



Telangana State Electricity Regulatory Commission
5thFloor, Singareni Bhavan, Red Hills, Lakdi-ka-pul,
Hyderabad 500 004.

ORDER
ON
ANNUAL FEE AND OPERATING CHARGES FOR
STATE LOAD DESPATCH CENTRE FOR
4th CONTROL PERIOD
(FY 2019-20 TO FY 2023-24)

FOR

TRANSMISSION CORPORATION OF TELANGANA LIMITED
(TSTransco)

02.03.2020

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LIST OF ABBREVIATIONS

A&G	Administrative and General
ABT	Availability Based Tariff
AGC	Automatic Generation Control
AMC	Annual Maintenance Contract
AMR	Automatic Meter Reading
APERC	Andhra Pradesh Electricity Regulatory Commission
APGPCL	Andhra Pradesh Gas Power Corporation Limited
APTRANSCO	Transmission Corporation of Andhra Pradesh Limited
ARR	Aggregate Revenue Requirement
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Station
DAS	Data Acquisition System
DISCOM	Distribution Company
DSM	Deviation Settlement Mechanism
EA	Electricity Act
EBC	Energy Billing Centre
EHT	Extra High Tension
EMS	Energy Management System
EPABX	Electronic Private Automatic Branch Exchange
FCC	Financial Completion Certificate
FPT	Filing for Proposed Tariff
FY	Financial Year
G.O.Ms.	Government Order (Manuscript)
GE	General Electric
GHG	Green House Gas
GW	Gigawatt
IPP	Independent Power Producer
ISTS	Inter State Transmission System
KKNPP	Kudankulam Nuclear Power Plant
KTPP	Kakatiya Thermal Power Plant
KTPS	Kothagudem Thermal Power Station
kV	kilo Volt
LI	Lift Irrigation
MAPS	Madras Atomic Power Station
MDMS	Meter Data Management System
MNRE	Ministry of New and Renewable Energy
MoP	Ministry of Power
MSW	Municipal Solid Waste
MU	Million Units
MVA	Mega Volt Ampere
MW	Mega-Watt
MYT	Multi Year Tariff
NAS	Network-Attached Storage

NCE	Non-Conventional Energy
NLC	Neyveli Lignite Corporation Limited
NLDC	National Load Despatch Centre
NPCIL	Nuclear Power Corporation of India Limited
NSLCPH	Nagarjuna Sagar Left Canal Power House
NSPH	Nagarjuna Sagar Power House
NTECL	NTPC Tamil Nadu Energy Company Ltd
NTPC	National Thermal Power Corporation Limited
O&M	Operation and Maintenance
OCC	Operation Coordination Sub-Committee
O.P.	Original Petition
OFC	Optical Fibre Communication
p.a	Per Annum
PCC	Project Completion Certificate
PGCIL	Power Grid Corporation of India Limited
PLCC	Power Line Carrier Communication
PM	Per Month
PSA	Power Supply Agreement
PSS/E	Power System Simulation for Engineering
PTC	Power Trading Corporation
PTCC	Power and Telecommunication Co-ordination Committee
PTR	Power Transformer
R&M	Repairs & Maintenance
RE	Renewable Energy
REMC	Renewable Energy Management Centre
RLDC	Regional Load Despatch Centre
Rs.	Rupees
SAC	State Advisory Committee
SAMAST	Scheduling, Accounting, Metering and Settlement of Transactions in Electricity
SAN	Storage Area Network
SAP	Systems, Applications, Products
SCADA	Supervisory Control and Data Acquisition
SLDC	State Load Dispatch Centre
SPS	Special Protection Scheme
SRPC	Southern Regional Power Committee
STU	State Transmission Utility
TCC	Technical Coordination Sub-Committee
TPS	Thermal Power Station
TSERC	Telangana State Electricity Regulatory Commission
TSTransco	Transmission Corporation of Telangana Limited
VoIP	Voice over Internet Protocol

**TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
HYDERABAD**

Present

Sri T. Sriranga Rao, Chairman

Sri M. D. Manohar Raju, Member (Technical)

Sri Bandaru Krishnaiah, Member (Finance)

Dated: 02.03.2020

O. P. No. 2 of 2019

TRANSMISSION CORPORATION OF TELANGANA LIMITED

... Applicant

The Transmission Corporation of Telangana Limited (TSTransco) filed Petition under Sections 61 to 64 of the Electricity Act, 2003, before the Telangana State Electricity Regulatory Commission (TSERC or the Commission) on 30.11.2019 for approval of Aggregate Revenue Requirement (ARR), Filing for Proposed Tariff (FPT) for SLDC activity for the 4th MYT Control Period from FY 2019-20 to FY 2023-24. The Petition was admitted by the Commission and assigned O. P. No. 2 of 2019.

The Commission, in exercise of its powers under the Electricity Act, 2003 and the Andhra Pradesh Electricity Regulatory Commission (Levy and Collection of fees and charges by State Load Despatch Centre) Regulation No. 1 of 2006 adopted by TSERC vide its Regulation No. 1 of 2014, and after considering Petitioner's submissions, suggestions and objections of the other stakeholders, responses of Petitioner, to issues that are raised during the Public Hearing, and all other relevant material, passed the following:

ORDER
CHAPTER 1
INTRODUCTION

1.1 BACKGROUND

- 1.1.1 Telangana State Electricity Regulatory Commission (herein referred to as TSERC or Commission) was constituted by the Government of Telangana State (GoTS) in 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, 2003) vide G.O.Ms.No.3, (Energy) (Budget) Department Dt:26.07.2014.
- 1.1.2 This Commission having been established u/s 82(1) of the Act, 2003 is required to exercise the powers and functions vested in it in terms of Section 86 and Section 62(1) of the Act, 2003 to determine the tariff for (1) supply of electricity by a generating company to a distribution licensee; (2) transmission of electricity; (3) wheeling of electricity; and (4) retail sale of electricity as the case may be within the State of Telangana.
- 1.1.3 The Commission issued Regulation, viz., Regulation No. 1 of 2014, on 10.12.2014 for Adoption of Previously Subsisting Regulations, Decisions, Directions or Orders, Licenses and Practice of Directions. Clause 2 of this regulation specifies as follows:
- "All regulations, decisions, directions or orders, all the licences and practice directions issued by the erstwhile Andhra Pradesh Electricity Regulatory Commission (Regulatory Commission for States of Andhra Pradesh and Telangana) as in existence as on the date of the constitution of the Telangana State Electricity Regulatory Commission and in force, shall mutatis-mutandis apply in relation to the stakeholders in electricity in the State of Telangana including the Commission and shall continue to have effect until duly altered, repealed or amended, any of Regulation by the Commission with effect from the date of notification as per Notification issued by the Government of Telangana in G.O.Ms.No.3 Energy (Budget) Department, dt.26-07-2014 constituting the Commission."*
- 1.1.4 In accordance with the above Regulation, all the Regulations framed by the erstwhile Andhra Pradesh Electricity Regulatory Commission (APERC) will continue to apply for the State of Telangana, till further modification. Accordingly, the Regulation No. 1 of 2006 as in existence as on the date of constitution of TSERC and in force, shall mutatis-mutandis apply in relation to determination of SLDC Charges.
- 1.1.5 Consequent upon formation of the Telangana State, the Government of erstwhile

Andhra Pradesh vide G.O.Ms.No.25 dated 29.05.2014 had established TSTransco. The erstwhile APERC had issued the license No. 1 of 2014 to TSTransco w.e.f., 23.06.2014.

1.1.6 Subsection 1 of Section 31 of the Electricity Act, 2003 provides that the State Government shall establish a State Load Despatch Centre (SLDC) and such SLDC shall be operated by a Government Company or any authority or corporation established or constituted by or under any State Act, as may be notified by the State Government. GoTS vide G.O.Ms.No.9 dated 17.09.2014 notified that the SLDC shall be operated by TSTransco, which has been notified as the State Transmission Utility (STU).

1.1.7 SLDC is the apex body to ensure integrated operation of the power system in the State. The functions of SLDC as stipulated in Section 32 of EA, 2003 are as under:

- be responsible for optimum scheduling and despatch of electricity within the State, in accordance with the contracts entered into within the Licensees or the Generating Companies operating in the State;
- monitor grid operations;
- keep accounts of the quantity of electricity transmitted through the State grid;
- exercise supervision and control over the intra-State transmission system; and
- be responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the State grid in accordance with the Grid Standards and the State Grid Code.

1.1.8 Vide its Order dated 09.05.2014 in O. P. No. 61 of 2013, the erstwhile APERC had approved the Annual Fee and Operating Charges for SLDC of United Andhra Pradesh for 3rd Control Period from FY 2014-15 to FY 2018-19. Vide its Order dated 20.06.2017 in O. P. No. 9 of 2017, the Commission had approved the Annual Fee and Operating Charges for Telangana SLDC for FY 2017-18 and FY 2018-19. Vide the stated Order, the Commission had also approved the provisional true-up of FY 2014-15 and FY 2015-16.

1.1.9 In accordance with Clause 6.1 of the Regulation No. 1 of 2006, the SLDC is required to file a Petition for the Control Period with statements containing details of the Fee and Charges under its currently approved levels of fee and charges along with the proposals for determination of fee and charges for the ensuing Control Period by 30th November immediately preceding the first year of the Control Period. Clause 6.2 of the Regulation No. 1 of 2006 stipulates that duration of a Control Period shall be of five years. Accordingly, the 4th Control Period is from FY 2019-20 to FY 2023-24. Accordingly, the Petition for determination of Annual Fee and Operating Charges for 4th Control Period from FY 2019-20 to FY 2023-24 was to be filed by 30.11.2018.

1.1.10 The Petitioner, vide its letters dated 25.09.2018, 30.11.2018, 31.12.2018, 20.03.2019, 29.06.2019 and 30.09.2019 sought extension of time for filing of Petition for the 4th Control Period from 30.11.2018, lastly upto 30.11.2019. The Commission vide its letters dated 11.12.2018 and 10.01.2019 communicated to the Petitioner that the same shall be considered along with the Petition to be filed for the 4th Control Period. The instant Petition was filed on 30.11.2019.

1.1.11 The Petitioner had expressed the following difficulties in preparation of Petition for the 4th Control Period in seeking extension of time for filing of Petition for the 4th Control Period are as follows:

- i. Non-finalisation of Investment Plan.
- ii. Finalisation of Annual accounts causing changes in proposals for the 4th Control Period.
- iii. Non-receipt of information of Lift Irrigation Schemes from Irrigation Department.
- iv. Enforcement of Model Code of Conduct from 10.03.2019 upto 23.05.2019 for the Lok Sabha elections 2019 by the Election Commission of India.

1.1.12 The Commission reviewed the representations/letters submitted by Licensee for extension of time and resolved to condone the delay in filing the Petition for true-up for 3rd Control Period and Petition for determination of Annual Fee and Operating Charges for 4th Control Period i.e., for FY 2019-20 to FY 2023-24.

1.1.13 TSTransco filed the instant Petition for approval of true-up for 3rd MYT Control Period from FY 2014-15 to FY 2018-19 and for approval of Annual Fee and Operating Charges for 4th MYT Control Period from FY 2019-20 to FY 2023-24 with the following prayers:

- “a. to take the accompanying Annual fee and Operating charges for the Petition for 4th Control Period (FY 2019-20 to FY 2023-24) of TS Transco for SLDC Business on record;*
- b. to grant suitable opportunity to TSTransco within a reasonable time frame to file additional material information if any;*
- c. to treat the filing as complete in view of substantial compliance with justification placed on record;*
- d. to consider and approve SLDC Annual fee and Operating charges including all requested regulatory treatments in the filing;*
- e. to pass such order, as the Hon’ble Commission may deem fit and proper in the facts and circumstances of the case.”*

1.2 ADMISSION OF PETITION AND REGULATORY PROCESS

1.2.1 The Petition for approval of ARR and FPT for 4th MYT Control Period submitted by

the Petitioner was scrutinised and found to be generally in order as required under the TSERC (Conduct of Business) Regulations, 2015 (Regulation No. 2 of 2015). The Commission admitted the filings by condoning delay in filing the Petition and the same were taken on record by assigning the Original Petition (O.P.) number 2 of 2019.

1.2.2 Upon scrutiny of the filings of the Petitioner, the Commission identified certain data gaps and directed to furnish additional information. As directed by the Commission, the Petitioner furnished the additional information and placed the same on its website.

1.2.3 The Petitioner, as directed by the Commission, published the content of Petition for information of all stakeholders in two (2) English newspapers in English, two (2) Telugu Newspapers in Telugu and one (1) Urdu newspaper in Urdu on 11.12.2019. The notice was to inform the general public that the Petitioner has filed the ARR and FPT in respect of SLDC activity for the 4th MYT Control Period before the Commission.

1.2.4 Overview of stakeholders' consultation process:

1.2.4.1 The filings have been made available by the Petitioner along with supporting material to the public at large including all stakeholders. The filings and supporting material were also hosted on the website of the Commission as well as the Petitioner.

1.2.4.2 It was also notified in the public notice (Annexure - 1) that, objections / suggestions on the filings may be filed with the Petitioner by 10.01.2020 with a copy to the Commission. In response to the public notice, one (1) number of objections / suggestions were received (Annexure - 2) by the Commission in writing within the stipulated date and no further objections/suggestions were received during Public Hearing. Further, on the request of the stakeholders during the Public Hearing, the Commission had granted additional time of 10 days for those stakeholders for submission of objections / suggestions and directed the Petitioner to reply to the same. However, no additional objections / suggestions were received during the extended period. The list of stakeholders who attended the public hearing on 07.02.2020 is enclosed at Annexure-3.

1.2.4.3 The Petitioner was directed to give its response in writing to all the written objections received by 24.01.2020 by sending the same to the respective objector with a copy to the Commission before the scheduled date of public hearing. The replies were also posted on the website of the Commission.

1.2.4.4 The State Advisory Committee (SAC) meeting was held on 29.01.2020 to elicit views

of the members on the filings of the Petitioner. The views of the members were taken on records while determining the Annual Fee and Operating Charges for SLDC.

1.2.4.5 The Commission has conducted the public hearing at the Commission's Court Hall on 07.02.2020. During the hearing, the Petitioner made a brief presentation on the filings and then the Commission heard the objectors desiring to be heard in person. At the hearing, apart from the registered objectors, the persons / organizations who had turned up at the venue directly were also heard and their objections / suggestions were also considered. At the end, as directed by the Commission, the Petitioner responded on the issues raised by the objectors during the hearing.

1.3 DATA GAPS AND PETITIONER'S RESPONSES

1.3.1 During scrutiny, the filings of the Petitioner as well as based on objections raised by the objectors' certain information were found to be deficient in certain aspects and therefore, additional information was sought. Subsequently, the Petitioner submitted the additional information sought by the Commission. The Commission has considered the original filings and the additional information submitted by the Petitioner.

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CHAPTER 2

SUMMARY OF FILINGS

2.1 SUMMARY OF TRUE-UP FOR 3RD CONTROL PERIOD

2.1.1 The summary of true-up of 3rd Control Period from FY 2014-15 to FY 2018-19 claimed by the Petitioner is as shown in the Table below:

Table 2–1: Summary of true-up for 3rd Control Period as claimed by the Petitioner

Financial Year	(Rs. Crore)		
	Claimed		
	Total expenditure	Total revenue	Revenue gap/(surplus)
2014-15	29.31	36.01	-6.70
2015-16	33.56	44.36	-10.80
2016-17	43.33	49.26	-5.93
2017-18	51.60	48.82	2.78
2018-19	68.09	48.51	19.58
Total	225.90	226.95	-1.06
Less: Revenue gap/(surplus) on account of provisional true-up for FY 2014-15 and FY 2015-16	-	-	-20.75
Net Revenue gap/(surplus) for 3rd Control Period	-	-	19.69

2.2 ANNUAL FEE AND OPERATING CHARGES FOR 4TH CONTROL PERIOD

2.2.1 The Annual Fee and Operating Charges claimed for 4th Control Period from FY 2019-20 to FY 2023-24 is as shown in the Tables below:

Table 2–2: Annual Fee for 4th Control Period as claimed by the Petitioner

Financial Year	Claimed		
	Capital Cost	Generation Capacity	Annual Fee
	Rs. Crore	MW	Rs./MW/p.a.
2019-20	6.36	16540.00	3843.63
2020-21	8.89	18892.00	4707.92
2021-22	9.90	18924.00	5232.94
2022-23	10.26	20979.00	4889.51
2023-24	10.51	22537.00	4662.25

Table 2–3: Operating Charges for 4th Control Period as claimed by the Petitioner

Financial Year	Claimed		
	Operating Expenses	Generation Capacity	Operating Charges
	Rs. Crore	MW	Rs./MW/month
2019-20	57.09	16540.00	2876.57
2020-21	40.67	18892.00	1794.04
2021-22	43.66	18924.00	1922.49
2022-23	48.38	20979.00	1921.72
2023-24	51.99	22537.00	1922.54

2.2.2 The submissions of the Petitioner and the Commission's analysis are discussed in detail in Chapter 4 and Chapter 5 of the Order.

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CHAPTER 3

ISSUES RAISED BY GENERAL PUBLIC, RESPONSES OF PETITIONER, COMMISSION'S VIEWS

3.1 OBJECTIONS / SUGGESTIONS / COMMENTS MADE ON FILINGS

- 3.1.1 One stakeholder has filed objections/ suggestions/ comments on the Petition for Annual Fee and Operating Charges for SLDC for 4th Control Period. The Petitioner has filed replies on the objections/ suggestions/ comments received from the stakeholders. For the sake of clarity, the objections/ suggestions/ comments raised by the stakeholders and responses of the Petitioner have been consolidated and summarised issue-wise.

The Commission has concluded all the objections/suggestions/comments of the stakeholders made in writing as well as during the course of Public Hearing and the responses to them by the Petitioner. In the subsequent Chapters of this Order, the Commission has taken into consideration, the objections/ suggestions/ comments of the stakeholders and replies of the Petitioner while determining the Annual Fee and Operating Charges for SLDC for the 4th Control Period.

3.2 OPERATING CHARGES

Stakeholders' submissions

- 3.2.1 TSTransco has claimed a total deficit of Rs. 19.69 Crore on true-up for the 3rd Control Period from FY 2014-15 to FY 2018-19 after adjusting the surplus of Rs. 20.75 Crore approved by the Commission vide its Order dated 20.06.2017. During the said period, the increase in operating expenses is to the tune of Rs. 37.36 Crore, the reduction in Capital Cost is to the tune of Rs. 13.13 Crore, the increase in revenue is to the tune of Rs. 22.41 Crore and the increase in other income is to the tune of Rs. 2.20 Crore. The operating expenses have increased due to increase in employee cost while the Administrative & General (A&G) expenses and Repairs and Maintenance (R&M) expenses had been lower than the approved amounts. The share of employee cost in the total operating expenses is to the tune of 71.78% in FY 2015-16 and this has increased to 89.49% in FY 2018-19. In light of employee cost on the higher side and the other expenses on lower side in comparison to the approved expenses the Petitioner may be directed to limit the employee cost to prudent levels.

Petitioner's replies

- 3.2.2 The main reason for increase in employee cost is on account of revision of pay scales to regular employees with effect from 01.04.2014 and 01.04.2018 i.e., during 3rd Control Period. Further, there is an increase in Dearness Allowance (DA) rates than projected for the period from FY 2014-15 to FY 2018-19.
- 3.2.3 In the projections of Operating Charges for the 4th Control Period, the employee cost has been estimated based on actuals for FY 2018-19 duly restricting to proposed staffing pattern. Hence, there is decrease in employee cost proposed for 4th Control Period in comparison to actuals for FY 2018-19.

Commission's Views

- 3.2.4 The Commission has carried out the prudence check of the operating charges claimed by SLDC for the 3rd Control Period and projected for the 4th Control Period in accordance with Regulation No. 1 of 2006 as detailed in Chapter 4 and Chapter 5 of the Order.

3.3 RATE OF INTEREST FOR 4TH CONTROL PERIOD***Stakeholders' submissions***

- 3.3.1 TSTransco has proposed the interest rate of 11% on long-term loans. In view of reduction of interest rates by banks and financial institutions, interest rate of 11% is on the higher side. The interest rate may be approved realistically in tune with market trends.

Petitioner's replies

- 3.3.2 The interest rate of 11% was proposed based on the prevailing lending rates in the financial debt market. As suggested by the stakeholder, every effort is being made to minimize the interest rates and negotiations with financial institutions are being undertaken from time to time to reduce the interest rates according to the debt market conditions. Further, the high cost term loans (if any) are being liquidated from time to time based on the internal cash flows of the company, to reduce the interest cost burden.

Commission's Views

- 3.3.3 The Commission has approved the interest rate for the 4th Control Period in accordance with Regulation No. 1 of 2006 as detailed in Chapter 5 of the Order.

3.4 ANNUAL FEE FOR 4TH CONTROL PERIOD

Stakeholders' submissions

- 3.4.1 The proposed Annual Fee for the 4th Control Period is to the tune of Rs. 3844/MW/pa, Rs. 4708/MW/pa, Rs. 5233/MW/pa, Rs. 4890/MW/pa and Rs. 4662/MW/pa for FY 2019-20, FY 2020-21, FY 2021-22, FY 2022-23 and FY 2023-24 respectively. If substantial surplus power is available during the 4th Control Period from the existing capacities and capacities proposed to be added, generation capacity may remain idle proportionately due to backing down and their inability to compete in the market and sell surplus power. It results in under-utilisation of SLDC services, but Annual Fee and Operating Charges would be paid for the entire generation capacity, . Therefore, in order to avoid such unwarranted payments and to ensure putting into use of generation, transmission and distribution capacities, as well as SLDC services, a realistic determination of long-term load forecast and resources and procurement plan and ensuring timely completion of projects and works relating to generation, transmission and distribution, as well as SLDC, need to be ensured.

Petitioner's replies

- 3.4.2 The generation and transmission capacity is planned to meet the peak demand. The demand pattern in the State is not uniform throughout the day or throughout the year. Generation is being backed down to maintain load generation balance particularly during off-peak hours and solar generation period. The demand particulars for FY 2018-19 and FY 2019-20 (upto December 2019) are as shown in the Table below:

Table 3–1: Demand particulars for FY 2018-19 and FY 2019-20 (upto Dec. '19)

Financial Year	Maximum demand (MW)	Minimum demand (MW)	Maximum energy (MU)	Minimum energy (MU)
2018-19	10818	2950	233.44	122.80
2019-20	11703	4685	241.67	136.84

- 3.4.3 The demand varied from 2950 MW to 10818 MW in FY 2018-19 and from 4685 MW to 11703 MW in FY 2019-20. Also, energy varied from 122.80 MU to 233.44 MU in FY 2018-19 and from 136.84 MU to 241.67 MU in FY 2019-20. The Demand pattern of Telangana State varies from off-peak to peak in a day from 1500–3000 MW depending on seasonal loads, particularly agriculture. In the State there are two farming crop seasons i.e., Kharif and Rabi. Further, during Rabi Season, Summer demand also gets added to agricultural demand.

- 3.4.4 After the formation of Telangana State, as per the Renewable Energy (RE) policy, solar generation is integrated aggressively into the system to meet Renewable Power Purchase Obligation (RPPO). The total solar generation capacity installed upto FY 2018-19 was 3489 MW and 3650 MW upto FY 2019-20. This generation is available in the day time in a ramp up/ramp down pattern with variation on hour to hour and day to day basis, which is mostly uncertain. So far, there is no forecasting and scheduling mechanism established in the State. The generation from solar has to be absorbed and it has to be treated as must run. The balancing has to be carried out only by varying conventional thermal generation by way of backing down/recall and hydel if available.
- 3.4.5 Under these circumstances, to handle off-peak to peak demand variations to the tune of 1500-3000 MW and 3000 MW availability variation due to solar in the day time, backing down of conventional generators is inevitable during off-peak and maximum solar generation period. In addition to this the Lift Irrigation loads are seasonal and vary depending on various parameters. From the above it can be concluded that, utilization of power system network varies depending upon demand pattern of various consumers and it cannot be construed as underutilization. Therefore, the SLDC Charges are to be recovered on yearly basis for the total system built.

Commission's Views

- 3.4.6 The Commission has approved the Annual Fee for the 4th Control Period considering the approved Capital Cost and generation capacity in accordance with Regulation No. 1 of 2006.

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CHAPTER 4

ANALYSIS AND CONCLUSIONS ON TRUE-UP OF 3RD CONTROL PERIOD

4.1 REGULATORY PROVISIONS

- 4.1.1 SLDC Charges comprises of (i) Annual Fee and (ii) Operating Charges. Clause 4.1 of the Regulation No. 1 of 2006 stipulates as under:

“Users shall pay to SLDC an annual fee and monthly operation charges leviable on the electricity transmitted, in MWs (mega-watt), subject to the charges for a minimum of one MW...”

- 4.1.2 Clause 4.7 of the Regulation No. 1 of 2006 stipulates as under:

“Variations in recovery of capital cost and operating charges over the fee and charges fixed for a year on account of variations in SLDC usage shall be adjusted in the subsequent control period, or earlier in case the variations are considered to be significant by the Commission warranting adjustment thereof before the commencement of the subsequent control period, with financing cost at the average rate(s) of borrowing during the year(s) to which the variations relate.”

- 4.1.3 Clause 7 of the Regulation No. 1 of 2006 stipulates that separate accounts are to be maintained for SLDC activity and till such time as the accounts are not segregated, the Transmission Company shall apportion its costs on the basis of an Allocation Statement.

- 4.1.4 TSTransco has claimed the true-up for 3rd Control Period from FY 2014-15 to FY 2018-19 in accordance with Regulation No. 1 of 2006. In reply to the Commission’s query, TSTransco has submitted its audited accounts for FY 2014-15 to FY 2017-18 and provisional accounts for FY 2018-19. TSTransco has also submitted the Allocation Statement segregating its actual expenses and revenue between Transmission and SLDC for FY 2014-15 to FY 2018-19.

4.2 BASIS FOR APPROVED EXPENSES FOR FY 2014-15, FY 2015-16 AND FY 2016-17

Petitioner’s submissions

- 4.2.1 The erstwhile APERC, vide its Order dated 09.05.2014 in O. P. No. 61 of 2013, had approved the Annual Fee and Operating Charges for the SLDC of United Andhra Pradesh for 3rd Control Period from FY 2014-15 to FY 2018-19. Subsequently, the TSERC, vide its Order dated 20.06.2017 in O. P. No. 9 of 2017, had approved provisional true-up for FY 2014-15 and FY 2015-16 while approving the Annual Fee

and Operating Charges for Telangana SLDC for the rest of the Control Period i.e., FY 2017-18 and FY 2018-19.

- 4.2.2 Consequent to bifurcation of Andhra Pradesh State, a separate Transmission Utility in the name of TSTransco for the State of Telangana has been incorporated and commenced its activities w.e.f. 02.06.2014 i.e., from the formation day of state of Telangana. In the absence of separate Tariff Order for Telangana SLDC for the period from FY 2014-15 to FY 2016-17, the expenses approved vide the Order dated 09.05.2014 issued by then APERC have been allocated to Telangana SLDC @ 53.89% (as notified by Govt. of AP vide G.O.Ms.No.20, Dt. 08.05.2014) of the approved expenses for the respective years.

Commission's Views

- 4.2.3 The Commission has observed that there is no separate Tariff Order for Telangana SLDC for FY 2014-15, FY 2015-16 and FY 2016-17. The Commission also observed that the percentage of 53.89% as considered by the Petitioner is the ratio of power allocation to the residual Distribution Licensees of Telangana as on 02.06.2014. In the absence of a separate Tariff Order, the Commission finds it prudent to consider the methodology proposed by the Petitioner as regards the approved expenses for FY 2014-15, FY 2015-16 and FY 2016-17 are concerned which serves the purpose of comparison with the actual expenses.

Table 4-1: Approved expenses for FY 2014-15 to FY 2016-17

(Rs. Crore)

Financial Year	Capital Cost		O&M expenses	
	As approved in the MYT Order Dt. 09.05.2014	Approved as considered for Telangana SLDC	As approved in the MYT Order Dt. 09.05.2014	Approved as considered for Telangana SLDC
2014-15	5.52	2.47*	63.39	28.36*
2015-16	7.46	4.02	63.98	34.48
2016-17	9.03	4.87	68.92	37.14

**proportionate expenses for the period from 02.06.2014 to 31.03.2015*

- 4.2.4 The separate audited accounts for TSTransco have been submitted from FY 2014-15 onwards and the actual expenses are made available for prudence check.

4.3 CAPITAL COST FOR 3RD CONTROL PERIOD

Petitioner's submissions

- 4.3.1 Capital Cost is a recovery towards interest & financial charges and Depreciation is a claim towards replacement cost of fixed assets. The Petitioner has claimed the Capital Cost of Rs. 0.45 Crore, Rs. 0.60 Crore, Rs. 0.58 Crore, Rs. 4.10 Crore and Rs. 2.52 Crore for FY 2014-15, FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 respectively.

Commission's Views

- 4.3.2 The Commission directed the Petitioner to submit the details of actual capital investments vis-à-vis the approved investments during the 3rd Control Period under the heads of Grid Operation, Commercial, Energy Billing Centre, Telecom, and Power Systems along with means of finance for the same. In reply, the Petitioner submitted the details of investments made during the 3rd Control Period as shown in the Table below:

Table 4–2: Details of division wise investments made as submitted by the Petitioner

(Rs. Crore)

Financial Year	Telecom	SLDC	Telecom (HO)	Grid Operation	Total
2014-15	0.63	0.08	0.00	0.00	0.71
2015-16	0.06	0.07	0.00	0.00	0.14
2016-17	2.06	6.46	5.16	0.00	13.67
2017-18	3.13	0.31	0.00	0.00	3.43
2018-19	1.31	0.71	0.03	0.12	2.17
Total	7.19	7.63	5.19	0.12	20.12

- 4.3.3 The Petitioner also submitted the additions to Gross Fixed Assets (GFA) during each year of the 3rd Control Period as shown in the Table below:

Table 4–3: GFA addition claimed for 3rd Control Period

(Rs. Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Plant & Machinery	0.38	0.05	13.67	3.02	0.88
Furniture & Fixtures	0.00	0.00	0.00	0.00	0.12
Office equipment	0.33	0.09	0.00	0.41	1.17
Total	0.71	0.14	13.67	3.43	2.17

4.3.4 The Petitioner has not submitted the means of finance for the above investments made during the 3rd Control Period.

4.3.5 The Commission directed the Petitioner to submit the computations of Capital Cost claimed for FY 2014-15 to FY 2018-19. In reply, the Petitioner submitted that the interest & financial charges and depreciation on SLDC assets is considered as Capital Cost for FY 2014-15 to FY 2018-19. The break-up of Capital Cost claimed by the Petitioner is as shown in the Table below:

Table 4-4: Break-up of Capital Cost claimed for FY 2014-15 to FY 2018-19

(Rs. Crore)

Financial Year	Interest & financial charges	Depreciation	Capital Cost
2014-15	0.26	0.19	0.45
2015-16	0.27	0.33	0.60
2016-17	0.24	0.34	0.58
2017-18	0.10	4.00	4.10
2018-19	0.01	2.51	2.52
Total	0.88	7.37	8.25

4.3.6 Clause 4.3 of the Regulation No. 1 of 2006 stipulates that the Capital Cost shall cover the repayment of principal amount and payment of interest on investments in a year, plus any residual component of past investments.

4.3.7 In reply to the Commission's query, the Petitioner has submitted the details of long-term loan portfolio for each year for the 3rd Control Period as shown in the Table below:

Table 4-5: Long-term loan portfolio as submitted by the Petitioner

(Rs. Crore)

Financial Year	Opening balance	Receipt during the year	Repaid during the year	Closing balance	Interest expense
2014-15	1.54	1.15	0.21	2.48	0.26
2015-16	2.48	0.00	0.28	2.20	0.27
2016-17	2.20	0.00	0.28	1.92	0.24
2017-18	1.92	0.00	1.92	0.00	0.11
2018-19	0.00	0.00	0.00	0.00	0.00

4.3.8 The Capital Cost claimed by the Petitioner is the sum of the interest on loans and depreciation. The Commission observed that the interest expenses claimed for FY

2017-18 and FY 2018-19 are slightly in variation to the interest expenses as submitted in the additional information for the respective years which are Rs. 0.10 Crore and Rs. 0.01 Crore as against Rs. 0.11 Crore and Rs. 0.00 Crore respectively submitted in the additional information.

4.3.9 The outstanding long-term loan balance as on 02.06.2014 was Rs. 1.54 Crore and the loan drawal during FY 2014-15 was Rs. 1.15 Crore. There has been no loan drawal during the remaining years of the Control Period. The entire long-term loan has been repaid by FY 2017-18. Hence, there is no residual investment at the end of the 3rd Control Period to be allowed for recovery in accordance with the Regulation No. 1 of 2006.

4.3.10 Since the Petitioner has failed to submit the means of finance of capital investments during the 3rd Control Period, the Commission has considered the Capital Cost for each year of the 3rd Control Period as the sum of repayment and interest on long-term loan during the respective year in accordance with Clause 4.3 of the Regulation No. 1 of 2006.

4.3.11 The Capital Cost approved in the Tariff Order, claimed for true-up and approved by the Commission is as shown in the Table below:

Table 4-6: Capital Cost approved in the Tariff Order, claimed for true-up and approved by the Commission

(Rs. Crore)			
Financial Year	Approved in Tariff Order	Claimed	Approved
2014-15	2.47	0.45	0.47
2015-16	4.02	0.60	0.55
2016-17	4.87	0.58	0.52
2017-18	4.22	4.10	2.03
2018-19	5.80	2.52	0.00
Total	21.38	8.25	3.57

4.4 OPERATION AND MAINTENANCE (O&M) EXPENSES FOR 3RD CONTROL PERIOD

Petitioner's submissions

4.4.1 The O&M expenses comprise of (i) employee cost, (ii) A&G expenses and (iii) R&M expenses. The Petitioner has claimed the O&M expenses of Rs. 28.85 Crore, Rs. 32.96

Crore, Rs. 42.75 Crore, Rs. 47.49 Crore and Rs. 65.58 Crore for FY 2014-15, FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 respectively.

Commission's Views

4.4.2 The Commission directed the Petitioner to submit the justification for variation in employee cost, A&G expenses and R&M expenses for each year from FY 2014-15 to FY 2018-19. In reply, the Petitioner submitted that the following main factors have contributed to the increase in O&M expenses:

- Revision of pay scales to regular employees from 01.04.2014 and 01.04.2018.
- Revision of remuneration paid to outsourced personnel.
- Increase in Hire Vehicle Charges.
- Increase in Annual Maintenance Charges (AMC) Charges to SLDC equipment.

4.4.3 The employee cost during the 3rd Control Period has increased by Rs. 52.11 Crore than the approved amount but there is decrease in A&G and R&M expenses by Rs. 14.65 Crore, thus the net increase in O&M expenses for the period is to the tune of Rs. 37.45 Crore mainly on account of implementation of pay revision for the employees. The Commission finds it prudent to allow the O&M expenses claimed by the Petitioner as the increase is mainly on account of the increase in employee expenses and such expenses are beyond the control of the Petitioner. The O&M expenses approved in the Tariff Order Vs claimed for true-up and approved by the Commission is as shown in the Table below:

Table 4–7: O&M expenses approved in Tariff Order, claimed for true-up and approved by the Commission

(Rs. Crore)

Financial Year	Approved in Tariff Order				Claimed				Approved			
	Employee cost	A&G expenses	R&M expenses	Total	Employee cost	A&G expenses	R&M expenses	Total	Employee cost	A&G expenses	R&M expenses	Total
2014-15	19.21	5.49	3.65	28.36	25.02	1.68	2.15	28.85	25.02	1.68	2.15	28.85
2015-16	24.75	7.19	2.54	34.48	29.47	1.94	1.55	32.96	29.47	1.94	1.55	32.96
2016-17	26.43	7.81	2.90	37.14	38.30	3.00	1.45	42.75	38.30	3.00	1.45	42.75
2017-18	34.77	2.24	1.45	38.46	43.54	2.41	1.54	47.49	43.54	2.41	1.54	47.49
2018-19	37.76	2.42	1.56	41.74	58.69	4.73	2.15	65.58	58.69	4.73	2.15	65.58
Total	142.92	25.15	12.11	180.18	195.03	13.76	8.85	217.63	195.03	13.76	8.85	217.63

4.5 EXPENDITURE SIDE SUMMARY

Commission's Views

4.5.1 Based on the above analysis, the total expenditure claimed for true-up and approved by

the Commission is as shown in the Table below:

Table 4–8: Expenditure side summary for 3rd Control Period

(Rs. Crore)

Financial Year	Approved in Tariff Order			Claimed			Approved		
	Capital Cost	O&M expenses	Total	Capital Cost	O&M expenses	Total	Capital Cost	O&M expenses	Total
2014-15	2.47	28.36	30.83	0.45	28.85	29.31	0.47	28.85	29.32
2015-16	4.02	34.48	38.50	0.60	32.96	33.56	0.55	32.96	33.51
2016-17	4.87	37.14	41.99	0.58	42.75	43.33	0.52	42.75	43.27
2017-18	4.22	38.46	42.68	4.10	47.49	51.60	2.03	47.49	49.52
2018-19	5.80	41.74	47.54	2.52	65.58	68.09	0.00	65.58	65.58
Total	21.38	180.18	201.54	8.25	217.63	225.90	3.57	217.63	221.20

4.6 REVENUE SIDE TRUE-UP

Petitioner's submissions

- 4.6.1 The Petitioner has claimed the revenue from SLDC activity of Rs. 36.01 Crore, Rs. 44.36 Crore, Rs. 49.26 Crore, Rs. 48.82 Crore and Rs. 48.51 Crore for FY 2014-15, FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 respectively.

Commission's Views

- 4.6.2 The Commission observed that the entire revenue claimed by the Petitioner is out of operations only and same were verified with audited accounts submitted by the Petitioner. Therefore, the Commission has considered the revenue as claimed by the Petitioner.

Table 4–9: Revenue from SLDC activity as claimed for true-up and approved by the Commission

(Rs. Crore)

Financial Year	Claimed				Approved			
	Revenue from Operating Charges	Revenue from Annual Fee	Non-Tariff Income	Total	Revenue from Operating Charges	Revenue from Annual Fee	Non-Tariff Income	Total
2014-15	32.21	2.65	1.15	36.01	32.21	2.65	1.15	36.01
2015-16	39.06	3.99	1.31	44.36	39.06	3.99	1.31	44.36
2016-17	42.08	4.97	2.21	49.26	42.08	4.97	2.21	49.26
2017-18	43.03	4.63	1.16	48.82	43.03	4.63	1.16	48.82
2018-19	41.71	5.83	0.97	48.51	41.71	5.83	0.97	48.51
Total	198.09	22.07	6.80	226.95	198.09	22.07	6.80	226.95

4.7 SUMMARY OF TRUE-UP***Commission's Views***

4.7.1 Based on the above analysis, the summary of true-up for 3rd Control Period is as shown in the Table below:

Table 4-10: Summary of true-up for 3rd Control Period**(Rs. Crore)**

Financial Year	Claimed			Approved		
	Total expenditure	Total revenue	Revenue gap/(surplus)	Total expenditure	Total revenue	Revenue gap/(surplus)
2014-15	29.31	36.01	-6.70	29.32	36.01	-6.69
2015-16	33.56	44.36	-10.80	33.51	44.36	-10.84
2016-17	43.33	49.26	-5.93	43.27	49.26	-5.99
2017-18	51.60	48.82	2.78	49.52	48.82	0.70
2018-19	68.09	48.51	19.58	65.58	48.51	17.07
Total	225.90	226.95	-1.06	221.20	226.95	-5.75

4.7.2 Due to the above changes, the revenue surplus of Rs. 1.06 Crore as claimed by the Petitioner has increased to Rs. 5.75 Crore.

4.7.3 As per the provisional true-up for FY 2014-15 and FY 2015-16 surplus revenue of Rs. 20.75 Crore has already been passed on vide Order dated 20.06.2017 in O. P. No. 9 of 2017. Considering the same, the net revenue gap/(surplus) for the 3rd Control Period works out as under:

Table 4-11: Net revenue gap/(surplus) for 3rd Control Period**(Rs. Crore)**

Particulars	Claimed for true-up	Approved
Revenue gap/(surplus) on account of final true-up for 3rd Control Period	-1.06	-5.75
Less: Revenue gap/(surplus) on account of provisional true-up for FY 2014-15 and FY 2015-16	-20.75	-20.75
Net revenue gap/(surplus) for 3rd Control Period	19.69	15.00

4.7.4 As against the revenue gap of Rs. 19.69 Crore claimed by the Petitioner, the Commission has approved the revenue gap of Rs. 15.00 Crore.

4.7.5 The Petitioner has proposed to recover the revenue gap of Rs. 19.69 Crore in the Operating Charges of FY 2019-20.

4.7.6 Clause 4.7 of the Regulation No. 1 of 2006 stipulates as under:

“Variations in recovery of capital cost and operating charges over the fee and charges fixed for a year on account of variations in SLDC usage shall be adjusted in the subsequent control period, or earlier in case the variations are considered to be significant by the Commission warranting adjustment thereof before the commencement of the subsequent control period, with financing cost at the average rate(s) of borrowing during the year(s) to which the variations relate.”

4.7.7 The Commission has considered the recovery of approved revenue gap of Rs. 15.00 Crore in the Operating Charges for FY 2020-21 to FY 2023-24 as shown in the Table below:

Table 4-12: Recovery of approved gap for 3rd Control Period

(Rs. Crore)				
Financial Year	Outstanding gap	Principal allowed for recovery	Financing cost on unrecovered gap @ interest rate of 11%	Total allowed for recovery during the year
	(i)	(ii)	(iii)	(iv)=(ii)+(iii)
2019-20	15.00	0.00	1.65	1.65
2020-21	15.00	7.50	1.24	8.74
2021-22	7.50	7.50	0.41	7.91

Contd...

CHAPTER 5

ANALYSIS AND CONCLUSIONS ON MYT FOR 4TH CONTROL PERIOD FY 2019-20 TO FY 2023-24

5.1 GENERATION CAPACITY FOR 4TH CONTROL PERIOD

Petitioner's submissions

- 5.1.1 The total generating capacity estimated, including the capacity related to Open Access consumers for the 4th Control Period is as shown in the Table below:

Table 5–1: Generation Capacity claimed for 4th Control Period

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
		MW	MW	MW	MW	MW
I	TSGenco					
A	Thermal	4113.94	3677.80	3677.80	5197.80	6717.80
B	Hydro	2406.29	2406.29	2406.29	2406.29	2406.29
II	Central Generating Stations	2643.74	4003.74	4003.74	4302.75	4302.75
III	Joint Sector	24.51	24.51	24.51	24.51	24.51
IV	Independent Power Projects	0.00	0.00	0.00	0.00	0.00
V	Non-Conventional Energy	3473.53	4873.48	4873.48	4873.48	4873.48
VI	Inter State Hydel	75.54	75.54	75.54	75.54	75.54
VII	Others	3517.45	3517.45	3517.45	3719.45	3719.45
	Total	16255.00	18578.81	18578.81	20599.82	22119.82
VII	Open Access Generators	285.14	313.66	345.02	379.53	417.48
	Grand Total	16540.15	18892.48	18923.84	20979.35	22537.31

- 5.1.2 The station wise Generation capacity details as submitted by the Petitioner are enclosed as Annexure 4.

Commission's Views

- 5.1.3 The generation capacity as submitted by the Petitioner is a mix of existing generating stations as well as the new generating stations expected to be commissioned during the 4th Control Period. Further, some of the existing generating stations are proposed to be abandoned during the 4th Control Period. In reply to the Commission's query, the Petitioner submitted station wise generating capacity details in each source under the Non-Conventional Energy and the list of intra-State long-term Open Access users included in the capacity shown under Open Access.

5.1.4 The Commission has considering the following:

- i. The year wise generation capacity of the existing generating stations has been considered based on the share allocation to the DISCOMs.
- ii. The year wise generation capacity of new generating stations has been considered based on the current physical progress and expected Commercial Operation Date (COD) as per the monthly reports published by the Central Electricity Authority (CEA).
- iii. The generation capacity under NCE sources has been considered based on the existing capacity under operation and the new capacities expected to be commissioned during the 4th Control Period.
- iv. The Commission observed that the Petitioner has projected the current long-term Open Access capacity of 285.14 MW to increase by 10% annually during the 4th Control Period. The Commission has considered the Open Access capacity as proposed by the Petitioner.

5.1.5 Based on the above, the generation capacity approved by the Commission for the 4th Control Period is as shown in the Table below:

Table 5–2: Generation Capacity approved for 4th Control Period

S. No.	Particulars	FY 2019-20		FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24	
		Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
		MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
I	TSGenco										
A	Thermal	4113.94	3624.35	3677.80	5200.20	3677.80	7474.20	5197.80	7474.20	6717.80	7474.20
B	Hydro	2406.29	2404.49	2406.29	2404.49	2406.29	2404.49	2406.29	2404.49	2406.29	2404.49
II	Central Generating Stations	2643.74	2666.44	4003.74	3346.44	4003.74	4026.44	4302.75	4325.45	4302.75	4325.45
III	Joint Sector	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51
IV	Independent Power Projects	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
V	Non-Conventional Energy	3473.53	3487.37	4873.48	4915.67	4873.48	4910.27	4873.48	4894.74	4873.48	4865.09
VI	Inter State Hydel	75.54	75.55	75.54	75.55	75.54	75.55	75.54	75.55	75.54	75.55
VII	Others	3517.45	3520.45	3517.45	3520.45	3517.45	3520.45	3719.45	3724.45	3719.45	3724.45
	Total	16255.00	15803.15	18578.81	19487.31	18578.81	22435.91	20599.82	22923.38	22119.82	22893.73
VII	Open Access Generators	285.14	285.15	313.66	313.66	345.02	345.03	379.53	379.53	417.48	417.49
	Grand Total	16540.14	16088.30	18892.48	19800.97	18923.84	22780.93	20979.35	23302.91	22537.31	23311.22

5.1.6 The station wise Generation capacity details have been enclosed as Annexure 4 of the Order.

5.2 ANNUAL FEE FOR 4TH CONTROL PERIOD – REGULATORY PROVISIONS

5.2.1 Clause 4.2, 4.3 and 4.4 of the Regulation No. 1 of 2006 stipulates as under:

“4.2 The annual fee shall be determined by the Commission after taking into account

the required capital investment for setting up the Centre. The fee will be revised only on the basis of a filing made to the Commission by SLDC to cover any investments for upgradation and/or modernization of SLDC that may be required.

4.3 The basis for determination of the annual fee shall be the Capital Cost to cover the repayment of principal and payment of interest on investments in a year, plus any residual capital cost of past investments.

4.4 The annual fee shall be computed as follows:

$$\text{Annual SLDC Fee (Rs./MW/p. a.)} = \frac{\text{Capital Cost (CC)(in Rs.)}}{\text{Total Generation Capacity (MW)}}$$

where

Capital Cost (CC) for a given year shall be computed as follows:

$$\text{Capital Cost (CC in Rs.)} = \text{Investment} \times \frac{r}{[1 - 1/(1 + r)^t]}$$

where

Investment = Actual investment made in an year plus any residual value of previous investment (s).

r = Actual rate of interest on borrowed capital or 150% of the Bank Rate, whichever is lower.

t = Number of years in which the investment is proposed to be recovered; for software, it would be 5 years and 10 years for other investments.”

5.2.2 The Petitioner’s submissions and the Commission’s analysis on the Annual Fee for the 4th Control Period are detailed below.

5.3 INVESTMENT PLAN FOR 4TH CONTROL PERIOD ***Petitioner’s submissions***

5.3.1 The Petitioner has proposed the capital investment of Rs. 22.95 Crore, Rs. 14.94 Crore, Rs. 5.94 Crore, Rs. 2.08 Crore and Rs. 1.47 Crore for FY 2019-20, FY 2020-21, FY 2021-22, FY 2022-23 and FY 2023-24 respectively. The Petitioner submitted the details of new capital assets proposed to be added during the 4th Control Period and the need for such capital assets for SLDC in each of the wings viz., Grid Operation, Energy Billing Centre and Telecom.

Commission's Views

5.3.2 Clause 6.3 of the Regulation No. 1 of 2006 stipulates as under:

“The SLDC shall submit an investment plan for each control period, by not less than 120 days before the commencement of the control period. The investment plan must include, inter-alia, the sources of funds for investment.”

5.3.3 The investment plan for the 4th Control Period has been submitted as a part of the MYT Petition. In reply to the Commission's query, the Petitioner submitted the details of investments proposed during the 4th Control Period along with the item wise cost details and means of finance. The means of finance of the proposed investments during the 4th Control Period is as shown in the Table below:

Table 5–3: Means of finance of proposed investments during the 4th Control Period

Financial Year	Claimed		
	Debt	Grants	Total
2019-20	14.80	8.15	22.95
2020-21	10.09	4.85	14.94
2021-22	5.94	0.00	5.94
2022-23	2.08	0.00	2.08
2023-24	1.47	0.00	1.47
Total	34.38	13.00	47.38

5.3.4 Further, the Petitioner submitted that as the proposed investments are below Rs. 20 Crore, prior approval of the Commission is not required for the same.

5.3.5 The Commission has gone through the submissions of the Petitioner regarding the proposed investment plan for the 4th Control Period. Keeping in view the importance of SLDC in the power system of the State, the Commission finds it appropriate to approve the capital investments as proposed by the Petitioner for the 4th Control Period. The capital investments claimed by the Petitioner and approved by the Commission is as shown in the Table below:

Table 5–4: Investment plan approved for 4th Control Period**(Rs. Crore)**

Financial Year	Claimed				Approved			
	Grid Operation	Energy Billing Centre	Telecom	Total	Grid Operation	Energy Billing Centre	Telecom	Total
2019-20	9.57	11.90	1.48	22.95	9.57	11.90	1.48	22.95
2020-21	8.13	5.47	1.33	14.94	8.13	5.47	1.33	14.94
2021-22	4.90	0.18	0.85	5.94	4.90	0.18	0.85	5.94
2022-23	0.88	0.19	1.02	2.08	0.88	0.19	1.02	2.08
2023-24	0.90	0.19	0.38	1.47	0.90	0.19	0.38	1.47
Total	24.38	17.93	5.06	47.38	24.38	17.94	5.06	47.38

5.3.6 The recovery of the investments for the 4th Control Period is by way of Capital Cost in accordance with Clause 4.3 of the Regulation No. 1 of 2006 as detailed below.

5.4 CAPITAL COST FOR 4TH CONTROL PERIOD

Petitioner's submissions

5.4.1 The Capital Cost for 4th Control Period has been claimed in accordance with Regulation No. 1 of 2006 considering the rate of interest at 11% p.a. and the recovery period of 10 years for the investments. The Petitioner has claimed the Capital Cost of Rs. 6.36 Crore, Rs. 8.89 Crore, Rs. 9.90 Crore, Rs. 10.26 Crore and Rs. 10.51 Crore for FY 2019-20, FY 2020-21, FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

Commission's Views

5.4.2 The Commission has approved the Capital Cost in accordance with the provisions of the Regulation No. 1 of 2006. The Commission has allowed the recovery of debt component of the capital investments.

5.4.3 The Petitioner has considered the residual investment as on 01.04.2019 as Rs. 14.49 Crore. From the true-up of 3rd Control Period, there is no residual investment to be allowed for recovery in accordance with Regulation No. 1 of 2006. Accordingly, the Commission has considered the residual investment as on 01.04.2019 as zero.

5.4.4 The Petitioner has proposed 10 years for recovery of investments during the 4th Control Period. As per Clause 4.4 of Regulation No. 1 of 2006, the recovery period for software investments is 5 years and 10 years for other investments. Since the Petitioner has failed to submit the break-up details of investments, the Commission has considered 30% of the proposed investments towards software and balance investments to other

investments. Accordingly, recovery of software investments is proposed for 5 years and balance investments is to be recovered in 10 years.

5.4.5 Clause 4.4 of the Regulation No. 1 of 2006 stipulates the interest rate to be lower of (a) actual interest rate and (b) 150% of the Bank Rate. The current Bank Rate (SBI 1-year MCLR) is 7.85% and 150% of the same works out to 11.78%. As the interest rate claimed by the Petitioner is lower than 150% of the Bank rate, the Commission has considered the interest rate of 11% as claimed by the Petitioner.

5.4.6 Based on the above, the Capital Cost approved by the Commission for the 4th Control Period is as shown in the Table below:

Table 5–5: Capital Cost approved for 4th Control Period

(Rs. Crore)

Financial Year	Claimed	Approved
2019-20	6.36	2.96
2020-21	8.89	4.98
2021-22	9.90	6.17
2022-23	10.26	6.58
2023-24	10.51	6.88
Total	45.92	27.56

5.5 ANNUAL FEE FOR 4TH CONTROL PERIOD

Commission's Views

5.5.1 Based on the above analysis, the Annual Fee claimed by the Petitioner and approved by the Commission for the 4th Control Period is as shown in the Table below:

Table 5–6: Annual Fee for the 4th Control Period

Financial Year	Claimed			Approved		
	Capital Cost	Generation Capacity	Annual Fee	Capital Cost	Generation Capacity	Annual Fee
	Rs. Crore	MW	Rs./MW/p.a.	Rs. Crore	MW	Rs./MW/p.a.
2019-20	6.36	16540	3843.63	2.96	16088.30	1839.76
2020-21	8.89	18892	4707.92	4.98	19800.97	2513.70
2021-22	9.90	18924	5232.94	6.17	22780.93	2706.21
2022-23	10.26	20979	4889.51	6.58	23302.91	2824.46
2023-24	10.51	22537	4662.25	6.88	23311.22	2949.80

5.6 OPERATING CHARGES FOR 4TH CONTROL PERIOD – REGULATORY PROVISIONS

5.6.1 Clause 4.5 of the Regulation No. 1 of 2006 stipulates as under:

“4.5 The Operating Charges shall be fixed for an year on the basis of the filing of the SLDC and will cover:

- a) Employee cost;*
- b) Administration and general charges;*
- c) Repairs and Maintenance expenses; and*
- d) Any other relevant costs and expenses deemed appropriate by the Commission.*

.....

4.6 The monthly operating charges per MW shall be computed as per the following formula:

$$\text{Operating Charges (Rs/MW per month)} = \frac{\text{Annual Operating charges}}{\text{Total Generation Capacity (MW)} \times 12}$$

5.6.2 The Petitioner’s submissions and the Commission’s analysis on the Operating Charges for the 4th Control Period is detailed below.

5.7 OPERATION & MAINTENANCE (O&M) EXPENSES FOR 4TH CONTROL PERIOD

Petitioner’s submissions

5.7.1 The Operating Charges cover the O&M expenses of SLDC i.e., employee cost, A&G expenses, and R&M expenses for SLDC activity.

5.7.2 The actual O&M expenses for FY 2018-19 have been considered as the base. The escalation rate of 7.68%, based on the methodology specified by CERC, has been considered for projecting the employee cost and A&G expenses for the 4th Control Period.

5.7.3 The employee cost, other than salaries of the personnel, also contain (i) surrender leave, (ii) Various medical allowances, (iii) other allowances and pension contribution. Further, the wage revision which is due w.e.f. 01.04.2022 has not been considered in the O&M projections for the 4th Control Period and the same shall be claimed separately based on actuals.

5.7.4 As per Clause 7 of Regulation No. 2 of 2006, the Energy Billing Centre is considered as part of SLDC. Therefore, the assets of SLDC are mainly SCADA wing and Energy Billing Centre. The R&M expenses are primarily for the Annual Maintenance Contracts (AMCs) of various equipment. The R&M expenses are projected based on the requirements of SCADA, Power Planning, Energy Billing Centre & Renewable Energy, Telecom and Power System wings. In order to facilitate the reliable and effective speech and data communication system, Power Line Carrier Communication

(PLCC) and Optical Fibre Communication (OFC) is being implemented in substations. R&M of the equipment is very much essential for uninterrupted transfer of real time data to SLDC and for implementation of SCADA. R&M expenses comprise of expenses towards lines and cable network, plant & machinery and office equipment.

5.7.5 The O&M expenses claimed for the 4th Control Period is as shown in the Table below:

Table 5–7: O&M expenses claimed for 4th Control Period

(Rs. Crore)

Financial Year	Claimed			
	Employee cost	A&G expenses	R&M expenses	Total
2019-20	34.41	2.66	1.33	38.40
2020-21	37.06	2.86	1.75	41.67
2021-22	39.90	3.08	1.67	44.66
2022-23	42.97	3.32	3.09	49.38
2023-24	46.27	3.58	3.15	52.99
Total	200.61	15.50	10.99	227.11

Commission's Views

5.7.6 The Commission observed that the O&M expenses claimed for true-up of FY 2018-19 are higher than the base values considered for projecting the O&M expenses for the 4th Control Period as shown in the Table below:

Table 5–8: Comparison of O&M expenses for FY 2018-19 claimed for true-up and considered for projections for 4th Control Period

(Rs. Crore)

Particulars	Claimed for true-up of FY 2018-19	Considered for FY 2018-19 for projections of 4 th Control Period	Difference
	Rs. Crore	Rs. Crore	Rs. Crore
	(i)	(ii)	(iii)=(ii)-(i)
Employee cost	58.69	31.96	-26.73
A&G expenses	4.73	2.47	-2.26
R&M expenses	2.15	0.47	-1.68
Total	65.58	34.90	-30.67

5.7.7 In reply to the Commission's query in this regard, the Petitioner submitted that the O&M expenses pertaining to field Telecom Units were considered in the SLDC activity upto the 3rd Control Period and the same has not been considered for the 4th Control Period for SLDC activity as per the staffing pattern. The expenses of such field Telecom Units have been considered in the base values of Transmission business in projections of O&M expenses for 4th Control Period.

5.7.8 The Commission directed the Petitioner to submit the computation for the escalation rate of 7.68% along with supporting documents considered for projecting the employee cost and A&G expenses for the 4th Control Period. In reply, the Petitioner submitted that the escalation rate of 7.68% has been considered based on the methodology specified by CERC and submitted the copy of "Explanation for the Notification on escalation factors and other parameters for Tariff Based Competitive Bidding for transmission service, dated 07.10.2019".

5.7.9 Clause 4.5.1 and 4.5.2 of the Regulation No. 1 of 2006 stipulates as under:

"4.5.1 Employee Cost

The employee cost to be considered for the year shall be as per the approved staffing plan or the actual employee cost whichever is lower. As a first step, SLDC shall file the staffing plan within 3 months from the date of notification of this Regulation. The Commission will approve the staffing plan after examining the details thereof. The approval shall be for the purpose of cost recovery through operating charges alone and no other purpose whatsoever.

4.5.2 Administration and General Expenses & Repairs and Maintenance Expenses

These expenses for the first Control Period will be fixed on the basis of information filed by SLDC and accepted by the Commission. Thereafter, these will be fixed as per the norms to be determined by the Commission."

5.7.10 Commission's Order dt. 20.06.2017:

"3) Segregation of Employees Cost

- a) *TSTransco shall apportion the cost of employees of Telecom wing to SLDC business and Transmission business in the next filing as per Grid Code. Since, in the present filing all employees cost of Telecom wing is shown in SLDC business, further the cost of expansion of Telecom shall be shown in the concerned business as per Grid Code.*
- b) *In the present filing the total employee cost of power system is shown under the SLDC business. The employees of power system wing are dealing with SLDC business and Transmission business. The TSTransco is directed to segregate the cost of employees between Transmission business and SLDC business.*

4) As per clause 4.5.1 (employees cost) of Regulation No. 1 of 2006 of APERC the staffing plan shall be submitted to the Commission to get approval. As per clause 4.5.2 of Regulation No. 1 of 2006, for the A&G costs and R&M costs the norms have to be

determined. Hence, the TSTransco is directed to submit proposals for determining norms for these costs in O&M expenses well before the next filings.”

- 5.7.11 The Petitioner submitted staffing plan allocating the employee cost of Telecom wing, Power System wing to SLDC and Transmission, the employees pertaining to Telecom and Power System are segregated to SLDC and Transmission as under:

Table 5–9: Staffing plan - segregation of employees as submitted by the Petitioner

Wing	Regular	Artisans	Total
SLDC	75	27	102
Telecom	26	11	37
Power System	7	2	9
SAO/SLDC	7	3	10
Total	115	43	158

- 5.7.12 The Petitioner submitted that the total strength of employees including Telecom and Power System wing looking after SLDC activity is 158 as against the earlier employee strength of 401 and the employee cost pertaining to 158 employees is covered under the SLDC. Further, the Petitioner submitted that it is in the process of studying the norms for determination of A&G expenses and R&M expenses.
- 5.7.13 The Commission directed the Petitioner to submit the computations of employee, A&G and R&M expenses for the 4th Control Period. In reply, the Petitioner submitted as follows:
- The actual employee and A&G expenses for FY 2018-19 have been escalated by an annual escalation rate of 7.68% towards Annual Grade Increment, Dearness allowance and increase in vehicle charges, advertisement expenses, Property tax, License Fee and other expenses.
 - The increase in proposed R&M expenses for FY 2020-21 is mainly due to additional expenditure to be incurred towards AMC of load forecasting software.
 - The increase in proposed R&M expenses for FY 2022-23 is mainly due to additional expenditure expected to be incurred towards AMC of load REMC software.
 - The other variations in R&M expenses are due to inflation and maintenance of additional inventory being added during the respective years. Further, the scope for price variation has also been considered.
- 5.7.14 The Commission has gone through the submissions of the Petitioner. The Commission has approved the staffing plan submitted by the Petitioner and the approval is for the purpose of cost recovery through operating charges alone and no other purpose whatsoever. Further, the Commission has approved the projections of O&M expenses

for the 4th Control Period based on the following:

- a) The O&M expenses (excluding that of field Telecom Units) for FY 2018-19 have been considered as the base O&M expenses
- b) The Commission finds that the Petitioner has not submitted the computation for the escalation rate of 7.68%. The Petitioner has also not submitted the proposal for the norms of A&G expenses and R&M expenses.
- c) The Commission does not find merit in considering the escalation rate based on the computation methodology of escalation factor specified by CERC for Tariff Based Competitive Bidding projects as such escalation factor shall be applied on the quoted escalable transmission charges and not O&M expenses. Therefore, the Commission finds it prudent to consider the escalation rate of 3.51%, which is considered by CERC for determining the normative O&M expenses for the period from FY 2019-20 to FY 2023-24 for transmission. Further, in the absence of any proposed methodology for determining R&M expenses, the Commission does not find it prudent to consider the AMC fee in addition to normative R&M expenses at this stage.

5.7.15 The O&M expenses claimed by the Petitioner and approved by the Commission for the 4th Control Period is as shown in Table below:

Table 5–10: O&M expenses approved for 4th Control Period

(Rs. Crore)

Financial Year	Claimed				Approved			
	Employee cost	A&G expenses	R&M expenses	Total	Employee cost	A&G expenses	R&M expenses	Total
2019-20	34.41	2.66	1.33	38.40	33.08	2.56	0.49	36.12
2020-21	37.06	2.86	1.75	41.67	34.24	2.65	0.50	37.39
2021-22	39.90	3.08	1.67	44.66	35.44	2.74	0.52	38.71
2022-23	42.97	3.32	3.09	49.38	36.69	2.84	0.54	40.06
2023-24	46.27	3.58	3.15	52.99	37.98	2.94	0.56	41.47
Total	200.61	15.50	10.99	227.11	177.44	13.71	2.61	193.76

5.8 OTHER EXPENSES

Petitioner's submissions

- 5.8.1 The Petitioner has claimed the recovery of revenue gap for the 3rd Control Period amounting to Rs. 19.69 Crore in the Operating Charges FY 2019-20.
- 5.8.2 The Petitioner has also proposed a Non-Tariff Income of Rs. 1.00 Crore for each year of the 4th Control Period.

Commission's Views

5.8.3 Clause 4.5.3 of the Regulation No. 1 of 2006 stipulates as under:

“4.5.3 Other expenses

All other expenses, not covered by Capital Cost, Employee cost, Administration and General Expenses or Repairs & Maintenance expenses shall fall under this category of expenses. The SLDC shall file the details of such expenses, if any, at the time of its filings for the purpose of fixation of charges.”

5.8.4 The Commission has approved the revenue gap of Rs. 15.00 Crore on true-up of 3rd Control Period. Accordingly, the Commission has considered the recovery of the approved revenue gap as detailed in Chapter 4, in determining the Operating Charges for 4th Control Period.

5.8.5 Further, the Commission has considered the non-tariff income of Rs. 1.00 Crore for each year of the 4th Control Period, the same as projected by the Petitioner.

5.9 OPERATING EXPENSES FOR 4TH CONTROL PERIOD**Commission's Views**

5.9.1 Based on the above analysis on O&M expenses and other expenses, the operating expenses claimed by the Petitioner and approved by the Commission for the 4th Control Period is as shown in the Table below:

Table 5–11: Operating expenses for 4th Control Period**(Rs. Crore)**

Financial Year	Claimed				Approved			
	O&M expenses	Other expenses	Less: Non-Tariff Income	Total	O&M expenses	Other expenses	Less: Non-Tariff Income	Total
2019-20	38.40	19.69	1.00	57.09	36.12	1.65	1.00	36.77
2020-21	41.67	0.00	1.00	40.67	37.39	8.74	1.00	45.13
2021-22	44.66	0.00	1.00	43.66	38.71	7.91	1.00	45.62
2022-23	49.38	0.00	1.00	48.38	40.06	0.00	1.00	39.06
2023-24	52.99	0.00	1.00	51.99	41.47	0.00	1.00	40.47
Total	227.11	19.69	5.00	241.80	193.76	18.30	5.00	207.06

5.10 OPERATING CHARGES FOR 4TH CONTROL PERIOD**Commission's Views**

5.10.1 Based on the above analysis on operating expenses and generation capacity, the Operating Charges claimed by the Petitioner and approved by the Commission for the

4th Control Period is as shown in the Table below:

Table 5–12: Operating Charges for 4th Control Period

Financial Year	Claimed			Approved		
	Operating expenses	Generation Capacity	Operating Charges	Operating expenses	Generation Capacity	Operating Charges
	Rs. Crore	MW	Rs./MW/month	Rs. Crore	MW	Rs./MW/month
2019-20	57.09	16540.00	2876.57	36.77	16088.30	1904.84
2020-21	40.67	18892.00	1794.04	45.13	19800.97	1899.31
2021-22	43.66	18924.00	1922.49	45.62	22780.93	1668.69
2022-23	48.38	20979.00	1921.72	39.06	23302.91	1396.97
2023-24	51.99	22537.00	1922.54	40.47	23311.22	1446.74

5.11 SLDC CHARGES FOR 4TH CONTROL PERIOD

Commission's Views

5.11.1 Based on the above, the SLDC Charges i.e., Annual Fee and Operating Charges claimed by the Petitioner and approved by the Commission is as shown in the Table below:

Table 5–13: SLDC Charges for 4th Control Period

Financial Year	Annual Fee		Operating Charges	
	Claimed	Approved	Claimed	Approved
	Rs./MW/p.a.	Rs./MW/p.a.	Rs./MW/month	Rs./MW/month
2019-20	3843.63	1839.76	2876.57	1904.84
2020-21	4707.92	2513.70	1794.04	1899.31
2021-22	5232.94	2706.21	1922.49	1668.69
2022-23	4889.51	2824.46	1921.72	1396.97
2023-24	4662.25	2949.80	1922.54	1446.74

Notes on SLDC Charges

- Users (meaning the Generating Companies, Distribution Licensees or Trading Licensees as the case may be who use the intra-State Transmission Network for the purpose of selling/procuring electricity) shall pay to SLDC an Annual Fee and Operating Charges leviable on the electricity transmitted, in MW, subject to charges for a minimum of one MW;
Provided that for the purpose of billing and collection the above-mentioned fee and charges, a fraction of a MW shall be treated as one full MW;
Provided further that the Operating Charges shall be leviable for a minimum period of one month, a fraction of a month being rounded off to full month.
- The Annual Fee shall be paid by all the Users in advance in two equal instalments, by 10th of April and by 10th of October every Financial Year starting from FY 2019-20 onwards.

- iii. Provided that in case where the usage of intra-State transmission system commences after the 10th of April or the 10th October of a year, the Annual Fee for the period upto 30th September of the year and 31st March of the subsequent year respectively shall be required to be paid before the commencement of intra-State transmission.
- iv. The Operating Charges shall be paid monthly.
- v. If the Annual Fee and Operating Charges as the case may be are not paid by the due dates, surcharge at the rate of two percent (2%) per month shall be levied on the unpaid amounts.
- vi. An amount equivalent to two months' Operating Charges shall have to be deposited in advance by every User as security against default in payment of Operating Charges.

5.11.2 Variations in recovery of Capital Cost and Operating Charges over the Annual Fee and Charges approved in this Order on account of variations in SLDC usage shall be adjusted in accordance with the provisions of the Regulation No. 1 of 2006.

5.11.3 The Commission's earlier directives and new directives issued in this Order are enclosed as Appendix B.

5.11.4 The aforementioned SLDC Charges determined for each year of the 4th Control Period are applicable from 1st April to 31st March of the respective Financial Year. However, for FY 2019-20, the SLDC Charges determined are applicable w.e.f. 10.03.2020.

This order is corrected and signed on this day the 2nd March, 2020.

Sd/-
BANDARU KRISHNAIAH
(MEMBER)

Sd/-
M. D. MANOHAR RAJU
(MEMBER)

Sd/-
T. SRIRANGA RAO
(CHAIRMAN)

APPENDIX A-SCHEDULE OF APPROVED SLDC CHARGES

Financial Year	Annual Fee	Operating Charges
	Rs./MW/p.a.	Rs./MW/month
2019-20	1839.76	1904.84
2020-21	2513.70	1899.31
2021-22	2706.21	1668.69
2022-23	2824.46	1396.97
2023-24	2949.80	1446.74

NOTES ON SLDC CHARGES

1. Users (meaning the Generating Companies, Distribution Licensees or Trading Licensees as the case may be who use the intra-State Transmission Network for the purpose of selling/procuring electricity) shall pay to SLDC an Annual Fee and Operating Charges leviable on the electricity transmitted, in MW, subject to charges for a minimum of one MW;

Provided that for the purpose of billing and collection the above-mentioned fee and charges, a fraction of a MW shall be treated as one full MW;

Provided further that the Operating Charges shall be leviable for a minimum period of one month, a fraction of a month being rounded off to full month.

2. The Annual Fee shall be paid by all the Users in advance in two equal instalments, by 10th of April and by 10th of October every Financial Year starting from FY 2019-20 onwards.
3. Provided that in case where the usage of intra-State transmission system commences after the 10th of April or the 10th October of a year, the Annual Fee for the period upto 30th September of the year and 31st March of the subsequent year respectively shall be required to be paid before the commencement of intra-State transmission.
4. The Operating Charges shall be paid monthly.
5. If the Annual Fee and Operating Charges as the case may be are not paid by the due dates, surcharge at the rate of two percent (2%) per month shall be levied on the unpaid amounts.
6. An amount equivalent to two months' Operating Charges shall have to be deposited in advance by every User as security against default in payment of Operating Charges.

APPENDIX B-COMMISSION'S DIRECTIVES

EARLIER DIRECTIVES

1. Details of Completed Capital Works

The Commission directs the Petitioner to submit the details of completed capital works pertaining to SLDC operations along with Project Completion Certificate (PCC) and Financial Completion Certificate (FCC) as is being done for transmission projects. The Commission also directs the Petitioner to file a monthly report with the Commission on progress in capital works pertaining to SLDC operations by 25th of every month relating to the previous month.

2. Details of Actual Costs and Revenue

The Commission directs the Petitioner to file the actual costs and revenues by 25th of every month relating to the previous month in the format prescribed for this purpose by the Commission. The Commission also directs the Petitioner to state its own observations on cost, revenues and capacities along with the monthly report.

3. Proposal for Determining Norms of O&M Expenses

The Commission directs the Petitioner to submit the proposal for determining the norms of O&M expenses in accordance with Regulation No. 1 of 2006 by 30.06.2020.

4. Optimum Utilisation of SLDC Assets

The Commission directs the Petitioner to make needful study and send the proposal for approval regarding the optimum utilisation of SLDC assets by engaging in other business activity and amount of financial gains to be accrued on account of the above.

NEW DIRECTIVES

5. Annual Performance Review

The Commission directs the Petitioner to file the Performance Review (true-up) for each year of the 4th Control Period before 31st December of the following year. As a first step, the Petitioner shall file the Annual Performance Review for FY 2019-20 by 31.11.2020.

ANNEXURE-1

PUBLIC NOTICE

BEFORE THE HONOURABLE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION (TSERC)
 D.No. 11-4-660, 5th Floor, Singareni Bhavan, Red Hills, Lakdi-Ki-Pool, Hyderabad-500 004.
TRANSMISSION CORPORATION OF TELANGANA LIMITED
PUBLIC NOTICE

1. Notice is hereby given to all that the Transmission Corporation of Telangana Limited (TSTRANSCO) filed before the Telangana State Electricity Regulatory Commission (TSERC) for determination of Aggregate Revenue Requirement (ARR), Filing for Proposed Tariff (FPT) under Multi Year Tariff (MYT) framework for 4th Control Period (2019-20 to 2023-24) for Transmission Business of TSTRANSCO and Annual Fee, Operating Charges for the State Load Dispatch Centre (SLDC) activity and true up for 3rd Control Period for Transmission Business and SLDC Activity. These filings have been taken on record by the Hon'ble Commission in O.P.No.3 of 2019 (Transmission Business) & O.P.No. 2 of 2019 (SLDC activity).

2. Copies of the filings referred are available in the Office of the Chief Engineer (Comm & RAC), Room No.149, 'A' Block, TSTRANSCO, Vidyal Soudha, Hyderabad - 500 002 and the Chief Engineer/ (Metro Zone, Rural Zone, Karimnagar and Warangal Zone) and Superintending Engineer OMC TSTRANSCO (Khammam, Nizamabad, Adilabad, Karimnagar, Nalgonda, Mahabubnagar, Warangal, Metro East, Metro West, Metro Central and Sangareddy located at Hyderabad). Interested persons may inspect/peruse the said filings and take note thereof during office hours at any of the said offices free of cost. These proposals are also available on www.tstransco.in and the same may be accessed at www.tserc.gov.in. Hard copy of these filings can be obtained from the above offices on payment of Rs.300/- by cash for TSTRANSCO Business and Rs.50/- for SLDC filings.

3. Objections/suggestions if any, on the said filings together with supporting material may be sent to the Chief Engineer/ Comm & RAC, Room No.149, 'A' Block, TSTRANSCO, Vidyal Soudha, Hyderabad - 500 002 in person or through Registered Post so as to reach on or before **10.01.2020 by 5.00 PM**. A copy of the same must also be filed with the Secretary(FAC), TSERC, at the Singareni Bhavan, Red Hills address as mentioned above. The objections/suggestions should be duly signed and should carry full name and postal address of the person(s) sending the objections/suggestions. If the objections/ suggestions are filed on behalf of any organization or any category of consumers, it should be clearly mentioned. If the objector also wants to be heard in person it may also be specifically mentioned. The Objection/Suggestion should accompany the following statement as an overleaf:-

Name & full address of the Objector	Brief details of Objection(s)/ Suggestion(s)	Objections against filings by TSTRANSCO for determination of ARR and Tariff for Transmission Business and Annual Fee & Operating Charges for SLDC activity for the period of 2019-20 to 2023-24	Whether copy of objection & proof of delivery at TSTRANSCO's office enclosed (Yes/No)	Whether Objector wants to be heard in person (Yes/No)

4. The summary of filings are indicated in Schedules I (Transmission Business) and II (SLDC Activity).

5. Telangana State Electricity Regulatory Commission intends to conduct a **Public Hearing at Court Hall, TSERC, # 11-4-660, 5th Floor, Singareni Bhavan, Red Hills, Hyderabad - 500 004 on 07.02.2020 from 11.00 AM.**
 Place : Hyderabad
 Date : 10.12.2019

Sd/-
CHAIRMAN & MANAGING DIRECTOR
TSTRANSCO

SCHEDULE - I
ARR / Transmission Charges for Transmission Business

Details	2019-20	2020-21	2021-22	2022-23	2023-24
A) ARR /Transmission Charges					
1) ARR of Transmission Business (Rs. Crores.)	2812.88	2828.18	3345.96	3974.39	4274.77
2) Transmission Contracted Capacity (MW)	15235	17564	17569	19588	21114
3) Transmission Charges (Rs./KW/Month)	110.05	134.19	158.71	169.89	168.72
B) Target Transmission Loss Range (%)	3.25 +/- 0.2	3.24 +/- 0.2	3.23 +/- 0.2	3.22 +/- 0.2	3.21 +/- 0.2
C) Capital Investments (Rs. Crores.)	3521.67	3968.20	3120.93	1669.57	1397.91

SCHEDULE - II
Annual Fee and Operating Charges for SLDC Activity

Details	2019-20	2020-21	2021-22	2022-23	2023-24
1 Total Operating Charges (Rs. Crores)	57.89	40.67	43.66	48.38	51.99
2 Generation Capacity (MW)	16540	18892	18924	20979	22537
3 Operating Charges (Rs. / MW/Month)	2878.57	1794.04	1922.49	1921.72	1922.54
4 Total Capital Cost (Rs. Crores)	9.36	8.89	9.90	10.26	10.51
5 Annual Fee (Rs./MW/Annum)	3844	4708	5233	4890	4862

R.O.No. 38/19

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آوازِ اُتر کھڑا کھڑا چلا ہے کہ کھڑی ہو رہی حالت کی دے (وہاں اُتر گیا)	آوازِ اُتر کھڑی کی کھڑی ہو رہی اُتر کھڑی کے کھڑی ہو رہی حالت کی دے (وہاں اُتر گیا)	آوازِ اُتر کھڑی کی کھڑی ہو رہی اُتر کھڑی کے کھڑی ہو رہی حالت کی دے (وہاں اُتر گیا)	آوازِ اُتر کھڑی کی کھڑی ہو رہی اُتر کھڑی کے کھڑی ہو رہی حالت کی دے (وہاں اُتر گیا)
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شیر احمد سید
چیمبر سین و سنیجنگ ڈانر کٹر
لی ایس ڈو انیسگو

مقام : حیدرآباد
مورخہ : 10-12-2019

ARR / Transmission Charges for Transmission Business

Details		2019-20	2020-21	2021-22	2022-23	2023-24
A) ARR / Transmission Charges						
1)	ARR of Transmission Business (Rs. Crores.)	2012.06	2628.16	3345.98	3974.38	4274.77
2)	Transmission Contracted Capacity (MW)	16235	17564	17566	18588	21114
ARR Transmission (Rs. Crores./MW)		123.92	150.18	190.51	213.84	202.44
Annual Fee and Operating Charges for SLOC Activity						
Details		2019-20	2020-21	2021-22	2022-23	2023-24
1	Total Operating Charges (Rs. Crores)	57.99	40.97	43.66	46.38	51.99
2	Generation Capacity (MW)	16540	18892	18924	20979	22537
3	Operating Charges (Rs. /MW/Month)	2970.57	1794.04	1922.49	1921.72	1922.54
4	Total Capital Cost (Rs. Crores)	6.36	9.39	9.90	10.26	10.51
5	Annual Fee (Rs. /MW/Annum)	3844	4708	5233	4898	4662

ANNEXURE-2

LIST OF STAKEHOLDERS WHO SUBMITTED THE WRITTEN COMMENTS / OBJECTIONS/ SUGGESTIONS

S. 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, Journalist's Colony, Gopanpally, Serlingampally Mandal, Hyderabad 500 032

ANNEXURE-3

LIST OF STAKEHOLDERS WHO ATTENDED THE PUBLIC HEARING HELD ON 07.02.2020

S. 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, Journalist's Colony, Gopanpally, Serlingampally Mandal, Hyderabad-500 032
2	Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation, 139, Kakatiyanagar, Hyderabad-500 008
3	Electric Power Transmission Association, F-1, The Mira Corporate Suites, 1&2 Ishwar Nagar, Mathura Road, Okhla Crossing, New Delhi – 110 065

ANNEXURE 4

GENERATION CAPACITY FOR THE 4th CONTROL PERIOD

Generating station/source	Installed Capacity (MW)		Net Capacity TS Share (MW)		Year wise Capacity (MW)									
					FY 2019-20		FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24	
	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
KTPS-A	180.00	180.00	162.54	162.00	162.54	162.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KTPS-B	120.00	120.00	108.36	108.00	108.36	108.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KTPS-C	120.00	120.00	108.36	108.00	108.36	108.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RTS-B	62.50	62.50	56.88	56.25	56.88	56.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KTPS-D (V)	500.00	500.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00
KTPS-VI	500.00	500.00	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50
KTPS-VII	800.00	800.00	760.00	758.00	760.00	758.00	760.00	758.00	760.00	758.00	760.00	758.00	760.00	758.00
KTPP-I	500.00	500.00	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50	462.50
KTPP-II	600.00	600.00	555.00	558.00	555.00	558.00	555.00	558.00	555.00	558.00	555.00	558.00	555.00	558.00
Bhadradri-TPS-I	270.00	270.00	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05
Bhadradri-TPS-II	270.00	270.00	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05
Bhadradri-TPS-III	270.00	270.00	245.70	247.05	245.70	0.00	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05
Bhadradri-TPS-IV	270.00	270.00	245.70	247.05	245.70	0.00	245.70	247.05	245.70	247.05	245.70	247.05	245.70	247.05
Yadradri-TPS-I	800.00	800.00	760.00	758.00	0.00	0.00	0.00	758.00	0.00	758.00	760.00	758.00	760.00	758.00
Yadradri-TPS-II	800.00	800.00	760.00	758.00	0.00	0.00	0.00	758.00	0.00	758.00	760.00	758.00	760.00	758.00
Yadradri-TPS-III	800.00	800.00	760.00	758.00	0.00	0.00	0.00	0.00	0.00	758.00	0.00	758.00	760.00	758.00
Yadradri-TPS-IV	800.00	800.00	760.00	758.00	0.00	0.00	0.00	0.00	0.00	758.00	0.00	758.00	760.00	758.00
Yadradri-TPS-V	800.00	800.00	760.00	758.00	0.00	0.00	0.00	0.00	0.00	758.00	0.00	758.00	0.00	758.00
Total Thermal	8462.50	8462.50	7913.94	7908.45	4113.94	3624.35	3677.80	5200.20	3677.80	7474.20	5197.80	7474.20	6717.80	7474.20
Hydel														

Generating station/source	Installed Capacity (MW)		Net Capacity TS Share (MW)		Year wise Capacity (MW)									
					FY 2019-20		FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24	
	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
NSPH	815.60	815.60	807.44	807.44	807.44	807.44	807.44	807.44	807.44	807.44	807.44	807.44	807.44	807.44
NSLCPH	60.00	60.00	59.40	59.40	59.40	59.40	59.40	59.40	59.40	59.40	59.40	59.40	59.40	59.40
Pochampad-PH	36.00	36.00	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64
Nizamsagar-PH	10.00	10.00	9.90	9.90	9.90	9.90	9.90	9.90	9.90	9.90	9.90	9.90	9.90	9.90
Singur	15.00	15.00	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85
SSLM-LBPH	900.00	900.00	891.00	889.20	891.00	889.20	891.00	889.20	891.00	889.20	891.00	889.20	891.00	889.20
Priyadarshini-Jurala	234.00	234.00	231.66	231.66	231.66	231.66	231.66	231.66	231.66	231.66	231.66	231.66	231.66	231.66
Lower-Jurala	240.00	240.00	237.60	237.60	237.60	237.60	237.60	237.60	237.60	237.60	237.60	237.60	237.60	237.60
Pulichintala	120.00	120.00	118.80	118.80	118.80	118.80	118.80	118.80	118.80	118.80	118.80	118.80	118.80	118.80
Total Hydel	2430.60	2430.60	2406.29	2404.49	2406.29	2404.49	2406.29	2404.49	2406.29	2404.49	2406.29	2404.49	2406.29	2404.49
Total Genco	10893.10	10893.10	10320.23	10312.94	6520.23	6028.84	6084.09	7604.69	6084.09	9878.69	7604.09	9878.69	9124.09	9878.69
Interstate Hydel Projects														
Machkund PH	120.00	120.00	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81	44.81
Tungabhadra PH & Hampi	72.00	72.00	30.73	30.73	30.73	30.73	30.73	30.73	30.73	30.73	30.73	30.73	30.73	30.73
Total IS Hydel	192.00	192.00	75.54	75.55	75.54	75.55	75.54	75.55	75.54	75.55	75.54	75.55	75.54	75.55
CGS														
NTPC(SR)-Ramagundam-1-2	2100.00	2100.00	345.45	346.71	345.45	346.71	345.45	346.71	345.45	346.71	345.45	346.71	345.45	346.71
NTPC(SR)-Ramagundam-3	500.00	500.00	86.73	87.00	86.73	87.00	86.73	87.00	86.73	87.00	86.73	87.00	86.73	87.00
NTPC Talcher-Stage-2	2000.00	2000.00	214.47	215.00	214.47	215.00	214.47	215.00	214.47	215.00	214.47	215.00	214.47	215.00
NLC-Stage-I	630.00	630.00	59.93	66.53	59.93	66.53	59.93	66.53	59.93	66.53	59.93	66.53	59.93	66.53
NLC-Stage-II	840.00	840.00	107.13	115.67	107.13	115.67	107.13	115.67	107.13	115.67	107.13	115.67	107.13	115.67
NPC-MAPS	440.00	440.00	22.76	23.19	22.76	23.19	22.76	23.19	22.76	23.19	22.76	23.19	22.76	23.19
NPCIL-Kaiga-Unit 1&2	440.00	440.00	70.41	71.81	70.41	71.81	70.41	71.81	70.41	71.81	70.41	71.81	70.41	71.81
NPCIL-Kaiga-Unit 3&4	440.00	440.00	74.73	76.12	74.73	76.12	74.73	76.12	74.73	76.12	74.73	76.12	74.73	76.12

Generating station/source	Installed Capacity (MW)		Net Capacity TS Share (MW)		Year wise Capacity (MW)									
					FY 2019-20		FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24	
	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
NTPC-Simhadri-I	1000.00	1000.00	538.90	538.90	538.90	538.90	538.90	538.90	538.90	538.90	538.90	538.90	538.90	538.90
NTPC-Simhadri-II	1000.00	1000.00	231.30	229.20	231.30	229.20	231.30	229.20	231.30	229.20	231.30	229.20	231.30	229.20
NTECL Vallur	1500.00	1500.00	110.75	113.10	110.75	113.10	110.75	113.10	110.75	113.10	110.75	113.10	110.75	113.10
NLC Tamilnadu (Tuticorn) (NTPL)	1000.00	1000.00	152.37	154.90	152.37	154.90	152.37	154.90	152.37	154.90	152.37	154.90	152.37	154.90
NTPC Kudgi-I& II	2400.00	2400.00	271.68	271.20	271.68	271.20	271.68	271.20	271.68	271.20	271.68	271.20	271.68	271.20
KKNPP (Kudankulam Nuclear)	1000.00	1000.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
NCE-Bundled power NVVNL ph 1	85.00	85.00	45.81	45.81	45.81	45.81	45.81	45.81	45.81	45.81	45.81	45.81	45.81	45.81
NCE-Bundled power NTPC Coal	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
Neyveli New Unit-1	500.00	500.00	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66
Neyveli New Unit-2	500.00	500.00	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66	30.66
NLC-TPS - II 2nd expansion	1320.00	1320.00	299.01	299.01	0.00	0.00	0.00	0.00	0.00	0.00	299.01	299.01	299.01	299.01
Telangana STPP(ph 1)	1600.00	1600.00	1360.00	1360.00	0.00	0.00	1360.00	680.00	1360.00	1360.00	1360.00	1360.00	1360.00	1360.00
Total CGS	19495.00	19495.00	4302.75	4325.45	2643.74	2666.44	4003.74	3346.44	4003.74	4026.44	4302.75	4325.45	4302.75	4325.45
Joint Sector														
APGPCL-I	100.00	100.00	6.67	6.67	6.67	6.67	6.67	6.67	6.67	6.67	6.67	6.67	6.67	6.67
APGPCL-II	172.00	172.00	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84
Total Joint Sector	272.00	272.00	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51	24.51
Others														
Thermal-Power-Tech (Unit - I)	660.00	660.00	269.45	269.45	269.45	269.45	269.45	269.45	269.45	269.45	269.45	269.45	269.45	269.45
Thermal-Power-Tech (Unit - II)	660.00	660.00	570.00	570.00	570.00	570.00	570.00	570.00	570.00	570.00	570.00	570.00	570.00	570.00
Singareni-TPP Stage - I	1200.00	1200.00	1128.00	1131.00	1128.00	1131.00	1128.00	1131.00	1128.00	1131.00	1128.00	1131.00	1128.00	1131.00
Chhattisgarh-Power	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
Singareni Stage – II	800.00	800.00	752.00	754.00	0.00	0.00	0.00	0.00	0.00	0.00	752.00	754.00	752.00	754.00

Generating station/source	Installed Capacity (MW)		Net Capacity TS Share (MW)		Year wise Capacity (MW)									
					FY 2019-20		FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24	
	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
Staggered Medium term PSA with PTC	550.00	550.00	550.00	550.00	550.00	550.00	550.00	550.00	550.00	550.00	0.00	0.00	0.00	0.00
Total Others	4870.00	4870.00	4269.45	4274.45	3517.45	3520.45	3517.45	3520.45	3517.45	3520.45	3719.45	3724.45	3719.45	3724.45
NCE														
Bio-Mass	51.00	51.00	42.57	32.40	42.57	32.40	42.57	32.40	42.57	27.00	42.57	21.60	42.57	10.80
Bagasse	73.95	73.95	35.30	35.30	35.30	35.30	35.30	35.30	35.30	35.30	35.30	29.84	35.30	10.99
Industrial-Waste	18.50	18.50	17.16	13.65	17.16	13.65	17.16	13.65	17.16	13.65	17.16	13.65	17.16	13.65
MSW	17.60	49.40	17.60	28.30	17.60	0.00	17.60	28.30	17.60	28.30	17.60	28.30	17.60	28.30
Wind Power	100.80	100.80	100.30	100.30	100.30	100.30	100.30	100.30	100.30	100.30	100.30	100.30	100.30	100.30
Mini-Hydel	18.71	18.52	15.87	15.72	15.87	15.72	15.87	15.72	15.87	15.72	15.87	11.05	15.87	11.05
Solar	2826.93	2890.00	2826.93	2890.00	2826.93	2890.00	2826.93	2890.00	2826.93	2890.00	2826.93	2890.00	2826.93	2890.00
Solar Bundled under Ph-II	417.80	400.00	417.80	400.00	417.80	400.00	417.80	400.00	417.80	400.00	417.80	400.00	417.80	400.00
NTPC ISTS Connected Solar PSA	1099.95	1100.00	1099.95	1100.00	0.00	0.00	1099.95	1100.00	1099.95	1100.00	1099.95	1100.00	1099.95	1100.00
NTPC ISTS Connected Wind PSA	300.00	300.00	300.00	300.00	0.00	0.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00
Total NCE	4925.24	5002.17	4873.48	4915.67	3473.53	3487.37	4873.48	4915.67	4873.48	4910.27	4873.48	4894.74	4873.48	4865.09
DISCOMs Total			23865.96	23928.57	16255.00	15803.15	18578.81	19487.31	18578.81	22435.91	20599.82	22923.38	22119.82	22893.73
Open Access					285.15	285.15	313.66	313.66	345.03	345.03	379.53	379.53	417.49	417.49
Grand Total					16540.15	16088.30	18892.47	19800.97	18923.84	22780.93	20979.35	23302.91	22537.31	23311.22