ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

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MONDAY, THE TWENTY EIGHTH DAY OF OCTOBER
TWO THOUSAND AND TWENTY-FOUR

:Present:

Justice C.V. Nagarjuna Reddy, Chairman

Sri Thakur Rama Singh, Member

Sri P.V.R.Reddy, Member

O.P. No. 5 of 2023.

In the matter of granting consent to the amended and restated Power Purchase Agreement (PPA) between Andhra Pradesh Power Generation Corporation Limited (APGENCO) and the three Distribution Licensees of Andhra Pradesh, namely APSPDCL, APEPDCL, and APCPDCL (collectively referred to as APDISCOMs), under Section 21 of the AP Electricity Reform Act, 1998, for the purchase of electricity from Dr. Narla Tata Rao Thermal Power Station Stage-V (Dr. NTPPS-V, 1x800 MW).

Between:

1. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)
2. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)
3. Andhra Pradesh Central Power Distribution Corporation Ltd (APCPDCL)

....Petitioners(s)

AND

Andhra Pradesh Power Generation Corporation Limited (APGENCO)

....Respondent

AND

O.P.No.22 of 2024.

In the matter of determination of capital cost and tariff for the balance of the 4th control period, i.e., from 21.12.2023 (COD) to 31.03.2024, and determination of additional capital cost and tariff for the 5th control period, i.e., from 01.04.2024 to 31.03.2029, under Section 62 of the Electricity Act, 2003, for the electricity supplied by APGENCO from its 1x800 MW, Dr. NTPPS-V power plant to the Distribution Licensees in Andhra Pradesh, namely APSPDCL, APEPDCL and APCPDCL.

Between

Andhra Pradesh Power Generation Corporation Limited (APGENCO)

....Petitioner

AND

1. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)
2. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)
3. Andhra Pradesh Central Power Distribution Corporation Ltd (APCPDCL)

....Respondent(s)

These petitions were taken up for final hearing on 25.09.2024 in the presence of Sri K.V.N. Chakradhar Babu IAS, Managing Director/APGENCO & Chairman, APPDCL; Sri K.Gopal Chowdary learned counsel for the Petitioners; Sri P.Shiva Rao, learned Standing Counsel for the respondents; Sri M. Venugopala Rao, Sri Ch. Babu Rao, and Sri Shiva Kumar, the learned objectors; that after hearing all the parties and after carefully considering the material available on record, the Commission passes the following:

COMMON ORDER

1. On 22.01.2013, the four Distribution Licensees namely APCPDCL, APSPDCL, APEPDCL and APNPDCL of the undivided state of Andhra Pradesh entered into the PPA with APGENCO 22.01.2013 for purchasing electricity from 1x800 MW, Dr. NTPPS-V power plant.
2. After the bifurcation of the erstwhile state of Andhra Pradesh into the states of residual Andhra Pradesh and Telangana w.e.f. 02.06.2014, the erstwhile Andhra Pradesh Electricity Regulatory Commission (APERC) for the states of residual Andhra Pradesh and Telangana returned the PPA to the Distribution Licensees for want of essential information for determination of tariff vide letter dated 11.08.2014.
3. Subsequently, the Commission, through a letter dated 20.05.2022, granted in-principle approval to the APDISCOMs to enter into an amended and restated PPA with APGENCO with a direction to submit the said PPA along with Tariff Application within two months from the Commercial Operation Date (COD) of the unit for approval of the PPA and determination of the tariff. APDISCOMs executed the amended and restated PPA with APGENCO on 14.10.2022 and submitted a petition to the Commission on 17.01.2023, seeking consent for the PPA under Section 21 of the AP Electricity Reform Act, 1998.
4. The Commission had taken the petition on record, numbered it as O.P.No. 5 of 2023, and posted the matter for hearing on 15.03.2023. During the hearing on 15th March 2023, the Commission noted that APDISCOMs should have submitted the petitions for approval of the PPA as well as the Tariff after the declaration of COD. Therefore, the Commission adjourned the hearing of the petition *sine die* till the filing of the Tariff petition and directed the APDISCOMs to move an application for the posting of the petition for hearing after the filing of the Tariff petition.

5. Subsequently, on 16.04.2024, APGENCO filed a petition before the Commission seeking the determination of the following for the Dr. NTTPS-V power plant:

   A. To determine the capital cost with the additional capital cost, the annual fixed charges of tariff and the initial energy charges of tariff for the balance of the 4th control period following the COD together with the terms and conditions thereof;

   B. To determine the capital cost with the additional capital cost, the annual fixed charges of tariff and the initial energy charges of tariff for the 5th control period together with the terms and conditions thereof;

   C. To direct that the Fuel Cost Adjustment be paid against supplementary bills and the terms and conditions thereof and that the initial energy charges be reset every subsequent financial year based on the actuals of the last quarter of the immediate preceding financial year; and

   D. To allow loading and transportation charges of unutilized ash in terms of CERC Regulation - 2024 read with the directions of MoEF and MoP and permit such charges to be claimed from time to time by way of supplementary bills and the terms and conditions thereof.

6. The Commission had taken the petition on record, numbered it as O.P.No.22 of 2024 and uploaded the filings on its website. Further, the Commission directed APGENCO to upload tariff filings on its official website, make copies available at its corporate office and carry out the publication of the petition in two newspapers -one in Telugu and the other in English both in the Andhra Pradesh Editions- for information and calling for views/objections/suggestions from individuals, representatives of consumer organisations and the other stakeholders. Further, the Commission directed APGENCO to file the proof of publication by the next date of hearing, i.e., 03.07.2024. Accordingly, APGENCO uploaded the petition along with annexures & calculation sheets on

its website and filed the proof of publication on 03.07.2024(**Annexure-I & II**).

7. During the hearing of O.P.No.22 of 2024, the Commission called for the file relating to O.P.No.5 of 2023 and heard both the OPs together.

8. **Objections/suggestions/views(including APDISCOMs), replies of APGENCO and APDISCOMs**

(A list of objectors is shown vide Annexure-III)

In response to the publication of the petition in O.P.No. 5 of 2024 in the newspapers, the following Objections/suggestions/views were received from stakeholders.

A. Delay in re-submitting the PPA and increase in the capital cost:

After APERC returned the PPA due to the lack of essential information,it was not necessary to obtain APERC's in-principle permission before signing the amended and restated PPA. What were the factors that contributed to the significant delay of nearly 8 years in seeking and obtaining this permission from the Commission? Given the delay in signing the amended and restated PPA, how do APDISCOMs justify agreeing to the revised capital cost of ₹7904 crore and extending the COD to 21.12.2023?

Reply of APDISCOMs: In its order dated 13.12.2017 regarding 41 PPAs, the Commission directed APDISCOMs that they should not enter into any new PPAs with power developers using any source or fuel without prior permission. Additionally, between 2016 and 2022, a series of discussions took place regarding draft amendments to the PPA, but no consensus was reached, particularly on tariff proposals. Despite this, the construction of the project progressed without hindrance. APDISCOMs have only referred to the capital cost claimed by APGENCO but have not accepted the same. The capital cost shall be as determined by the Commission. As per Section 62 of the Electricity Act, the appropriate commission specifies the terms and conditions for tariff determination. Therefore, the final decision on capital cost and tariff determination falls under the jurisdiction of the Commission.

B. Abnormal delay in achieving the COD:

The reasons explained by APGENCO for the abnormal delay in achieving COD by 46 months are not convincing. The substantial increase of 59.29% in capital cost compared to the estimate in the original PPA dated 22.01.2013 places a significant burden on consumers over the 25-year duration of the PPA, if approved by the Commission.

Reply of APGENCO: The reasons for the delayed execution of the project have been stated in the petition and are reiterated. APGENCO has claimed only the actual capital expenditure incurred on the project, the IDC and the finance charges. The subsisting and relevant PPA is only the amended and restated PPA dated 14.10.2022. The PPA dated 22.01.2013 is redundant and not relevant.

C. Irrelevance of state bifurcation and entire capacity allocation to Project Execution Delays:

The bifurcation of Andhra Pradesh and the allocation of the entire capacity to APDISCOMs are irrelevant to the delay in executing the project. Had the amended PPA been signed and approved by APERC post-bifurcation, the project's cost could have been determined much earlier. The amended PPA's sole purpose was to allocate the unit's capacity to APDISCOMs.

Reply of APGENCO: No Reply

D. Imprudence in Revised Capital Cost for the project compared to CERC Benchmarks:

APERC regulations do not provide a benchmark capital cost for 800 MW thermal units with supercritical technology. According to CERC norms set on 4.6.2012, with December 2011 as the base year, the benchmark capital cost was ₹4.63 crore per MW. Even accounting for escalation up to the original scheduled COD, APGENCO's revised capital cost of ₹11.15 crore per MW is highly excessive and imprudent.

Reply of APGENCO: The comparison of the actual capital with the CERC benchmark has been explained in the petition, and the same may be referred to.

E. Scrutiny of APGENCO's delay reports and validity of COVID-related claims:

The objectors queried whether APGENCO submitted periodic reports on the project's delay to the DISCOMs and sought an extension, particularly under force majeure conditions in the PPA and if so, whether the DISCOMs properly assessed and concluded these reports? The validity of APGENCO's claims of COVID-related delays, which lasted only nine months in three waves, should be scrutinised.

Reply of APGENCO: There is no provision or practice of submitting periodical reports to APDISCOMs. APGENCO faced various challenges caused by the COVID-19 pandemic, including the exodus of migrant workers, repeated demobilisation and remobilisation of the workforce, oxygen cylinder shortages, supply chain disruptions, and financial difficulties faced by suppliers. As a result, the overall delay due to the pandemic amounted to 24 months, not just 9 months as claimed.

F. Need for mandatory PPA submissions and liquidated damage clauses to ensure accountability in project delays:

Abnormal delays lead to increased capital costs, higher fixed charges for consumers, and losses for DISCOMs, as they are forced to buy power at higher prices. Incorporating liquidated damage clauses in PPAs with public sector utilities like APGENCO is essential to safeguard the public interest and ensure accountability.

Reply of APGENCO: The reasons for the delay of 46 months due to the change in law, force majeure circumstances and circumstances have already been submitted which are beyond the control of APGENCO.

G. Disallowance of IDC and Financing Charges for impermissible delays in project execution:

APGENCO claimed Rs. 3254.69 crores towards Interest During Construction (IDC) and Financing Charges, compared to Rs.665.77 crores in the original PPA dated 22.01.2013. IDC and Financing Charges for the impermissible delay in project execution should not be approved.

Reply of APGENCO: No Reply

H. Assessment of liquidated damages and delay claims by APGENCO:

APGENCO must clarify whether it collected liquidated damages from contractors for project delays as per the agreements. Any such damages should be deducted from the claimed capital cost. Additionally, APGENCO's claim that a fire accident in the control room caused delays should be reviewed as per its contracts and relevant APERC or CERC regulations.

Reply of APGENCO: No liquidated damages were imposed on the contractors for delays caused by force majeure conditions and changes in law.

I. Prudence check on APGENCO's loan interest claims:

APGENCO's claim of an average interest rate of 11.8% on loans with varying rates should be prudently checked by the Commission including verifying when and how much loan was sanctioned, disbursed, drawn, and spent.

Reply of APGENCO: No Reply

J. Limiting APGENCO's tax claims to Pre-COVID period as per Regulations:

The taxes claimed, if paid by APGENCO, should be limited for the period up to the COD of the project, as per applicable regulations, and should not be allowed for the post-COD period.

Reply of APGENCO: The taxes and duties would be incurred only after the post-COD works are actually carried out. All such taxes and duties as incurred must necessarily be allowed.

K. Scrutiny of APGENCO's RoE claim and accountability for project delays:

APGENCO has claimed a 15.5% return on capital, citing "business risks" as justification However, since APGENCO seeks to recover all expenditures, whether permissible or not, from DISCOMs and their consumers, the actual "business risks" it faces in executing and managing the project, especially for any failures, must be questioned. The delay in implementing emission norms set by the Ministry of Environment, Forest, and Climate Change needs to be explained, and any additional financial impact from the delay should be disallowed. Consumers should not bear the cost of APGENCO's failures.

Reply of APGENCO: No Reply

L. Transparency in ash disposal and O&M charges by APGENCO:

Since the O&M charges for the 4th control period have already been determined by the Commission, there is no need for revision of the same. Thermal power plants are expected to sell ash and generate revenue, so if the ash remains unsold and unutilized, details about its transport, purpose, and cost must be substantiated and subjected to scrutiny. If unsold ash is being transported and dumped elsewhere without charge, APGENCO should provide full details, with proof, on how it is disposing of ash from the project, as well as from its other thermal power plants.

Reply of APGENCO: The O&M charges for the project have not yet been determined for the 4th control period. Ash disposal is more likely to incur costs rather than generate revenue. It is conducted in compliance with the norms, schemes, and directives of the MoEF&CC.

M. Regulatory oversight on charges and incentives claimed by APGENCO:

Energy charges should be allowed according to applicable norms and regulations, while fixed charges should be based on normative availability and proportionate to actual scheduling. Incentives for power generation beyond the target PLF of 85%, should be permitted as per regulations. Water charges, security expenses, and similar claims by APGENCO should be prudently checked and allowed only if not already included in fixed charges. The Commission is also requested to ensure that any gains accruing to APGENCO due to various factors are shared with the DISCOMs.

Reply of APGENCO: No Reply

N. Consistent Application of Tariff Principles to NTTPS-V

The Commission has excluded power procurement from four central generating stations due to their higher tariffs. Therefore, the same principle should be applied to NTTPS-V before taking a final decision on the petition.

Reply of APGENCO: No Reply

O. Assessment of increased Capital Cost and delays in the COD of the project:

APGENCO has claimed a capital cost of Rs. 8328.31 Crores in the amended PPA dated 14.10.2022, which is not permissible when compared to the Rs. 5286.00 Crores agreed in the PPA dated 22.01.2013. The Scheduled COD was expected within 50 months from the zero date, but the actual COD was delayed by 46 months.

Reply of APGENCO: The capital cost as per the amended and restated PPA was Rs. 8328.31 crores. The capital cost incurred by APGENCO up to the actual COD is Rs. 7904.20 crores. Additionally, the estimated expenditure for the remaining works of the Balance of Plant package after COD is Rs. 550 crores. Therefore, the total actual capital cost for FY 2025-26 onwards is estimated at Rs. 8454.19 crores, which is only marginally higher than the amount stated in the PPA.

P. Unjustified delay claims for emission norms implementation and COVID-19 pandemic:

APGENCO's claim of a 12-month delay due to the implementation of revised emission norms is not justifiable, as this falls under the calculated business risks. APGENCO should have taken corrective measures to prevent such delays in project execution. The claim of a 24-month delay due to the COVID-19 pandemic is not justifiable, as the actual period affected by the pandemic was only 9 months.

Reply of APGENCO: The MoEF notification issued on 07.12.2015 revising emission norms constitutes a change of law and should not be considered a foreseeable business risk for APGENCO. Additionally, APGENCO cited challenges caused by the COVID-19 pandemic, such as the mass exodus of migrant workers, repeated demobilisation and remobilisation of the workforce, oxygen cylinder shortages, supply chain disruptions, and financial crises among suppliers. As a result, the overall delay due to the pandemic was 24 months, not just 9 months as claimed.

Q. Excess Capital Cost claim by APGENCO beyond CERC Norms:

As per CERC norms, the benchmark capital cost for a 1 x 800 MW thermal power project is Rs. 4.63 Crores/MW, with December 2011 as the base year. Considering that the project was to be commissioned by 30.03.2017, the applicable benchmark capital cost, with a 5% annual escalation, should be Rs. 5.858 Crores/MW. This results in a total capital cost of Rs. 4,688 Crores (5.86 x 800). However, APGENCO has claimed a higher capital cost of Rs.

5286 Crores, which is Rs. 598 Crores above the CERC norms. Hence, the Commission may kindly undertake a prudent check of the capital cost vis-a-vis CERC order on "Benchmark Capital Cost (Hard cost/Mandatory Package) for Thermal Power Stations with Coal as Fuel" dated 4th June 2012.

Reply of APGENCO: The Scheduled Commercial Operation Date (SCOD) for the project is 50 months from the Zero Date, which is 15.12.2015. Therefore, the correct SCOD is February 2020. APDISCOMs' consideration of 30.03.2017 as the SCOD is incorrect and misconceived. APGENCO has submitted the equivalent benchmark costs in paragraph 3.5 of the petition, which should be referred to for further details.

R. Disallowance of excess IDC and Financing Charges due to unjustified delays:

APGENCO revised the capital cost to Rs. 8328.31 Crores in the amended PPA, claiming IDC and financing charges of Rs. 2101.34 Crores, significantly higher than the Rs. 665.77 Crores in the PPA entered into in 2013. These increased charges are due to delays in project execution. APGENCO attributed the delay in the COD of the project to non-performance by contractors, emission norm revisions, the COVID-19 pandemic, and a fire accident. However, no correspondence regarding these delays was made with APDISCOMs, making the reasons untenable, as these are considered business risks.

APGENCO did not submit monthly progress reports and did not impose liquidated damages (LD) on contractors. As per CERC regulations, such delays and cost overruns should have been mitigated. Additionally, CERC's tariff regulations state that any cost overruns due to delays must be justified, and liquidated damages recovered should be offset against capital costs. Since the IDC and financing charges have increased by Rs. 1153 Crores (55%) in just 14 months, without adequate justification, this excess amount should be disallowed.

Reply of APGENCO: APGENCO has explained the 46-months delay due to changes in law, force majeure conditions, and other uncontrollable factors. The claimed IDC and financing charges of Rs. 3254.69 crores are based on the actual construction period and prevailing interest rates. No liquidated damages were imposed on contractors for delays caused by force majeure or change of law circumstances, as these were unforeseeable and could not have been anticipated. Both the IDC and the IEDC have been claimed in line with the CERC 2019 Regulations.

S. Disallowance of Post-SCoD Taxes and Duties, and Scrutiny of APGENCO's Working Capital and RoCE Claims:

APGENCO has claimed Rs. 730.28 Crores towards taxes and duties in the tariff petition. However, since the project was delayed beyond the Scheduled Commercial Operation Date (SCoD), APDISCOMs should not be burdened with taxes and duties incurred after the SCoD. Therefore, these amounts should be disallowed. For the working capital, APGENCO has claimed two months of receivables, but as per CERC Tariff Regulations, only 45 days should be considered. Regarding the Return on Capital Employed (RoCE), APGENCO has claimed a rate of 11.8%**,** based on a 10.2% interest rate for loans from REC and a return on equity of 15.5%. The claimed interest rate should be prudently verified by reviewing the necessary documents, loan sanction details, and the moratorium period.

Reply of APGENCO: APGENCO has claimed IDC and lEDC as per CERC 2019 Regulations. APDISCOM’s contention that no taxes and duties incurred after SCOD should be allowed is incorrect. Taxes and duties are incurred when the actual work is performed after SCOD, and thus, all such expenses deserve to be allowed. As per Clause 3.13 of the PPA and APERC Regulation 1 of 2008, the due date for payment of monthly bills is 60 days. Therefore, receivables should be calculated based on 60 days when computing working capital.

T. Prudence checks on Water Charges, Security Expenses, Ash Transportation, and Capital Spares:

Water charges, security expenses, ash transportation expenses, and capital spares for thermal generating stations should be allowed separately, subject to prudence checks. Water charges should be based on actual consumption, the plant type, the cooling water system, or the water agreement with the state government, and MoEF norms. APGENCO must submit detailed information along with the petition. For security expenses, APGENCO must provide an assessment and estimated costs in the tariff petition. Capital spares costing over Rs. 10 Lakhs must be reported year-wise at the time of truing up, with justifications to ensure that they are not covered by the compensatory allowance, special allowance, additional capitalization, or other funding sources.

Reply of APGENCO: No Reply

U. APGENCO's additional O&M charges claim for the 4th Control Period

APGENCO has claimed O&M charges based on CERC's 2019 Regulations, with an additional 20% for pay revision in FY 2023-24. However, the Commission has already approved the O&M charges for APGENCO employees for the 4th control period (FY 2019-20 to FY 2023-24) in its order dated 29.04.2019. Therefore, APDISCOMs requested the Commission not to accept the petitioner's current claim for O&M charges, as the employees' costs were already factored into the previous tariff orders. For the 5th control period, O&M charges may be calculated with a 5.25% escalation.

Reply of APGENCO: APDISCOM's contentions regarding O&M charges are incorrect. The Commission approved O&M costs based on CERC regulations for 800 MW units during the 2nd and 3rd control periods, as there were no specific norms for units above 500 MW in APERC Regulation 1 of 2008. The Commission also allowed a 20% increase over CERC norms to cover pay revisions every four years, as per the AP Electricity Reform Act, 1998. This approach was followed by the Commission in MYT order dated 29.04.2019 for APGENCO for the 4th control period. The pay scales and pensions of employees in APGENCO, APTRANSCO, and APDISCOMs were revised from 01.04.2022. APGENCO is responsible for paying the revised benefits, including HRA, CCA, and gratuity, in line with state government regulations. While pay revisions fall within the 4th control period, APGENCO has only claimed O&M charges for 102 days from the COD, i.e., 21.12.2023 for the 800 MW unit.

V. Adjustment of Station Heat Rate and Auxiliary Energy Consumption for Tariff Calculations:

Clause 3.4(b) of Article 3 of PPA dated 14.10.2022 between APGENCO and APDISCOMs specifies the station heat rate as 2061 Kcal/KWh. However, in the tariff filing, the station heat rate is indicated as 2164 Kcal/KWh in Annexures A-7, 8(a), and 8(c). The Commission is requested to consider a station heat rate of 2164 Kcal/KWh and auxiliary energy consumption of 5.75% for the balance of the 4th control period (21.12.2023 to 31.03.2024) and a heat rate of 2154 Kcal/KWh and auxiliary energy consumption of 5.25% for the 5th control period while calculating variable charges.

Reply of APGENCO: The operating parameters of the project have been proposed as per the CERC 2019 Regulations as the zero date of the project is

15.12.2015 and the actual COD is 31.12.2023.

W. **Sharing of Financial Gains and Fixed Cost payments based on Normative Availability:**

Any financial gains from improvements in Station Heat Rate, Auxiliary Consumption, Fuel Consumption, loan restructuring, Clean Development Mechanism (CDM) benefits, and non-tariff income should be shared with APDISCOMs, as per CERC Regulations 2024. DISCOMs will pay fixed costs based on the plant's actual availability during the month, subject to capping at normative values both monthly and annually.

Reply of APGENCO: The Fixed Costs as determined by the Commission are required to be paid in monthly instalments based on the availability of the plant.

<u>Commission's Analysis and Decision</u>

9. Having regard to the respective stands of the parties and the objectors, the following common points arise for consideration in these O.Ps.

A. Point No.1: Whether the draft PPA deserves to be approved?

B. Point No.2: If Point No.1 is answered in the affirmative, are any modifications necessary in the draft PPA clauses? And

C. Point No.3: If the PPA is to be approved, what should be the appropriate tariff?

<u>Re-Points Nos.1 & 2</u>

10. None of the objectors have opposed the procurement of power from the Dr. NTTPS-V project. Their main concerns relate to the high tariff caused by higher capital costs due to delays in project completion, additional ROCE and O&M charges, higher Station Heat Rate and Auxiliary Consumption, post-SCoD taxes and duties, etc. In its order dated 27.06.2024 on Load Forecasts and Resource Plans for the 5th control period (FY 2024-25 to FY 2028-29), the Commission

conducted a thorough assessment of the power needs of APDISCOMs and approved the inclusion of Dr. NTTPS-V as a generation source and that order has attained finality. Added to this, the project was conceived in 2013, and the original PPA was signed in that year. Despite the pending approval of the PPA, APGENCO has been supplying power to APDISCOMs from this project. Therefore, it would be inappropriate to reject the PPA at this stage.

In this context, while the Commission aims to ensure a fair tariff, it also recognizes the importance of baseload generation from Dr. NTTPS-V, especially given the growing integration of infirm solar and wind energy, and the anticipated retirement of older APGENCO thermal stations. Power from this project is very much essential to balance the intermittent generation from the solar and wind plants, safeguard the grid and maintain uninterrupted supply to the consumers. As a State Government-owned unit, significant public funds have already been invested in Dr. NTTPS-V unit, which would be wasted if the PPA is not approved. Moreover, maintaining a balance of public and private generation plants is crucial for fostering competition and preventing monopolistic trends. Encouraging power procurement from units like Dr. NTTPS-V supports this objective. Therefore, the Commission is of the view that the PPA merits approval.

Therefore, the Commission conducted a comprehensive review of the PPA and concluded that the modifications outlined in **Annexure-IV** are necessary.

Points Nos.1 and 2 are accordingly answered.

Re-Point No.3

11. **Determination of Tariff**

A. Capital Cost

The Capital Cost claimed by the APGENCO in its filings is Rs.7904.19 Crores including the IDC amount for 46 months delay in attaining COD, for the balance of 4th Control Period, i.e., 21.12.2023 (COD) to 31.03.2024 as certified by its statutory auditors **(Annexure-V)**. The details of this capital cost filings are indicated in the following table.

Table No: 1.1

Filings: Capital Cost for the balance of the 4th Control Period, i.e., 21.12.2023 (COD) to 31.03.2024 (Rs. Crores)

S.No.	Description	Rs(Crores)
1	Cost of Land & Site Development	
1.1	Land Cost	-
1.2	R&R Package	-
1.3	Development Cost	-
	Total Land & Site Development	-
2	Plant & Equipment	
2.1	EPC BTG Package Supply, Spares	2,109.26
2.2	EPC BOP Package Supply, Spares	1,146.51
2.3	Civil works	794.35
2.4	Formation of diversion bund	-
2.5	Township	
	Total Plant & Equipment Including Taxes & Duties	4,050.12
3	Construction & Pre–Commissioning Expenses	
3.1	BTG Package Erection	350.5
3.2	BOP Package Erection	38.34
3.3	Start-up Fuel	35
3.4	Operator Training	
	Total Construction & Pre-Commissioning Expenses	423.84
	Total Hard Cost of the Project with tax component of Rs.730.28 Cr (2+3)	4,473.96
4	Overheads	
4.1	Establishment costs	165.7
4.2	Contingency	3.66
4.3	CSR@ 0.4% of Project Cost	
4.4	Consultancy & Engineering	6.18
	Total Overheads	175.54
5	Capital Cost Excluding IDC & FC (1+2+3+4)	4,649.50
6	Interest During Construction	3,254.69
	Project Capital Cost including IDC	**7,904.19**

Further, APGENCO has claimed an additional capital cost of Rs.550 Crores towards the completion of balance works of BOP starting from FY 2025-26 of the 5th control period. The details are as follows:

Table No: 1.2

Filings: Capital Cost and additional capital cost for the 5th Control Period (Rs. Crores)

S. No.	Description	FY 2024-25	From FY 2025-26
1	Capital Cost of the Project as of 20.12.2023	7904.19	7904.19
2	Additional Capital Cost for completing Balance Works of BOP		550.00
	Total Capital Cost	**7904.19**	**8454.19**

The reasons for the significant increase in the capital cost is mainly due to the incurring of IDC for the delay of 46 months in attaining the COD beyond the Scheduled COD of the project which was on 15.02.2020.

APGENCO pleaded the following reasons in justification of the delay.

I. Due to the revision of standards for stack emissions and condenser cooling systems by the MoEF & CC, as notified on 07.12.2015, APGENCO had to undertake re-engineering of the boiler and associated equipment to comply with these new standards. This led to extensive correspondence, discussions, and negotiations with the BTG contractor until 24.11.2016. The supply and service contract with the contractor was amended on 24.11.2016. This led to a delay of 12 months in attaining the COD of the project. This delay falls under the "change in law" category due to the revision of standards by the MoEF & CC.

II. Due to the COVID-19 pandemic, construction work was halted on 21.03.2020 following the government's lockdown declaration. Most migrant workers left the site for their native places even by walking, during the lockdown, and the remaining workers departed after transportation was restored. As work was to resume, the 2nd wave of COVID-19 hit in April 2021, causing further disruptions as migrant workers again left the site. The 3rd Omicron wave in January 2022 severely impacted progress, with many workers and employees becoming seriously ill, and quarantine protocols delaying the return of skilled labour from other states. Additionally, supply chains were disrupted, and government restrictions on oxygen use for non-medical purposes further delayed supply, erection, and commissioning activities. Overall, the pandemic caused a delay of 24 months in attaining the COD of the project.

III. Force majeure events such as fire accidents in the central control room (CCR), heavy rains, sand crisis, cement holiday and truckers' strike led to a further delay of 10 months in attaining the COD of the project.

The above reasons led to a cumulative 46 months delay in attaining the COD of the project which were beyond the control of APGENCO.

APGENCO's contention is that the capital cost of Rs.7,904.20 crores claimed by it for the balance of the 4th control period is less than the capital cost of Rs.8,917 Crores (computed based on the 2011 CERC benchmark hard cost escalated by 5% up to SCOD + the IDC for 46 months + Taxes and duties).

Most of the objections raised by the objectors relate to the abnormal delay in achieving the COD of the project and the resultant increase in the Capital Cost of the project.

Commission's decision

The Commission has given its earnest consideration for the reasons for the delays pleaded by the APGENCO and the objections raised there to by the objectors. The AP GENCO contended that the 46-month delay in achieving COD and the resultant increase in capital cost were due to factors beyond their control, including the implementation of revised standards notified by MoEF &

CC (12 months), the COVID-19 pandemic (24 months), and a fire accident in the central control room (10 months). In light of the Supreme Court's order dated 10.01.2022 in miscellaneous application No. 21 of 2022 in miscellaneous application No. 665 of 2021 in suo motu writ petition (c) No. 3 of 2020, which excluded the period from 15.03.2020 to 28.02.2022 and an additional 90 days from 01.03.2022 for limitation purposes due to the pandemic, it is reasonable to extend this rationale to the execution of works. The Supreme Court's direction makes it evident that the highest court of the land has taken judicial notice of the severe impact created by COVID-19 in different phases and the serious disruption of human activities for almost two years. Therefore the Commission finds it reasonable to exclude the length of period which the Supreme Court excluded for computing limitation. As regards the other delays, even if the extensions sought by APGENCO on account of the revised standards and the fire accident are granted, the extended periods would overlap with the COVID-19 period, making those additional extensions redundant.

From the records, it is noted that the project was synchronized with the grid on 07.12.2021. Based on the CEA report on "Expected synchronization/commissioning (Full load)/COD details of Thermal Power Projects," it is reasonable to assume that the typical period from synchronization to COD completion is 3 months. By adding this period to the time extension granted by the Supreme Court, the revised timeline for COD completion would be the end of August 2022. Accordingly, the Commission is inclined to permit the IDC up to the end of August 2022.

The Commission has reviewed the hard cost of the project (including taxes and overheads, but excluding IDC) filed by APGENCO, which works out to Rs. 5.812 Crores/MW or Rs.4,649.5 Crores. This figure is lower than the CERC Benchmark Hard Cost (CERC Benchmark Hard Cost in 2011 plus 5%

escalation up to 2020 plus taxes) of Rs. 7.8 Crores/MW. Therefore, the Commission adopts the figure claimed by APGENCO for arriving at the final Capital Cost by adding IDC. For calculating the IDC for the SDSTPS and RTPP-IV units, the Commission distributed the utilization of funds equally from the zero date to the COD, each year. The same principle has been adopted in respect of this project also and the Capital Cost has been recalculated, including the IDC up to the end of August 2022. The interest rate considered for IDC computation is 11.75%, which is the effective interest rate paid by APGENCO to the lenders. The details of the revised calculations are presented in the following table.

Table No. 1.3

Approved by APERC: Capital Cost of the project including IDC

The Capital Cost (excluding IDC) is Rs. 4,649.5 crores. The interest rate considered is 11.75%. IDC is calculated on 70% of the Capital Cost(excluding IDC), which represents the loan amount.								
Description	1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	Total
Loan utilised (Rs. Crores)	482.17	482.17	482.17	482.17	482.17	482.17	361.63	3254.65
IDC (Rs. Crores)	28.33	88.31	155.34	230.25	313.96	407.51	336.64	1560.34
Capital Cost(including IDC)(4649.50+1560.34)(Rs.Crores)								6209.84

As regards the additional capitalization of Rs. 550 Crores claimed by APGENCO, the Commission is not inclined to approve the same as it has been submitted on a provisional basis without the Auditor's certificate. However, APGENCO is granted the liberty to approach the Commission through a petition once the amount is actually incurred, supported by the necessary documentation.

B. <u>Depreciation</u>

APGENCO claimed a uniform depreciation rate of 5.28% for the remaining duration of the 4th control period from the COD and the entire 5th control period, in accordance with the CERC Tariff Regulations, 2019. This rate would apply until 70% of the project's original capital cost is recovered, after which the remaining depreciable value is spread over the project's remaining useful life. The depreciation rate claimed by APGENCO is lower than the rate specified by the Ministry of Power (MoP) and allowed by the Commission under Clause 12.2(b) of APERC Regulation 1 of 2008. No objections were raised against APGENCO's claims.

Commission's decision

The depreciation rate of 2.75% claimed by APPDCL (in which APGENCO holds a majority stake) in O.P.No.21 of 2024, for the determination of tariff for SDSTPS Stage-II (covering the remaining 4th control period and the entire 5th control period), differs from that of the similarly placed Dr. NTTPS-V unit, even though both units have the same capacity. O.P.No.21 of 2024 is currently pending before the Commission. Against 2.75 per cent claimed by APPDCL and 5.28 per cent claimed by Dr.NTTPS Stage V, the Commission is of the view that applying different depreciation rates to these two units, which are similarly placed and are effectively controlled by APGENCO, is not appropriate. The APERC Regulation 1 of 2008 stipulates the adoption of deprecation rates notified by the MoP, Government of India. These rates are higher than the depreciation rates adopted by the APPDCL and APGENCO. If these rates are adopted, it would lead to substantial front lading of tariffs. Therefore, the Commission decides to implement a uniform depreciation rate of 3.6% in the straight-line method for both units for the entire duration of their PPAs. Accordingly, the Commission has computed the depreciation amounts for the remainder of the 4th control period and the entire 5th control period. As per Clause 12.2 of APERC Regulation 1 of 2008, land is not a depreciable asset. Hence, the same has been excluded in the computation of depreciation. The depreciation calculated by the

Commission, along with those filed by APGENCO, is shown in the following tables.

Table No. 1.4

Filings: Depreciation for the balance of the 4th control period from the COD and the entire 5th control period (Rs. Crores)

S.No.	Description	FY 2023-24 (102 days)	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Depreciation	116.31	417.34	446.38	446.38	446.38	446.38
2	Accumulated Depreciation	00.00	116.31	533.65	980.03	1426.41	1872.80

Table:1.5

Approved by APERC: Depreciation for the balance of the 4th control period from the COD and the entire 5th control period (Rs. Crores)

S.No.	Description	FY 2023-24 (102 days)	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Depreciation	62.47	223.55	223.55	223.55	223.55	223.55
2	Accumulated Depreciation	00.00	62.47	286.03	509.58	733.13	956.69

C. Operation & Maintenance(O&M) Charges

APGENCO has claimed O&M charges for the balance of the 4th control period and the entire 5th control period in line with the norms specified in the CERC (Terms and Conditions for Tariff) Regulations, 2019 and 2024, respectively. Further, APGENCO has requested an extra 20% over the specified norms to account for the 2022 wage revision, increased HRA, CCA, and gratuity. Additionally, APGENCO claimed water and security charges proportional to the 800 MW installed capacity of this project, based on the Government Orders (G.Os) for water charges and the Memorandum of Understanding (MoU) with the Government of Andhra Pradesh (GoAP) for security charges.

The contention of APDISCOMs is that since the O&M charges for the 4th control period have already been determined by the Commission, there is no need for the revision of the same. APGENCO responded that APDISCOMs' contention is not correct, as the O&M charges for other APGENCO plants were determined by the Commission, but not for this particular project. Further, APDISCOMs requested the Commission to compute the O&M charges for the 5th control period by considering an escalation rate of 5.25%.

Commission's decision

In the MYT order dated 09.09.2024 in O.P.No.79 of 2023 for the 5th control period, the Commission approved the O&M expenditure for APGENCO's thermal stations in accordance with the norms set for thermal stations by CERC under its Tariff Regulations, 2024. At the same time, the Commission did not approve APGENCO's request for an additional 20% over the norms for pay revision. Instead, the Commission allowed APGENCO to seek a True-Up of O&M charges if the actual expenditures exceeded the approved amounts.

In line with the above decision, the Commission decides to compute the O&M charges for the project for the remainder of the 4th control period as per the norms specified in the CERC Tariff Regulations, 2019, and for the entire 5th control period as per the norms specified in the CERC Tariff Regulations, 2024. The O&M charges computed by the Commission, along with those filed by APGENCO, are shown in the following tables.

Table No. 1.6

Filings: O&M charges for the balance of the 4th control period from the COD and the entire 5th control period

S.No	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Capacity (MW)	800	800	800	800	800	800
2	O&M charges per MW as per CERC 2019/24 Regulations (Rs. Lakh/MW)	20.93	23.20	24.42	25.70	27.05	28.47
3	O&M charges with wage revision (Rs. Lakh/MW)	25.12	27.84	29.30	30.84	32.46	34.16
4	Water and security charges	6.00	6.24	6.49	6.75	7.02	7.30
O&M charges per annum Rs. Crores (1x3/100)		**206.93**	**228.96**	**240.90**	**253.47**	**266.69**	**280.60**
O&M charges for 102 days in FY 2023-24 in Rs. Crores		**57.67**	--	--	--	--	--

Table No. 1.7

Approved by APERC: O&M charges for the balance of the 4th control period from the COD and the entire 5th control period

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Capacity (MW)	800	800.00	800.00	800.00	800.00	800.00
2	O&M charges per MW as per CERC 2019/24 Regulations (Rs. Lakh/MW)	20.93	23.20	24.42	25.70	27.05	28.47
O&M charges per annum Rs. Crores (1x2/100)		**167.94**	**185.60**	**195.34**	**205.60**	**216.39**	**227.75**
O&M charges for 102 days in FY 2023-24 in Rs. Crores		**46.66**	--	--	--	--	--

The Commission is not inclined to allow separate water and security charges claimed by APGENCO as they are part of O&M charges.

D. Working Capital

APGENCO claimed the Working Capital as per clause 12.4 of APERC Regulation

1 of 2008. APDISCOMs contended that only 45 days of receivables should be considered instead of two months in the computation of Working Capital in line with CERC Tariff regulations. APGENCO responded that since the due date for payment of monthly bills is 60 days, two months should be considered in the computation of Working Capital.

Commission's decision

As per Clause 12.4 of Regulation 1 of 2008, Working Capital includes the cost of coal & oil for one month at target availability, O&M charges for one month, Maintenance spares @ 1 percent of the historical cost as per indexation (4%) of O&M norms and Receivables for sale of electricity equivalent to two months of the sum of annual fixed charges and energy charges calculated at target availability. The Commission has been consistently following the norms specified in APERC Regulation 1 of 2008 for computing the Working Capital including the Working Capitals for various thermal stations of APGENCO in the latest MYT Tariff Order dated 09.09.2024 in O.P.No.79 of 2023 for the 5th control period.

Therefore, the Commission adopts the same procedure for computing the Working Capital for this project. The Working Capital Computed by the Commission and that filed by APGENCO, are shown in the following tables.

Table No. 1.8

Filings: Working Capital for the balance of the 4th control period from the COD and the entire 5th control period(Rs. Crores)

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Cost of Fuel for 1 month	162.35	162.35	162.35	162.35	162.35	162.35
2	Cost of oil for 1 month	1.40	1.40	1.40	1.40	1.40	1.40
3	O&M charges for 1 month	17.20	19.08	20.08	21.12	22.22	23.38

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
4	Spares @1% of CC with 4% Escalation	79.04	82.20	90.99	94.33	98.42	102.35
5	Receivables equivalent to 60 days	603.95	605.50	615.32	608.60	601.99	595.50
Working Capital per Annum (1+2+3+4+5)		**864.02**	**870.53**	**890.14**	**888.10**	**886.38**	**884.99**
Working Capital for 102 days in FY 2023-24		**240.79**	**--**	**--**	**--**	**--**	**--**

Table No. 1.9

Approved by APERC: Working Capital for the balance of the 4th control period from the COD and the entire 5th control period(Rs. Crores)

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Cost of Fuel for 1 month including oil	156.26	156.26	156.26	156.26	156.26	156.26
2	O&M charges for 1 month	13.95	15.47	16.28	17.13	18.03	18.98
3	Spares @1% of CC with 4% Escalation	62.10	64.58	67.17	69.85	72.65	75.55
4	Receivables equivalent to 60 days	514.51	516.42	513.66	510.99	508.42	505.94
Working Capital per Annum (1+2+3+4)		**746.82**	**752.74**	**753.37**	**754.24**	**755.36**	**756.74**
Working Capital for 102 days in FY 2023-24		**208.13**	**--**	**--**	**--**	**--**	**--**

E. Weighted Average Cost of Capital (WACC)

Clause 12.1.b. of APERC Regulation 1 of 2008 specifies the following formula for Weighted Average Cost of Capital (WACC).

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

Where

'D/E' is the Debt to Equity Ratio and shall be determined at the beginning of the Control Period after considering the 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 the 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.

APGENCO claimed WACC at 11.80% as per the above formula based on a Debt/Equity ratio of 70:30, Return on Equity of 15.5% and Interest on Debt at 10.2% as REC which is the major lender for the projects charges an interest of 10.2%.

<u>Commission’s decision</u>

As per Clause 10.13 of Regulation 1 of 2008, the debt-equity ratio as on the date of commercial operation shall be taken as 70:30 for determination of tariff irrespective of the actual quantum of debt and equity. Therefore, the Commission adopts the Debt/Equity ratio as 70:30. In the latest MYT tariff order of APGENCO stations for FY 2024-29 dated 09.09.2024 in O.P.No.79 of 2023, the Commission adopted 15.5% as return on equity and 10.2% as the cost of debt. Therefore, the Commission adopts the same rates for this project also. Based on the above figures, the WACC works out to 11.79% which is almost equal to the 11.80% claimed by APGENCO. Therefore, the Commission accepts the WACC of 11.80% claimed by APGENCO.

F. <u>Return on Capital Employed (RoCE)</u>

As per Clause 12.1 (a) of APERC Regulation 1 of 2008, RoCE is equal to sum of

I. Original Capital Cost less Accumulated depreciation, and;

II. Working Capital approved by the Commission as per this Regulation, multiplied by the Weighted Average Cost of Capital (WACC).

In para No.11(A), the Commission approved the Capital Cost for the project as Rs. 6,209.84 Crores as of the COD, i.e., 21.12.2023. Further, the Commission has disallowed additional capital expenditure of Rs.550 crores claimed by APGENCO as of the end of FY 2024-25.

The components in the above formula, i.e., Gross Fixed Asset(original Capital Cost), Depreciation, Working Capital and WACC have already been determined by the Commission *supra*. Based on the above formula and its constituents, the Commission has computed the ROCE for the remainder of the 4th control period and the entire 5th control period. The ROCE computed by the Commission and that filed by APGENCO, are shown in the following tables.

Table No. 1.10

Filings: Return on Capital Employed (RoCE) for the balance of the 4th control period from the COD and the entire 5th control period(Rs. Crores)

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Original Capital Cost	7904.19	7904.19	7904.19	8454.19	8454.19	8454.19
2	Estimated Add. Cap. Cost for Completing balance works of BOP as on 31.03.2025			550.00			
3	Less Accumulated Depreciation	0.00	116.31	533.65	980.03	1426.41	1872.79
4	Working Capital	864.02	870.53	890.14	888.10	886.38	884.99
5	Total (1+2-3+4)	8768.21	8658.41	8810.68	8362.26	7914.16	7466.39
6	WACC (%)	11.80	11.80	11.80	11.80	11.80	11.80
RoCE per Annum		**1034.65**	**1021.69**	**1039.66**	**986.75**	**933.87**	**881.03**
RoCE for 102 days in FY 2023-24		**288.34**	**--**	**--**	**--**	**--**	**--**

Table No. 1.11

Approved by APERC: Return on Capital Employed (RoCE) for the balance of the 4th control period from the COD and the entire 5th control period(Rs. Crores)

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Original Capital Cost	6,209.84	6,209.84	6,209.84	6,209.84	6,209.84	6,209.84
2	Less Accumulated Depreciation	-	62.47	286.03	509.58	733.13	956.69
3	Working Capital	746.82	752.74	753.37	754.24	755.36	756.74
4	Total (1-2+3)	6,956.66	6,900.10	6,677.18	6,454.50	6,232.06	6,009.88
5	WACC (%)	11.80	11.80	11.80	11.80	11.80	11.80
RoCE per Annum		**820.89**	**814.21**	**787.91**	**761.63**	**735.38**	**709.17**
RoCE for 102 days in FY 2023-24		**229.40**					

G. Fixed Charges

The fixed Charges computed by the Commission by summing up the ROCE, O&M charges and Depreciation as approved *supra* and the fixed costs claimed by APGENCO are as shown in the following tables.

Table No. 1.12

Filings: Return on Capital Employed (RoCE) for the balance of the 4th control period from the COD and the entire 5th control period(Rs. Crores)

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Depreciation	417.34	417.34	446.38	446.38	446.38	446.38
2	O&M charges	206.93	228.96	240.90	253.47	266.69	280.60
3	ROCE	1034.65	1021.51	1039.47	986.54	933.36	880.81
4	Petition fee and publication		1.80				
Fixed Cost (1+2+3)		**1658.92**	**1669.79**	**1726.94**	**1686.60**	**1646.94**	**1608.02**
Fixed Cost for 102 days from 21.12.2023 to 31.03.2024		**462.32**	**--**	**--**	**--**	**--**	**--**

Table No. 1.13

Approved by APERC: Return on Capital Employed (RoCE) for the balance of the 4th control period from the COD and the entire 5th control period(Rs.Crores)

S.No.	Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Depreciation	223.55	223.55	223.55	223.55	223.55	223.55
2	O&M charges	167.44	185.60	195.34	205.60	216.39	227.75
3	ROCE	820.89	814.21	787.91	761.63	735.38	709.17
Fixed Cost (1+2+3)		**1,211.88**	**1,223.37**	**1,206.81**	**1,190.78**	**1,175.33**	**1,160.47**
Fixed Cost for 102 days from 21.12.2023 to 31.03.2024		**338.66**	--	--	--	--	--

Note: The fixed charges approved above are based on normative availability, and if the actual availability falls below this level, the payment shall be claimed and made on a pro-rata basis.

H. Income Tax and Incentives

Income tax and Incentives shall be claimed and paid as per the relevant provisions of APERC Regulation 1 of 2008.

I. Ash Transportation Costs

APGENCO has requested the Commission to permit the incurrence of loading and transportation costs for unutilized ash, as per the guidelines in Clause B of the MoEF Notification 2021. These guidelines mandate that thermal power plants bear the transportation costs for delivering ash to projects within 300 km. APGENCO also sought approval to claim these costs as a pass-through in the FCA bills when incurred.

Commission's decision

The Commission is not inclined to approve these charges at this stage. However, APGENCO is granted the liberty to file an appropriate petition before the Commission with the actual costs incurred.

J. <u>Tariff Petition Fee, Publication & Related Expenses</u>

APGENCO stated that, as per Clause No. 94 of CERC 2024 Regulation, 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. Accordingly, APGENCO has claimed Rs.1.80 crores towards the application fee and publication expenses.

<u>Commission's decision</u>

The Commission is not inclined to approve the application fee and related expenses of Rs. 1.80 crores claimed by APGENCO as there is no provision in APERC Regulation 1 of 2008 for pass-through of the same. APGENCO may meet this expenditure from its profits.

K. <u>Variable Charges</u>

Clause 13.1.a. of APERC Regulation 1 of 2008 provides the formula for calculating Variable Charges (Rs./kWh). The formula includes components such as the landed cost of fuel, GCV of fuel, and normative values for specific oil consumption, auxiliary consumption, and Station Heat Rate.

APGENCO has claimed the base Variable Charge (energy charge) at Rs.3.50/kWh for the remainder of the 4th control period and for the entire 5th control period. This base rate was calculated by APGENCO using the following normative parameters, based on the norms specified in the CERC Tariff Regulations, 2019, along with fuel values.

<u>Table No. 1.14</u>

Filings: Normative Parameters

S.No.	Description	Units	Values
1	Station Heat Rate	kCal/Kg	2164
2	Auxiliary Power Consumption	%	5.75
3	Specific Oil Consumption	ml/kWh	0.5
4	Windage & Transit Losses	%	0.8
5	Availability	%	85

Table No. 1.15

Filings: Fuel Values

S.No.	Description	Units	Values
1	GCV of Coal	Kcal/Kg	4200
2	Landed Cost of Coal	Rs/MT	6371
3	GCV of Oil	Kcal/Kg	10000
4	Landed Cost of Oil	Rs/KL	63000

Commission's decision

As per Clause 13.1.b of the APERC Regulation 1 of 2008, the initial variable charges (Rs./kWh) for the project shall be determined based on the actual gross calorific value of coal, lignite, gas, or liquid fuel from the preceding three months. However, APGENCO was unable to provide the above data citing reasons such as the delays in coal deliveries from Coal India, with whom it has a Fuel Supply Agreement. This has led to the diversion of coal from stocks intended for other projects to this project. Therefore, APGENCO has submitted details of the Variable Charges for the period from January 2024 to August 2024, including the norms and fuel values used in these calculations (as shown in Annexure-VI). The norms applied in these calculations are based on the CERC Tariff Regulations, 2019 for 800 MW units. As APERC Regulation 1 of 2008 does not specify normative values for secondary oil consumption, auxiliary consumption, and Station Heat Rate,etc., for 800 MW units, the Commission accepts the Variable Charges submitted by APGENCO as they have been computed using CERC norms. However, since APGENCO has not furnished the details of Variable Charges for the preceding three months of the COD, the Commission finds it reasonable to consider the average of the variable charges furnished by it for the period from Jan 2024 to Aug 2024 for the purpose of fixing the ceiling price for Variable Charges, which works out to Rs. 3.34/kWh. This ceiling price for 100 per cent domestic coal through all rail

Route. If alternate mode is permitted for transport of coal or imported coal is used for blending, based on the price difference between the coal from all rail route and other means as mentioned above, the ceiling price may be revised correspondingly and paid.

12. APGENCO, when submitting bills, must provide the necessary information to DISCOMs in the format attached to this Order as **Annexure-VII**. Failure to submit the information in the specified format will be considered an incomplete bill submission. Consequently, APDISCOMs may withhold payment until APGENCO provides the required information.

13. In the event of an increase in the landed cost of coal due to notifications from coal companies or changes in railway freight charges, the ceiling price for the Variable Charge shall be adjusted proportionately to the percentage increase as specified in the notifications. Fuel cost adjustment bills, in accordance with APERC Regulation 1 of 2008, shall be paid up to the ceiling price for the Variable Charge as approved in this order. Any variation beyond the approved ceiling price Variable Charge will be subject to scrutiny and approval by the Commission for payment. Until such approval is granted, payments shall be limited to the approval based on APGENCO's annual performance review.. **Accordingly, APGENCO is required to submit an annual performance petition to the Commission each year, once the audited figures are available.**

14. **The following CERC directions regarding the sampling and testing of GCV at the receiving end of generating stations must be strictly adhered to.**

"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."

15. The GCV shall be calculated at the receiving generating station for the computation of energy charges/variable cost, following the above sampling procedure duly considering the minimum margin recommended in the MoP notification dated 18.10.2017, to account for the loss of GCV from the wagon top at the unloading point to the point of firing in the boiler.

16. APGENCO, in collaboration with the DISCOMs, shall optimise the variable cost by adhering to the guidelines issued by the Central Electricity Authority (CEA) in its letter dated 08.06.2016, which outlines the methodology for flexibility in the utilisation of domestic coal to reduce power generation costs. Any coal diversion from one station to another must strictly follow the CEA guidelines and not be conducted on an unplanned basis, as this could increase the landed cost of coal.

If coal diversion occurs without adhering to the CEA guidelines, all such instances must be reported to the Commission. APGENCO is required to provide an explanation of the circumstances, the necessity for the diversion, and the price implications on variable costs resulting from these unplanned diversions. This information should be presented in the format specified in Annexure VII and submitted by APDISCOMs based on the details obtained from APGENCO.

17. There is serious concerns about the performance of APGENCO's power plants. This is evident from the low PLF despite the need for full despatch in the last few years. As fewer coal stocks & low-quality of coal 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 address all performance-related issues, including coal logistics, to improve the performance of APGENCO and also for less dependence on markets to maintain the 24X7 power supply to end consumers. Because of the poor performance of APGENCO' plants, additional costs in short-term purchases are being imposed on retail consumers. Therefore, the Commission directs the DISCOMS to deduct five paise from variable costs of Dr NTTPS Stage V if the actual availability in any month is upto 5 percent less than the normative/target, 10 paise if the actual availability shortage falls in the range of 5-15 per cent and 15 paise if the actual availability falls short of more than 15 per cent. APGENCO may seek release of the withheld amount by the DISCOMS by filing an appropriate petition in this regard with reasons for such non-performance and showing that they are uncontrollable.

18. 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.

19. Further, 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 December 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 percent of the norm, DISCOMS may file a petition before the Commission under section 142 for violation of the above direction, besides seeking recovery of WC corresponding to the maintaining of actual coals stocks. The Commission also directs the DISCOMS that the payments to APGENCO shall be made with promptitude, strictly as per the PPA approved by the Commission. 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.

20. **Any violation of the directions issued by the Commission in this Order will entail in action being taken by the Commission Suo motu under Sections 142 and 146 of the Electricity Act, 2003.**

21. APGENCO is entitled to recover the tariff as determined in this order from APDISCOMs in proportion to the power supplied to them.

22. In the light of the above discussion, the Commission hereby grants consent to the PPA with the tariff as determined and the conditions as modified above. APDISCOMs are directed to incorporate the modifications as directed in the foregoing and submit the amended PPA signed by all the parties within 30 days from the date of this Order for final approval by the Commission.

The OPs accordingly stand disposed of.

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

Annexure-I

ఆంధ్రప్రదేశ్ పవర్ జనరేషన్ కార్పొరేషన్ లిమిటెడ్
ఆంధ్రప్రదేశ్ ఎలక్ట్రిసిటీ రెగ్యులేటరీ కమిషన్, 220 KV సబ్ స్టేషన్ ప్రక్కన,
దిన్నెదేవరపాడు రోడ్, కర్నూలు, ఆంధ్రప్రదేశ్ - 518002

బహిరంగ ప్రకటన
ఓ.పి. నెంబర్: 22/2024

ఇందుమూలంగా యావన్మందికి తెలియచేయడము ఏమనగా, విద్యుత్ ఉత్పత్తి వ్యాపారంలో ఉన్న ఆంధ్రప్రదేశ్ పవర్ జనరేషన్ కార్పొరేషన్ లిమిటెడ్ ("APGENCO") వారు ఆంధ్రప్రదేశ్ డిస్ట్రిబ్యూషన్ లైసెన్సుదారులకు, Dr. NTTPS స్టేజ్-V (1x800 MW) నుండి పంపిణీ చేయుచున్న విద్యుత్‌కి, 4 వ నియంత్రణ కాలవ్యవధి 2019-24 లో మిగిలిన కాలం అనగా COD 21.12.2023 నుండి 31.03.2024 వరకు **"మూలధన వ్యయం & టారిఫ్"** నిర్ధారణ కోసం మరియు 5 వ నియంత్రణ కాలవ్యవధి 2024-2029 కి **"టారిఫ్"** నిర్ధారణ కోసం, ఒక దరఖాస్తును సమర్పించింది, గౌరవనీయమైన కమిషన్ ద్వారా O.P.No.22/2024 గా రికార్డు చేయబడింది.

టారిఫ్ దరఖాస్తు యొక్క కాపీ మరియు దానికి సంబంధించిన అన్ని అనుబంధాలను APGENCO వెబ్‌సైట్ **www.apgenco.gov.in** లో మరియు APERC వెబ్‌సైట్ **www.aperc.gov.in** లో అందుబాటులో ఉన్నాయి. టారిఫ్ దరఖాస్తు యొక్క కాపీ ఇ-మెయిల్ ce-comml@apgenco.gov.in ద్వారా ఉచితంగా పొందవచ్చు లేదా చీఫ్ ఇంజినీర్, కమర్షియల్, APGENCO, విద్యుత్ సౌధ, గుణదల, విజయవాడ-520004 నుండి రాతపూర్వక దరఖాస్తు ద్వారా Rs.100/- చెల్లించి హార్డ్ కాపీ పొందవచ్చు. దరఖాస్తును పైన పేర్కొన్న కార్యాలయంలో కూడా తనిఖీ చేయవచ్చు.

APGENCO దాఖలు చేసిన పిటిషన్‌పై అభ్యంతరాలు లేదా సూచనలు ఏమైనా ఉంటే, సపోర్టింగ్ మెటీరియల్ మరియు సర్వీస్ కనెక్షన్ యొక్క రుజువుతో పాటు సెక్రటరీ, APERC కి పైన పేర్కొన్న చిరునామాకు లేదా చీఫ్ ఇంజినీర్, కమర్షియల్, APGENCO, విద్యుత్ సౌధ, గుణదల, విజయవాడ-520004 చిరునామాకు వ్యక్తిగతంగా లేదా రిజిస్టర్డ్ పోస్ట్ ద్వారా దాఖలు చేయవచ్చు. అభ్యంతరాలను స్వీకరించేందుకు చివరి తేది 03.07.2024. అభ్యంతరాలు/ సూచనలపై సంతకం చేసి పూర్తి పేరు మరియు పోస్టల్ చిరునామాను కలిగి ఉండాలి. అభ్యంతరాలు/ సూచనలను పంపుతున్న వ్యక్తి లేదా వ్యక్తులు ఏదైనా సంస్థ లేదా ఏదైనా వర్గం వినియోగదారుల తరపున అభ్యంతరాలు దాఖలు చేయబడితే, దానిని పేర్కొనాలి మరియు అభ్యంతరదారుడు వ్యక్తిగతంగా విచారణను హాజరవ్వాలనుకుంటే, దానిని కూడా ప్రత్యేకంగా పేర్కొనాలి.

ఈ నోటీసుకు ప్రతిస్పందనగా వచ్చిన అభ్యంతరాలు/సూచనలను పరిశీలించిన తర్వాత గౌరవనీయమైన కమిషన్ వారు విచారణ తేదీలను తెలియజేయును.

తేది: 03.06.2024 — కమిషన్ యొక్క ఆదేశంతో
స్థలం: విజయవాడ — Sd/- **మేనేజింగ్ డైరెక్టర్, APGENCO**

DIPR RO No.3015PP/CL/Advt/1/1/2021-22, Dt: 31-05-2024

Annexure-II

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

BEFORE THE ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION,
VIDYUT NIYANTRANA BHAVAN, BESIDE 220 KV SS,
DINNEDEVARAPADU ROAD, KURNOOL - 518002

APGENCO

PUBLIC NOTICE
O.P. No. 22 of 2024

Notice is hereby given to all that the **Andhra Pradesh Power Generation Corporation Ltd. ("APGENCO")**, a corporation in the business of generation of electricity, has submitted an Application for Determination of Tariff for supply of electricity generated at the **Dr. Narla Tata Rao Thermal Power Station Stage - V (1x800 MW)** to the Distribution Licensees of Andhra Pradesh from 21.12.2023 for rest of the 4th Control Period 2019-2024 and for the 5th Control Period 2024-2029 which has been taken on record by the Hon'ble Commission in O.P. No.22 of 2024.

A copy of the Petition together with all annexures thereto is available on the website of APGENCO at www.apgenco.gov.in and also on the website of the APERC at www.aperc.gov.in. Copies of the petition may be obtained on written application from the Chief Engineer/Commercial, APGENCO, Vidyut Soudha, Gunadala, Vijayawada- 520004 by e-mail (ce-comml@apgenco.gov.in) at free of cost or as hard copy on payment of Rs.100/- per copy. The tariff petition may also be inspected at the aforesaid office at free of cost.

Objections or suggestions, if any, on the above petition filed by APGENCO, together with supporting material may be filed with the Secretary, APERC, at the address mentioned above, in person or through Registered Post, so as to reach the Commission on or before 03.07.2024, along with proof of service of the same on Chief Engineer/Commercial, APGENCO, 4th floor, Vidyut Soudha, Gunadala, Vijayawada- 520004. The objections/suggestions should be filed duly signed and should carry full name and postal address of the person(s) sending the objections/suggestions. If the objections are filed on behalf of any organization or any category of consumers, it should be so mentioned and if the objector also wants to be heard in person, it may also be specifically mentioned so.

After perusing the objections/suggestions received, the Hon'ble Commission may notify the dates for hearing as it considers appropriate.

Place: Vijayawada,
Date: 03.06.2024

BY ORDER OF THE COMMISSION
Sd/- **MANAGING DIRECTOR, APGENCO**

DIPR-RO-No: 3015PP/CL/ADVT/1/1/2024-25 Dt:31/05/2024

Annexure-III (List of Objectors)

S.No	Name of the Objector
1	Sri 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. Baburao, State Secretariat Member, Communist Party of India (MARXIST) AP Committee, H.No.27-30-9, CPI (M), Akulavari Street, Governorpeta, Vijayawada- 2.
3	Sri R.Siva Kumar, A.P.Textiles Mills Association (APTMA). 2nd Floor Manoharam Skin Clinic, 4/2, Lakshmipuram, Guntur - 522 007

Annexure-IV

Amendments to the Dr NTTP-V PPA

Clause No.	Proposed by APGENCO	Amendments to be carried out	Reasons for amendment
1.27	**Depreciation**: means the sum of the amounts of depreciation on buildings, equipment and other capital facilities of the Project on the date hereof, and in respect of any asset, shall be allowed up to 90% of the approved capital and shall cease so soon as its net book value equals the residual value of its approved capital cost.	**Depreciation**: means the sum of the amounts of depreciation on buildings, equipment and other capital facilities of the Project on the date hereof, and in respect of any asset, shall be allowed up to 90% of the approved capital (excluding land cost) and shall cease so soon as its net book value equals the residual value of its approved capital cost.	The cost of land should be excluded in the calculation of depreciation.
1.47	**IEGC:** Indian Electricity Grid Code, as approved by APERC or any other competent authority and as amended from time to time.	**IEGC:** Indian Electricity Grid Code notified by CERC as amended from time to time.	Only CERC has the authority in the matter of IEGC
1.55	**Energy Charges**: Energy charges shall cover fuel costs (both Primary and Secondary fuel costs) and shall be as determined by APERC or any other competent Authority.	**Energy Charges**: Energy charges shall cover fuel costs (both primary and secondary fuel costs) as determined by APERC.	Only APERC has the authority to determine the energy charges in respect of intrastate generators supplying power to Distribution Licensees.

1.59	**Capital Cost:** The capital cost of the project or its unit or stage as the case may be, means the actual capital expenditure incurred and filed before the Hon'ble Commission.	**Capital cost:** The capital cost of the project or its unit or stage, as the case may be, means the capital expenditure thereon as approved by APERC for determination of tariff.	The capital cost, which is approved by APERC, forms the basis for determining the tariff.
1.62	**Scheduling:** The methodology of generation scheduling shall be as per the relevant APERC Regulations read along with the provisions of the Indian Electricity Grid Code (as revised from time to time) and the decisions taken at SRPC forums. The Utility shall bear all charges/fees related to scheduling and despatch of electricity.	**Scheduling:** The methodology of generation scheduling shall be as per the relevant APERC Regulations read along with the provisions of the Indian Electricity Grid Code (as revised from time to time). The utility shall bear all charges/fees related to scheduling and despatch of electricity.	The Scheduling is based only on relevant APERC/CERC Regulations, but not on decisions taken in SRPC forums.
2.3.2	Supplier shall follow the APSLDC's directives to back down, increase or resume generation, or decrease generation at times on a day, provided that such directives are consistent with the technical limits of the facility, Prudent Utility Practices or in accordance with discharge functions of APSLDC. Number of dispatch instructions per day shall not exceed two. The duration of back down and quantum of energy backed down each day shall be reconciled and certified by both the Supplier (at station level) and APSLDC on a monthly basis.	Supplier shall follow the APSLDC's directives to back down, increase or resume generation, or decrease generation at times on a day, provided that such directives are consistent with the technical limits of the facility, Prudent Utility Practices or in accordance with discharge functions of APSLDC. The duration of back down and quantum of energy backed down each day shall be certified by APSLDC every month.	There are no restrictions on the number of dispatches either as per IEGC or the Code of Technical Interface issued by CERC and APERC. Further, the duration of back down and quantum of energy backed down each day shall be certified only by APSLDC as a statutory entity/third party.

3.15	**Surcharge Due on Late Payment:** In case the payment of any bill for charges payable under these regulations is delayed by the beneficiary beyond a period of 60 days from the date of billing, a late payment surcharge shall be levied by the generating company @ 1.25% per month and maximum 15% per annum subject to any Notifications/Regulations issued by Ministry of Power (MoP).	**Surcharge Due on Late Payment:** In case the Utility delays the payment of any bill for charges payable under these regulations beyond a period of 60 days from the date of billing, a late payment surcharge shall be levied by the supplier @ 1.25% per month and maximum 15% per annum.	The Late Surcharge rate is to be decided by APERC but not the MOP.
Article 7	**Force Majeure** No party shall be liable for any claim for any loss or damage whatsoever arising out of failure to ……..	**Force Majeure** No party shall be liable for any claim for any loss or damage arising from failure to … If the Supplier disagrees with the Utility's decision on force majeure, it is entitled to raise a dispute before APERC for adjudication.	The Para should be added at the end of the clause in line with the Commission's decision in respect of the RTPP-IV PPA.

Annexure-V

C.A. Seshapu Bala Manikanta
84979 95818, 83285 49941

SESHAPU BALA MANIKANTA & CO
CHARTERED ACCOUNTANTS

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Andhra Pradesh Power Generation Corporation limited (APGENCO), Vijayawada, Andhra Pradesh, has incurred Capital Expenditure up to 20.12.2023 of Rs.7904.19 Crores for its unit at Dr.Narla Tata Rao Thermal Power Station Stage V(**1*800 MW**), Ibrahimpatnam, NTR District. The breakup of Capital expenditure incurred as detailed below:

Sl.No.	Details	Amount Rs. In Crores as on 20.12.2023.
1.	Buildings	74.81
2.	Plant & Machinery	6,327.02
3.	Lines & Cables	391.14
4.	Other Civil Works	1,111.22
5.	**TOTAL**	**7,904.19**

This certificate is provided based on the information and documentation made available to us. Our responsibility is limited to the presentation of the available data and information in a fair and accurate manner.

We hereby certify that to the best of our knowledge and belief, the information provided in this certificate is accurate and true.

This certificate is being issued at the request of the Company for onward submission to APERC for filing tariff petition as per information, papers, books, and records produced.

SESHAPU BALA MANIKANTA & CO CHARTERED ACCOUNTANTS FRN: 024188S

Date: 09-01-2024

Place: Eluru

UDIN: 24260079BKAIRC2873

For SESHAPU BALA MANIKANTA &CO
Chartered Accountants

SESHAPU BALA MANIKANTA
Proprietor. M.No.260079

Annexure-VI

Month	Station Heat Rate	Aux. Consn.	Spec. Oil Consn.	Energy Sent Out (actuals)	GCV of Coal	GCV of Oil	Wt. Ave. delivered Price of Coal (Actuals)	Wt. Ave. delivered Price of Oil (Actuals)	Specific Coal Consn. (FCA)	Coal (Actuals) FCA	Oil (Actuals) FCA	Variable Charges (Actuals) (Ps./Kwh)
Jan-24	2159	5.75	0.50	202,012,464	3203	9877	5,105.00	61,076.56	0.673	364.26	3.24	367.50
Feb-24	2159	5.75	0.50	27,696,677	3492	9877	5,132.36	59,791.48	0.617	335.91	3.17	339.08
Mar-24	2159	5.75	0.50	304,478,333	3343	9877	4,822.31	59,774.69	0.644	329.68	3.17	332.85
Apr-24	2159	5.75	0.50	290,630,000	3908	9877	5,566.40	61,857.20	0.551	325.53	3.28	328.82
May-24	2159	5.75	0.50	180,430,000	3894	9877	5,377.60	60,745.29	0.553	315.62	3.22	318.85
Jun-24	2159	5.75	0.50	319,186,032	4081	9877	5,781.35	61,986.51	0.528	323.77	3.29	327.06
Jul-24	2159	5.75	0.50	236,502,741	3804	9877	5,549.20	64,910.32	0.566	333.40	3.44	336.84
Aug-24	2159	5.75	0.50	63,778,603	3699	9877	5,114.13	64,855.97	0.582	315.98	3.44	319.42

Annexure-VII

Information to be furnished by APGENCO at the time of submission of monthly FCA bill to APDISCOMS

Sr. No.	Month-wise	Unit	----
A)	**OPENING QUANTITY**		
1	Opening Quantity of Coal	(MMT)	
2	Value of Stock		
B)	**QUANTITY**		
3	The quantity of Coal supplied by the Coal Company for the particular month, giving complete details of the mode of transportation used along with the quantity.	(MMT)	
	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 Company *	(Rs.)	
10	Unloading, Handling and Sampling charges.		
	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	
19	Blending Ratio (Domestic/Imported)		
20	Weighted average cost of coal for the preceding twelve months	Rs./MT	

F)	**QUALITY**		
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	
22	GCV of Domestic Coal supplied as per the bill of the Coal Company	(kCal/Kg)	
23	GCV of Imported Coal of the opening stock as per the bill Coal Company	(kCal/Kg)	
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)	
25	Weighted average GCV of coal as Billed	(kCal/Kg)	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)	
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/kWh)	
32	Actual Auxiliary Consumption	%	
33	Actual Specific Oil Consumption	ml/kWh	
(*specifying the period of adjustment along with reason and support document for the adjustment)			

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 the 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.