



Telangana State Electricity Regulatory Commission

5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500 004

ORDER

ON

**Approval of Business Plan and Capital Investment Plan
for MYT 5th Control Period for FY 2024-25 to FY 2028-29**

FOR

Telangana State Power Generation Corporation Limited (TSGenco)

29.12.2023

TABLE OF CONTENTS

CHAPTER 1: BACKGROUND	9
1.1 Telangana State Electricity Regulatory Commission	9
1.2 Telangana State Power Generation Corporation Limited	9
1.3 Regulatory Provisions	9
1.4 Admission of the Petition	11
1.5 Public Notice.....	11
1.6 Response to the Public Notice.....	11
1.7 Public Hearing	12
1.8 Datagaps and Petitioner’s Responses.....	12
CHAPTER 2: SUMMARY OF TSGENCO BUSINESS PLAN AND CAPITAL INVESTMENT PLAN PETITIONS FOR 5TH CONTROL PERIOD COMPRISING FY 2024-25 TO FY 2028-29	13
2.1 TSGenco’s Submissions.....	13
2.2 Business Plan and Capital Investment Plan for FY 2024-25 to FY 2028-29.....	13
CHAPTER 3: OBJECTIONS ON THE TSGENCO FILINGS	16
3.1 Objections/Suggestion/Comments on TSGenco Filings	16
3.2 General.....	16
3.3 Environmental Norms provision in Regulation	17
3.4 Capital Investment Plan Projection.....	19
3.5 Capital Investment Plan for New and Upcoming Generating Stations	20
3.6 Generation Forecast.....	21
3.7 Investment in Capital Cost and R&M.....	22
3.8 Generation from thermal base load capacity	24
3.9 Consideration of central guidelines and mandates	25
3.10 RPPO targets and consideration of storage	26
3.11 Compliance to environmental norms	27
3.12 Plans for decommissioning.....	28
CHAPTER 4: BUSINESS PLAN	30
4.1 Installed Capacity of TSGENCO.....	30
4.2 Future Performance targets.....	31
4.3 Generation Planning and Forecast	36
4.4 Financial Statement.....	40
CHAPTER 5: CAPITAL INVESTMENT PLAN	41

5.1	Approach for approval of Capital Investment Plan.....	41
5.2	KTPS VII.....	44
5.3	BTPS	48
5.4	KTPP I & II.....	55
5.5	KTPS V and VI	59
5.6	RTS-B.....	62
5.7	YTPS	63
5.8	Srisaïlam Left Bank Power House:	66
5.9	Nagarjuna Sagar Hydro Electric Station Complex	68
5.10	Small Hydro (Pochampad, Singur, Nizam Sagar & Paliar HES).....	72
5.11	Pochampad-II	74
5.12	Priyadarshini Jurala	75
5.13	Lower Jurala	76
5.14	Pulichintala Hydro Electricity Station	77
5.15	Solar	78
5.16	IT Initiatives	79
5.17	Summary of Additional Capitalisation claimed and approved for 5 th Control Period81	
ANNEXURE I: PUBLIC NOTICE		82
ANNEXURE II: LIST OF STAKEHOLDERS WHO SUBMITTED THE WRITTEN COMMENTS / OBJECTIONS / SUGGESTIONS		84
ANNEXURE III: LIST OF STAKEHOLDERS WHO HAVE PRESENTED THEIR OBJECTIONS / SUGGESTIONS IN PUBLIC HEARING HELD ON 20.07.2023.....		85

LIST OF TABLES

Table 2-1: Annual Overhaul Plan submitted by TSGenco (Days)	13
Table 2-2: Operational Parameters of Existing Plants proposed by TSGENCO	14
Table 2-3: Operation Parameters of New Plants proposed by TSGENCO	14
Table 2-4: Energy Availability of Thermal Plants proposed by TSGENCO (MU).....	14
Table 2-5: Energy Availability of Hydel Plants proposed by TSGENCO (MU)	15
Table 2-6: Summary of Capital Investment submitted by TSGenco (Rs. Crore)	15
Table 4-1: Installed Capacity of existing Thermal Generating Plants (MW).....	30
Table 4-2: Installed capacity of existing Hydro Generating Plants (MW).....	30
Table 4-3: New Thermal Generating Capacity as submitted by TSGenco (MW)	31
Table 4-4: Operating Norms of existing thermal plants for 4 th Control Period.....	32
Table 4-5: Operating Norms of new and upcoming thermal plants	32
Table 4-6: Availability of Thermal Stations submitted by TSGenco (MU).....	37
Table 4-7: Availability of Hydro Generating Station submitted by TSGenco (MU)	37
Table 4-8: Net Availability of thermal Plants submitted by TSGenco (MU).....	37
Table 4-9: Net Energy Generation of Hydro Plants submitted by TSGenco (MU).....	38
Table 4-10: Overhaul Plan for the Thermal Plants submitted by TSGenco (Days).....	38
Table 4-11: Overhaul Schedule of Thermal Plant submitted by TSGenco.....	38
Table 5-1: Capital Investment Plan submitted by Petitioner (Rs Crore)	44
Table 5-2:- Capital Investment Plan Submitted by the Petitioner (Rs Crore).....	45
Table 5-3: Bifurcation of additional capitalisation proposed for KTPS VII.....	45
Table 5-4: Capital Investment Plan claimed and approved for KTPS-VII for 5 th Control Period (Rs Crore)	48
Table 5-5: Capital Investment Plan Submitted by the Petitioner (Rs Crore)	49
Table 5-6: Capitalization Schedule proposed for BTPS (Rs Crore).....	53
Table 5-7: Classification of works into Original Scope of work and beyond the Original scope of work	53
Table 5-8 : Determination of Balance capital cost (Rs Crore).....	54
Table 5-9:- Capital Investment Plan claimed and approved by the Commission for BTPS for 5 th Control period.....	55
Table 5-10:- Additional Capitalisation claimed for KTPP-I (Rs Crore)	56
Table 5-11:- Additional Capitalisation claimed for KTPP - II (Rs Crore)	56
Table 5-12:- Additional Capitalisation claimed and approved for KTPP-I for 5 th Control Period (Rs Crore).....	58
Table 5-13:- Additional Capitalisation claimed and approved for KTPP-II for 5 th control period (Rs Crore).....	59
Table 5-14:- Additional Capitalisation claimed for KTPS V (Rs Crore)	59
Table 5-15:- Additional Capitalisation claimed for KTPS VI (Rs Crore)	60
Table 5-16:- Additional Capitalisation claimed and approved for KTPS V for 5 th control period (Rs Crore)	61
Table 5-17:- Additional Capitalisation claimed and approved for KTPS VI for 5 th control period (Rs Crore)	61
Table 5-18:- Additional Capitalisation claimed for RTS-B (Rs. Crore).....	62
Table 5-19:- Additional Capitalisation claimed and approved for RTS-B for 5 th control period (Rs Crore).....	63
Table 5-20:- Proposed Additional Capitalisation for YTPS (Rs Crore)	63

<i>Table 5-21: Capital Cost for YTPS submitted by the Petitioner (Rs. Crore)</i>	<i>64</i>
<i>Table 5-22: Additional Capitalisation Claimed for SLBHES (Rs. Crore)</i>	<i>67</i>
<i>Table 5-23: Additional capitalisation claimed and approved for SLBHES for 5th control period (Rs Crore)</i>	<i>68</i>
<i>Table 5-24: Capital Investment Plan submitted by the Petitioner (Rs. Crore)</i>	<i>70</i>
<i>Table 5-25: additional capitalisation claimed and approved for of NSHES Complex for 5th control period (Rs Crore).....</i>	<i>72</i>
<i>Table 5-26: additional capitalisation claimed and approved for NSLCPH for 5th control period (Rs Crore).....</i>	<i>72</i>
<i>Table 5-27: Capital Investment Plan submitted by the Petitioner (Rs. Crore)</i>	<i>73</i>
<i>Table 5-28: additional capitalisation claimed and approved for Small Hydro for 5th control period (Rs Crore).....</i>	<i>73</i>
<i>Table 5-29: Additional Capitalisation claimed for Pochampad II (Rs. Crore).....</i>	<i>74</i>
<i>Table 5-30: Additional capitalisation claimed and approved for Pochampad-II for 5th control period (Rs Crore).....</i>	<i>75</i>
<i>Table 5-31: Capital Investment Plan submitted by the Petitioner (Rs. Crore)</i>	<i>75</i>
<i>Table 5-32: Additional capitalisation claimed and approved for Priyadarshini Jurala for 5th control period (Rs Crore)</i>	<i>76</i>
<i>Table 5-33: Capital Investment Plan submitted by the Petitioner (Rs. Crore)</i>	<i>76</i>
<i>Table 5-34: Additional capitalisation claimed and approved for Lower Jurala for 5th control period (Rs Crore).....</i>	<i>77</i>
<i>Table 5-35: Capital Investment Plan submitted by the Petitioner (Rs. Crore)</i>	<i>77</i>
<i>Table 5-36: Additional Capitalisation claimed and approved for PCHES for 5th control period (Rs. Crore)</i>	<i>78</i>
<i>Table 5-37: Additional Capitalisation Proposed for Solar Plant (Rs. Crore)</i>	<i>78</i>
<i>Table 5-38: Additional Capitalisation claimed and approved for solar plants for 5th control period (Rs. Crore).....</i>	<i>79</i>
<i>Table 5-39: Additional Capitalisation proposed for IT initiative (Rs. Crore)</i>	<i>80</i>
<i>Table 5-40: Additional Capitalisation claimed and approved for IT Initiatives (Rs. Crore)</i>	<i>80</i>
<i>Table 5-41:- Additional Capitalisation claimed and approved for 5th Control Period (Rs. Crore)</i>	<i>81</i>

LIST OF ABBREVIATIONS

1 st Control Period	Comprising seven months period from 1.09.2008 to 31.03.2009
2 nd Control Period	Comprising five (5) years from FY 2009-10 to FY 2013-14
3 rd Control Period	Comprising five (5) years from FY 2014-15 to FY 2018-19
4 th Control Period	Comprising five (5) years from FY 2019-20 to FY 2023-24
A&G	Administrative and General
AFC	Annual Fixed Charges
ARR	Aggregate Revenue Requirement
ATEL	Appellate Tribunal for Electricity
BHEL	Bharat Heavy Electricals Limited
BoP	Balance of Plant
BTG	Boiler, Turbine and Generator
BTPS	Bhadradi Thermal Power Plant
CAG	Comptroller and Auditor General of India
CAGR	Compound Annual Growth Rate
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
COD	Commercial Operation Date
CPCB	Central Pollution Control Board
CPI	Consumer Price Index
CSR	Corporate Social Responsibility
CT	Current Transformer
DCS	Distributed Control System
Discom	Distribution Company
DMFT	District Mineral Foundation Trust
DPR	Detailed Project Report
E&M	Electrical and Mechanical
ECR	Energy Charge Rate
EDC	Expenditure During Construction
EPC	Engineering, Procurement and Construction
EPCA	Environment Pollution Control Authority
EPS	Electric Power Survey
ERP	Enterprise Resource Planning
ESCOM	Electricity Supply Company
ESP	Electrostatic Precipitator
FC	Financing Charges
FGD	Flue Gas Desulphurization
FI	Financial Institution

FY	Financial Year
GCV	Gross Calorific Value
GDP	Gross Domestic Product
Genco	Power Generating Company Limited
GFA	Gross Fixed Assets
Gol	Government of India
GoTS	Government of Telangana State
GST	Goods and Services Tax
GTO	Generation Tariff Order
RoCE	Return on Capital Employed
RoE	Return on Equity
ROI	rate of interest
Rs.	Rupees
RST	Retail Supply Tariff
RTS	Ramagundam Thermal Station
SBI	State Bank of India
SCCL	Singareni Collieries Company Limited
SCR	Selective Catalytic Reduction
SERC	State Electricity Regulatory Commission
SHR	Station Heat Rate
SLDC	Stake Load Dispatch Centre
So _x	Sulphur Oxides
SPM	Suspended Particulate Matter
TSERC	Telangana State Electricity Regulatory Commission
TSGenco	Telangana State Power Generation Corporation Limited
VFD	Variable Frequency Drive
WACC	Weighted Average Cost of Capital
WPI	Wholesale Price Index
YTPS	Yadadri Thermal Power Station



TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500 004

O. P. Nos. 10 and 11 of 2023

Present

Sri T. Sriranga Rao, Chairman
Sri M. D. Manohar Raju, Member (Technical)
Sri Bandaru Krishnaiah, Member (Finance)

Date: 29.12.2023

Between:

Telangana State Power Generation Corporation Limited ... Petitioner

And

1. Southern Power Distribution Company of Telangana Limited
2. Northern Power Distribution Company of Telangana Limited
3. ESCOMs of Karnataka State ... Respondents

Telangana State Power Generation Corporation Limited (TSGenco) has filed the Petitions under the Section 62 of the Electricity Act 2003 and provisions of "Terms and Conditions of Generation Tariff Regulations, 2019" (Regulation No.1 of 2019) for approval of Business Plan and Capital Investment Plan for 5th Control Period comprising of FY 2024-25 to FY 2028-29.

The Commission, in exercise to the powers vested on it by Electricity Act, 2003 (EA 2003), Regulation No.1 of 2019 and after considering the Petitioner's submissions, objections and suggestions of the stakeholders, issues raised during the Public Hearing and all other relevant material, hereunder pass the Order on the Business Plan and Capital Investment Plan of TSGENCO for 5th Control Period comprising FY 2024-25 to FY 2028-29.

Chapter 1: Background

1.1 Telangana State Electricity Regulatory Commission

- 1.1.1. Telangana State Electricity Regulatory Commission (hereinafter referred to as TSERC or Commission) was constituted by the Government of Telangana State (GoTS) as per the terms of the provisions of Schedule XII(C) (3) of the A.P. Reorganisation Act of 2014, read with Section 82 of the Electricity Act, 2003 (Act) vide G.O.Ms.No.3, Energy (Budget) Department, dated 26.07.2014.
- 1.1.2. This Commission having been established u/s 82(1) of the Act had notified TSERC (Adoption) Regulation No.1 of 2014 on 10.12.2014, accordingly all the subsisting Regulations and their amendments thereof shall continue to apply for the Telangana State. The Commission had notified TSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2019 (Regulation No.1 of 2019) which has come into force from the date of its publication in Telangana Gazette i.e. on 01.02.2019.

1.2 Telangana State Power Generation Corporation Limited

- 1.2.1. Telangana State Power Generation Corporation Limited (hereinafter referred to as 'TSGenco' or 'Petitioner') was incorporated on 19.05.2014 under the Companies Act, 2013.
- 1.2.2. TSGenco generate and supply of electricity to the distribution companies in Telangana, namely, Northern Power Distribution Company of Telangana Ltd. (hereinafter referred to as "TSNPDCCL") and Southern Power Distribution Company of Telangana Ltd. (hereinafter referred to as "TSSPDCL") (combinedly referred to as "TSDiscoms").
- 1.2.3. The entire availability (100%) of TSGENCO except Priyadarshini Jurala Hydro Electric Scheme (6x39 MW) has been allocated to TSDISCOMs. The availability and fixed charges of Priyadarshini Jurala Hydel Electric Scheme as per its PPA has been shared in ratio of 50:50 between TSDISCOMs and ESCOMs of Karnataka State.

1.3 Regulatory Provisions

- 1.3.1. The Commission in exercise of the powers conferred on it by Section 181 of the

Electricity Act 2003 (EA 2003) and all other powers enabling it in this behalf has notified the Telangana State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2019, (hereinafter referred to as the TSERC Regulations) which come into force from the date of its publication in Telangana Gazette on 01.02.2019.

- 1.3.2. TSERC Regulation 1 of 2019 specifies that all existing and new generating utilities within the state of Telangana shall file before the Commission a Business Plan along with Capital Investment Plan for at least the entire duration of control Period and before the commencement of the Control Period. The relevant Clauses of the Regulation are reproduced as under:

Business Plan and Capital Investment Plan

a) Business Plan

7.1 The Applicant shall file a business plan along with capital investment plan for its Generation Business on or before 1st April of the Year preceding the first Year of the Control Period for a duration covering at least the entire Control Period.

7.2. The business plan shall cover details such as Generation Planning and forecasts, Capex Investment Plan, future performance targets, proposed efficiency improvement measures, Compliance status of Environmental norms, Saving in operating costs. The Business Plan shall also include, financial statements such as balance sheet, profit and loss statement and cash flow statement for the Control Period duration, any other new measures to be initiated for the Generation Business, e.g. automation, IT initiatives etc.

b) Capital Investment Plan

7.3. The Capital Investment Plan submitted along with Business Plan shall include the details of purpose of investment, broad technical specifications of the proposed investment and supporting details. It shall also include capital structure, capitalization schedule with milestones for completion, financing plan with sources of investment, physical targets, Cost-benefit analysis, prioritization of proposed investments etc.

- 1.3.3. Further, Clause 7 of Regulation 1 of 2019 entails the detail of the components which need to be incorporated in generation entities Business Plan and Capital Investment Plan for 5th Control Period comprising FY 2024-25 to FY 2028-29.

1.4 Admission of the Petition

1.4.1. Pursuant to Clause 7 of the Regulation 1 of 2019, the Petitioner for the approval of the Commission on 01.04.2023 has filed Business Plan and Capital Investment Plan Petitions for 5th Control Period comprising FY 2024-25 to FY 2028-29. The Commission has found the filings in order as per Conduct of Business Regulation No.02 of 2015. The Commission admitted the Petitioner's filings for Business Plan and Capital Investment Plan for 5th Control Period comprising FY 2024-25 to FY 2028-29 and assigned O.P. No. 11 of 2023 and O.P. No. 10 of 2023, respectively.

1.5 Public Notice

1.5.1. The Petitioner, in conformity of the Commission's directions, issued Public Notice for inviting comments and suggestions of the stakeholders on the filing of the Business Plan and Capital Investment for 5th Control Period in two (2) English, two (2) Telugu and one (1) Urdu daily newspapers on 18.05.2023. The Petitioner made the filing (along with its supporting material) available for the public at large on payment of printing cost only. Also, the filing (along with supporting material) was hosted by the Petitioner as well as the Commission on their respective websites.

1.5.2. Initially, the objections/suggestions on the filing were to be filed before the Commission by 15.06.2023. But, considering the request from the stakeholders, the Commission has extended the last date for submitting objections/suggestions on the filings to 28.06.2023. Accordingly, the Petitioner has issued the revised Public Notice in the daily newspapers on 08.06.2023.

1.6 Response to the Public Notice

1.6.1. In response to the Public Notice, two (2) stakeholders have submitted their Objections/Comments on the filing of Business Plan and Capital Investment Plan of TSGenco for 5th Control Period. The list of stakeholders submitting written objections/suggestions on filings is enclosed at **Annexure-II**.

1.6.2. The Petitioner has been directed to furnish reply on the objections/suggestions of stakeholders in writing, marking copy of the same to the Commission, by 28.06.2023. The objections/suggestions of stakeholders and responses of the

Petitioner on the same has been posted both on the website of Petitioner and the Commission as well.

1.7 Public Hearing

1.7.1. The Commission has conducted the Public Hearing on 20.07.2023 in attendance of the Petitioner, the Respondents, and the other interested stakeholders. During the Public Hearing, the Petitioner has made a brief submission on its filings and then the Commission heard the Respondents and other stakeholders desiring to be heard. At the end, the Petitioner responded on the issues raised by the objectors and on directions of the Commission filed a written submission regarding the same. The list of persons who have presented their objections/suggestions in Public Hearing held on 20.07.2023 is enclosed at **Annexure-III**.

1.8 Datagaps and Petitioner's Responses

1.8.1. During scrutiny, the filings of Petitioner was found deficient in certain aspects and therefore, additional information was sought. The Commission has considered the original filings and additional information submitted by the Petitioner.

Chapter 2: Summary of TSGenco Business Plan and Capital Investment Plan Petitions for 5th Control Period comprising FY 2024-25 to FY 2028-29

2.1 TSGenco's Submissions

- 2.1.1. Petitioner in its filing and additional submission has prayed the Commission to approve the Business Plan and Capital Investment Plan of TSGenco for 5th Control Period comprising FY 2024-25 to FY 2028-29.
- 2.1.2. In Business Plan, the Petitioner has submitted projections for gross generation, performance parameters, environmental norms and overall financial statement of TSGenco for 5th Control Period.
- 2.1.3. In Capital Investment Plan, the Petitioner has submitted additional capital expenditure for existing and upcoming new plants. A major portion of additional capital expenditure is towards capital cost of new plant, installation of FGD, renovation and modernization of retiral plants, undischarged liabilities of recently installed plants, efficiency improvement and IT measures.
- 2.1.4. The Petitioner has further submitted that the entire energy (100%) of its generating plants is allocated to TSDiscoms except Priyadarshini Jurala, which is shared in 50:50 ratio between TSDiscoms and EScoms of Karnataka State.

2.2 Business Plan and Capital Investment Plan for FY 2024-25 to FY 2028-29

- 2.2.1. TSGenco, has submitted the following information in the Business Plan for 5th Control Period:

- a) **Outage Plan:** The overhaul schedule for Thermal Generating Stations only is provided. The same is tabulated below:

Table 2-1: Annual Overhaul Plan submitted by TSGenco (Days)

Sl. No.	Energy Sources	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1.	KTPS-V (Unit-9)	47	0	20	0	45	0	20
2.	KTPS-V (Unit-10)	0	45	0	20	0	20	0
3.	KTPS-VI	0	20	0	20	0	45	0
4.	KTPS-VII	86	0	20	0	20	0	45
5.	KTPP-I	56	0	20	0	45	0	20
6.	KTPP-II	0	45	0	20	0	20	0
7.	RTS-B	15	15	45	15	15	15	15
8.	BTPS-I	20	0	20	0	45	0	20

Sl. No.	Energy Sources	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
9.	BTPS-II	20	0	20	0	45	0	20
10.	BTPS-III	0	20	0	20	0	45	0
11.	BTPS-IV	0	20	0	20	0	45	0

- b) **Operational Performance Plan:** Operating norms for Thermal Generating plants only is provided. Norms as per the Order dated 22.03.2023 is solicited for 5th Control Period. The same is tabulated below:

Table 2-2: Operational Parameters of Existing Plants proposed by TSGENCO

Sl. No.	Particulars	Normative Plant Availability	Auxiliary Consumption	Gross Station Heat Rate	Secondary Fuel Oil Consumption	Transit Losses
		%	%	kcal/kWh	ml/kWh	%
1.	KTPS-O&M	70.00%	10.00%	3000	2	0.80%
2.	KTPS-V	80.00%	9.00%	2500	2	0.80%
3.	KTPS-VI	80.00%	7.50%	2450	2	0.80%
4.	KTPS-VII	85.00%	5.25%	2151	0.5	0.80%
5.	RTS-B	75.00%	10.00%	3000	2	0.80%
6.	KTPP-I	80.00%	7.50%	2450	2	0.80%
7.	KTPP-II	80.00%	7.00%	2400	2	0.80%

Table 2-3: Operation Parameters of New Plants proposed by TSGENCO

Sl. No.	Particulars	Normative Plant Availability	Auxiliary Consumption	Gross Station Heat Rate	Secondary Fuel oil consumption	Transit Losses
		%	%	kcal/kWh	ml/kWh	%
1.	BTPS	85.00%	8.50%	2333.485	0.5	0.80%
2.	YTPS	85%	6.40%	2151	0.5	0.80%

- c) **Energy Availability:** TSGenco has submitted the projections for energy availability from all Thermal Generating Stations as follows:

Table 2-4: Energy Availability of Thermal Plants proposed by TSGENCO (MU)

Sl. No.	Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1.	KTPS-V	3511.50	3511.50	3508.80	3521.40	3511.50
2.	KTPS-VI	3504.00	3519.00	3504.00	3524.58	3504.00
3.	KTPS-VII	5961.60	5956.80	5961.60	5973.12	5959.68
4.	KTPP-I	3519.00	3504.00	3513.60	3513.60	3519.00
5.	KTPP-II	4204.80	4222.80	4204.80	4235.04	4204.80
6.	RTS-B	412.80	412.13	412.13	413.30	412.13
7.	BTPS	8044.92	8044.92	8043.62	8067.21	8044.92
8.	YTPS	18816.96	29784.13	29784.05	29784.23	29784.11
9.	Total	47975.58	58955.28	58932.60	59032.48	58940.14

Table 2-5: Energy Availability of Hydel Plants proposed by TSGENCO (MU)

Sl. No.	Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1.	Priyadarshini Jurala*	246.79	249.00	270.74	276.60	282.52
2.	Lower Jurala	246.96	246.96	246.96	246.96	246.96
3.	Srisaillam	1134.00	1134.00	1134.00	1134.00	1134.00
4.	NSPH	970.00	965.00	1053.00	1139.00	1234.00
5.	NSLCPH	66.00	67.00	66.00	66.00	68.00
6.	Pulichintala	257.00	289.00	324.00	361.00	400.00
7.	Palair	2.78	2.87	2.96	3.05	3.05
8.	Singur	14.00	14.00	14.00	14.00	14.00
9.	Nizam Sagar	17.00	17.00	17.00	17.00	17.00
10.	Pochampad	75.00	75.00	75.00	75.00	75.00
11.	Peddapalli	2.48	2.85	2.36	2.50	2.50
12.	Total:	3032.01	3062.679	3206.021	3335.10	3477.03

Note: *Energy generated from Priyadarshini Jurala is being shared between TSDISCOMS & ESCOMS of Karnataka state in the ratio of 50:50.

2.2.2. TSGenco in the Capital Investment Plan for 5th Control Period has proposed additional capitalisation towards the capital requirement for new plants, installation of FGD System, Civil Works, Repair & Maintenance for efficiency improvement, Renovation & Modernisation of plants and IT measures. The summary of Plant wise and Year wise Capital Investment Plan proposed by the Petitioner for 5th Control Period is tabulated below:

Table 2-6: Summary of Capital Investment submitted by TSGenco (Rs. Crore)

Sl. No	Particulars	Capacity (MW)	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	KTPS-V	500	51.3	115	415	115.52	0	696.82
2.	KTPS-VI	500	6.5	115	415	115.52	0	652.02
3.	RTS-B	62.50	20	32.63	0	0	0	52.63
4.	KTPP-I	500	131.22	210.91	241.05	90.39	0	673.57
5.	KTPP-II	600	144.6	253.1	289.25	108.47	0	795.42
6.	KTPS-VII	800	445.03	220.185	2.96	3.01	51.58	722.765
7.	BTPS	1080	592.41	44.77	2	2	0	641.18
8.	YTPS	4000	7596.97	1475.44	499.25	0	0	9571.66
9.	NSHES	875.60	87.5	0	0	0	0	87.5
10.	SLBHES	900	157	0	0	0	0	157
11.	Small Hydel	54	7.3	0	0	0	0	7.3
12.	Mini Hydel	9.16	0	0	0	0	0	0
13.	Pochampam	9	1	0	0	0	0	1
14.	PJHES	234	6	0	0	0	0	6
15.	LJHES	240	14.5	0	0	0	0	14.5
16.	PCHES	120	21	0	0	0	0	21
17.	IT Initiatives		30	0	0	0	0	30
18	Total	10484.26	9312.33	2467.04	1864.51	434.91	51.58	14130.37

Chapter 3: Objections on the TSGenco filings

3.1 Objections/Suggestion/Comments on TSGenco Filings

- 3.1.1. In response to public notice, individuals/entities (Annexure-I) have submitted their comments/objections/suggestions on the TSGENCO Petitions, for which the Petitioner has replied before the due date.
- 3.1.2. The objections /comments /suggestions received from individuals /entities / others & stake holders, replies furnished by the TSGENCO and analysis to the same by the Commission are discussed hereunder.

3.2 General

Stakeholders' Submissions

- 3.2.1. TSGENCO is not a licensee of the Commission. As such, business plan and capital investment plan of GENCO are not within the purview of the Commission. As and when PPAs are entered into with TSGENCO by TSDISCOMs and submitted to the Commission for its consideration, the Commission examines the same after holding public hearings and gives its orders. The Commission determines permissible capital cost and tariff for the power plant concerned in the regulatory process, considering applicable regulations and norms. Business plan and capital investment plan of TSGENCO are an internal matter of the utility and the Commission has nothing to do with them. In other ERCs, especially in APERC, there is no such regulation providing for submission of business plan and capital investment plan of APGENCO for the consideration of the Commission. The clause in TSERC Regulation 1 of 2019 providing for the said arrangement is unwarranted and without jurisdiction for various reasons. Similarly, TSDISCOMs have nothing to do with business plan and capital investment plan of TSGENCO and vice versa in terms of the regulatory process of the Commission. Similar is the case with private power generation companies with whom TSDISCOMs enter into PPAs and the Commission has nothing to do with business plan and capital investment plan of those private power generation companies. As such, the Commission is once again requested to examine the legal position and dispense with the questionable provisions in its regulations concerned which is providing for submission and consideration of business plan

and capital investment plan of TSGENCO by the Commission. The entities of the Government of Telangana State, TSGENCO, TS TRANSCO and TSDISCOMs can have internal arrangement for taking a holistic view and work out plans for development of power sector in the state as per the policies and direction of GoTS. The Commission is considering long-term load forecast, procurement plan and investment plan of TSDISCOMs and TSTRANCO as its licensees and issuing multi-year tariff order for transmission business and distribution business, after holding public hearings, for the Control Period concerned. There is no such arrangement in the case of TSGENCO, except considering renewal of its PPAs with TSDISCOMs periodically, considering all relevant factors, as decided by the Commission in its orders.

Petitioner's Replies

- 3.2.2. In accordance with the TSERC Regulation 1 of 2019, TSGENCO has filed the business plan and capital investment plan on 1st April, 2023 for the 5th Control Period (FY 2024-25 to FY 2028-29).

Regulation No.7 of TSERC (Terms and Conditions of Generation Tariff) Regulations, 2019 (Regulation No.1 of 2019) specifies that the applicant shall file a business plan along with capital investment plan for its Generation Business on or before 1st April of the Year preceding the first Year of the Control Period for a duration at least the entire Control Period.

Commission's View

- 3.2.3. The Commission has taken the note of the submissions made by the Stakeholder and response of the Petitioner. The Petitioner has filed the Business Plan and Capital Investment Plan for approval of the Commission in accordance with the provisions of Regulation 1 of 2019 and hence the Commission is issuing this Order on Business Plan filed by the Petitioner.

3.3 Environmental Norms provision in Regulation

Stakeholders' Submissions

- 3.3.1. TSGENCO has submitted that the impact of notification dated 31.12.2021 of the Ministry of Environment, Forest and Climate Change is to be studied in detail and

that the expenditure involved will be submitted to the Commission separately. Those relate to installation of flue gas desulfurization (FGD) and up gradation of electrostatic precipitators (ESP) for its power plants concerned. As such, GENCO's capital investment plan is confined to other works, including renovation and modernization, of its proposed plants during the fifth Control Period.

Petitioner's Replies

- 3.3.2. As per the MOEF & CC Notification dated. 31.12.2021 various issues regarding 100% ash utilization need to achieved by thermal power plants by transportation of ash for construction and other activities and back filling of mine voids, manufacturing of ash based products etc. which requires detailed study regarding requirement of capital investments. Hence the same could not be factored in the proposed capital investment plan.

The capital expenditure projected in the capital investment plan includes the capital expenditure towards meeting the new emission Norms of Ministry of Environment, Forest and Climate Change, at an estimated cost of Rs.2586.79 Crore. This cost is estimated based on the technical field study report submitted by M/s BHEL for complying with the New Emission Norms and implementation of Flue gas De-sulphurisation (FGD), selective catalytic Reactor (SCR) and addition of Electro Static Precipitator (ESP) in respect of KTPS-V&VI Stages, KTPP- I & II at an estimated cost of Rs. 1231.04 Crore and Rs. 1325.75 Crore respectively.

In this regard it is submitted that Regulation No. 7.19.1 (I) of TSERC Regulations 1 of 2019 specifies that an additional capital expenditure for complying with statutory norms for Environment in accordance with the appropriate notifications of Ministry of Environment, Forest and Climate Change may be admitted by the Commission".

Commission's View

- 3.3.3. The Commission has taken the note of the submissions made by the Stakeholder and response of the Petitioner. The Commission has carried out the analysis of the capital expenditure proposed by Petitioner for installation of FGD and ESP to meet the Environmental norms while approving the Capital Investment Plan in

Chapter 5 of the Order.

3.4 Capital Investment Plan Projection

Stakeholders' Submissions

- 3.4.1. For 16 of its existing and ongoing power plants with a total installed capacity of 10484.26 MW, TSGENCO has projected a capital investment of Rs.14130.37 Crore proposed to be incurred from a period ranging from one year to five years in case of different plants during the fifth Control Period. While the projected cost for BTPS (1080 MW) is Rs.641 Crore and for YTPS (4000 MW) is Rs.9571.66 Crore.

Petitioner's Replies

- 3.4.2. In the total expenditure proposed in the capital investment plan of Rs. 14130.37 Crore, the expenditure proposed for the new stations is of Rs. 10212.84 Crore and for the existing stations towards Automation & technological up gradation amounting to Rs. 3917.53 Crore.

As per clause No. 2.23 of TSERC Regulations 1 of 2019, cut-off date for the project which has declared commercial operation in the last quarter of a year shall be 31st March of the Year ending after three years of the start of commercial operation. Accordingly, the cut-off date of BTPS shall be 31st March, 2025. Against a total proposed capital cost of Rs. 641.1805 Crore for BTPS most of the proposed expenditure i.e., of Rs. 592.41 Crore is proposed during the FY 2024-25 are under original scope of project cost.

During the FY 2023-24 two units of YTPS are scheduled to be Commissioned and the balance three units scheduled to be commissioned during FY 2024-25 (5th Control Period). The expenditure to be incurred is proposed in the capital investment plan for 5th Control Period.

As per the MOEF & CC guidelines and notifications issued from time to time, the estimated capital expenditure towards the FGD, SCR and addition of ESP of KTPS- V & VI, KTPP I & II and KTPS-VII Stations is of Rs. 2586.79 Crore included in the Capital Investment Plan to meet the new emission norms. The proposed

expenditure is admissible as per the clause No. 7.19.1 (l) of TSERC Regulations 1 of 2019.

The expenditure proposed towards the R&M works of existing stations is of Rs. 1300.73 Crore. The R&M works are proposed due to aging wear & tear of the equipment and to improve the efficiency of operation and the same may be admissible by the Commission as per the Clause No. 7.19.1 (k) of the TSERC Regulations 1 of 2019.

Commission's View

- 3.4.3. The Commission has thoroughly reviewed the stakeholder's submission concerning the Petitioners Capital Investment Plan Projection. In this regard, the Petitioner has projected a substantial capital investment of Rs. 14130.37 Crore for existing and ongoing power plants. The Commission has carried out the detailed analysis of the capital investment plan proposed by Petitioner in the Capital Investment plan section in chapter 5 of this Order.

3.5 Capital Investment Plan for New and Upcoming Generating Stations

Stakeholders' Submissions

- 3.5.1. Going by the proposed capital investment plan of TSGENCO, during the 5th Control Period it will not be taking up any new project. There has been impermissible delay in execution of some of its ongoing projects like BTPS and YTPS, leading to escalation in capital cost, including interest during construction. Prolonged delay in execution of the projects does not contribute to declaration of COD and starting generation and supply of power as originally scheduled, with attendant problems to the DISCOMs and their consumers of power.

Petitioner's Replies

- 3.5.2. BTPS last Unit is commissioned on 9th January, 2022. In this connection, TSGENCO has already made its submissions to the Commission during Multi Year tariff Filing and Mid-term Review filing during the 4th Control Period. The Commission has thoroughly examined the submissions of TSGENCO and accorded the approval for capital cost.

New super critical thermal power station YTPS (5X800 MW) 2 units are expected to be commissioned by December, 2023 and the remaining 3 units of 800 MW each are expected to be commissioned by December, 2024. The delay in commissioning of the project is mainly due to the force majeure conditions prevailed due to COVID pandemic.

Commission's View

- 3.5.3. The Commission has taken note of the submissions of Stakeholder and response of the Petitioner. The Commission has directed the Petitioner to adhere to the Timelines for commissioning of the YTPS. The Commission while approving the Capital Cost of the new generating stations carries out detailed prudence check of the capital cost including reasons for delay and accordingly approves the Capital Cost.

3.6 Generation Forecast

Stakeholders' Submissions

- 3.6.1. With TSDISCOMs projecting availability of abnormal quantum of surplus power every year during the 5th Control Period, and no addition of generating capacity, despite projected growth in demand, delay in execution of power plants of TSGENCO has various implications. Arrangement for procurement of power should have been done in a phased manner gradually to be in consonance with growing and fluctuating demand. Procurement of power should have ensured ideal power mix to meet fluctuating demand to the extent possible, leaving no scope for availability of unwarranted and avoidable surplus power. Despite delay in implementation of power plants by TSGENCO, there has been no shortage for power and hence the same raises a question mark against need for power from some of the plants of GENCO. Backing down power plants of GENCO under merit order dispatch also confirms the kind of unwarranted imbalance in power mix and unwarranted purchase of renewable power. Being the utility of GoTS, GENCO's plants should have been accommodated in power procurement plan for the State earlier, instead of going in for procuring private power, including unwarranted RE, and implemented in an efficient manner to stand competitive in all respects and justify preference for its plants.

Petitioner's replies

- 3.6.2. TSGENCO has planned capacity addition to ensure 24x7 quality, reliable and affordable power supply to all Domestic, Commercial, Agriculture and Industrial consumers in line with the policies of Govt. of Telangana. The Bhadradi TPS (4x270MW) and Yadadri TPS (5x800 MW) are part of capacity addition. Further PLF of all Thermal Stations of TSGENCO is around 71.84% which is higher than National average of 64.15%.

Commission's View

- 3.6.3. The Commission has taken the note of the submissions made by the Stakeholder and response of the Petitioner. The issue raised by the stakeholder is related to overall demand supply situation of the State and power procurement planning and hence the issue is not related to this Petition.

3.7 Investment in Capital Cost and R&M***Stakeholders' Submissions***

- 3.7.1. When the Commission is expected to apply normative parameters for determination of capital cost and tariff and for giving consent to PPAs of generating plants, the need to "accept" or approve the capital investment plan of TSGENCO in advance based on projections, not on actual performance, is questionable and infructuous. Whatever be the decision of the Commission in considering business plan and capital investment plan of TSGENCO, it is requested to the Commission not to make them the basis for determining permissible capital cost of its plants and tariffs based thereon. It is all the more important, because the Commission has not been examining how tenders are being invited and their terms and conditions and how bidders are being selected for purchases of materials and implementation of works concerned. In principle, public sector units should be encouraged. However, giving orders for implementation of power plants and other works to BHEL has not ensured benefits that would have accrued through real competitive bidding. Therefore, realistic normative parameters based on changing market trends and real competitive bidding giving scope for wider participation of bidders all over the country, with required comparative study, should form the basis for evaluation of

various factors, including expenditure, performance, renovation and modernization, pollution control measures, etc., of power plants. Renovation and modernization should be based on cost-benefit analysis, but no such analysis is provided by GENCO.

Petitioner's Replies

- 3.7.2. Capital Cost Determination:** As per the prevailing regulations, capital cost of a project is determined as per Clause No. 7.9(c) to 7.23, of TSERC Regulations 1 of 2019. There are no specific normative parameters for determination of Capital Cost. Only measure available is per MW Bench Mark Hard Cost, made available by CERC with December, 2011 Base Indices, Dt. 04.06.2012. Considering the same and escalating thereon, the capital cost of TSGENCO projects BTPS & YTPS are well below the bench mark. The same is explained by TSGENCO during Consent to PPAs, Multi Year Tariff filings, Mid Term Review. Considering the submissions of TS GENCO, the Commission has done prudence check and issued the orders. Further, the capital costs approved provisionally will be reviewed by the commission upon successful commissioning of the project and the Commission will approve the final capital cost after prudence check.
- 3.7.3. Capital Works:** TSGENCO has filed the business plan and capital investment plan in accordance with the TSERC Regulations 1 of 2019 for the 5th Control Period (FY 2024-25 to FY 2028-29). Major expenditure proposed In the Capital Investment Plan are for the balance works of YTPS, BTPS and for installation of FGD to meet the MOEF & CC orders.
- 3.7.4. TSGENCO adopts the GoTS, terms and conditions for tendering process in purchasing materials and for execution of works.
- 3.7.5. However, the capital works in respect of BTPS & YTPS are awarded to M/s. BHEL, which is a Maharatna Central PSU and has expertise in establishment of Thermal Power Stations across the country and also the only manufacturer of BTG in the Govt. sector.
- 3.7.6. Renovation and modernization:** Renovation and modernization of a project with a minimal investment is beneficial in improving the plant performance, efficiency and also to extend the useful life of the plant. However, the Regulations have

provision for these nature of capital costs admissible as per clause No. 7.19.1 (k). 7.19.1(l). 7.19.1 (m) and 7.19.4 of TSERC Regulations 1 of 2019.

- 3.7.7. The Commission may take a decision in respect of filing of capital Investment plan and business plan in accordance with the appropriate regulations.

Commission's View

- 3.7.8. The Commission has taken the note of the submissions made by the Stakeholder and the response submitted by the Petitioner. The Commission in this Order has done the prudence check of the investment claimed by the Petitioner against each investment of the existing and upcoming plants while approving the claimed investment. The Capital cost of BTPS was already approved in the Mid Term Review and Truing up of Generation Tariff Order dated 23.03.2023.

3.8 Generation from thermal base load capacity

Stakeholders' Submissions

- 3.8.1. The generation plan considers, among other sources, generation from 14717 MW of coal and lignite capacity (8042 MW state owned, 3635 MW central, 3040 other) and 3548 MW of non-conventional energy sources. On average, these 2 sources account for over 95% of the energy availability projected till FY2034.
- 3.8.2. With regard to meeting the projected energy requirement, the base load coal/lignite capacity alone is in excess of the total requirement in FY2025 at 116%. This surplus tapers down to 97% at the end of the 5th Control Period, and falls further to 65% of the total requirement at the end of the 6th Control Period. As a major component of energy available, the drop in coal/lignite base load generation results in a shortage in the 6th Control Period.
- 3.8.3. It is interesting to note that for both base load thermal and NCE sources, the generation plan assumes staggering year on year growth till FY2025 and some growth in FY2026. However, thereafter, it considers little variation in expected generation from FY2027 to FY2034.
- 3.8.4. Over 50% of the base load thermal generation considered comes from State owned capacity. The generation plan assumes most of this capacity to operate at normative annual PLFs through the considered Control Periods.

- 3.8.5. Annual PLFs may reflect the norm in some cases, there are months in the year when the plant operates at much lower PLFs. For instance, while Kothagudem TPS (New) generated at annual PLF of 82% in FY2023, in the month of July it generated at 63% PLF. Consideration of such seasonal variations across scenarios would enable more optimal generation planning and better manage surplus and deficits.
- 3.8.6. PLFs and optimality of generation is also affected by the surplus generation projected in the 5th Control Period. Given that there is no persistent shortage in the country, there will only be few avenues to offload some of the surplus generation. The thermal power plants (TPPs) would then be required to operate at lower PLFs, affecting optimality of generation and cost recovery of the project. The cost implications are even more pronounced for the new Bhadradri TPP (BTPS) and the upcoming Yadadri TPP (YTPS), which have total costs in the range of Rs. 5/unit (Form 1.4, RSF SPDCL FY2024).
- 3.8.7. Further, the generation plan also details that of the 14717 MW of base load coal/lignite capacity, 10676 MW is tied up with Telangana till 2040 or beyond. Coal based capacity will continue to have an important role to play as the transition unfolds, but the tying up of such long term capacities when there are dynamic and cost competitive alternatives emerging could prove detrimental to the business and operations of the state generating company.
- 3.8.8. Scrutiny in bringing on base load capacity, prudence in scheduling their commission and generation, and foresight with regard to the role the state generator would play in a power sector with increasing RE should take on a more central consideration in the formulation of such a generation resource plan over the long time period considered.

Petitioner's Replies

- 3.8.9. No response has been submitted.

Commission's Analysis

- 3.8.10. The Commission has taken note of the submission of stakeholder.

3.9 Consideration of central guidelines and mandates

Stakeholders' Submissions

- 3.9.1. As a sector in transition stage, integration of growing renewables and provision of flexibility for existing conventional generation are increasingly being recognized as sector priorities by central institutions. CEA's draft guidelines for a resource adequacy planning framework is aimed at ensuring adequacy in generation capacity contracting through Integrated Resource Planning so that demand can be met reliably, with the increasing variable and intermittent RE. Forum of Regulators (FOR) is also reportedly preparing a guideline for resource adequacy planning.
- 3.9.2. Similarly, CEA's report on flexibilization of coal fired power plants for achieving 40% technical minimum load is aimed at managing the inconsistency and intermittency of RE generation and stabilizing the grid. As per the draft phasing plan TSGENCO's BTPS falls in the 1st phase which is required to be compliant by FY 2026.
- 3.9.3. Since compliance to such larger sectoral mandates and guidelines will require cost and operational investments, they must be accounted for well in advance to pre-empt challenges and ensure visibility for better planning.

Petitioner's Replies

- 3.9.4. No response has been submitted.

Commission's Analysis

- 3.9.5. The Commission has taken note of the submissions of the stakeholder.

3.10 RPPO targets and consideration of storage***Stakeholders' Submissions***

- 3.10.1. Telangana mostly meets its RPPO targets, which are at 13% of total energy consumption. While it is not presently mandatory for the state DISCOMs to align with the MoP notified RPPO trajectory, compliance and penalties in the absence of such compliance may be introduced in accordance to the proposed amendment of section 142 of the Electricity Act 2003. This may give rise to the possibility of the DISCOMs having to increase RPPO targets. Given this, and economic drivers and national targets, the role of renewables is likely to grow. In

line with section 2.2, with variable RE poised to grow, its effective integration into the grid becomes crucial to the robust and reliable operation of the sector.

3.10.2. Storage options such as Battery Energy Storage Systems (BESS) and Pumped Storage Plants (PSP) will have a role to play in improving the availability of variable RE generation. This is validated by MoP guidelines for RPO and SPO until FY 2030, which stipulates purchase obligations for storage options as well. Given the likely costs and time required to effectively bring on storage options, such avenues must be explored and discussed as part of the resource planning process so as to ensure a smooth transition into increasing RE whilst maintaining quality of supply. While it is difficult to set targets and projections on these projects given their nascence, their role and related costs could be considered as part of scenarios.

3.10.3. It is important to note that the MoP guidelines for RPO and SPO also discuss wind RPOs. Given that Telangana does not have as much wind potential, it may need to procure the same from other states. Such procurement requires planning and should be included in the resource plan considerations. The guidelines also mention Hydro purchase obligations, which may impact Telangana's power procurement, but that too has not been explored as part of the resource plan and merits further discussion.

Petitioner's Replies

3.10.4. No response has been submitted.

Commission's Analysis

3.10.5. The issue raised is not related to Business Plan filing of TSGENCO and is related to power procurement planning if TSDISCOMs.

3.11 Compliance to environmental norms

Stakeholders' Submissions

3.11.1. In September 2022, the MoEFCC introduced an amendment to the Environment (Protection) Rules, 1986. In accordance to the amendment, all TSGENCO TPPs fall into category C and have the relaxed timelines for compliance. The amendment also includes a penalty for noncompliance, ranging from Rs. 0.20/unit

to Rs. 0.40/unit of generation, based on duration of delay in compliance. It has been understood that RTS-B TPP will be operational till FY 2029 without implementation of any FGD, since it is claimed that the plant adheres to the emission standards set by the norms. Given the low levels of generation from the small TPP, this may be true, but it is difficult to validate the same in the absence of actual emissions data. Non-compliance from the larger TPPs with more generation would have a much higher financial impact assuming Kakatiya TPPs continued non-compliance till the end of the 6th Control Period as an example. The deadlines fall within the considered Control Periods, and there is an environmental compensation applicable for non-adherence. This makes milestone wise reporting of progress and costs across the timeline a much-needed part of the resource plan, toward ensuring transparency and accountability of process.

Petitioner's Replies

3.11.2. No response has been submitted.

Commission's Analysis

3.11.3. The Commission directs the Petitioner to comply with the environment norms.

3.12 Plans for decommissioning

Stakeholders' Submissions

3.12.1. Over the previous Control Period, TSGENCO decommissioned 420 MW of coal based Kothagudem TPP. RTS-B TPP is scheduled to be retired in the upcoming Control Period. However, there is no mention of the costs and operations involved in the decommissioning and repurposing process.

As the transition progresses, decommissioning is going to take on a more central role. Like capacity additions, capacity decommissioning also has far-reaching impacts on the sector and requires appropriate scrutiny and transparency. While RTS-B is a small capacity TPP, it is critical from a process standpoint to have guidelines and protocols in place to ensure a smooth and just decommissioning. Such decommissioning guidelines should take into account the repurposing and rehabilitation needed on the socio-environmental and economic fronts, and is good practise as opposed to ad hoc addressing of TPP closures.

Petitioner's Replies

3.12.2. No response has been submitted.

Commission's Analysis

3.12.3. The Commission directs the Petitioner to properly plan the decommissioning of old units before retiring the same.



Chapter 4: Business Plan

4.1 Installed Capacity of TSGENCO

Petitioner's Submissions

4.1.1. The Petitioner submitted that the installed capacity of existing thermal and Hydro generating plants is 4042.50 MW and 2441.76 MW, respectively. The station-wise details of installed capacity of existing thermal and hydro generating plants is shown in table below:

Table 4-1: Installed Capacity of existing Thermal Generating Plants (MW)

Sl. No	Generating Stations	No. of Units	Operating Capacity (MW)	COD
1.	KTPS-V	Unit-I	250	31.03.1997
		Unit-II	250	28.02.1998
2.	KTPS-VI	Unit-I	500	23.10.2011
3.	KTPS-VII	Unit-I	800	26.12.2018
4.	RTS-B	Unit-I	62.5	17.10.1971
5.	KTPP-I	Unit-I	500	14.09.2010
6.	KTPP-II	Unit-I	600	24.03.2016
7.	BTPS	Unit-I	270	05.06.2020
		Unit-II	270	07.12.2020
		Unit-III	270	26.03.2021
		Unit-IV	270	09.01.2022

Table 4-2: Installed capacity of existing Hydro Generating Plants (MW)

Sl. No.	Generating Stations	Installed Capacity (MW)	Unit Configuration	COD
1.	Nagarjuna Sagar HES	875.6	1X110 + 7X100.8 & 2X30	07.03.1978 to 27.09.1992
2.	Srisaillam LB	900	6X150	26.02.2001 to 04.09.2003
3.	Small Hydel	54	2X7.5+3X9+2X5 +1X2	07.03.1978 to 31.03.2000
4.	Mini Hydel	9.16	6X0.22 +3X0.23+2X0.3 25+10x0.5+2X0. 75	31.03.1986 to 29.01.2004
5.	Pochampad-II	9	9	12.10.2010
6.	Priyadarshini Jurala	234	6X39	31.08.2008 to 04.08.2011
7.	Lower Jurala	240	6X40	19.10.2015 to 01.10.2016
8.	Pulichintala	120	4X30	08.09.2018

4.1.2. Further, the Petitioner submitted that new thermal generating plant 'Yadari Thermal Power Station' (YTPS) having installed capacity of 4000 MW (5x800MW) is planned to be commissioned in 5th Control Period. The two units of YTPS are

planned to get commissioned in FY 2023-24, whereas balance units will get commissioned in FY2024-25. The detail of commissioning date for each unit of YTPS is shown in table below:

Table 4-3: New Thermal Generating Capacity as submitted by TSGenco (MW)

Sl. No.	Name of Station	No. of Units	Installed Capacity (MW)	COD (Expected)
1.	YTPS	Unit-I	800	31.12.2023
		Unit-II	800	31.12.2023
		Unit-III	800	31.10.2024
		Unit-IV	800	30.09.2024
		Unit-V	800	31.12.2024

- 4.1.3. Also, the Petitioner submitted that the entire availability of its thermal and hydro generating stations has been allocated to TSDISCOMs except Priyadarshini Jurala Hydro Electric Scheme (6x39 MW). The availability and fixed charges of Priyadarshini Jurala Hydel Electric Scheme, as per the terms and conditions of Power Purchase Agreement (PPA) have been the shared in the ratio of 50:50 between TSDISCOMs and ESCOMs of Karnataka State.

Commission's Analysis

- 4.1.4. The information related to the installed capacity of existing and upcoming generating stations are noted by the Commission and as per these details and applicable provisions of the Regulation 01 of 2019 the Business Plan and Capital Investment Plan of the TSGenco will be approved by the Commission for 5th Control Period comprising FY 2024-25 to FY 2028-29.

4.2 Future Performance targets

Petitioner's Submissions

- 4.2.1. The Petitioner submitted that the operating norms for thermal generating stations should be approved as per Clause 17 of Regulations 1 of 2019.
- 4.2.2. The Petitioner further submitted that the Clause No. 7.19(I) of TSERC Regulation 1 of 2019 states as under:

“Generating Company shall approach to the Commission for change in operational parameters such as change in normative Auxiliary Consumption on account of technology changes in the Generating Plant for e.g. installation of Flue Gas Desulfurization (FGD)”.

- 4.2.3. Accordingly, the Petitioner after commissioning of FGD/SCR will approach to the

Commission for change in operating parameters for respective stations.

4.2.4. The Petitioner also submitted that the Commission has approved the operating norms of the existing and new & upcoming thermal stations in respect to the following parameters:

1. Normative Annual Plant Availability Factor (Target Availability)
2. Gross Station Heat Rate
3. Secondary Fuel oil Consumption
4. Auxiliary Energy Consumption
5. Transit & Handling Charges

4.2.5. The Petitioner further submitted that the Commission in its Generation Tariff Order dated 22.03.2022 has approved the following operating norms of existing thermal plants for 4th Control Period as under.

Table 4-4: Operating Norms of existing thermal plants for 4th Control Period

Particulars	Normative Plant Availability	Auxiliary Consumption	Gross Station Heat Rate	Secondary Fuel oil consumption	Transit Losses
	%	%	kcal/kWh	ml/kWh	%
KTPS-O&M	70.00%	10.00%	3000	2	0.80%
KTPS-V	80.00%	9.00%	2500	2	0.80%
KTPS-VI	80.00%	7.50%	2450	2	0.80%
KTPS-VII	85.00%	5.25%	2151	0.5	0.80%
RTS-B	75.00%	10.00%	3000	2	0.80%
KTPP-I	80.00%	7.50%	2450	2	0.80%
KTPP-II	80.00%	7.00%	2400	2	0.80%

4.2.6. Also, the Petitioner proposes the following operating norms for new and upcoming thermal plants:

Table 4-5: Operating Norms of new and upcoming thermal plants

Particulars	Normative Plant Availability	Auxiliary Consumption	Gross Station Heat Rate	Secondary Fuel oil consumption	Transit Loss
	%	%	kcal/kWh	ml/kWh	%
BTSP	85.00%	8.50%	2333.485 (*)	0.5	0.80%
YTSP**	85%	6.40%	2151	0.5	0.80%

4.2.7. The Petitioner submitted that the Station Heat rate for BTPS should be revised to 2333.485 (*) as per the TSERC Regulations 1 of 2019. Further, the operating norms for YTPS (**) should be approved as per the provisions of the TSERC Regulations 1 of 2019.

Commission's Analysis

4.2.8. The norms of operation as specified in Draft MYT Regulation, 2023 are as follows:

44 Operational Norms for Thermal Generating Stations

44.1 Recovery of capacity charge, energy charge and any incentive by the generating station shall be based on the achievement of operational norms specified in this Regulation.

44.2 The Normative Annual Plant Availability Factor (NAPAF) for full recovery of Annual Fixed Charges shall be 85 per cent.

44.3 Normative Annual Plant Load Factor (NAPLF) for incentive for thermal Generating Stations/Units shall be 85 per cent.

44.4 Gross Station Heat Rate for existing coal-based thermal Generating Stations, except those covered under clause 0 shall be:

62.5 MW	250 MW sets	500 MW sets (sub-critical boilers)	600 MW sets (sub-critical boilers)
3000 kcal/kWh	2500 kcal/kWh	2450 kcal/kWh	2300 kcal/kWh

Note 1

In respect of 500 MW/600 MW Units, where the boiler feed pumps are electrically operated, the Gross Station Heat Rate shall be 40 kcal/kWh lower than the gross Station Heat Rate specified above.

Note 2

For Generating Stations having combination of 250 MW sets and 500 MW and 600 MW sets, the normative gross Station Heat Rate shall be the weighted average Station Heat Rate.

44.5 Gross Station Heat Rate for Coal based thermal power Generating Stations /Units achieving COD after 01.04.2019 shall be equal to 1.05 times the Design Heat Rate (kcal/kWh);

Where the Design Heat Rate of a Unit means the Unit Heat Rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure:

Provided that the Design Heat Rate shall not exceed the following maximum design Unit Heat Rates depending upon the pressure and temperature ratings of the Units:

Pressure Rating (kg/cm²)	150	170	170	247
SHT/RHT (°C)	535/535	537/537	537/565	537/565
Type of Boiler Feed Pump	Electrical Driven	Turbine driven	Turbine driven	Turbine driven
Maximum Turbine Cycle Heat Rate (kcal/kWh)	1955	1950	1935	1900
Minimum Boiler Efficiency				
Sub-Bituminous Indian Coal	0.86	0.86	0.86	0.86
Bituminous Imported Coal	0.89	0.89	0.89	0.89
Maximum Design Unit Heat Rate (kcal/kWh)				
Sub-Bituminous Indian Coal	2273	2267	2250	2222
Bituminous Imported Coal	2197	2191	2174	2135

Pressure Rating (kg/cm²)	247	270	270
SHT/RHT (°C)	565/593	593/593	600/600
Type of Boiler Feed Pump	Turbine driven	Turbine driven	Turbine driven
Maximum Turbine Cycle Heat Rate (kcal/kWh)	1850	1810	1800
Minimum Boiler Efficiency			
Sub-Bituminous Indian Coal	0.86	0.865	0.865
Bituminous Imported Coal	0.89	0.895	0.895
Maximum Design Unit Heat Rate (kcal/kWh)			
Sub-Bituminous Indian Coal	2151	2105	2081
Bituminous Imported Coal	2078	2034	2022

Provided further that in case pressure and temperature parameters of a Unit are different from above ratings, the maximum design Unit Heat Rate of the nearest class shall be taken:

Provided also that where Unit Heat Rate has not been guaranteed but turbine cycle Heat Rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the Unit Design Heat Rate shall be arrived at by using guaranteed turbine cycle Heat Rate and boiler efficiency:

Provided also that where the boiler efficiency is below 86% for sub-bituminous Indian coal and 89% for bituminous imported coal, the same shall be considered as 86% and 89%, respectively, for sub-bituminous Indian coal and bituminous imported coal for computation of Gross Station Heat Rate:

Provided also that maximum turbine cycle Heat Rate shall be adjusted for type of dry cooling system:

Provided also that if one or more Units are declared under commercial operation prior to 01.04.2019, the Heat Rate norms for those Units as well as Units declared under commercial operation on or after 01.04.2019 shall be lower of

the Heat Rate norms arrived at by the above methodology and the norms specified in clause 0:

Note: In respect of Units where the boiler feed pumps are electrically operated, the maximum design Unit Heat Rate shall be 40 kcal/kWh lower than the maximum design Unit Heat Rate specified above with turbine driven boiler feed pumps.

44.6 Secondary fuel oil consumption norm for all thermal Generating Stations, shall be:

a) Coal-based Generating Stations: 0.50 ml/kWh

44.7 Auxiliary Energy Consumption for all coal-based thermal Generating Stations shall be as given in the Table below:

Particulars	With Natural Draft cooling tower or without cooling tower
(i) 62.5 MW	10.00%
(ii) 250 MW series	8.50%
(iii) 500 MW & above	
Steam driven boiler feed pumps	5.25%
Electrically driven boiler feed pumps	7.75%

Provided that for thermal Generating Stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8%, respectively:

Provided further that additional Auxiliary Energy Consumption as follows may be allowed for plants with Dry Cooling Systems:

Type of Dry Cooling System	(% of gross generation)
Direct cooling air cooled condensers with mechanical draft fans	1.0%
Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower	0.5%

Provided also that for thermal Generating Stations with Flue Gas De-sulphuriser (FGD), additional Auxiliary Energy Consumption shall be allowed on case to case basis after prudence check.

44.8 Auxiliary Energy Consumption for hydro generating stations be as under:

Type of Station	Auxiliary Energy Consumption
Surface	
Rotating Excitation	0.7%
Static	1.0%
Underground	

Type of Station	Auxiliary Energy Consumption
<i>Rotating Excitation</i>	0.9%
<i>Static</i>	1.2%

44.9 In case of pumped storage hydro generating stations, the quantum of electricity required for pumping water from down-stream reservoir to up-stream reservoir shall be arranged by the beneficiaries duly taking into account the transmission and distribution losses up to the bus bar of the generating station. In return, beneficiaries shall be entitled to equivalent energy of 75% of the energy utilized in pumping the water from the lower elevation reservoir to the higher elevation reservoir from the generating station during peak hours and the generating station shall be under obligation to supply such quantum of electricity during peak hours.

44.10 Transit and handling Losses

44.11 Normative transit and handling losses for coal based Generating Stations, as a percentage of quantity of coal dispatched by the coal company during the month shall be:

(a) Pit head Generating Stations	:	0.2%
(b) Non-pit head Generating Stations	:	0.8%

Provided that in case of pit head stations if coal is procured from sources other than the pit head mines, which is transported to the Station through rail, normative transit loss of 0.8% shall be applicable:

Provided further that the above norms shall be applicable for domestic coal and washed coal:

Provided also that in case of imported coal, the normative transit and handling losses shall be 0.2%:

Provided also that for procurement of coal on delivery basis, no transit and handling loss shall be allowed.”

4.2.9. The Commission has issued the Draft TSERC (Multi Year Tariff) Regulation, 2023 for the Control Period commencing from 01.04.2024 through Notice dated 16.11.2023. The Commission based on stakeholder’s inputs will finalize the norms of operation in the Multi Year Tariff Regulation for the period commencing from 01.04.2024.

4.2.10. Accordingly, the Commission has not approved operating norms for thermal and hydro generating plants for 5th Control Period in this Order. The Norms of Operation for Thermal and hydro generating plants for 5th Control Period will be as per MYT Regulation,2023.

4.3 Generation Planning and Forecast

Petitioner's Submissions

4.3.1. TSGenco has submitted the gross station wise projection for generation planning and forecast for the 5th Control Period as below:

Table 4-6: Availability of Thermal Stations submitted by TSGenco (MU)

Sl. No	Name of Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Existing Plants						
1.	KTPS-V	3511.50	3511.50	3508.80	3521.40	3511.50
2.	KTPS-VI	3504.00	3519.00	3504.00	3524.58	3504.00
3.	KTPS-VII	5961.60	5956.80	5961.60	5973.12	5959.68
4.	RTS-B	412.80	412.13	412.13	413.30	412.13
5.	KTPP-I	3519.00	3504.00	3513.60	3513.60	3519.00
6.	KTPP-II	4204.80	4222.80	4204.80	4235.04	4204.80
7.	BTPS	8044.92	8044.92	8043.62	8067.21	8044.92
8.	Total	29157.00	29172.77	29154.83	29242.75	29154.41
Upcoming Plants						
9.	YTPS	18,816.96	29,784.13	29,784.05	29,784.23	29,784.11
10.	Total	47,975.58	58,955.28	58,932.60	59,032.48	58,940.14

Table 4-7: Availability of Hydro Generating Station submitted by TSGenco (MU)

Sl. No	Name of Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1.	Nagarjuna Sagar HES	1036.00	1032.00	1119.00	1205.00	1302.00
2.	Srisaillam LB	1134.00	1134.00	1134.00	1134.00	1134.00
3.	Small Hydel	33.78	33.87	33.96	34.05	34.05
4.	Mini Hydel	2.48	2.85	2.36	2.50	2.50
5.	Pochampad-I&II	75.00	75.00	75.00	75.00	75.00
6.	Priyadarshini Jurala	246.79	249.00	270.74	276.60	282.52
7.	Lower Jurala	246.96	246.96	246.96	246.96	246.96
8.	Pulichintala	257.00	289.00	324.00	361.00	400.00
9.	Total	3032.01	3062.68	3206.02	3335.10	3477.03

4.3.2. TSGenco also submitted the station wise net energy generation data for thermal and hydro generating plants for the 5th Control Period:

Table 4-8: Net Availability of thermal Plants submitted by TSGenco (MU)

Sl. No.	Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Existing Plants						
1.	KTPS-V	3,195.47	3,195.47	3,193.01	3,204.47	3,195.47
2.	KTPS-VI	3,241.20	3,255.08	3,241.20	3,260.24	3,241.20
3.	KTPS-VII	5,648.62	5,644.07	5,648.62	5,659.53	5,646.80
4.	KTPP-I	3,255.08	3,241.20	3,250.08	3,250.08	3,255.08
5.	KTPP-II	3,910.46	3,927.20	3,910.46	3,938.59	3,910.46
6.	RTS-B	371.52	370.91	370.91	371.97	370.91
7.	BTPS	7,359.62	7,362.58	7,365.67	7,376.46	7,359.62
Upcoming Plants						
8.	YTPS	17,612.67	27,783.75	27,891.30	27,964.98	27,891.30

Sl. No.	Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Existing Plants						
9.	Total	44,594.63	54,780.26	54,871.25	55,026.32	54,870.84

Table 4-9: Net Energy Generation of Hydro Plants submitted by TSGenco (MU)

Sl. No	Name of Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1.	Nagarjuna Sagar HES	1,024.75	1,020.72	1,107.75	1,193.75	1,290.69
2.	Srisaillam LB	1,123.94	1,123.94	1,123.94	1,123.94	1,123.94
3.	Small Hydel	33.27	33.35	33.44	33.53	33.53
4.	Mini Hydel	2.42	2.79	2.30	2.44	2.44
5.	Pochampad-I&II	74.36	74.36	74.36	74.36	74.37
6.	Priyadarshini Jurala	241.67	243.88	265.40	271.17	277.00
7.	Lower Jurala	242.90	242.90	242.90	242.90	242.90
8.	Pulichintala	255.60	287.46	322.30	359.13	397.95
9.	Total	2,998.91	3,029.40	3,172.40	3,301.22	3,442.81

4.3.3. Annual overhaul plan for existing thermal generating stations as submitted by the Petitioner is detailed below:

Table 4-10: Overhaul Plan for the Thermal Plants submitted by TSGenco (Days)

Sl. No.	Energy Sources	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1.	KTPS-V	47	0	20	0	45	0	20
2.	KTPS-V	0	45	0	20	0	20	0
3.	KTPS-VI	0	20	0	20	0	45	0
4.	KTPS-VII	86	0	20	0	20	0	45
5.	KTPP-I	56	0	20	0	45	0	20
6.	KTPP-II	0	45	0	20	0	20	0
7.	RTS-B	15	15	45	15	15	15	15
8.	BTPS-I	20	0	20	0	45	0	20
9.	BTPS-II	20	0	20	0	45	0	20
10.	BTPS-III	0	20	0	20	0	45	0
11.	BTPS-IV	0	20	0	20	0	45	0

Commission's Analysis

4.3.4. The Commission observed that the outage/overhaul plan for thermal plants on date wise basis is not provided by the Petitioner and the information related to the same was sought vide Letter No. TSERC / Secy / E 562979 & E562980 / D.No.580 / 23 dated 26.08.2023. In reply, the Petitioner furnished the date wise detail of outage/overhaul planning detailing the Capital Overhaul (COH) and Annual Overhaul (AOH) as shown in the table below:

Table 4-11: Overhaul Schedule of Thermal Plant submitted by TSGenco

Name of Station/ Units	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
KTPS -V U9 (250MW)	01.06.2024 to 20.06.2024 (AOH) (20 Days)	Not Scheduled	01.06.2026 to 15.07.2026 (COH) (45 Days)	Not Scheduled	21-06-2028 to 10-07-2028 (AOH) (20 Days)
KTPS -V U10 (250MW)	Not Scheduled	21.07.2025 to 09.08.2025 (AOH) (20 Days)	Not Scheduled	16-12-2027 to 04-01-2028 (AOH) (20 Days)	Not Scheduled
KTPS VI (500MW)	Not Scheduled	21.11.2025 to 10.12.2025 (AOH) (20 Days)	Not Scheduled	01.06.2027 to 15.07.2027 (COH) (45 Days)	Not Scheduled
KTPS -VII (800 MW)	01-08-2024 to 20-08-2024 (AOH) (20 Days)	Not Scheduled	01-11-2026 to 20-11-2026 (AOH) (20 Days)	Not Scheduled	11-07-2028 to 24- 08-2028 (COH) (45 Days)
KTPP Stage-I (500MW)	21.06.2024 to 10.07.2024 (AOH) (20 Days)	Not Scheduled	16.07.2026 to 29.08.2026 (COH) (45 Days)	Not Scheduled	01.06.2028 to 20.06.2028 (AOH) (20 Days)
KTPP Stage-II (600MW)	Not Scheduled	01.06.2025 to 20.06.2025 (AOH) (20 Days)	Not Scheduled	16-07-2027 to 04-08-2027 (AOH) (20 Days)	Not Scheduled
RTS-B (62.5MW)	11.07.2024 to 24.08.2024 (COH) (45 Days)	15-12-2025 to 30-12-2025 (AOH) (15 Days)	15-12-2026 to 30-12-2026 (AOH) (15 Days)	15-12-2027 to 29-12-2027 (AOH) (15 Days)	15-12-2028 to 30- 12-2028 (AOH) (15 Days)
BTPS U1 (270MW)	01.11.2024 to 20.11.2024 (AOH) (20 Days)	Not Scheduled	16.07.2026 to 29.08.2026 (COH) (45 Days)	Not Scheduled	01.11.2028 to 20.11.2028 (AOH) (20 Days)
BTPS U2 (270MW)	Not Scheduled	01-07-2025 to 20-07-2025 (AOH) (20 Days)	Not Scheduled	01-06-2027 to 15-07-2027 (COH) (45 Days)	Not Scheduled
BTPS U3 (270MW)	Not Scheduled	11-08-2025 to 30-08-2025 (AOH) (20 Days)	Not Scheduled	16-07-2027 to 29-08-2027 (COH) (45 Days)	Not Scheduled
BTPS U4 (270MW)	Not Scheduled	01-11-2025 to 20-11-2025 (AOH) (20 Days)	Not Scheduled	01.11.2027 to 15.12.2027 (COH) (45 Days)	Not Scheduled
YTPS U1 (800MW)	Not Scheduled	21.06.2025 to 10.07.2025 (AOH) (20 Days)	Not Scheduled	05.08.2027 to 24.08.2027 (AOH) (20 Days)	Not Scheduled
YTPS U2 (800MW)	Not Scheduled	11.12.2025 to 30.12.2025 (AOH) (20 Days)	Not Scheduled	16.07.2027 to 04.08.2027 (AOH) (20 Days)	Not Scheduled
YTPS U3 (800MW)	Not Scheduled	Not Scheduled	21.11.2026 to 10.12.2026 (AOH) (20 Days)	Not Scheduled	21.11.2028 to 10.12.2028 (AOH) (20 Days)
YTPS U4 (800MW)	Not Scheduled	Not Scheduled	01.06.2026 to 20.06.2026 (AOH) (20 Days)	Not Scheduled	21.06.2028 to 10.07.2028 (AOH) (20 Days)
YTPS U5 (800MW)	Not Scheduled	Not Scheduled	11.12.2026 to 30.12.2026 (AOH) (20 Days)	Not Scheduled	11.12.2028 to 30.12.2028 (AOH) (20 Days)

4.3.5. The Commission based on the above information related to installed capacity, outage/overhaul planning and the operating parameters of the generating plants has taken note of the generation planning and forecast for the 5th Control Period. As discussed earlier, the norms of operation i.e., Availability and PLF will be as specified in TSERC (Multi Year Tariff) Regulation, 2023. Accordingly, the Commission has not approved the Generation forecast in this Order.

4.4 Financial Statement

4.4.1. The Petitioner based on the proposed Capital Investment Plan for 5th Control Period has submitted the financial statements such as Profit & Loss, Balance Sheet and Cash Flow along with its Business Plan Petition. However, the basis for projecting the various cost and income items for each financial year is not elaborated and provided in the Petition. The Commission has sought such information from the Petitioner in the data gaps but appropriate details depicting calculation for projecting the estimates for the various cost and income items is not provided by the Petitioner.

4.4.2. The Commission at this stage in the absence of complete information regarding the basis of projecting financial statements has not commented on the financial statements. Therefore, the Commission in lapse of adequate and appropriate information is not admitting the financial statement proposed by the Petitioner for the 5th Control Period comprising FY 2024-25 to FY 2028-29 at this stage.

Chapter 5: Capital Investment Plan

5.1 Approach for approval of Capital Investment Plan

5.1.1. The Capital Investment Plan for 5th Control Period comprising FY 2024-25 to FY 2028-29 is scrutinized by the Commission in accordance with Clause 7(B) of the Regulation No.1 of 2019. Further, the additional capitalisation proposed by the Petitioner is analyzed in the light of the Clause 7.19, Clause 7.21 and other relevant clauses of the Regulation 01 of 2019. The relevant excerpts of the aforesaid regulations are reproduced below:

7.19 Additional Capitalisation

7.19.1. *The capital expenditure actually incurred or projected to be incurred, on the following counts within the Original Scope of Work, after the COD and up to the Cut-Off Date, may be admitted by the Commission subject to Prudence Check. Any additional capitalization after COD needs prior approval of the Commission: -*

- (a) *Un-discharged liabilities recognised to be payable at a future date;*
- (b) *Works deferred for execution;*
- (c) *Procurement of initial capital spares within the Original Scope of Work in accordance with clause 7.12 of these Regulations;*
- (d) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*
- (e) *Change in law or compliance of any existing law;*
- (f) *Any expenses to be incurred on account of need for higher security and safety of the Station/Unit as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;*
- (g) *Deferred works relating to ash pond or ash handling system and coal handling in the Original Scope of Work;*
- (h) *Any capital expenditure found justified after Prudence Check necessitated on account of modifications required or done in fuel receiving system arising due to non--materialisation of coal supply corresponding to full coal linkage in respect of Thermal Generating Station as result of circumstances not within the control of the Generating Station.*

- (i) Any liability for works executed prior to the Cut-Off Date, after Prudence Check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments, etc.

Provided that in case of such liabilities, the details and relevant Board of Director approvals shall be submitted along with the Petition for determination of final Tariff after the COD of the Generating Unit/ Station.

- (j) Any liability for works admitted by the Commission after the Cut-Off Date to the extent of discharge of such liabilities by actual payments.
- (k) Any additional capital expenditure which has become necessary for efficient operation.

Provided that the claim shall be substantiated with the technical justification duly supported by documentary evidence like test results carried out by an independent agency in case of deterioration of assets, damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level.

- (l) An additional capital expenditure for complying with statutory norms for Environment in accordance with the appropriate notifications of Ministry of Environment, Forest and Climate Change.

Provided that, the Generating Company shall approach to the Commission for change in operational parameters such as change in normative Auxiliary Consumption on account of technology changes in the Generating Plant for e.g. installation of Flue Gas Desulfurization (FGD).

- (m) In case of hydro Generating Stations, any expenditure, which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the Generating Entity) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation.

7.19.2. The details of works included in the Original Scope of Work along with estimates of expenditure, liabilities recognised to be payable at a future date and the works deferred for execution shall be submitted along with the petition for determination of final tariff after COD of the Generating Unit/Station.

- 7.19.3. Any expenditure, which has been claimed under renovation and modernisation (clause 7.16 of this Regulation) or repairs and maintenance under O&M expenses (clause 19 of these Regulation), shall not be claimed under this clause.
- 7.19.4. Impact of additional capitalisation on tariff, if any, shall be considered during Mid-term Review or tariff determination for the next Control Period as the case may be.
- 7.19.5. Any expenditure on miscellaneous items/assets like normal tools and tackles, personal computers, furniture, air- conditioners, voltage stabilizers, refrigerators, fans, coolers, TV, washing machines, heat-convectors, carpets, mattresses etc. brought after the Cut-Off Date shall not be considered for additional capitalisation for determination of tariff. The said items are illustrated and may include any other similar items.

7.21. Renovation and Modernisation for Life Extension

- 7.21.1. The Generating Entity shall file a petition towards the fag end (5 years before) of the Useful Life before the Commission for approval of the proposal with a Detailed Project Report (DPR) detailing the 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 Entity for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the originally recognised Useful Life as specified in CERC Regulations.
- 7.21.2. The Commission may grant approval for additional capital cost on account of R&M after due consideration of reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.

Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses shall be suitably deducted after due Prudence Check from the R&M expenditure to be allowed.

- 5.1.2. The Capital Investment Plan submitted by the Petitioner for existing and upcoming new plants for the 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in the table below:

Table 5-1: Capital Investment Plan submitted by Petitioner (Rs Crore)

Sl. No.	Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	KTPS-V	51.30	115.00	415.00	115.52	0.00	696.82
2.	KTPS-VI	6.50	115.00	415.00	115.52	0.00	652.02
3.	KTPS-VII	445.03	220.19	2.96	3.01	51.58	722.77
4.	RTS-B	20.00	32.63	0.00	0.00	0.00	52.63
5.	KTPP-I	131.22	210.91	241.05	90.39	0.00	673.57
6.	KTPP-II	144.60	253.10	289.25	108.47	0.00	795.42
7.	BTPS	592.41	44.77	2.00	2.00	0.00	641.18
8.	NSHES	87.50	0.00	0.00	0.00	0.00	87.50
9.	SLBHES	157.00	0.00	0.00	0.00	0.00	157
10.	Small Hydel	7.30	0.00	0.00	0.00	0.00	7.30
11.	Mini Hydel	0.00	0.00	0.00	0.00	0.00	0.00
12.	Pochampad-II	1.00	0.00	0.00	0.00	0.00	1.00
13.	PJHES	6.00	0.00	0.00	0.00	0.00	6.00
14.	LJHES	14.50	0.00	0.00	0.00	0.00	14.50
15.	PCHES	21.00	0.00	0.00	0.00	0.00	21.00
16.	YTPS	7596.97	1475.44	499.25	0.00	0.00	9571.66
17.	Solar	680.06	1318.00	1318.00	0.00	0.00	3316.06
18.	IT Initiatives	30.00	0.00	0.00	0.00	0.00	30.00
19.	Total	9992.39	3785.04	3182	434.91	51.58	17446.43

5.1.3. The Commission conducted prudence check of the Capital Investment Plan proposed by the Petitioner for 5th Control Period on plant wise basis. The detailed analysis for admittance of the additional capital expenditure on plant wise basis is elaborated in following sections:

5.2 KTPS VII

Petitioner's Submissions

5.2.1. The Petitioner has claimed additional capitalization for KTPS VII in 5th Control Period which is primarily towards Civil works and FGD works. The civil works include additional capital expenditure towards construction of residential quarters, vocational training institute, ash water recovery system, raising elevation of ash ponds I & II, material storage shelves and installation of solar rooftop PV panels as per MOEF&CC norms. Whereas, FGD works include the additional capital requirement towards FGD for E&M & Civil Works. Details of additional capitalization claimed by the Petitioner for KTPS VII in the 5th Control Period is shown in the table below:

Table 5-2:- Capital Investment Plan Submitted by the Petitioner (Rs Crore)

Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
Civil Work	369.28	215.19	2.96	3.01	1.58	592.01
FGD (E&M)	20.00	-	-	-	-	20.00
FGD (Civil Works)	10.00	-	-	-	-	10.00
Ash Pond (raising elevation)	40.50	-	-	-	50.00	90.50
Ash Handling System (Ash water recovery, providing protection wall to river, box culvert near R/Way Track)	5.25	5.00	-	-	-	10.25
Total (KTPS-VII)	445.03	220.19	2.96	3.01	51.58	722.77

Commission's Analysis

5.2.2. The Commission vide Letter No. TSERC / Secy / E 562979 & E562980 / D.No.580 / 23 dated 26.08.2023 has sought classification of works proposed for additional capitalisation of KTPS VII under the heads of within the original scope of work and beyond the original scope of work. In reply, the Petitioner submitted that the additional capitalisation attributed to Civil works and FGD related works is within the original scope of work. Whereas the balance amount of additional capitalisation attributed to works related to raising elevation of Northern Ash Ponds (I&II), providing protection to river bank towards Northern Ash Pond- II and providing box culvert near Railway track to approach Northern Ash Pond- II is beyond the original scope of work. The bifurcation of additional capitalisation for KTPS VII within the original scope of work and beyond the original scope of work is summarised in table below:

Table 5-3: Bifurcation of additional capitalisation proposed for KTPS VII

Station Name	Additional Capitalisation proposed for 5th Control Period (Rs. Crore)	Additional Capitalisation within Original Scope of Work (Rs. Crore)	Additional Capitalisation beyond the Original Scope of Work (Rs. Crore)
KTPS VII	722.765	627.015	95.750

5.2.3. Further, the Commission observed that the KTPS VII has achieved its Commercial Operation Date (COD) on 26.12.2018. As per Clause 2.23 of the Regulation 1 of 2019, the Cut-Off of Date for KTPS VII is 31.03.2021. The relevant extract of Clause 2.23 of the Regulation 01 of 2019 is reproduced under:

2. Definitions and Interpretation

2.23 "Cut-off Date" means the 31st March of the Year ending after two (2) Years of the Year of start of commercial operation of a Project and, in case a Project is declared to be under commercial operation in the last quarter of a Year, it shall mean the 31st March of the Year ending after three Years of start of such commercial operation.

- 5.2.4. The Commission conducted prudence check of additional capitalisation for KTPS VII attributed to the works within the original scope of work as per the Clause 7.19.1 of the Regulation 01 of 2019. It states that the capital expenditure which is within the original scope of work and projected to be incurred after COD and upto Cut-Off Date, on count of the certain conditions, may be admitted by the Commission. As the additional capitalization for KTPS VII attributed to the Civil Works is within the original scope of work and planned to be incurred after the Cut Off Date, the same is not admitted by the Commission.
- 5.2.5. The Commission with respect to the additional capitalisation for KTPS VII attributed to FGD E&M and Civil works has taken into its consideration as per the directions given in the MYT Order dated 22.03.2022. The Commission has given in principle approval for installation of FGD system and deferred the admittance of capital cost till the truing up of the relevant year, post commissioning of the same. The relevant extract of the MYT Order dated 22.03.2022 is reproduced below:

FGD System

5.3.38 MoEF&CC vide its notification dated 07.12.2015 has revised the SO₂ emission norm from 600 mg/Nm³ to 200 mg/Nm³. TSGenco has proposed the capital investment towards FGD system for KTPS-VII & BTPS for complying with the revised emission norm under Clause 7.191(e) and 7.191(l) of the Regulations No.1 of 2019.

5.3.39 In accordance with Clause 7.19.1 of the Regulations No.1 of 2019, the capital investment claimed for FGD system is allowable as the same is within the original scope of work. However, the Commission deems it appropriate to decide on the issue of whether the power of relaxation can be invoked in the instant case or not. The details of timelines given by CPCB are as under:

5.3.40 As the target date for complying with SO₂ emission norm was deferred by the competent authority and such uniform dispensation was given across

the country, the Commission deems it a fit case to exercise the power of relaxation of Clause 7.19.1 regarding the criteria for allowing additional capitalization. Clause 7.19.1(l) provides for capital expenditure for complying with statutory norms for Environment in accordance with the appropriate notifications of MoEF&CC. Therefore, the capital investment for FGD system is allowable under Clause 7.19.1(l) of the Regulations No.1 of 2019.

5.3.41 The Commission understands that TSGenco is in the process of awarding the works of procurement and installation of FGD system through competitive process. The Commission expects such competitive procurement to yield the most economical prices aligned to market trends. The Commission shall carry out the prudence check of the cost of FGD system in true-up for the relevant year after commissioning of the same.

- 5.2.6. Hence the additional capitalisation for KTPS VII attributed to the FGD E&M and Civil works is deferred by the Commission. The admittance of capital cost of the same will be taken into consideration at the time of truing up for relevant year, post commissioning of FGD system.
- 5.2.7. Further, the additional capitalisation for KTPS VII attributed to the works beyond the original scope of work is scrutinized by the Commission in consideration to Clause 7.19.1(k) of the Regulation 1 of 2019. It specifies that additional capitalisation which has become necessary on the count of efficient operation may be admitted by the Commission, provided such claim shall be duly substantiated by technical justification and supported by the reports carried out by the independent agency. As the Petitioner has not provided any such justification for the additional capitalisation attributed to the works other than original scope, the same is not admitted by the Commission.
- 5.2.8. Accordingly, the additional capitalisation claimed and approved for KTPS VII for 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in table below:

Table 5-4: Capital Investment Plan claimed and approved for KTPS-VII for 5th Control Period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Civil Work	592.01	-	-	-	-	-	-	-
FGD (E&M)	20.00	-	-	-	-	-	-	10.00
FGD (Civil Works)	10.00	-	-	-	-	-	-	20.00
Ash Pond (raising elevation)	90.50	-	-	-	-	-	-	-
Ash Handling System (Ash water recovery, providing protection wall to river, box culvert near R/Way Track)	10.25	-	-	-	-	-	-	-
Total (KTPS-VII)	722.77	-	-	-	-	-	-	30.00

5.3 BTPS

Petitioner's Submissions

- 5.3.1. The Petitioner has claimed additional capitalisation for BTPS for 5th Control Period, which includes expenditure primarily towards civil works, erection and commissioning works, E&M works other than EPC and FGD works. The civil works include expenditure toward construction of side stream filters, earth work in construction of railway siding and exchange yard, supply of track for construction of railway siding and Marshalling yard, railway electrification, project management consultancy, construction of integrated township, land scaping and street lighting system. The erection and commissioning works include expenditure toward track hopper, wagon tippler, spares of CHP & AHP and procurement of spares. The FGD works include expenditure toward engineering works and E&M works other than EPC include expenditure toward providing raw coal storage shed with new conveying system from the existing crusher house. The year wise details of additional capitalisation for BTPS in 5th Control Period is shown in table below:

Table 5-5: Capital Investment Plan Submitted by the Petitioner (Rs Crore)

Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
Civil works	504.91	42.77	0.00	0.00	0.00	547.68
Erection and Commissioning works	15.50	0.00	0.00	0.00	0.00	15.50
E&M works other than EPC	20.00	0.00	0.00	0.00	0.00	20.00
Civil work (Side Stream Filter)	2.00	2.00	2.00	2.00	-	8.00
FGD works	50.00	0.00	0.00	0.00	0.00	50.00
Total	592.41	44.77	2.00	2.00	0.00	641.18

Commission's Analysis

5.3.2. The Commission has approved the capital cost for BTPS in MTR Order dated 23.03.2023. The Commission while approving the capital cost for BTPS has deferred the capital works related to New Environment Norms which includes addition of FGD, SCR & ESP. The relevant extract of MTR Order dated 23.03.2023 is reproduced below:

4.4 REVISED CAPITAL COST OF BTPS

4.4.5 The Commission has scrutinised the submissions of the Petitioner. The Commission has revisited the capital cost of BTPS in accordance with the provisions under Regulation No.1 of 2019 for approval of IDC and EDC and has accordingly after prudence check allowed the final capital cost of BTPS. The Commission has exercised following prudence check while approving the capital cost of BTPS.

- The Commission checked original actual capital cost recorded in the annual accounts.
- The revenue from the sale of infirm power already reduced from capital cost as submitted by TSGENCO in its submissions.
- The penalties levied by TSGENCO to the contractors reduced from the capital cost.
- Electrical & Mechanical System (BHEL): TSGENCO has claimed revised cost of Rs.3326.60 crore and submitted the contract price and liquidated damages as Rs.3241.19 crore and Rs.93.86 crore respectively. The Commission after prudence check allowed Rs.3147.33 crore by disallowing the liquidated damages from the contract price.
- Civil System (BHEL): TSGENCO has claimed revised cost of Rs.1522.76 crore and submitted the contract price and liquidated damages as Rs.1435.59 crore and Rs.42 crore respectively. The Commission after

prudence check allowed Rs.1393.59 crore by disallowing the liquidated damages from the contract price.

- Common works E&M other than BHEL: TSGENCO has claimed revised cost of Rs.138.76 crore. The Commission after prudence check of revised DPR allowed Rs.138.76 crore as claimed.
- Common works Civil other than BHEL: TSGENCO has claimed revised cost of Rs.1466.57 crore. The Commission after prudence check of revised DPR allowed Rs.1466.57 crore as claimed.
- Consultancy Services: TSGENCO has claimed revised cost of Rs.12.00 crore. The Commission after prudence check allowed Rs.11.13 crore.
- CSR & Land: TSGENCO has claimed revised cost of CSR and Land as Rs.30 crore and Rs.100 crore respectively. The Commission after prudence check allowed Rs.30 crore and Rs.100 crore respectively as claimed.
- Erection & Commissioning (BHEL): TSGENCO has claimed Rs.551.83 crore and submitted the liquidated damages levied on the contractor as Rs.36.57 crore. The Commission after prudence check allowed Rs.515.26 crore by disallowing the liquidated damages levied on the contractor.
- New Norms (FGD, SCR & ESP addition): The Commission has deferred capital cost towards New Norms (FGD, SCR & ESP addition) in the GTO dated 22.03.2022. As per revised DPR, the petitioner has claimed Rs.686.24 crore towards New Norms (FGD, SCR & ESP addition). The Commission has deferred the same, the cost towards FGD will be considered after completion of FGD works. The Commission directs TSGENCO to submit the details of FGD installation along with DPR, project cost, physical & financial progress of work, etc., in its End of Control Period Review petition for the consideration of the Commission.
- Bus Reactor and CTs & CVTs: TSGENCO has claimed Rs.12.55 crore. The Commission after prudence check allowed Rs.12.55 crore as claimed.
- Bus Reactor and CTs & CVTs: TSGENCO has claimed Rs.12.55 crore. The Commission after prudence check allowed Rs.12.55 crore as claimed.
- Back charges to BHEL: The petitioner has claimed an amount of Rs.24.07 towards back charges to BHEL. The Commission has not allowed the claim of the petitioner.
- EDC: TSGENCO has claimed EDC of Rs.671.33 crore. The Commission after prudence check and in terms of clauses 7.23 and 8 of Regulation No.1 of 2019 has allowed Rs.553.26 crore.

- IDC: TSGENCO has claimed IDC of Rs.1845.59 and IDC for FGD of Rs.127.54 crore. The Commission after prudence check and in terms of clauses 7.22 of Regulation No.1 of 2019 has allowed Rs.1449.52 crore. and deferred the IDC for FGD. The IDC for FGD will be considered after completion of FGD works.

Table 4.6: Capital Cost approved for BTPS (Rs Crore)

Sl. No.	Breakup of Expenditure	Provisional Capital Cost approved in GTO	Revised cost claimed	Final Capital cost approved in MTR	Basis of approved cost
1	Electrical & Mech. System (BHEL)	3147.33	3326.60	3147.33	Allowed after deducting LD from contract price.
2	Civil System (BHEL)	1393.59	1522.76	1393.59	
3	Common works E&M otherthan BHEL	95.00	138.76	138.76	Claimed cost is within the revised cost estimates and hence allowed
4	Common works Civil otherthan BHEL	1208.88	1466.57	1466.57	
5	Consultancy services	11.13	12.00	11.13	Limited to the approved amount in the GTO
6	CSR	30.00	30.00	30.00	Claimed cost is within the revised cost estimates and approved cost deducting LD.
7	Land	100.00	100.00	100.00	
8	Erection & Commissioning (BHEL)	482.45	551.83	482.45	Claimed cost is within the revised cost estimates and approved cost deducting LD.
9	New Norms (FGD, SCR & ESP addition)	0.00	686.24	0.00	Deferred. Cost towards FGD will be considered after completion of FGD works
10	Bus Reactor and CTs&CVTs	12.55	12.55	12.55	Claim is same as approved in GTO.
11	Back charges to BHEL	0.00	24.07	0.00	Disallowed the back charges.
12	EDC	650.16	671.33	650.16	Allowed as per clause 7.23 and 8 of Regulation No.1 of 2019.
13	IDC	1560.35	1973.13	1560.35	Allowed as per clause 7.22 of Regulation No.1 of 2019 and IDC

<i>Sl. No.</i>	<i>Breakup of Expenditure</i>	<i>Provisional Capital Cost approved in GTO</i>	<i>Revised cost claimed</i>	<i>Final Capital cost approved in MTR</i>	<i>Basis of approved cost</i>
					<i>for FGD deferred and will be considered after completion of FGD works.</i>
	Total	8691.43	10515.84	8817.97	

5.3.3. Further, the Commission in MTR Order dated 23.03.2023 has also approved the revised capital investment plan for BTPS in 4th Control Period comprising FY 2019-20 to FY 2023-24. The relevant extract of the Order dated 23.03.2023 is reproduced below:

4.5 ADDITIONAL CAPITALISATION (GFA) OF BTPS:

4.5.1 The Petitioner has claimed Rs.4871.17 crore, Rs.2075.12 crore for FY 2020-21 and FY 2021-22. The Commission after prudence check has allowed the claim of the petitioner.

4.5.2 Based on the above the revised GFA of BTPS is as given in the table below:

Table 4.7: Revised GFA of BTPS (Rs Crore)

<i>Financial Year</i>	<i>Provisional cost approved in GTO</i>	<i>Revised cost claimed in MTR</i>	<i>Revised cost approved in MTR</i>
<i>Approved as on COD</i>	5561.87		
2020-21	2390.87	4871.18	4871.18
2021-22	738.68	2075.12	2075.12
2022-23		2058.33	1079.28
2023-24		1511.22	792.41
Total	8691.43	10515.84	8817.97

5.3.4. The Commission, observed that the information such as Capital Structure, Capitalization Schedule, Prioritization of Proposed Investment and Financing Plan for 5th Control Period was not provided by the Petitioner along with the Petitions. Thus, the Commission vide Letter No. TSERC / Secy / F.Resource Plan / D.No. 396 / 23 dated 07.06.2023 has sought such information from the Petitioner. In reply, the Petitioner provided the related information. The Capitalization Schedule of BTPS as provided by the Petitioner is shown in the table below:

Table 5-6: Capitalization Schedule proposed for BTPS (Rs Crore)

Plant Name	Upto FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
BTPS	6946.25	25.01	1500.00	1500.00	495.81	44.77	2.00	2.00

5.3.5. Further, the Commission vide Letter No. TSERC / Secy / E 562979 & E562980 / D.No.580 / 23 dated 26.08.2023 has sought additional information from the Petitioner related to the categorization of works proposed under additional capitalisation for BTPS into original scope of work and beyond original scope of work. In reply, the Petitioner submitted that the civil work related to the side stream filters to the cooling water system of Stage-II is beyond the original scope of work and the balance works proposed in the additional capitalisation are part of original scope of work. Accordingly, the classification of additional capitalisation for BTPS into original scope of work and beyond the original scope of work is summarized in the tabulated below:

Table 5-7: Classification of works into Original Scope of work and beyond the Original scope of work

Station Name	Additional Capitalisation for 5 th Control Period (Rs. Crore)	Additional Capitalisation for the works within Original scope of work (Rs. Crore)	Additional Capitalisation for the works beyond Original Scope of work (Rs. Crore)
BTPS	641.18	633.18	8.00

5.3.6. The Commission in consideration of Clause 7.19.1 of the Regulation 01 of 2019 has conducted the prudence check of additional capitalisation for BTPS attributed to the works within the original scope of work. The Clause 7.19.1 of the Regulation 01 of 2019 specifies that the capital expenditure which is within the original scope of work and projected to incur after COD and up to Cut-Off Date may be admitted by the Commission, on the count of certain conditions. As the BTPS has achieved its COD on 09.01.2022 and according to Clause 2.23 of the Regulation 01 of 2019, its Cut Off Date will be on 31.03.2025. Therefore, the Commission in consideration of additional capitalisation approved for BTPS in the Mid Term Review and Truing up of Generation Tariff Order dated 23.03.2023 and capitalization schedule provided by the Petitioner for balance years of the 4th Control Period has approved the additional capitalisation for BTPS in 5th Control

Period attributed to the works within the original scope of work other than the FGD works. The same is permitted only upto the Cut Off Date of BTPS. The calculation is summarized in the table below:

Table 5-8 : Determination of Balance capital cost (Rs Crore)

Plant Name	Approved Capital Cost of Plant	GFA upto FY 2022-23 as per MYT Order 23.03.2023	Capitalisation proposed for balance years of 4 th Control Period	Balance amount of Capital Cost
BTPS	8817.99	6946.29	1525.01	346.66

- 5.3.7. The Commission with respect to the additional capitalisation of BTPS attributed to the FGD work has taken into consideration the direction given for FGD System in the MYT Order dated 22.03.2022. The Commission in MYT Order dated 22.03.2022 has given the in-principle approval for the installation of FGD System and deferred the admittance of the capital cost in the true up of the relevant years post commissioning of the same. Accordingly, the additional capitalisation of BTPS claimed for FGD works is deferred and will be taken into consideration at the time of the true up of the relevant year.
- 5.3.8. The Commission with respect the additional capitalisation claimed for the works other than the original scope of work, has underwent the prudence check of works as per the Clause 7.19.1(k) of Regulation 1 of 2019. It specifies that any additional capital requirement which has become necessary on account of efficient operation should be substantiated properly by technical justification and duly supported by the documentary evidence like test results carried out by the independent agency. As the Petitioner has not provided any such justification which is duly supported by the report of independent agency, the additional capital of BTPS claim for the works other than original scope of work is not approved by the Commission.
- 5.3.9. Accordingly, additional capitalization claimed and approved for BPTPS for 5th Control Period comprising FY 2024-24 to FY 2028-29 is shown below:

Table 5-9:- Capital Investment Plan claimed and approved by the Commission for BTPS for 5th Control period

Particulars	Claimed additional Capitalisation	Approved additional capitalisation					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Civil Work	547.68							
Erection and Commissioning works	15.50	346.66	-	-	-	-	346.66	-
E&M works other than EPC	20.00							
Civil work (Side Stream Filter)	8.00	-	-	-	-	-	-	-
FGD Works	50.00	-	-	-	-	-	-	50.00
Total BTPS	641.18	346.66	-	-	-	-	346.66	50.00

5.4 KTPP I & II

Petitioner's Submissions

- 5.4.1. The Petitioner has claimed additional capitalisation for KTPP I&II in 5th Control Period which includes expenditure primarily towards civil works, replacement and upgradation works and installation of FGD system. The expenditure towards civil works includes raising elevation of ash pond bunds, construction of frame structure for storage of coal near emergency reclaim hopper and balance work of wet fly ash handling system. The expenditure towards replacement & modification works include procurement of SF6 circuit breaker, modification of boiler reheater rear tubes, replacement of complete assembly of clinker grinders and replacement of transport air compressors. And the expenditure for FGD includes installation of FGD and upgradation of Electrostatic Precipitators.
- 5.4.2. The Petitioner further submitted that the additional capitalisation claimed for civil works and FGD will be shared between KTPP I & II on pro rata basis as per their installed capacity. Whereas, the replacement and upgradation works relate to only KTPP I. The summary of additional capitalisation claimed for KTPP I&II in 5th Control Period is shown in table below:

Table 5-10:- Additional Capitalisation claimed for KTPP-I (Rs Crore)

Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
Civil Works	5.09	-	-	-	-	5.09
Replacement & Upgradation Works	12.05	-	-	-	-	12.05
Ash Pond (raising elevation)	15.91	-	-	-	-	15.91
Construction of Coal storage structure	38.64	-	-	-	-	38.64
FGD	60.26	210.91	241.05	89.67	-	601.88
Total (KTPP I)	131.95	210.91	241.05	89.67	-	673.57

Table 5-11:- Additional Capitalisation claimed for KTPP - II (Rs Crore)

Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
Civil Works	6.11	-	-	-	-	6.11
Replacement & Upgradation Works	-	-	-	-	-	-
Ash Pond (raising elevation)	19.09	-	-	-	-	19.09
Construction of Coal storage structure	46.36	-	-	-	-	46.36
FGD	72.31	253.10	289.25	109.19	-	723.86
Total (KTPP II)	143.87	253.10	289.25	109.19	-	795.42

- 5.4.3. The Petitioner submitted that the proposal for approval of capital cost for installation of Flue Gas Desulfurization (FGD) and up-gradation of Electrostatic Precipitators (ESP) at KTPP-I&II will be submitted separately.

Commission's Analysis

- 5.4.4. The Commission in MYT Order dated 22.03.2022, has given in-principle approval for FGD installation to the plants where it is the part of original scope of work. The Commission has found that the capital investment for FGD installation is appropriate as per the Clause 7.19.1(l) of Regulation 1 of 2019, which states that capital expenditure may be admitted on the account of compliance of statutory environment norms as per the appropriate notification of the Ministry of Environment Forest and Climate Change (MoEF&CC).
- 5.4.5. The Commission with regard to the admittance of capital cost for FGD installation has stated in MYT Order dated 22.03.2022 that as the TSGenco has started the process of awarding works for procurement and installation of FGD system

through competitive process, this will yield to economical prices and aligned the cost of FGD along with the market trends. Therefore, the Commission will carry out the prudence check of the capital cost of FGD system at the time of true-up of relevant year after commissioning of the same.

- 5.4.6. Further, the Commission observed that the environment clearance accorded to KTPP I&II envisaged compliance to the pollution control system. Therefore, compliance to the MoEF&CC notification dated 07.12.2015 and 31.03.2021 is mandatory. The MoEF&CC notification dated 31.03.2021 has further directed to comply with the emission norms within the specified time limit. The relevant extract of the MoEF&CC notification is reproduced as under:

“(i) A task force shall be constituted by Central Pollution Control Board (CPCB) comprising of representative from Ministry of Environment and Forest and Climate Change, Ministry of Power, Central Electricity Authority (CEA) and CPCB to categories thermal power plants in three categories as specified in the Table-I on the basis of their location to comply with the emission norms within the time limit as specified in column (4) of the Table-I, namely:

Table-I

Sl. No.	Category	Location/area	Timelines for compliance	
			Non retiring units	Retiring units
(1)	(2)	(3)	(4)	(5)
1	Category A	Within 10 km radius of National or cities having million plus population ¹ .	Upto 31 st December 2022	Upto 31 st December 2022
2	Category B	Within 10 km radius of Critically Polluted Areas ² or Non-attainment cities ²	Upto 31 st December 2023	Upto 31 st December 2025
3	Category C	Other than those included in category A and B	Upto 31 st December 2024	Upto 31 st December 2025

- 5.4.7. The Commission in consideration to the notification issued by the MoEF&CC accords its in-principle approval to KTPP I&II for installation of FGD system. However, as the TSGenco is in the process of awarding the work for procurement and installation of FGD through competitive process, which may yield to the most economical prices aligned to the market trends. Hence, the Commission has deferred the admittance of capital expenditure for FGD system and will conduct prudence check in true-up of the relevant year and post commissioning of the same.

- 5.4.8. The Commission, with respect to the additional capitalisation claimed for Civil Works, Coal Storage Structure and Replacement & Upgradation works, has sought additional information from the Petitioner vide Letter No. TSERC / Secy / E 562979 & E562980 / D.No.580 / 23 dated 26.08.2023 for classifying the proposed works into original scope of work and beyond the original scope of work. In reply, the Petitioner submitted that none of the works proposed for additional capitalisation is part of original scope of work. Hence the Commission carried out prudence check of the claimed additional capitalisation in consideration of Clause 7.19.1(k) of the Regulation 01 of 2019. It states that the capital work which have become necessary for efficient operation and substantiated by the technical justification and duly supported by report of independent agency may be admitted by the Commission. As the additional capitalisation claimed for Civil works, Coal Storage Structure and Renovation & Upgradation works are not substantiated by the report of independent agency, the Commission in lapse of such information has not approved the additional capitalization for the same.
- 5.4.9. With regard to additional capital expenditure claimed for the raising elevation of Ash Ponds and works related to the Ash Handling System, the Commission carried out prudence of additional capital requirement as per the provisions of Clause 7.19.1(k) of Regulation 1 of 2019. The Petitioner has not provided any proper technical justification duly supported by the documentary evidence like test results carried out by the independent agency to substantiate their claim for additional capital requirement. Hence the additional capital requirement for the same is not approved by the Commission.
- 5.4.10. Therefore, the additional capitalisation claimed and approved for KTPP I&II for 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in table below:

Table 5-12:- Additional Capitalisation claimed and approved for KTPP-I for 5th Control Period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Civil Works	5.09	-	-	-	-	-	-	
Replacement & Upgradation Works	12.05	-	-	-	-	-	-	

Particulars	Claimed additional capitalisation	Approved additional capitalisation					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Ash Pond (raising elevation)	15.91	-	-	-	-	-	-	-
Construction of Coal storage structure	38.64	-	-	-	-	-	-	-
FGD	601.88	-	-	-	-	-	-	601.88
Total KTPP-I	673.57	-	-	-	-	-	-	601.88

Table 5-13:- Additional Capitalisation claimed and approved for KTPP-II for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Civil Works	6.11	-	-	-	-	-	-	-
Replacement & Upgradation Works	-	-	-	-	-	-	-	-
Ash Pond (raising elevation)	19.09	-	-	-	-	-	-	-
Construction of Coal storage structure	46.36	-	-	-	-	-	-	-
FGD	723.86	-	-	-	-	-	-	723.86
Total KTPP-II	795.42	-	-	-	-	-	-	723.86

5.5 KTPS V and VI

Petitioner's Submissions

- 5.5.1. The Petitioner has claimed additional capitalisation for KTPS V&VI for 5th Control Period. The additional capitalisation is primarily towards R&M, Civil Works and installation of FGD system. The R&M works includes renovation of LP Bypass System, upgradation of VFD systems, modification of APH sealing arrangement, upgradation of PLC system for coal handling plant and upgradation of fire detection and alarm system. The civil works include raising elevation of ash pond bund and the FGD work include installation of FGD System for complying the new environment norms issued of MoEF&CC. The summary of additional capitalisation for KTPS V&VI in 5th Control Period is shown in the tables below:

Table 5-14:- Additional Capitalisation claimed for KTPS V (Rs Crore)

Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
Renovation & Modification (LP Bypass system)	8.00	-	-	-	-	8.00
Renovation & Modification (VFD & APH Sealing)	36.80	-	-	-	-	36.80
Upgradation & Modification	6.50	-	-	-	-	6.50
Ash Pond (Raising Elevation)	-	15.00	15.00	-	-	30.00
FGD	-	100.00	400.00	115.52	-	615.52
Total (KTPS V)	51.30	115.00	415.00	115.52	-	696.82

Table 5-15:- Additional Capitalisation claimed for KTPS VI (Rs Crore)

Particulars	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
Renovation & Modification (LP Bypass system)	-	-	-	-	-	-
Renovation & Modification (VFD & APH Sealing)	-	-	-	-	-	-
Upgradation & Modification	6.50	-	-	-	-	6.50
Ash Pond (Raising Elevation)	-	15.00	15.00	-	-	30.00
FGD	-	100.00	400.00	115.52	-	615.52
Total (KTPS VI)	6.50	115.00	415.00	115.52	-	652.02

Commission's Analysis

5.5.2. The Commission in consideration of Clause 7.19.1(k) of the Regulation 01 of 2014 has conducted the prudence check of the additional capitalisation claimed for the R&M works. The Clause 7.19.1(k) provides that any additional capital expenditure which has become necessary for efficient operation may be admitted by the Commission, provided that the claim shall be substantiated with the technical justification and duly supported by documentary evidence like test results carried out by an independent agency. The Commission found that the additional capitalisation claimed for R&M works is on account of technological obsolescence. However, the OEM recommendation is only suggested for the R&M works towards LP Bypass System. Therefore, the additional capitalisation attributed due to R&M works towards LP Bypass system is approved by the Commission.

5.5.3. The prudence check of additional capitalisation claimed for raising elevation of Ash Ponds and Civil Works related to the Ash Handling System, has been

scrutinized by the Commission in consideration to Clause 7.19.1(k) of the Regulation 1 of 2019. As, the Petitioner has not provided proper justification duly supported by documentary evidence issued by independent agency, the additional capitalisation claimed for raising elevation of Ash Ponds and Ash Handling System is not approved by the Commission.

5.5.4. Further, the Commission with regard to the prudence check of additional capitalisation claimed for installation FGD system, the Commission observed that the MOEFCC Notification dated 31.03.2021, has directed the plants to ensure FGD installation upto 31.12.2024. The Commission in consideration of Clause 7.19.1(l) of Regulation 1 of 2019 grants in-principle approval to KTPS V & VI for FGD installation. However, the admittance of additional capital expenditure for FGD installation is deferred by the Commission in consideration to the competitive bidding process to be conducted by the Petitioner which may yield to most economic prices aligned to the market trends. Hence, the prudence check of capital cost for FGD installation will be taken up in true-up of the relevant year, carried out post commissioning of the same.

5.5.5. The additional capitalisation claimed and approved for KTPS V & VI in 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in table below:

Table 5-16:- Additional Capitalisation claimed and approved for KTPS V for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Renovation & Modification (LP Bypass system)	8.00	8.00	-	-	-	-	8.00	-
Renovation & Modification (VFD & APH Sealing)	36.80	-	-	-	-	-	-	-
Upgradation & Modification	6.50	-	-	-	-	-	-	-
Ash Pond (Raising Elevation)	30.00	-	-	-	-	-	-	-
FGD	615.52	-	-	-	-	-	-	615.52
Total (KTPS V)	696.82	8.00	-	-	-	-	8.00	615.52

Table 5-17:- Additional Capitalisation claimed and approved for KTPS VI for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Renovation & Modification (LP Bypass system)	-	-	-	-	-	-	-	-
Renovation & Modification (VFD & APH Sealing)	-	-	-	-	-	-	-	-
Upgradation & Modification	6.50	-	-	-	-	-	-	-
Ash Pond (Raising Elevation)	30.00	-	-	-	-	-	-	-
FGD	615.52	-	-	-	-	-	-	615.52
Total (KTPS VI)	652.02	-	-	-	-	-	-	615.52

5.6 RTS-B

Petitioner's Submissions

5.6.1. The Petitioner has claimed additional capitalisation for RTS-B for 5th Control Period. The plant has completed its 51 years of service, the additional capitalisation is claimed primarily towards Renovation & Modernisation works for extension of useful life of the plant. The proposed works for additional capitalisation are related to Boiler Maintenance, Turbine Maintenance, Mills, CAPM, Coal Handling System, Electrical Maintenance and Civil work of Sub-Division. The additional capitalisation claimed for RTS-B in 5th Control Period is shown in table below:

Table 5-18:- Additional Capitalisation claimed for RTS-B (Rs. Crore)

Name of Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
RTS-B	20.00	32.63	0.00	0.00	0.00	52.63

Commission's Analysis

5.6.2. The Commission as per Clause 7.21.1 of Regulation 01 of 2019 has conducted prudence check of the additional capitalisation claimed for RTS-B for extension of useful life of plant. The Clause 7.21.1 provides that generating entity at the fag end (5 years before) of the useful life of the plant shall file a Petition along with a Detailed Project Report (DPR) and any other information considered to be relevant by the Generating Entity for meeting the expenditure on renovation and

modernization (R&M) for the purpose of extension of life beyond the originally recognized Useful Life as specified in CERC Regulations. Accordingly, the Commission sought the Detail Project Report from the Petitioner vide Letter No. TSERC / Secy / E 562979 & E562980 / D.No.580 / 23 dated 26.08.2023. In reply, the Petitioner submitted that DPR preparation for meeting the expenditure of R&M works of RTS-B for extension of useful life of the plant is under process and tendering process will be initiated after finalization of the same.

5.6.3. The Commission, in absence of the DPR is not in a stage to assess the estimated extension of useful life for the plant from a certain reference date and corresponding benefits to the plant from the same as well. Therefore, the Commission directs the Petitioner that DPR in accordance with Clause 7.21.1 of the Regulation 01 of 2019 shall be submitted along with the MYT filing for 5th Control Period, so that, the capital cost for Renovation & Modernization of Plant for extension of useful life can be scrutinized and considered accordingly.

5.6.4. The additional capitalisation claimed and approved for RTS-B in 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in the table below:

Table 5-19:- Additional Capitalisation claimed and approved for RTS-B for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
R&M Works for Extension of useful life of plant	52.63	-	-	-	-	-	-	52.63
Total (RTS-B)	52.63	-	-	-	-	-	-	52.63

5.7 YTPS

Petitioner's Submissions

5.7.1. The Petitioner has claimed additional capitalisation for upcoming thermal generating station YTPS in 5th Control Period as under:

Table 5-20:- Proposed Additional Capitalisation for YTPS (Rs Crore)

Name of Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
YTPS	7596.97	1475.44	499.25	0.00	0.00	9571.66

Commission's Analysis

5.7.2. The Commission observed that the YTPS is an upcoming new thermal generating plant for which capital cost is not approved. Accordingly, the Commission vide Letter No. TSERC / Secy / E 562979 & E562980 / D.No.580 / 23 dated 26.08.2023, has sought additional information from the Petitioner related to investment approval, scheduled COD, PPA status, Break-up of Capital Cost, Interest During Construction, Incidental Expenditure During Construction, Time and cost Overrun details. In reply, the Petitioner submitted the requisite details as under:

a) Capital Cost of YTPS

Table 5-21: Capital Cost for YTPS submitted by the Petitioner (Rs. Crore)

Description	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	Total
E & M system	5518.37	1893.36	1839.36	2412.31	1298.13	3184.61	998.50	200.00	17344.64
Civil system	937.45	393.64	834.00	543.78	99.55	620.60	149.13	150.00	3728.14
COMMON WORKS E & M NON – EPC	3.05	0.36	6.71	0.11	121.61	123.59	10.64		266.08
Common works Civil - Non EPC	41.80	75.38	112.18	593.25	459.12	1035.43	115.01	89.25	2521.42
Project Consultancy services- Civil	0.29	2.39	6.36	0.14	4.10	5.93	0.80		20.00
Contingency Works	2.74	1.19	1.51	0.25	26.28	29.19	2.47		63.63
CSR development charges	7.55	0.00	0.07	1.26	52.20	72.29	4.79		138.17
Land	484.40	0.00	0.00	0.00	143.74	0.00			628.14
Project Consultancy services - E & M	4.57	4.50	4.16	3.80	2.96	0.00			20.00
ERV and CDV bills		72.18	17.91	11.03	59.33	69.55	10.00	10.00	250.00
Emergency works		0.00		0.10		0.00			0.10
Back charges for EPC contractor BHEL		0.00				0.00			0.00
EDC	172.74	82.73	108.13	102.58	84.50	655.79	184.10	50.00	1440.56
IDC	931.30	809.75	1202.03	1591.48	1777.84	1800.00			8112.40
Capital Goods	1.01	1.08	1.81	5.75					9.65
Total	8105.27	3336.56	4134.23	5265.85	4129.36	7596.98	1475.44	499.25	34542.95

b) Scheduled COD:

Unit-1	31.12.2023
Unit-2	31.12.2023
Unit-3	31.10.2024
Unit-4	30.09.2024
Unit-5	31.12.2024.

c) **PPA status: PPA copy enclosed.**

d) **Break up of Capital cost: Administrative Approval copy enclosed**

e) **Interest during construction:**

- Total IDC including Financing expenses as per the approval: Rs.8112.40Cr (IDC: Rs.8100Cr & Financing expenses: Rs.12.40Cr)
- IDC up to Dt: 31.07.2023: Rs.4989.49Cr.

f) **Incidental Expenditure during construction:**

- Total Project Cost: Rs.34, 542.95Cr.
- EPC & NON EPC Cost including Consultancy & Engg, Start-up fuel and Operator training: Rs.25, 548.30Cr.
- Incidental Expenditure: Establishment cost including Head quarter charges: Rs.744.07Cr and CSR: Rs.138.17Cr.
- Interest during construction including Financing expenses as per the approval: Rs.8112.40Cr (IDC:Rs.8100Cr & Financing expenses:Rs.12.40Cr)

g) **Time and cost overrun:**

- Cost Overrun from Rs.29, 965.48Cr to Rs.34, 542.95Cr: Rs.4577.47Cr (15.28%)

h) **Time Overrun:**

Unit No	COD as per the Contract	Tentative COD	Time Overrun
1	16.10.2020	31.12.2023	38 months
2	16.10.2020	31.12.2023	38 months
3	16.10.2021	31.10.2024	36 months
4	16.10.2021	30.09.2024	35 months
5	16.10.2021	31.12.2024	38 months

5.7.3. The Commission, in consideration of Clause 4.2.3 & Clause 4.2.4 of the Regulation 01 of 2019 has scrutinized the additional capitalisation claimed for YTPS for 5th Control Period. The Clause 4.2.3 states that the Generating Entity shall file an application for determination of provisional tariff for a new generating station, one hundred and eighty (180) days prior to the anticipated COD of Generating Unit or Stage or Generating Station as a whole, as the case may be. Further the Clause 4.2.4 states that the Generating Entity shall make an application for determination of tariff based on capital expenditure incurred or projected to be incurred upto COD and additional capital expenditure incurred, duly certified by the statutory auditor. Accordingly, as per Clause 4.2.3 and Clause 4.2.4 the Petitioner has not filed any separate petition for determination of capital

cost and tariff for YTPS. In absence of such Petition, the additional capitalisation claimed for YTPS for 5th Control Period is not considered by the Commission.

- 5.7.4. The Commission in the MYT Order dated 22.03.2022 has also directed the Petitioner to submit the proposal for determination of capital cost and tariff for YTPS. The relevant extract of the Order is reproduced below:

“5.3.36 The Commission noted that TSGenco submitted the capital investment for YTPS (new station) in the Capital Investment Plan; however, TSGenco has not sought determination of capital cost & tariff for YTPS in the Petition. The Commission noted that TSGenco submitted the capital investment for YTPS (new station) in the Capital Investment Plan; however, TSGenco has not sought determination of capital cost & tariff for YTPS in the Petition. Therefore, the Commission has not considered the approval of capital cost for YTPS while approving the investment plan for FY 2019-20 to FY 2023-24. The Commission directs TSGenco to submit the proposal for determination of capital cost and Tariff for YTPS before its CoD as per the Regulations No.1 of 2019.”

- 5.7.5. Therefore, considering the directions given in MYT Order dated 22.03.2022 and Clause 4.2.3 & 4.2.4 of the Regulation 01 of 2019, the Commission again directs the Petitioner to submit a proposal for determination of capital cost and tariff for YTPS before its CoD as per applicable tariff regulation for the relevant period.
- 5.7.6. The additional capitalisation claimed and approved for YTPS for 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in the table below:

Table 5 22:- Additional Capitalisation claimed and approved for YTPS for 5th control period (Rs Crore)

Articulars	Claimed additional capitalisation	Admitted additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
R&M Works for Extension of useful life of plant	9571.66	-	-	-	-	-	-	9571.66
Total (YTPS)	9571.66	-	-	-	-	-	-	9571.66

5.8 Srisailam Left Bank Power House:

Petitioner's Submissions

5.8.1. The Petitioner has claimed additional capitalisation for Srisaillam Left Bank Power House (SLBHES) for 5th Control Period. The additional capitalisation is primarily towards Renovation and Modernization (R&M) works. The R&M works include replacement of existing GIS system, procurement of spare generating transformer, replacement of 400 kV, power cable and replacement & modification of outdated equipment's of all units. The additional capitalisation claimed for SLBHES for 5th Control Period is shown in table below:

Table 5-22: Additional Capitalisation Claimed for SLBHES (Rs. Crore)

Sl. No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	Replacement of existing GIS system	75.00	0.00	0.00	0.00	0.00	75.00
2.	Procurement of 1 No. Spare Generating Transformer	12.00	0.00	0.00	0.00	0.00	12.00
3.	Replacement of 400 kV, Power cable of 5 nos. 400 kV Feeders	50.00	0.00	0.00	0.00	0.00	50.00
4.	Replacement & Modification of outdated equipment's of all units	20.00	0.00	0.00	0.00	0.00	20.00
	Total	157.00					157.00

Commission's Analysis

5.8.2. The Commission observed that Petitioner has not provided any justification for the R&M works proposed in additional capitalisation for SLBHES in 5th Control Period. The Commission vide Letter No. TSERC/ Secy/ F. Resource Plan / D.No. 396/23 dated 07.06.2023 has sought additional information from the Petitioner. In reply, the Petitioner has submitted the related information along with justifications. The Commission vide Letter No. E 562980/ D. No. 580 / 23 dated 26.08.2023 has subsequently sought comprehensive justification for the (R&M) works. The Petitioner submitted the detailed justification to the Commission.

5.8.3. The Commission in consideration to Clause 7.19.1 (k) of Regulation 01 of 2019 has carried out the prudence of the R&M works proposed by the Petitioner. The Clause 7.19.1(k) provides that any additional capital expenditure which has become necessary for efficient operation and substantiated by technical

justification duly supported by the report of independent agency, the same may be admitted by the Commission. The Commission, with respect to the R&M works related to Replacement of GIS and Replacement & Modification of outdated equipment of all units has found that the OEM supplier has expressed its inability to supply the spares due to obsolescence of the technology and thereto suggested to replace the existing assets. The Commission based on the justification submitted by Petitioner has approved the additional capitalisation claimed for Replacement of GIS and Replacement & Modification of outdated equipment of all units.

- 5.8.4. The Commission observed that the R&M works related to Procurement of 1 Nos Spare Generating Transformer (GT) and Replacement of Power Cables of 5 Nos of 400KV Feeders are neither recommended by the OEM on account of obsolescence of technology nor substantiated duly by the report of independent agency. Hence, in the absence of such information the additional capitalisation claimed for such R&M works is not approved by the Commission.
- 5.8.5. Accordingly, the additional capitalisation claimed and approved for SLBHES in 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown below:

Table 5-23: Additional capitalisation claimed and approved for SLBHES for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalization					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Replacement of existing GIS system	75.00	75.00	0.00	0.00	0.00	0.00	75.00	-
Procurement of 1 No. Spare Generating Transformer	12.00	-	-	-	-	-	-	-
Replacement of 400 kV, Power cable of 5 nos. 400 kV Feeders	50.00	-	-	-	-	-	-	-
Replacement & Modification of outdated equipment's of all units	20.00	20.00	0.00	0.00	0.00	0.00	20.00	-
Total SLBHES	157.00	95.00	-	-	-	-	95.00	-

5.9 Nagarjuna Sagar Hydro Electric Station Complex

Petitioner's Submissions

- 5.9.1. The Petitioner has claimed additional capitalisation for Nagarjuna Sagar Hydro Electric Station (NSHES) Complex for 5th Control Period. The NSHES Complex includes establishment of both Nagarjuna Sagar Hydro Electric Station (NSHES) and Nagarjuna Sagar Left Canal Power House (NSLCPH). The additional capitalisation for NSHES complex is claimed for the Replacement & Modification (R&M) works related to Replacement & Modification of outdated equipment of Units-2,3,4&5, reconditioning of penstock gates (8Nos), SFC Bay (providing of one additional 220 kV Bay to provide power supply to 20MW SFC) including accessories and replacement of existing governor for 7units (Unit 2 to 8). Similarly, the additional capitalisation for NSLCPH is claimed for R&M works which includes replacement & modification of outdated equipment of Units-2, replacement of governor at Unit-2 and replacement of excitation system of both units. The additional capitalisation for NSHES complex is shown in table below:

Table 5-24: Capital Investment Plan submitted by the Petitioner (Rs. Crore)

Sl. No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
	NSHES						
1.	Replacement & Modification of outdated equipment of Units-2,3,4&5	15.00	0.00	0.00	0.00	0.00	15.00
2.	Reconditioning of penstock Gates (8Nos)	2.00	0.00	0.00	0.00	0.00	2.00
3.	SFC Bay, Providing of One additional 220kV Bay for providing power supply to 20MW SFC, including cost of SFC accessories	50.00	0.00	0.00	0.00	0.00	50.00
4.	Replacement of existing governor for 7units (2 to 8)	15.00	0.00	0.00	0.00	0.00	15.00
5.	Total	82.00	0.00	0.00	0.00	0.00	82.00
	NSLCPH						
1	Replacement & Modification of outdated equipment of Unit-2	1.00	0.00	0.00	0.00	0.00	1.00
2	Replacement of governor at Unit-2	1.50	0.00	0.00	0.00	0.00	1.50
3	Replacement of excitation System of Both units	3.00	0.00	0.00	0.00	0.00	3.00
4.	Total	5.50	0.00	0.00	0.00	0.00	5.50

Commission's Analysis

- 5.9.2. The Commission observed that the Petitioner has not provided any justification for R&M works proposed for additional capitalisation for NSHES Complex for 5th Control Period. The Commission vide Letter No. TSERC/ Secy/ F. Resource Plan / D.No. 396/23 dated 07.06.2023 and Letter No. TSERC / Secy / E 562979 & E562980 / D.No.580 / 23 dated 26.08.2023 has sought additional information from the Petitioner. In reply, the Petitioner submitted the detailed justification to the Commission.
- 5.9.3. The Commission in consideration of Clause 7.19.1(k) of the Regulation 01 of 2019 carried out prudence check of R&M works proposed under the additional capitalisation for NSHES. The R&M works related to Replacement & Modification of outdated equipment and Reconditioning of penstock Gates is not supported by the report of the independent agency thus additional capitalisation for these works is not approved by the Commission. The R&M Works related to Replacement of existing governor for 7units (2 to 8) is recommended by the OEM on account of obsolesce of the technology thus the additional capitalisation for the same is

approved by the Commission.

- 5.9.4. Further, with respect to the R&M work of NSHES related to installation of 1 Nos of SFC, SFC Bay for providing power supply to 20MW SFC and its accessories, the Commission observed that the installation of SFC will smoothen the starting operation of pump mode units. The pump mode operation of units 2-8 (7 Units) was commissioned with Back to Back Generator Mode start up process in the month of January-2018 to utilize the surplus power available during non peak hours and to meet the additional power required during peak hours by utilizing the pumped water. During this process of startup of unit in pump condenser with the help of back to back generator, it requires multiple operations for preparation of unit in Back to Back Generator mode (BBG). By using SFC system it requires only 06-07 minutes to take unit as pump. Further number of unit operations can also be minimized, whereas in BBG mode it required 20-30 minutes to take unit as pump and only six (06) units out of seven (07) can be kept in pump mode, keeping one unit always in generator as standby mode. It is observed that this arrangement will enhance the efficiency of the system and more power can be generated during peak hours. The Commission after going through the details of efficiency improvement which such an arrangement will bring into the system approves the additional capitalisation for the same.
- 5.9.5. The Commission, with respect to the additional capitalisation for NSLCPH has carried out prudence of the R&M works as per the provision of the Clause 7.19.1(k) of Regulation 01 of 2019. The Commission observed that the R&M works related to Replacement and Modification of outdated equipment of Unit-II and replacement of excitation system of both units are not substantiated with technical justification and reports by independent agency, hence the additional capital expenditure for these R&M works is not approved by the Commission. The R&M Works related to replacement of Governor at Unit -2, the Commission found that due to obsolesce of technology the OEM is unable to supply the spares. The Commission takes this into consideration and allows the additional capital expenditure for the same.
- 5.9.6. Accordingly, the claimed and approved additional capitalisation for NSHES

Complex (NSHES & NSLCPH) for 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown below:

Table 5-25: additional capitalisation claimed and approved for of NSHES Complex for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Replacement & Modification of outdated equipment of Units-2,3,4&5	15.00	-	-	-	-	-	-	-
Reconditioning of penstock Gates (8Nos)	2.00	-	-	-	-	-	-	-
SFC Bay, Providing of One additional 220kV Bay for providing power supply to 20MW SFC, including cost of SFC accessories	50.00	50.00	-	-	-	-	50.00	-
Replacement of existing governor for 7units (2 to 8)	15.00	15.00	-	-	-	-	15.00	-
Total- NSHES	82.00	65.00	-	-	-	-	65.00	-

Table 5-26: additional capitalisation claimed and approved for NSLCPH for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Replacement & Modification of outdated equipment of Unit-2	1.00	-	-	-	-	-	-	-
Replacement of governor at Unit-2	1.50	1.50	-	-	-	-	1.50	-
Replacement of excitation System of Both units	3.00	-	-	-	-	-	-	-
Total- NSLCPH	5.50	1.50	-	-	-	-	1.50	-

5.10 Small Hydro (Pochampad, Singur, Nizam Sagar & Paliar HES)

Petitioner's Submissions

5.10.1. The Petitioner has claimed the additional capitalisation for Small Hydro generating plants for 5th Control Period. The Petitioner in its subsequent submission against data gap queries has revised its additional capitalisation for Small Hydro Plants and Pochampad-II. The Small Hydro plants incorporate

Pochampad-I, Singur, Nizam Sagar and Paliar HES. The additional capitalisation claimed by the Petitioner for Small Hydro generating plants in 5th Control Period is tabulated below:-

Table 5-27: Capital Investment Plan submitted by the Petitioner (Rs. Crore)

Sl. No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
A	Pochampad-I						
1.	Replacement of Cooling water System (Pochampad I)	0.50	0.00	0.00	0.00	0.00	0.50
B	Singur						
2.	Replacement of existing AVR with DAVR and installation of Auto sequencer and protection system etc., for Unit-I of SHES, Singur	2.50	0.00	0.00	0.00	0.00	2.50
3.	Replacement of Governing system for SHES, Singur	2.00	0.00	0.00	0.00	0.00	2.00
C	Nizam Sagar						
4.	Procurement of New Generator Transformer	0.80	0.00	0.00	0.00	0.00	0.80
D	Paliar HES						
5.	Dismantling, Supply, Transportation, Repair/refurbishment, Erection & Testing of Semi Kaplan Turbine Runner Hub Assy. at MHS/ Palair site	1.50	0.00	0.00	0.00	0.00	1.50
	Grand Total	7.30	0.00	0.00	0.00	0.00	7.30

Commission's Analysis

5.10.2. The Commission observed that the additional capitalisation claimed for Pochampad-I, Singur, Nizam Sagar & Paliar HES is towards R&M works. The Commission in consideration of Clause 7.19.1(k) of Regulation 1 of 2019 examined the justification for the R&M works and found them general in nature, without any technical justification and report from the independent agency. Hence, the Commission has not approved the additional capital expenditure claimed for Small Hydro Plants.

5.10.3. The additional capitalisation claimed and approved for Small Hydro Plant for 5th Control Period comprising FY 2023-24 to FY 2028-29 is shown in table below:

Table 5-28: additional capitalisation claimed and approved for Small Hydro for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Pochampad-I								
Replacement of Cooling water System (Pochampad I)	0.50	-	-	-	-	-	-	-
Singure								
Replacement of existing AVR with DAVR and installation of Auto sequencer and protection system etc., for Unit-I of SHES, Singure	2.50	-	-	-	-	-	-	-
Replacement of Governing system for SHES, Singure	2.00	-	-	-	-	-	-	-
Nizam Sagar								
Procurement of New Generator Transformer	0.80	-	-	-	-	-	-	-
Paliar HES								
Dismantling, Supply, Transportation, Repair/refurbishment, Erection & Testing of Semi Kaplan Turbine Runner Hub Assy. at MHS/ Palair site	1.50	-	-	-	-	-	-	-
Grand Total	7.30	-	-	-	-	-	-	-

5.11 Pochampad-II

Petitioner's Submissions

5.11.1. The additional capitalisation claimed by the Petitioner for Pochampad –II for 5th Control Period is shown in table below:

Table 5-29: Additional Capitalisation claimed for Pochampad II (Rs. Crore)

Sl. No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	Replacement & Modification of outdated equipment of unit-4	1.00	-	-	-	-	1.00
2.	Total	1.00	-	-	-	-	1.00

Commission's Analysis

- 5.11.2. The Commission in consideration of Clause 7.19.1(k) of the Regulation 1 of 2019 has carried out the prudence check of the R&M works proposed under the additional capitalisation for Pochampad-II for 5th Control Period. The Commission observed that the R&M work related to the replacement and modification of outdated equipment is not substantiated with proper justification and technical report conducted by the any independent agency. Hence, the additional capital expenditure proposed for Pochampad-II has not approved by the Commission.
- 5.11.3. The additional capitalisation claimed and approved for Pochampad-II for 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in table below:

Table 5-30: Additional capitalisation claimed and approved for Pochampad-II for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Replacement & Modification of outdated equipment of unit-4	1.00	-	-	-	-	-	-	-
Total Pochampad-II	1.00	-	-	-	-	-	-	-

5.12 Priyadarshini Jurala**Petitioner's Submissions**

- 5.12.1. The Petitioner has claimed additional capitalisation for Priyadarshini Jurala in Capital Investment Plan for 5th Control Period. The additional capitalisation claimed for Priyadarshini Jurala, is detailed below:

Table 5-31: Capital Investment Plan submitted by the Petitioner (Rs. Crore)

Sl. No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	Up gradation of SCADA System	6.00	0.00	0.00	0.00	0.00	6.00
2.	Total	6.00	0.00	0.00	0.00	0.00	6.00

Commission's Analysis

- 5.12.2. The Commission in consideration of Clause 7.19.1(k) of Regulation 1 of 2019 has examined the R&M works proposed under the additional capitalisation of the Priyadarshini Jurala. The Commission observed that the justification given for the

R&M works are general in nature and are not substantiated by technical justification along with documentary evidence by independent agency. The Commission, is therefore has not approved the additional capitalisation claimed by the Petitioner for Priyadarshini Jurala.

5.12.3. The Details of the additional capitalisation claimed and approved for the Priyadarshini Jurala for 5th Control Period comprising FY 2023-24 to FY 2028-29 is shown in the table below:

Table 5-32: Additional capitalisation claimed and approved for Priyadarshini Jurala for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Up gradation of SCADA System	6.00	-	-	-	-	-	-	-
Total PJHES	6.00	-	-	-	-	-	-	-

5.13 Lower Jurala

Petitioner's Submissions

5.13.1. The additional capitalisation claimed by the Petitioner for Lower Jurala in Capital Investment Plan for 5th Control Period is shown in the table below:

Table 5-33: Capital Investment Plan submitted by the Petitioner (Rs. Crore)

Sl. No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	Up gradation of carbon dust system for 6 units	1.50	0.00	0.00	0.00	0.00	1.50
2.	Software up gradation for all units(6 Units)	3.00	0.00	0.00	0.00	0.00	3.00
3.	Modification of Shaft Seal System for all Units	10.00	0.00	0.00	0.00	0.00	10.00
4.	Total	14.50	0.00	0.00	0.00	0.00	14.50

Commission's Analysis

5.13.2. The Commission has examined the justification for the R&M works proposed under the additional capitalisation for Lower Jurala in 5th Control Period, as per the Clause 7.19.1(k) of Regulation 1 of 2019. The Commission found the justification for upgradation of carbon dust system and software upgradation are not substantiated with technical justification along with report from independent agency. Therefore, the expenditure for same is not approved by the Commission.

However, as the expenditure towards modification of the shaft seal is essential for efficient operation and also recommended by OEM, the same is considered by the Commission.

5.13.3. Accordingly, the additional capitalisation claimed and approved for Lower Jurala for 5th Control Period comprising FY 2024-25 to FY 2028-29 is shown in table below:

Table 5-34: Additional capitalisation claimed and approved for Lower Jurala for 5th control period (Rs Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Up gradation of carbon dust system for 6 units	1.50	-	-	-	-	-	-	-
Software up gradation for all units(6 Units)	3.00	-	-	-	-	-	-	-
Modification of Shaft Seal System for all Units	10.00	-	-	-	-	-	10.00	-
Total LJHES	14.50	-	-	-	-	-	10.00	-

5.14 Pulichintala Hydro Electricity Station

Petitioner's Submissions

5.14.1. The additional capitalisation claimed by the Petitioner for Pulichintala Hydro Electric Station (PCHES) in Capital Investment Plan for 5th Control Period is shown in table below:

Table 5-35: Capital Investment Plan submitted by the Petitioner (Rs. Crore)

Sl. No.	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	Procurement of 40MVA 220/11KV Power Transformer at PCHES site as spare GT for all the Units.	6.00	0.00	0.00	0.00	0.00	6.00
2.	Procurement of 01 Set (06Nos) of Runner Blades along with Hexa bolts for 30MW Kaplan Turbine at PCHES.	15.00	0.00	0.00	0.00	0.00	15.00
3	Total	21.00	0.00	0.00	0.00	0.00	21.00

Commission's Analysis

5.14.2. The Commission has examined the proposed expenditure for additional

capitalisation in consideration of Clause 7.19.1(k) of Regulation 1 of 2019. The Commission observed that the additional capitalisation proposed for procurement of 01 Set of Runner Blade along with Hexa bolts for 30 MW Kaplan Turbine is recommended by the OEM. The Commission considering the technical justification provided by the OEM admitted the expenditure for the same. The expenditure proposed towards procurement of 400 MVA, 220/11 kV Power transformer is not properly substantiated by the technical justification along with report from independent agency, thus, the same is not approved by the Commission.

5.14.3. In accordance to the above, the additional capitalisation claimed and approved for PCHES in 5th Control Period comprising FY 2024-25 to FY 2028-29 is tabulated below:

Table 5-36: Additional Capitalisation claimed and approved for PCHES for 5th control period (Rs. Crore)

Particulars	Claimed additional capitalisation	Admitted additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
Procurement of 40MVA 220/11KV Power Transformer at PCHES site as spare GT for all the Units.	6.00	-	-	-	-	-	-	-
Procurement of 01 Set (06Nos) of Runner Blades along with Hexa bolts for 30MW Kaplan Turbine at PCHES.	15.00	15.00	-	-	-	-	15.00	-
Total PCHES	21.00	15.00	-	-	-	-	15.00	-

5.15 Solar

Petitioner's Submissions

5.15.1. The Petitioner in response to data gap queries has submitted the additional capitalisation for Grid Connected Solar Rooftop Plant and Ground Mounted Plant. The additional capital claimed for Solar Plants for 5th Control Period is shown in table below:

Table 5-37: Additional Capitalisation Proposed for Solar Plant (Rs. Crore)

Sl. No	Description	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
1.	Grid Connected Solar Rooftop Plant (645 MW)	659.00	1318	1318	-	-	3295.00
2.	Solar Ground Mounted Plant (4.6 MW)	21.06	-	-	-	-	21.06
3.	Total- Solar	680.6	1318	1318	-	-	3316.06

Commission's Analysis

5.15.2. The Commission in consideration of Clause 4.2.3 and Clause 4.2.4 of Regulation 01 of 2019 has examined the additional capitalisation proposed for the Solar Plants. The Commission found that the Petition for determination of capital cost and tariff has not been filed by the Petitioner for both cases. The Commission also observed that the Scheme for Grid Connected Solar Rooftop Plants is premised on the concept of virtual net metering, which is presently not permitted under the existing net metering regulations. Further, for the ground mounted solar plant, the Commission in Order of O.P. No. 1 of 2023 dated 02.02.2023 in the matter related to consent PPA between TSNPDCL and TSGENCO for procurement of power from 4.6 MW Solar Plant, has directed the Petitioner to file a separate Petition for approval of capital cost and tariff for the solar plant. Thus, in absence of above details the Commission has not approved the additional capitalisation for solar plants.

5.15.3. Accordingly, the additional capitalisation claimed and approved for Solar Plants in 5th Control Period comprising FY 2024-25 to FY 2028-29 is tabulated below:

Table 5-38: Additional Capitalisation claimed and approved for solar plants for 5th control period (Rs. Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation					Total	Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29		
Grid Connected Solar Rooftop (645 MW)	3295.00	-	-	-	-	-	-	-
Solar Ground Mounted (4.6 MW)	21.06	-	-	-	-	-	-	-
Total Solar	3316.06	-	-	-	-	-	-	-

5.16 IT Initiatives

Petitioner's Submissions

5.16.1. The Petitioner has claimed additional capitalisation for IT Initiatives in Capital Investment Plant for 5th Control Period. It incorporates the expenditure towards upgrading of ERP SAP software from ECC to S4 HANA, upgradation of Server and Storage equipment suitable for the proposed software upgrade, establishment of Disaster Recovery system, Financial Module of ERP for integration of payment gateway and Material Management Module of ERP for Master Data Governance Module. The additional capitalisation proposed for IT initiatives is tabulated below:

Table 5-39: Additional Capitalisation proposed for IT initiative (Rs. Crore)

Name of Station	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total
IT initiative	30.00	0.00	0.00	0.00	0.00	30.00

Commission's Analysis

5.16.2. The Commission on examination of Petitioner's submission has found that proposal for IT Initiative is in circulation with its Board of Directors for approval. Also, the information provided by the Petitioner for the expenditure towards IT initiatives are not comprehensive in nature. The information submitted by the Petitioner for IT Initiative lapse in technical details and justification as well. Hence, in absence of these information the additional capitalisation for IT initiative is not approved by the Commission.

5.16.3. The additional capital expenditure claimed and approved for IT Initiatives in 5th Control Period is tabulated below

Table 5-40: Additional Capitalisation claimed and approved for IT Initiatives (Rs. Crore)

Particulars	Claimed additional capitalisation	Approved additional capitalisation						Deferred additional capitalisation
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total	
IT Initiatives	30.00	-	-	-	-	-	-	-
Total IT Initiatives	30.00	-	-	-	-	-	-	-

5.17 Summary of Additional Capitalisation claimed and approved for 5th Control Period

5.17.1. The Commission in consideration to the Regulation 01 of 2019 has approved the additional capitalisation for various generating plants of TSGenco in previous section of this Chapter. The summary of the additional capitalisation approved for the TSGenco in Capital Investment Plan for 5th Control Period comprising of FY 2024-25 to FY 2028-29, is shown in the table below:

Table 5-41:- Additional Capitalisation claimed and approved for 5th Control Period (Rs. Cr)

Sl. No.	Particulars	Claimed	2024-25	2025-26	2026-27	2027-28	2028-29	Total
A	Thermal							
1.	KTPS-VII	722.77	-	-	-	-	-	-
2.	BTPS	641.18	346.66	-	-	-	-	346.66
3.	KTPP-I	673.57	-	-	-	-	-	-
4.	KTPP-II	795.42	-	-	-	-	-	-
5.	KTPS-V	696.82	8.00	-	-	-	-	8.00
6.	KTPS-VI	652.02	-	-	-	-	-	-
7.	RTS-B	52.63	-	-	-	-	-	-
8.	YTPS	9571.66	-	-	-	-	-	Deferred
9.	FGD of stations at sl.no. 1 to 6							Deferred
10.	Total Thermal	13806.07	354.66	-	-	-	-	354.66
B	Hydro							
1.	Srisaillam (SLBHES)	157.00	95.00	-	-	-	-	95.00
2.	Nagarjuna Complex	87.50	66.50	-	-	-	-	66.50
3.	Small Hydro	7.30	-	-	-	-	-	-
4.	Pochampad-II	1.00	-	-	-	-	-	-
5.	Priyadarshini Jurala (PJHES)	6.00	-	-	-	-	-	-
6.	Lower Jurala (LJHES)	14.50	10.00	-	-	-	-	10.00
7.	Pulichintala (PCHES)	21.00	15.00	-	-	-	-	15.00
8.	Total Hydro	294.30	186.50	-	-	-	-	186.50
C	IT Initiative	30.00	-	-	-	-	-	-
D	Solar Plant	3316.06	-	-	-	-	-	-
E	Grand Total	17446.425	541.16	-	-	-	-	541.16

This Order is corrected and signed on this the 29th day of December, 2023.

Sd/-
(BANDARU KRISHNAIAH)
MEMBER

Sd/-
(M.D.MANO HAR RAJU)
MEMBER

Sd/-
(T.SRIRANGA RAO)
CHAIRMAN

// CERTIFIED COPY //

Annexure I: Public Notice

Appeared in Business Standard on 8.06.2023

**BEFORE THE HONOURABLE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**
D.No. 11-4-660, 5th Floor, Singareni Bhavan, Red Hills, Hyderabad-500 004

TELANGANA STATE POWER GENERATION CORPORATION LIMITED
Vidyut Soudha, Hyderabad-500082, Phone :040-23499849 /847

PUBLIC NOTICE

Notice is hereby given to all that considering the request of stakeholders, Hon'ble TSERC has extended the timelines in the matter of conducting public hearing on TSGENCO petition for approval of capital investment plan and business plan for the 5th control period (FY 2024-25 to FY 2028-29). Last date for receipt of objections / suggestions is 28.06.2023 (Wednesday) and Public Hearing is rescheduled on 20.07.2023 at Court Hall of TSERC, Singareni Bhavan, Lakdi-Ka-Pul, Hyderabad from 11:00 Hrs. onwards. Sd/-

Place: Hyderabad
Date: 08.06.2023

Chairman & Managing Director
TSGENCO

Appeared in The Hindu on 8.06.2023

**BEFORE THE HONOURABLE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**
D.No. 11-4-660, 5th Floor, Singareni Bhavan, Red Hills, Hyderabad-500 004

TELANGANA STATE POWER GENERATION CORPORATION LIMITED
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Place: Hyderabad
Date: 08.06.2023

Chairman & Managing Director
TSGENCO

Appeared in Namaste Telangana on 8.06.2023

**గౌరవనీయ
తెలంగాణ రాష్ట్ర విద్యుత్ నియంత్రణ మండలి వారి సమక్షంలో**
డి.నెం. 11-4-660, 5వ అంతస్తు, సింగరేణి భవన్, రెడ్ హిల్స్, హైదరాబాద్-500 004.

తెలంగాణ స్టేట్ పవర్ జనరేషన్ కార్పొరేషన్ లిమిటెడ్
విద్యుత్ సౌధ, హైదరాబాద్-500 082, ఫోన్: 040-23499849 / 847

సమాచార ప్రకటన

ఇందుమూలముగా ఉందరికీ తెలియజేయునది ఏమనగా, వాటాదారుల అభ్యర్థనను పరిగణనలోకి తీసుకుని 5వ నియంత్రణ కాలం (FY 2024-25 నుండి FY 2028-29) కొరకు క్యాపిటల్ ఇన్వెస్ట్మెంట్ ప్లాన్ మరియు బిజినెస్ ప్లాన్ ఆమోదం కోసం TSGENCO యొక్క పిటిషన్ పై ప్రజాభిప్రాయం నిర్వహించు విషయంలో గౌరవనీయ TSERC సమయ పాలనను పొడిగించినది. అభ్యంతరాలు/సూచనల స్వీకరణ కొరకు చివరి తేదీ: 28-06-2023 (బుధవారం) మరియు ప్రజాభిప్రాయం TSERC కోర్ట్ హౌస్, సింగరేణి భవన్, లక్ష్మీ-కా-పూల్, హైదరాబాద్ వద్ద 20-07-2023న 11.00 గంటలకు తిరిగి షెడ్యూల్ చేయబడినది.

ప్రచారం: హైదరాబాద్
తేదీ: 08-06-2023

సం/- చైర్మన్ & మేనేజింగ్ డైరెక్టర్
TSGENCO

Appeared in EENADU on 8.06.2023

గౌరవనీయ తెలంగాణ స్టేట్ ఎలక్ట్రిసిటీ రెగ్యులేటరీ కమిషన్
 డి.నెం.11-4-660, 5వ అంతస్తు, సింగరేణి భవన్, రెడ్ హిల్స్, హైదరాబాద్ - 500004 సమక్షంలో

తెలంగాణ స్టేట్ పవర్ జనరేషన్ కార్పొరేషన్ లిమిటెడ్
 ఎడ్యుట్ సాధ, హైదరాబాద్ - 500082, ఫోన్: 040-23499849/847

బహిరంగ ప్రకటన ఈ

యావన్ముదికి ఇందుమూలముగా తెలియజేయునది ఏమనగా స్టేట్ హోల్టర్ల అభ్యర్థనను పరిగణనలోకి తీసుకుంటూ గౌరవనీయ TSERC 5వ నియంత్రణా వ్యవధి (ఎప్ వై 2024-25 నుండి ఎప్ వై 2028-29) కొరకు మూలధన పెట్టుబడి ప్రణాళిక మరియు వ్యాపార ప్రణాళిక ఆమోదం నిమిత్తం TSGENCO అర్జీపై బహిరంగ విచారణను నిర్వహించే విషయంలో గడువును పొడిగించినది. ఆక్షేపణలు/ సలహాలను స్వీకరించుటకు చివరి తేదీ 28-6-2023(బుధవారం) మరియు బహిరంగ విచారణ TSERC కోర్టు హాలు, సింగరేణి భవన్, లక్ష్మీకాపుల్, హైదరాబాద్ నందు 20-7-2023న ఉ.11.00 గం.ల నుండి జరుగుటకు తిరిగి నిర్ణయించబడినది.

ప్రదేశం: హైదరాబాద్
 సం/- చైర్మన్ అండ్ మేనేజింగ్ డైరెక్టర్
 తేదీ: 8-6-2023
 TSGENCO

Appeared in SIASAT URDU DAILY on 8.06.2023

تہ اعلیٰ معزز
تلنگانہ اسٹیٹ الیکٹریسیٹی ریگولیشن کمیٹین
 فون نمبر 11-4-660, 5 ویں منزل، سنگارینی بھون، ریڈ ہلز، حیدرآباد - 500004

تلنگانہ اسٹیٹ پاور جنریشن کارپوریشن لمیٹید
 ویڈیوٹ سدا، حیدرآباد، 500082، فون: 040-23499849/847

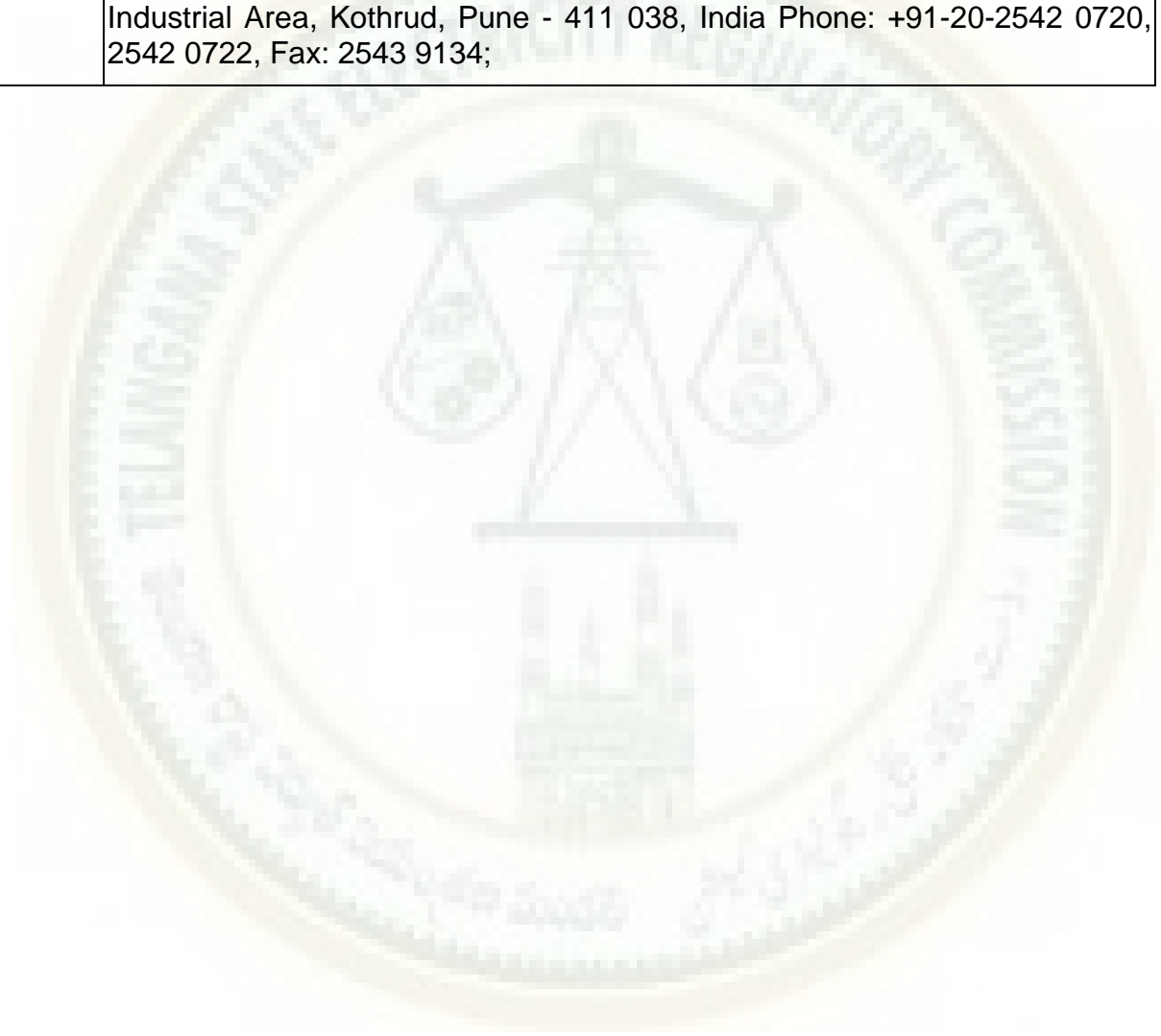
تہ اعلیٰ

تمام کوڈ ریویو ہذا اطلاع دی جاتی ہے کہ اسٹیٹ ہولڈرز کی درخواست کو روکنے والے TSERC کے 5 ویں کنٹرول بورڈ (مالی سال 2024-25 تا مالی سال 2028-29) کے لیے کوشش اور اسٹیٹ پلان اور ریگولیشن پلان کی منظوری کے لیے TSGENCO کی پیشینہ پر ساعت عامہ منعقد کرنے کے معاملے میں مقررہ وقت کو پیش کیا ہے۔ اعتراضات اچھاویڑ کی وصولی کے لیے آگرمی بارش 28-06-2023 (چارشنبہ) ہے اور ساعت عامہ کا آغاز شنبہ 20-07-2023 کو مقامی طور پر TSERC کے کاروباری ہول میں ہوگا۔

بکڑی کاپی حیدرآباد میں 11.00 بجے دن کے بعد سے۔
 مقام: حیدرآباد
 مورخہ: 08-06-2023
 چیئر مین و مینیجنگ ڈائریکٹر
 TSGENCO

Annexure II: List of Stakeholders who submitted the written Comments / Objections / Suggestions

Sl. No.	Name and address of the stakeholder
1	Sri M.Venugopala Rao, Senior Journalist & Convenor, Centre for Power Studies, H.No.1-100/MP/101, Monarch Prestige, Journalists' Colony, Gopanpally, Serlingampally Mandal, Hyderabad – 500 032
2	Prayas (Energy Group), Unit III A and B, Devgiri, Joshi Museum Lane, Kothrud Industrial Area, Kothrud, Pune - 411 038, India Phone: +91-20-2542 0720, 2542 0722, Fax: 2543 9134;



Annexure III: List of Stakeholders who have presented their objections / suggestions in Public Hearing held on 20.07.2023

Sl. No.	Name and address of the stakeholder
1	Sri M.Venugopala Rao, Senior Journalist & Convenor, Centre for Power Studies, H.No.1-100/MP/101, Monarch Prestige, Journalists' Colony, Gopanpally, Serlingampally Mandal, Hyderabad – 500 032
2	Prayas (Energy Group), Unit III A and B, Devgiri, Joshi Museum Lane, Kothrud Industrial Area, Kothrud, Pune - 411 038, India Phone: +91-20-2542 0720, 2542 0722, Fax: 2543 9134;

