# **APGENCO GENERATION TARIFFS**

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



# Andhra Pradesh Electricity Regulatory Commission

Vidyut Niyantrana Bhavan, Adjacent to 220/132/33/11 kV, AP Carbides Sub Station, Dinnedevarapadu Road, Kurnool - 518 002.



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## ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

Vidyut Niyantrana Bhavan, Adjacent to 220/132/33/11 KV AP Carbides SS, Dinnedevarapadu Road, Kurnool - 518 002, AP Phones: 08518 - 294823,24,25,26

# MONDAY, THE NINTHDAY OF SEPTEMBER

# TWO THOUSAND AND TWENTY-FOUR

# Present

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

In the matter of

Determination of Tariffs of APGENCO Generating stations for the

5<sup>th</sup> Control period

(FY 2024-25 to FY 2028-29)

in

and

# O.P.No. 79 of 2023

Andhra Pradesh Power Generation Corporation Limited, Vijayawada

... Petitioner

1. Southern Power Distribution Company of A.P. Limited, Tirupati

0

- 2. Eastern Power Distribution Company of A.P. Limited, Visakhapatnam
- 3. Andhra Pradesh Central Power Distribution Company Ltd, Vijayawada

... Respondents

The MYT Tariff filings filed by Andhra Pradesh Power Generation Corporation Limited (APGENCO), registered as O.P.No.79 of 2023 in respect of its Generating Stations for the 5<sup>th</sup> Control Period (FY 2024-25 to FY 2028-29) came up for consideration before the Commission. Upon following the procedure prescribed for determination of such tariff 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 Tariff for supply of electricity by a generating company to a distribution licensee and purchase of electricity by distribution licensees) Regulation, 2008, (Regulation 1 of 2008) as amended from time to time, hereby passes the following:

## ORDER

#### **CHAPTER-I**

## INTRODUCTION

- Consequent on 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.
- Andhra Pradesh Power Generation Corporation Limited (hereinafter referred to as "APGENCO" or as the "Petitioner") was established as a company under the Companies Act, 1956, on 01/02/1999 upon the coming into force of the Andhra Pradesh Electricity Reform Act, 1998.
- 3. In terms of the Andhra Pradesh Electricity Reform (Transfer Scheme) Rules, 1999, notified by the Government of Andhra Pradesh in G.O.Ms. No. 9, Energy (Power-III), dt.29.01.1999 and amended subsequently by notification in G.O.Ms. No.11. Energy (Power-III), dt.31.01.2000, certain assets, liabilities, personnel and proceedings of the erstwhile Andhra Pradesh State Electricity Board, which had vested in the State Government upon coming into force of the Reform Act, stood transferred and vested in APGENCO on the values, terms, conditions and consequences provided therein. The aforesaid transfer and vesting were binding on all, without any exception or recourse to anyone.
- 4. Thereupon, APGENCO generated and supplied electricity to the Transmission Corporation of Andhra Pradesh so long as it was the distribution licensee or bulk supply licensee and thereafter to the four distribution licensees of the undivided State of Andhra Pradesh.
- 5. After the bifurcation of the State under the Reorganisation Act, the power generated by APGENCO was being supplied to the two distribution licensees of Andhra Pradesh and the two distribution licensees of Telangana State as per the inter-se allocation of the generation to the individual distribution licensees notified by the State Government of the undivided State. Subsequently, as per the approval of GoAP in letter No.1504/power-III/2015-9 dated 05/06/2017, APGENCO has requested APSLDC to regulate the power supply to Telangana power utilities. Accordingly, APGENCO's regulation of power supply to Telangana power utilities came into effect at 00:00 hrs on 11.06.2017.

- In addition to the two licensees APSPDCL and APEPDCL, the Commission, in 6. exercise of its powers conferred under Section 14 of the Electricity Act, 2003, granted a licence to the Andhra Pradesh Central Power Distribution Corporation Limited (APCPDCL) to undertake the distribution of electricity in Krishna, Guntur, and Prakasam districts (which were part of the APSPDCL) of Andhra Pradesh State for 25 years with effect from 01-04-2020. Accordingly, APCPDCL is carrying on the Retail Supply and Distribution Business with effect from 01-04-2020.
- 7. Thereafter, w.e.f 11.06.2017, the entire power generated by APGENCO is being supplied only to the three Distribution Licensees of Andhra Pradesh viz Eastern Power Distribution Company of A.P. Limited, Visakhapatnam (APEPDCL) and Southern Power Distribution Company of A.P. Limited, Tirupati (APSPDCL) and Andhra Pradesh Central Power Distribution Corporation Limited (APCPDCL) (hereinafter referred to as "Respondents" or as the マレ "Licensees"). C<sub>C</sub>

# APERC (Adaptation) Regulation, 2014

In exercise of the power conferred by Section 181 of the Electricity Act, 2003 8. (Central Act No.36 of 2003) and all other powers thereunto enabling, including those conferred by the Andhra Pradesh Electricity Reform Act, 1998 (State Act No.30 of 1998) and the Reorganization Act, 2014, the Commission issued APERC (Adaptation) Regulation, 2014 (Regulation 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 in para 1, shall apply to the State of Andhra Pradesh and shall continue to have effect until duly altered, repealed or amended. Regulation 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

- 9. Section 64(3), read with Section 62 (a) of the Electricity Act, 2003, stipulates that the Commission shall determine the tariff for electricity supply by a generating company to a distribution licensee.
- 10. Regulation 1 of 2008, notified by the Commission, introduced the Multi-Year tariff (MYT) framework. Accordingly, the Generating company has to Cause a tariff filing with the Commission to determine the Tariff for its power generating

stations for a period of five years (called the Control Period). The fifth Control Period covers five years from FY2024-25 to FY2028-29.

11. The Central Act No.36 of 2003 and Regulation 1 of 2008 mandate that a Generating company shall file its tariff 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. Accordingly, APGENCO was to file its Tariff Filings for its generating stations on or before 30.11.2023 as per Regulation 1 of 2008.

## Tariff Filings, Public Notice, Public Hearings and SAC meeting

- 12. APGENCO filed a petition under Section 62 of the Electricity Act, 2003, and APERC Regulation 1 of 2008 to determine the Tariff for the 5<sup>th</sup> control period (FY 2024-25 to FY 2028-29) for the electricity supplied from its various generating stations to the three Distribution Licensees in the State of Andhra Pradesh.
- 13. The Tariff application filed by APGENCO was received by the Commission and assigned O.P.No. 79 of 2023, and its filings were uploaded on the Commission's website. Further, the Commission directed APGENCO to issue a Public Notice in the English language in two (2) English Newspapers and in the Telugu language in two (2) Telugu Daily Newspapers having wide circulation in the States of Andhra Pradesh incorporating the tariff schedule of its generating stations submitted to the Commission, for information and calling for views/objections/suggestions from individuals, representatives of consumer organisations and the other stakeholders. The Schedule of events for paper publication and the last date for receipt of the objections communicated to the APGENCO are shown below.

S1.No.	Description of Event	Due Date
1	Notification by APGENCO in newspapers, intimating the Public of the Tariff application filed by it before APERC for its power stations for the 5th Control Period (FY 2024-25 to FY 2028-29) on or before	18-12-2023
2	Receipt of Views/Objections/Suggestions on Tariff application submitted by APGENCO for its power stations for the 5th Control Period (FY 2024-25 to FY 2028-29) by 5 PM on or before	18-01-2024
3	The last date for furnishing of replies by APGENCO to the Views/Objections/ Suggestions	25-01-2024

- 14. APGENCO was directed to upload tariff filings on its official website and make copies available at its corporate office and offices at various power stations. Further, the Commission decided to conduct public hearings through video conference on the 01<sup>st</sup> of February 2024 on the filings of APGENCO. The APGENCO was therefore directed to publish the date & timings, the manner and procedure of conducting public hearings through video conference, and the link for live streaming of the event for the benefit of the public in the same public notice on filings.
- 15. In compliance with the directions of the Commission, the APGENCO caused the publication of public notices in the Telugu Language in two (2) Telugu daily newspapers ('Sakshi' and 'Eenadu' newspapers on 10.12.2023) and in the English Language in two (2) English daily newspapers (The HINDU' and The Hans India' newspapers on 10.12.2023) - (Annexure-A1 & A2) incorporating its with other details tariff schedule along as directed. inviting views/objections/suggestions in respect of tariff filings for its generating stations for the 5<sup>th</sup> control period and also informed that all the interested/Associations/Stakeholders/Objectors who want to heard in person/through authorised representatives may appear before the Commission during public hearings. The filings were also uploaded on the APGENCO website.

# Response to the Public Notice

16. In addition to the counter of the Respondents, in response to the Public Notice, the Commission received several objections/suggestions/views in writing through emails and/or in person at its Office and through video conference during the public hearings. As directed by the Commission, the APGENCO sent their written replies to the views/objections/suggestions received before the due date from various stakeholders.

## **Public Hearings**

17. The Commission conducted public hearings through video conference at the Conference Hall, Visakhapatnam, from 10.30 AM onwards on 01-02-2024 to have the widest consultations possible and also the benefit of maximum inputs in finalising the tariff for APGENCO generating stations for the 5th Control Period (FY2024-25 to FY2028-29). Names of the stakeholders to be heard day-wise as per seriatim were hosted on the Commission's website well in advance. Sri M. Venugopala Rao & Sri B. Raja Sekhar (APCCIF) have requested the Commission to provide an opportunity by providing a link to

participate in public hearings in virtual mode. The Commission considered their request and allowed them to make their submissions on line.

- 18. During the public hearings, the Managing Director/APGENCO presented briefly on APGENCO's tariff filings. Then, the participating stakeholders were heard in detail, apart from receiving all of the written representations they presented. The MD/APGENCO gave a detailed response to the issues/aspects raised by the objectors at the end of the public hearings.
- After the public hearings, the Commission held a State Advisory Committee (SAC) meeting on 13.02.2024 in the Corporate Office of APSPDCL at Tirupati. The members' views on APGENCO's filings were elicited is the said meeting.
- 20. The views/objections/suggestions expressed by the stakeholders and/or their representatives (Annexure-B), in writing and/or in person, and the replies provided by the APGENCO in writing and/or through oral responses during the public hearing held on 01.02.2024 in respect of APGENCO Tariff filings and the views of the members of State Advisory Committee (SAC) have been duly considered in arriving at the appropriate conclusions in this Order, in so far as they relate to the determination of tariff of APGENCO generating stations for the 5<sup>th</sup> Control Period are concerned.



#### CHAPTER-II

# **FILINGS OF APGENCO**

- 21. The summary of APGENCO's tariff petition is discussed in the Paragraphs below:
- 22. The table below shows the status of the Power Purchase Agreements ('PPAs') details between APGENCO and the Distribution licensees.

	rings. Details of ring with denorating stations						
PPA Date	Thermal Generating Stations	Valid upto					
30/11/2023	Dr NTTPS I-III – 1260 MW	31/03/2034					
30/11/2023	Dr. MVR RTPP I– 420 MW	31/03/2034					
22/12/2009	Dr NTTPS IV (1x500 MW)	27/01/2035					
22/12/2009	Dr. MVR RTPP II (2x210 MW)	28/03/2033					
22/12/2009	Dr. MVR RTPP III (1x210 MW)	09/02/2036					
28/01/2019	Dr. MVR RTPP IV – (1x600 MW)	28/03/2043					
PPA Date	Hydro Electric Generating Stations	Valid upto					
30/11/2023	SRBPH – 770 MWGULA	31/03/2034					
30/11/2023	Sileru complex- 725 MW	31/03/2034					
30/11/2023	NSRCPH – 90 MW	31/03/2034					
30/11/2023	PABR – 20 MW MW)	31/03/2034					
30/11/2023	Chettipeta – 1 MW	31/03/2034					
02/08/2017	NSTPHES - (2x25 MW)	27/01/2052					

Table No: 2.1Filings: Details of PPAs with Generating stations

23. The table below shows the Annual Fixed Charges for each Station/Stage and additional interest on pension bonds estimated by APGENCO for each year of the 5<sup>th</sup> control period.

# Table No: 2.2 Filings: Annual Fixed charges station/stage wise & Other charges (Cr.)

S1.	Station	MW	2024-25	2025-26	2026-27	2027-28	2028-29	
The	Thermal Power Stations							
1	Dr.NTTPS I to III	1260	906.85	979.92	1054.06	1075.29	1097.49	
2	RTPP-I	420	316.63	351.67	387.10	393.31	399.85	
3	RTPP -II	420	325.70	333.40	341.40	349.71	358.36	
4	Dr NTTPS - IV	500	336.00	339.71	343.68	347.90	352.40	
5	RTPP III	210	196.94	199.37	201.95	204.69	207.60	
6	RTPP - IV	600	787.27	769.53	752.03	734.80	717.83	
Hyd	ro Electric Stations							
7	Sileru	725	296.14	319.42	343.34	355.17	367.67	
8	NS - RCPH	90	29.09	32.82	36.62	37.62	38.67	
9	Srisailam	770	247.43	260.68	274.44	285.41	296.94	
10	PABR	20	15.83	16.96	18.11	18.54	19.00	
11	Chettipeta	1	2.33	2.45	2.57	2.65	2.75	
12	NSTP HES	50	54.83	54.20	53.60	53.02	52.48	
13	TB- Machkund	117.6	80.11	83.93	87.93	92.13	96.52	
Oth	Other Charges							
	Pension Liab.		1600.44	1647.31	1691.49	1742.78	1784.13	
	Petition fees and		2.50					
	expenses		2.30	-	-	-	-	
	TOTAL ANNUAL CH	5198.10	5391.36	5588.32	5693.02	5791.69		

The procedure adopted by APGENCO for the estimation of the Annual Fixed charges

24. The annual fixed charges cover (a) Return on Capital employed,(b) Depreciation, (c) O&M expenses, and (d) Taxes on income as per actuals.

#### (a) Return on Capital Employed (RoCE)

The GFA and the additional capital cost incurred during the 4th control period for computing the station-wise RoCE as per Clause 12.1 of the APERC Regulation 1 of 2008 are shown in the table below.

Filings: Gross fixed assets (Cf.)								
Station Name	GFA as on 31.03.2014	Additional Capex 2014-19	GFA as on 31.03.2019 (As approved by APERC)	Additional Capex 2018-24	GFA as on 31.03.2024			
	(A)	(B)	(C)=(A)+(B)	(D)	(E) = (C)+(D)			
Dr NTTPS-I,II,III	2,962.24	R 105.66-A	3,067.90	104.24	3,172.14			
Dr NTTPS IV	2,118.85	17.83	2,136.68	-	2,136.68			
RTPP I	2,011.33	28.91	2,040.24	23.03	2,063.27			
RTPP II	1,874.46	1.02	1,875.48	14.19	1,889.67			
RTPP III	1,182.42	33.87	1,216.29	-	1,216.29			
RTPP IV	<u> </u>	-	3,931.36	-	3,931.36			
Sileru Complex	686.57	10.3	696.87	3 <mark>8</mark> .52	735.39			
NSRCPH	113.6	1.02	114.62	<b>4.</b> 61	119.23			
SRBPH	946.28	15.92	96 <mark>2</mark> .2	1 <u>6.2</u>	978.4			
PABR PH	56.68		56.68	<mark>0</mark> .87	57.55			
Chettipeta	3.55		3.55	-	3.55			
NSTPHES			293.67	17.77	311.44			

Table No.2.3

Filings: Gross fixed assets (Cr.)

#### Capital Expenditure for R&M Works

- 25. APGENCO stated that by letter dated 20/01/2023, the CEA had communicated the advice that no thermal units be retired until 2030 and that R&M works be carried out to extend their lives and improve their flexibility and reliability, considering the expected demand scenario and the availability of capacity in the future.
- 26. Accordingly, APGENCO constituted a committee to identify the R&M works to be taken up for Dr NTTPS I, II, III and D. MVR RTPP-I thermal stations. The necessary R & M works for hydropower projects, were identified by the Chief Engineer / HPC & Hydel of APGENCO. Accordingly, the proposed expenditure for R & M to be undertaken during the period of FY 2025-2027 at thermal and hydropower stations for computation of RoCE & Depreciation is as follows:

<b>Sl</b> .	Thermal Power Station	R & M Expenditure (Rs. cr)
1.	Dr.NTTPS - I,II,III (1260 MW)	433.21
2.	Dr. MVR RTPP – 1 (420 MW)	237.68
Total	R&M for Thermal Stations	670.89
Sl.	Hydro Power Station	R & M Expenditure (Rs. cr)
1.	SILERU COMPLEX (725 MW)	100.99
2.	NRCPH (90 MW)	22.75
3.	SRBPH (770 MW)	26.43
4.	PABR (20 MW)	6.00
5.	Chettipeta (1 MW)	0.30
Total	R&M for Hydro Stations	156.47

Table No. 2.4Filings: R&M Expenditure proposed during 5th CP (Cr.)

The table below shows the working capital for each station/stage, as per clause
 12.4 of Regulation 1 of 2008, for computing RoCE.

	Filings: Working Capital (Rs. Cr)							
SI. No.	Name of the Station	Capacity	FY 25	FY 26	FY 27	FY 28	FY 29	
1	SILERU	725	92.87	98.66	104.63	108.68	112.94	
2	NS RCPH	90	10,5	11.36	12.25	12.68	13.13	
3	SRBPH	770	88.92	93.17	97.6	101.66	105.9	
4	PABR	20	4.97	5.26	5.56	5.74	5.93	
5	Chettip <mark>e</mark> ta		0.62	0.65	0.69	0.71	0.74	
6	NSTP HES	50	13.74	13.82	13.92	14.03	14.16	
7	Dr. NTTPS	1260	1172.49	1189.55	1206.98	1215.78	1224.95	
8	Dr NTTPS IV	500	446.94	449.6	452.39	455.3	458.33	
9	RTPP-I	<mark>4</mark> 20	431.27	440.26	449.44	453.88	458.5	
10	RTPP -II	420	405.11	408.43	411.89	415.48	419.21	
11	RTPP III	210	211.6	213.17	214.8	216.5	218.28	
12	RTPP IV	600	629.35	628.93	628.66	628.53	628.56	

Table No. 2.5Filings: Working Capital for 5th CP (Cr.)

28. APGENCO submitted that the Debt-Equity Ratio (D/E) is taken as 70:30 in terms of Clause 10.13 of the Regulation. PFC and REC are the major lenders for the APGENCO projects. The interest rates charged by PFC & REC are 10.2% and 10.25% respectively. Hence, the cost of debt is taken at 10.2%. APGENCO submitted that Return on Equity is to be considered as per Clause 10.13, which is RoE allowed by CERC. As per Clause 12.1.6 of CERC Tariff Regulation 2019, the Return on Equity is 15.5% for thermal generating stations and 16.5% for storage type Hydro generating stations. Accordingly, the Weighted Average Cost of Capital (WACC) is computed as 11.8% for thermal stations and 12.1% for Hydel stations.

- APERC
- 29. Accordingly, the summary of the RoCE claimed in the petition is shown in the table below.

Table No. 2.6

Filings: Return on Capital Employed (RoCE) for 5 <sup>th</sup> CP (Rs. Cr)								
Name of the Station	FY 25	FY 26	FY 27	FY 28	FY 29			
Dr.NTTPS-I,II,III	186.86	213.32	237.27	231.77	226.32			
Dr NTTPS IV	114.93	111.88	108.85	105.33	102.83			
RTPP-I	77.68	92.52	105.98	103.28	100.6			
RTPP -II	80.24	79.62	79.01	78.42	77.85			
RTPP III	62.28	60.56	58.83	57.12	55.42			
RTPP IV	392.23	367.85	343.5	319.16	294.84			
Sileru	29.4	35.27	40.56	38.83	37.12			
Nagarjuna Sagar RCPH	3.47	4.87	6.14	5.82	5.51			
Srisailam Right bank	27.45	29.08	30.56	30.23	29.91			
PABR	2.71	2.97	3.19	2.99	2.8			
Chettipeta	0.26	0.27	0.28	0.26	0.25			
NSTP HES	32.44	31.22	30.01	28.79	27.58			

# (b) Depreciation

CI

APGENCO stated that 70% of the loan component of the original cost of the old 30. power plants have been repaid. As per clause 12(b)(iii) of APERC Regulation 1 of 2008, the remaining depreciable value is to be spread over the balance useful life of the asset. As per CERC Regulations, depreciation has to be computed at 5.28% up to 70% of the asset's original cost. Afterwards, the remaining depreciable value is to be spread over the balance of the asset's useful life. Therefore, in the case of the old power plants, the depreciation under the APERC and CERC Regulations are essentially the same. For RTPP Stage-IV, the depreciation as per the Commission's Order dated 31/12/2020 in O.P. No. 33 of 2019 has been computed. Accordingly, the depreciation claimed in the Petition for each station/stage is shown in the table below.

	Filings: Depreciation for 5th CP (Rs. Cr)								
S.No.	Station	2024-25	2025-26	2026-27	2027-28	2028-29			
1	Dr.NTTPS-I,II,III	9.38	31.04	55.41	55.41	55.41			
2	Dr NTTPS IV	28.49	28.49	28.49	28.49	28.49			
3	RTPP-I	2.07	13.96	27.33	27.33	27.33			
4	RTPP II	8.59	8.59	8.59	8.59	8.59			
5	RTPP III	16.22	16.22	16.22	16.22	16.22			
6	RTPP IV	206.13	206.13	206.13	206.13	206.13			
7	Sileru	7.67	12.72	18.40	18.40	18.40			
8	Nagarjuna Sagar RCPH	0.62	1.76	3.04	3.04	3.04			
9	Srisailam Right bank	4.03	5.35	6.84	6.84	6.84			
10	PABR	1.17	1.47	1.81	1.81	1.81			
11	Chettipeta	0.12	0.13	0.15	0.15	0.15			
12	NSTP HES	10.16	10.16	10.16	10.16	10.16			

Table No. 2.7 ation for Eth OD (Da On)

#### (c) Operation & Maintenance Expenses

- 31. APGENCO has stated that O&M expenses, as provided in APERC Regulation 1 of 2008, are based upon the CERC 2004 Regulation as amended in 2006 for the control period 2004-2009. That the CERC-2019 Tariff Regulation allows a 3.51% annual escalation for Thermal Plants and a 4.77% annual escalation rate for Hydel Plants, and the same is considered in the petition. APGENCO further stated that CERC issued a revised Regulation in 2009 for the control period 2009-2014, which, inter alia, allowed pay revision as the pay revision was due for Central PSUs during that period. The CERC Regulation for 2024-2029 is in the draft stage, and the approach paper released by CERC on Terms & Conditions of Tariff for the control period FY 2024-29 also proposes to provide for a pay revision to the employees. The Commission has considered the pay revision of 20% on the O&M expenses in the MYT order dated 29/04/2019 for the 4th control period. The same has been considered for calculating the O&M expenses for the 5th control period. Therefore, the Commission may consider and adopt the methodology of the CERC Regulation for O & M expenses and year-on-year escalation thereof and allow such expenses on such basis.
- 32. APGENCO stated that the pay scales of the employees were revised with effect from 01/04/2022. Further, the State Government has revised the HRA, CCA and Gratuity adopted by the APGENCO, as the same allowances applicable to State Government employees are payable as per the service regulations. Hence, for Thermal Power Plants, the per-MW expenses specified in the CERC 2019 Regulations plus an additional 20% thereof towards the effect of pay revision is computed as the O & M expenses for FY 2019-20, being the 1st year of the control period 2019-2024. The same methodology was approved and ordered by this Commission in its order dated 29/04/2019 in O.P. No. 35 of 2018. The O&M expenses thereby ordered for the year 2022-23, along with an additional 20% towards the effect of pay revision, is considered as a base O&M for the year 2022-23 and an annual escalation of 3.51% is considered to arrive at the O&M expenses for FY 2024-25. The O & M expenses for the 2nd and subsequent years of the control period are computed by escalating the 1st year O & M expenses by 3.51% year-on-year.
- 33. For the Hydro Power Plants, the actual O&M expenses for FY2019-20 are escalated by 4.77% year-on-year until FY 2021-2022 by way of normal annual escalation and a further 20% by way of pay revision to arrive at the normal O&M for FY 2022-23. An annual escalation of 4.77% is considered to arrive at

the O&M expenses for FY 2024-25, being the first year of the control period 2024-2029. The O & M expenses for the 2nd and subsequent years of the control period are computed by escalating the 1st year O & M expenses by 4.77 % year-on-year.

34. Accordingly, the O&M expenses claimed in the Petition are shown in the table below.

	Finings. Oddin Expenses for 5 °CF (KS. Cf)								
S. No.	Name of the Station	2024-25	2025-26	2026-27	2027-28	2028-29			
1	Dr.NTTPS I to III	710.62	735.56	761.38	788.1	815.77			
2	Dr NTTPS - IV	192.58	199.34	206.34	213.58	221.08			
3	RTPP-I	236.87	245.19	253.79	262.7	271.92			
4	RTPP -II	236.87	245.19	253.79	262.7	271.92			
5	RTPP III	118.44	122.59	126.9	131.35	135.96			
6	RTPP - IV	188.91	195.54	202.41	209.51	216.87			
7	Sileru	259.07 <sup>G</sup>	271.42	284.37	297.94	312.15			
8	NS - RCPH	25	26.19	27.44	28.75	30.12			
9	Srisailam	215.94	226.24	237.03	248.34	260.18			
10	PABR	11.95	12.52	13.12	13.75	14.4			
11	chettipeta	1.95	2.04	2.14	2.24	2.35			
12	NSTP HES	12.24	12.83	13.44	14.08	14.75			
	Total	2210.44	2294.65	2382.15	2473.04	2567.47			

Table No. 2.8Filings: O&M Expenses for 5th CP (Rs. Cr)

# (d). Income Tax

There is no claim in the present petition. APGENCO has stated that the income tax will be claimed based on actual payment from time to time.

#### **Interest on Pension Bonds**

- 35. APGENCO stated that liability of Rs 4,386.90 crores towards meeting the pension liability was vested in the APGENCO in terms of the statutory First Transfer Scheme dated 30/01/2000 notified by the State Government under the AP Electricity Reform Act, 1998 as stated below;
  - (a) the pensioners/family pensioners of the erstwhile APSEB as of 31/03/1999 and
  - (b) the employees of the erstwhile APSEB as of 31/03/1999 working thereafter for the APGENCO, APTRANSCO and the DISCOMs and since retired.

The APGENCO issued bonds in favour of the Master Trust, which have been redeemable for over 30 years. In order that the Master Trust to discharge 100% of the pension commitments of pensioners as of 31/01/1999 and 74%

of the pension commitment of employees who retired after 01/02/1999 (26% being funded by the separate P&G Trusts of the APGENCO, APTRANSCO and the DISCOMs), the APGENCO is required to make the following annual payments as per the bond schedule –

- i. an amount towards repayment of the principal as per the bond schedule and
- ii. interest on the outstanding liability as per the bond schedule and
- iii. additional interest, being the actual amount of pension payment in a year above the aggregate for that year of the scheduled repayment and interest aforesaid as per the bond schedule, which is to be passed through in the tariff.
- 36. APGENCO stated that the Commission has recognised and allowed additional interest in the tariff on a year-to-year basis in the tariff orders dated 24/03/2003, 04/07/2013, 26/03/2016, and also in the order dated 29.04.2019 in OP 35 of 2018.
- 37. By a transfer scheme notified by the State Government in G.O. Ms. 29 dated 31/05/2014 under the provisions of the A.P. Electricity Reforms Act, 1998, 58% of the outstanding pension liability (i.e. bonds issued to the Master Trust) as on 31/03/2014 was vested in the APGENCO with the corresponding obligations for repayment, payment of interest and payment of additional interest.
- 38. APGENCO stated that the above commitment is in addition to the yearly contributions made to APGENCO's P & G Trust for funding the 26% Pension Liability for its employees who were in service as of 01/02/1999 and retired thereafter and also gratuity liability for its employees, which are part of O & M expenses.
- 39. After the state's bifurcation, the assets transferred to APGENCO are depreciated assets, and only ROCE on 10% value is recovered through tariff. This is hardly sufficient to meet the principal repayment in the bond schedule.
- 40. Hence, APGENCO has proposed recovering interest on pension liability along with additional interest. APGENCO entered into a PPA with APDISCOMs accordingly, providing for interest and additional interest in the PPA.
- 41. The actual interest for FY 2022-23 is Rs. 1524.48 crores, which will increase further for FY 2024-25 with inflation on account of granting DA, etc. Hence,

the commitment as anticipated and proposed for recovery is Rs. 1600 crores, which is adjustable to actuals at the end of the tariff year.

42. Accordingly, the additional interest claimed in the Petition for each year during the 5th control period is shown in the table below.

Filings: Additional Interest on Pension Bonds for 5th CP (Rs. Cr)									
2024-25 2025-26 2026-27 2027-28 2028-2									
Additional Interest on Pension Bonds	1,602.94	1,647.31	1,691.49	1,742.78	1,784.13				

Table No. 2.9

## Expenses of Tungabhadra Dam & Machkund Hydro Power

APGENCO stated that the state's share of power generated from these 43. hydropower projects is allocated amongst the Discoms. APGENCO operates the generating stations on behalf of the state government. The AP Discoms are required to proportionally reimburse their respective shares of the actual operating expenses and the fixed charges payable to the State Government.

# Tariff Petition Fee, Publication & Related Expenses

APGENCO stated that, as per Clause No. 70 of CERC-2019 Regulation, the 44. application filing fee and the expenses incurred on publication of notices of the application for approval of tariff may, at the discretion of the Commission, be allowed to be recovered by the generating company. Accordingly, APGENCO has claimed Rs. 2.50 crores towards the application fee and publication expenses.

# Late Payment Surcharge

- The beneficiary distribution licensee(s) shall open and maintain a revolving 45. Letter of Credit, and the conditions in Clause 16.1 of APERC Regulation 1 of 2008 shall apply thereupon.
- If bill payment is delayed beyond two months of billing, a late payment 46. surcharge of 1.25% per month will be applicable, as per Clause 16.2 of APERC Regulation 1 of 2008.

# **Energy Charges**

The Station wise Energy charges/Variable cost estimated by APGENCO for its 47. thermal generating stations based on the provisions of Clause 13.1 of the Regulation considering the actual landed cost and the Gross calorific value (GCV) of fuels during the 2<sup>nd</sup> Quarter of FY 2023-24 is as hereunder:

## **Table 2.10**

Station	Energy Charges (Rs./kWh)
Dr.NTTPS-I, II,III	4.44
Dr.NTTPS-IV	4.17
RTPP-I, II, III	4.44
RTPP IV	4.11

Filings: Energy Charges/Variable cost

For each subsequent year, the base rate of energy charges will be the energy charge as adjusted and applicable for the last three months of the preceding financial year. Such rates will continue to be subject to adjustment based on the actual landed cost and Gross Calorific Value of the fuels.

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

48. Several objections/suggestions/views were received on the filing aspects of the Tariff. Below are the brief objections, APGENCO's response, and the Commission's view.

## Sri B. Raja Sekhar (APCCIF)

(i) He appreciated the effort made by the Petitioner to present the input data logically for Tariff Determination. That the petition was signed by the Chief Engineer and the Counsel for the Applicant, whereas the C.E. and the Company Secretary signed all Tariff petitions filed by the licensees; therefore, the Commission may direct all licensees to follow the procedure adopted by APGENCO when filing tariff applications.

**APGENCO's Response:** Within the purview of the Hon'ble Commission.

**Commission's view:** All petitions filed before the Commission must comply with clauses 9, 10, and 11 of Regulation 2 of 1999 (Conduct of Business Regulations). If any application does not comply with the above, the Commission will not consider it.

(ii) He requested the Commission 45 days instead of the standard 30 days to submit the objections because of simultaneous MYT filings of all the power utilities.

**APGENCO's Response:** Within the purview of the Hon'ble Commission

**Commission's view:** The APERC Conduct of Business Regulations does not specify a specific time frame for receipt of the objections on any petition before the Commission. After considering all the aspects, 30 days time was fixed to receive the objections instead of 21 days being generally allowed. However, no objections were rejected, as time barred. The Commission considered all the

objections received even after the due date in determining the tariff for APGENCO's power stations.

(iii) That the petition is being filed without a review and true-up of the 4th Control in every revenue or capital expenditure account. One essential requirement built in by regulation in MYT principles is an annual review of capital and/or expenditure to arrive at annual true-up. The primary objective in the regulatory process is to provide certainty of both tariff and regulatory protection. Berry Alloys & others have stated that True-up exercises are essential towards the definite closure of the tariff determination scheme and, therefore, must be completed on time. Notably, many SERCs across the country have been conducting Annual True ups for the Generating company/ Transmission Licensee/ Distribution Licensee so that the burden of the True-up does not result into significant Tariff shocks to the retail consumers.

**APGENCO's Response:** APGENCO has not proposed any capital expenditures during the 4th control period, FY 2019 to 2024. The expenditure incurred during 2019-24 is now claimed in O.P. No. 79/2023. Hence, a True-up of capital expenditures for 2019-24 does not arise. APGENCO will file a true-up petition for the R&M capital investment at the end of the 5<sup>th</sup> control period.

**Commission's view:** There is no true-up/down for the annual fixed costs approved by the Commission for APGENCO's stations as per Regulation 1 of 2008. However, the energy charges/fuel costs have to be paid as per clause 13 of Regulation 1 of 2008 based on the actual figures subjected to the norms fixed in the Regulations and the directions of the Commission issued from time to time in various Orders. The provision for annual true up/down of all un-controllable expenses of DISCOMS is already incorporated in the Regulations, and the fuel cost variations were allowed every month as automatic pass-through subject to 40 paise per unit ceiling and annual reconciliation. The MYT orders for APGENCO, TRANSCO, APSLDC, and the Distribution business were issued to provide greater regulatory certainty.

(iv) APERC's Generation Tariff Regulation 1 of 2008 has not been updated. In the intervening 15 years, CERC issued two more updated Regulations after APERC Regulation 1 of 2008, and the current CERC Regulations are operational until 31.3.2024. Updating Regulations in line with the latest CERC Regulations is long overdue. The APERC may take an appropriate decision in this regard.

**APGENCO's Response:** Within the purview of the Hon'ble Commission

**Commission's view:** The objector may note that the Commission adopted CERC Tariff Regulations for all the new thermal power plants commissioned in the State during the 3rd/4th control periods for tariff determination whereever appropriate as per clause 10 of Regulation 1 of 2008. However, the existing plants of APGENCO were commissioned long ago, and many served their useful life period. All such plants need special consideration, and the CERC also deals separately with such old plants in adopting the norms for tariff determination. However, in due course, the Commission will update Regulation 1 of 2008 suo motu.

**M/s Berry Alloys & others** have stated that there is a lack of transparency in Tariff Filings. The Tariff formats filed are not formula-driven, leading to difficulties in assessing the claims made by the APGENCO. The Commission may direct the Petitioner to upload the formula-driven Excel sheets. The Petitioner has relied on certain Actual expenditures incurred during the FY2019-20 to FY 2022-23 period; however, the same has not been reconciled with the Annual Audited Accounts for the respective years. Therefore, the Petitioner may be directed to submit the Audited Accounts for FY 2019-20 to FY 2019-20 to FY 2019-20 to Submit the Audited Accounts for FY 2019-20 to FY 2019-20 to FY 2019-20 to Submit the Audited Accounts for FY 2019-20 to FY 2019-20 to FY 2022-23.

**APGENCO's Response:** APGENCO shared the Excel sheets on the website. It will mail the required Excel sheets linked with formulae and the Annual Audited statement for FY 2019-20 to FY 2021-22.

**Commission's view:** The Commission uploaded all tariff filings of power utilities, including APGENCO, using a formula-driven format on its website, duly directing all the utilities to host similar Excel sheets on their websites. As per the Commission's directions issued on 07.12.2021 on the transparency measures to be followed by all power utilities in the State, APGENCO was directed to place its audited reports as and when completed on its website. **APGENCO should comply with the above directions and report compliance.** 

#### Conclusion

The Commission has decided to consider the FPT filings submitted by 49. APGENCO, which are mentioned briefly in this Chapter, as the basis for the determination of tariff of APGENCO's power plants for each year of the 5th Control Period. with due weight being given to the relevant views/objections/suggestions of stakeholders, as discussed in subsequent chapters of this order.

#### **CHAPTER-III**

#### **DETERMINATION OF ANNUAL FIXED CHARGES & OTHER CHARGES**

- 50. In this chapter, the Commission reckoned/considered all the views/objections/suggestions expressed by the stakeholders in writing and during the public hearings to the extent they are relevant to the subject matter before determining the Annual Fixed Charges (AFC) and other charges.
- 51. APGENCO stated that the PPAs dated 30.11.2023 in respect of the power plants mentioned in Chapter II for which tariff is to be determined in this order are subject to the Commission's approval, and the distribution licensees will file a petition for approval of the PPAs in due course.

## **Views/Objections/Suggestions**

52. Sri P. Prathapa Reddy, APSEBEA, and Sri M. Mohan Rao, APGENCO Accounts Officers' Association, have explained the advantages of APGENCO's power station's contribution to APState Grid demand and requested the Commission to approve the PPA.

**M/s Berry Alloys & others** stated that each PPA needs to be examined thoroughly, with all relevant data, through the public hearing process to ensure transparency and accountability. Without the PPA being approved by the Commission, permissible capital costs and tariffs, and without holding public hearings on the same, seeking variable and fixed charges for such projects through the instant filings is improper.

**APGENCO's Response:** The existing PPAs are valid until 31.03.2024. APGENCO and APDISCOM entered an extended PPA on 30.11.2023, valid up to 31.03.2034, for 1680 MW of thermal and 1723.60 MW of hydel plants. The approval of PPA is within the purview of APERC.

**Commission's Decision:** As most of the Stations, except the Hydel, are Base Load Stations and the Respondent DISCOMS heavily rely upon the power generated by them, continuous procurement of power from these stations is necessary for the DISCOMS. The composite PPA valid up to 31.03.2034 was approved by the Commission in its Order dated 06.03.2024 in OP NO 2 of 2024 filed by the DISCOMS after following the due Regulatory process.

#### **Determination of Annual Fixed Charges**

53. As per clause 10.5 of regulation 1 of 2008, the annual fixed charges of a thermal generating station or a hydropower generating station, as the case may be, shall consist of recovery of the following:

- APERC
  - a) Depreciation;
  - b) O&M Expenses;
  - c) Return on Capital Employed (RoCE);
  - d) Income tax as per actuals;

The Commission proposes to deal with each AFC component in the following paragraphs.

# **Finalisation of Gross Fixed Assets**

54. Finalising the Gross Fixed Assets is the prelude to determining RoCE and Depreciation. The GFA of each station is to be seen in the context of the actual capital expenditure incurred during the 4<sup>th</sup> control period and the proposed R&M capital during the 5<sup>th</sup> control period. The GFA, as approved by the Commission as of 31.03.2019, and the additional capital expenditure incurred during FY 2018- 24, as well as the final GFA of each station/stage, as per the filings are shown in the table below.

	GFA as of		
Station Name	31.03.2019 (As approved by APERC)	Additional Capex 2018-24	GFA as of 31.03.2024
Dr NTTPS-I,II,III	3,067.90	104.24	3,172.14
Dr NTTPS IV	2,136.68	-	2,136.68
RTPP I	2,040.24	23.03	2,063.27
RTPP II	1,875.48	14.19	1,889.67
RTPP III	1,216.29	121 ar-	1,216.29
RTPP IV	3,931.36	-	3,931.36
Sileru Complex	696.87	38.52	735.39
NSRCPH	114.62	4.61	119.23
SRBPH	962.2	16.2	978.4
PABR PH	56.68	0.87	57.55
Chettipeta	3.55	-	3.55
NSTPHES	293.67	17.77	311.44
Total	16,395.54	219.43	16,614.97

# Filings: Gross Fixed Assets (GFA) (Rs. Cr.)

Table No: 3.1

APGENCO filed the R&M expenditure proposed to be incurred during the 5<sup>th</sup> CP, as shown in the table below.

Sl.	Thermal Power Station	R & M Expenditure Rs. cr
1.	Dr.NTTPS - I,II,III (1260 MW)	433.21
2.	Dr. MVR RTPP – 1 (420 MW)	237.68
Tota	l R&M for Thermal Stations	670.89
	Hydro Power Station	
1.	SILERU COMPLEX (725 MW)	100.99
2.	NRCPH (90 MW)	22.75
3.	SRBPH (770 MW)	26.43
4.	PABR (20 MW)	6.00
5.	Chettipeta (1 MW)	0.30
Tota	al R&M for Hydro Stations	156.47
	Total R&M	827.36

Views/Objections/Suggestions

Sri P. Prathapa Reddy, APSEBEA, and Sri S. Pratap, APSEBAEEA, have stated that APGENCO needs to establish additional thermal capacity. Sri Srinivasa Rao Gandham, CIFA, requested APGENCO's plan to increase the installed power generation capacity from non-fossil fuel sources by 2030, as per GOI policies.

**APGENCO's Response:** APGENCO is planning to add the following Hydel stations

**2X115 MW at Lower Sileru:** As part of capacity addition in green energy, APGENCO is installing two additional units of 115 MW capacity each at Lower Sileru (as expansion units by utilising the existing facilities). These units will be utilised for balancing requirements of the grid and will also be very useful to meet the peak-hour demand.

**12X80 MW at Polavaram:** APGENCO is establishing 12 units of 80 MW capacity each at Polavaram.

**9X150 MW at Upper Sileru Pumped storage:** To ensure grid stability and meet demand whenever required, APGENCO has proposed installing 9 Units of 150 MW, i.e. 1350 MW of pumped storage project at Upper Sileru with the existing reservoir. This project will be instrumental in balancing the unpredictable wind/solar power in the grid.

**New Pumped Storage Schemes:** The GoAP has directed to explore the possibilities to establish the following Pumped Storage Projects:

APERC

- i. Yaganti PSP (1000MW), Nandyal Dist.
- ii. Kamalapdu PSP (950 MW), Anantapur Dist.
- iii. Aravetipalli PSP (1200 MW), Dr. YSR Dist.
- iv. Gadikota PSP (800 MW), Annamayya Dist.
- v. Deenepalli PSP (750 MW), YSR Dist.

Out of the 5 projects, APGENCO is planning to establish 2 Pumped Storage Projects as joint ventures with M/s NHPC at Yaganti, Nandyal Dist (1000 MW) and Kamalapadu, Anantapur Dist (950 MW) in phase I.

**Sri Srinivasa Rao Gandham- CIFA & Sri Cherukuri Venu Gopala Rao, FFAA** requested APGENCO to share the list of thermal plants with age and actions to reduce pollution or CO2 emissions from the same.

REGULATO

SI No.	Station	Details of Units	Capacity in (MW)	Date of Commissioning						
	C	Unit - 1	210	01.11.1979						
	N. N	Unit - 2	210	10.10.1980						
	<u><u> </u></u>	Unit - 3	210	0 05.10.1989						
1	Dr.Narl <mark>a</mark> Tata Rao	Unit - 4	210	23.08.1990						
1	Therma <mark>l</mark> Power Station	Unit - 5	210	31.03.1994						
		Unit - 6	210	24.02.1995						
		Unit - 7	500	06.04.2009						
		Unit - 8	800	21.12.2023						
		Unit -1	210	31.03.1994						
	275	Unit - 2	210	25.02.1995						
2	Dr. M.V.R.Rayalaseema	7: Unit - 3 18	210	25.01.2007						
	Thermal Power Project	Unit - 4	210	20.11.2007						
		Unit - 5	210	29.11.2010						
		Unit - 6	600	29.03.2018						

# **APGENCO's Response:**

APGENCO is operating Dr NTTPS and Dr MVR RTPP plants duly complying with emission norms prescribed under the Environment Protection Act 1986, Air Act 1981 and its subsequent amendments. The stations are being operated with valid consent from APPCB. The following measures are being taken to control the SPM.

- Ammonia injection is being carried out as per requirement in ESPs
- Most of the time, SPM levels are maintained almost close to the normative Values.

- APERC
- In units 1 and 2 of Dr.NTTPS, parallel ESPs were already installed to meet the CPCB/APPCB norms. For units 3 and 4 of Dr.NTTPS, the ESP controllers were upgraded with EPIC3 controllers. There is no plan for upgrading ESPs for other units as the normative values of SPM levels are maintained.
- Prompt preventive and breakdown maintenance works of ESPs are being carried out.
- Water Sprinkling arrangements are being made to suppress the fugitive emissions, and all ash-loaded trucks are being covered with Tarpaulins.
- The Required Greenbelt was provided in and around the Plants.

# FGD Implementation to control SO2:

APGENCO plans to install wet limestone-based FGD to comply with MoEF&CC norms, as shown in the table below.

Station/Unit	Capacity in MW	FGD status
Dr.NTTPS-IV/ Unit-7	500	Tender Specifications for FGD EPC tendering for Dr NTTPS-500MW is
Dr.MVR RTPP/Unit-6	600	under preparation and in finalisation
Dr.MVR	210	Engaging Engi <mark>n</mark> eering consultancy
RTPP/Unit-3,4,5	<b>A</b> )99	services for the installation of wet lime
		st <mark>one-base</mark> d FG <mark>D</mark> is under process
Dr.NTTPS-V/Unit-8	800	Under tendering process

**Sri Srinivasa Rao Gandham CIFA** requested that APGENCO share a plan/approach to phase out thermal plants as part of environmental protection to reduce pollution.

**APGENCO's Response:** The CEA has directed that thermal plants shall not be retired until 2030 and that necessary R&M works on old units be undertaken. Accordingly, APGENCO has planned to undertake R&M works on the 210 MW units of Dr NTTPS, Units 1 to 6, and Dr.MVR RTPP Stage-I (1&2 units). APGENCO submitted the R&M proposals before the Commission and plans to carry out the R&M in FY 2025-26 and 2026-27, subject to the Commission's approval.

**Berry Alloys & Others** stated that the Petitioner has considered the Opening GFA balances as of 01.04.2019 as approved by the Commission and has considered the additional capitalisation for the period FY 2019-20 to FY

2023-24 based on the Audited Accounts for respective FYs which is Rs. 219.42 Crores. Clause 10.9 of Regulation 1 of 2008 explicitly states that post-cut-off date, any capital expenditure would only be admitted under select circumstances. It stated that the submissions made by the APGENCO are devoid of any reference to the Tariff Regulations. Further, no documentary evidence to justify the said cost has been placed on record by the Petitioner. Accordingly, in the absence of compliance with the Tariff Regulations, the Commission may disallow the claim of the Additional capitalisation for FY 2019-24, subject to the approval of the same based on the True-up of FY 2019-24.

In its counter on behalf of DISCOMS, APCPDCL stated that APGENCO had included the additional capitalisation of Rs. 219.42 Cr during FY 2018-24. The additional capex claimed by APGENCO may be prudently checked. Any liquidated damages and penalties collected from suppliers and contractors may be deducted from the capex.

**APGENCO's Response:** APGENCO will make available all such information as the Commission requires for prudent check

**Berry Alloys & Others** further stated that the Petitioner had claimed Renovation and Modernisation (R&M) based on the internal Committee Report. As per the CERC Regulations, Station Heat Rate (SHR) and Auxiliary Energy Consumption are the controllable parameters, and the GCV of coal is uncontrollable. Accordingly, the need to upgrade or undertake R&M must be considered, given the difficulties faced by the Petitioner in controlling SHR and Auxiliary Energy Consumption. It also quoted the relevant Regulation of CERC Tariff Regulations 2019. It stated that the Petitioner has failed to abide by the said provisions of CERC Tariff Regulations 2019 as neither the Petitioner has filed a separate Petition seeking approval of R&M along with a copy of the DPR nor the Petitioner has provided consent of the Distribution Licensees to which it supplies power as per the PPA. Furthermore, the Committee Report is silent about the funding for the R&M, financial plan, and phasing of capital expenditure.

**APGENCO's Response:** Regarding R&M of Thermal Plants, the CEA has directed not to retire thermal plants until 2030 but to take up necessary R&M works on old Units. Accordingly, APGENCO has planned to take up R&M works on the 210 MW units of Dr NTTPS, Units- 1 to 6 and Dr.MVR

RTPP Stage-I (1&2 units) as they have served for over 25 years. It is planning to carry out the R&M in the FY 2025-26 & 2026-27, subject to the approval of the Commission.

**Sri M. Venugopala Rao** stated that by taking up R&M works for 8 thermal units, the expected extension of the useful life span of the eight units by 10-15 years, a saving of Rs.3610 crore to Rs.5415 crore can be achieved. The Commission, subject to the cost-benefit analysis of APGENCO's proposal for R&M expenditure, for prudence, may direct APGENCO to go in for transparent and real competitive bidding, giving scope for as many bidders as possible to participate to ensure the least cost options for the purchase of materials and timely completion of the said works and benefit to the consumers.

**APGENCO's Response:** Within the purview of the Commission.

**Sri P. Prathapa Reddy, APSEBEA & Sri. S. Prathap, APSEB AEEA,** stated that due to the ageing effect of these generators, the efficiency and availability deteriorated generally. Thus, these generators must be renovated to improve their efficiency and availability. Hence, the Commission may approve the APGENCO proposed R&M expenditure to renovate the old generators and cater for the prevailing grid demand with affordable prices as APDISCOMs are procuring power from the market at higher prices, i.e. in the FY 2023-24, APDISCOMs have procured 5929.56MU till October 2023 with an average of Rs 9/kWh which costs around 5336Crs.

**APGENCO's Response:** APGENCO proposed R&M of thermal and hydel plants (old plants), considering the state's power demand and the CEA's directions. The proposal requires the Commission's approval.

**Sri B. Raja Sekhar, APCCIF**, has stated that the otherwise elaborate tech-commercial explanations do not show a time frame for each project's completion.

**Sri Cherukuri Venu Gopala Rao FFAA** stated that GENCO NTTPS Phases 1, 2, and 3 of 1260 Mega Watts should be closed because of Environmental concerns and to reduce pollution (**SIC** temperature) by 1 1/2 degrees centigrade as per the agreement in COP28.

**APGENCO's Response:** As per CEA's advisory, APGENCO proposed undertaking the R&M works for Dr NTTPS 210 MW units-1 to 6 and Dr.MVR RTPP Phase-1 (1&2 units) subject to the Commission's approval.

In its counter on behalf of DISCOMS, APCPDCL stated that APGENCO had yet to show any improvement in operating norms such as SHR, Auxiliary consumption and Specific oil consumption due to proposed R&M works. Hence, the Commission may consider the above submissions while considering the R&M amount claimed by APGENCO.

APGENCO's Response: The R&M works are proposed mainly to extend the life of the power plants by another 10 years and prevent further degradation and loss of performance, given their vintage. If the operating parameters are improved, the savings in variable costs will be shared with the Discoms as 1 Values per the PPA.

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

Regarding the new plants proposed to be taken up by APGENCO, the Commission would consider APGENCO's proposals based on DISCOMS requirements and the Resource plan approved for the relevant period in appropriate proceedings before it, based on the merits in each case.

# Regarding emissions, APGENCO shall comply with the environmental norms prescribed by MoEF&CC and other statutory bodies and shall not be complacent in that regard.

Regarding the capital expenditure incurred, there is no relevance to clause 10.9 of Regulation 1 of 2008 as it deals with the new plants's tariff determination. The capital expenditure incurred during the 4th control period relates to the vintage plants, whose life is at the end of a useful life or completed useful life. Regulation 1 of 2008 has no specific clause that deals with such expenditure. The Commission, therefore, proposes to allow such expenditure as in earlier tariff orders based on the auditor's certification and prudent check. To examine the capital expenditure incurred during the 4th CP, the Commission has sought detailed station-wise, year-wise, and asset-wise actual capital expenditure of Rs. 219.42 Crore from APGENCO. APGENCO submitted a copy of the Auditor's Certificate along with the information sought by the Commission (Annexure - C).

Further, APGENCO has clarified that liquidated damages penalties collected from the suppliers and contractors were not included in the capital expenditure. Upon examination, it is observed that a net additional capital expenditure of Rs. 29.32 Crore pertains to FY 2018-19, relevant to the 3rd Control Period, attained finality in the order dated 29.04.2019 in OP NO 35 of 2018. Hence, the Commission is not inclined to allow this. The Commission is also not inclined to allow some expenditure that is not capital in nature. Accordingly, the Commission approves Rs.184.26 Crore as additional capital expenditure for the 4th CP. The detailed station-wise additional capital expenditure approved against filings is shown in the tables below:

 Table No: 3.2

 Filings: Station-wise, Year-wise Additional Capital Expenditure incurred during the 4<sup>th</sup> CP (Rs. Cr.)

during the + CP (KS. CI.)									
Stations	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Total		
Dr.NTTPS O&M	26.55	65.60	1.58	6.04	3.10	1.37	104.24		
RTPP I	-12.54	9.16	25.78	0.18	0.25	0.20	23.04		
RTPP II	-10.08	22.17	1.32	0.12	0.66	0.00	14.19		
Sileru Complex	9.78	14.91	9.75	0.51	3.5 <mark>6</mark>	0.01	38.53		
NSRCPH	5.16	7.74	1.37	0.66	1.25	0.01	16.20		
SRBHES [	0.01	0.36	0.02	0.02	0.46	0.00	0.87		
PABR	10.37	6.94	0.34	0.07	0.04	0.00	17.76		
NSTPHES	0.06	0.79	2.06	0.02	1.67	0.00	4.60		
Total	29.32	127.67	42.23	7.63	10.99	1.59	219.44		
							•		

Table No: 3.3

Approved: Station-wise, Year-wise Additional Capital Expenditure incurred during the 4<sup>th</sup> CP (Rs. Cr.)

		warning t		[ACS: 01.]			1
Stations'	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Total
Dr.NTTPS O&M		65.10	1.34	6.51	2.67	0.46	76.09
RTPP I		8.27	25.77	0.12	0.20	0.01	34.37
RTPP II		22.07	1.32	0.11	0.63	0.00	24.13
Sileru Complex		14.53	9.73	0.51	3.47	0.00	28.24
NSRCPH		0.79	1.16	0.02	1.67	0.00	3.64
SRBHES		7.46	1.33	0.66	1.21	0.01	10.68
PABR		0.31	0.00	0.01	0.46	0.00	0.78
NSTPHES		6.01	0.28	0.01	0.02	0.00	6.32
Total	0.00	124.55	40.93	7.95	10.34	0.49	184.26

Regarding the R&M costs proposed for the 5<sup>th</sup> control period, the relevant clause 27 of CERC Tariff Regulation 2019 which is relevant is extracted below.

"27. Additional Capitalisation on account of Renovation and Modernisation

(1) The generating company or the transmission licensee, as the case may be, intending to undertake renovation and modernization (R&M) of the generating station or unit thereof or transmission system or element thereof for the purpose of extension of life beyond the originally recognised useful life for the purpose of tariff, shall file a petition before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, and any other information considered to be relevant by the generating company or the transmission licensee:

Provided that the generating company making the applications for renovation and modernization (R&M) shall not be eligible for Special Allowance under Regulation 28 of these regulations;

Provided further that the generating company or the transmission licensee intending to undertake renovation and modernization (R&M) shall be required to obtain the consent of the beneficiaries or the long term customers, as the case may be, for such renovation and modernization (R&M) and submit the same along with the petition.

(2) Where the generating company or the transmission licensee, as the case may be, makes an application for approval of its proposal for renovation and modernisation (R&M), approval may be granted after due consideration of reasonableness of the proposed cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, expected duration of life extension, consent of the beneficiaries or long term customers, if obtained, and such other factors as may be considered relevant by the Commission.

(3) In case of gas/liquid fuel based open/ combined cycle thermal generating station after 25 years of operation from date of commercial operation, any additional capital expenditure which has become necessary for renovation of gas turbines/ steam turbine or additional capital expenditure necessary due

to obsolescence or non-availability of spares for efficient operation of the stations shall be allowed:

Provided that any expenditure included in the renovation and modernisation (R&M) on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted from the expenditure to be allowed after prudence check.

(4) After completion of the renovation and modernisation (R&M), the generating company or the transmission licensee, as the case may be, shall file a petition for determination of tariff. Expenditure incurred or projected to be incurred and admitted by the Commission after prudence check, and after deducting the accumulated depreciation already recovered from the admitted project cost, shall form the basis for determination of tariff."

After considering various suggestions and objections, and the above CERC Regulation in this regard, based on the benefits projected with the proposed cost estimates and the mandate of CEA advisory, the Commission is inclined to approve the proposal for the R&M works to be undertaken by APGENCO. However, the same is not included in the tariff determination for the 5th control period as there is no detailed DPR or clear roadmap. After the renovation and modernisation (R&M) is completed, APGENCO shall file a petition for tariff determination. After a prudent check, the Commission will determine the tariff after following the due Regulatory process. The APGENCO is directed not to take up the R&M works without following the transparent competitive bidding process.

The GFA of the RTPP IV is revised based on the Commission's Order dated 18.06.2024 in RP No. 3 of 2021 in O.P. NO. 33 OF 2019 AND 35 OF 2018 (PART).

Based on the above discussion, the Commission revises the GFA filed by APGENCO. The revised GFA as approved by the Commission for each station/stage is shown in the table below.

S. No.	Station name	GFA as on 31.3.2019 OP. No.35 of 2018) Additional Capex 2019-24		GFA as on 31.3.2024
		a	b	c=a+b
A	Thermal Power Stations	14,294.44	134.59	14,429.03
1	Dr.NTTPS I to III	3,067.90	76.09	3,143.99
2	RTPP-I	2,040.24	34.37	2,074.61
3	RTPP -II	1,875.48	24.13	1,899.61
4	Dr NTTPS - IV	2,136.68	0.00	2,136.68
5	RTPP III	1,216.29	0.00	1,216.29
6	RTPP - IV	3,957.85	0.00	3,957.85
B	Hydro Electric Stations	2,127.59	49.67	2,177.26
7	Sileru	696.87	28.24	725.11
8	NS - RCPH	114.62	3.64	118.26
9	Srisailam	962.20	10.68	972.88
10	PABR	REG 56.68	0.78	57.46
11	Chettipeta	3.55	0.00	3.55
12	NSTP HES	293.67	6.32	299.99
C=A+B	Total	16,422.03	<b>184.</b> 26	16,606.29

Table No: 3.4Approved: Gross Fixed Assets (GFA) (Rs. Cr.)

# Determination of Depreciation:

55. The table below shows the Depreciation claimed by APGENCO for each Station/Stage for the 5th control period.

Filings: Depreciation for 5th CP (Rs. Cr)									
S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP		
A	Thermal Power Stations	270.88	304.43	342.17	342.17	342.17	1,601.82		
1	Dr.NTTPS I to III	9.38	31.04	55.41	55.41	55.41	206.65		
2	RTPP-I	2.07	13.96	27.33	27.33	27.33	98.02		
3	RTPP -II	8.59	8.59	8.59	8.59	8.59	42.95		
4	Dr NTTPS - IV	28.49	28.49	28.49	28.49	28.49	142.45		
5	RTPP III	16.22	16.22	16.22	16.22	16.22	81.10		
6	RTPP - IV	206.13	206.13	206.13	206.13	206.13	1,030.65		
В	Hydro Electric Stations	23.77	31.59	40.40	40.40	40.40	176.56		
7	Sileru	7.67	12.72	18.40	18.40	18.40	75.59		
8	NS - RCPH	0.62	1.76	3.04	3.04	3.04	11.50		
9	Srisailam	4.03	5.35	6.84	6.84	6.84	29.90		
10	PABR	1.17	1.47	1.81	1.81	1.81	8.07		
11	Chettipeta	0.12	0.13	0.15	0.15	0.15	.70		
12	NSTP HES	10.16	10.16	10.16	10.16	10.16	50.80		
C=A+ B	Total	294.65	336.02	382.57	382.57	382.57	1,778.38		

# Table No. 3.5Filings: Depreciation for 5th CP (Rs. Cr)

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

**Berry Alloys & Others,** referring to the provisions in APERC Regulation 1 of 2008 and CERC Tariff Regulations regarding depreciation, have stated that Depreciation shall be computed as per the CERC Tariff Regulations.

**APGENCO's Response:** APGENCO will claim depreciation as per the CERC regulations or the Hon'ble APERC orders

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

The methodology adopted by APGENCO in the computation of Depreciation and complying with APERC Regulation 1 of 2008 is correct. The Commission computed the Depreciation based on the revised GFAs as approved in this Order. In addition, the main difference between the Depreciation claimed by APGENCO and approved by the Commission is due to the following reasons.

- Due to the disallowance of the proposed R&M capital expenditure during the 5<sup>th</sup> CP.
- Regarding RTPP-II, the actual capital expenditure in filings is Rs.14.19 Crore, which was corrected in data clarifications as Rs.24.13 Crore.
- Regarding RTPP-IV, the Depreciation is computed as per the Revised Capital Cost admitted by the Commission in Order in RP No. 3 of 2021 in O.P. NO 33 OF 2019 AND 35 OF 2018 (PART) dated 18.06.2024.
- Chettipeta's power plant depreciation—The remaining part of 90 per cent of GFA is being considered in the next two years of balance useful life.

Accordingly, the table below gives the depreciation approved by the Commission for each station/stage for the 5th control period.

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
A	Thermal Power Stations	275.96	275.96	275.96	275.96	275.96	1,379.82
1	Dr.NTTPS I to III	6.85	6.85	6.85	6.85	6.85	34.24
2	RTPP-I	3.09	3.09	3.09	3.09	3.09	15.46
3	RTPP -II	9.49	9.49	9.49	9.49	9.49	47.46
4	Dr NTTPS - IV	31.34	31.34	31.34	31.34	31.34	156.69
5	RTPP III	16.22	16.22	16.22	16.22	16.22	81.10
6	RTPP - IV	208.97	208.97	208.97	208.97	208.97	1,044.87

Table No: 3.6Approved: Depreciation for 5th CP (Rs. Cr.)
B	Hydro Electric Stations	22.02	22.02	21.42	21.42	21.42	108.29
7	Sileru	6.75	6.75	6.75	6.75	6.75	33.74
8	NS - RCPH	0.54	0.54	0.54	0.54	0.54	2.68
9	Srisailam	3.54	3.54	3.54	3.54	3.54	17.68
10	PABR	1.16	1.16	1.16	1.16	1.16	5.82
11	Chettipeta	0.60	0.60	0.00	0.00	0.00	1.20
12	NSTP HES	9.43	9.43	9.43	9.43	9.43	47.17
C=A+ B	Total	297.98	297.98	297.38	297.38	297.38	1,488.11

#### b) Determination of O&M expenses:

56. The table below shows the O&M costs claimed by APGENCO for each station/stage in the Petition.

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
A	Thermal Power Stations	1,684.29	1,743.41	1,804.61	1,867.94	1,933.52	9,033.77
1	Dr.NTTPS I to III	710.62	735.56	761.38	788.10	815.77	3,811.43
2	RTPP-I	236.87	245.19	253.79	262.7 <mark>0</mark>	271.92	1,270.47
3	RTPP -II	236.87	245.19	253.79	262.70	271.92	1,270.47
4	Dr NTTPS - IV 🖳	192.58	199.34	206.34	213.58	221.08	1,032.92
5	RTPP III	118.44	122.59	126.90	131.35	135.96	635.24
6	RTPP - IV 🛛 🔍	188.91	195.54	202.41	209.51	216.87	1,013.24
В	Hydro Electr <mark>i</mark> c Stations	<mark>526.</mark> 15	551.24	577.54	605.10	633.95	2,893.98
7	Sileru	259.07	271.42	284.37	297.94	312.15	1,424.95
8	NS - RCPH	25.00	26.19	27.44	28.75	30.12	137.50
9	Srisailam	215.94	226.24	237.03	2 <mark>4</mark> 8.34	260.18	1,187.73
10	PABR	11.95	12.52	13.12	13.75	14.40	65.74
11	Chettipeta	1.95	2.04	2.14	2.24	2.35	10.72
12	NSTP HES	12.24	12.83	13.44	14.08	14.75	67.34
C=A+B	Total	2,210.44	2,294.65	2,382.15	2,473.04	2,567.47	11,927.75

Table No. 3.7Filings: O&M Expenses for 5th CP (Rs. Cr)

#### Views/Objections/Suggestions

**Sri M. Venugopala Rao** stated that APGENCO is adopting some parameters per the CERC drafts. It should not be permitted, as such drafts have no legal sanctity and approval of APERC to adopt the same.

**APGENCO's Response:** APGENCO has adopted the parameters as per the provisions of the APERC regulations 1 of 2008. However, CERC regulations are being adopted where there are no provisions in APERC regulations.

**Sri. S. Prathap, APSEB AEEA, and Sri M. Mohan Rao, APGENCO AOA,** have requested the Commission to direct AP Power Utilities to disburse timely salaries to its employees to avoid uncertainty and mental agony.

**APGENCO's Response:** Within the purview of the Commission.

**Berry Alloys & Others** have stated that the provisions of the Tariff Regulations do not provide for the impact of Pay revision. Therefore, the claim made by the petitioner does not qualify under the said Regulations. However, since the impact of Pay revision notification is a force of law, the Commission has approved and considered the impact towards Pay revision in the past. That the Petitioner has not substantiated by documentary evidence the claim of 20% made by it towards Pay revision. Hence, the escalation of 20% towards Pay revision, as claimed by the Petitioner, is not maintainable as the same already forms part of norms approved by the CERC in the CERC Tariff Regulations 2019. **However**, the Commission may approve the impact of the Pay Revision at the time of True-up.

**APGENCO's Response:** APGENCO was formed as per the provisions of the AP Electricity Reform Act 1998. The existing benefits to the employees transferred from erstwhile APSEB to successor companies should not be inferior compared to the provisions during the APSEB regime. Hence, all AP power utilities, including APGENCO, extend PRC benefits to its employees once every four years. In addition to regular employees, the wages of contract employees are being enhanced as per the provisions of minimum wages prescribed. APGENCO claims a 20% enhancement towards wage commitment as approved by the Commission in its earlier orders.

**In its counter on behalf of DISCOMS, APCPDCL stated** that APGENCO had claimed O&M expenses for thermal and Hydel power plants based on per-MW expenses specified in the CERC 2019 Regulations plus 20% thereof towards the effect of pay revision. Hence, the Commission may consider the actual pay revision while considering the O&M expenses.

**APGENCO's Response:** The Commission has uniformly and consistently allowed an additional 20% over and above the O&M expenses towards the effect of pay revision, irrespective of the actuals, and the same methodology has been proposed in the present application.

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

57. APGENCO, in its filings, sought a pay revision commitment for its employees, which was 20% of O&M expenses. After carefully perusing all objections and the DISCOMS' submissions in its counter, the Commission sought the actual O&M expenses of each station/stage from APGENCO. APGENCO furnished the information. The Commission verified the same with the figures in the audited books of accounts and found them correct. Upon comparison of the actuals with CERC norms for the fourth control period, the Commission observes that the O&M actuals regarding the Dr NTTPS and RTPP Stage I & III are higher than the norms, and the remaining thermal stations' actual O&M is less than the norms fixed in CERC Regulations 2019 applicable for the 4th CP. However, the total actual O&M expenditure of thermal stations in isolation and the total actual O&M of all thermal and hydel stations is less than the norms fixed in CERC Tariff Regulations 2019 for the fourth control period. As all these stations except three stages/units are covered by the composite PPA and giving due weight to the objections, the Commission decides to approve the O&M expenditure for thermal stations as per the norms fixed for thermal stations by CERC in its Tariff Regulations 2024. However, the 10 per cent extra over the norms is allowed for the thermal stations which have completed their useful life periods, such as Dr NTTPS and RTPP Stage I, considering their vintage status requiring additional maintenance. Similarly, In respect of the Hydel stations, the O&M expenses approved by the Commission for the fourth control period are escalated at the Rate of 4.77 % proposed by the APGENCO in its filings without taking into account 20 per cent provision for pay revision in line with Regulation 1 of 2008. Accordingly, the total O&M costs approved by the Commission for the 5th control period for each station/stage are shown in the table below.

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
A	Thermal Power Stations	1,304.53	1,373.05	1,445.14	1,521.01	1,600.74	7,244.48
1	Dr.NTTPS I to III	567.15	596.95	628.27	661.26	695.91	3,149.55
2	RTPP-I	189.05	198.98	209.42	220.42	231.97	1,049.85
3	RTPP -II	171.86	180.89	190.39	200.38	210.88	954.41
4	Dr NTTPS - IV	135.85	143.00	150.50	158.40	166.70	754.45
5	RTPP III	85.93	90.45	95.19	100.19	105.44	477.20
6	RTPP - IV	154.68	162.78	171.36	180.36	189.84	859.02

Table No: 3.8 Approved: O&M Expenses (Rs. Cr.)

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
В	Hydro Electric Stations	438.46	459.38	481.29	504.25	528.30	2,411.68
7	Sileru	215.89	226.19	236.98	248.28	260.12	1,187.45
8	NS - RCPH	20.83	21.82	22.86	23.95	25.10	114.56
9	Srisailam	179.95	188.54	197.53	206.95	216.82	989.80
10	PABR	9.96	10.44	10.94	11.46	12.01	54.80
11	Chettipeta	1.62	1.70	1.78	1.87	1.96	8.93
12	NSTP HES	10.20	10.69	11.20	11.74	12.30	56.13
13	TB- Machkund						0.00
C=A+ B	Total	1,742.99	1,832.43	1,926.43	2,025.26	2,129.04	9,656.15

The Commission further observes from the data provided by APGENCO that the employees' expenses for its power plants are 60-80 per cent. APGENCO is a state government company governed by the statutory provisions under the Transfer Schemes under the AP Electricity Reforms Act, 1998. If the impact of wage revisions is significant due to uncontrollable circumstances, the same needs to be considered. If ignored, it will seriously impact the performance of APGENCO, which is vital to the state's power demand requirement. Because of this, the successive Commissions including the present Commission considered the impact of pay revisions in the earlier tariff Orders. Further, even under clause 36(8) by CERC Tariff Regulation 2024 CERC has allowed the impact of pay revisions in its True-up Orders.

There is no specific clause in APERC Regulation 1 of 2008 regarding the true-up of O&M expenses. However, clause 10 of the Regulation provides for adopting CERC Tariff Regulations wherever appropriate. Hence, the Commission decides to adopt the CERC Regulations for the true up of O&M expenses. Therefore, if the actual O&M exceeds the approval in the present Order due to uncontrollable factors particularly the wage revision of employees, APGENCO may seek the True-up of O&M expenses in the next MYT filings substantiating its claim. Further, APGENCO shall file an annual performance petition before the Commission. Reviewing the annual performance, the Commission may issue suitable directions if required.

Regarding the timely payment of salaries, APGENCO should make every effort to pay salaries to its employees on time, as employee dissatisfaction will affect its performance.

## c) Determination of Return on Capital Employed (RoCE)

58. The computation of working capital and the Weighted Average Cost of Capital (WACC) is a prelude to the determination of RoCE. The station-wise Working Capital computed by APGENCO is shown in the table below.

Table N	lo. 3.9	)
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<b>Filings:</b>	Working	Capital	for	$5^{\text{th}}$	СР	(Cr.)	
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S.	Name of the	Capacity	FY 25	FY 26	FY 27	FY 28	FY 29
No.	Station	Capacity	1140	1120		1120	
1	SILERU	725	92.87	98.66	104.63	108.68	112.94
2	NS RCPH	90	10.5	11.36	12.25	12.68	13.13
3	SRBPH	770	88.92	93.17	97.6	101.66	105.9
4	PABR	20	4.97	5.26	5.56	5.74	5.93
5	Chettipeta	1	0.62	0.65	0.69	0.71	0.74
6	NSTP HES	50	13.74	13.82	13.92	14.03	14.16
7	Dr. NTTPS	1260	1172.49	1189.55	1206.98	1215.78	1224.95
8	Dr NTTPS IV	500	446.94	449.6	452.39	455.3	458.33
9	RTPP-I	420	431.27	440.26	449.44	453.88	458.5
10	RTPP -II	420	405.11	408.43	411.89	415.48	419.21
11	RTPP III	210	211.6	213.17	214.8	216.5	218.28
12	RTPP IV	600	629.35	628.93	628.6 <mark>6</mark>	628.53	628.56
	Total		3508.38	3552.86	3598.81	3628.97	3660.63

Similarly, the Weighted Average Cost of Capital (WACC) computed by APGENCO is 11.8% for thermal stations and 12.1% for Hydel stations.

Based on the above, the RoCE claimed for each station/stage by APGENCO in its petition, is shown in the table below.

	Filings: Return on	<b>Capital E</b>	mployed	(RoCE) fo	r 5th CP	(Rs. Cr)	1
S. No	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
Α	Thermal Power Stations	914.22	925.75	933.44	895.08	857.86	4,526.35
1	Dr.NTTPS I to III	186.86	213.32	237.27	231.77	226.32	1,095.54
2	RTPP-I	77.68	92.52	105.98	103.28	100.60	480.06
3	RTPP -II	80.24	79.62	79.01	78.42	77.85	395.14
4	Dr NTTPS - IV	114.93	111.88	108.85	105.33	102.83	543.82
5	RTPP III	62.28	60.56	58.83	57.12	55.42	294.21
6	RTPP - IV	392.23	367.85	343.50	319.16	294.84	1,717.58
B	Hydro Electric Stations	95.73	103.68	110.74	106.92	103.17	520.24
7	Sileru	29.40	35.27	40.56	38.83	37.12	181.18
8	NS - RCPH	3.47	4.87	6.14	5.82	5.51	25.81
9	Srisailam	27.45	29.08	30.56	30.23	29.91	147.23
10	PABR	2.71	2.97	3.19	2.99	2.80	14.66
11	Chettipeta	0.26	0.27	0.28	0.26	0.25	1.32
12	NSTP HES	32.44	31.22	30.01	28.79	27.58	150.04
C=A+B	Total	1,009.95	1,029.43	1,044.18	1,002.00	961.03	5,046.59

Table No. 3.10Filings: Return on Capital Employed (RoCE) for 5th CP (Rs. Cr)

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

**Sri B. Raja Sekhar**, **APCCIF**, has requested that the ROCE be brought down as the returns are too generous for the thermal power producers requiring its tapering.

**APGENCO's Response:** The RoCE computation is following Cl.No. 12.1 of APERC regulations 1 of 2008.

**Sri VenuGopala Rao** stated that if coal stocks are not maintained as per norms by APGENCO, the working capital should be reduced.

In its counter on behalf of all DISCOMS, APCPDCL stated that the APGENCO shall maintain at least 15 days of coal stocks to provide uninterrupted Power Supply as per the APGENCO MYT Order for FY 2019-24 passed by the Commission. However, APGENCO failed to maintain such a quantum of coal stocks at any point of time since a long time and the actual coal stocks are much below the quantity required for 10 days. The same is evident from the Central Electricity Authority (CEA) reports. In the absence of the required power from APGENCO, APDISCOMs were/are compelled to purchase power from energy exchanges to meet day-to-day grid demand, which has caused further financial burdens for APDISCOMs. Hence, the Commission is requested to pass orders to modify the working capital portion to APGENCO for 15 days only from the existing 30 days.

**APGENCO's Response:** The averments of the DISCOMS are misconceived and unfair. The receivables of APGENCO from the Discoms as of 31.12.2023 are over Rs. 2198 crores. Further, an amount of about Rs. 1759 crores towards FCA is still pending. The outstanding receivables are greatly in excess of the norms. In such circumstances, the available working capital for maintaining coal stocks is seriously eroded, and the cash flow is seriously affected. Until and unless the Discoms clear the present outstandings expeditiously, and until they make payments on time in future, it is not reasonable to expect APGENCO to maintain coal stocks at the required level. There is no case whatsoever to restrict the working capital of APGENCO for fuel stocks to only 15 days instead of the norm of 30 days as provided in the Regulation. In fact, the cash constraint imposed on the APGENCO due to grossly delayed payments and the consequent inability to maintain coal stocks at the required level is also affecting the declaration of availability and, consequently, the recovery of fixed costs. The Respondents have been directed to establish LCs, which have been consistently observed in the breach. The Respondents are not justified in raising this issue in such a manner because they are the main reason and cause for the coal stocks not being maintained at the required levels.

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

- 59. As per clause 12.1 (a) of Regulation 1 of 2008, RoCE is equal to sum of
  - a. Original Capital Cost less Accumulated depreciation, and;
  - b. Working Capital approved by the Commission as per this Regulation,

multiplied with the Weighted Average Cost of Capital (WACC)

The WACC for this purpose will be determined as per the procedure given below:

WACC = [D/E/(1+D/E)] rd + [1/(1+D/E)] re

D/E is the Debt to Equity Ratio and shall be determined at the beginning of the Control Period after considering Generating Company's previous years' D / E mix, market conditions and other relevant factors.

**rd** is the Cost of Debt and shall be determined at the beginning of the Control Period after considering Generating Company's proposals, present cost of debt, market conditions and other relevant factors.

**re** is the Return on Equity and shall be determined at the beginning of the Control Period after considering CERC norms, Generating Company's proposals, previous years' D/E mix, risks associated with generating business, market conditions and other relevant factors

60. Clause 12.4 (a) of Regulation 1 of 2008 provides for computation of working capital for thermal generating stations, which is stipulated as under

"In case of coal -based/ oil-based/ lignite-fired generating stations, working capital shall cover:

(i) Cost of coal or lignite for one-and-a-half months for pit-head generating stations and two months for non-pit-head generating stations, corresponding to target availability;

(ii) Cost of oil for two months corresponding to target availability;

(iii) Cost of secondary fuel oil for two months corresponding to target availability;

(iv) Operation and Maintenance expenses for one month;

(v) Maintenance spares @ 1 per cent of the historical cost as per indexation of O&M norms; and

(vi) Receivables for sale of electricity equivalent to two months of the sum of annual fixed charges and energy charges calculated on target availability;

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Payables for fuel (including oil and secondary fuel oil) to the extent of one month of the cost of fuel calculated on target availability."

Clause 12.4 (C) of Regulation 1 of 2008 provides for computation of working 61. capital for hydro power stations, which is stipulated as under

" In case of hydro power generating stations, working capital shall cover:

(i) Operation and maintenance expenses for one month;

(ii) Maintenance spares at 1 per cent of the historical cost as per indexation of O&M norms; and

(iii) Receivables for sale of electricity equivalent to two months of the annual fixed charges calculated on normative capacity index."

The Commission has computed the RoCE in terms of the above as detailed below: भावतः प्रगतिसाधिक

#### Working Capital

APGENCO computed the working capital as per Regulation. The contentions of APGENCO and DISCOMS have equal weight in considering the fuel cost for computation of working capital. The Regulation allows a net one-month fuel cost, whereas the DISCOMS suggest considering only 15 days of fuel cost in calculating working capital. In this regard, it is pertinent to refer to the Commission's directions in the Order dated 29.04.2019, which are extracted below.

"It is the responsibility of the APGENCO to maintain the required coal stocks at their respective stations as per the norms. Accordingly, the working capital requirement has been allowed in this order while computing the Return on

Capital Employed. Maintenance of minimum coal stocks required on the average for uninterrupted generation for 15 days is the widely accepted norm in planning the maintenance and running of thermal generating stations. The APGENCO shall hereafter treat adherence to such minimum norm as a direction from the Commission under Section 142 of the Electricity Act, 2003, the contravention of which will make the APGENCO liable for a penalty of Rs.1 Lakh for each contravention and additional penalty of Rs.6000/- per day during the continuance of the period of failure after each contravention. The APGENCO shall submit monthly compliance reports by 10th of every succeeding month commencing from May 2019 about compliance of this requirement and the distribution licensees or any other stakeholder are at liberty to bring to the notice of the Commission any non-compliance with the direction at any time. The APGENCO is at liberty to satisfy the Commission through its monthly reports or otherwise about the failure to comply with the direction at any time being for reasons beyond its control on which the Commission may waive the liability to pay such penalty."

It is amply clear from the above that APGENCO should maintain 15 days of coal stock as per the above directions. APGENCO has not furnished monthly reports except for the periodic compliance reports as directed. As per the periodic compliance reports, in addition to the financial constraints, logistical issues with the Railways are leaded for insufficient coal stocks at APGENCO Stations. Given the above, the Commission could not take serious action on APGENCO. The impact of considering the coal stock for 15 days in working capital calculations is about 40 crores per Annum. However, as per the submissions of the DISCOMS, the coal stock was close to 10 days most of the period. APGENCO has foregone more than 1000 Crores fixed costs for not achieving the normative availability of some of the stations due to insufficient coal stocks and quality as per the information available with the Commission. Despite several efforts, it could not maintain coal stocks as per the norms, as APGENCO repeatedly said. As fewer coal stocks & quality are leading to less power availability from the APGENCO Stations, there is greater uncertainty in the power procurement planning of the DISCOMS. To overcome this uncertainty, the Govt.shall intervene and back APGENCO to address all logistical issues to improve the performance of APGENCO and also for less dependence on markets to maintain the 24X7 power supply to end consumers. Be that as it may, the Commission decides to calculate the working capital as per APERC Regulation 1 of 2008 with the

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direction given infra. The Working Capital has been computed based on this order's approved Fixed and Energy charges. The year-wise Working Capitals estimates are shown in Annexures E1 to E5. The summary of the Working Capital approved for the fifth control period is given in the table below:

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29
A	Thermal Power Stations	3,196.78	3,116.75	3,139.64	3,163.85	3,189.41
1	Dr.NTTPS I to III	1,134.59	1,144.55	1,154.99	1,165.95	1,177.42
2	RTPP-I	420.95	425.62	430.48	435.57	440.88
3	RTPP -II	390.49	393.81	397.29	400.93	404.76
4	Dr NTTPS - IV	419.50	422.01	424.66	427.46	430.41
5	RTPP III	204.11	103.98	105.61	107.33	109.14
6	RTPP - IV	627.14	626.79	626.61	626.61	626.80
B	Hydro Electric Stations	188.84	196.68	204.80	213.46	222.55
7	Sileru	81.66	85.22	88.96	92.88	97.00
8	NS - RCPH	9.43	9.84	10.28	10.74	11.22
9	Srisailam	79.76	83.34	87.08	91.01	95.13
10	PABR	4.48	4.64	4.81	4.99	5.19
11	Chettipeta	0.62	0.63	0.54 0	0.57	0.60
12	NSTP HE <mark>S</mark>	12.89	13.00	13.12	13.25	13.40
C=A+B	Total	3,385.62	3,313.42	3,344.44	<mark>3</mark> ,377.31	3,411.96

Table No: 3.11Approved: Working Capital for 5th CP (Rs. Cr.)

It is the responsibility of APGENCO to maintain the required coal stocks at their respective stations as per the norms. Accordingly, the working capital requirement has been allowed in this order while computing the Return on Capital Employed. Maintenance of minimum coal stocks required on average for uninterrupted generation for 15 days is the widely accepted norm in planning the maintenance and running of thermal generating stations. The APGENCO shall hereafter treat adherence to such minimum norm as a direction from the Commission under Section 142 of the Electricity Act, 2003. The APGENCO shall submit monthly compliance reports to the Commission by the 10th of every succeeding month commencing from October 2024 about compliance with this requirement, and the distribution licensees may verify the non-compliance with the direction at the time of monthly admission of bills. In case there is a deviation of more than 10 per cent of the norm, DISCOMS may file a petition before the Commission under section 142 for violation of the above direction, besides seeking recovery

of working capital corresponding to the shortfall of coal stock. The APGENCO is at liberty to satisfy the Commission through its monthly reports or otherwise about failing to comply with the direction at any time for reasons beyond its control.

#### Weighted Average Cost of Capital (WACC),

#### a) D/E (Debt/Equity) Ratio

The Commission approves a D/E mix of 70:30 for the fourth control period, as filed by APGENCO, as it is a standard norm.

#### b) Return on Equity

The Commission approves the Return on Equity as 15.5% as filed by APGENCO in terms of CERC Tariff Regulations.

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#### c) Cost of Debt:

The Commission approves a rate of 10.2% as filed by APGENCO, which is less than the weighted average cost of debt of the actual loan portfolio (ANNEXURE – D1 & D2).

Based on the above, the WACC (Weighted Average Cost of Capital) has been computed at 11.8% as per the formula stated supra.

#### ROCE (Return on Capital Employed)

As per the procedure and formula described above, the RoCE has been computed with the approved working capital, Gross Fixed assets, Depreciation, and WACC in this order. The RoCE-approved computations year-wise are shown in Annexures F1 to F5. The summary of the RoCE approved by the Commission is given in the tables below.

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
A	Thermal Power Stations	904.32	862.28	832.40	802.68	773.11	4,174.79
1	Dr.NTTPS I to III	179.18	179.54	179.97	180.45	181.00	900.14
2	RTPP-I	77.85	78.04	78.25	78.48	78.75	391.37
3	RTPP -II	79.74	79.01	78.30	77.61	76.94	391.60
4	Dr NTTPS - IV	111.76	108.36	104.97	101.60	98.25	524.94
5	RTPP III	61.44	47.70	45.98	44.27	42.57	241.95

#### Table No: 3.12

#### Approved: Return on Capital Employed (RoCE) (Rs. Cr.)

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
6	RTPP - IV	394.35	369.63	344.94	320.26	295.61	1,724.80
B	Hydro Electric Stations	89.68	87.97	86.29	84.74	83.25	431.92
7	Sileru	26.84	26.45	26.09	25.74	25.43	130.54
8	NS - RCPH	3.22	3.21	3.20	3.19	3.18	16.00
9	Srisailam	25.72	25.72	25.75	25.79	25.87	128.85
10	PABR	2.65	2.53	2.41	2.29	2.17	12.03
11	Chettipeta	.26	.19	.11	.11	.12	.79
12	NSTP HES	31.00	29.87	28.74	27.61	26.49	143.71
C=A+	Total						
B	IViui	994.00	950.25	918.69	887.42	856.36	4,606.71

#### d) Income Tax

62. APGENCO stated that there is no claim in the present filings. That the income tax will be claimed on the basis of actual payment from time to time.

#### Views/Objections/Suggestions

**Sri B. Raja Sekhar,** APCCIF, stated that allowing the income tax as part of ARR has no justification. It is a statutory deduction from a profit that is assured by regulation.

**Sri M. Venugopala Rao** stated that APGENCO is getting a return on equity *(i)* 15.5% for thermal stations and 16.5% for hydel stations. Income tax is also being allowed as a pass-through. Imposing the income tax burden on RoE would be equivalent to penalising the consumers for the amount they have already paid in the form of RoE. The amounts of RoE claimed by APGENCO make it clear that it can afford to pay and bear the income tax without passing it on 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 generators of power with whom APDISCOMs had PPAs shall be borne by the generating entities only.

**APGENCO's Response:** Income tax is allowed in tariff in line with clause No. 12.5 of APERC regulations 1 of 2008. However, APGENCO has not made any claim towards income tax in tariff filings.

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

No income tax claim in the present filings pertains to the previous control period. Also, there is no claim mode towards IT for the 5th CP. In the absence of any claim made in the present filings, a decision on this aspect is unnecessary. The Commission will take an informed decision as and when such a claim is made.

#### AFC of Machkund dam HES & TB Dam HES:

63. Hydel Power Stations of Machkund and Tungabhadra (including Hampi) are inter-government projects. AP's share of power in these projects is supplied to the DISCOMs. APGENCO has estimated the AFC of these stations for the fourth control period based on the approved figures by the Commission for FY 2018- 19, with an escalation factor of 6.64%, to arrive at year-on-year charges for the 5th CP. After examining the filings with reference to the audited figures for the previous four years, the Commission approves the charges by applying an escalation factor of 4.77% instead of 6.64%. The charges approved by the Commission vis a vis the filings are given in the table below:

<b>Fable</b>	No:	3.13

## Approved: Machkund HES & TB Dam HES charges for 5th CP (Rs. Cr.)

S. No.	O&M Cost for TB & Machkund	FY 25	FY 26	FY 27	FY 28	FY 29	Total
Α	Filings	80.11	83.93	87.93	92.13	96.52	440.62
В	Approved	71.10	74.49	78.04	81.76	85.66	391.05

#### Interest on Pension Bonds for Contribution to Master Trust:

64. APGENCO stated that the actual interest for FY 2022-23 is Rs.1524.48 crores, which will increase further for FY 2024-25 due to inflation. Accordingly, the estimated additional interest subject to adjustment based on actuals for each year of the 5th control period is shown in the table below.

Table No. 3.14Filings: Additional Interest on Pension Bonds for 5th CP (Rs. Cr)

	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Additional						
Interest on	1 600 04	1 647 21	1 601 40	1 740 79	1 704 10	0 160 61
Pension	1,602.94	1,047.51	1,691.49	1,742.70	1,704.13	0,400.04
Bonds						

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

**Sri M. Venugopala Rao,** strongly opposing the scheme of things that led to this claim, stated that a blunder was committed during the period of APSEB by not providing pension funds; those liabilities were unjustly allocated through the transfer schemes by GoAP, and the same, with interest, have been allowed continuously by successive Commissions as pass through. The injustice to the consumers has been continuing for more than two decades. How long it would continue is unknown, with the authorities concerned not taking any responsibility for such failures of omission and commission and correcting them.

**Sri M. Mohan Rao, APGENCO AOA,** stated that Pension commitment was allowed in tariff by APERC from 1999 to 2024. Hence, APGENCO may be allowed to recover pension commitment as per PPA entered; that P&G trusts of APSEB employees are partly funded, and P&G trust of EPF employees is not put to operation. Hence, direction may be issued for proper funding of P&G Trusts.

**APGENCO's Response:** The liability was vested in APGENCO through a statutory transfer scheme vide G.O.Ms.No.11, Dt.30.01.2000. APERC has been allowing the commitment from time to time since 01.02.1999 until 31.03.2024. APGENCO has included the above commitment in the current tariff filings for the control period 2024-2029 and incorporated it into the composite PPA entered. Regarding funding P&G trusts, it stated that it is within the purview of the Commission.

**Berry Alloys and others,** narrating the different aspects regarding APGENCO's claim, have stated that the said expenses be allowed at the FY 2023-24 approved levels (ref Order dated 29.04.2019).

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

65. The Commission reiterated its earlier view on this issue that the obligation to meet the pension liability of the APSEB employees was vested in APGENCO in terms of the statutory First Transfer Scheme dated 30.01.2000 notified by the State Government under the AP Electricity Reform Act, 1998. The G.O. Ms.No.29 (Transfer Scheme) issued on 31.05.2014 in terms of the AP Electricity Reform Act, 1998 and AP Reorganization Act, 2014, also provides for payment of pension liabilities by APGENCO. At the time of the bifurcation of erstwhile APSEB into APGENCO and APTRANSCO on 01.02.1999, the pension liabilities of employees who already retired in APSEB and of those employees

who were on the payrolls on the date of bifurcation to the extent of their service in APSEB were transferred to APGENCO. To service the pension liabilities, a Master Trust was formed. APGENCO issued two types of bonds to the Trust, the first one for an amount of Rs. 1320.43 Cr. to meet the total pension liabilities of employees who have already retired as of 01.02.1999 and the second one for an amount of Rs. 3066.52 Cr. to meet past pension liabilities of the employees who have on payrolls in APSEB as on 01.02.1999. The respective companies will meet the latter's future pension liabilities. APGENCO has to meet the above pension liabilities that arise each year by repaying principal amounts and interest on bonds. The redemption of the first type of bond will be completed by 2033 and the second type by 2029, by which time the entire bond amounts and interest will be repaid to the Trust. To service the bonds, APGENCO's liabilities were increased by Rs. 4386.95 (1320.43 + 3066.52) Cr. with a corresponding increase in the amount of assets. APGENCO was expected to service the bonds from part of the depreciation and part of the return on equity earned based on the value of the total assets. As this amount fell short of meeting the actual pension liabilities of the Master Trust, erstwhile APERC, in the order dt.24.03.2003 in O.P. No. 402/2002, first allowed the excess amount over the scheduled commitments from APGENCO as additional interest and the successive Commissions allowed the same up to 31.03.2024 keeping in view the statutory nature of the claims.

Moreover, the PPAs entered into by APGENCO with DISCOMs consented to by this Commission by Order dated -06.03.2024 have a provision for passing through additional interest on pension bonds in the tariff. Hence, the Commission is inclined to allow them after a prudent check. Accordingly, the details of actual payments made from FY 2019-20 to FY2023-24 are obtained as shown in the table below.

S.No.	0	Utility, wise Actual Pension Payments made during 4 <sup>th</sup> CP						
5.NO.	Company	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24		
1	APGenco	166.29	178.39	195.29	213.60	248.15		
2	APTransco	73.35	81.10	87.20	108.70	116.96		
3	APEPDCL	351.10	351.29	360.24	420.25	448.26		
4	APSPDCL	671.50	690.47	693.41	273.36	301.49		
5	APCPDCL				508.57	562.54		
6	Total	1,262.24	1,301.25	1,336.13	1,524.48	1,677.40		
7	Scheduled Commitment of APGENCO	228.17	229.34	232.32	236.05	242.29		
8	Over and above scheduled	1,034.07	1,071.91	1,103.81	1,288.43	1,435.11		

Year	2023	2024	2025	2026	2027	2028	2029
Scheduled							
Commitment from	120.40	113.10	105.30	97.00	88.40	79.70	71.00
Bond Schedule-1							
Scheduled							
Commitment from	284.35	302.35	334.70	348.70	372.70	325.70	322.70
Bond Schedule-2							
Total	404.75	415.45	440.00	445.70	461.10	405.40	393.70
AP Share (58.32%)	236.05	242.29	256.61	259.93	268.91	236.43	229.61

The details of the scheduled commitment as per the bond schedule for the 5th CP are as follows.

Taking the actual payment in base year FY 2023-24, applying the 3.51 per cent escalation factor, the Commission arrives at the additional interest on pension liabilities as shown in the table below.

	Approved: Additiona	al interes	st on Pen	sion Bon	ds	
S. No.	Pension Contribution	FY 25	FY 26	FY 27	FY 28	FY 29
A	Actual Interest on Pension Bonds, including Scheduled Interest	1,744.50	1,814.28	1,886.85	1,962.32	2,040.81
В	Schedule Commitment of APGENCO	256.61	259.93	268.91	236.43	229.61
С	Approved (C=A-B)	1,487.89	1,554 <mark>.3</mark> 4	1,617.93	1,725.89	1,811.21

Table No: 3.15Approved: Additional Interest on Pension Bonds

The amounts indicated in the above table are estimates only. Any excess or shortfall compared to the above-approved figures is passed through to Discoms at the end of each year when the details of actual amounts payable are available. APGENCO's reply on payment of its contributions to the P&G Trusts is completely evasive, and it should honour its statutory obligations without fail.

### **Tariff Petition Fee, Publication & Related Expenses**

66. APGENCO stated that, as per Clause No. 70 of CERC Regulation 2019, the application filing fee and the expenses incurred on publication of notices of the application for approval of tariff may, at the discretion of the Commission, be allowed to be recovered by the generating company. After examination of the submissions, the Commission is not inclined to approve the application fee and related expenses of Rs. 2.50 crores claimed by APGENCO. The same shall be met from its profit.

#### Late Payment Surcharge

67. APGENCO stated that the beneficiary distribution licensee(s) shall open and maintain a revolving Letter of Credit, and the conditions in Clause 16.1 of APERC Regulation 1 of 2008 shall apply thereupon. If bill payment is delayed beyond two months of billing, a late payment surcharge of 1.25% per month will be applicable as per Clause 16.2 of APERC Regulation 1 of 2008.

**Sri M. Venugopala Rao** stated that APGENCO's request may be permitted if payment of bills is delayed beyond two months,

**Commission's Decision:** The Government of India issued the Electricity (Late Payment Surcharge and Related Matters) Rules, 2022. As per Rule 6, a distribution licensee shall maintain unconditional, irrevocable and adequate payment security mechanism. In case of non-maintenance of payment security mechanisms, generating companies shall regulate the power supply to the distribution licensee. Clause 3.1.14 of the PPA approved by the Commission in its Order dated 06.03.2024 dealing with "Payment Mechanism" provides that APGENCO shall present the bills to the Designated Officer of DISCOMS for payments. The Payments for such bills raised shall be made within 60 days by DISCOMS through a revolving Letter of Credit (LC) to be opened in favour of APGENCO to cover one-month receivables valid for the term of the PPA. LPS Charges as per the MoP guidelines shall be applicable. Clause 3.1.15 "Surcharge Due on Late Payment" provides that in case the payment of any bill for charges payable under these regulations is delayed beyond a period of 60 days from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by generating company and maximum of 15% per annum subject to any Notification/Regulation issued by Ministry of Power (MOP). APGENCO stated that because of accumulated dues from DISCOMS, it could not maintain coal stocks as per norms. Therefore, the Commission directs the DISCOMS that the payments to APGENCO shall be made as per the PPA approved by the Commission by its order dated 06.03.2024. Any violation of this direction entitles the APGENCO to initiate proceedings under Section 142 of the Electricity Act before this Commission besides regulating power supply as per Rule 6 of the Electricity (Late Payment Surcharge and Related Matters) Rules, 2022.

### Annual Fixed charges and Other charges

68. Based on the discussion above, the annual fixed charges determined for each station/stage and other charges details are shown in Annexures G1 to G5. The summary of Annual Fixed charges station/stage and other charges for the 5th control period approved by the Commission vis a vis the filings is shown in the tables below.

	ring. rinc				(		
S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
A	Thermal Power Stations	2,869.39	2,973.60	3,080.22	3,105.70	3,133.53	15,162.40
1	Dr.NTTPS I to III	906.85	979.92	1,054.06	1,075.29	1,097.49	5,113.61
2	RTPP-I	316.63	351.67	387.10	393.31	399.85	1,848.56
3	RTPP -II	325.70	333.40	341.40	349.71	358.36	1,708.57
4	Dr NTTPS - IV	336.00	339.71	343.68	347.90	352.40	1,719.69
5	RTPP III	196.94	199.37	201.95	204. <mark>6</mark> 9	207.60	1,010.55
6	RTPP - IV	787.27	769.53	752.03	734.80	717.83	3,761.46
В	Hydro Electric Stations	725.76	770.46	816.61	844.54	874.03	4,031.40
7	Sileru	296.14	319.42	343.34	355.17	367.67	1,681.74
8	NS - RCPH	29.09	32.82	36.62	37.62	38.67	174.82
9	Srisailam	2 <mark>47</mark> .43	260.68	274.44	285.41	296.94	1,364.90
10	PABR	15.83	16.96	18.11	18.54	19.00	88.44
11	Chettipeta	2.33	2.45	2.57	2.65	2.75	12.75
12	NSTP HES	54.83	54.20	53.60	53.02	52.48	268.13
13	TB- Machkund	80.11	83.93	87.93	92.13	96.52	440.62
A+B	Annual Fixed Charges	3,595.15	3,744.06	3,896.83	3,950.24	4,007.56	19,193.84
С	Pension Liability	1,602.94	1,647.31	1,691.49	1,742.78	1,784.13	8,468.65
D	Petition fees and expense	2.50					2.50
E=A +B+ C+D	Total	5,198.09	5,391.37	5,588.32	5,693.02	5,791.69	27,662.4

# Table No: 3.16Filing: Fixed charges for the 5th Control Period (Rs. Cr)

	Approved: Fixed	charges	for the 5 <sup>th</sup>	<u>Control</u>	Period (Re	s. Cr)	
S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
A	Thermal Power Stations	2,484.81	2,511.30	2,553.50	2,599.66	2,649.82	12,799.09
1	Dr.NTTPS I to III	753.17	783.34	815.09	848.56	883.76	4,083.92
2	RTPP-I	270.00	280.11	290.77	302.00	313.81	1,456.68
3	RTPP -II	261.09	269.40	278.18	287.48	297.31	1,393.46
4	Dr NTTPS - IV	278.95	282.70	286.81	291.34	296.29	1,436.08
5	RTPP III	163.59	154.37	157.39	160.68	164.23	800.25
6	RTPP - IV	758.01	741.39	725.27	709.60	694.43	3,628.69
В	Hydro Electric Stations	621.26	643.85	667.03	692.17	718.63	3,342.94
7	Sileru	249.47	259.39	269.81	280.77	292.30	1,351.74
8	NS - RCPH	24.59	25.57	26.60	27.68	28.81	133.24
9	Srisailam	209.20	217.79	226.81	236.28	246.22	1,136.32
10	PABR	13.77	14.13	14.51	14.91	15.34	72.65
11	Chettipeta	2.48	2.49	1.89	1.98	2.07	10.92
12	NSTP HES	50.64	49.99	49.38	48 <mark>.</mark> 79	48.22	247.02
13	TB- Machkund	71.10	74.49	78.04	81.76	85.66	391.05
<b>A+B</b>	Annual Fixed Charges	3,106.07	3,155.15	3,220.54	3,291.82	3,368.45	16,142.03
С	Pension Liabilities	1,487.89	1,554.34	1,617.93	1,725. <mark>8</mark> 9	1,811.21	8,197.26
D	Petition fees and expense	0					.00
E=A+ B+C+ D	Total	4,593.96	4,709.49	4,838.47	5,017.72	5,179.66	24,339.30

Table No: 3.17Approved: Fixed charges for the 5th Control Period (Rs. Cr)



#### CHAPTER-IV

#### **DETERMINATION OF ENERGY CHARGES**

- 69. In this chapter, the Commission, while examining the tariff filings regarding energy/variable charges, has considered all the views/objections/suggestions expressed by the stakeholders in writing during public hearings, which have been elaborated below to the extent they are relevant to the subject matter.
- 70. APGENCO stated that the energy/variable charges for the energy supplied from the thermal generating stations were computed based on the operating norms specified in the Regulation and in accordance with the provisions of Clause 13.1 of the Regulation considering the actual landed cost and the GCV of fuels during the 2nd quarter of FY 2023-24. That Dr NTTPS Stages I, II and III have served for 45 years, 35 years and 30 years, respectively. The Commission permitted the Heat rate of 2,550 kcal/kWh for Dr NTTPS Stage-I, II, III, i.e. (6X210 MW) in the order dated 29/04/2019 in O.P.No.35 of 2018, and the same is proposed to be continued. For all the 210 MW & 500 MW units of Dr. MVR RTPP Stage-I, II & III and Dr. NTTPS-Stage-IV, the Station Heat Rate, the Auxiliary Consumption and the Specific Fuel Oil Consumption were considered as per Clause 11 of the APERC Regulation 1 of 2008. That for Dr MVR RTPP Stage-IV (1X600 MW), the Commission adopted the operating norms specified by CERC for 600 MW coal-based thermal units in the CERC Tariff Regulations, 2019, in the order dated 31/12/2020 in O.P. No.35 of 2018 and O.P. No. 33 of 2019 as the APERC Regulation 1 of 2008 does not specify the parameters for 600 MW units and the same is proposed. Accordingly, APGENCO adopted the following operating norms to compute the Energy Charges /Variable costs of the thermal power plants.

Finings: Operating Norms of Thermal Power Plants for 5° CP						
Operating Norm	Dr.NTTPS -O&M	RTPP Stages I,II,III	Dr.NTTPS -IV	RTPP-IV		
Capacity (MW)	6 x 210	5 x 210	1 x 500	1 x 600		
Target PLF (%)	80	80	80	85		
Station Heat Rate(kcal/kWh)	2550	2500	2450	2390		
Auxiliary Consumption (%)	9.0	9.0	7.5	5.75		
Sp. Oil Consumption (ml/kwh)	2.0	2.0	2.0	0.5		

Table No. 4.1Filings: Operating Norms of Thermal Power Plants for 5th CP

71. Based on the above submission, the variable/energy charges estimated by APGENCO are shown in the table below.

Filings: Energy Charges/Variable cost					
Station	Energy Charges (Rs./kWh)				
Dr.NTTPS-I,II,III	4.44				
Dr.NTTPS-IV	4.17				
RTPP-I, II, III	4.44				
RTPP IV	4.11				

Table No.4.2

AGENCO stated that for each subsequent year, the base rate of energy charges will be the energy charge as adjusted and applicable for the last three months of the preceding financial year; such rates will continue to be subject to adjustment based on the actual landed cost and Gross Calorific Value of the fuels.

APGENCO has further stated that incentives for generation beyond the Target Plant Load Factor for Thermal generating stations and the Secondary Energy Charges for generation beyond the design energy for Hydel generating stations will be claimed annually at the rates specified in APERC Regulation 1 of 2008.

### Views/objections/suggestions

72. Sri M. Venugopala Rao stated that the energy charges shown by APGENCO are far excessive, and the basis for projection of such variable charges for the next financial year is not explained by it, except saying that they are "subject to adjustment based on the actual landed cost and Gross Calorific Value of the fuels." That the Commission has liberally fixed various normative parameters for the loss of coal and GCV in the respective PPAs of the plants; as such, GCV of fuels should be allowed as per normative parameter or actual, whichever is lower. While allowing the landed cost of fuels claimed by GENCO, DISCOMs are expected to examine the justifiability of the cost, considering prudent costs for mode of transportation of fuels through real competitive bidding, quality/grade of coal as per allocations made, etc.

**Berry Alloys & Others** stated that the Petitioner has significantly exaggerated the Price of primary fuel (coal) for the projection of ECR for each year of the Control period FY 2024-29. That the Operational norms of SHR, Auxiliary Energy consumption, and Specific Oil consumption must be approved following the CERC Tariff Regulations for FY 2024-29. By referring to the energy market

dynamics, domestic coal supply demand, and measures of CIL to handle the demand for coal, they stated that the Energy Charge Rate during the FY 2022-23 and initial half of FY 2023-24 although remained at an all-time high, but the said situation is likely to ease out given the strengthening coal sector reducing reliance on imported coal in the time to come. Therefore, the Commission may approve energy charges as approved in the RST Order for FY2023-24.

**APGENCO's Response:** The coal companies increased the notified coal base price several times from FY 2019 to 2023, abnormally increasing the landed cost of coal. In the MYT filings for the 5th control period, APGENCO has arrived at variable charges for its plants based on the actual landed cost and GCV of coal received at the respective power plants during Q-2 of FY 2023-24. Hence, the Commission may revise the variable charges of APGENCO thermal plants for the FY 2024-25 as filed by APGENCO in the O.P.No.79 of 2023.

### In its counter on behalf of DISCOMS, APCPDCL stated:

(i) **That** in MYT Order for the 4th CP, APERC directed APGENCO to reduce the Station heat rate and auxiliary consumption by implementing the recommendations of Steag Energy Services India Pvt. Ltd. Further, if the actual station heat rate was less than 2550 kCal/kWh, the APGENCO ought to have considered such a lower station heat rate for admitting Fuel Cost Adjustment (FCA) bills for Dr. NTTPS-I, II & III. Despite that, APGENCO continues to claim 2550 Kcal/kWh as the station heat rate without any improvement in auxiliary consumption regarding 210 MW units.

**APGENCO's Response:** The Commission considered an SHR of 2550 kcal/kWh for the old power stations working beyond their normal life expectancy and requiring exceptional consideration. The actual SHR for Dr. NTTPS-I, II, and III was 2581 kcal/kWh during FY 2022-23 and 2553 kcal/KWh during FY 2023-24. The present performance of the plants is after implementing many of Steag Energy Services' recommendations.

(ii) That due to the provision of higher specific oil consumption (2ml/kWh) to APGENCO stations (except RTPP-IV), APDISCOMS are losing considerable amounts irrespective of their actual oil consumption. Hence, a norm of 0.5

ml/kWh as per CERC regulations 2019, may be considered for specific oil consumption.

**APGENCO's Response:** The specific oil consumption has been proposed as per the APERC Regulation 1 of 2008 and the previous tariff order of the Commission. Due to their operation at the technical minimum loads and their vintage, the specific oil consumption must be allowed at 2ml/kWh for the 210 and 500 MW plants. In any case, the variable charges are limited to actuals if actuals are lower than the normative.

(iii) **That** APGENCO selectively adopted certain CERC norms such as O&M expenses, ROE, etc. The Commission may also consider CERC norms for SHR, Auxiliary Energy consumption, Oil consumption, target availabilities, target PLFs, and GCVs of coal "on received basis" instead of "as fired basis" for billing purposes, etc.

**APGENCO's Response:** The provisions of Regulation 1 of 2008 provide for the adoption of CERC norms where the APERC Regulations have no provisions relating to certain aspects.

(iv) **That** in APGENCO MYT Order for FY 2019-24, APERC directed APGENCO to explore long-term contracts with Coal producing companies through competitive bidding, duly ensuring that the Landed Price of the coal shall not increase the indicative prices. However, it is understood that APGENCO has yet to make any efforts to reduce the landed price of coal. Had the APGENCO made efforts in this direction, APDISCOMs would have benefitted considerably in terms of power purchase cost, thereby reducing the burden on the end consumers in the form of FPPCA.

**APGENCO's Response:** APGENCO has an FSA for coal with MCL and SCCL based on the prices notified by the Government of India. APGENCO has been making all efforts for an economy in coal prices by coordinating with CIL, MCL and SCCL by swapping FSA quantities at notified prices, whereby the additional costs of procuring coal through MoU have been avoided. The increase in coal prices is due to the revision of notified coal prices by MCL / SCCL.

(v) That in APGENCO MYT Order for FY 2019-24, APERC directed APGENCO to optimize the variable cost by following the guidelines issued by the Central Electricity Authority (CEA) in its letter dated 08.06.2016 the

methodology for flexibility in utilisation of domestic coal for reducing the cost of power generation. However, it is understood that APGENCO still needs to take steps to reduce the cost of power generation.

**APGENCO's Response:** APGENCO, as the designated nodal agency for the flexi coal scheme since 06.04.2020, has diverted coal from SDSTPS to RTPP during FYs 2022-23 and 2023-24 as per the requirement indicated by the SLDC. Unplanned coal diversions are being avoided to the extent possible to reduce additional logistic expenses and to reduce the landed cost of coal.

(vi) That APGENCO has not proposed sharing any financial gains with APDISCOMs on account of better Station Heat Rate, Auxiliary Consumption, Fuel Consumption, loan restructuring, CDM (Clean Development Mechanism) benefits, and Non-Tariff income.

**APGENCO's Response:** Any savings in variable cost of APGENCO as a whole will be passed on to the Discoms as provided in Clause 3.1.3 of the PPA.

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

73. Considered the objections to APGENCO's claims on energy charges. The relevant clause 13.1. (a) of Regulation 1 of 2008, which provides for a formula for determining the energy charges for the thermal generating stations, is extracted below for perusal.

"a. Energy charges shall cover fuel costs and shall be worked out on the basis of ex-bus energy sent out corresponding to scheduled generation as per the following formula:

Energy Charges (Rs.) = Rate of Energy Charges in Rs/kWh X Ex-bus energy sent out corresponding to scheduled generation for the month in kWh

#### Where,

Rate of Energy Charges (REC) shall be the sum of the cost of normative quantities of primary and secondary fuel for one kWh of ex-bus energy sent out corresponding to scheduled generation and shall be computed as under:

$$REC = \frac{100\{Pp \ x \ (Qp)n + Ps \ X \ (Qs)n\}}{(100-(AUXn))}$$
(Rs. /kWh)

Where,

**Pp** = Landed cost of primary fuel namely coal or lignite or gas or liquid fuel in Rs/Kg or Rs/cubic-meter (m3) or Rs. /litre, as the case may be

**(Qp)n** = Quantity of primary fuel required for generation of one kWh of electricity at generator terminals in Kg or litre or m3, as the case may be, and shall be computed on the basis of normative Gross Station Heat Rate (less heat contributed by secondary fuel oil for coal/lignite based generating stations) and gross calorific value of coal/lignite or gas or liquid fuel as fired.

**Ps** = Landed cost of Secondary fuel oil in Rs. / ml

**(Qs)n** = Normative Quantity of Secondary fuel oil in ml/kWh as per clause 11.1.4, as the case may be, and

**AUXn** = Normative Auxiliary Energy Consumption as percentage of gross generation as per clause 11.2.2, as the case may be.

b) Adjustment of rate of energy charge (REC) on account of variation in price or heat value of fuels. Initially, gross calorific value of coal/lignite or gas or liquid fuel shall be taken as per actuals of the preceding three months. Any variation shall be adjusted on month to month basis on the basis of gross calorific value of coal/lignite or gas or liquid fuel received and burnt and landed cost incurred by the Generating Company for procurement of coal/lignite, oil, or gas or liquid fuel, as the case may be. In case of any dispute, an appropriate application in accordance with the Conduct of Business Regulations shall be made before the Commission.

c) Landed Cost of fuel The landed cost of fuel shall include price of fuel corresponding to the grade/quality of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail/ road/ pipeline or any other means, and, for the purpose of calculation of energy charges, shall be arrived at after considering transit losses as per clause 11.1.5

11.1.5 Transit losses a. Transit losses for coal-based generating stations, as a percentage of quantity of coal dispatched by the coal supply company during the month, shall be as given below:

(i) Pit head generating stations- 0.3%

(ii) Non-pit head generating stations- 0.8% "

The Commission carefully examined all objections with reference to the above clause for the computation of energy charges. The Regulation does not fix any limitation in claiming actual energy charges incurred by GENCO subject to adjustments based on the actuals on a month-on-month basis. But this is a significant component of the power cost per unit and requires prudent checks at every stage, right from loading at the coal mines loading point to unloading and firing point at the GENCO coal-yard. Hence, the norms have been devised. If the norms are too tight, it will significantly cause loss to the GENCOs. Accordingly, the norms have been fixed after due public consultation process, and the norms for older plants can't be changed unilaterally. The norms specified in the APERC Regulation apply to all units till the Regulation is amended. Even if amendments are proposed, the plant's vintage status is to be considered while fixing the revised norms. The CERC also follows a similar approach while revising the Tariff Regulations for every control period. The majority of the APGENCO plants have already served their useful life. Considering this, Dr NTTPS's SHR has been revised from 2500 kcal/kWh to 2550 kWh in the MYT Order for the 4th CP, subject to the condition that if the actuals are less than the revised norm, the actuals are to be considered for billing. The Commission does not find any reason to revise the same and accordingly proposes to continue the same for DR NTTPS Stages I, II and III. As per APERC Regulation 1 of 2008, the norms are to be adopted for the remaining power plants. For the new unit RTPP stage IV, the Commission already adopted the norms as per CERC Tariff Regulations in terms of clause 10 of APERC Regulation 1 of 2008. Accordingly, the norms approved by the Commission for the computation of energy charges as per clause 13.1 are shown in the table below:

<b>Operating Norm</b>	Dr.NTTPS	RTPP Stages I,II,III	Dr.NTTPS -IV	RTPP- IV
Capacity (MW)	6 x 210	5 x 210	1 x 500	1 x 600
Target PLF (%)	80	80	80	85
Station Heat Rate(kcal/kWh)	2550	2500	2450	2390
Auxiliary Consumption (%)	9.0	9.0	7.5	5.75
Sp. Oil Consumption (ml/kwh)	2.0	2.0	2.0	0.5

<b>Approved:</b> O	perating Norms	for 5th	CP (Rs. Cr	)

Table No. 4.3

However, after examining the FCA claims for the last five years and the provision of the Regulation, given a large variance over the five-year period, the Commission is not inclined to finally determine the energy charges for the 5th control period. The DISCOMS shall pay the energy charges for APGENCO's thermal stations, complying with clause 13.1 of APERC Regulation 1 of 2008.

The APGENCO, while submitting the bills, should furnish the information to DISCOMS in format H attached to this Order. Failing to provide the information as per the format shall be construed as an incomplete bill submission. Accordingly, the DISCOMS may stop paying the bills till the APGENCO furnishes the required information. Section 86.1 (b) of Electricity Act, 2003 provides for SERCs to regulate the electricity purchase and procurement process of distribution licensees, including the price at which electricity shall be procured from the generating companies or licensees or other sources through agreements for the purchase of power for distribution and supply within the State; Hence, by allowing the DISCOMs to pay APGENCO as per Regulation 1 of 2008 based on the actuals, the Commission fixes the ceiling price per unit as shown in the table below:

#### Table No.4.4

Approved: Ceiling of Energy Charges/Variable Rates for 5<sup>th</sup> CP (Rs. per unit)

Sr.No.	Stations	Rs./kWh
1	Dr. NTTPS	4.26
2	Dr. NTTPS-IV	4.01
3	RTPP Stage-1	4.40
4	RTPP Stage-11	4.400
5	RTPP Stage-III	4.40
6	RTPP Stage-IV	4.10

The ceiling price is fixed based on the Q1 FCA of FY 2024-25 and the FCA data for FY 2023- 24. In case, there is any increase in the landed cost of coal due to notification by coal companies or freight charges by railways, the ceiling prices shall be increased proportionately to the percentage of hikes notified in the notifications. The fuel cost adjustment bills in accordance with Regulation 1 of 2008 shall be paid subject to a ceiling approved in this order. Variation over and above the ceiling approved is subject to scrutiny and approval of the Commission for payment. The payment should be limited to a ceiling price until the Commission approves such an excess variation. The ceiling price will be revised based on APGENCO's annual performance review. Accordingly, APGENCO should file the yearly performance petition with the Commission every year once the audited figures are available.

# 74. The CERC directions as produced below shall be strictly complied with with regard to sampling and testing of GCV at the receiving end of generating stations.

"As per the directions of the Hon'ble High Court of Delhi, the CERC vide its order dated 25.1.2016 in Petition No. 283/GT/2014 has decided as under:

(a) There is no basis in the Indian Standards and other documents relied upon by NTPC etc. to support their claim that GCV of coal on as received basis should be measured by taking samples after the crusher set up inside the generating station, in terms of Regulation 30(6) of the 2014 Tariff regulations.

(b) The samples for the purpose of measurement of coal on as received basis should be collected from the loaded wagons at the generating stations either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part1/Section 1)-1964 before the coal is unloaded. While collecting the samples, the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples, the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS 436(Part 1/Section 1)-1964, which has been elaborated in the CPRI Report to PSERC."

- 75. The GCV shall be calculated at the receiving generating station for the computation of energy charges/variable cost as per the above sampling procedure duly considering the minimum margin recommended as per MoP notification dated 18.10.2017 for loss of GCV measured at wagon top at unloading point till the point of firing in a boiler.
- 76. The APGENCO, in coordination with the DISCOMS, shall optimize the variable cost by following the guidelines issued by the Central Electricity Authority (CEA) in its letter dated 08.06.2016 on methodology for flexibility in the utilisation of domestic coal for reducing the cost of power generation. Any diversion of coal from station to station shall strictly follow the guidelines communicated by the CEA rather than on an unplanned basis, increasing the landed cost of coal. Suppose the diversion of coal is done without following the CEA guidelines. In that case, all such cases shall be brought to the notice of the Commission explaining the circumstances, necessity and price implication on variable cost due to such unplanned diversions by

DISCOMS based on the information obtained from APGENCO in the format shown in Annexure H.

- 77. APGENCO shall submit its action plan to comply with the CEA (Flexible operation of coal-based thermal generating units) Regulations,2023, within two months of receiving this Order.
- 78. Violation of any of the directions issued by the Commission in this should attract action under Sections 142 and 146 of the Electricity Act, 2003.
- 79. APGENCO is entitled to recover the tariff as determined in this order from the respondents in proportion to the power supplied to them.
- 80. In terms of the decisions/directions issued supra, the OP is disposed of.



#### ANNEXURE A1 The HINDU and The Hans India (AP Edition) Dt:11.12.2023

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7.	Sileru	725	296.14	319.42	343.34	355.17	367.67
8.	NS - RCPH	90	29.09	32.82	36.62	37.62	38.67
9.	Srisailam	770	247.43	260.68	274.44	285.41	296.94
10.	PABR	20	15.83	16.96	18.11	18.54	19.00
11.	Chettipeta	1	2.33	2.45	2.57	2.65	2.75
12.	NSTP HES	50	54.83	54.20	53.60	53.02	52.48
13.	TB- Machkund	117.6	80.11	83.93	87.93	92.13	96.52
Othe	r Charges						
	Pension Liability.		1600.44	1647.31	1691.49	1742.78	1784.13
	Petition fees and		2.50				

TOTAL ANNUAL FIXED CHARGES		5198.10	5391.36	5588.32	5693.02	5791.69
	Petition fees and expenses	2.50	-	-	-	-
	Pension Liability.	1600.44	1647.31	1691.49	1742.78	1784.13

#### Energy Charges / Variable Cost for Thermal Power Stations:

The following are the Energy Charges / Variable Costs for the Thermal Power Stations for April 2024 and FY 2024-25 subject to adjustment based on the actuals landed cost and Gross Calorific Value of the fuels.

ENERGY CHARGES 2024-25					
	Rupees / kWh				
Station	Energy Charges				
Dr.NTTPS-I, II, III	4.44				
Dr.NTTPS-IV	4.17				
Dr.MVR. RTPP-I, II, III	4.44				
Dr.MVR. RTPP IV	4.11				

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 filings of the APGENCO on 01-02-2024 from 10.30 AM to 1.00 PM and from 2.00 PM to 4.30 PM.

The schedule of the hearing is as given below:

Date: 01.02.2024 (Thursday)

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 APGENCO
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 04:00 PM	Views/ objections/ suggestions by the Public
04.00 PM to 04.30 PM	Response of APGENCO to the objections

Note: Depending on the response and participation of the objectors, the above schedule will be modified.

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

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

8. The representative of the APGENCO shall be present at the office of the DE/EE (Operation) of DISCOM concerned on the date of the hearing. If any of the DE/EE's offices receive requests from persons who have not earlier communicated their intent to make their submissions in person, on the 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. APGENCO 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 DE/EE concerned.

9. The Commission will sit in the Conference Hall of the APEPDCL at Visakhapatnam on the day of the public hearing.

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

/1	000.00	
90	352.40	Date : 18.12.2023 Sd/- MANAGING DIRECTOR Place : Vijayawada APGENCO
69	207.60	Place : Vijayawada APGENCO
80	717.83	DIPR No.2543PP/CL/ADVT/1/1/2021-22, Dt: 15/12/2023

- m

#### **ANNEXURE A2** Sakshi and Eenadu (AP Edition) dt: 10.12.2023

ෆි0ර්බ්ඞ්රෝ පෙරයිුලිබ්න් බහදූීඑඞ් ටිෆ්ා,ම්ඩව් ජිනාබුබ් (APERC) තෘව තිබාදුිටවර డి.నం. 11–4–660, 4వ అంతస్తు, సింగరేణి భవన్, రెడ్ హిల్స్, హైదరాబాద్ – 500004 ఇ–మెయిల్: commn-secy@aperc.in

ఆంధ్రప్రదేశ్ పవర్ జనరేషన్



అంధ్రప్రదేశ్ పవర్ జనరేషన్ కార్పొరేషన్ లిమిటెడ్, 5వ కంట్రోల్ పీరియడ్ కోసం తమ పవర్ ప్లాంట్లలో ఉత్తత్తయ్యే విద్యుత్ వ్యాపారం కోసం ప్రతిపాదిత మల్లీ ఇయర్ టారిఫ్ (MYT) ఫైలింగ్ ఆంద్రప్రదేశ్ ఎలక్రిసిటీ రెగ్నులేషన్ కమిషన్ సమక్షంలో దాఖలు చేయఐదిందని అందరికీ ఇందుమూలంగా తెలియజేయదమైనది మరియు ఈ టారిఫ్ అప్లికేషన్ ఓ. పి. నెంబర్. 79 ఆఫ్ 2023లో గౌరవనీయ కమిషన్ వారిచేే రికార్డులోనికి తీసుకొనబడినది.

2. దరఖాన్తు కాపీలు - టీఫ్ ఇంజనీర్ (కమర్షియల్) వారి కార్యాలయం ఏపీ జెన్కో, 4వ అంతన్ను, విద్యుత్ సౌధ, గుణదల, విజయవాద వద్ద మరియు 1) చీఫ్ ఇంజనీర్ (O&M) దాక్టర్ ఎన్.టి.టి.పి.ఎన్/ ఏపీ జెన్కో/ ఇబ్రహీంచట్నం/ ఎస్టీఆర్ జిల్లా, 2) బీఫ్ ఇంజనీర్ (O&M) దాక్టర్. ఎం. పి. ఆర్. ఆర్టిపిపి/ ఏపీ జెన్కో/ విప్ రెడ్డి నగర్/ దాక్టర్ వైయస్ఆర్ కడప జిల్లా, 3) బీఫ్ ఇంజనీర్ (O&M) ఎస్.ఆర్.బి.పి.హెచ్/ డ్రీశైలం తూర్పు/ నంద్యాల జిల్లా, 4) చీఫ్ ఇంజనీర్ (O&M) ఎల్.ఎన్.హెచ్/ మోతుగూడెం/ అల్లూరి సీతారామరాజు జిల్లా, 5) నూపర్ ఇంటిండింగ్ ఇంజసీర్ సివిల్ /రోలచరం/ హైడ్రో ఎలక్ట్రీక్ ప్రాజెక్ట్/ H.No. 73-19-3/1, శ్రీనివాన ఏట్రిల్ 2024 మరియు FY 2024-25కి సంబంధించిన భర్మల్ పచర్ స్టేషన్ల కోసం ఎనర్జీ ఫార్జీలు గార్డెన్స్/ ఏపీ అప్పారావు రోడ్డ/ రాజమండి కార్యాలయాలలో కూడా లభిస్తాయి అసక్తి గల వ్యక్తులు నదరు / వేరియబుల్ ఖర్చులు, ఇంధనాల వాస్తవ ధర మరియు స్థూల క్యాలరీ విలువ ఆధారంగా కార్యాలయాలలో వేడిలో అయినా కార్యాలయ పేతులో ఉచితంగా సదరు ఫైలింగ్ ను తనిఖీ నరుబాటుకు లోబడి ఉంటాయి. చేసుకోవచ్చును/ చదువుకోవచ్చును మరియు వాటిని సోట్ చేసుకోవచ్చును. ఈ ప్రతిపాదనలు www.apgen co.gov.in లో లభిస్తాయి మరియు వాటిని www.aperc.gov.in నుండి యాక్సెస్ చేసుకోవచ్చును. ఈ ఫైలింగ్ కాపీని రూ. 100/- దే పే ఆఫీసర్, APGENCO, విద్యుత్ సౌధ, విజయవాద పేరున డిమాంద్ దాఫ్ట్ దూవంలో చెల్లించి ప్రచురణ తేదీ నుండి పైన తెలిపిన కార్యాలయాల నుండి పొందవచ్చును. అంగ్రీష్ మరియు తెలుగులో మల్లీ ఇయర్ టారిఫ్ నమ్మరీని కూడా కాపీకీ రూ. 10/- ది పే ఆఫ్టీనర్, APGENCO, విద్యుత్ సౌధ, విజయవాడ పేరున డిమాండ్ డ్రాఫ్ట్ రూపంలో చెల్లించి పొందవచ్చున

3. ఈ ఫైరెంగ్స్ పై ఏవైనా అభిప్రాయాలు/అభ్యంతరాలు/సూచనలు ఉంటే నపోర్టింగ్ మెటీరియల్ లో పాటు 18.01.2024 న సా5:00 గం. లకు లేదా ఆ లోగా స్వయంగా కానీ ఇమెయిల్ ఐడి œ-comml@apgen-co.govin కి కానీ రిజిస్టర్ పోస్టు ద్వారా కానీ బీఫ్ ఇంజిసీర్ (కమర్షియల్) APGENCO. 4వ అంతన్ను విద్యుత్ సౌధ, గుణదల్, విజయవాడ-520004, Ph 0866-2526911 వారిక్ లేదా పైన తెలిపిన కార్యాలయాలకు చేరేలా పంపవచ్చును. వాబి కా<mark>పీ</mark>ని కమేషన్ నిక్రటలీ, APERC వారికి ఈమెయిల్ ద్వారా లేదా పైన తెలిపిన హెడ్డింగ్ లోని చిరునామాకి పోస్ను ద్వారా వంపనచ్చును. అభిప్రాయాలు/ అభ్యంతరాలు/ సూచనలపై తగు విధంగా సంతకం చేయాలి మరియు మాచనలు/అభ్యంతరాలు/సంహాలపై పంపే వ్యక్తి(లు) పూర్తి పేరు మరియు పోస్టల్ చిరునామా ఉండవలెను. అభిప్రాయాలు/అభ్యంతరాలు/సూచనలు ఏవేని సంస్త పూర్తి విరు మరియు వాస్టర బరునాయా బరుజురాలు, అంటాయాల్యాంక్యాలర లుగారాటులు అంగారాటు లేదా ఏంటిటీ తరపున దాఖలు చేస్తే, వారు ఆర్గనైజేజీవ్ లేదా ఏంటిటీ పేరును పేర్పొనచలెను. అభ్యంతరం, సా4:30 చరకు కమిషన్ విచారిస్తుంది. తెలిపే వ్యక్తి వీడియో కాన్చరెన్న్ ద్వారా స్వయంగా తెలవదలెస్టే రానిని కూడా నిర్ణిష్టరగా తెలియజీయనలెను.. వివారణ ఆరిగే షద్యూలు దిగువన తెలిపిన విధంగా ఇవ్వజ అభిప్రాయాలు/ అభ్యంతరాలు/మాచనలు ఓవర్రరీఫ్గా దిగువ తెలిపిన స్టీటీమెంబిద్వారా జతపరచబడాలి.....తద్దం ఆరిగే షద్యూలు దిగువన తెలిపిన విధంగా ఇవ్వజ

సంప్రదించ	అభిప్రాయం	APGENCO	కార్యాలయం	అభ్యంతరం తెలిపే వ్యక్తి
వలసిన	(లు)/	్రపతిపాద <mark>న</mark> లపై	వద్ద	న్వయంగా 🚽
నెంబరుతో	అభ్యంతరం	అభ్యంతరాలు	అభ్యంతరం	వినాలనుకుంటున్నారా
అభ్యంతరం	(లు)/	తెలిపే వ్యక్తిచే	కాపీ డెలివరీ	(అవును/ కాదు)
මවීඩ	నూచన(లు)	దాఖలు	రుజువు	అవును అయితే
వ్యక్తి పేరు	యొక్క	చేయబడాలి	සම	వీడియో కాన్మరెన్స్—
పూర్తి	సంక్రిప్త		చేయబడింది	ద్వారా న్వయంగా
చిరునామా	విచరణ		(అవును	అతను/ఆమె తమ
(వాట్సప్ నం			/ව්යා)	ఏజ్ఞప్తలను ఎక్కడ
ఈమెయిల్				దాఖలు చేయాలను
හයී)				కుంటున్నారో నదరు
				కార్యాలయం పేరును
				తెలియజేయండి

గమనిక: గడువు తేదీ తర్వాత అందిన అభ్యంతరాలను కమిషన్ పరిశీలించదు.

4. APGENCO ప్రతి స్టేషన్/యూనిట్ వారీగా దాఖలు చేసిన 5వ నియంత్రణ వ్యవధి కోసం ప్రతిపాదిత టారిఫ్లు క్రింద ఇవ్వబడ్డాయి:

#### స్థిర ఛార్జీలు / ఎనర్జీ చార్జీల సారాంశం

02	్ ఎఎర్ స్టేషనల్ పొర్నక స్థ	ಂ ಘಂಜ್ಞ	ల నారాంశం	ဗြဝင္က သင္မဝဂ	1º 800.			చేసేందుకు తమ అభిప్రాయాన్ని గతంలో తెలియజేయని వ్యక్తుల నుండి ఎవరేని DE/EE
	వార్షిక స్థిర ఛార్జీలు						కార్యాలయాలకు అభ్యర్థుల నుండి అందితే సంబంధిత DE/EE నమోదైన వ్యక్తులందరినీ	
_						5%	్లు రూపాయలు	విచారించిన తరువాత విచారణ తేదీన వీడియో కాన్ఫరెన్స్ ద్వారా కమిషన్ కు ఆ విషయాన్ని
5.2	ం స్టేషన్	MW	2024-25	2025-26	2026-27	2027-28	2028-29	తెలియజేస్తారు. కమిషన్ అనుమతిస్తే అట్టి వ్యక్తులు తమ విజ్ఞవులను దాఖలు చేయచచ్చు. DIS- COM సహకారంతో APGENCO వారు సంబంధిత DE/EE కార్యాలయానికి వెళ్తునవనరం
థర్మ	ల్ పవర్ స్టేషన్లు							లేకుండా తమ ఇల్లు / కార్యాలయాల నుండి వీడియో కాన్ఫరెన్స్ ద్వారా తమ అభ్యంతరాలను
1.	Dr.NTTPS - I,II&III	1260	906.85	979.92	1054.06	1075.29	1097.49	సమర్పించేందుకు సాధారణ ప్రజలకు వీలు కలిగేలా మీటింగ్ లంక్ ను అందిస్తారు మరియు
2.	డా.ఎం.వి.ఆర్.RTPP- I	420	316.63	351.67	387.10	393.31	399.85	దానిని వార్తా పత్రికలలో ప్రచురిస్తారు.
3.	దా. ఎం. వి. ఆర్.	420	325.70	333.40	341.40	349.71	358.36	9. బహిరంగ విచారణలు జరిగే రోజులో విశాఖపట్నం వద్ద APEPDCL కాన్ఫరెన్స్ హాలులో కమిషన్ వారు ఉంటారు.
	RTPP - II							10. బహిరంగ విచారణలు ప్రత్యక్ష ప్రసారం చేయబడతాయి ప్రత్యక్ష ప్రసారం చేసే పద్దతి
4.	డాక్టర్ NTTPS - IV	500	336.00	339.71	343.68	347.90	352.40	మరియు విధానం ట్రింట్ ఎలక్ర్యానిక్ మీడియా ద్వారా విడిగా ప్రచురించబడును.
5.	దా. ఎం. వి. ఆర్. RTPP III	210	196.94	199.37	201.95	204.69	207.60	తేదీ: 18.12.2023 మేనేజింగ్ దైరెక్టర్
6.	దా.ఎం.వి.ఆర్.	600	787.27	769.53	752.03	734.80	717.83	స్థలం: విజయవాద APGENCO
	RTPP- IV							DIPR RO No.2543PP/CL/Advt/1/1/2021-22, Dt: 15.12.2023

206	ో ఎల్కక్రిక్ స్టేషన్లు						
7.	సీలేరు	725	296.14	319.42	343.34	355.17	367.67
8.	NS - RCPH	90	29.09	32.82	36.62	37.62	38.67
9.	శ్రీశైలం	770	247.43	260.68	274.44	285.41	296.94
10.	PABR	20	15.83	16.96	18.11	18.54	19.00
11.	చెట్టిపేట	1	2.33	2.45	2.57	2.65	2.75
12.	NSTP HES	50	54.83	54.20	53.60	53.02	52.48
13.	TB - మాచ్కుండ్	117.6	80.11	83.93	87.93	92.13	96.52
ಇತ	ర ఛార్జీలు						
	పెన్షన్ బాధృత		1600.44	1647.31	1691.49	1742.78	1784.13
	2855 2000		2 50		-	-	-

#### మరియు ఖర్చులు మొత్తం వార్నిక స్థిర ఛార్జీలు 5198.10 5391.36 5588.32 5693.02 5791.69 థర్మల్ పవర్ స్టేషన్ల కోసం ఎనర్జీ ఛార్జీలు / వేరియబుల్ ధర:

	ఎనర్జీ ఛార్జీలు 2024–25						
		రూపాయలు / kWh					
AT	స్టేషన్	ఎనర్జీ ఛార్జీలు					
	Dr.NTTPS - I,II,III	4.44					
	Dr.NTTPS - IV	4.17					
	ూ.ఎం.వి.ఆర్. RTPP- I, II, III	4.44					
	దా.ఎం.వి.ఆర్. RTPP IV	4.11					

5. ఫైలింగ్స్ కు నంబంధించి తమ ఉదేశాలు అభ్యంతరాలు నూచనలు దాఖలు చేసేందుకు రాష్ట్రవ్యాప్తంగా ఉన్న స్టేక్ హోల్డర్స్ అందరి కొరకు అవకాశం కల్పించేందుకు వీడియో కాన్ఫరెన్స్ ేఐహిరంగ విచారజలను కమిషన్ నిర్వహిస్తుంది. APGENCO ఫైలింగ్స్ ను 01.02.2024న ఉదయం 10:30గం నుండి మ1:00గం వరకు మరియు మ2:00గం నుండి

A CARLER CARD		-		
వి <mark>చార</mark> ణ జరిగే షెడ	హ్యాలు దిగువం	న తెలిపిన	విధంగా	ఇ <mark>వ్</mark> పబడినది:

GW. 01.02.2024 (10000-00)	
10:30 AM నుండి 10:35 AM వరకు	కమిషన్ కార్యదర్శి ప్రారంభ వ్యాఖ్యలు
10:35 AM నుండి 10:40 AM వరకు	గౌరవనీయ చైర్మన్, APERC వారి వ్యాఖ్యలు
10:40 AM నుండి 11:45 AM వరకు	APGENCO ద్వారా ప్రదర్శన
11:45 AM నుండి 01:00 PM వరకు	ట్రజల అభిప్రాయాలు/ అభ్యంతరాలు/ సూచనలు
01:00 PM నుండి 02:00 PM వరకు	భోజన విరామం
02:00 PM నుండి 04:00 PM వరకు	వ్రజల అభిప్రాయాలు/ అభ్యంతరాలు/ సూచనలు
04.00 PM నుండి 04.30 PM వరకు	అభ్యంతరాలపె APGENCO ప్రతిస్తుందన

గమనిక: స్టేక్ హోలర్స్ పాల్గానుట మరియు ప్రతిస్పందన పై ఆధారపడి షెడ్యూలు మారవచ్చును.

 వీడియో కాన్ఫరెన్స్ ద్వారా విచారించగోరు ఆనక్తి గల వృక్తులు ఆ విషయాన్ని APGENCOకు తగినంత ముందుగా తెలియజేస్తూ తమ ఉద్దేశాలు/అభ్యంతరాలు/నూచనలు సమర్పించుటకు వారు ఉద్దేశిస్తున్న DISCOM యొక్క ఎగ్జిక్యూటివ్ ఇంజనీరు/ డివిజనల్ ఇంజనీరు కార్యాలయం పేరు మరియు తేదీని సూచిస్తూ కమీషన్ కు కూడా కాపీ పంపాలి.

7. తమ ఉద్దేశాలు/అభ్యంతరాలు/సూచనలు సమర్పించుటకు నమోదు చేసుకున్న వ్యక్తుల పేర్లు రోజువారి జాబితాను కమిషన్ తమ వెబ్ సైట్ లో ఉంచుతుంది.

8. APGENCOకు సంబంధించిన బ్రతినిధులు సంబంధిత DISCOMకు చెందిన EE/DE 

	10. బహిరంగ విచారణలు ప్రత్యక్ష ప్రసారం చేయబడతాయి ప్రత్యక్ష ప్రసారం చేసే పద్ధతి	l
352.40	10. బహిరంగ విచారణలు ప్రత్యక్ష ప్రసారం చేయబడతాయి ప్రత్యక్ష ప్రసారం చేసే పద్ధతి మరియు విధానం ట్రింట్ ఎలక్వ్రాస్ మీడియా ద్వారా విడిగా ప్రచురించబడును.	l

#### ANNEXURE B LIST OF OBJECTORS

S1 No	Name of the Objector
1	M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, H.No.1-100/MP/101, Monarch Prestige, Journalists' Colony, Serilingampally Mandal Hyderabad - 500 032
2	Sri CH Babu Rao, Communist Party of India (MARXIST) AP Committee, H.No:27-30-9, CPI(M) State Committee Office, Akulavari Street, Governorpet, Vijayawada - 2.
3	Sri B Raja Sekhar, General Secretary, Andhra Pradesh Chambers of Commerce and Industry Federation, 40-1-144,3RD FLOOR, Corporate office Centre, M.G. Road, Vijayawada-520010
4	AP Genco Accounts Officers Association,
5	Sri Srinivas Rao Gandham, Consortium of Indian Farmers Association (CIFA)
6	Sri S Prathap, General Secretary, APSEB AEEA
7	Sri P Prathap Reddy, Secretary General, APSEB Engineers' Association
8	Counter-filed by APCPDCL
9	Sri Cherukuri Venugopal, Federation of Farmers Association
10	Berry Alloys Limited
·	शिक्तः प्रगतिसाधिका

#### ANNEXURE C AUDITOR CERTIFICATE



## TO WHOM SO EVER IT MAY CONCERN

This is to certify that M/S. Andhra Pradesh Power Generation Corporation Limited (APGENCO), Vijayawada, has incurred Capital Expenditure (CAPEX) on its power stations during years 2018-24 as mentioned below:

ABICIT	EGULATO (Rs. in Crs Additional Capex 2018-24 (up to 30.11.2023)
Station Name	
Sileru Complex	38.52
NSRCPH	4.61
SRBPH	16.20
PABR PH	0.87
Dr.NTTPS I, II, III	104.24
RTPP I	23.03
RTPP II	14.19
NSTPHES	17.77
Total	219.42

This certificate is given based on the records and information

produced and at the request of the company for onward submission to the Hon'ble APERC.

Date: 01-12-2023 Place: Eluru



ESHAPU BALA MANIKANTA &CO Chartered Accountants SESHAPU BALA MANIKANTA Proprietor: M.No.260079

D.No. 3A-3-8, Behind YMHA Hall, Flower Market Road, Eluru - 534 001 tbtaxaudit@gmail.com

#### ANNEXURE D1 REC INTEREST RATES STATEMENT

#### Annexure-A

#### **REC** Limited

Lending Rates effective from September 20, 2023 till further notification

A. On monthly rest basis, with 1 year reset (% p.a.)

SI. No	Scheme /Product Borrower		tate Secto vers/CPS		Private Sector Borrowers					
140		A++	A+	A	IR1					
1	Conventional Generation	10.40	11.15	11.40	10.90	11.15	11.40			
2	R&M of Conventional Generation (including Small Capex)	10.00	10.75	11.00	10.50	10.75	11.00			
3	Installation of Pollution Control Equipment's like FGD etc.	9.50	10.00	10.25	9.75	9.75 10.00 10				
4	Non-Conventional Generation- Renewable Energy (Wind and Solar).For other projects, refer to note no.8	8.95	9.45	9.70	9.20					
5	Transmission	9.50	10.00	10.25	10.00 10.25 10.					
6	Distribution	10.00	10.25	10.75	10.25 10.75 11.					
B. O	n monthly rest basis (%p.a.)									
1	Short Term Loan and Revolving	Bill Payn	nent Facili	ity (RBPF	-only for	state Sec	ctor)			
(a)	Tenor upto 6 months (with 3 months reset)	8.75	9.00	9.25	Please refer to Note					
(b)	Tenor>6 months upto 12 months (with 3 months reset)	9.00	9.25	9.50	No14	No14 for STL only				
2	Medium Term Loan (with no reset)	9.50	10.00	10.25	3					

#### Notes:

- 1. The revised interest rates as above will be applicable in respect of all disbursements made on or after September 20, 2023 till further notification.
- Interest rates for State Sector/CPSUs/JVs-Grade B, C & D borrowers shall be higher by 25 bps, 50 bps and 75 bps respectively than the interest rates applicable to Grade A.

•Interest rates for Private Sector-Grade IR-4 & IR-5 borrowers shall be higher by 25 bps & 50 bps respectively than the interest rates applicable to Grade IR-3.

- Interest rate for Loans with "Reset after every 3 Years" shall be 25 bps higher than the rates of Term Loans with "Reset after every 1 year".
- 4. I year reset option is available for all schemes/products, where loan documents are executed on or after 01.04.2021.
- 5. The option of "Reset after every 10 years" is available only for loans sanctioned before 01/09/2020 and the Interest rate shall be 15 bps higher than the rates of Term Loans with "Reset after every 3 years".

## ANNEXURE D2 PFC INTEREST RATES STATEMENT

rt rt Bay 204 3 60,43,204 3 57,03,019 3 57,019 3 99,46,027 3 33,27,005 3 33,27,005 3 17,68,719 3 76,40,133 3 76,40,133 3 76,40,133 3 50,02,538 3 26,021 538 3 26,021 546 546 3 26,021 546 546 3 26,021 546 546 546 546 546 546 546 546 546 546	urday uprisity aruftityra fieldficts FUNANCE CORPORATION LIMITED REV TAGENERT SYSTEM Interest Calculation Report Day Interest Calculate Symount Day Opening Balance 2,60,43,204 3 Opening Balance 2,60,43,204 3 Opening Balance 1,212,37,414 3 Opening Balance 1,33,27,005 3 Opening Balance 1,33,27,005 3 Opening Balance 1,33,27,005 3 Opening Balance 1,78,58,790 3 Opening Balance 1,78,58,790 3 Opening Balance 2,76,40,1133 3 Opening Balance 2,00,07,266 3 Opening Balance 2,50,02,538 3 Opening Balance 2,00,07,266 3 Opening Balance 2,50,02,538 3 Opening Balance 2,50,01,133 3 Opening Balance 2,50,02,538 3 Opening Balance 2,50,01,133 3 Opening Balance 2,50,02,538 3 Opening Balance 2,50,02,538 3 Opening Balance 2,50,02,538 3 Opening Balance 2,50,01,131 3 Opening Balance 2,50,01,	16:47 WIRK FINNUCE CORPORATION LINITED RETURNICE CORPORATION LINITED RETURNICE CORPORATION LINITED RETURNICE CORPORATION LINITED RETURNICE CORPORATION LINITED RETURNICE CORPORATION LINITED ADDA 0.00 Opening Balance 2,60,43,204 3 0.00 Opening Balance 2,60,43,204 3 0.00 Opening Balance 4,57,03,019 3 0.00 Opening Balance 5,99,46,027 3 0.00 Opening Balance 1,17,68,719 3 0.00 Opening Balance 1,76,40,133 3 0.00 Opening Balance 2,76,40,133 3 0.00 Opening Balance 2,50,02,538 3 0.00 Opening Balance 2,50,01,133 3 0.00 Opening Balance 2,50,01,238 3 0.00 Open	INTCALA4_EM	पुछ सं/Page No.:4 Identified Loan	दर/Rate Int. Amount	10 20 2.18.335	10.20		1,02,02,357		10.20 10,16,401	10.20 5,02,561	10.20 1,11,728	10.20 10,06,218	10.20 1,49,720	10.20 14,828	10.20 2,31,723	10.20 20,95,951	10.20 95,618	10.20 2,09,610	10.20 79.259
<pre>urgray urgray urgray urgray argu gatar gured argu gatar gured LOAN MANAGENENT SYSTEM Interest Calculation Report- -Interest Calculation Report- day Interest Calculation Report- day Interest Calculation Report- day </pre>	<ul> <li>urav urav urav urav urav urav urav urav</li></ul>	<ul> <li>I):16:47 und pricing aufibrant (a pricing pricing power symple)</li> <li>Dower private corporation and power symple</li> <li>Dower private corporation power symple</li> <li>Dower private corporation power symple</li> <li>Dower power power power symple</li> <li>Dower power power power power power symplement</li> <li>Dower power powe</li></ul>		Εv																	
<pre>urgut urgat urgative apultarie feiffhct</pre>	<ul> <li>urav urav urav urav urav urav urav urav</li></ul>	<ul> <li>I):16:47 und pricing aufibrand for antityral for any manual managements static and the management static and them</li></ul>	IMITED	n Report	र संसि/Base Am		4,57,03,	Y	REC		12, 12, 37,	5,99,46,	1,33,27,	12,00,22.	1,78,58,	17,68,	2,76,40,	25,00,07,	1,14,05,	2,50,02,	94.54.
	BAYAIL	<ul> <li>19:16:47</li> <li>23 0.00</li> <li>023 0.00</li> <li>023 0.00</li> <li>023 0.00</li> <li>023 0.00</li> <li>15/09/2023</li> <li>15/09/2023</li> <li>0.00</li> <li>023 0.00</li> </ul>	पावर फाइनेंस कर्पोरेशन लिगिटेड ER FINANCE CORPORATION L	आत्म प्रबंधन प्रणाली LOAN MANAGEMENT SYSTEM Interest Calculatio		A.P. ELEC	Opening Balance Opening Balance	16,947,791		A STAGE IV, UNIT 6 (1X60	Opening Balance	Opening Balance		Opening Balance	<b>Opening Balance</b>	Onening Balance					

## **ANNEXURE E1**

S. No	Station name	Capacity	Cost of Fuel (30 Days)	O&M (1 month)	Spares (Escalated @4%)	Receivables (2 Months)	Total Working Capital
A	Thermal Power Stations	3,410	800.93	108.71	271.15	2015.99	3,196.78
1	Dr.NTTPS I to III	1,260	297.31	47.26	69.87	720.15	1,134.59
2	RTPP-I	420	99.68	15.75	61.16	244.36	420.95
3	RTPP -II	420	99.68	14.32	33.62	242.87	390.49
4	Dr NTTPS - IV	500	108.29	11.32	36.83	263.06	419.50
5	RTPP III	210	49.84	7.16	20.16	126.94	204.11
6	RTPP - IV	600	146.14	12.89	49.51	418.61	627.14
В	Hydro Electric Stations	1,656	0.00	36.54	60.61	91.69	188.84
7	Sileru	725	0.00	17.99	22.09	41.58	81.66
8	NS - RCPH	90	0.00 G	1.74	3.59	4.10	9.43
9	Srisailam	770	0.00	15.00	29.90	34.87	79.76
10	PABR	20	0.00	0.83	1.35	2.30	4.48
11	Chettipeta	1	0.00	0.14	0.07	0.41	.62
12	NSTP HES	50	0.00	0.85	3.60	8.44	12.89
C=A+ B	Total	5,066	800.93	145.25	331.76	2107.68	3,385.62

## Approved: Working Capital for FY 2024-25 (Rs.Cr)

# ANNEXURE E2 Approved: Working Capital for FY 2025-26 (Rs.Cr)

S. No	Station name	Capacity	Cost of Fuel (30 Days)	O&M (1 month)	Spares (Escalated @ 4%)	Receivables (2 Months)	Total Working Capital
A	Thermal Power Stations	3,410	800.93	114.42	280.67	1920.73	3,116.75
1	Dr.NTTPS I to III	1,260	297.31	49.75	72.32	725.17	1,144.55
2	RTPP-I	420	99.68	16.58	63.31	246.04	425.62
3	RTPP -II	420	99.68	15.07	34.80	244.26	393.81
4	Dr NTTPS - IV	500	108.29	11.92	38.12	263.69	422.01
5	RTPP III	210	49.84	7.54	20.87	25.73	103.98
6	RTPP - IV	600	146.14	13.57	51.25	415.84	626.79
В	Hydro Electric Stations	1,656	0.00	38.28	63.50	94.89	196.68
7	Sileru	725	0.00	18.85	23.14	43.23	85.22
8	NS - RCPH	90	0.00	1.82	3.77	4.26	9.84
9	Srisailam	770	0.00	15.71	31.33	36.30	83.34
10	PABR	20	0.00	0.87	1.42	2.35	4.64
11	Chettipeta	1	0.00	0.14	0.08	0.42	.63
12	NSTP HES	50	0.00	0.89	3.78	8.33	13.00
C=A+ B	Total	5,066	800.93	152.70	344.17	2015.62	3,313.42
S.No.	Station name	Capacity	Cost of Fuel (30 Days)	O&M (1 month)	Spares (Escalated @4%)	Receivables (2 Months)	Total Working Capital
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A	Thermal Power Stations	3,410	800.93	120.43	290.52	1927.76	3,139.64
1	Dr.NTTPS I to III	1,260	297.31	52.36	74.86	730.47	1,154.99
2	RTPP-I	420	99.68	17.45	65.53	247.82	430.48
3	RTPP -II	420	99.68	15.87	36.02	245.72	397.29
4	Dr NTTPS - IV	500	108.29	12.54	39.46	264.37	424.66
5	RTPP III	210	49.84	7.93	21.60	26.23	105.61
6	RTPP - IV	600	146.14	14.28	53.05	413.15	626.61
В	Hydro Electric Stations	1,656	0.00	40.11	66.53	98.17	204.80
7	Sileru	725	0.00	19.75	24.24	44.97	88.96
8	NS - RCPH	90	0.00	1.91	3.94	4.43	10.28
9	Srisailam	770	0.00	16.46	32.82	37.80	87.08
10	PABR	20	0.00	0.91	1.48	2.42	4.81
11	Chettipeta	1.0	0.00	0.15	0.08	0.32	.54
12	NSTP HES	50	0.00	0.93	3.96	8.23	13.12
C=A+ B	Total	5,066	800.93	160.54	357.05	2025.93	3,344.44

#### ANNEXURE E3 Approved: Working Capital for FY 2026-27 (Rs.Cr)

#### ANNEXURE E4

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# Approved: Working Capital for FY 2027-28 (Rs.Cr)

S. No.	Station name	Capacity	Cost of Fuel (30 Days)	O&M (1 month)	Spares (Escalated @4%)	Receivables (2 Months)	Total Working Capital
A	Thermal Power Stations	3,410	800.93	126.75	300.72	1935.45	3,163.85
1	Dr.NTTPS I to III	1,260	297.31	55.11	77.49	736.04	1,165.95
2	RTPP-I	420	99.68	18.37	67.83	249.69	435.57
3	RTPP -II	420	99.68	16.70	37.29	247.27	400.93
4	Dr NTTPS - IV	500	108.29	13.20	40.84	265.13	427.46
5	RTPP III	210	49.84	8.35	22.36	26.78	107.33
6	RTPP - IV	600	146.14	15.03	54.91	410.54	626.61
В	Hydro Electric Stations	1,656	0.00	42.02	69.70	101.73	213.46
7	Sileru	725	0.00	20.69	25.40	46.80	92.88
8	NS - RCPH	90	0.00	2.00	4.13	4.61	10.74
9	Srisailam	770	0.00	17.25	34.39	39.38	91.01
10	PABR	20	0.00	0.95	1.55	2.48	4.99
11	Chettipeta	1	0.00	0.16	0.08	0.33	.57
12	NSTP HES	50	0.00	0.98	4.14	8.13	13.25
C=A+ B	Total	5,066	800.93	168.77	370.42	2037.19	3,377.31

#### **ANNEXURE E5**

S. No.	Station name	Capacity	Cost of Fuel (30 Days)	O&M (1 month)	Spares (Escalated @4%)	Receivables (2 Months)	Total Working Capital
A	Thermal Power Stations	3,410	800.93	133.40	311.28	1943.81	3,189.41
1	Dr.NTTPS I to III	1,260	297.31	57.99	80.21	741.91	1,177.42
2	RTPP-I	420	99.68	19.33	70.21	251.66	440.88
3	RTPP -II	420	99.68	17.57	38.59	248.91	404.76
4	Dr NTTPS - IV	500	108.29	13.89	42.28	265.95	430.41
5	RTPP III	210	49.84	8.79	23.15	27.37	109.14
6	RTPP - IV	600	146.14	15.82	56.83	408.01	626.80
В	Hydro Electric Stations	1,656	0.00	44.02	73.03	105.49	222.55
7	Sileru	725	0.00	21.68	26.61	48.72	97.00
8	NS - RCPH	90	0.00 G	2.09	4.33	4.80	11.22
9	Srisailam	770	0.00	18.07	36.03	41.04	95.13
10	PABR	20	0.00	1.00	1.63	2.56	5.19
11	Chettipeta	1	0.00	0.16	0.09	0.35	.60
12	NSTP HES	50	0.00	1.02	4.34	8.04	13.40
C=A+ B	Total	5,066	800.93	177.42	384.30	2049.31	3,411.96

## Approved: Working Capital for FY 2028-29 (Rs.Cr)

# ANNEXURE E6 Approved: Summary of Working Capital for 5<sup>th</sup> CP (Rs.Cr)

S. No.	Station name	FY 25	FY 26	FY 27	FY 28	FY 29	5th CP
A	Thermal Power Stations	3,196.78	3,116.75	3,1 <b>39.64</b>	3,163.85	3,189.41	15,806.43
1	Dr.NTTPS I to III	1,134.59	1,144.55	1,154.99	1,165.95	1,177.42	5,777.49
2	RTPP-I	420.95	425.62	430.48	435.57	440.88	2,153.51
3	RTPP -II	390.49	393.81	397.29	400.93	404.76	1,987.28
4	Dr NTTPS - IV	419.50	422.01	424.66	427.46	430.41	2,124.03
5	RTPP III	204.11	103.98	105.61	107.33	109.14	630.17
6	RTPP - IV	627.14	626.79	626.61 626.61		626.80	3,133.95
В	Hydro Electric Stations	188.84	196.68	204.80	213.46	222.55	1,026.32
7	Sileru	81.66	85.22	88.96	92.88	97.00	445.72
8	NS - RCPH	9.43	9.84	10.28	10.74	11.22	51.52
9	Srisailam	79.76	83.34	87.08	91.01	95.13	436.34
10	PABR	4.48	4.64	4.81	4.99	5.19	24.11
11	Chettipeta	.62	.63	.54	.57	.60	2.97
12	NSTP HES	12.89	13.00	13.12	13.25	13.40	65.67
C=A+B	Total	3,385.62	3,313.42	3,344.44	3,377.31	3,411.96	16,832.76

ANNEXURE - F1	
Approved: Return on Capital Employed for FY 202	4-25 (Rs.Cr)

S. No.	Station name	GFA as on 31.03.24	30% Equity on 31.03.24 GFA.	70% loan	Accumula ted depreciati on as on 31.3.24	Net Equity	Net Loans	Working Capital	Capital Employed	WACC	RoCE
A	Thermal Power Stations	14,429.03	4,328.71	10,100.32	9,966.96	2,936.73	1,525.34	3,196.78	7,658.85		904.32
1	Dr.NTTPS I to III	3,143.99	943.20	2,200.80	2,761.11	382.88	0.00	1,134.59	1,517.47	11.81%	179.18
2	RTPP-I	2,074.61	622.38	1,452.22	1,836.21	238.40	<b>P</b> 0.00	420.95	659.35	11.81%	77.85
3	RTPP -II	1,899.61	569.88	1,3 <mark>2</mark> 9.73	1,614.78	284.83	0.00	390.49	675.32	11.81%	79.74
4	Dr NTTPS - IV	2,136.68	641.00	1,495.68	1,609.64	527.04	0.00	419.50	946.54	11.81%	111.76
5	RTPP III	1,216.29	364.89	851.40	900.06	316.23	, 0.00	204.11	520.34	11.81%	61.44
6	RTPP - IV	3,957.85	1,187.36	2,770.50	1,245.16	1,187.36	1,525.34	627.14	3,339.83	11.81%	394.35
B	Hydro Electric Stations	2,177.26	653.18	1,524.08	1,625.37	398.13	153.76	2 <mark>1</mark> 88.84	740.73		89.68
7	Sileru	725.11	217.53	507.58	585.12	139.99	.00	81.66	221.65	12.11%	26.84
8	NS - RCPH	118.26	35.48	82.78	101.07	17.19	.00	9.43	26.62	12.11%	3.22
9	Srisailam	972.88	291.86	681.01	840.24	132.64	.00	79.76	212.40	12.11%	25.72
10	PABR	57.46	17.24	40.22	40.08	17.24	.14	4.48	21.86	12.11%	2.65
11	Chettipeta	3.55	1.07	2.49	2.00	1.07	.49	.62	2.17	12.11%	.26
12	NSTP HES	299.99	90.00	209.99	56.86	90.00	153.13	12.89	256.03	12.11%	31.00
C=A+B	Total	16,606.29	4,981.89	11,624.40	11,592.33	3,334.86	1,679.10	3,385.62	8,399.58		994.00

		ANNEXUR	E F2		
Approved: Re	eturn on	Capital Emp	loyed for	FY 2025-2	26 (Rs.Cr)

S. No.	Station name	GFA as on 31.03.24	30% Equity on 31.03.24 GFA.	70% loan	Accumulated depreciation as on 31.3.25		Net Loans	Working Capital	Capital Employed	WACC	RoCE
A	Thermal Power Stations	14,429.03	4,328.71	10,100.32	10,242.92	2,869.74	1,316.36	3,116.75	7,302.85		862.28
1	Dr.NTTPS I to III	3,143.99	943.20	2,200.80	2,767.96	376.03	.00	1,144.55	1,520.59	11.81%	179.54
2	RTPP-I	2,074.61	622.38	1,452.22	1,839.30	235.30	.00	425.62	660.92	11.81%	78.04
3	RTPP -II	1,899.61	569.88	1,329.73	1,624.27	275.34	.00	393.81	669.15	11.81%	79.01
4	Dr NTTPS - IV	2,136.68	641.00	1,495.68	1,640.98	495.70	.00	422.01	917.71	11.81%	108.36
5	RTPP III	1,216.29	364.89	851.40	916.28	300.01	.00	103.98	403.99	11.81%	47.70
6	RTPP - IV	3,957.85	1,187.36	2,770.50	1,454.13	1,187.36	1,316.36	626.79	3,130.50	11.81%	369.63
В	Hydro Electric Stations	2,177.26	653.18	1,524.08	1,647.39	386.17	143.70	196.68	726.55		87.97
7	Sileru	725.11	217.53	507.58	591.87	133.25	.00	85.22	218.46	12.11%	26.45
8	NS - RCPH	118.26	35.48	82.78	101.61	16.66	.00	9.84	26.50	12.11%	3.21
9	Srisailam	972.88	291.86	681.01	843.78	129.10	.00	83.34	212.44	12.11%	25.72
10	PABR	57.46	17.24	40.22	41.24	16.22	.00	4.64	20.86	12.11%	2.53
11	Chettipeta	3.55	1.07	2.49	2.60	.95	.00	.63	1.59	12.11%	.19
12	NSTP HES	299.99	90.00	209.99	66.29	90.00	143.70	13.00	246.70	12.11%	29.87
C=A+ B	Total	16,606.29	4,981.89	11,624.40	11,890.31	3,255.92	1,460.06	3,313.42	8,029.40		950.25

		ANNEXUR	e f3		
Approved:	Return on	Capital Empl	loyed for	FY 2026-2	27 (Rs.Cr)

S. No.	Station name	GFA as on 31.03.24	30% Equity on 31.03.24 GFA	70% loan	Accumulated depreciation as on 31.3.26		Net Loans	Working Capital	Capital Employed	WACC	RoCE
A	Thermal Power Stations	14,429.03	4,328.71	10,100.32	10,518.89	2,802.75	1,107.39	3,139.64	7,049.78		832.40
1	Dr.NTTPS I to III	3,143.99	943.20	2,200.80	2,774.81	369.19	.00	1,154.99	1,524.18	11.81%	179.97
2	RTPP-I	2,074.61	622.38	1,452.22	1,842.40	232.21	.00	430.48	662.69	11.81%	78.25
3	RTPP -II	1,899.61	569.88	1 <mark>,3</mark> 29.73	1,633.76	265.85	.00	397.29	663.13	11.81%	78.30
4	Dr NTTPS - IV	2,136.68	641.00	1,495.68	1,672.31	464.37	.00	424.66	889.02	11.81%	104.97
5	RTPP III	1,216.29	364.89	851.40	932.50	283.79	.00	105.61	389.40	11.81%	45.98
6	RTPP - IV	3,957.85	1,187.36	2,770.50	1,663.11	1,187.36	1,107.39	626.61	2,921.35	11.81%	344.94
B	Hydro Electric Stations	2,177.26	653.18	1,524.08	1,669.40	373.59	134.26	204.80	712.66		86.29
7	Sileru	725.11	217.53	507.58	598.62	126.50	.00	88.96	215.46	12.11%	26.09
8	NS - RCPH	118.26	35.48	82.78	102.14	16.12	.00	10.28	26.40	12.11%	3.20
9	Srisailam	972.88	291.86	681.01	847.31	125.57	.00	87.08	212.65	12.11%	25.75
10	PABR	57.46	17.24	40.22	42.41	15.05	.00	4.81	19.87	12.11%	2.41
11	Chettipeta	3.55	1.07	2.49	3.20116	.36	.00	.54	.90	12.11%	.11
12	NSTP HES	299.99	90.00	209.99	75.73	90.00	134.26	13.12	237.38	12.11%	28.74
C=A+ B	Total	16,606.29	4,981.89	11,624.40	12,188.29	3,176.34	1,241.65	3,344.44	7,762.44		918.69

		ANNEXURI	E F4			
Approved: F	Return on	Capital Empl	oyed for	FY 2027-2	28 (Rs. Cr)	

s.	Ot at i an an an		30% Equity on	70% loan	Accumulated depreciation		Net Loans	Working	Capital	WAGO	D-OF
No.	Station name	31.03.24	31.03.24 GFA.	70% loan	as on 31.3.27	Equity	Net Loans	Capital	Employed	WACC	RoCE
A	Thermal Power Stations	14,429.03	4,328.71	10,100.32	10,794.85	2,735.76	898.41	3,163.85	6,798.03		802.68
1	Dr.NTTPS I to III	3,143.99	943.20	2,200.80	2,781.66	362.34	.00	1,165.95	1,528.28	11.81%	180.45
2	RTPP-I	2,074.61	622.38	1,452.22	1,845.49	229.12	.00	435.57	664.69	11.81%	78.48
3	RTPP -II	1,899.61	569.88	1,329.73	1,643.25	256.35	.00	400.93	657.29	11.81%	77.61
4	Dr NTTPS - IV	2,136.68	641.00	1,495.68	1,703.65	433.03	.00	427.46	860.48	11.81%	101.60
5	RTPP III	1,216.29	364.89	851.40	948.72	267.57	.00	107.33	374.90	11.81%	44.27
6	RTPP - IV	3,957.85	1,187.36	2,770.50	1,872.08	1,187.36	898.41	626.61	2,712.38	11.81%	320.26
B	Hydro Electric Stations	2,177.26	653.18	1,524.08	1,690.82	361.61	124.83	213.46	699.90		84.74
7	Sileru	725.11	217.53	507.58	605.36	119.75	.00	92.88	212.63	12.11%	25.74
8	NS - RCPH	118.26	35.48	82.78	102.68	15.58	.00	10.74	26.32	12.11%	3.19
9	Srisailam	972.88	291.86	681.01	850.85	122.03	.00	91.01	213.05	12.11%	25.79
10	PABR	57.46	17.24	40.22	43.57	13.89	.00	4.99	18.88	12.11%	2.29
11	Chettipeta	3.55	1.07	2.49	3.20	.36	.00	.57	.92	12.11%	.11
12	NSTP HES	299.99	90.00	209.99	85.16	90.00	124.83	13.25	228.08	12.11%	27.61
C=A+ B	Total	16,606.29	4,981.89	11,624.40	12,485.67	3,097.37	1,023.24	3,377.31	7,497.92		887.42

#### **ANNEXURE F5**

# Approved: Return on Capital Employed for FY 2028-29 (Rs.Cr)

S. No.	Station name	GFA as on 31.03.24	30% Equity on 31.03.24 GFA.	70% loan	Accumulated depreciation as on 31.3.28	Net Equity	Net Loans	Working Capital	Capital Employed	WACC	RoCE
A	Thermal Power Stations	14,429.03	4,328.71	10,100.32	11,070.82	2,668.77	689.44	3,189.41	6,547.62		773.11
1	Dr.NTTPS I to III	3,143.99	943.20	2,200.80	2,788.50	355.49	.00	1,177.42	1,532.91	11.81%	181.00
2	RTPP-I	2,074.61	622.38	1,452.22	1,848.58	226.02	.00	440.88	666.91	11.81%	78.75
3	RTPP -II	1,899.61	569.88	1,329.73	1,652.75	246.86	.00	404.76	651.62	11.81%	76.94
4	Dr NTTPS - IV	2,136.68	641.00	1,495.68	1,734.99	401.69	.00	430.41	832.10	11.81%	98.25
5	RTPP III	1,216.29	364.89	851.40	964.94	251.35	.00	109.14	360.49	11.81%	42.57
6	RTPP - IV	3,957.85	1,187.3 <mark>6</mark> [	2,770.50	2,081.06	1,187.36	689.44	626.80	2,503.59	11.81%	295.61
B	Hydro Electric Stations	2,177.26	653.18	1,524.08	1,712.24	349.62	115.39	222.55	687.57		83.25
7	Sileru	725.11	217.5 <mark>3</mark>	507.58	612.11	113.00	.00	97.00	210.00	12.11%	25.43
8	NS - RCPH	118.26	35.48	82.78	103.22	15.05	.00	11.22	26.27	12.11%	3.18
9	Srisailam	972.88	291.86	681.01	854.38	118.50	.00	95.13	213.63	12.11%	25.87
10	PABR	57.46	17.24	40.22	44.73	12.73	.00	5.19	17.91	12.11%	2.17
11	Chettipeta	3.55	1.07	2.49	3.20	.36	.00	.60	.95	12.11%	.12
12	NSTP HES	299.99	90.00	209.99	94.60	90.00	115.39	13.40	218.80	12.11%	26.49
C=A+ B	Total	16,606.29	4,981.89	11,624.40	12,783.06	3,018.40	804.83	3,411.96	7,235.19		856.36

## **ANNEXURE G1**

#### Approved: Fixed Charges for FY 2024-25 (Rs. Cr)

S. No.	Station name	RoCE	Depreciation	O&M	Fixed Charges
Α	Thermal Power Stations	904.32	275.96	1,304.53	2,484.81
1	Dr.NTTPS I to III	179.18	6.85	567.15	753.17
2	RTPP-I	77.85	3.09	189.05	270.00
3	RTPP -II	79.74	9.49	171.86	261.09
4	Dr NTTPS - IV	111.76	31.34	135.85	278.95
5	RTPP III	61.44	16.22	85.93	163.59
6	RTPP - IV	394.35	208.97	154.68	758.01
В	Hydro Electric Stations	89.68	22.02	438.46	621.26
7	Sileru	26.84	6.75	215.89	249.47
8	NS - RCPH	3.22	0.54	20.83	24.59
9	Srisailam	25.72	3.54	179.95	209.20
10	PABR	2.65	1.16	9.96	13.77
11	Chettipeta	RE 0.26-A	0.60	1.62	2.48
12	NSTP HES	31.00	9.43	10.20	50.64
13	TB- Machkund		CO.		71.10
С	Other Cha <mark>r</mark> ges				1,487.89
14	Pension Liab.				1,487.89
15	Petition fees and expenses		7		
D=A+B+C	Total	994.00	297.98	1, <mark>7</mark> 42.99	4,593.96

# ANNEXURE G2

# Approved: Fixed Charges for FY 2025-26 (Rs. Cr)

S. No	Station name	RoCE	Depreciation	0&M	Fixed Charges
A	Thermal Power Stations	862.28	275.96	1,373.05	2,511.30
1	Dr.NTTPS I to III	179.54	6.85	596.95	783.34
2	RTPP-I	7: 78.04	3.09	198.98	280.11
3	RTPP -II	79.01	9.49	180.89	269.40
4	Dr NTTPS - IV	108.36	31.34	143.00	282.70
5	RTPP III	47.70	16.22	90.45	154.37
6	RTPP - IV	369.63	208.97	162.78	741.39
В	Hydro Electric Stations	87.97	22.02	459.38	643.85
7	Sileru	26.45	6.75	226.19	259.39
8	NS - RCPH	3.21	0.54	21.82	25.57
9	Srisailam	25.72	3.54	188.54	217.79
10	PABR	2.53	1.16	10.44	14.13
11	Chettipeta	0.19	0.60	1.70	2.49
12	NSTP HES	29.87	9.43	10.69	49.99
13	TB- Machkund				74.49
С	Other Charges				1,554.34
14	Pension Liab.				1,554.34
15	Petition fees and expenses				
D=A+B+ C	Total	950.25	297.98	1,832.43	4,709.49

S. No	Station name	RoCE	Depreciation	O&M	Fixed
					Charges
Α	Thermal Power Stations	832.40	275.96	1,445.14	2,553.50
1	Dr.NTTPS I to III	179.97	6.85	628.27	815.09
2	RTPP-I	78.25	3.09	209.42	290.77
3	RTPP -II	78.30	9.49	190.39	278.18
4	Dr NTTPS - IV	104.97	31.34	150.50	286.81
5	RTPP III	45.98	16.22	95.19	157.39
6	RTPP - IV	344.94	208.97	171.36	725.27
В	Hydro Electric Stations	86.29	21.42	481.29	667.03
7	Sileru	26.09	6.75	236.98	269.81
8	NS - RCPH	3.20	0.54	22.86	26.60
9	Srisailam	25.75	3.54	197.53	226.81
10	PABR	2.41	1.16	10.94	14.51
11	Chettipeta	0.11	0.00	1.78	1.89
12	NSTP HES	R 28.74	2.43	11.20	49.38
13	TB- Machkund		AL.		78.04
С	Other Charges				1,617.93
14	Pension Liab.		$\langle 3$		1,617.93
15	Petition fe <mark>e</mark> s and expenses				
<i>D=A+B+</i> C	Total	918.69	297.38	1,926.43	4,838.47

#### ANNEXURE G3 Approved: Fixed Charges for FY 2026-27 (Rs. Cr)

## ANNEXURE G4 Approved: Fixed Charges for FY 2027-28 (Rs. Cr)

S. No.	Station name	RoCE	Depreciation	0&M	Fixed Charges
Α	Thermal Power Stations	802.68	275.96	1,521.01	2,599.66
1	Dr.NTTPS I to III	180.45	6.85	661.26	848.56
2	RTPP-I	78.48	3.09	220.42	302.00
3	RTPP -II	77.61	9.49	200.38	287.48
4	Dr NTTPS - IV	101.60	31.34	158.40	291.34
5	RTPP III	44.27	16.22	100.19	160.68
6	RTPP - IV	320.26	208.97	180.36	709.60
В	Hydro Electric Stations	84.74	21.42	504.25	692.17
7	Sileru	25.74	6.75	248.28	280.77
8	NS - RCPH	3.19	0.54	23.95	27.68
9	Srisailam	25.79	3.54	206.95	236.28
10	PABR	2.29	1.16	11.46	14.91
11	Chettipeta	0.11	0.00	1.87	1.98
12	NSTP HES	27.61	9.43	11.74	48.79
13	TB- Machkund				81.76
С	Other Charges				1,725.89
14	Pension Liab.				1,725.89
15	Petition fees and expenses				
D=A+B+ C	Total	887.42	297.38	2,025.26	5,017.72

S. No.	Station name	RoCE	Depreciation	O&M	Fixed Charges
Α	Thermal Power Stations	773.11	275.96	1,600.74	2,649.82
1	Dr.NTTPS I to III	181.00	6.85	695.91	883.76
2	RTPP-I	78.75	3.09	231.97	313.81
3	RTPP -II	76.94	9.49	210.88	297.31
4	Dr NTTPS - IV	98.25	31.34	166.70	296.29
5	RTPP III	42.57	16.22	105.44	164.23
6	RTPP - IV	295.61	208.97	189.84	694.43
В	Hydro Electric Stations	83.25	21.42	528.30	718.63
7	Sileru	25.43	6.75	260.12	292.30
8	NS - RCPH	3.18	0.54	25.10	28.81
9	Srisailam	25.87	3.54	216.82	246.22
10	PABR	2.17	1.16	12.01	15.34
11	Chettipeta	0.12	0.00	1.96	2.07
12	NSTP HES	26.49	9.43	12.30	48.22
13	TB- Machkund	0.00	T-		85.66
С	Other Charg <mark>e</mark> s		0		1,811.21
14	Pension Liab.		$\langle \rangle$		1,811.21
15	Petition fe <mark>e</mark> s and expenses				
D=A+B+ C	Total	856.36	297.38	2,129.04	5,179.66

शीक्तः प्रगतिसाधिका

#### ANNEXURE G5 Approved: Fixed Charges for FY 2028-29 (Rs. Cr)

#### ANNEXURE H Information to be furnished by APGENCO at the time of submission of monthly FCA bill to DISCOMS

Sr.	No.	Month-wise	Unit	
A)		OPENING QUANTITY		
,	1	Opening Quantity of Coal	(MMT)	
	2	Value of Stock		
	2			
B)	0	QUANTITY		
	3	The quantity of Coal supplied by the Coal Company for the particular month, giving complete details of the	(MMT)	
		mode of transportation used along with the quantity.		
		By Rail		
		By Road		
		By Ship		
		By MGR		
		By any other mode (specify)		
	4	Adjustment (+/-) in quantity supplied made by Coal Company *	(MMT)	
	5	Coal supplied by Coal Company (3+4)	(MMT)	
	6	Actual Transit & Handling Losses specify the source	(MMT)	
	7	Actual coal received	(MMT)	
C)		PRICE		
	8	The amount charged by the Coal Company	(Rs.)	
	9	Adjustment (+/-) in the amount charged made by Coal Co <mark>m</mark> pany *	(Rs.)	
	10	Unloading, Handling and Sampling charges.	Z	
		Unloading charges		
		Handling charges		
		Sampling charges		
	11	Total amount Charged (8+9+10)	(Rs.)	
D)		TRANSPORTATION		
	12	Transportation charges by rail/ship/road transport	(Rs.)	
		By Rail		
		By Road		
		By Ship		
		By MGR		
	13	Adjustment (+/-) in the amount charged made by Railways/Transport Company	(Rs.)	
	14	Demurrage Charges, if any	( Rs.)	
	15	Cost of fuel in transporting coal through the MGR system, if applicable	( Rs.)	
	16	Total Transportation Charges (12+13+14+15)	( Rs.)	
	17	Total amount Charged for coal supplied including Transportation (11+16)	( Rs.)	
E)		TOTAL COST		
	18	Landed cost of coal $(2+17)/(1+7)$	Rs./MT	1
	19	Blending Ratio (Domestic/Imported)	, .	1
	20	Weighted average cost of coal for preceding twelve months	Rs./MT	

sr. No.	Month-wise	Unit	
<b>`)</b>	QUALITY		
21	GCV of Domestic Coal of the opening coal stock as per	(kCal/Kg)	
	bill of Coal Company		
22	GCV of Domestic Coal supplied as per the bill of Coal	(kCal/Kg)	
	Company		
23	GCV of Imported Coal of the opening stock as per the	(kCal/Kg)	
	bill Coal Company		
24	GCV of Imported Coal supplied as per bill Coal	(kCal/Kg)	
	Company		
25	Weighted average GCV of coal as Billed	(kCal/Kg)	
26	GCV of Domestic Coal of the opening stock as received	(kCal/Kg)	
	at Station		
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	
28	GCV of Imported Coal of opening stock as received at	(kCal/Kg)	
	Station		
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)	
30	Weighted average GCV of coal as Received	(kCal/Kg)	
31	Actual Station heat rate achieved	(kCal/kW	
		h)	
32	Actual Auxiliary Consumption	%	
33	Actual Specific Oil Consumption	ml/kWh	

Note:

- 1. As billed and as received GCV, quantity of coal, and price should be submitted as certified by the statutory auditor.
- 2. The action taken to address the difference in GCV between as billed and as received should be submitted.
- 3. The details of source-wise fuel for computation of energy charges should be provided in the above format. Details are to be provided for each source separately. If there is more than one source, add an additional column.
- 4. A break-up statement of the amount charged by the coal company is to be provided separately.
- 5. Details of planned and unplanned diversions of the coal from one plant to another are to be provided, if any, under the flexi scheme and the certificate to the effect that there are no unplanned diversions of coal. If there is unplanned coal diversion, the cost implications shall be indicated separately in addition to the information in the above format.