Commission shall also ensure that the order it passes pursuant to our directions is scrupulously complied with expeditiously and in a time bound manner and for this purpose shall have recourse to all enabling powers available to it under the law”.

- 3) In light of the above judgement, the petitioner, vide the letter dated 07.03.2022, requested the Commission to initiate the process of determining separate tariffs for EHT consumers for FY 2018-19 afresh based on the voltage levels at which the consumers are availing supply and their cost of service (CoS).
- 4) In this regard, the Commission filed an application before the Hon'ble APTEL seeking extension of three months time to comply with its directions as per the statutory procedure. The Hon'ble APTEL granted the extension sought by the Commission.
- 5) As the re-determination of separate tariffs for EHT consumers based on the voltage levels affects the Retail Supply Aggregate Revenue Requirement (ARR) and thus all the retail supply consumers of the licensees, the petitioner was directed by the Commission to cause publication of the public notices regarding the re-determination of separate tariffs at 220 kV and 400 kV voltage levels in OP.Nos.60 & 61 of 2017 in two newspapers, one in English and the other in vernacular language (Telugu) having wide circulation in the State of Andhra Pradesh in terms of Section 64(2) of the Electricity Act, 2003. Accordingly, the petitioner caused the publication of public notices and filed a compliance memo dated 19.07.22 along with the proof of publication. However, no objections have been received in response to the said public notices.
- 6) The Commission already determined the true-ups of power purchase costs and true-up for the distribution business of the distribution licensees, i.e. APSPDCL & APEPDCL for the third control period, i.e. for the period from FY 2014-15 to FY 2018-19 vide its orders dated 26.11.2020 and 30.03.2022 respectively. The said orders were not challenged by anyone so far as the tariffs for retail supply consumers at voltage levels up to 132 kV (determined in the RST order for FY2018-19) are concerned. Therefore, the Commission is not inclined to disturb these tariffs. However, the Commission needs to re-determine separate tariffs for the consumers connected at 220 kV voltage levels for FY2018-19 (as there are no consumers of the licensees connected at

400 kV voltage level, determination of the tariffs at this voltage is not necessary) as described in the following paragraphs.

- 7) The indicative Costs of Service (COS) at 132 kV and 220 kV voltage levels have been determined as follows;
- i. The total EHT sales approved in the RSTO for FY 2018-19 have been apportioned between 132 kV and 220 kV voltages based on the actual sales data furnished by the licensees as shown in the table below.

Particulars	Sales approved (MU)		
	APSPDCL	APEPDCL	Total for two DISCOMs
Sales at 132 kV voltage	3928.00	3216.66	7144.67
Sales at 220 kV voltage	1411.32	1683.28	3094.59
Total EHT Sales	5339.32	4899.94	10239.26

- ii. The total EHT loss percentage approved in the RSTO for FY 2018-19 has been apportioned among the 132 kV, 220kV, and 400 kV voltage levels based on the actual loss percentages communicated by the APTRANSCO for FY 2018-19 by its letter dated 18.04.22 as shown in the table below.

EHT Transmission Loss percentage for FY 2018-19	
400 kV	0.60%
220 kV	1.12%
132 kV	1.56%
Total EHT Losses	3.27%

- iii. Based on the above loss percentages, the losses in MUs, at 132 kV, 220 kV, and 400 kV voltage levels DISCOM wise have been arrived at from the total EHT losses approved in the RSTO for FY 2018-19 as shown in the table below:

Voltage Systems	EHT Transmission losses (MU)	
	SPDCL	EPDCL
132 kV	611.77	335.10
220 kV	439.07	240.50
400 kV	234.17	128.27
Total EHT losses	1285	703.87

- iv. The losses in MUs at 132 kV, 220 kV, and 400 kV voltage systems as shown in the table at para (iii), have been apportioned among the consumers based on their sales at the respective voltages, as shown in the tables below:

Apportioning system losses at 132 kV level among different voltage levels(MU)		
Voltages	SPDCL	EPDCL
LT	420.69	195.50
11kV	58.02	43.07
33kV	61.34	35.93
132kV	71.71	60.60
220 kV	0.00	0.00
TOTAL	611.77	335.10

Apportioning system losses at 220 kV level among different voltage levels(MU)		
Voltages	SPDCL	EPDCL
LT	289.73	128.18
11kV	39.96	28.24
33kV	42.25	23.56
132kV	49.39	39.73
220 kV	17.74	20.79
TOTAL	439.07	240.50

Apportioning system losses at 400 kV level among different voltage levels(MU)		
Voltages	SPDCL	EPDCL
LT	154.52	68.36
11kV	21.31	15.06
33kV	22.53	12.56
132kV	26.34	21.19
220 kV	9.46	11.09
	234.17	128.27

- v. Based on the apportionment at para (iv), the losses applicable to the consumers at 132kV & 220 kV voltage level have been arrived at as shown in the tables below:

Losses applicable for the consumers at 132 kV voltage (MU)				
DISCOMs	132 kV system losses	220 kV system losses	400 kV system losses	Total losses
(1)	(2)	(3)	(4)	(5)=(2)+(3)+(4)
SPDCL	71.71	49.39	26.34	147.43
EPDCL	60.60	39.73	21.19	121.53

Losses applicable for the consumers at 220 kV voltage (MU)			
DISCOMs	220 kV system losses	400 kV system losses	Total losses
(1)	(2)	(3)	(4)=(2)+(3)
SPDCL	17.74	9.46	27.21
EPDCL	20.79	11.09	31.88

- vi. The power purchase requirements (PPR) for consumers at 132 kV and 220 kV voltages have been arrived at by adding the corresponding sales and applicable losses as arrived above.

Voltages	Power Purchase Requirement (MU)	
	SPDCL	EPDCL
132 kV	4075.44	3338.19
220 kV	1438.52	1715.16

- vii. The total ARR approved for EHT consumers in the RSTO for FY2018-19 has been apportioned between 132 kV and 220 kV voltage consumers based on their PPR.

Voltages	ARR (Rs.Cr.)	
	SPDCL	EPDCL
132 kV	2137.62	1769.45
220 kV	754.52	909.14
ARR approved for EHT in RST order for FY 2018-19	2892.14	2678.59

- viii. Based on the energy sales and the apportioned ARR for the consumers at 132 kV and 220 kV voltages, the indicative Costs of Service (CoS) have been arrived at as shown in the table below:

S. No.	Particulars		132 kV Voltage	220 kV Voltage
1	Sales approved (MU)	APSPDCL	3928.00	1411.32
		APEPDCL	3216.66	1683.28
2	Power Purchase Requirement (PPR) MUs	APSPDCL	4075.44	1438.52
		APEPDCL	3338.19	1715.16
3	ARR allocation based on PPR arrived at Sl no (2) (Cr.)	APSPDCL	2137.62	754.52
		APEPDCL	1769.45	909.14
4	Indicative CoS (Rs.per unit)	APSPDCL	5.44	5.35
		APEPDCL	5.50	5.40

- 8) As can be seen from the Costs of Service (CoS) determined for the consumers at 132kV and 220kV voltages in para (7), the CoS at 220 kV voltage level for APSPDCL and APEPDCL are less by 9 paise and 10 paise respectively compared to that at 132 kV voltage level.
- 9) The ratios of Average Billing Rates to Average Cost of Service for APSPDCL and APEPDCL are 103.73 % and 99.49 % respectively which are well within the band of 80-120% stipulated in the National Tariff Policy as far as the tariffs determined for EHT consumers in the RSTO for FY 2018-19 are concerned. Therefore, based on the indicative Costs of Service determined in this order for consumers at 132 kV and 220 kV voltages, the Commission retains the tariff for the consumers at 132 kV voltage at the same level as determined for consumers at 132 kV and above voltage level in the RSTO for FY 2018-19 and determines the tariff for consumers at 220 kV voltage which is 5 paise less than the tariff at 132 kV level thereby passing on the benefit of the lower Cost of Service to the consumers at 220 kV.
- 10) With the fixing of separate tariffs for 132 kV and 220 kV consumers in compliance with the directions of the Hon'ble APTEL, the tariff schedule approved in the RSTO for FY 2018-19 gets revised as per the following table:

TARIFF FOR RETAIL SALE OF ELECTRICITY DURING FY 2018-19 (Applicable with effect from 1.04.2018 to 31.03.2019 in respect of two distribution licensees, SPDCL and EPDCL, and three RESCOs in the State of Andhra Pradesh)					
Consumer Category		Fixed / Demand Charges per month		Energy Charge	
LT		Rs. / kVA	Rs./HP/kW	Billing Unit	Rs./Unit
I	LT CATEGORY-I: DOMESTIC (TELESCOPIC)				
	Group A: Annual Consumption <=900 Units during FY2017-18				
	0-50	-	-	kWh	1.45
	51-100	-	-	kWh	2.60
	101-200	-	-	kWh	3.60
	Above 200	-	-	kWh	6.90
	Group B: Annual Consumption > 900 and <=2700 units during FY2017-18				
	0-50	-	-	kWh	2.60
	51-100	-	-	kWh	2.60
	101-200	-	-	kWh	3.60
	201-300	-	-	kWh	6.90
	Above 300	-	-	kWh	7.75
	Group C: Annual Consumption >2700 units during FY2017-18				
	0-50	-	-	kWh	2.68
	51-100	-	-	kWh	3.35
	101-200	-	-	kWh	5.42
	201-300	-	-	kWh	7.11
	301-400	-	-	kWh	7.98
	401-500	-	-	kWh	8.52
	Above 500 units	-	-	kWh	9.06
	Smart Meters (Optional for above 500 units/month):	-	-	kWh	9.06
	Time of Day tariff (TOD) 10AM to 12 Noon	-	-	kWh	8.06
II	LT CATEGORY-II: OTHERS				
	LT-II(A): 0-50 units	-	55/kW	kWh/kVAh	5.40
	LT-II(B): Above 50 Units/Month				
	0-50	-	75/kW	kWh/kVAh	6.90
	51-100	-	75/kW	kWh/kVAh	7.69
	101-300	-	75/kW	kWh/kVAh	9.06
	301-500	-	75/kW	kWh/kVAh	9.61
	Above 500	-	75/kW	kWh/kVAh	10.19
	LT-II(C): Advertising Hoardings	-	75/kW	kWh/kVAh	12.28

	LT-II(D): Function Halls/Auditoriums	-	-	kWh/kVAh	11.77
	LT-II(E): Electric Vehicles (EVs) / Charging Stations	-	-	kWh/kVAh	6.95
	ToD (6 AM to 10 AM & 6 PM to 10 PM)	-	-	kWh/kVAh	8.00
	ToD (10 PM to 6 AM) off peak	-	-	kWh/kVAh	5.95
	LT-II(F): Startup Power for Captive Generating Plants, Co-generation plants and Renewable Generation Plants	-	-	kWh/kVAh	11.77
III	LT CATEGORY-III: INDUSTRY				
	(i) Industry(General)	-	75/kW	kWh/kVAh	6.71
	(ii) Seasonal Industries (offseason)	-	75/kW	kWh/kVAh	7.45
	(iii) Aquaculture and Animal Husbandry	-	30/kW	kWh/kVAh	3.86
	(iv) Sugarcane crushing	-	30/kW	kWh/kVAh	3.86
	(v) Mushroom & Rabbit Farms	-	75/kW	kWh/kVAh	5.91
	(vi) Floriculture in Green House	-	75/kW	kWh/kVAh	5.91
	(vii) Poultry Hatcheries and Poultry Feed Mixing Plants, Aqua Hatcheries and Aqua feed mixing plants	-	75/kW	kWh/kVAh	4.89
IV	LT CATEGORY-IV: COTTAGE INDUSTRIES & OTHERS				
	(A) Cottage Industries upto 10 HP	-	20/kW	kWh	3.75
	(B) Agro Based Activities upto 10 HP	-	20/kW	kWh	3.75
V	LT CATEGORY-V: AGRICULTURE				
	LT-V(A): Agriculture with DSM measures**				
	(i) Corporate Farmers & IT Assesseees	-	-	kWh	2.50
	(ii) Wet Land Farmers (Holdings >2.5 acre)	-	525/HP/Year*	kWh	0.50
	(iii) Dry Land Farmers (Connections > 3 nos.)	-	525/HP/Year*	kWh	0.50
	(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	0	kWh	-
	(v) Dry Land Farmers (Connections <= 3 nos.)	-	0	kWh	-
	LT-V(B): Agriculture without DSM measures**				
	(i) Corporate Farmers & IT Assesseees	-	-	kWh	3.50
	(ii) Wet Land Farmers (Holdings >2.5 acre)	-	1050/HP/Year*	kWh	1.00
	(iii) Dry Land Farmers (Connections > 3 nos.)	-	1050/HP/Year*	kWh	1.00
	(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	525/HP/Year*	kWh	0.50
	(v) Dry Land Farmers (Connections <= 3 nos.)	-	525/HP/Year*	kWh	0.50
	LT-V(C): Others				
	(i) Salt farming units with Connected Load upto 15HP	-	20/HP	kWh	3.70
	(ii) Rural Horticulture Nurseries***				
	Connected load upto 5 HP	-	20/HP	kWh	1.50
	Connected load above 5 HP and upto 25 HP	-			3.70

VI	LT CATEGORY-VI: STREET LIGHTING, PWS SCHEMES & NTR SUJALA PATHAKAM				
	LT-VI(A): Street Lighting				
	(i) Panchayats	-	75/kW	kWh	5.98
	(ii) Municipalities	-	75/kW	kWh	6.53
	(iii) Municipal Corporations	-	75/kW	kWh	7.09
	LT-VI(B): PWS Schemes				
	(i) Panchayats	-	75/HP	kWh/kVAh	4.87
	(ii) Municipalities	-	75/HP	kWh/kVAh	5.98
	(iii) Municipal Corporations	-	75/HP	kWh/kVAh	6.53
	LT VI(C): NTR Sujala Pathakam	-	10/HP	kWh/kVAh	4.00
VII	LT CATEGORY-VII: GENERAL				
	LT VII(A): General Purpose	-	30/kW	kWh/kVAh	7.28
	LT VII(B): Religious Places				
	(i) With Contracted Load ≤ 2 kW	-	30/kW	kWh	4.84
	(ii) With Contracted Load >2 kW	-	30/kW	kWh	5.04
VIII	LT CATEGORY-VIII: TEMPORARY SUPPLY	-	30/kW	kWh/kVAh	10.50
HT	HT CATEGORY-I: INDUSTRY				
I	H-I(A): (i) INDUSTRY GENERAL				
	11 kV	475/kVA	-	kVAh	6.33
	33 kV	475/kVA	-	kVAh	5.87
	132 kV	475/kVA	-	kVAh	5.44
	220 kV	475/kVA	-	kVAh	5.39
	Industrial Colonies				
	11 kV	-	-	kVAh	6.32
	33 kV	-	-	kVAh	6.32
	132 kV	-	-	kVAh	6.32
	220 kV	-	-	kVAh	6.27
	Time of Day tariff (TOD) peak (6 AM to 10 AM & 6 PM to 10 PM)				
	11 kV	-	-	kVAh	7.38
	33 kV	-	-	kVAh	6.92
	132 kV	-	-	kVAh	6.49
	220 kV	-	-	kVAh	6.44
	Time of Day tariff (TOD) off peak (10 PM to 6 AM)				
	11 kV	-	-	kVAh	5.33
	33 kV	-	-	kVAh	4.87
	132 kV	-	-	kVAh	4.44
	220 kV	-	-	kVAh	4.39
	HT-I(A):(ii) Seasonal Industries (Off Season Tariff)				
	11 kV	475/kVA	-	kVAh	7.66
	33 kV	475/kVA	-	kVAh	6.98

	132 kV	475/kVA	-	kVAh	6.72
	220 kV	475/kVA		kVAh	6.67
	HT-I(B): Energy Intensive Industries				
	11 kV	-	-	kVAh	5.82
	33 kV	-	-	kVAh	5.37
	132 kV	-	-	kVAh	4.95
	220 kV	-	-	kVAh	4.90
	HT-I(C): Aquaculture and Animal Husbandry				
	11 kV	30/kVA	-	kVAh	3.86
	33 kV	30/kVA	-	kVAh	3.86
	132 kV	30/kVA	-	kVAh	3.86
	220 kV	30/kVA	-	kVAh	3.81
	HT-I(D): Poultry Hatcheries and Poultry Feed Mixing Plants, Aqua Hatcheries and Aqua Feed Mixing Plants				
	11 kV	475/kVA	-	kVAh	4.89
	33 kV	475/kVA	-	kVAh	4.89
	132 kV	475/kVA	-	kVAh	4.89
	220 kV	475/kVA	-	kVAh	4.84
II	HT CATEGORY-II				
	HT-II(A): OTHERS				
	11 kV	475/kVA	-	kVAh	7.66
	33 kV	475/kVA	-	kVAh	6.98
	132 kV	475/kVA	-	kVAh	6.72
	220 kV	475/kVA	-	kVAh	6.67
	Time of Day tariff (TOD) (6PM to 10PM)				
	11 kV	-	-	kVAh	8.71
	33 kV	-	-	kVAh	8.03
	132 kV	-	-	kVAh	7.77
	220 kV	-	-	kVAh	7.72
	HT-II(B): Religious Places				
	11 kV	30/kVA	-	kVAh	5.03
	33 kV	30/kVA	-	kVAh	5.03
	132 kV	30/kVA	-	kVAh	5.03
	220 kV	30/kVA	-	kVAh	4.98
	HT-II(C):Function Halls/Auditoriums				
	11 kV	-	-	kVAh	11.77
	33 kV	-	-	kVAh	11.77
	132 kV	-	-	kVAh	11.77
	220 kV	-	-	kVAh	11.72
	HT-II(D): Intentionally left blank				

	HT-II(E): Electric Vehicles (EVs) / Charging Stations	-	-	kWh/kVAh	6.95
	ToD (6 AM to 10 AM & 6 PM to 10 PM)	-	-	kWh/kVAh	8.00
	ToD (10 PM to 6 AM) off peak	-	-	kWh/kVAh	5.95
	HT-II(F):Startup Power for Captive Generating Plants, Co-generation plants and Renewable Generation Plants				
	11 kV	-	-	kVAh	11.77
	33 kV	-	-	kVAh	11.77
	132 kV	-	-	kVAh	11.77
	220 kV	-	-	kVAh	11.72
III	HT CATEGORY-III: PUBLIC INFRASTRUCTURE AND TOURISM				
	11 kV	475/kVA	-	kVAh	7.30
	33 kV	475/kVA	-	kVAh	6.69
	132 kV	475/kVA	-	kVAh	6.38
	220 kV	475/kVA	-	kVAh	6.33
	Public Infrastructure and Tourism, ToD peak (6PM to 10 PM)				
	11 kV	-	-	kVAh	8.35
	33 kV	-	-	kVAh	7.74
	132 kV	-	-	kVAh	7.43
	220 kV	-	-	kVAh	7.38
IV	HT CATEGORY-IV: LIFT IRRIGATION & CPWS SCHEMES				
	HT-IV(A):Govt. / Private Lift Irrigation and Agriculture				
	11 kV	-	-	kVAh	5.82
	33 kV	-	-	kVAh	5.82
	132 kV	-	-	kVAh	5.82
	220 kV	-	-	kVAh	5.77
	HT-IV(B): Composite Protected Water Supply Schemes				
	11 kV	-	-	kVAh	4.89
	33 kV	-	-	kVAh	4.89
	132 kV	-	-	kVAh	4.89
	220 kV	-	-	kVAh	4.84
V	HT CATEGORY-V: RAILWAY TRACTION	300/kVA	-	kVAh	3.55
VI	HT CATEGORY-VI: TOWNSHIPS AND COLONIES				
	11 kV	75/kVA	-	kVAh	6.32
	33 kV	75/kVA	-	kVAh	6.32
	132 kV	75/kVA	-	kVAh	6.32
	220 kV	75/kVA	-	kVAh	6.27
VII	HT CATEGORY-VII:GREEN POWER				
	11 kV	-	-	kVAh	11.32
	33 kV	-	-	kVAh	11.32

	132 kV	-	-	kVAh	11.32
	220 kV	-	-	kVAh	11.27
VIII	HT CATEGORY-VIII:TEMPORARY				
	11 kV	1.5 times of corresponding HT consumer Category tariff			
	33 kV				
	132 kV				
	220 kV				
	RESCOs****				
	Anakapalle	-	-	kWh	-
	Cheepurupalle	-	-	kWh	-
	Kuppam	-	-	kWh	-
	* Equivalent Flat Tariff				
	** The rates for LT Category V(A) and V(B) determined above are contingent on payment of subsidy as agreed to by the GoAP, failing which the rates indicated in the Full Cost Recovery Tariff Schedule become operative				
	*** The licensees shall not collect this tariff irrespective of the connected load as per the orders of GoAP vide G.O.RT.No.39, dt. 14.03.2018				
	****Separate Order will be issued.				

- 11) All the three Distribution licensees ie; APSPDCL, APEPDCL, and APCPDCL shall give effect to the revised tariffs for FY 2018-19 at 220 kV voltage level as indicated in the above table. The licensees are at liberty to claim any revenue loss on account of the said revision, in the ARR for Retail Supply Tariff for FY2023-24.
- 12) [APEPDCL, vide memo dated 25.05.2022](#), has informed the Commission that it has preferred an appeal before the Hon'ble Supreme Court against the judgment dated 18.02.2022 of Hon'ble APTEL in Appeal no 248 of 2018 and that the Hon'ble Supreme Court has numbered it as Civil Appeal No 2656 of 2022. Therefore, the tariffs determined in this order for the retail consumers at 220 kV voltage are subject to the final orders of the Hon'ble Supreme Court in Civil Appeal No 2656 of 2022.

The OP accordingly stands disposed of to the extent of determination of separate retail supply tariffs at 132 kV and 220 kV voltage levels.

Sd/- Thakur Rama Singh Member	Sd/- Justice C.V. Nagarjuna Reddy Chairman	Sd/- P. Rajagopal Reddy Member
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