

# **TRANSMISSION TARIFFS**

**for 5<sup>th</sup> Control Period - FY2024-25 to FY2028-29**



**ORDER**

**6<sup>th</sup> August 2024**

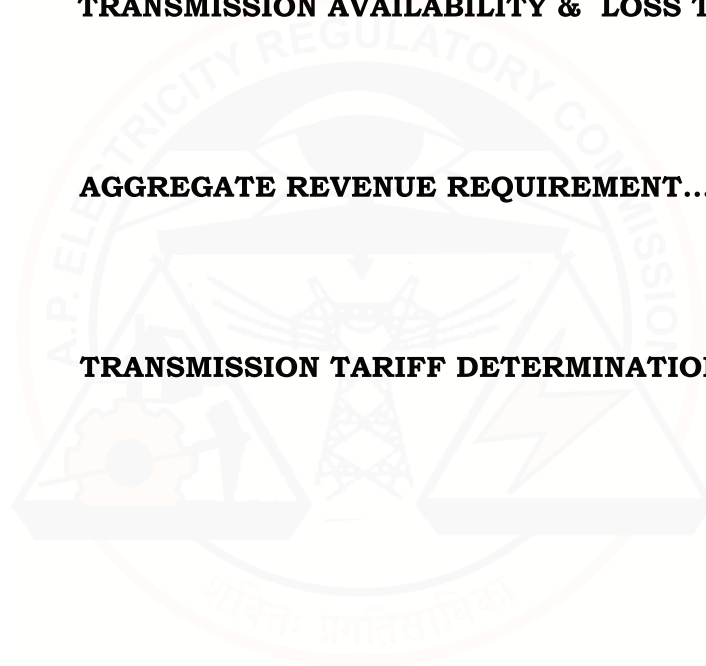
**Andhra Pradesh  
Electricity Regulatory Commission**

**Vidyuth Nyantrana Bhavan-Dinnedevaram Road-Kurnool-A.P**



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# **ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION**

## **HYDERABAD**

**TUESDAY, THE SIXTH DAY OF AUGUST,  
TWO THOUSAND AND TWENTY-FOUR  
(06.08.2024)**

**Present**

**Justice C.V. Nagarjuna Reddy, Chairman  
Sri. Thakur Rama Singh, Member  
Sri. P.V.R. Reddy, Member**

In the matter of

**Determination of Transmission Tariffs for the 5<sup>th</sup> Control Period**

(FY2024-25 to FY2028-29)

in

**O.P. No.77 of 2023**

### **Transmission Corporation of Andhra Pradesh Limited (APTRANSCO)**

The Aggregate Revenue Requirement (ARR) and Filing for Proposed Tariff (FPT) filed by Transmission Corporation of Andhra Pradesh Limited (APTRANSCO) vide O.P.No.77 of 2023 in respect of its Transmission business for the 5<sup>th</sup> Control Period covering FY 2024-25 to FY2028-29 came up for consideration before the Commission. Upon following the procedure prescribed for the determination of such tariff as laid down under Section 64 of the Electricity Act, 2003 (Central Act No.36 of 2003) and after careful consideration of the material available on record, the Commission, in exercise of the powers vested in it under the said Central Act No. 36 of 2003, the Andhra Pradesh Electricity Reform Act, 1998 (State Act 30 of 1998) and the APERC Terms and Conditions for determination of Transmission Tariff Regulations, 2005, (Regulation No.5 of 2005) as amended from time to time, hereby passes the following:

**ORDER**  
**CHAPTER - I**  
**INTRODUCTION**

1. Consequent to coming into force of the Andhra Pradesh Reorganization Act, 2014 (Central Act No.6 of 2014) (hereinafter referred to as the Reorganization Act) and in terms of the provisions of Section 92 of the said Act read with Schedule XII (C) (3) and Section 82 of the Electricity Act, 2003, the Government of Andhra Pradesh issued notification in G.O.Ms.No.35, Energy (Power-III) Department, dt.01.08.2014 and constituted the Andhra Pradesh Electricity Regulatory Commission.
2. The Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO) / the Applicant is the holder of the Transmission License (License No.1/2000) issued by Andhra Pradesh Electricity Regulatory Commission (APERC), which is the State Electricity Regulatory Commission for the State of Andhra Pradesh under relevant provisions of the Electricity Act, 2003 (Act). Further, as per Section 39(1) of the Act, APTRANSCO is also the State Transmission Utility (STU).

**APERC (Adaptation) Regulation, 2014**

3. In exercise of the power conferred by Section 181 of the Electricity Act, 2003 (Central Act No.36 of 2003) and all other powers thereunto enabling, including those granted by the Andhra Pradesh Electricity Reform Act, 1998 (State Act No.30 of 1998) and the A.P. Reorganization Act, 2014, the Commission issued APERC (Adaptation) Regulation, 2014 (Regulation No.4 of 2014) and notified that with effect from 01.08.2014, all regulations made by, all decisions, directions or orders of, and all the licenses and practice directions issued by the Commission in existence as on the date of G.O.Ms. No.35, dt.01.08.2014, referred to above, shall apply in relation to the State of Andhra Pradesh and shall continue to have effect until duly altered, repealed or amended. The said Regulation No.4 of 2014 was published in the Extraordinary Gazette of the State of Andhra Pradesh on 29.11.2014.

**Statutory provisions, Filing requirements and permission**

4. Section 62 (1) (b) of the Electricity Act 2003 stipulates that the Commission shall determine the tariff for electricity transmission following the procedure prescribed under Section 64.
5. Regulation No.5 of 2005, notified by the Commission, introduced the Multi-Year Tariff (MYT) framework. Accordingly, the transmission licensee has to file an ARR along with an FPT with the Commission to determine the tariff for its transmission business for a

period of 5 years (called the Control Period). The 5<sup>th</sup> Control Period covers five years from FY2024-25 to FY2028-29.

6. The Electricity Act No.36 of 2003, as well as the Regulation No.5 of 2005, mandate that a transmission licensee shall file for its licensed business an application in such form and in such manner as specified and in accordance with the guidelines issued by the Commission for the Control Period, not less than 120 days before the commencement of the first year of the Control Period, for approval of the Commission. Transmission Corporation of Andhra Pradesh Limited (hereinafter referred to as APTRANSCO or 'Licensee') has to file its Aggregate Revenue Requirement (ARR) and Filings of Proposed Tariff (FPT) before 30.11.2023 as per Regulation No.5 of 2005.

#### **ARR Filings, Public Notice, Public Hearings and SAC & SCF meetings**

7. On 30.11.2023, the licensee filed an application seeking approval of its Aggregate Revenue Requirement (ARR) and Filing for proposed Tariff (FPT) for the 5<sup>th</sup> Control Period. In the filings, the licensee stated that the true-up / true-down for the 4<sup>th</sup> Control Period (FY2019-20 to FY2023-24) would be filed separately. The ARR and FPT filed by the Licensee were admitted by the Commission and assigned O.P. No.77 of 2023.
8. The filings made by the licensee were uploaded on the Commission's website. By its letter dated 07.12.2023, the Commission directed the Licensee to issue a public notice in the Telugu language in one Telugu daily newspaper and in the English language in one English daily newspaper incorporating the ARR and FPT Schedule submitted to the Commission for information and calling for views/objections/suggestions on the same from individuals, representatives of consumer organisations and other stakeholders to be submitted on or before 08.01.2024 by 5 PM. The Commission also directed the licensee to upload the filings of ARR and FPT on its official website and make copies of filings available at its corporate office and circle offices. It was also informed in the public notice that all the interested persons/associations/stakeholders/objectors who want to be heard in person/through authorised representatives may appear before the Commission during the public hearings through video conference.
9. The Commission, vide its letter dated 09.01.2024, also communicated the schedule of public hearings to the Energy Department/ Government of Andhra Pradesh and required the presence of a responsible officer from GoAP in the public hearings.
10. In compliance with the directions of the Commission, the licensee has caused the publication of public notices on 11.12.2023 in the Telugu Language in one (1) Telugu daily newspaper and in the English Language in one (1) English daily newspaper

**(Annexure-A1, A2)** incorporating its ARR & FPT Schedules along with other details as directed, inviting views/objections/suggestions in respect of ARR and FPT for various transmission users for the 5<sup>th</sup> Control Period and also informed that all the interested persons/associations/stakeholders/objectors who want to be heard in person/through authorised representatives may appear before the Commission during public hearings through video conference. The filings were also uploaded on the licensee's website.

### **Response to the Public Notice**

11. In response to the public notice, the Commission received objections /suggestions/views in writing and/or in person at its Office and during public hearings. As directed by the Commission, the licensee communicated its written replies to various stakeholders' views/objections/suggestions.

### **Public Hearings**

12. The Commission conducted public hearings on filings of APTRANSCO through video conference from Visakhapatnam along with Annual ARR - Retail Supply for FY2024-25, MYT-Distribution for 5th CP of APDISCOMS during the period from 29<sup>th</sup> to 31<sup>st</sup> January 2024 in the presence of JMD/AP Transco, all the CMDs of DISCOMs and the officers concerned of the AP Transco and DISCOMS at the Conference Hall, ATC Building, APEPDCL's Corporate Office. The public hearings were conducted from 10.30 AM to 4.30 PM (with a lunch break of one hour) or till all the objectors were fully heard on all three days. Names of the stakeholders to be heard day-wise as per seriatim were hosted on the Commission's website well in advance.
13. The DISCOMS have made uninterrupted video conference arrangements at every operation Superintending Engineer's office/Executive Engineer's office in each circle having given wide publicity through print and electronic media about public hearings and participation facilities to the public for submitting their views/objections/suggestions to the Commission on the MYT filings of AP Transco along with DISCOMs' filings. The Joint Managing Director AP Transco, made a brief presentation on their filings at the beginning of the first day. Then, the stakeholders who registered themselves for participation in the public hearings as per seriatim published day-wise on the Commission's website were heard in detail apart from receiving all written representations presented by them during the three days of the public hearing. The Commission also heard the views/objections/suggestions from persons who had not registered to speak during the public hearings but appeared during public hearings through video conference after hearing the registered objectors every day. At the end of the third day, the Joint Managing Director of AP Transco gave a response to the views/objections/suggestions presented by the objectors during the three days of the hearings.

14. After the public hearings, the Commission held a meeting of the State Advisory Committee (SAC) on 13.02.2024 in the Corporate Office of APSPDCL at Tirupati, wherein the views of the members on the ARRs, FPTs proposals of the DISCOMS & APTRANSCO were elicited. The CMDS of the DISCOMS & APTRANSCO were also invited to the SAC meeting as special invitees.
15. The views/objections/suggestions expressed by the stakeholders and/or their representatives (Annexure-B), in writing and/or in person through video conference and the replies furnished by the APTRANSCO in writing and/or through oral responses during the public hearings in respect of ARR, Tariff for the 5<sup>th</sup> control period and the views expressed by the members of the State Advisory Committee (SAC) in the SAC meeting on the filings of the APTRANSCO have been carefully considered by the Commission while arriving at the conclusions in this Order, in so far as the determination of APTRANSCO's ARR and Tariff for the 5<sup>th</sup> control period is concerned.

#### **Summary of filings**

16. The Summary of the filings is detailed in the paragraphs infra.
  - (i) A brief performance analysis of the key elements of the licensee's business is as follows:
    - a) Loss Reduction: The licensee has stated that it has improved its performance in terms of transmission loss reduction from 3.10% in FY 2018-19 to 2.75% in FY 2023-24. The licensee has undertaken a number of loss reduction measures, such as system improvement, reactive compensation, etc., and it would like to continue to do so to reduce transmission losses further.
    - b) Transmission Network Availability: The licensee has stated that the transmission network availability has improved from 99.50%, and presently, the System availability for FY 2022-23 is 99.70%.

#### **Resource Plan for the Fourth Control Period**

- (ii) The licensee has stated that the Resource Plan comprising Transmission load forecast and Capital Investment Plan for the 5<sup>th</sup> Control Period has already been submitted in compliance with clause No. 9 of the APERC Terms and Conditions for determination of Transmission Tariff Regulations, 2005 (Regulation No. 5 of 2005) dated 30<sup>th</sup> November 2005, and in accordance with the APERC guidelines for Load Forecast, Resource Plans, and Power Procurement, 2006.
- (iii) APTransco filed the Resource Plan on 28.04.2023. Public hearings on the Resource Plan of Transmission & Distribution Licensees concluded on 19.08.2023.



- (iv) Loss Projection: Based on the proposed network plan, the projected loss trajectory over the five-year control period is as shown below.

Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Target Transmission Loss Range	2.75% +/-0.3	2.75% +/-0.3	2.70% +/-0.3	2.70% +/-0.3	2.70% +/-0.3

### Capital Investment plan

- (v) The licensee filed its Resource Plan on 28.04.2023, and the proposed CAPEX in it for the 5<sup>th</sup> Control Period is evaluated for the load conditions up to FY2028-29 like Electric Vehicles, expected industrial growth, Solar Rooftop Generation schemes and schemes to evacuate Generation from Polavaram Hydro Electric Power Plant, Upper Sileru Pumped Storage Project. The following capital investments are proposed for the execution of 400 kV Schemes, including evacuation schemes, schemes consisting of 220kV & 132kV Sub Stations and Lines and Renovation and modernisation schemes during the 5th Control Period.

### Capital Investments proposed (Rs. Cr.)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
400kV Schemes	1,699.56	1,276	1,021.37	1,320	1,320
220kV & 132 kV Schemes	1,093.02	1,062.90	897.52	1,038.40	1,024.59
Augmentation of Power Transformers	1,002.71	555.51	559.12	517.28	441.43
Renovation & Modernization Improvement	160.00	170.00	180.00	190.00	200.00
Total Base Capital Investment	3,955.29	3,064.41	2,658.01	3,065.68	2,986.02

### Revenue from ISTS Lines

- (vi) The licensee has estimated the revenue for 44 Nos. Inter-state lines for the 5<sup>th</sup> Control Period based on the tariff regulations approved by CERC for FY 19-24, which is adjusted in the Gross ARR and the details are shown in the table below. (Rs.Cr.)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Revenue from ISTS Lines	100	100	100	100	100
<b>Total (INR Crs.)</b>	<b>500</b>				



### Projection of ARR and Transmission Charges

(vii) The licensee has computed each item of the ARR as detailed below:

**(a) Return on Capital Employed (RoCE):** The Licensee has computed the RoCE based on the methodology suggested by the Commission in Regulation 5 of 2005. RoCE is computed by multiplying the Regulated Rate Base (RRB) by the Weighted Average Cost of Capital (WACC). A sum of Rs.15,681 Cr. is expected to be added to the Gross Fixed Assets (GFA) during the 5<sup>th</sup> Control Period.

A summary of RoCE (Rs. Cr.) proposed for the 5<sup>th</sup> Control Period is shown below:

Parameter	2023-24 (R.E)	2024-25	2025-26	2026-27	2027-28	2028-29
Additions to OCFA	1,950	3,012	3,966	3,308	2,287	3,108
Depreciation	8450.50	9781.93	11345.74	13103.37	14995.00	17068.74
Opening Balance	7295.56	8450.50	9781.93	11345.74	13103.37	14995.00
Depreciation during the year	1154.94	1331.43	1563.81	1757.63	1891.63	2073.74
Consumer Contributions	1226.14	1196.14	1163.14	1125.14	1072.14	1022.14
Opening Balance	1251.14	1226.14	1196.14	1163.14	1125.14	1072.14
Additions during the year	-25.00	-30.00	-33.00	-38.00	-53.00	-50.00
Working Capital	199.09	203.89	215.78	225.53	234.14	248.21
Change in Rate Base	410.03	855.29	1217.60	794.19	224.19	542.13
Regulated Rate Base	7871.14	9141.26	11226.02	1347.55	14247.54	15054.92
WACC (%)	11.86	12.14	11.87	11.79	11.78	11.77
Cost of Debt (%)	11.15	11.52	11.16	11.05	11.04	11.02
Return on Equity (%)	14.00	14.00	14.00	14.00	14.00	14.00
RoCE @ WACC	933.52	1109.75	1332.53	1561.89	1678.36	1771.96

For the computation of WACC, the licensee is stated to have considered the following:

- Debt-Equity Ratio: 75:25
- Return on Equity: 14.00%

**(b) O&M Expenses:** The licensee has stated that Operation and Maintenance (O&M) costs include employee-related costs, repair & maintenance costs and administrative & general costs. The O&M costs are stated to be driven by the following:

- Length of lines in circuit km and
- No. of Sub-station bays

The Gross O&M expenses for the FY 2022-23, as per the latest audited accounts, have been allocated to lines and sub-stations in the ratio of 30:70 as per Regulation 5 of 2005 of APERC. The allocated expenditure to lines and sub-stations is further divided with line length (Ckt-KM) and no. of sub-station bays, respectively, to compute the O&M Norms in terms of INR/Ckt KM (INR 1,15,124/Ckt KM) for lines and INR/Bay (INR 15,90,598/Bay) for Sub Station Bays.

The norms thus arrived for Lines and Sub-stations are escalated at a rate of 3.51% year-on-year to arrive at norms for the base year FY 2023-24 and the fifth control period. The year-wise O&M expenditures for the next six years were based on the year-wise estimated length of lines and number of bays in sub-stations. The net escalation rate of 3.51%, as per CERC Tariff Regulations, is used to project the O&M expenses over the next six years.

Accordingly, the base year (FY 2023-24) O&M Cost per CKM of Line is estimated to be INR 1,37,294, and the base year O&M Cost per Sub-Station bay is estimated to be INR 18,93,206. Total O&M expenses are computed by multiplying the number of bays by O&M cost/ Bay and circuit km by O&M / CKM for each year of the control period.

<b>O&amp;M Expenses – Projections (INR Crs)</b>					
<b>Parameter</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>	<b>2028-29</b>
Gross O&M Expenditure	1824.61	1935.16	2029.39	2116.14	2246.95
O&M Expenses Capitalised.	298.14	319.68	338.12	354.81	380.24
Net O&M Expenses	1526.47	1615.48	1691.27	1761.33	1866.71

Wage revision, due to take effect on 1<sup>st</sup> April 2026, is stated to be not factored in the above O&M projections and it is stated that the financial commitments of wage revision will be claimed based on actuals during the True-up/True-down for the 5<sup>th</sup> Control Period.

- (c) **Depreciation:** The licensee has stated that the depreciation has been calculated for every year in compliance with clause 15.3 of Regulation 5 of 2005 on the fixed assets adopting the depreciation rates as notified by the Ministry of Power, Government of India in their Gazette, for the MYT filings. Depreciation pertaining to capital invested through debt and equity only is stated to have been taken into consideration.

**Estimated Depreciation (Rs.Cr.)**

<b>Description</b>	<b>2023-24 (RE)</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>	<b>2028-29</b>
Land & land rights	0	0	0	0	0	0
Buildings	4.34	4.97	5.79	6.49	6.96	7.61
Intangible Assets	0	0	0	0	0	0
Hydraulic Works	0	0	0	0	0	0
Other civil works	29.9	43.18	60.67	75.25	85.34	99.04
Plant & Machinery	405.28	478.01	573.77	653.64	708.86	783.91
Line Cable Network	699.95	785.41	897.93	991.78	1056.67	1144.85
Vehicles	1.38	1.65	1.99	2.28	2.48	2.76
Furniture & Fixtures	5.23	7.99	11.63	14.67	16.77	19.63
Office Equipment	8.34	9.7	11.49	12.99	14.02	15.42
<b>Total</b>	<b>1154.92</b>	<b>1331.43</b>	<b>1563.81</b>	<b>1757.63</b>	<b>1891.52</b>	<b>2073.74</b>

**Further**, the licensee has stated that the charge depreciating the assets as per the guidelines of the Electricity (Supply) Annual Accounts Rules 1985 till FY 2016-17, wherein it was specified vide para 2.60(3) "Depreciation charge on newly commissioned assets shall commence in the year immediately following the year of commissioning since inception of the company".

Further, it stated that the AG, AP commented, "As per its accounting policy, the company provided depreciation on Property, Plant and Equipment available at the beginning of the year, i.e., depreciation is not charged in respect of the assets commissioned during the year. This is contrary to the provision of the Companies Act 2013, which stipulates that depreciation shall be provided on a pro-rata basis from the date of the utilisation of the assets".

In view of the above, APTRANSCO is charging Depreciation from the date of Capitalisation. However, in the ARR filing, the Depreciation projected for the next financial year is based on the asset's capitalisation during the previous year as per clause 15.3 of Regulation 5 of 2005, i.e. "Depreciation shall be charged from the 1st April of the following year from the date the asset is put to use".

- (d) **Taxes and Special Appropriation:** The licensee has stated that taxes have been estimated based on the current tax rate of 34.944%. The taxes have been estimated to be such that the post-tax return on equity is equivalent to 14% of RRB for each year. No special appropriations have been considered in this filing. True-up / True-down will be filed separately after the 5th Control Period is completed.

**Aggregate Revenue Requirement for the 5<sup>th</sup> Control Period**

(viii) To sum up, the licensee has estimated the ARR (Rs. Cr.) for the transmission business for each year of the Control Period as shown in the table below.

Parameter	2023-24 (R.E)	2024-25	2025-26	2026-27	2027-28	2028-29	Total
O&M Costs	1772.51	1824.61	1935.16	2029.39	2116.14	2246.95	11924.17
Depreciation	1154.94	1331.43	1563.81	1757.63	1891.63	2073.74	8618.24
Provision for Income Tax	183.23	212.80	261.33	308.39	332.30	350.46	1648.51
Special Appropriation	0.47	0.47	0.47	0.47	0.47	0.47	2.79
Total expenditure	<b>3111.15</b>	<b>3369.30</b>	<b>3760.76</b>	<b>4095.88</b>	<b>4340.54</b>	<b>4671.62</b>	23349.35
LESS: O&M Expenses Capitalized	288.24	298.14	319.68	338.12	354.81	380.24	<b>1979.23</b>
<b>Net Expenditure</b>	<b>2822.91</b>	<b>3071.16</b>	<b>3441.08</b>	<b>3757.76</b>	<b>3985.73</b>	<b>4291.38</b>	<b>21370.02</b>
<b>Add: RoCE</b>	<b>933.44</b>	<b>1109.88</b>	<b>1332.58</b>	<b>1561.81</b>	<b>1681.54</b>	<b>1771.24</b>	<b>8390.49</b>
<b>Gross ARR</b>	<b>3756.35</b>	<b>4181.05</b>	<b>4773.66</b>	<b>5319.57</b>	<b>5667.27</b>	<b>6062.62</b>	<b>29760.51</b>
<b>Less: Non-Tariff Income</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>240</b>
<b>Less: Revenue from Interstate Lines</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>600</b>
<b>Net ARR</b>	<b>3616.35</b>	<b>4041.05</b>	<b>4633.66</b>	<b>5179.57</b>	<b>5527.27</b>	<b>5922.62</b>	<b>28920.51</b>

However, APTRANSCO stated that the OA consumers would be billed separately based on contracted capacity and that revenue from OA consumers would be adjusted as part of the True-down.

**State Peak Demand (MW):**

(ix) The year-wise State Peak Demand (MW), estimated during the 5<sup>th</sup> Control Period, is shown in the table below:

Parameter/ Year	2024-25	2025-26	2026-27	2027-28	2028-29
State Peak Demand (MW)	15,226	16,256	17,831	18,805	19,913

**Transmission Charges for the 5<sup>th</sup> Control Period**

(x) The licensee has computed the transmission charges by allocating the Net ARR computed above for each year to the total State peak demand in that particular year.

As per sub-clause 20.1 of Regulation 5 of 2005, read with first amendment Regulation 1 of 2019, the Transmission Tariff payable by the users of the

Transmission System shall be determined in accordance with the following formula:

$$TR = \text{Net ARR} / (12 * TCC)$$

where

TR: Transmission Rate in INR/kW/Month

Net ARR: Net Aggregate Revenue Requirement, as determined as per clause 8.3 of Regulation 5 of 2005.

TCC: Total Transmission Capacity in kW of the Transmission system.

The total transmission capacity means the transmission system's peak demand, including open access demand, as approved by the Commission in the Multi-Year Tariff order.

The Transmission Charges estimated for the 5th control period are shown in the table below.

**Transmission Charges – 5<sup>th</sup> Control Period**

Parameter	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
<b>Net ARR</b>	<b>INR Crs</b>	4041.05	4633.66	5179.57	5527.27	5922.62
<b>State Peak Demand</b>	<b>MW</b>	15,226	16,256	17,831	18,805	19,913
<b>Transmission Charges</b>	<b>INR/KW /Month</b>	<b>221.17</b>	<b>237.54</b>	<b>242.06</b>	<b>244.93</b>	<b>247.85</b>

**Billing methodology of Transmission Charges:**

- (xi) AP DISCOMs shall pay transmission charges for the allocated peak demand, which was considered to determine the transmission tariff for the control period.

DISCOMs have to execute long-term Transmission service agreements (LTTSA) with AP Transco for the allocated peak demand for the respective years in the entire control period.

Note: The projected peak demand will be apportioned to DISCOMs as per the projections given by the AP Discoms during Resource Plan filing.

If the actual demand incident on the transmission system is greater than the total peak demand, DISCOMs would be required to pay additional charges for the deviated demand.

If the actual demand incident on the transmission system is less than the total peak demand, then DISCOMs would be required to pay transmission charges for the total peak demand, which was considered for the determination of transmission tariff for the control period (i.e., the peak demand for which DISCOMs have entered LTTSA for the entire control period.)

The Open Access users (other than APDISCOMs) would be charged based on the actual contracted capacity.

**True-up/True-down**

- (xii) The licensee has stated that the process of reconciliation of actual revenue vs cost has not been completed, and hence, there is a delay in filing the True-up/True-down. AP Transco would be filing the True-up/True-down after the completion of the 4th control period separately after the completion of the audit.

**Views/Objections/Suggestions**

17. Sri. M. Venugopala Rao, Sr. Journalist and Sri. Ch. Babu Rao have submitted the following.

**That** public hearings were conducted on 18.08.2023 by the Hon'ble Commission on the licensees' resource plans, including APTRANSCO, for the 5th and 6th control periods, and orders were reserved. The proposals of the licensee for the 5th control period, as approved by the Commission, need to be factored in the MYT of Transmission business. Distribution business for the 5th control period and RSTO for the FY 2024-25 for retail supply business of the DISCOMs. Interested stakeholders were constrained from making their submissions on the subject petitions without examining the Commission's orders on the proposals and plans of the licensee for the 5th control period.

**APTransco's Response:** APTransco has filed the ARR petition based on the filings of the Resource Plan as the approved Resource Plan is yet to be issued by the Hon'ble Commission.

**Commission's View:**

The Order on the Resource Plan is delayed due to an analysis of huge data pertaining to the last seven years; however, after considering all the suggestions, the Commission issued the common order on 27<sup>th</sup> June 2024 regarding the Load Forecast and Resource Plans filed by AP Transco and the three DISCOMs in the State. As per the Regulations in force, the approved quanta in the Resource Plan have been adopted to determine the transmission charges for the 5th control period in the present order.

**That** without repeating this submissions underlining the need for dispensing with the system of MYT, the Hon'ble Commission may review the performance of the licensees relating to the MYT orders given by the Commission, as well as their true-up/true-down claims on an annual basis and issue its orders, after holding public hearings. In the immediate and long-term context, such annual exercises would facilitate corrections, if required, annually, based on what is determined by the



Commission in the MYT orders vis a vis actual performance of the licensees for the FY concerned. It will also facilitate avoidance of accumulation of claims of true-up/true-down for a control period of five years. Such an exercise will also facilitate considering the licensees' actual performance during the control period concerned while examining their MYT proposals and issuing MYT orders for the next control period. It is also pertinent to mention, APTRANSCO's submissions are that the O&M projections have not been factored in wage revision, which will be due from 1st April 2026, and the financial commitments of wage revision will be claimed based on actual during the true-up/true-down for the 5<sup>th</sup> control period. Therefore, annual true-up/true-down is suggested to avoid such accumulation of burdens.

**APTransco's Response:** The tariff determined under MYT provides uniform transmission charges over five years and thus gives a conducive environment for the stakeholders such as DISCOMs, private and Govt. Generators to plan and invest in the State.

Even in the case of MYT filing, there is an option for Annual Review by the Hon'ble Commission, i.e., MYT order vis a vis actual performance of the licensees for the FY. However, APTransco will follow the directions of the Hon'ble Commission.

**Commission's View:**

Tariff determination on a multi-year basis has been envisaged in the Electricity Act and the Tariff Policy to give the concerned stakeholders certainty and regulatory clarity on the tariffs. Since infrastructure creation in the sector has larger lead times, planning the system in advance is always preferable. However, with a view to review annually, as opined by the objectors, the Regulations have been amended. Hence, it is imperative now for the licensees to file Annual Performance Petitions before the Commission every year, and the Commission will process them as per the procedure prescribed by its Regulations.

**Conclusion**

18. The Commission has decided to consider the ARR and FPT filings submitted by the licensee, which are mentioned in brief in this Chapter, as the basis for the determination of ARR and transmission tariff for each year of the 5<sup>th</sup> Control Period with due weight being given to views/objections/suggestions of stakeholders, as discussed in subsequent chapters of this order.

**CHAPTER-II**  
**INVESTMENTS**

19. The licensee has stated that it has filed its investment plan for the 5<sup>th</sup> Control Period based on the resource plan already submitted to the Commission. Accordingly, the total investment proposed for the 5<sup>th</sup> Control Period is Rs. **15,729.41** Cr, and the same has been verified and found to be the same as the filings of the Resource Plan submitted to the Commission.
20. The details of investments as per the filings for the 5<sup>th</sup> Control Period are shown below.

**TABLE NO. 2.1**  
**FILINGS: INVESTMENTS (Rs. Cr.)**

Financial Year	Evacuation and System Improvement		Augmentation	Renovation & Modernization Improvement	Total
	400 kV	220 kV & 132 kV			
2024-25	1,699.56	1,093.02	1,002.71	160	<b>3,955.29</b>
2025-26	1,276	1,062.90	555.51	170	<b>3,064.41</b>
2026-27	1,021.37	897.52	559.12	180	<b>2,658.01</b>
2027-28	1,320	1,038.40	517.28	190	<b>3,065.68</b>
2028-29	1,320	1,024.59	441.43	200	<b>2,986.02</b>
<b>Total :</b>	<b>6,636.93</b>	<b>5,116.43</b>	<b>3,076.05</b>	<b>900</b>	<b>15,729.41</b>

21. It is pertinent to extract the relevant clause of Regulation 5 of 2005 on the Investment plan submitted by APTRANSCO. Clause 14 of Regulation 5 of 2005 is extracted herein.

“14. INVESTMENT PLAN

*14.1 The Commission shall adopt the Capital Investment Plan approved as part of the Resource Plan in terms of clause 9 of this Regulation for the purpose of determining the Regulated Rate Base (RRB) at the commencement of the Control Period:*

*Provided that for the first Control Period, the Transmission Licensee shall file its Capital Investment Plan for the Control Period as part of its Multi-Year Filings for Commission's approval.*

*14.2 The Transmission Licensee shall seek approval for individual schemes in the Capital Investment Plan at least 90 days before undertaking the investment in accordance with the Guidelines on Investment Approval. The individual schemes/ projects submitted by the Transmission Licensee for Commission's approval must provide complete details, including those relating to the cost and capitalisation for each year of the Control Period.*



14.3 The Commission may provide corrections to the ARR of the Transmission Licensee for subsequent years of the Control Period to the extent of deviation from the investments approved as part of the Capital Investment Plan. The Transmission Licensee shall justify the deviations beyond 10 percent for each individual scheme/ project and any other material deviations from the Capital Investment Plan, including introduction of, or substitution of existing schemes/projects by, new scheme/project (s). “

22. Vide Chapter VI of the common order dated 27th June 2024 issued by this Commission on the Load Forecast & Resource Plans of AP Transco & DISCOMs, the Commission has approved the capital investment plan for AP Transco. The capital investment plan approved for the 5th control period was Rs.**10,692.99** Cr. with detailed reasoning. In accordance with clause 14.1 of Regulation 5 of 2005, the same is adopted herein as an approved capital investment plan to determine tariff for the 5th Control Period against the proposed investments of Rs.**15729.41** Cr. The details of investments approved by the Commission are given in the table below:

**TABLE NO. 2.2**  
**APPROVED: INVESTMENTS (Rs. Cr.)**

Financial Year	Evacuation and System Improvement	Augmentation and R&M Works	<b>Total</b>
2024-25	2089.19	576.53	2665.72
2025-26	1740.99	357.85	2098.84
2026-27	1392.79	377.73	1770.52
2027-28	1740.99	357.85	2098.84
2028-29	1740.99	318.08	2059.08
<b>Total</b>	<b>8704.96</b>	<b>1988.03</b>	<b>10692.99</b>

23. Some objections/suggestions were received regarding the capital investment plan submitted by APTRANSCO. As the capital investment plan is adopted per the resource plan approved by this commission, the suggestions are redundant. However, the suggestion submitted by Sri Dr. M. Thimma Reddy and APTRANSCO's response are discussed herein as it has some relevance.

Sri. Dr. M. Thimma Reddy has stated that APTRANSCO will be incurring an expenditure of Rs. 1,105 Crore towards interest during construction (IDC) during the 5<sup>th</sup> control period; That this accounts for 6% of the capital investment during the period; That it has to be seen that projects are executed efficiently and in time and that burden in the form of IDC is eliminated or brought down to the minimum; That IDC towards delay in execution of the project beyond the set limits shall not be allowed.

**APTransco's Response:** APTRANSCO is putting all efforts into executing projects within the time limits. But as works being executed are cutting across different locations/terrains, APTransco has to handle various issues like RoW, Court/Legal cases, etc. Further, APTransco has to get permission from various agencies for forest, NH, and railway clearances, etc. Because of the above aspects, delays are occurring in some projects despite several measures taken by APTransco. However, APTransco strives to complete the projects quickly to pass on the benefits to consumers as soon as possible.

**Commission's view:** Keeping in view the importance of completing the Transmission Projects/ Works in time as per the schedule and to avoid any Time /Cost/Scope overruns as stated by the learned objector, the Commission reiterates its direction in the Order for Transmission Tariffs for the 4<sup>th</sup> Control Period with regard to timely completion of projects/schemes, which is extracted below:

***“The Licensee shall take all possible measures to ensure that the projects/schemes taken up are completed as per schedule. In this regard, the Commission clarifies that it will not allow any interest during construction for delays exceeding one month and three months in respect of completion of projects/schemes with completion schedules of up to one year and more than one year, respectively, unless the Commission's approval for extension in the completion schedule is obtained in advance.”***

If the licensee can satisfy the Commission that it has every justification and reason beyond its control for any such delay, the Commission may consider the request for any interest during construction appropriately.

24. **Therefore, the licensee should submit quarterly reports on the status of projects/schemes within 15 days after the completion of each quarter.** With reference to the scheme-wise investments proposed by the licensee for the 5<sup>th</sup> Control Period, which have yet to be submitted to the Commission for approval, **the licensee is directed to strictly comply with clauses 14(2) and 14 (3) of APERC Regulation No. 5 of 2005.**
25. **Capitalisation of Investments:** Considering the importance of capitalisation works, the Commission, in its previous order on transmission tariffs, laid down the following requirements to be fulfilled before accepting the inclusion of the value of the capitalised work in the Original Cost of Fixed Assets (OCFA):
- a) On completion of capital work, a physical completion certificate (PCC) to the effect that the work in question has been fully executed physically, and the assets created are put in use, to be issued by the concerned engineer, not below the rank of Superintendent Engineer.
  - b) The PCC shall be accompanied or followed by a financial completion certificate (FCC) to the effect that the assets created have been duly entered in the fixed assets register by

transfer from the CWIP register to OCFA. The FCC shall have to be issued by the concerned finance officer, not below the rank of Senior Accounts Officer.

- c) The above-mentioned certificates must be submitted to the Commission within 60 days of the completion of work, at the latest.

**These requirements shall continue to be in force in the 5th Control Period, and the licensee is directed to comply with them strictly.**

26. The Commission may also inspect or arrange to inspect, at random, a few of the capitalised works included in the OCFA to confirm that the assets created are being used and useful for the business.
27. All works of the licensee shall have to be executed in strict compliance with the Andhra Pradesh Works of Licensees Rules, 2007, G.O.Ms.No.6 Energy, Infrastructure and Investment (Power. III) department dated 6.03.2017 notifying the District Collector as the authorised officer, G.O.Rt. No. 83, Energy, Infrastructure and Investment (Pr. II A.2) department dated 20.06.2017 incorporating the guidelines for determining the compensation towards damages as stipulated in Sections 67 and 68 of the Electricity Act, 2003 read with Sections 10 and 16 of the Indian Telegraph Act, 1885 or any other law and payment thereof and all other Orders and Instructions issued by the Government of Andhra Pradesh/GOI thereunder from time to time and any deviation will be viewed seriously and will invite action under Sections 142 and 146 of the Electricity Act, 2003 against the concerned.
28. Below are the Commission's conclusions regarding the capital investment plan for the 5<sup>th</sup> control period in the Resource Plan Order, which APTRANSCO should follow:

*“As replied by APTRANSCO to the objections, it shall update its transmission investment plan dynamically to meet the changing requirements. APTRANSCO shall note that the investments approved above are only a roadmap for the next five years, and specific scheme-wise approvals are to be obtained from the Commission as per the investment guidelines and applicable regulations. The Commission will examine the cost of various elements in the Scheme in detail before approval. Therefore, the actuals may vary with the above-approved investments. At the end of each financial year, APTRANSCO shall submit the actual investments incurred vis a vis the approved investments and shall justify variations. As the Commission approved only two-thirds of the investment proposed for the 5th control period, APTRANSCO shall diligently prioritise the execution of proposed planned lines, substations, augmentation, and R&M works for the 5th control period and seek necessary directions from the Commission if required.”*

**CHAPTER-III**  
**TRANSMISSION AVAILABILITY & LOSS TRAJECTORY**

29. The licensee has filed the transmission loss reduction trajectory and also the transmission system availability for each year of the Control Period as per Regulation No.5 of 2005.
- The licensee proposes to reduce the average loss from 2.75 percent in FY2024-25 to 2.70 percent by FY 2028-29, the end year of the 5<sup>th</sup> Control Period.
  - As proposed above, the average loss reduction target is subject to  $\pm 0.3$  variation as the loss band.
  - The licensee has projected system availability at 99.70 percent during all the years of the Control Period.
30. The loss band is stated to be subject to the investment levels proposed by the licensee. Consequent to changes in investments, the loss reduction path may vary. The summary of transmission loss trajectory and system availability is given below.

**TABLE NO.3.1**  
**FILINGS: SYSTEM AVAILABILITY**  
**AND TRANSMISSION LOSS TRAJECTORY**

<b>Financial Year</b>	<b>Target System Availability</b>	<b>Average Transmission Loss</b>	<b>Transmission Loss Upper Limit</b>	<b>Transmission Loss Lower Limit</b>
(1)	(2)	(3)	(4)	(5)
<b>2024-25</b>	99.70%	2.75	3.05%	2.45%
<b>2025-26</b>	99.70%	2.75	3.05%	2.45%
<b>2026-27</b>	99.70%	2.70	3.00%	2.40%
<b>2027-28</b>	99.70%	2.70	3.00%	2.40%
<b>2028-29</b>	99.70%	2.70	3.00%	2.40%

**Views/Objections/Suggestions**

31. Sri. Ch. Babu Rao, CPI (M), and Sri. M. Venugopala Rao, a senior journalist, have submitted similar views/objections/suggestions. The objections and APTRANSCO's response are discussed below.

**That** APTRANSCO has proposed transmission system availability of 99.70% for all the years of the 5th control period. Compared to 99.98% fixed by the Commission for the 4th control period, the target proposed by TRANSCO for the 5th control period is lower; That as a result of the investments proposed to be made and the addition of assets and strengthening of the system, it should reflect in improvement in system availability and reduction of transmission loss. However, the targets of transmission system availability and reduction of losses do not correspond to the claims of APTRANSCO about system improvement and loss

reduction initiatives narrated in the subject petition; That in the undivided A.P., APTRANSCO received national awards for maintaining the highest transmission system availability. Transoc has not explained why it will remain at the proposed 99.70% availability during the next control period.

**APTransco’s Response:** AP Transco strives to maintain availability at 99.98% with reference to consumers by maintaining alternative supplies to most of the EHT Substations. However, in view of aged lines, severe weather conditions in some areas, changed working conditions, etc., the availability of network is proposed with some margin to take care of the above parameters. However, the proposed 99.7% is also well above the standards.

**That** against the target of transmission loss at an average of 3% for the last FY of the 4th control period, APTRANSCO has projected targets of transmission loss reduction ranging from 2.75% to 2.70% ±0.3% per annum for the 5th control period; That for the 4th control period, TRANSCO maintained that the loss band is subject to the investment levels it proposed and that there may be variations in the loss reduction path consequent to investment changes. It repeated the same stand for the 5th control period; That the Commission reduced the investments proposed by APTRANSCO for the 4th control period. That compared to the actual peak demand recorded during the 4th control period, the actual investments made and reduction of transmission loss achieved by TRANSCO were not mentioned.

**APTransco’s Response:** The investment by APTransco is generally made based on system studies, which collectively consider requirements like meeting load growth, minimising overloading, loss reduction, etc. As demand was not as expected in the 4th control period, APTransco could maintain the losses within the range specified by APERC even with reduced investment. The details of actual losses during 4<sup>th</sup> control period are as follows:

**The Transmission Losses for the 4th Control Period are as follows.**

FY	2019-20	2020-21	2021-22	2022-23	2023-24
Approved (%)	3.10	3.08	3.06	3.03	3.00
Actual (%)	2.91	2.60	2.80	2.61	2.63 (Up to Nov 23)

**Commission’s decision**

32. The Transmission system primarily consists of substations and feeders. As per the APERC Transmission Standards of Performance Regulation, 2007, APTRANSCO shall achieve a feeder availability of 99 percent and a substation availability of 97 percent. Given the varied requirements of the transmission system, investments can not be linked directly to particular performance standards. Therefore, the Commission is inclined to approve the transmission system availability at 99.70%, as projected by APTRANSCO, which is reasonable in the Commission’s view.



33. After examining APTRANSCO's past performance and future load and energy handling, the Commission has approved the InSTS losses at 2.75 percent for FY25, FY26 and 2.70 percent for FY27, FY28, and FY29 for estimating the energy requirement at the State Level on the sales of the three DISCOMS together in the common order on Load Forecasts and Resource Plans of licensees for the 5th control period issued on 27 June 2024. The Commission is inclined to adopt the same losses considered in its Resource Plan Order dated 27 June 2024 as there is no reason to deviate from the same. However, as per APERC Transmission Tariff Regulation, 2005, there shall be a Range of Transmission losses (upper and lower) for each year of the Control Period for the purpose of incentive/penalties. As the losses approved are at very reasonable levels given the network size, energy handling and geography of the State, the Commission is inclined to fix the band of  $\pm 0.2$  over the loss percentage approved in the Resource plan Order for each year of the 5<sup>th</sup> control period. Accordingly, the Transmission loss percentages and availability for each year of the 5<sup>th</sup> control period as approved by the Commission in the present Order is shown in the table below.

**TABLE NO. 3.2**

**APPROVED: TRANSMISSION LOSS TRAJECTORY AND SYSTEM AVAILABILITY**

<b>Financial Year</b>	<b>Target System Availability</b>	<b>Average Transmission Loss</b>	<b>Transmission Loss Upper Limit</b>	<b>Transmission Loss Lower Limit</b>
(1)	(2)	(3)	(4)	(5)
<b>2024-25</b>	99.70%	2.75	2.95%	2.55%
<b>2025-26</b>	99.70%	2.75	2.95%	2.55%
<b>2026-27</b>	99.70%	2.70	2.90%	2.50%
<b>2027-28</b>	99.70%	2.70	2.90%	2.50%
<b>2028-29</b>	99.70%	2.70	2.90%	2.50%

34. The licensee shall put the losses to the user account provisionally at the average transmission loss approved by the Commission in this order. Upon availability of the actual transmission losses, the licensee may settle the final energy account for transmission system users as per the methodology approved by the Commission. **Further, the Commission directs that the details of the energy accounts (weekly/monthly settlements) of all the transmission system users, and the month-wise transmission system availability as certified by SLDC shall be placed invariably on its website along with the transmission loss for a month, by the end of the succeeding month invariably.**

35. Further, clause 18.1 of Regulation No. 5 of 2005 provides an incentive/penalty as may be determined by the Commission to be applicable for Transmission Losses. The Transmission Losses below the approved lower limit shall earn an incentive, which shall be added to the ARR relating to the subsequent Control Period. Similarly, an increase in the actual

Transmission Losses beyond the approved upper limit shall attract a penalty, which shall be deducted from the ARR relating to the subsequent Control Period.

Clause 18.2 of the said Regulation provides that the Commission may also, from time to time, specify any other performance parameters, including the availability of transmission system, quality targets, etc., for which penalty or incentive may be required to be included in the application for ARR:

Provided that in the event of significant seasonal variations in losses, the licensee may submit to the Commission the transmission loss levels for corresponding time periods during a year for approval:

Provided further that, the total amount of penalty levied, if any, by the Commission under the above provisions shall not exceed 10% of the Return on Equity.

Considering the above, the Commission approves the following as an incentive/penalty to the licensee during each year of the 5<sup>th</sup> control period.

- i. For reduction over and above 0.1% on the lower limit of transmission loss percentage, an incentive of one (1) paisa per unit on the total energy handled by the transmission system during that particular year.
- ii. For exceeding every 0.1% or part thereof on the upper limit of transmission loss percentage, a penalty of one (1) paisa per unit on the total energy handled by the transmission system during that particular year.

36. The Commission ordered similar incentive/penalty provisions as stated above in its MYT Transmission Tariff Order for the fourth control period. Therefore, regarding the incentives/penalties to APTRANSCO for the fourth control period that needs to be added/deducted from its ARR of the fifth control period, the Commission proposes to examine the Transmission loss lower limit fixed in the MYT Order for the fourth CP vs. the actual losses during each year of the fourth control period, as shown in the table below.

<b>Financial Year</b>	<b>Transmission Loss Lower Limit</b>	<b>Actual Loss as per the filings</b>
2019-20	2.90%	2.91
2020-21	2.88%	2.60
2021-22	2.86%	2.80
2022-23	2.83%	2.61
2023-24	2.80%	2.63 ( up to Nov 23)

As can be seen from the above Table, APTRANSCO is entitled to claim incentives during the financial years FY21, FY23 and FY24. It has achieved the loss percentages within the band specified by the Commission in the remaining two years of the fourth control period and

hence has not attracted any penalty as per the MYT Order for the fourth control period. Though APTRANSCO is entitled to claim incentives during the three years, it has not made any claim in its ARR filings for the 5<sup>th</sup> control period. Therefore, appreciating its positive gesture for foregoing incentive to benefit transmission system users, particularly the retail supply consumers indirectly, the Commission is inclined to pass the same to consumers and hence decided not to add any incentive in ARR of APTRANSCO for the 5<sup>th</sup> control period regarding the better performance of APTRANSCO in respect of Transmission System losses during the 4<sup>th</sup> control period.





**CHAPTER - IV**  
**AGGREGATE REVENUE REQUIREMENT**

37. In this chapter, the Commission has examined the Aggregate Revenue Requirement filed by the licensee in its ARR & FPT filings for the 5<sup>th</sup> Control Period. The Commission, while computing the Aggregate Revenue Requirement for the 5<sup>th</sup> Control Period, has reckoned /considered all the views /objections/suggestions expressed by the stakeholders in writing and during public hearings, which have been elaborated at the appropriate place, to the extent they are relevant to the subject matter.
38. The Aggregate Revenue Requirement (ARR) for a year refers to the amount required by the licensee to meet the sum of the estimated costs and the allowed Return on Capital Employed (RoCE) as per Regulation No. 5 of 2005 for transmission activity. The RoCE depends on the investment required to meet the forecasted transmission capacity for each year of the Control Period.
39. The licensee estimated the gross ARR at Rs.27,695.17 Cr. After deducting (i) Rs.1690.99 Cr. towards the O&M expenses capitalised, (ii) Rs.200 Cr. towards Non-Tariff Income (NTI), (iii) Rs.500 Cr. towards the anticipated other tariff income towards Inter-State Transmission System (ISTS) charges from National pool, the licensee placed the net ARR at Rs.25304.18 Cr. for the entire 5<sup>th</sup> Control Period as given below:

**TABLE NO. 4.1**  
**FILINGS: NET AGGREGATE REVENUE REQUIREMENT (ARR) (Rs. Cr.)**

Financial Year	Gross Revenue Requirement	Less			Net Aggregate Revenue Requirement
		Expenses Capitalised	Non-Tariff Income	Tariff from others (ISTS)	
(1)	(2)	(3)	(4)	(5)	(6)=(2)-(3)-(4)-(5)
2024-25	4479.19	298.14	40	100	4041.05
2025-26	5093.35	319.68	40	100	4633.67
2026-27	5657.69	338.12	40	100	5179.57
2027-28	6022.08	354.81	40	100	5527.27
2028-29	6442.86	380.24	40	100	5922.62
<b>Total</b>	<b>27695.17</b>	<b>1690.99</b>	<b>200</b>	<b>500</b>	<b>25304.18</b>

40. The Revenue Requirement consists of (A) Depreciation, (B) RoCE, (C) Operation and Maintenance cost, (D) Taxes on Income, and (E) Special appropriations, if any.

**A. Depreciation**

- a) Based on the proposed investment plan, the licensee projected the year-wise asset base for the 5<sup>th</sup> Control Period. The depreciation amount was computed based on the item-wise asset base created, using rates notified by the Ministry of Power,

Government of India. Applying these rates to forecasted assets, the depreciation amount was computed at Rs.8615 Cr. for the entire Control Period, giving details for each year. The year-wise asset base and depreciation amounts filed by the licensee for the Control Period are given below.

**TABLE NO. 4.2**

**FILINGS: ASSET BASE AND DEPRECIATION FOR THE 5<sup>TH</sup> CONTROL PERIOD**

<b>Financial Year</b>	<b>Asset base - GFA Opening Balance (Rs. Cr.)</b>	<b>Depreciation during the year (Rs. Cr.)</b>
2024-25	18025	1331
2025-26	21037	1563
2026-27	25003	1757
2027-28	28311	1891
2028-29	30598	2073
<b>Total</b>		8615

**Commission's decision**

- b) The Commission has examined the asset base and depreciation amounts filed by the Licensee and carefully considered the issue of the depreciation allowance to be applied in determining the licensee's ARR. As per clause 15.2 of Regulation No. 5 of 2005, the depreciation allowance for each year of the Control Period shall be determined generally based on the methodology, rates, and other terms as decided by CERC from time to time. Accordingly, the Commission adopts the depreciation rates approved by the CERC to determine the ARR for the fourth Control Period. The Commission computed the year-wise asset base and depreciation amounts based on the investments as approved in Chapter II for each year of the Control Period. The Commission worked out the asset base to compute depreciation at the beginning of each year of the Control Period. Assets not funded by APTRANSCO, such as those funded through grants and those funded by consumers, have been removed from the asset base before computing the depreciation as per APERC Regulation No.5 of 2005. The depreciation amount determined by the Commission is Rs.5893.76 Cr. against Rs.8615 Cr. filed by the licensee for the 5<sup>th</sup> Control Period. The details of the asset base and depreciation, filed and approved, are given in the table below.

**TABLE NO. 4.3**  
**APPROVED: ASSET BASE AND DEPRECIATION**

Financial Year	Asset Base at the beginning of the Year-Net of Consumer Contribution (Rs. Cr.)		Depreciation (Rs. Cr.)	
	Filed	Approved	Filed	Approved
(1)	(2)	(3)	(4)	(5)
2024-25	18025	17308	1331	890
2025-26	21037	20305	1563	1044
2026-27	25003	23092	1757	1187
2027-28	28311	25656	1891	1319
2028-29	30598	28274	2073	1453
<b>Total</b>			8615	5894

**B) Operation and Maintenance Costs:**

- a) The operation and maintenance (O&M) costs consist of a) Employee costs, b) Repairs and Maintenance (R&M) Costs and c) Administration and General (A&G) costs. The licensee's O&M cost depends on i. Length of Lines (all Voltages) in Ckt km and ii. Number of Substation Bays. The licensee estimated the O&M costs for each year of the Control Period as per the procedure mentioned in the following paragraphs.
- b) The Gross O&M expenses for the year FY 2022-23, as per the latest audited accounts, have been allocated to lines and sub-stations in the ratio of 30:70 as per Regulation 5 of 2005 of APERC. The allocated expenditure to lines and sub-stations is further divided with line length (Ckt-KM) and no. of sub-station bays, respectively, to compute the O&M Norms in terms of INR/Ckt KM (INR 1,15,124/Ckt KM) for lines and INR/Bay (INR 15,90,598/Bay) for Sub Station Bays.
- c) The norms thus arrived for Lines and Substations are escalated at a rate of 3.51% year-on-year to arrive at norms for the base year FY 2023-24 and the fifth control period. The year-wise O&M expenditures for the next five years are arrived at based on the year-wise estimated length of lines and number of bays in substations. The net escalation rate of 3.51%, as per CERC Tariff Regulations, is used to project the O&M expenses over the next five years.
- d) Accordingly, the base year (FY 2023-24) O&M Cost per CKM of Line is estimated to be INR 1,37,294, and the base year O&M Cost per Sub-Station bay is estimated to be INR 18,93,206. Total O&M expenses are computed by multiplying the number of bays by O&M cost/ Bay and circuit km by O&M / CKM for each year of the control period. An average of around 16.67% is considered for capitalisation of O&M expenditure.
- e) As stated above, the licensee estimated the gross and net O&M costs for the fifth control period, as shown in the Table below.

**TABLE NO. 4.4**  
**FILINGS: O&M EXPENSES (Rs. Cr.)**

S. No.	Year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1	Gross O&M Cost	1824.61	1935.16	2029.39	2116.14	2246.95	10152.25
2	O &M expenses capitalised	298.14	319.68	338.12	354.81	380.24	1690.99
3	Net O &M expenses (1) – (2)	1526.47	1615.48	1691.27	1761.33	1866.71	8461.26

- f) Further, the licensee has stated that the O&M cost estimations in the filings have not factored in the wage revision, which is due w.e.f. 1<sup>st</sup> April 2026 and its financial commitment of wage revision based on actuals will be filed in the true-up/ true-down for the 4<sup>th</sup> Control Period.

#### **Views/Objections/Suggestions**

- g) Sri. M. Venugopala Rao, Sr. Journalist and Sri. Ch. Babu Rao, CPI (M) have stated that compared to the gross O&M expenditure of Rs.4446.96 crore approved by the Commission for the 4<sup>th</sup> control period, the projected O&M expenditure for the 5<sup>th</sup> control period of Rs.10152.25 crore works out to an increase of 228.30%. The increase, ipso facto, is abnormal. Since the components of O&M expenditure are being determined on a normative basis, they need to be revised downwards as per relevant factors of capital investments to be approved by the Commission and assets approved to be created. That the reasons for such an abnormal increase in the said costs have not been explained. Since 2023-24 is the base year, applying an escalation rate of 3.51% annually would lead to much higher costs during the 5<sup>th</sup> control period.

**APTransco's Response:** O&M expenses have been arrived at as per the procedure laid down in the Regulation. The increment in O&M Cost is mainly due to the provision for a 100% P&G Pension fund, which is due from 2030 onwards. As per the Tri-partite agreement entered during the unbundling of APSEB into APTRANSCO, APGENCO and APDISCOMS, 74% pension liability needs to be met from Master Trust under the control of APGENCO, and the Balance of 26% needs to be met from the Trusts of the respective companies till December 2029. From January 2030 onwards, the 100% pension liability needs to be met from the internal trust of the respective companies. The liability pending as per the actuarial valuation is Rs.2458.08 Crores. To be ready with the trust amount by January 2030, the liability is considered during this control period. The liability will be further revised as per the actuarial valuation report submitted by the qualified actuarial auditor. The increment in O&M Cost is mainly due to the provision for a 100% P&G Pension fund, which is due from 2030 onwards. The wage revision 2026 is not factored in the ARR

as a policy, as it may become the benchmark for the unions/associations. The actuals will be claimed while filing True down/up. Projections are made based on the base year FY2022-23 O&M costs with an escalation factor of 3.51%. The overall O&M projections for the 5<sup>th</sup> CP are higher due to accommodating the P&G Trust liability, as it needs to be recovered during the 5<sup>th</sup> CP.

**Commission's Decision:**

- h) After careful examination of the objections and response of the APTRANSCO to the same, the Commission proposes to approve the O&M Costs based on the norms as per its Regulation. Hence, there will not be any separate provision towards P&G liability in the O&M costs proposed for approval. Also, the Commission has found that the licensee initially estimated the net O&M expenditure and grossed it up with a certain percentage to arrive at Gross O&M expenditure contrary to written submissions in the filings, which is against the regular practice of calculating Gross O&M expenditure first. However, the Commission has computed the O&M costs as per the procedure prescribed in Regulation No. 5 of 2005, which reads as under:

“The licensee, in its filings for the Control Period, shall submit the consolidated O&M expenses for the base year of the Control Period and for the two years preceding the base year. The O&M expenses for the base year shall be determined based on the latest audited accounts, best estimates of licensee of the actual O&M expenses for relevant years and other factors considered relevant. The O&M expenses for the base year, if required, will be used for projecting the expenses for each year of the Control Period. The Commission will determine the admissible quantum of O&M expenses for each year of the Control Period on the basis of the following formula.

$$O\&M_{L_o} = 0.3 * O\&M_o / LL_o$$

$$O\&M_{S_o} = 0.7 * O\&M_o / SS_o$$

O&M<sub>o</sub> is Total O&M expenditure

O&M<sub>L<sub>o</sub></sub> is O&M cost per circuit-km

O&M<sub>S<sub>o</sub></sub> is the O&M cost for each sub-station bay

Accordingly, the actual Gross O&M Expenditure of Rs. 1405.07Cr.as per the audited accounts for FY2022-23 has been allocated in the ratio of 30:70 between the Length of lines (Circuit-Km) and the number of sub-station bays existing by the end of FY22-23. The 31383 Circuit-kM length of Transmission lines and 5300 bays in Substations by the end of FY2022-23, as provided by the licensee, are considered. Based on the above, the O&M Norms are computed as Rs.1,34,315.08 per Circuit-km for lines and Rs. 18,55,752.83 per bay for substations for FY 2022-23. The O&M Norms for the base year FY2023-24 and for each year of the 5<sup>th</sup> Control Period are computed by considering the INDEX inflation factor as 3.51%, which the AP Transco considered for escalation of O&M expenditure as per CERC Tariff

Regulations 2019. The No. of Substation Bays and Ckt km of Line lengths are worked out based on the approved investment plan with reference to the investments in filings. Based on the above norms, the O&M expenditure for each year is computed considering the length of lines and number of bays in sub-stations corresponding to the investments approved by the Commission. The computation of Gross O&M Costs is shown in the table below.

**TABLE NO. 4.5****APPROVED: O&M NORMS & GROSS O&M EXPENDITURE (Rs. Cr.)**

<b>Projections</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>	<b>FY 2028-29</b>
Bay Norm (Rs./bay)	1988310.69	2058100.39	2130339.72	2205114.64	2282514.17
LL Norm (Rs./Circuit km)	143909.57	148960.80	154189.32	159601.37	165203.38
No. of Substation Bays	5512	5656	5732	5790	5940
Length of Lines -Ckt km	32833	33638	34235	34581	35385
Gross O&M Expenditure	1568.46	1665.11	1749.07	1828.67	1940.29

As shown above, the Commission has computed the gross O&M cost at Rs.8,751.60 Cr. against the gross O&M cost of Rs. 10152.25 Cr. filed by the licensee. The net O&M expenses are estimated at Rs.7292.70 Cr. after deducting capitalised expenses of Rs.1458.89 Cr. from the Gross O&M expenses for the entire Control Period as given in the Table below:

**TABLE NO. 4.6****APPROVED: O&M EXPENSES (Rs. Cr.)**

<b>S. No.</b>	<b>Year</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>	<b>FY 2028-29</b>	<b>Total</b>
1	Gross O&M Cost	1568.46	1665.11	1749.07	1828.67	1940.29	8751.60
2	O &M expenses capitalised	261.46	277.57	291.57	304.84	323.45	1458.89
<b>3</b>	<b>Net O &amp;M Expenses (1)-(2)</b>	<b>1307.00</b>	<b>1387.54</b>	<b>1457.50</b>	<b>1523.83</b>	<b>1616.85</b>	<b>7292.70</b>

**C. Return on Capital Employed (RoCE)**

The licensee can claim the Return on Capital Employed (ROCE) as per Regulation No. 5 of 2005. The amount claimed is expected to meet the debt and equity capital cost in creating the transmission assets. The Year's Return on Capital Employed (RoCE) shall be computed using the formula  $RoCE = WACC * RRB$  in Regulation 5 of 2005. Thus, the two steps required to determine the Return on Capital Employed are as follows:



- i. Determination of Regulatory Rate Base (RRB).
  - ii. Determination of Weighted Average Cost of Capital (WACC)
- (i) **Determination of Regulatory Rate Base (RRB):** The determination of RRB requires the calculation of working capital, which is detailed below.

### **Working Capital**

The licensee has computed the working capital requirement ranging from Rs.161 Cr. (FY 2025) to Rs. 206 Cr. (FY 2029). The basis was not revealed in the filings.

### **Commission's Decision:**

As per the APERC Regulation No. 5 of 2005, the working capital requirement for each year of the Control Period shall be considered equivalent to 45 days of O&M expenses as allowed for the year and the carrying cost of maintaining an appropriate inventory level of O&M stores. Accordingly, the Commission has approved the working capital equivalent of 45 days of O&M expenses as approved in this order and also considered the carrying cost of maintaining an appropriate inventory level of O&M stores equivalent to Rs.30 Cr. p.a. The details are given in the table below.

**TABLE NO. 4.7**  
**WORKING CAPITAL FILED AND APPROVED**

<b>S. No.</b>	<b>Year</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>	<b>FY 2028-29</b>
1	Filed	161	173	183	192	206
2	Approved	193	203	212	220	232

### **Regulated Rate Base (RRB)**

The licensee computed the RRB according to the procedure prescribed in Regulation 5 of 2005 for the proposed investments, depreciation, Working Capital, and Consumer Contributions for the 5<sup>th</sup> Control Period.

### **Commission's Decision:**

The Commission found no error in the methodology adopted by the licensee in the computation of RRB. The Commission has computed the RRB using the same methodology but based on the current order's approved investments, depreciation, working capital, and consumer contributions. The Detailed calculations of RRB as filed and approved are shown in Annexure C. The summary of RRB computed by the licensee and the Commission are shown in the table below.

**TABLE NO. 4.8****FILED Vs APPROVED: REGULATED RATE BASE (Rs. Cr.)**

S. No.	Year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1.	Filed	9141.26	11226.02	13247.56	14247.54	15054.92
2.	Approved	9041.70	10827.69	12258.55	13471.72	14587.73

**(ii) Determination of Weighted Average Cost of Capital (WACC):** The determination of WACC should follow the finalisation of the debt and equity ratio, cost of debt, and return on equity fixation, which are discussed below.

**(a) Debt and Equity Ratio**

AP Transco, in its filings, adopted a Debt-Equity ratio of 75:25 throughout the 5th control period.

**Commission's Decision:**

The Regulation does not stipulate a debt-equity ratio. Therefore, after examining the licensee's proposal and the previous year's D/E mix, the Commission is inclined to approve the debt-equity mix of 75:25 percent throughout the Control Period, as filed by the licensee.

**(b) Cost of Debt, Return on Equity.**

The Licensee has filed the cost of debt at different percentages, varying between 11.52% p.a. (FY 2025) and 11.02% p.a. (FY 2029), and RoE at 14% p.a., which remained constant throughout the control period. Regarding the RoE, it stated that as per clause 13.1 of APERC regulation 5 of 2005, RoE shall be determined at the beginning of the control period after considering the CERC norms. The details of Licensee's filings are as under.

**TABLE NO. 4.9****FILED: COST OF DEBT, ROE AND WACC**

S. No.	Year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Cost of Debt	11.52%	11.16%	11.05%	11.04%	11.02%
2	ROE	14.00%	14.00%	14.00%	14.00%	14.00%
3	WACC	12.14%	11.87%	11.79%	11.78%	11.77%

**Cost of Debt****Views/Objections/Suggestions**

Sri. Ch. Babu Rao, and Sri. M. Venugopala Rao, have requested the Commission to re-examine the projected interest rate and determine it realistically in tune with interest rates prevailing in the market. Also, the Hon'ble Commission may direct



APTRANSCO to swap loans with high interest rates for fresh loans at relatively lower interest rates to the extent available.

Dr. M. Timmareddy stated that interest rates have come down considerably over the period, reflecting developments in the financial markets. Following these developments, APTRANSCO needs to adopt lower rates of interest.

**APTransco's Response:** As advised by esteemed members, swapping loans from higher interest rates to lower interest rates is a continuous process in APTRANSCO. Very recently, during FY2022-23, the loans with higher interest rates were swapped. However, after the COVID-19 pandemic, the trend in interest rates is on the higher side. As per the monetary policies issued in recent years, the repo rate stood at 6.5% as of 08.12.2023 (monetary Policy) from 4% in 2021.

The prime lenders of APTRANSCO are REC and PFC, who reset the interest rates every year in the month of January, and at present, the rate with reset during January 2023 is 10.25%. With the current trend of raising interest rates in banks, the interest rate was considered at a CAGR of 1.72%. Thus, the interest rate is considered to be 11.16%, which is rational. The proposed interest rate of 11.16% for the 5th control period is reasonable and necessary to ensure sustainable operations amidst rising inflation in and around 5%.

**Commission's Decision:**

As per clause 13.1 of Regulation No. 5 of 2005, the Cost of Debt shall be determined at the beginning of the Control Period after considering the Licensee's proposals, present cost of debt, market conditions, and other relevant factors. Return on Equity shall be determined at the beginning of the Control Period after considering CERC norms, the Licensee's proposals, previous years' D/E mix, risks associated with distribution & supply business, market conditions and other relevant factors.

After examining the licensee's proposal and other aspects mentioned in the Regulation and weighing the objections in this regard, the Commission is inclined to approve the Cost of Debt at 11.0% based on the weighted average rate of interest calculated on the actual loan portfolio furnished in the filings and the likely trend in the debt market.

**Return on Equity:**

**Dr. M. Timmareddy** has stated that the RoE shall be linked to the interest rate. The RoE shall equal the interest rate plus 2% to account for the risk premium. As interest rates have decreased considerably, the RoE shall reflect this decline. Instead of 14%, the Commission shall adopt a lower RoE reflecting declining interest rates and 2% towards the risk premium.

**APTransco's Response:** APTransco has adopted an RoE of 14% as per the existing Tariff order for computing RoCE in the filings for Transmission MYT. The allowed RoE, as per the existing CERC norms, is 15.5% (post-tax), which is higher than the APERC allowed percentage. However, APTransco follows the directions of the Hon'ble Commission.

**Commission's Decision:**

The Regulation of APERC does not specify the return on equity (RoE). The Commission views it as essential for the regulated entities to retain their interests in the business. The RoE allowed to the state transmission licensee is less than the RoE allowed to the interstate licensee by CERC. Hence, the Commission is inclined to approve a return on equity of 14% for each year of the fifth control period as filed by the licensee.

**Weighted Average Cost of Capital (WACC)**

The licensee computed WACC using the formula provided in APERC Regulation No. 5 of 2005.

$$WACC = (D/E) * r_d / (1 + D/E) + (r_e / (1 + D/E))$$

Having finalised the debt-equity ratio, cost of debt, and return on equity as discussed above, the Commission computed the WACC using the same formula. Accordingly, the WACC calculated by the Commission for each year of the control period is shown in the table below.

**TABLE No. 4.10**

**APPROVED: COST OF DEBT, ROE AND WACC**

<b>S. No.</b>	<b>Year</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>	<b>FY 2028-29</b>
1	Cost of Debt	11.00%	11.00%	11.00%	11.00%	11.00%
2	ROE	14.00%	14.00%	14.00%	14.00%	14.00%
<b>3</b>	Weighted Average Cost of Capital (WACC)	11.75%	11.75%	11.75%	11.75%	11.75%

Having determined the RRB and WACC supra, the Commission computed the RoCE according to the formula in the Regulation. The Detailed calculations of RoCE as filed and approved are shown in Annexure C, and a summary is shown in the table below.

**TABLE No. 4.11****FILED Vs APPROVED: ROCE (Rs. Cr)**

S. No.	Year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Filed	1109.75	1332.53	1561.56	1678.36	1771.21
2	Approved	1062.40	1272.25	1440.38	1582.93	1714.06

**D. Taxes on Income:**

The licensee estimated the income tax in its filing based on the current tax rate of 34.944%. As stated by the licensee, the income tax is estimated to be such that the post-tax return on equity is 14% of RRB for each year. The total income tax liability as filed by the licensee in their Regulatory Form 1.0 for the entire 5th control period is 1468.28 Crs.

**Views/Objections/Suggestions**

(i) Dr M. Thimmareddy has stated that APTRANSCO has arrived at Rs. 770 Crore towards tax on income during the 5<sup>th</sup> control period based on the given regulated rate base (RRB) and income tax rate of 34.944% (Table 20). However, under ARR (Table 25), APTRANSCO claims Rs. 1,465.28 Crore towards income tax during the 5th control period. The difference between these two tables needs to be examined.

**APTransco's Response:**

Year	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Regulated Rate Base	7871.14	9141.26	11226.02	13247.55	14274.54	15054.92
Equity @25%	1967.79	2285.31	2806.51	3311.89	3568.63	3763.73
Debt @75%	5903.36	6855.94	8419.52	9935.66	10705.90	11291.19
Return on Equity @14%	275.49	319.94	392.91	463.66	499.61	526.92

As seen from the above table, to have the post-tax profit shown against the Return on Equity @14%, with the Income Tax @34.944%, the Income Tax proposed as follows

Income Tax @.34.944%	183.23	212.80	261.33	308.39	332.30	350.46
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Hence, the Taxes shown in Table 25 (Filings) are to maintain the ROE at 14% after Tax expenses, while the taxes shown in Table 20 (Filings) will reduce the profit by the Tax amount. Hence, the taxes shown in Table 25 (Filings) need to be considered to maintain ROE at 14%.

(ii) Dr. M. Thimma Reddy, Sri. M. Venugopala Rao, and Sri. Ch. Babu Rao have stated that APTRANSCO has estimated taxes on income based on the current tax rate of 34.944% and that the taxes have been estimated such that the post-tax return on equity is equivalent to

14% of RRB for each year; That under normal course income tax is paid out of the profits earned by the entities. However, under the present treatment, income tax on the profits earned by the entities will be paid by electricity consumers through tariffs. In other words, electricity consumers will be reimbursing the income tax paid by APTRANSCO; That the amounts of RoE claimed by APTRANSCO and the rates of income tax shown by it make it clear that it can afford to pay and bear the income tax without passing it through to the consumers. Therefore, the Commission may dispense with this obnoxious and iniquitous arrangement by recording valid reasons in writing for deviating from the applicable regulation or by incorporating a clause in the applicable regulation that income tax on RoE and other taxable income of the licensee shall be borne by it only and shall not be allowed as a pass-through to be collected from consumers, directly or indirectly.

**APTransco's Response:** APTransco has arrived at RRB post-tax as per the procedure adopted in the 4<sup>th</sup> CP. Even CERC has also allowed a tax on RoE. As per APTRANSCO's Balance Sheet, and as no MAT Provision is available, the Tax rate, including surcharge and Cess, is 34.944% and hence is allowable.

#### **Commission's Decision**

The tax estimate by the licensee is on the higher side. However, the 14% Return on Equity allowed to Transco is lower than the RoE allowed to Interstate Transmission Licensees such as PGCIL by CERC. Moreover, reasonable return on equity (RoE) is essential for the regulated entities to retain their interests in the business. If the burden of income tax is thrown on the licensees, which they ought to bear from their RoE, it may hamper the overall sustainability of the business and equity requirement for future network expansion. Further, the Tax is an uncontrollable item of the ARR and will be Trued up/down based on actuals at the end of each year. The experience shows that it was trued down, which was passed on to the consumers 100 per cent. Hence, there is no need to deviate from the Regulation. Therefore, considering the Regulation and all these factors, the Commission decides to allow the income tax as an exclusive ARR item as per its Regulation on the equity portion of the Regulated Rate Base (RRB) so that post-tax RoE to the licensed entity is 14%. Accordingly, the tax as filed by the licensee and approved by the Commission are shown in the table below.

**TABLE NO. 4.12**

**DETAILS OF INCOME TAX FILED AND APPROVED (Rs. Cr.)**

<b>Year</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>	<b>FY 2028-29</b>	<b>Total for CP</b>
Filed	212.8	261.33	308.39	332.3	350.46	1465.28
Approved	110.58	132.43	149.93	164.76	178.41	736.11

**(E) Special Appropriations**

41. The licensee has shown Rs.2.35 crores towards special appropriations for the total 5<sup>th</sup> control period without any submissions, and hence, the Commission is not inclined to accept the same.

**Non-Tariff Income**

42. The licensee has stated that a major contributor to the non-tariff income is supervisory charges that shall be collected from bulk-load consumers/developers/government while implementing various schemes. This income is temporary in nature and will be present only for the duration of the scheme's execution. Other components include income from investments, delayed payment charges from consumers, rebates earned from payments to suppliers, etc., which may continue for the next control period. The licensee has shown Rs.40 Cr as NTI during each year of the 5th CP.

**Commission's Decision**

Based on the actual non-tariff income earned by the licensee in the previous financial years, the Commission is inclined to propose a non-tariff income of Rs.500 Crores, considering Rs.100 Crores for each year of the Control Period uniformly. The year-wise non-tariff income filed by the licensee and approved by the Commission is shown in the table below.

**TABLE NO. 4.13**  
**NON-TARIFF INCOME FILED AND APPROVED (Rs. Cr.)**

Year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Filed	40	40	40	40	40
Approved	100	100	100	100	100

**Revenue from ISTS (Interstate) lines**

43. The licensee stated that the revenue from ISTS projected and considered while determining Transmission charges in the 4th control period is Rs.809 Crs. , and the actual receipts are Rs.452.59 Crs. The determination of Tariff for 4Nos. Lines for the 4<sup>th</sup> control period are pending with CERC. A revenue gap of Rs.356.41 Crores will be adjusted in the 4th CP True up/True down. Further, APTransco would be required to file a petition before CERC for the 44 ISTS lines for the 5th Control Period based on the CERC tariff regulations for the period FY 2024 – FY 29. The bay costs are not being considered by CERC while determination of annual transmission charges. Based on the earlier orders, the expected revenue generated from ISTS lines is Rs.100 Crs for each year, and the same is considered for adjustment of Gross ARR for the 5<sup>th</sup> Control Period.

**Views/Objections/Suggestions**

Sri. M. Venugopala Rao, and Sri. Ch. Babu Rao, have stated that as per the submissions of APTRANSCO, in other words, additional burdens are being kept pending for lack of orders of CERC to be imposed on the consumers later.

**APTransco's Response:** Out of 44 Interstate lines, the Tariff was determined for 40 lines for the fourth control period, and the Tariff determination for 4 Lines for the fourth control period is pending with CERC. This is not an additional burden but revenue to be received from the PoC pool, which is generally passed through to APDiscoms. In fact, this will reduce the burden on Discoms/consumers..

#### Commission's Decision

The revenue from the central POC pool towards the ISTS lines owned by APTRANSCO would be treated to net off its actual ARR. There is no merit in the objections. The Commission, having examined the income estimated from the ISTS lines owned by APTRANSCO and other facts stated by it in this regard, is inclined to consider the revenue from ISTS lines as filed. However, this will be trued up/down based on the actuals. The year-wise revenue from ISTS lines filed by the licensee and approved by the Commission is shown in the table below.

**TABLE NO. 4.14**

**Revenue from ISTS lines: FILED Vs APPROVED (Rs. Cr)**

Year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Filed	100	100	100	100	100
Approved	100	100	100	100	100

44. As discussed above, the table below shows the ARR required by APTRANSCO for the 5<sup>th</sup> control period, as determined by the Commission.

**TABLE NO. 4.15**

**Approved: ARR required by APTRANSCO for the 5th control period**

Sl.No.	Parameter	2024-25	2025-26	2026-27	2027-28	2028-29	Total
A	O&M Costs	1568.46	1665.11	1749.07	1828.67	1940.29	<b>8751.60</b>
B	Depreciation	890.32	1044.17	1187.21	1318.84	1453.23	<b>5893.76</b>
C	Provision for Income Tax	110.58	132.43	149.93	164.76	178.41	<b>736.12</b>
D=(A+B+C)	Total expenditure	<b>2569.36</b>	<b>2841.71</b>	<b>3086.21</b>	<b>3312.27</b>	<b>3571.94</b>	<b>15381.48</b>
E	LESS: O&M Expenses Capitalized	261.46	277.57	291.57	304.84	323.45	<b>1458.89</b>
<b>F= (D-E)</b>	<b>Net Expenditure</b>	<b>2307.90</b>	<b>2564.13</b>	<b>2794.64</b>	<b>3007.43</b>	<b>3248.49</b>	<b>13922.59</b>
<b>G</b>	<b>Add: RoCE</b>	<b>1062.40</b>	<b>1272.25</b>	<b>1440.38</b>	<b>1582.93</b>	<b>1714.06</b>	<b>7072.02</b>
<b>H=(F+G)</b>	<b>Gross ARR</b>	<b>3370.30</b>	<b>3836.38</b>	<b>4235.02</b>	<b>4590.36</b>	<b>4962.55</b>	<b>20994.60</b>
<b>I</b>	<b>Less: Non-Tariff Income</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>500.00</b>
<b>J</b>	<b>Less: Tariff from Interstate Lines</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>500.00</b>
<b>K= (H-I-J)</b>	<b>Net ARR</b>	<b>3170.30</b>	<b>3636.38</b>	<b>4035.02</b>	<b>4390.36</b>	<b>4762.55</b>	<b>19994.60</b>



45. The net ARR filed and approved by the Commission for the 5<sup>th</sup> control period is shown in the table below.

**TABLE NO. 4.16****NET AGGREGATE REVENUE REQUIREMENT FILED AND APPROVED (Rs. Cr.)**

Year	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
Filed	4041.05	4633.67	5179.57	5527.27	5922.62	25304.18
Approved	3170.30	3636.38	4035.01	4390.36	4762.55	19994.60

**True-up/ True-down for 4th Control Period**

46. The licensee has stated that they are in the process of reconciling actual revenue and cost details, and hence, there is a delay in filing the True-up/True-down. That it will file the True-up/True-down after the completion of the fourth control period separately after the completion of the Accounts audit.

**Commission's Decision**

With regard to the filing of the Trueing exercise by the Transmission Licensees, the relevant APERC Regulation no 5 of 2005 and its Second Amendment (Regulation No. 7 of 2023), notified on 11th October 2023, specify the following:

“10.5 Pass-through of gains and losses on variations in "uncontrollable" items of ARR:- The Transmission Licensee shall be eligible to claim variations in "uncontrollable" items in the ARR for a Control Period in the filings for the subsequent Control Period depending on the availability of data as per actuals with respect to effect of uncontrollable items:

Provided that the Commission shall allow the financing cost on account of the time gap between the time when the true-up becomes due and when it is actually allowed and the corrections shall not be normally revisited.

10.6 **Sharing of Gains/Losses due to variations in Controllable items in the ARR:** The Transmission Licensees shall present the variations in each controllable item with detailed reasoning. The aggregate gain/loss of the nth control period (Actuals of 4 years and provisional for 5th year) in controllable items of Transmission Business shall be a pass-through in the ARR of (n+1)control period at the appropriate ratio for each item as decided by the Commission. However, the Transmission licensee shall submit the gains/losses in each controllable item of the Transmission Business for the previous financial year by 30<sup>th</sup> November of the current financial year through an annual performance petition. The gains/losses in the controllable items of ARR on account of factors that are beyond the control of the Transmission Licensee shall be passed through to the consumers similar to the uncontrollable items stated in the clause 10.5 above.”



By exercising the powers conferred on it under the Regulation, the Commission grants liberty to the licensee to file true-up / true-down for the 4<sup>th</sup> Control Period within one month of the issue of this order through an appropriate application/petition. Upon filing such a petition or application, the same will be examined independently following the law and as per the prescribed procedure. Regarding the 5<sup>th</sup> control period, AP Transco is directed to follow clause 10.6 of the Regulation, as stated supra, scrupulously without fail.

47. The Commission reiterates its direction in the MYT Order for the 4<sup>th</sup> CP as any small income from the existing assets would be a solace to the ailing power sector in the State. Section 41 of the Electricity Act, 2003 enables the Transmission Licensee to take up other business for optimum utilisation of its assets. Since the Licensee has a large developed network of power and telecom, the Commission hereby directs it to furnish the details of other businesses it conceived to be taken up. If no steps have been taken so far, the licensee may submit the possibility of taking up other business and constraints, if any, within three months from the date of issue of this Order.



**CHAPTER - V****TRANSMISSION TARIFF DETERMINATION**

48. The Transmission Tariff Schedule consists of a) Transmission Charge in Rs./kW/Month and b) Transmission Loss in percent.
- a) To recover the estimated net ARR, the licensee proposed to levy the monthly Transmission Charge/Rate on Peak demand incidents on the transmission system for each year of the Control Period. The licensee computed the Transmission Charge by dividing the net ARR by the expected total peak demand for each year of the Control Period as per Regulation No. 5 of 2005.
- b) Since the energy drawn by the users from the transmission system is always less than the energy injected into the system to the extent of transmission losses, the licensee is accountable for energy to the users to the extent of input energy, less transmission losses. The licensee's filings on Net ARR, peak demand, transmission tariff and loss per cent for each year of the Control Period are shown in the table below.

**TABLE NO. 5.1****FILINGS: TRANSMISSION TARIFF AND TRANSMISSION LOSS PERCENTAGE**

Financial Year	Net ARR (Rs. Cr.)	Peak Demand (MW)	Transmission Tariff	
			Transmission Charge (Rs./kW/Month)	Average Transmission Loss (%)
(1)	(2)	(3)	(4)=(2/3)	(5)
2024-25	4041.05	15,226	221.17	2.75%
2025-26	4633.67	16,256	237.54	2.75%
2026-27	5179.57	17,831	242.07	2.70%
2027-28	5527.27	18,805	244.94	2.70%
2028-29	5922.62	19,913	247.85	2.70%

**Views/Objections/Suggestions**

49. The objections/views/suggestions received on the above and the response of the APTRANSCO to the same are discussed hereunder.
- (i) Sri. Ch. Babu Rao and Sri. M. Venugopala Rao stated that the actual peak demand in the state recorded for 2022-23 is 12293 MW against 14135 MW, as approved by the Commission. That APTRANSCO projecting a peak demand of 15,226 MW for 2024-25 against 15539 MW approved by the Commission for the last year of the 4<sup>th</sup> control period (2023-24) confirms that the peak demand approved by the Commission during the 4<sup>th</sup> control period and its last year has turned out to be inflated; That APTRANSCO projecting peak demand for 2024-25 at a level lesser than what itself proposed and approved by the

Commission for 2023-24 underlines the need for a realistic assessment of peak demand for the 5th control period.

**APTransco's Response:** The peak demand achieved during the 4<sup>th</sup> control period is less than that approved was due to COVID-19 pandemic conditions. The entire world had come to a standstill during the lockdown periods, which spread over a period of almost three years. All construction and development activities were stopped, leading to a reduction in demand growth. Even after the pandemic, things took quite a long time to reach normalcy. The deviation in demand projected/approved from actuals is mainly due to unanticipated natural calamity, which is not under APTransco's control. The projected state-level maximum demand or Energy requirements are based on Discoms' sales forecasts (by CAGR ) and are in line with CEA's 20th EPS forecasts.

The details of Approved vs Actual peak demands during the 4<sup>th</sup> control period are as below:

FY	4 <sup>th</sup> Control Period				
	2019-20	2020-21	2021-22	2022-23	2023-24
Approved	11450	12219	13209	14315	15539
Reached	10207	11193	12032	12293	13028 (so far)

**Commission's View:** APTRANSCO's response is self-explanatory. The Commission conducted due analysis in estimating the peak demands for the 5th control period in its Resource Plan Order dated 27.06.2024.

**(ii) AP Textile Mills Association and All India Cotton Seed Crushers Association**

That Transco purports to arrive at the State Peak Demand of 15226 MW from the energy inputs into the grid during the year. According to the principles of science and engineering, such a methodology is impermissible. Peak demand can never be derived from the annual energy input. There is clearly manipulation and numerical jugglery involved here, which is unexplained in the ARR/FPT.

**APTransco's Response:** APTransco has followed the existing methodology approved in the earlier Tariff orders.

**Commission's View:** Peak demand is a function of energy usage/handling in a time period (Week/month or year) and the system load factor for that time period. The peak demand for DISCOMs is estimated based on the above methodology in the Resource Plans. As such, the contention of the objector is incorrect.

**That** there is no indication in the ARR/FPT as to how much of the peak demand is actually apportioned to each Discom. There appears to be significant opacity and controversy as to which Discom is required to pay for what part of the peak demand.

**APTransco's Response:** Clause 12.5 H, added vide fourth amendment Regulation (2 of 2023) notified by the Hon'ble Commission dated 29.03.2023, to the principal Regulation (4 of 2005) on Determination of Tariff for Wheeling & Retail Sale of Electricity, is proposed to be followed; but however, Commission's directions are final.

**Commission's View:**

Since Peak Demand is a function of Energy usage/handled in a time period (Week/month or year) and System Load Factor for that time period, the State Peak demand excluding open access shall be apportioned based on the energy drawal of each DISCOM.

**Commission's Decision**

50. The Commission has issued 1<sup>st</sup> amendment to the APERC (Terms & conditions for Determination of Transmission Tariff) Regulation, 2005 on 13.02.2019. according to which

"The transmission tariff payable by the users of the Transmission system shall be determined in accordance with the following formula:

$$TR = \text{Net ARR} / (12 * \text{TTC})$$

Where,

TR: Transmission Rate in Rs./kW/month

Net ARR: Net ARR, as determined by the Commission as per the Regulation.

TTC: Total Transmission Capacity in kW of the Transmission system

Total Transmission Capacity (TTC) means Transmission system peak demand including open access demand approved by the Commission in the multi-year tariff (MYT) order.

In the previous chapter of this Order, the Commission determined APTRANSCO's net annual revenue requirement (ARR) for each year of the 5th control period. The Commission also approved the yearly peak demand at the state level in the common order dated 27 June 2024 on the Resource Plans filed by AP Transco and DISCOMs, as shown below.

**TABLE NO. 5.2**

**The Yearly Peak Demands**

<b>Year</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>	<b>FY 2027-28</b>	<b>FY 2028-29</b>
Peak Demand (MW)	14,610	15,600	16,663	17,793	19,019

Accordingly, as per the formula in the Regulation, the Commission has computed the Transmission Charge in Rs./kW/Month for each year for the 5th control period. The details of the commission's transmission tariff computations are shown in Annexure D. The

Transmission charge computed and Average loss percentage, as approved in Chapter II are shown in the table below.

**TABLE NO.5.3**  
**TRANSMISSION TARIFF SCHEDULE**

<b>Financial Year</b>	<b>Net ARR (Rs. Cr.)</b>	<b>Peak Demand (MW)</b>	<b>Transmission Charge/Rate (Rs./kW/Month)</b>	<b>Average Transmission Loss (%)</b>
(1)	(2)	(3)	(4)=(3/2)	(5)
2024-25	3170.30	14,610	180.83	2.75%
2025-26	3636.38	15,600	194.25	2.75%
2026-27	4035.01	16,663	201.80	2.70%
2027-28	4390.36	17,793	205.62	2.70%
2028-29	4762.55	19,019	208.67	2.70%

### **Billing Methodology**

51. Several objections were received regarding the billing methodology for RE open-access users. The objections received, and APTRANSCO's response are discussed hereunder.

(i) Solar Power Developers Welfare Association, Vuddanda Solar Power Private Limited, Hetero Labs Ltd., Aurobindo Atria Power Private Limited, Subrahmanya Solar Power, Rain CII Carbon(Vizag) Limited, Sri chakra Cements, Vignatha Solar Private Limited Sree Godavari B.G.Channappa, Small Hydro Power Developers Association, and Kanthi Brothers Oils Private Limited have stated that levy of capacity based Transmission or Distribution tariff on NCE sources like Solar, Wind and Mini Hydel power plants for which the PLF is in the range between 20% and 25% (the PLF of Mini-hydel may vary from 10 to 50% depending on the monsoon), amounts to levy of 4 to 5 times more than the levy on conventional power.

That whenever the Wind/Solar/Mini Hydel power is unavailable, the OA/Wheeling consumer would avail power from the DISCOM. Thus, the DISCOM recovers its fixed cost as an MD charge. The consumer always draws his required Demand within the CMD from the grid, whether from the DISCOM or the OA Generator/Exchange. Thus the consumer always uses the network and pays the fixed cost related to the Transmission and Distribution business. Hence, the network capacity is not left idle, and there is no loss to DISCOM.

AP Textile Mills Association and All India Cotton Seed Crushers Association have further stated that in the case of renewable energy generators, the licensees have wrongly and unjustly asserted that the power plant's installed capacity is the contracted capacity for

OA. In the case of short-term open access transactions of purchases through IEX and similar bilateral transactions, there is no difficulty as to the contracted capacity as open access is contracted for a specific quantity for a specific period. However, there is still some issue and inequity in applying the whole monthly charge. The situation where open access is contracted for only a few days or for specific time slots on specific days in a month, needs to be addressed and redressed.

Therefore, the Commission may consider levying transmission charges on wind/hydel generation open access based on the actual average demand for each month computed based on the energy injected during the month. Alternatively, the transmission charge for wind/hydel generation may be reasonable and fair per kWh applied to the number of units actually injected from time to time.

**APTransco's Response:** APTransco has taken the spirit of the Hon'ble Commission's directions in the Tariff Order for the 4<sup>th</sup> CP, which is reproduced below:

- i. The Users of the transmission system shall pay transmission charges and bear the transmission loss in kind.
- ii. The Discoms shall pay the Transmission charges based on the peak Demands excluding open access demand/ capacity approved by the Commission in this order.
- iii. The Open-access users shall pay the Transmission charges based *on the Contracted Capacities approved by the Commission in this order.*

Transmission charges / wheeling charges are meant to construct and maintain network facilities. Whether it is used fully or partially, the network is to be built for evacuation of full capacity even though it is incident for a very short period; otherwise, the generator has to restrict its generation to the line capacity. Hence, even though the plant's PLF is around 18 to 23%, the infrastructure has to be built for 100% capacity to facilitate 100% evacuation whenever it is available.

Once the transmission line is built, it should be maintained for its life irrespective of its percentage usage or generation PLF. As the network is built and maintained *for* full capacity, it is reasonable to levy transmission charges for that capacity. Energy-based Tariffs are unreasonable.

**(ii) Sri. M. Venugopala Rao, inter alia,** strongly criticised the incentive mechanism for RE developers and stated that the GoAP had withdrawn all the concessions, incentives, facilities, etc., extended to captive and open-access RE units. The Commission may provide a suitable recovery mechanism for fully recovering transmission charges.

**APTransco's Response:** As per GoAP Solar policy GO.Ms.No.8, dated 12-02-2015, and Wind policy G.O.Ms.No.9, dated 13-02-2015, Transmission Charges/Wheeling charges were exempted for ten years from the date of commissioning of the plant in the operative period 12.02.2015 to 11.02.2020 (Solar) and 13.02.2015 to 12.02.2020 (Wind),



respectively. Accordingly, APERC has amended Regulations 2 of 2005 and 2 of 2006, implementing these policies. Further, these policies were superseded by GoAP G.O.Ms.No.1,2,3 dt 03.01.2019 for Solar, Wind and Hybrid policies, respectively, and the above operative periods were revised as 12.02.2015 to 02.01.2019 (Solar) and 13.02.2015 to 02.01.2019 (Wind) respectively. APTRANSCO had addressed letter dt 05.02.2020 to APERC, and APDISCOMs have filed OP nos 3, 4,5,16, and 17 of 2020 before the APERC regarding the withdrawal of the above exemptions/incentives provided to RE open access users and amend the regulations accordingly. In its order dated 21.04.2023 in the above O.Ps, the Commission makes it evident that the incentives of 2015 policies apply to Solar and Wind Power Projects commissioned during the operative periods 12.02.2015 to 02.01.2019 (Solar), 13.02.2015 to 02.01.2019 (wind) as mentioned in GO.Ms.No.8, dated 12-02-2015, and G.O.Ms.No.9, dated 13-02-2015 and the Commission is of the view that there is no need to amend Regulations 2 of 2005 and 2 of 2006 as prayed by DISCOMs. APTRANSCO has been following the orders and regulations of APERC being issued from time to time while issuing Open Access to the RE generators within the state

#### **Commission's Decision on Billing Methodology**

52. The Commission has carefully examined the objections and APTRANSCO's response. The RE developers' main request is to collect the transmission charges on a per-kWh basis instead of the OA contracted capacity in kW. APTRANSCO and some other objectors have opposed any incentive to RE in transmission charges, which would burden the Retail Supply consumers. Hence, without burdening the retail consumers, the Commission proposes collecting the transmission charges from RE open access users on a per kWh basis in the present order. Therefore, the net ARR attributable to OA users based on their demand is divided by the expected OA Energy to arrive at the per kWh Transmission charges for RE. Accordingly, it is inclined to approve the billing methodology as below.

- i) The users of the transmission system shall pay the transmission charge and bear the transmission loss in kind.
- ii) The Discoms shall pay the Transmission charges based on the peak Demand, excluding open access demand, approved by the Commission in the Resource Plans Order for the 5th CP and adopted in this Order. The State Peak demand, excluding open access, shall be apportioned based on each DISCOM's energy drawal. However, the SLDC shall arrive at the coincident peak demands of the each DISCOMS based on the interface energy meter readings and the Commission shall be informed through monthly reports.
- iii) The conventional open-access users within the state shall pay Transmission charges based on the Contracted Capacities for open access.



- iv) The RE developers shall pay the Transmission charges as mentioned in the table below.

**TABLE NO.5.4**  
**TRANSMISSION TARIFF SCHEDULE FOR RE**

Parameter	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
OA Demand	MW	355	376	400	422	457
OA Energy	MU	2,090	2211	2334	2,478	2613.00
Net ARR attributed to OA	INR Crores	77	88	97	104	114
Tr. charges for RE Open Access	Rupees per Unit	0.37	0.40	0.42	0.42	0.44

- v) All transmission users shall bear losses based on the energy injected at the entry point and drawal at the exit point.
- vi) The other conditions applicable for levying and collecting these charges shall be as per the provisions of the Andhra Pradesh Electricity Regulatory Commission (Terms and conditions of Open Access to Intra-State Transmission and Distribution networks), Regulation, 2005 (Regulation No.2 of 2005), the Balancing and Settlement Code, and other relevant regulations as amended from time to time.
- vii) The Transmission Charge and Loss in Kind fixed for each year of the Control Period apply from 1 April to 31 March of the respective year. However, vide APERC proceedings dated 01.04.2024, the Commission directed that the Transmission Tariffs that were determined by the Commission for FY2023-24 in MYT Orders for the 4th CP will continue to be applicable for all Open Access users from 01.04.2024 as an interim measure, till the Commission issues the final Orders. Therefore, the Transmission Charge and Loss in Kind fixed for FY2024-25 year of the 5th Control Period would apply prospectively from the date of this Order.

**Commission's intervention in case of variations in ARR and Revenues.**

53. As per the Second Amendment notified on 11th October 2023 (Regulation No. 7 of 2023) to the Andhra Pradesh Electricity Regulatory Commission-Terms & Conditions for Determination of Transmission (Regulation 5 of 2005), the transmission licensee is required to file an Annual Performance Petition by 30th November of each year.
54. The licensee shall recover the approved revenue requirement without incurring any financial loss at the tariff determined by the Commission on an annual and cumulative basis for the Control Period, as shown in the table below.

**TABLE NO. 5.5**  
**APPROVED: ANNUAL AND CUMULATIVE COST (Rs. Cr.)**

S. No.	Net ARR Approved	FY				
		2024-25	2025-26	2026-27	2027-28	2028-29
1	Year wise	3170.30	3636.38	4035.01	4390.36	4762.55
2	Cumulative	3170.30	6806.68	10841.70	15232.05	19994.60

55. If the cumulative actual cost is less than 90 per cent of the cumulative approved cost at the beginning of the financial year starting from 2025-26, the Commission may require the APTRANSCO to explain the reasons for cost variations. If necessary, the Commission may also require APTRANSCO to file fresh proposals for ARR & FPT for the rest of the Control Period.
56. If cumulative actual revenue is more than 10 percent of cumulative approved revenue at the beginning of the financial year, starting from 2025-26, the Commission may require APTRANSCO to explain the reasons for revenue variations. If necessary, the Commission may also require APTRANSCO to file fresh proposals for ARR and FPT for the rest of the Control Period.
57. If the actual revenue recovery through Transmission Charge is less than the actual cost by more than 10 per cent, APTRANSCO may file the details with the Commission seeking a remedy for under-recovery of the cost. Upon examination of these details, the Commission may pass an appropriate Order or show the ways and means to address the issue of under-recovery of the cost.
58. In terms of the decisions/directions issued supra, the OP is disposed of.

**Sd/-**

**P.V.R Reddy**  
**Member**

**Sd/-**

**Justice C.V. Nagarjuna Reddy**  
**Chairman**

**Sd/-**

**Thakur Rama Singh**  
**Member**



ANNEXURE - A1

Indian Express (AP Edition) Dt:11.12.2023

Indian Express (AP Edition) Dt. 11.12.2023

**BEFORE THE HONOURABLE  
ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION (APERC)  
D.No.11-4-660, 4th Floor, Singareni Bhavan, Red Hills, Hyderabad-500 004.**

**Transmission Corporation of Andhra Pradesh Limited (APTRANSCO)**

**PUBLIC NOTICE**

Notice is hereby given to all that the Transmission Corporation of Andhra Pradesh Limited (APTRANSCO) holding License No.1/2000, as on 30-11-2023, filed before the Andhra Pradesh Electricity Regulatory Commission (APERC) the Multi Year Aggregate Revenue Requirement (ARR) and Filing for Proposed Tariff (FPT) (Transmission Tariffs) for its Transmission Business and SLDC activity for 5th Control Period (FY2024-25 to FY2028-29). These filings for its Transmission Business and SLDC activity have been taken on record by the Hon'ble Commission in O.P.Nos.77 and 78 of 2023 respectively.

2. Copies of the filings are available in the Office of the Chief General Manager (Commercial & Legal, APTRANSCO, 1st Floor, Vidyut Soudha, Gunadala, Vijayawada-520004) and also in the offices of the Chief Engineers/Zones located at Visakhapatnam, Vijayawada & Kadapa and also in the offices of the Superintending Engineers OMC/O&M located at Vijayawada, Guntur, Ongole, Nellore, Srikakulam, Vizianagaram, Visakhapatnam, Rajahmundry, Eluru, Kadapa, Kurnool, Tirupathi, Ananthapur. Interested persons may inspect/peruse the said filings and take note thereof during office hours at any of the said offices at free of charge. These proposals are also available on [www.aptransco.co.in](http://www.aptransco.co.in) and the same may also be accessed at [www.aperc.gov.in](http://www.aperc.gov.in) A copy of these filings, can be obtained from the above offices from the date of publication on payment of Rs.100/- (DD in favor of Pay Officer/APTRANSCO payable at SBI, Commercial Branch, Gunadala, Vja/Cash/Online bank transfer). Also a summary of Multi Year ARR and FPT in English and Telugu can be separately obtained on payment of Rs.10/- (Cash/Online bank transfer) per copy.

3. The Views/objections/suggestions if any, on these filings, together with supporting material may be sent to the Chief General Manager (Commercial & Legal, APTRANSCO, 1st Floor, Vidyut Soudha, Gunadala, Vijayawada-520004, E-mail ID: [rac.ap2014@gmail.com](mailto:rac.ap2014@gmail.com)) in person or through email/Registered Post to reach the above offices on or before 08-01-2024 by 5 PM. A copy of the same shall also be sent to the Commission Secretary, APERC through email or by post to the address mentioned in the heading. The views/objections/suggestions shall be duly signed and shall carry the full name and postal address of the persons(s) sending the views/objections/suggestions. If the views/objections/suggestions are filed on behalf of any organization or entity, they shall indicate the name of the organization or entity. If the objector wants to be heard in person through video conference, the same shall also be specifically mentioned. The views/objections/suggestions shall be accompanied by the following statement as an overleaf.

Name & full address of the Objector with contact Number (Whatsapp No. & email ID)	Brief details of View(s)/Objection(s)/Suggestion(s)	Objections against Proposals of (APTRANSCO and APSLDC, to be filled by Objector)	Whether a copy of objection & proof of delivery at AP TRANSCO's office enclosed (Yes/No)	Whether Objector wants to be heard in person (Yes/No). If Yes, mention the name of the DE/EE office from where he/she would like to make the submissions in person through video conference.
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**Note:** The Commission may not consider the objections received after the due date.

4. The ARR and Proposed Tariffs for 5th Control Period (FY2024-25 to FY2028-29) proposed by the APTRANSCO is given below.

Summary of ARR, Tariff for the 5th Control Period and any other important submission of the APTRANSCO & APSLDC

**TRANSMISSION CORPORATION OF ANDHRA PRADESH LIMITED PROPOSED TARIFF FOR TRANSMISSION BUSINESS OF APTRANSCO FOR 5th CONTROL PERIOD I.e., FY 2024-25 TO FY 2028-29**

**A) ARR / Transmission Charges**

SN	Parameter	Unit	2024-25	2025-26	2026-27	2027-28	2028-29
1	Aggregate Revenue Requirement	INR Crs	4041.05	4633.66	5179.57	5527.27	5922.62
2	State Peak Demand	MW	15,226	16,256	17,831	18,805	19,913
3	Transmission Charges	INR/KW/ Month	221.17	237.54	242.06	244.93	247.85

**B) Transmission Loss Reduction Trajectory**

SN	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	Transmission Loss (%)	2.75	2.75	2.70	2.70	2.70
		+/- 0.3	+/- 0.3	+/- 0.3	+/- 0.3	+/- 0.3

**C) Capital Investment**

Sl.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	Capital Investments (in Rs. Crore)	3,955.29	3,064.41	2,658.01	3,065.68	2,986.02

**TRANSMISSION CORPORATION OF ANDHRA PRADESH LIMITED  
PROPOSED TARIFF FOR SLDC ACTIVITY OF APTRANSCO  
FOR 5th CONTROL PERIOD I.e., FY 2024-25 TO FY 2028-29**

**A) ARR / SLDC Annual fee**

Sl.	Description	2024-25	2025-26	2026-27	2027-28	2028-29
1	Aggregate Revenue Requirement (in Rs. Crore)	110.32	125.85	144.27	156.96	171.78
2	Capacity (MW)	24480	28816	29800	31250	31220
3	Operating Charges (Rs / MW / Month)	2631.06	2339.85	2534.40	2483.47	2563.53
4	Annual Fee (Rs / MW / Annum)	13492.65	15595.50	18000.00	20425.60	24260.09

**B) Capital Investment**

Sl.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	Capital Investments (in Rs. Crore)	72.149	37.131	6.282	6.343	6.305

5. The Commission will hold public hearings through video conference to provide an opportunity for all the stakeholders across the state to submit their views/objections/suggestions on the filings. The Commission will hear the OPs/filings of all the DISCOMs, APTRANSCO and APSLDC together from 29-01-2024 to 31-01-2024 daily from 10.30 AM to 1.00 PM and from 2.00 PM to 4.30 PM. The schedule for each day of the hearing is as given below:

**29.01.2024 (Monday)**

10:30 AM to 10:35 AM	Opening Remarks by the Commission Secretary
10:35 AM to 10:40 AM	Remarks by the Hon'ble Chairman, APERC
10:40 AM to 11:45 AM	Presentation by the DISCOMs & APTRANSCO
11:45 AM to 01:00 PM	Views/objections/suggestions by the Public
01:00 PM to 02:00 PM	Lunch Break
02:00 PM to 04:30 PM	Views/objections/suggestions by the Public

**30.01.2024 (Tuesday)**

10:30 AM to 01:00 PM	Views/objections/suggestions by the Public
01:00 PM to 02:00 PM	Lunch Break
02:00 PM to 04:30 PM	Views/objections/suggestions by the Public

**31.01.2024 (Wednesday)**

10:30 AM to 01:00 PM	Views/objections/suggestions by the Public
01:00 PM to 02:00 PM	Lunch Break
02:00 PM to 03:00 PM	Views/objections/suggestions by the Public
03:00 PM to 04:30 PM	Replies by the DISCOMs & APTRANSCO

**Note:** Depending on the participation and response of the stakeholders, each day's schedule may be modified, and the public hearing will be conducted one more day on 01.02.2024, if necessary.

6. Persons who are desirous of being heard through video conference shall inform the same in advance to APTRANSCO with a copy to the Commission indicating the date and name of the office of the Executive Engineer/Divisional Engineer of the DISCOM from which they intend to present their views/objections/suggestions.

7. The Commission will host on its website the day-wise list of the names of the persons who have registered to present their views/objections/ suggestions.

8. The Executive Engineer of the APTRANSCO field shall be present at the office of the EE/DE of DISCOM concerned. If any of the DE/EE's offices receives requests from persons who have not earlier communicated their intent to make their submissions in person, on any hearing day, the DE/EE concerned will inform the same to the Commission through video conference on that date of the hearing after all the registered persons are heard. If the Commission permits, such persons may make their submissions. APTRANSCO in coordination with DISCOMs will provide a meeting link and publish it in newspapers to enable the general public to present their objections through video conference from their homes/offices without the necessity of going to the office of the EE/DE concerned.

9. The Commission will sit in the Conference Hall of the APEPDCL at Visakhapatnam on all days of public hearings.

10. The public hearings are streamed live. The method and manner of viewing the live stream will be separately published through print/electronic media.

**Date : Vijayawada** **Sd/- CHAIRMAN & MANAGING DIRECTOR**  
**Place : 11.12.2023** **APTRANSCO**  
**DIPR No.2529PP/CL/ADVT/1/1/2021-22, Dt: 08/12/2023**





**ANNEXURE - B****LIST OF OBJECTORS**

1	Sri. M. Venugopala Rao, Sr. Journalist, Hyderabad
2	Sri. CH.Baburao, CPI(M), Governorpeta, Vijayawada-2
3	Sri. M.Thimma Reddy, People's Monitoring Group on Elec. Regulation, Hyderabad
4	Sri. B.Shyam Sunder Reddy Solar Power Developers Welfare Association, Tirupati -517502
5	M/s. Suddanda Solar power Private Limited, Tirupathi-517501
6	Sri. Gopal Reddy, Hetero Labs Ltd., Hyderabad-500018
7	AP Textile Mills Association, GUNTUR - 522 007
8	M/s Aurobindo, Hyderabad- 500 092
9	M/s. Atria Power Private Limited, Bangalore-560 025
10	Subrahmanya Solar Power, Hyderabad.-5000082
11	M/s. Rain CII Carbon(Vizag) Limited, Srinagar Colony,Hyderabad-500 073
12	M/s. Sri chakra Cements, Hyderabad-500082
13	M/s. Vignatha Solar Private Limited, Vijayawada
14	M/s.Sree Godavari Solar Energy Private Limited , Hirehal Mandal, Anaparthi Dist, (A.P)- 515865
15	Sri B.G.Channappa, Bangalore-560 080.
16	Small Hydro Power Developers Association, Hyderabad
17	M/s.Kanti Brothers Oils Private Limited, Jyothi Mall & Solar Division, Kurnool-518001
18	M/s.All India Cottonseed Crushers Association, Church gate, Mumbai- 400 020



**ANNEXURE - C****Regulated Rate Base and Return on Capital Employed (Rs. Cr.)**

Sl.No	Particulars	FILED					APPROVED				
		FY 25	FY 26	FY 27	FY 28	FY 29	FY 25	FY 26	FY 27	FY 28	FY 29
<b>1.0</b>	<b>Assets (1.1+1.2)</b>	<b>21037</b>	<b>25003</b>	<b>28311</b>	<b>30598</b>	<b>33706</b>	<b>20305.86</b>	<b>23092.21</b>	<b>25656.15</b>	<b>28274.03</b>	<b>30906.51</b>
1.1	Opening Balance -OCFA	18025	21037	25003	28311	30598	17309.00	20305.86	23092.21	25656.15	28274.03
1.2	Additions during the Year	3012	3966	3308	2287	3108	2996.86	2786.35	2563.94	2617.89	2632.47
<b>2.0</b>	<b>Depreciation (2.1+2.2)</b>	<b>9,782</b>	<b>11,346</b>	<b>13,104</b>	<b>14,995</b>	<b>17,069</b>	<b>9230.05</b>	<b>10417.26</b>	<b>11736.09</b>	<b>13189.32</b>	<b>14777.70</b>
2.1	Opening Balance	8,451	9,782	11,346	13,104	14,995	8185.88	9230.05	10417.26	11736.09	13189.32
2.2	Depreciation during the year	1,331	1,564	1,758	1,892	2,074	1044.17	1187.21	1318.84	1453.23	1588.37
<b>3.0</b>	<b>Consumer Contributions (3.1+3.2)</b>	<b>1,196</b>	<b>1,163</b>	<b>1,125</b>	<b>1,072</b>	<b>1,022</b>	<b>1251.14</b>	<b>1251.14</b>	<b>1251.14</b>	<b>1251.14</b>	<b>1251.14</b>
3.1	Opening Balance	1,226	1,196	1,163	1,125	1,072	1251.14	1251.14	1251.14	1251.14	1251.14
3.2	Additions during the Year	-30	-33	-38	-53	-50	0.00	0.00	0.00	0.00	0.00
<b>4.0</b>	<b>Change in Rate Base (1.2-2.2-3.2)/2</b>	<b>1,711</b>	<b>2,436</b>	<b>1,589</b>	<b>449</b>	<b>1,085</b>	<b>976.35</b>	<b>799.57</b>	<b>622.55</b>	<b>582.33</b>	<b>522.05</b>
<b>5.0</b>	<b>Working Capital</b>	<b>161.00</b>	<b>173.00</b>	<b>183.00</b>	<b>192.00</b>	<b>206.00</b>	<b>193</b>	<b>203</b>	<b>212</b>	<b>220</b>	<b>232</b>
6.0	Regulated Rate Base (1.1-2.1-3.1+4+5)	9141.26	11226.02	13247.56	14247.54	15054.92	9041.70	10827.69	12258.55	13471.72	14587.73
<b>7.0</b>	<b>Capital Structure</b>										
7.1	Debt (percent)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
7.2	Equity (percent)	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
8.0	Cost of Funds (percent)-WACC (7.1*8.1+7.2*8.2)	12.14%	11.87%	11.79%	11.78%	11.77%	11.75%	11.75%	11.75%	11.75%	11.75%
8.1	Cost of Debt (percent)	11.52%	11.16%	11.05%	11.04%	11.02%	11.00%	11.00%	11.00%	11.00%	11.00%
8.2	Return on Equity (percent)	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
<b>9.0</b>	<b>Return on Capital Employed (6*8)</b>	<b>1,109.75</b>	<b>1,332.53</b>	<b>1,561.56</b>	<b>1,678.36</b>	<b>1,771.21</b>	<b>1062.40</b>	<b>1272.25</b>	<b>1440.38</b>	<b>1582.93</b>	<b>1714.06</b>

**ANNEXURE - D****Net ARR and Transmission Charges/Rate- filed vs. approved (Rs. Cr.)**

Sl.No	Particulars	FILED					APPROVED				
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	O&M Costs	1,824.61	1,935.16	2,029.39	2,116.14	2,246.95	1,568.46	1,665.11	1,749.07	1,828.67	1,940.29
2	Depreciation	1,331.43	1,563.81	1,757.63	1,891.63	2,073.74	890.32	1,044.17	1,187.21	1,318.84	1,453.23
3	Provision for Income Tax	212.80	261.33	308.39	332.30	350.46	110.58	132.43	149.93	164.76	178.41
4	Special Appropriation	0.47	0.47	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00
5	Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Total expenditure (1 to 5)	3,369.31	3,760.77	4,095.88	4,340.54	4,671.62	2,569.36	2,841.70	3,086.20	3,312.27	3,571.94
7	LESS: O&M Expenses Capitalized	298.14	319.68	338.12	354.81	380.24	261.46	277.57	291.57	304.84	323.45
8	<b>Net Expenditure (6-7)</b>	3,071.17	3,441.09	3,757.76	3,985.73	4,291.38	2,307.90	2,564.13	2,794.63	3,007.43	3,248.49
9	<b>Add: RoCE</b>	1,109.88	1,332.58	1,561.81	1,681.54	1,771.24	1,062.40	1,272.25	1,440.38	1,582.93	1,714.06
10	<b>Gross ARR (8+9)</b>	4,181.05	4,773.67	5,319.57	5,667.27	6,062.62	3,370.30	3,836.38	4,235.01	4,590.36	4,962.55
11	<b>Less: Non-Tariff Income</b>	40	40	40	40	40	100	100	100	100	100
12	<b>Less: Tariff from Interstate Lines</b>	100	100	100	100	100	100	100	100	100	100
13	<b>Net ARR (10-11-12)</b>	4,041.05	4,633.67	5,179.57	5,527.27	5,922.62	3,170.30	3,636.38	4,035.01	4,390.36	4,762.55
14	<b>Peak Demand</b>	15,226	16,256	17,831	18,805	19,913	14,610	15,600	16,663	17,793	19,019
15	<b>Transmission Charges (Rs/KW/Month)</b>	221.17	237.54	242.07	244.94	247.85	180.83	194.25	201.80	205.62	208.67