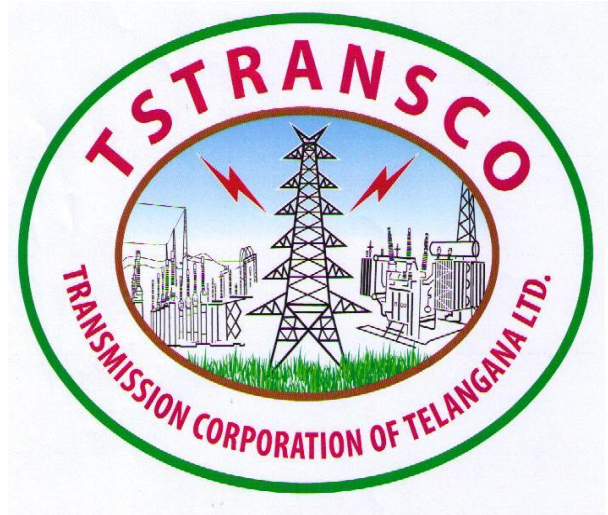


Transmission Corporation of Telangana Limited (State Transmission Utility)



**Filings for the Annual Performance Review on
Transmission Business for FY 2019-20 w.r.t.
Transmission Tariff Order dt.20.03.2020**

March 2021

**BEFORE THE HONOURABLE TELANGANA ELECTRICITY REGULATORY
COMMISSION**

AT ITS OFFICE AT Vth FLOOR, SINGARENI BHAVAN, RED HILLS,
HYDERABAD.

FILING NO. _____/2021

CASE NO. _____/2021

In the matter of:

Filing of the Annual Performance Review for the FY 2019-20 of the Transmission Business w.r.t. Transmission Tariff Order dated 20.03.2020 for the 4th Control Period i.e., for FY 2019-20 to FY 2023-24, read with Regulation No.5 of 2005 of APERC, adopted by TSERC as per Reg.No.1 of 2014.

In the matter of:

TRANSMISSION CORPORATION OF TELANGANA LIMITED ... Applicant

**AFFIDAVIT OF APPLICANT VERIFYING THE APPLICATION
ACCOMPANYING FILING OF ANNUAL PERFORMANCE REVIEW FOR THE
FY 2019-20 OF TRANSMISSION BUSINESS OF TSTRANSCO**

I, D. Prabhakar Rao, S/o D. Pashupathi Rao, working for gain at the Transmission Corporation of Telangana Limited do solemnly affirm and say as follows:

1. I am the Chairman and Managing Director of TSTransco, the licensee company operating and controlling the Transmission & SLDC business of electricity in Telangana pursuant to the license granted by the Hon'ble Commission. I am competent and duly authorized by TS Transco to affirm, swear, execute and file this affidavit in the present proceedings.

2. I have read and understood the contents of the accompanying filing of Annual Performance Review for the FY 2019-20. The statements made in the paragraphs of the accompanying application now shown to me are true to my knowledge derived from the official records made available to me and are based on information and advice received which I believe to be true and correct.


DEPONENT

VERIFICATION:

I, the above named Deponent solemnly affirm at Hyderabad on this 20th day of March, 2021 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.


DEPONENT

Solemnly affirmed and signed before me.


COMPANY SECRETARY
TSTRANSCO/HYDERABAD

BEFORE THE HONOURABLE TELANGANA ELECTRICITY REGULATORY COMMISSION

AT ITS OFFICE AT Vth FLOOR, SINGARENI BHAVAN, RED HILLS, HYDERABAD.

FILING NO. _____/2021

CASE NO. _____/2021

In the matter of:

Filing of the Annual Performance Review for the FY 2019-20 of the Transmission Business w.r.t. Transmission Tariff Order dated 20.03.2020, for the 4th Control Period i.e., for FY 2019-20 to FY 2023-24, read with Regulation No.5 of 2005 of APERC, adopted by TSERC as per Reg.No.1 of 2014.

In the matter of:

TRANSMISSION CORPORATION OF TELANGANA LIMITED ... Applicant

The Applicant respectfully submits as under: -

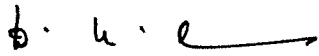
1. TSTRANSCO filed petition pertaining to Transmission Business for ARR, FPT and Transmission Tariff for the MYT of 4th Control Period i.e., FY 2019-20 to FY 2023-24 read with Regulation No. 5 of 2005 of APERC and adopted by TSERC as per Reg. No.1 of 2014.
2. Hon'ble Commission issued Tariff Order on 20.03.2020 for the ARR & Transmission Tariff for the 4th Control Period (FY 2019-20 to FY 2023-24).
3. TSERC directed TSTRANSCO to comply with the directives issued in the Transmission Tariff Order.

4. As part of compliance to the directives stipulated by Hon'ble Commission in the Transmission Tariff Order, TSTRANSCO made earnest efforts to meet the objectives laid out in the directives.
5. As per the directive No.3, i.e., Annual Performance Review, the licensee has 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 31.12.2020.
6. The licensee could not file the Annual Performance Review petition for the FY 2019-20 within the stipulated date as directed by the Commission. The reasons for the same are submitted in a separate petition with a request to condone the delay in filing the Annual Performance Review petition.
7. In compliance to the said directive, TSTRANSCO hereby submits the Annual Performance Review (True up) Petition for FY 2019-20 for Transmission Business along with the information enclosed in annexures for the Hon'ble Commission's approval.
8. The Performance parameters, achieved by TSTRANSCO for the FY 2019-20 are as follows:
 - (i) Transmission Availability : 99.98%
 - (ii) Transmission Loss : 2.65%
9. In the aforesaid circumstances, the applicant respectfully prays the Hon'ble commission
 - a) to take the accompanying Annual Performance Review petition along with the information enclosed in annexures.

- b) to grant suitable opportunity to TSTRANSCO within a reasonable timeframe to file additional material information if required.
- c) to pass such order, as the Hon'ble Commission may deem fit and proper in the facts & circumstances of the case.

TRANSMISSION CORPORATION OF TELANGANA LIMITED
(APPLICANT)

Through


D. PRABHAKAR RAO
CHAIRMAN AND MANAGING DIRECTOR

Place: HYDERABAD

Dated: 20th March, 2021

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1 Introduction

With the enactment of Andhra Pradesh Reorganisation Act 2014, the Telangana State has been carved out from the undivided Andhra Pradesh State as the 29th state of the Republic India on 02.06.2014.

The erstwhile Regulatory Commission of undivided State of Andhra Pradesh has issued Regulation No. 3 of 2014 (Reorganization) Regulation, 2014 on 25.05.2014. Consequent to the framing of Andhra Pradesh Reorganization Act 2014 notified by Government of India on 01.03.2014, where in clause 3 of the regulation says that, “All the regulations as well as their supplementary regulations/amendments, rules, orders, proceedings, guidelines, memos, notifications, other instruments issued immediately before 2nd June 2014 by the APERC for the conduct of business and other matters shall fully and completely apply to the whole of the states of Telangana and Andhra Pradesh and shall similarly apply in relation to all matters falling within the jurisdiction of the Commission until they are altered, repealed or amended by the respective State Electricity Regulatory Commissions”.

In accordance with the above regulation, all the regulations framed by erstwhile APERC will continue to apply for the state of Telangana. Subsequently, TSERC vide Telangana Official Gazette has issued its first regulation, Regulation No.1 of 2004 (adoption of Previously subsisting Regulations, Decisions, Directions or Orders, Licenses and Practice of Directions) wherein clause 2 says that “All regulations, decisions, directions or orders, all the licenses and practice directions issued by the erstwhile Andhra Pradesh Electricity Regulatory Commission (Regulatory Commission for States for 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 Commission”.

In compliance with the Regulations and Guidelines issued by the TSERC, TSTransco, the State Transmission Utility & Transmission Licensee managing the Transmission business herein submits the following in this Annual Performance Review (True-up) Petition:

- i. True Up - Analysis of Financial Performance for FY 2019-20.
- ii. Analysis of Performance of Transmission business for FY 2019-20.

2 True Up - Analysis of Performance from FY 2019-20 :

Transmission Corporation of Telangana Limited (TSTRANSCO) had filed Petition under Section 26(5) of the Andhra Pradesh Electricity Reform Act, 1998, Sections 61 to 64 of the Electricity Act, 2003 and relevant Guidelines and Regulations, before the Telangana State Electricity Regulatory Commission (TSERC) on 30.11.2019 for approval of Aggregate Revenue Requirement (ARR), Filing for Proposed Tariff (FPT) for Transmission Business for the 4th MYT Control Period from FY 2019-20 to FY 2023-24.

The Petition was admitted by the Hon'ble TSERC and assigned O. P. No. 3 of 2019. The Hon'ble TSERC, in exercise of its powers under the Electricity Act, 2003 and the Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Transmission of Electricity) Regulation No. 5 of 2005 as adopted by Hon'ble TSERC vide its Regulation No. 1 of 2014, and after considering Petitioner's submissions, suggestions and objections of the other stakeholders, responses of Petitioner, has issued ARR and Transmission Tariff Order for the 4th Control period (i.e., FY 2019-20 to FY 2023-24) and is applicable with effect from 20.03.2020.

The Hon'ble TSERC vide "Appendix B" has issued new directive No.3 where in the commission has directed the petitioner to file Performance Review (True up) for each year of the 4th Control period and as a first step directs the petitioner to file Annual performance Review for FY 2019-20 by 31.12.2020.

In compliance to the directive No.3 (Annual Performance Review for FY 2019-20) TSTRANSCO submit the following:

- Statement of variance with the Tariff Order for each item in the Aggregate Revenue Requirement and reasons for variation.
- Aggregate Revenue Requirement (ARR) for the year computed based on actual investments, interest and other costs.
- The Surplus/Deficit for the year arrived, based on revenue earned for FY 2019-20.

i) Operation and Maintenance (O&M) Expenses: The Actual O&M Expenses includes Employees Cost, Administrative & General Expenses, Repairs & Maintenance Expenses for FY 2019-20.

Table 1 : Variance in O&M Expenses (Rs. in crores)

Particulars	FY 2019-20		
	Tariff Order	Actuals	Deviation
Gross O&M Costs	848.32	942.61	94.29
Employees Cost		792.03	
Administrative & General Expenses		45.68	
Repairs & Maintenance Expenses		104.90	
Less: O&M Expenses Capitalised	91.71	109.23	17.52
Net O&M Expenses	756.61	833.38	76.77

- Net O&M Expenses for the year have been increased by Rs.76.77 crores.
- Main factors for increase in O&M expenditure is due to adoption of actuarial valuation Report for FY 2019-20 towards employee terminal benefits, which were not factored in the ARR filed by the TSTRANSCO and also Tariff Order issued by the Hon'ble Commission.

ii) Depreciation: Depreciation is a claim towards replacement cost of fixed assets. Depreciation has been calculated for the year on all the fixed assets on straight line method considering the rates notified by the Ministry of Power, Govt. of India.

Table 2 : Depreciation (Rs. in crores)

Particulars	FY 2019-20		
	Tariff Order	Actuals	Deviation
Depreciation	747.00	919.44	172.44

(a) The actual depreciation works to Rs.919.44 crores against allowed by commission for Rs.747.00 crores due to which there is an increase of Rs.172.44 cores towards depreciation mainly on account of difference in depreciation rates considered by Hon'ble TSERC.

(b) Further, it is also to submit that the depreciation as per CERC norms was calculated and submitted to Hon'ble TSERC in compliance to New Directive No.5 of 4th control period. The depreciation as per CERC norms works to Rs.839.21crores.

iii) Taxes on income:

Table 3 : Taxes on income (Rs. in crores)

Particulars	FY 2019-20		
	Tariff Order	Actuals	Deviation
Income Tax	61.85	66.77	4.92

Tax on income was calculated at current rate of Minimum Alternate Tax (MAT) on the Return on Equity (ROE) @14% on 25% of actual Regulated Rate Base.

iv) Return on Capital Employed (ROCE): Return on Capital Employed (ROCE) is to cover the interest charges on the debt portion and Return on Equity on the actual Regulated Rate Base of TS TRANSCO in 75:25 Debt Equity Ratio. The licensee has computed the actual Return on Capital Employed (ROCE) for the year as per the methodology prescribed by the Hon'ble Commission vide Regulation 5 of 2005.

Table 4 : ROCE (Rs. in crores)

Particulars	FY 2019-20		
	Tariff Order	Actuals	Deviation
Assets		17550.32	
Original Cost of Fixed Assets (OCFA)		14821.22	
Additions to OCFA		2729.10	
Depreciation		5323.62	
Opening Balance		4404.18	
Depreciation during the year		919.44	
Consumer Contributions		2876.94	
Opening Balance		1950.83	
Additions during the year		926.12	
Working Capital		102.75	
Change in Rate Base		441.77	
Regulated Rate Base (RRB)	8346.69	9010.73	664.04
Cost of Debt (Interest & Finance Charges)	616.61	702.30	85.69
Return on Equity @14% on 25% of RRB	292.13	315.38	23.25
Return on Capital Employed (ROCE)	908.75	1017.68	108.93

- The depreciation for the year has been calculated on straight line method considering the depreciation rates notified by the Ministry of Power, Govt. of India.
- The Return on Capital Employed (ROCE) for the year is computed by adding the interest expenditure at actual (net of interest capitalized) and Return on Equity (ROE) @14% on 25% of actual Regulated Rate Base.
- The increase in Regulated Rate Base (RRB) is mainly on account reduction in Consumer Contribution during the FY 2019-20.
- The Return on Capital Employed has been increased by Rs.108.93 crores based on actual Regulated Rate Base for FY 2019-20.

v) Revenue: The following is the position of Revenue FY 2019-20 :

Table 5 : Revenue

(Rs. in crores)

Particulars	FY 2019-20		
	Tariff Order	Actuals	Deviation
Revenue from Transmission Charges	1631.92	1491.31	-140.61
Other Income	296.14	514.82	218.68
Total:	1928.06	2006.13	78.07

- The actual transmission business income is decreased by Rs.194.13 crores as the tariff applicability date notified by Hon'ble TSERC for the FY 2019-20 with effect from 28th March, 2020, thereby the licensee could not able to recover the approved ARR for FY 2019-20. It is also to submit that the licensee has earned Rs.53.52 crores towards Interstate transmission charges (Pertaining to FY 2016-17) as per CERC approved ARR during FY 2019-20.
- The other income has increased by Rs.218.68 crores mainly on account of amortization of LIS and Deposit Contribution Work Assets depreciation.

vi) Aggregate Revenue Requirement (ARR) True up (Tariff Order Vs Actuals) for FY 2019-20:

The Total Aggregate Revenue Requirement (ARR) approved by Hon'ble Commission for the year is Rs.1928.06 crores, as against which the actual ARR is Rs.2837.27 crores. Whereas the company has received Rs.2006.13 crores by way revenue including other income. Thereby the company has incurred a deficit amount of Rs.831.14 crores during FY.2019-20.

Table 6 : ARR

(Rs. in crores)

Particulars	FY 2019-20		
	Tariff Order	Actuals	Deviation
Expenditure	1111.02	1928.82	817.80
O&M Costs	848.32	942.61	94.29
O&M Carrying Costs	0.00	0.00	0.00
Depreciation	747.00	919.44	172.44
Taxes	61.85	66.77	4.92
Special Appropriation	-546.15		546.15
Other Expenses	0.00	0.00	0.00
Less: Expenses Capitalised	91.71	109.23	17.52
IDC Capitalised	0.00	0.00	0.00
O&M Exp. Capitalized	91.71	109.23	17.52
Net Expenditure	1019.31	1819.59	800.28
Return on Capital Employed (ROCE)	908.75	1017.68	108.93
Gross ARR	1928.06	2837.27	909.21
Non Tariff Income	296.14	514.82	218.68
Revenue from Tariff	1631.92	1491.31	-140.61
Total Revenue	1928.06	2006.13	78.07
Surplus/(Deficit)	0.00	-831.14	-831.14

The Hon'ble TSERC has adjusted an amount of Rs.546.15 crores (including carrying cost) by way of special appropriation while reviewing 3rd control period (i.e., FY 2014-15 to FY 2018-19). Whereas, the actual True up provision available in the books of TS TRANSCO as per audited accounts as of FY 2018-19 is only Rs.287.59 crores.

The TS TRANSCO has incurred a deficit of Rs.831.14 crores for FY 2019-20. After adjustment/reversal of true-up provision available in the books of accounts, the net claim/regulatory receivable for the FY 2019-20 works to Rs.543.55 crores.

In view of the factual figures and reasons explained for the deficit incurred by TSTRANSCO for FY 2019-20 in compliance to the New Directive No.3 towards Annual Performance Review, the Hon'ble commission is requested to consider the claim of Rs.543.55 crores by way of special appropriation.

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ANNEXURE – I PLANS FOR SYSTEM PERFORMANCE

REPRESENTATIVE SYSTEM LOAD CURVES

1 Requirement in the Guidelines:

Representative system load curves for weekdays and weekends for various seasons (such as summer, winter and monsoon). Indicate in case if any load restriction was imposed. Also provide expected system load curves for the ensuing year and indicate the expected supply curves in each case. (Guidelines – 10a).

2 TSTRANSCO's Response:

Typical Full load details along with curves for three seasons representing Peak demand met day and Peak demand met on weekend day for the year 2019-20 follows:-

For 2019-20

Sl.No	Season	Date
1	Typical week end day in summer	01st March 2020
2	Typical full load day in summer	03rd March'2020
3	Typical week end day in monsoon	18th August'2019
4	Typical full load day in monsoon	30th August'2019
5	Typical full load day in winter	28th February'2020
6	Typical week end day in winter	29th February'2020

The highest system peak demand of 13168 MW was recorded on 28.02.2020 @ 07:52 AM for the FY 2019-20.

A brief analysis of system demand for all seasons of the year 2019-20 is furnished in the following sections:

For 2019-20

PEAK GRID DEMAND				
SEASON	Max MW	Max Date	Min MW	Min Date
SUMMER	12941	03.03.2020	4685	03.06.2019
MONSOON	11703	30.08.2019	4782	03.08.2019
WINTER	13168	28.02.2020	5189	03.12.2019

3 Summer season

For 2019-20

From the daily system load curves (vide annexure 1.a) on the day when the highest system peak was recorded (the maximum demand recorded on 03.03.2020 was 12941 MW), it can be seen that the system peak load is continuously maintained above 8157 MW (minimum on 03.03.2020) throughout the day. The minimum system demand recorded during the summer season was 4685 MW on 03rd June 2019. The demand variation in summer was between 4685 MW and 12941 MW.

4 Monsoon season

For 2019-20

From the daily system load curves (vide annexure 1.b) on the day when the highest system peak was recorded (the maximum demand recorded 30.08.2019 was 11703 MW), it can be seen that the system peak load is continuously maintained above 8003 MW (minimum on 30.08.2019) throughout the day. The minimum system demand recorded during the monsoon season was 4782 MW on 03rd August 2019. The demand variation in monsoon was between 4782 MW and 11703 MW.

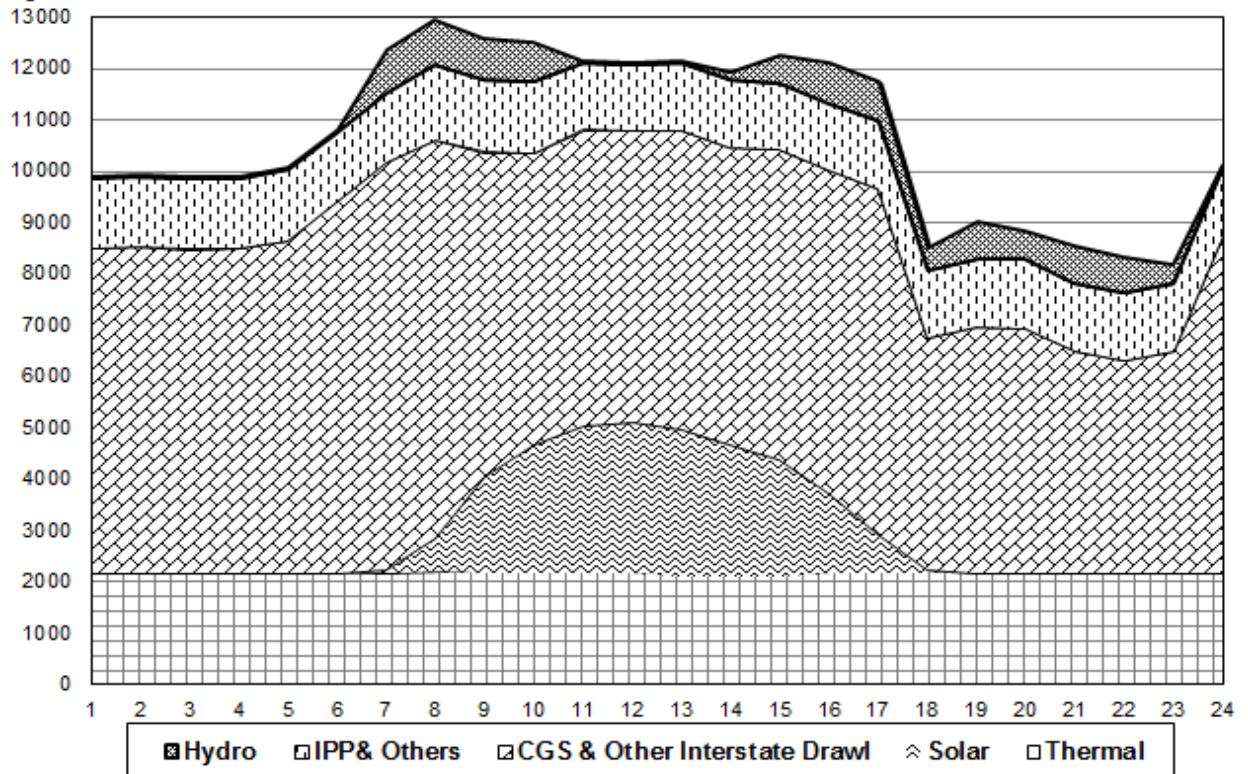
5 Winter season

For 2019-20

From the daily system load curves (vide annexure 1.c) on the day when the highest system peak was recorded (the maximum demand recorded on 28.02.2020 was 13168 MW), it can be seen that the system peak load is continuously maintained above 7975 MW (minimum on 28.02.2020) throughout the day. The minimum system demand recorded during the winter season was 5189 MW on 03rd December 2019. The demand variation in dry winter was between 5189 MW and 13168 MW.

Annexure 1.a

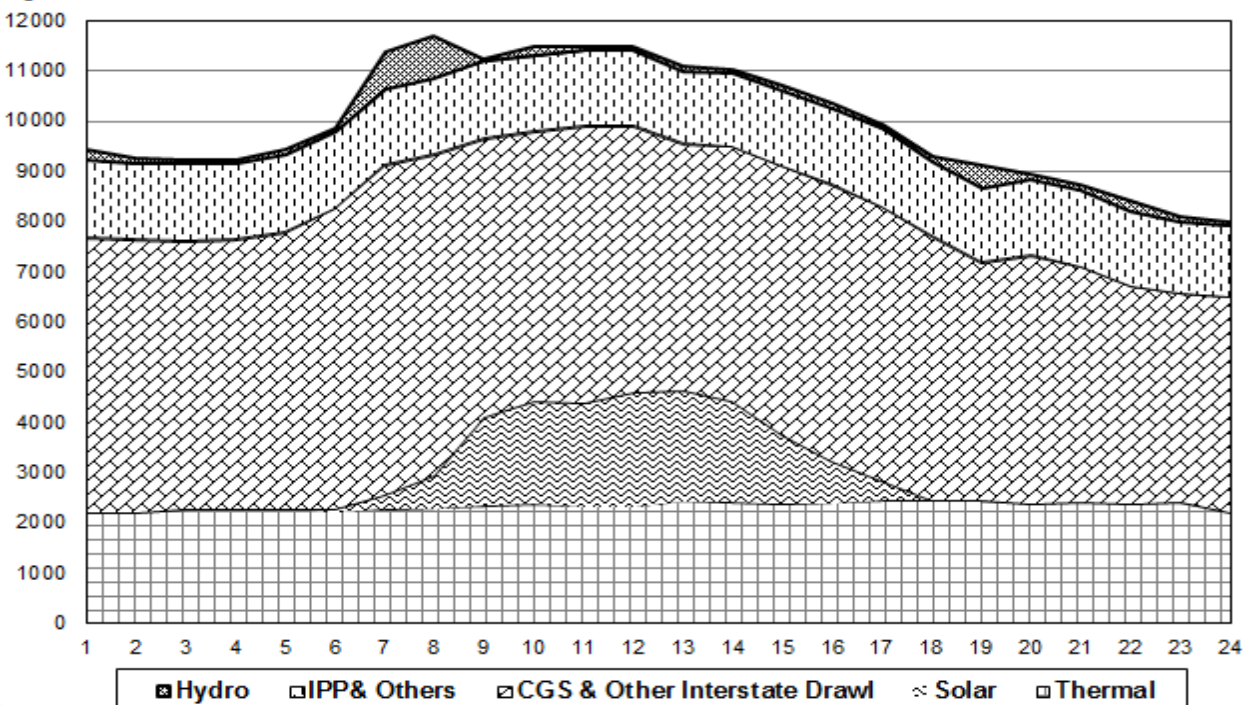
Fig in MW TS DEMAND Curve for the F.Y - 2019-20 Summer season on 03rd March'2020



Annexure 1.b

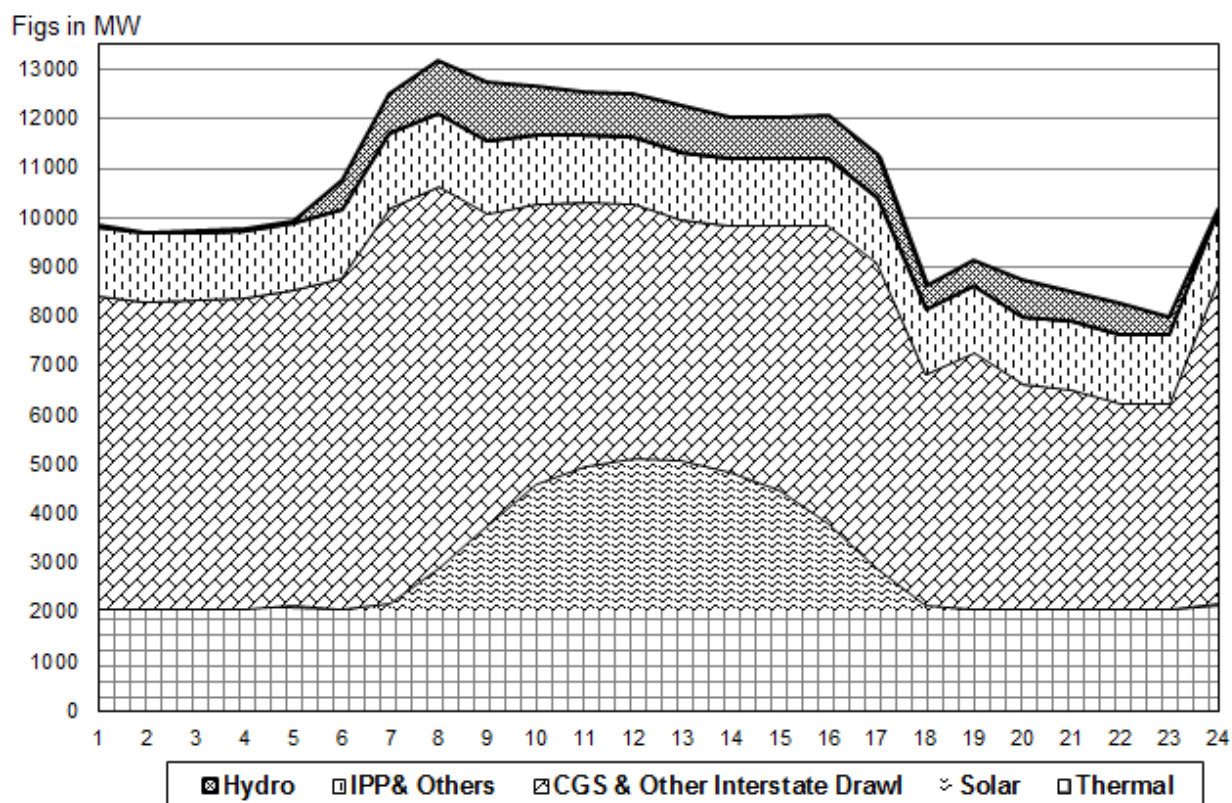
TS DEMAND Curve for the F.Y - 2019-20 Monsoon Season on 30th August'2019

Figs in MW



Annexure 1.c

TS DEMAND Curve for the F.Y - 2019-20 Winter Season on 28th February'2020



LOAD DURATION CURVES

1. Requirement in the guidelines

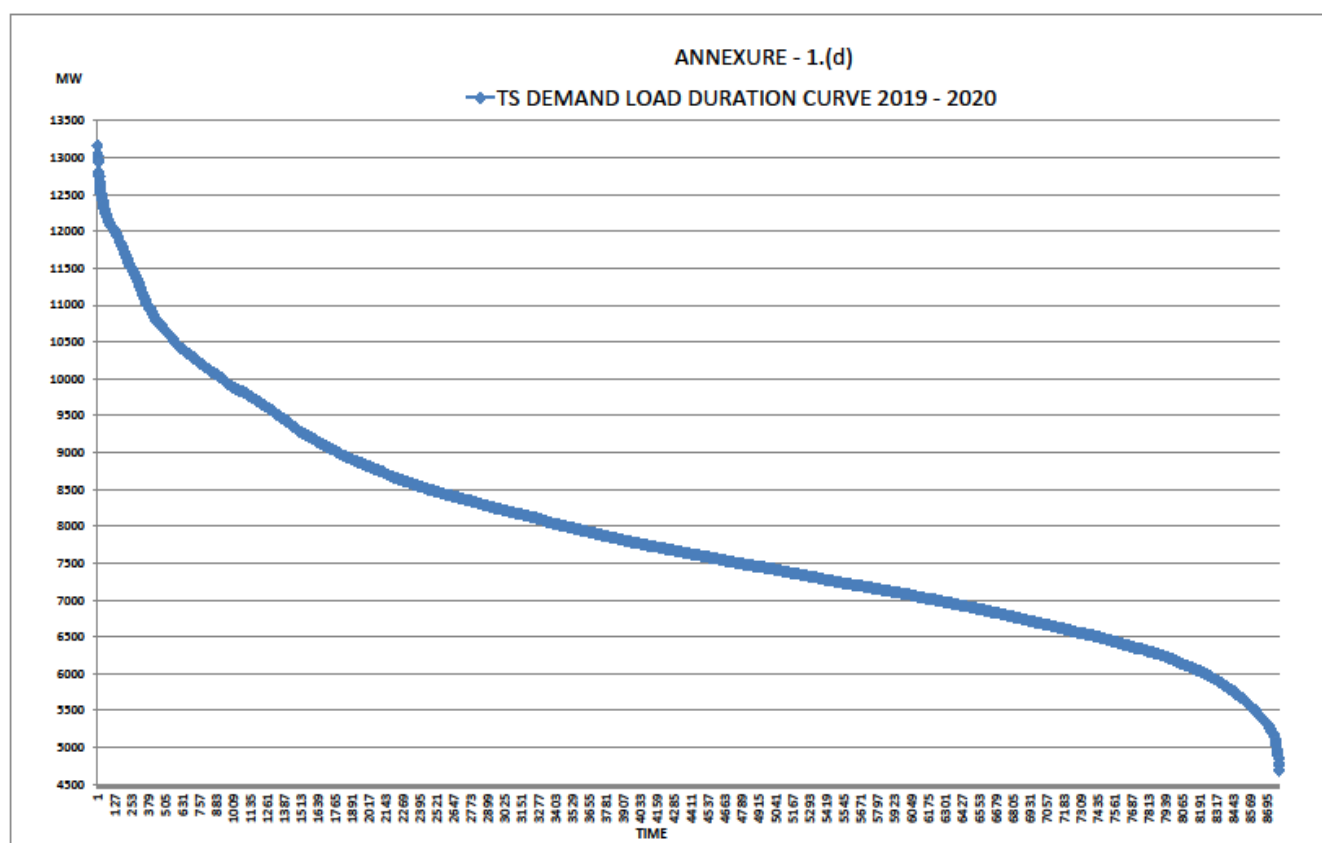
Load duration curves for the past year and current year and expected load duration curve for the ensuing year. Indicate energy unserved on the load duration curves. (Guidelines – 10b)

2. TSTRANSCO's Response:

The energy availability in FY 2019-2020 is 100% of the total energy requirement.

Load duration curves for the FY 2019-2020 is enclosed as Annexure 1(d)

Annexure 1(d)



PLANS FOR CAPITAL EXPENDITURE

1. Requirement in the Guidelines.

Plans for all Capital Expenditure. (Guidelines – 10g)

2. TSTransco's Response

Write up of completed works: 220kV & 132kV Schemes

1. 220/132/33 KV Substation at Nagarkurnool in Nagarkurnool Dist

- The scheme is formulated under “System Improvement Transmission Scheme under 9 Hrs agricultural Supply during day” covered in 400kV Dindi scheme.
- The administrative approval was accorded vide T.O.O.(CE-Construction) Ms.No.116, Dt: 02-07-2015, Amount: Rs.379.23 Cr.
- The scheme envisages the following works.
 - (i) Erection of 220/132/33 KV Substation at Nagarkurnool in Nagarkurnool Dist with 2x100 MVA.
 - (ii) 220KV DC/SC Line from proposed 400KVSS Dindi to proposed 220 kV Nagarkurnool Substation – 43 KM.
 - (iii) 132KV DC Line from proposed 220 kV Nagarkurnool Substation to existing 220 kV Nagarkurnool Substation.
 - (iv) 132 kV Bay Extensions at existing 220 kV Nagarkurnool Substation.
- The investment approval No.CRN/TST/TS/400 KV Dindi Substation/ Trans.Implement scheme/Invest Approval No.16/15, date.07.01.2016 Amount.Rs.334.53 Cr.
- Funding tied up with M/s REC Ltd & amount Rs. 273.55 Cr.
- Purchase Order Date: 08.06.2016 & Amount Rs. 38.76 Cr.
- Date of Commission: 03.04.2019.

2. Upgradation of existing 132/33 KV SS Janagaon to 220/132/33 KV SS Jangaon in Jangaon District

- The scheme is formulated under “System Improvement Transmission Scheme under 9 Hrs agricultural Supply during day” covered in 400kV KTPS VII Stage Power Transmission Scheme.
- The administrative approval was accorded vide T.O.O.(CE-400 KV) Ms.No.139, Dt: 11-09-2017, Amount: Rs.1412.53 Cr.

- The scheme envisages the following works.
 - (i) Up gradation of 132/33 kV Jangaon SS to 220/132/33 kV Jangaon Sub Station with 2x100 MVA.
 - (ii) Proposed 400/220kV Jangaon SS to the proposed up graded 220/132/33 kV Jangaon SS DC Line with Single Moose Conductor -15 KM.
- The investment approval No.CRN No.TST/TS/KPPS-VII stage (1x800 MW)/ power transmission scheme/Revised Invest. Approval No.01/17, date. 28.04.2017, Amount Rs.1223.67 Cr.
- Funding tied up with M/s PFC Ltd & amount Rs.1077.12 Cr.
- Purchase Order Date: 07.02.2018 & Amount: 21.10 Cr.
- Date of Commission: 20.05.2019.

3. 220/33 KV Sub-station at Domalapenta in Nagarkurnool district

- The scheme is formulated under “providing power supply to Domalapenta & Eegalapenta Villages, offices & residential quarters of TSGENCO & I&CAD located in the area.”
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 173 Dated: 15.12.2016, Amount: Rs.14.20 Cr.
- The scheme envisages the following works.
 - (i) Erection of 220/33 kV Sub-Station with 220/33 kV, 2x31.5 MVA.
 - (ii) Erection of 220 kV DC line on Galvanised Towers with Moose ACSR for LILO of one circuit of the existing 220 kV Srisailam – Dindi DC Line to the proposed 220 kV Sub-Station, Domalapenta.
- Funding tied up with M/s PFC Ltd & amount Rs.12.41 Cr.
- Purchase Order Date: 05.03.2018 & Amount: Rs.11.77 Cr.
- Date of Commission: 26.07.2019.

4. 220/132/33 KV Sub-station at Meenajipet in Siddipet District

- The scheme is formulated “to improve the voltage profile in and around Gajwel.”
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No.84, Dated: 27.05.2017., Amount: Rs.79.04 Cr.
- The scheme envisages the following works.

- (i) Erection of 220/132/33 kV Sub-Station at Meenajipet with 2 X 100 MVA + 2 X 31.5 MVA PTRs.
 - (ii) Erection of 220 kV DC line with Moose ACSR Conductor on Galvanised Towers from proposed Narsapur 400/220/132 kV SS to the now proposed Meenajipet 220/132/33 kV SS – 25 KM.
 - (iii) Erection of 132 kV DC/SC Line with Panther ACSR Conductor on Galvanized Towers from the proposed 220/132/33 kV Meenajipet SS to 132/33 kV Doulothabad SS – 25 KM.
 - (iv) Erection of 132 kV DC Line with Panther ACSR Conductor on Galvanized Towers from the proposed 220/132/33 kV Meenajipet SS to 132/33 kV Thunki Bollarum SS – 7 KM.
 - (v) Stringing of second circuit from 132/33 kV Thunki Bollarum to 132/33 kV Ganeshpally SS – 21 KM.
 - (vi) Erection of 220 kV Bays at 400/220/132 kV SS Narsapur for connectivity from 400/220/132 kV Narsapur SS to the 220/132/33 kV Meenajipet SS – 2 Nos.
 - (vii) Erection of 132 kV Bays at Doulothabad 132 kV SS (1), 132kV Thunki Bollarum SS (3) and 132kV Ganeshpally SS (1)- Total 5 Nos.
- The investment approval No TST/TS/132 kV SS- 220 kV Toopran, 132 kV Ganeshpally & 132 kV Duddeda SS / F-INVST-07/2015, dt.09.04.2015, Amount in crs.76.78.
 - Funding tie up with M/s REC Ltd. & amount Rs.68.44 Cr.
 - Purchase Order Date: 23.12.2016, 06.04.2018 & Amount: Rs.35.48 Cr.
 - Date of Commission: 06.02.2020.

5. Up gradation of 132/33 kV Renzal SS to 220/132 kV Renzal Sub Station in Nizamabad District

- The scheme is formulated under “System Improvement Transmission Scheme” covered in 400kV Nirmal scheme.
 - The administrative approval was accorded vide T.O.O. (CE-400kV) Ms. No. 07, Dated: 09.01.2018, Amount: Rs.1151.05 Cr.
 - The scheme envisages the following works.
- (i) Up gradation of 132/33 kV Renzal SS to 220/132 kV Renzal Sub Station with 2x100 MVA.

- (ii) 220kV DC Line from proposed 400/220kV Nirmal SS to the proposed up graded 220/132 kV Renzal SS – 68 KM.
- The investment approval No .CRN No.TST/TS/400 KV Nirmal /F.Revised Invest.Approval No.4/16/2016-17,date.21.06.2016, Amount .Rs.1075.56 Cr.
- Funding tie up with M/s REC Ltd & amount Rs.843.16 Cr/Addl.166.30 Cr.
- Purchase Order Date: 05.10.2016 & Amount Rs.60.97 Cr.
- Date of Commission: 15.02.2020.

6. 132/33 KV Sub-station Jangapalli in Karimnagar District

- The scheme is formulated under “System Improvement Transmission Scheme to overcome the low voltage problems and to provide quality power supply to the consumers”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No. 140, Dated: 30.07.2015, Amount Rs.1979.00 Lakhs.
- The scheme envisages the following works.
 - (i) Erection of 132/33 kV Sub-Station at Jangapally with 3 X 10/16 MVA PTRs.
 - (ii) Erection of 132 kV DC line on Galvanised Towers with Panther ACSR for making LILO of 132 kV Durshed to Shanigaram line to the proposed 132/33 kV Sub-Station, Jangapally- 14KM.
- Funding tie up with M/s. PFC Ltd & amount Rs.1668.00 Lakhs.
- Purchase Order Date: 03.03.2018 & Amount 1177.00 Lakhs.
- Date of commission: 02.06.2019.

7. 132/33KV Substation at N.V.Puram in Jayashankar Bhupalpally District

- The scheme is formulated under “System Improvement Transmission Scheme under 9 Hrs agricultural Supply during day”.
- The administrative approval was accorded vide T.O.O.(CE-Construction) Ms.No.11, Dt: 07.03.2014, Amount:1996.47 Lakhs.
- The scheme envisages the following works.
 - (i) 132/33 kV Substation at N.V.Puram with 2 x 16 MVA (Released) PTR Capacity.
 - (ii) 132kV DC/SC line from Kamalapuram 132/33 kV SS in Warangal district to the proposed 132/33 kV N.V.Puram Substation- 5.5KM.

- (iii) 220 kV DC/SC line on Galvanised Towers with Moose conductor along with JC Towers in Godavari river crossing area- 3.5 KM.
- (iv) 132 kV Bay extension at Kamalapuram 132 kV SS- 1No.
- Funding tie up with M/s. REC Ltd. & amount Rs.1055.21 Lakhs.
- Purchase Order Date: 17.08.2016 & Amount:Rs. 2023.00 Lakhs.
- Date of Commission: 24.06.2019.

8. 132/33KV Sub-station at Khaithlapur in Rangareddy District

- The scheme is formulated under “System Improvement Transmission Scheme to meet the load demands of industrial areas and in view of multiple load growth with Commercial complexes coming up in the area”.
- The administrative approval was accorded vide T.O.O (CE-Construction-I) Ms. No. 22, Dt: 10.09.2014, Amount: Rs. 6604.00 Lakhs.
- The scheme envisages the following works.
 - (i) 132/33 kV Substation at Khaitalapur with 2 x 31.5 MVA PTR Capacity.
 - (ii) Erection of 132kV DC XLPE (UG Cable) from 220/132kV Miyapur SS to the proposed 132/33kV Khaitalapur SS- 7.5KM.
 - (iii) 132 kV Bay extension at proposed 220/132 kV Miyapur SS- 2 Nos.
- The investment approval No APT/TS/132 KV SS Kaithlapur/F-INVST-4/2014, dt. 01.09.2015 and Amount Rs. 66.04 Crs.
- Funding tie up with M/s. REC Ltd & amount Rs.5909.27 Lakhs.
- Purchase Order Date: 05.07.2016 & Amount: Rs.5340.00Lakhs.
- Date of Commission: 27.08.2019.

9. 132/33 KV Sub-station at Bachannapet in Janagaon District

- The scheme is formulated under “System Improvement Transmission Scheme under 9 Hrs agricultural Supply during day”.
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No 76 Dated: 25.05.2016, Amount Rs.1938.00 Lakhs.
- The scheme envisages the following works.
 - (i) Erection of 132/33 kV Sub-Station at Bachannapet in Warangal District with 3 X 10/16 MVA PTRs.

- (ii) Erection of 132 kV DC/SC line on Galvanised Towers with Panther ACSR from proposed 220/132 kV Sub-Station, Jangoan to the proposed 132kV Sub-Station at Bachannapet- 18KM.
- (iii) Erection of 132kV Bay at 220/132 kV SS, Jangoan- 1No.
- Funding tie up with M/s. PFC Ltd & amount Rs.1671.00 Lakhs.
- Purchase Order Date: 06.06.2018 & Amount: Rs.988.00 Lakhs.
- Date of Commission: 31.10.2019.

10. 132/33KV Substation at Chandrugonda in Khammam District

- The scheme is formulated under “System Improvement Transmission Scheme under 9 Hrs agricultural Supply during day covered in 400KV Bhadradi Thermal Power Transmission Scheme”.
- The administrative approval was accorded vide T.O.O.(CE-Projects-I) Ms.No.15,Dt:29.04.2016, Amount: Rs.1304.36 Crores.
- The scheme envisages the following works.
 - (i) 132kV Chandrugonda Sub Station with PTR Capacity 2X31.5 MVA.
 - (ii) 132kV DC/SC line from proposed 220/132kV SS Kalluru to 132/33kV SS Chandrugonda (Single Zebra).-30KM.
- The investment approval No.CRN/TST/TS/Bhadradi (4x270) MW Thermal Power Transmission/Investment Approval No.17/15, date. 07.01.2016 Amount.Rs.1179.61 Cr.
- Funding tie up with M/s. PFC Ltd & amount Rs.1150.16 Crores.
- Purchase Order Date: 03.11.2016 & Amount: Rs.1913.00 Lakhs.
- Date of Commission: 02.11.2019.

11. 132/33 KV Substation Yadagirigutta in Yadadri-Bhongir District

- The scheme is formulated under “System Improvement Transmission Scheme to cater to the upcoming loads in view of the development of Temple Town at Yadagirigutta and its surrounding areas and to provide quality power supply.
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No.69, Dated: 09.05.2017, Amount: Rs.1506.00 Lakhs.
- The scheme envisages the following works

- (i) Erection of 132/33 kV Sub-Station at Yadagirigutta Temple Town with 2 X 31.5 MVA PTRs.
 - (ii) Erection of 132 kV DC line with Panther ACSR Conductor on Galvanised Towers for LILO of LILO of 132 kV Bhongiri - Raghunathapally (Bhongir-Shapurnagar-Kolanpak) line to the proposed 132 kV Yadagirigutta SS- 2 KM.
- Funding tie up with M/s. PFC Ltd. & amount Rs.1316.00 Lakhs.
 - Purchase Order Date: 16.07.2018 & Amount: Rs.1063.00Lakhs.
 - Date of Commission: 11.12.2019.

12. 132/33KV Substation at Sarangapur in Adilabad District

- The scheme is formulated under “System Improvement Transmission Scheme to provide uninterrupted supply, to shorten the length of 33 kV lines and subsequently overcome the low voltage problems”.
 - The administrative approval was accorded vide T.O.O (CE-Transmisssion) MS.No. 231,Dt: 21.12.2015, Amount Rs.1993.00 Lakhs.
 - The scheme envisages the following works
 - (i) Erection of 132/33 kV Sub-Station at Sarangapur in Adilabad District with 3 X 10/16 MVA PTRs.
 - (ii) Erection of 132 kV DC line on Galvanised Towers with Panther ACSR for making LILO of 132 kV Nirmal – Bhainsa line to the proposed 132/33 kV Sub-Station, Sarangapur- 14KM.
- Funding tie up with M/s. REC Ltd & amount Rs.1765.95 Lakhs.
 - Purchase Order Date: 04.04.2018 & Amount: Rs.1315.86 Lakhs.
 - Date of Commission: 11.12.2019.

13. 220KV line on Multi circuit towers for making LILO of both circuits of existing 220 KV Waddekothapalli - Bhongir DC line at 400/220 KV SS Jangaon

- The scheme is covered in 400kV KTPS VII Stage Power Transmission Scheme.
- The administrative approval was accorded vide T.O.O.(CE-400 KV) Ms.No.139, Dt: 11-09-2017, Amount: Rs.1412.53 Cr.
- The scheme envisages the following works

- (i) 220KV line on Multi circuit towers for making LILO of both circuits of existing 220 KV Waddekothapalli - Bhongir DC line at 400/220 KV SS Jangaon -26.015 KM.
- (ii) 220kV Bay Extensions at 400kV Jangaon SS – 4 Nos.
- The investment approval No.CRN No.TST/TS/KPPS-VII stage (1x800 MW)/ power transmission scheme/Revised Invest.Approval No.01/17, date. 28.04.2017, Amount .Rs.1223.67 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs.1077.12 Cr.
- Purchase Order Date:08.05.2018 & Amount Rs.38.34 Cr.
- Date of Commission: 12.06.2019.

14. Erection of 220 KV LILO line (24Km) from existing 220 KV KTPS-Shapurnagar SC line to proposed 400/220 KV SS Jangaon in Jangaon District

- The scheme is covered in 400kV KTPS VII Stage Power Transmission Scheme.
- The administrative approval was accorded vide T.O.O.(CE-40 KV) Ms.No.139, Dt: 11-09-2017, Amount: Rs.1412.53 Cr.
- The scheme envisages the following works
 - (i) Erection of 220 KV LILO line (24Km) from existing 220 KV KTPS-Shapurnagar SC line to proposed 400/220 KV SS Jangaon- 8.5 KM .
 - (ii) 220kV Bay Extensions at 400kV Jangaon SS – 2 Nos.
- The investment approval No.CRN No.TST/TS/KPPS-VII stage (1x800 MW)/ power transmission scheme/Revised Invest.Approval No.01/17, date. 28.04.2017, Amount .Rs.1223.67 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs.1077.12 Cr.
- Purchase Order Date: 23.04.2018 & Amount Rs14.87 Cr.
- Date of Commission: 10.08.2019.

15. 220kV DC line for making LILO of 220kV KTPS-Shahpurnagar SC line to 220/132kV SS Waddekothapally with Single moose conductor

- The scheme is covered in 400kV KTPS VII Stage Power Transmission Scheme.

- The administrative approval was accorded vide T.O.O.(CE-40 KV) Ms.No.139, Dt: 11-09-2017, Amount: Rs.1412.53 Cr.
- The scheme envisages the following works.
 - (i) 220kV DC line for making LILO of 220kV KTPS-Shahpurnagar SC line to 220/132kVSS Waddekothapally with Single moose conductor -24 KM.
 - (ii) 220kV Bay Extensions at 400kV Jangaon SS – 2 Nos.
- The investment approval No.CRN No.TST/TS/KPPS-VII stage (1x800 MW)/ power transmission scheme/Revised Invest.Approval No.01/17, date. 28.04.2017, Amount .Rs.1223.67 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs.1077.12 Cr.
- Purchase Order Date: 23.05.2018 & Amount:Rs.10.88 Cr.
- Date of Commission: 13.08.2019.

16. LILO of 220 KV RSS-Nirmal line to 220 kV Jagityal (Circuit-I & III)

- The scheme is formulated under “System Improvement Transmission Scheme” covered in 400kV Nirmal scheme.
- The administrative approval was accorded vide T.O.O. (CE-400kV) Ms.No.07, Dated: 09.01.2018, Amount: Rs.1151.05 Cr.
- The scheme envisages the following works
 - (i) LILO of 220 KV RSS-Nirmal line to 220 V Jagityal (Circuit-I & III). -3 KMr).
 - (ii) 220kV Bay Extensions at 220kV Jagityal SS – 4 Nos, Amount Rs.5.80 Cr.
- The investment approval No .CRN No.TST/TS/400 KV Nirmal /F.Revised Invest.Approval No.4/16/2016-17,date.21.06.2016, Amount .Rs.1075.56 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs.1077.12 Cr.
- Purchase Order Date:11.04.2018 & Amount:Rs.4.90 Cr.
- Date of Commission: 20.11.2019.

17. 220 KV line from Jagityal - Vemnur (Circuit-IV & II)-(LILO of Vemnur-Nirmal to 220 KV Jagityal SS)

- The scheme formulated under “System Improvement Transmission Scheme” covered in 400kV Nirmal scheme.

- The administrative approval was accorded vide T.O.O. (CE-400kV) Ms.No.07, Dated: 09.01.2018, Amount: Rs.1151.05 Cr.
- The scheme envisages the following works
 - (i) 220 KV line from Jagityal - Vemnur (Circuit-IV & II)-(LILO of Vemnur-Nirmal to 220 KV Jagityal SS) -3 KM.
 - (ii) 220kV Bay Extensions at 220kV Jagityal SS – 4 Nos.
- The investment approval No .CRN No.TST/TS/400 KV Nirmal /F.Revised Invest.Approval No.4/16/2016-17,date.21.06.2016, Amount .Rs.1075.56 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs.1077.12 Cr.
- Purchase Order Date:11.04.2018 & Amount:Rs.4.90 Cr.
- Date of Commission: 20.11.2019.

18. 220 kV DC line for LILO of Chandrayangutta - Imlibun line (UG Cable) to 220/33 kV GIS substation, Chanchalguda

- The scheme is formulated under “System Improvement Scheme” covered in 220/33 kV GIS Sub-Station at Chanchalguda scheme.
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 26, Dated: 27.02.2017, Amount: Rs.89.12 Cr.
- The scheme envisages the following work
 - (i) 220 kV DC line for LILO of Chandrayangutta - Imlibun line (UG Cable) to 220/33 kV GIS substation, Chanchalguda -1 KM.
- The investment approval No. CRN TS/TST/220/33 KV,GIS, Chanchaguda /Invest.Approval No.7/17-2017-18, date.August-2017 Amount Rs.89.12 Cr.
- Funding tie up with M/s REC Ltd & amount Rs.80.20 Cr.
- Purchase Order Date: 28.02.2018& Amount: Rs.63.74 Cr.
- Date of Commission: 26.02.2020.

19. 220KV Durshed-Sircilla LILO to Ramadugu SS (Circuit-I)

- The scheme is formulated under “System Improvement Scheme” covered in Telangana STPP scheme.
- The administrative approval was accorded vide T.O.O.(CE-400kV) Ms.No.104 , Dt:12.07.2017, Amount: Rs.1256.86 Cr.

- The scheme envisages the following work
 - (i) 220KV Durshed-Sircilla LILO to Ramadugu SS (Circuit-I)-12 KM.
- The investment approval No.CRN/TS/TST/Investment approval, Telangana STPP-I (2x800) MWNo.10/2017,date.23.08.2017,Amount.Rs.1151.60 Cr.
- Funding tie up with M/s REC Ltd & amount Rs. 1131.17 Cr.
- Purchase Order Date: 09.05.2018 & Amount: Rs.5.43 Cr.
- Date of Commission: 26.02.2020.

20. 220KV Durshed-Sircilla LILO to Ramadugu SS (Circuit-II)

- The scheme is formulated under “System Improvement Scheme” covered in Telangana STPP scheme.
- The administrative approval was accorded vide T.O.O.(CE-400kV) Ms.No.104 , Dt:12.07.2017, Amount: Rs.1256.86 Cr.
- The scheme envisages the following work
 - (i) 220KV Durshed-Sircilla LILO to Ramadugu SS (Circuit-II)-12 KM.
- The investment approval No.CRN/TS/TST/Investment approval, Telangana STPP-I(2x800) MWNo.10/2017,date.23.08.2017,Amount.Rs.1151.60 Cr
- Funding tie up with REC Ltd & amount Rs. 1131.17 Cr
- Purchase Order Date: 09.05.2018 & Amount: Rs.5.43 Cr.
- Date of Commission: 26.02.2020.

21. 2nd circuit from 220kV Shivarampally SS to 132kV Asifnagar SS for providing 2nd source of supply to 132kV Asifnagar

- The scheme is formulated under “System Improvement Transmission Scheme”
- The administrative approval was accorded vide T.O.O (CE-Construction-I) MS. No. 55, Dt: 25 .03 .2015, Amount: Rs.4597 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 2nd circuit from 220 kV Sub-Station, Shivarampally to 132 kV Sub-Station, Asifnagar by laying 220 kV XLPE UG Cable- 3.5KM.
 - (ii) Erection of 220 kV SC Line (Charged at 132 kV) with Zebra Conductor on Galvanized Narrow Based Towers and PMTT-0.5KM
 - (iii) 132 kV Bay extension 220kV SS, Shivarampally- 1No.
 - (iv) 132 kV Bay extension at 132 kV SS, Asifnagar-1No.

- The investment approval No CRN.No.TST/TSAshifnagar SS alternatesource of supply/Invest.App.06/2015, dt. 05.10.2015, Amount.Rs.45.97 Crs.
- Funding tie up with M/s. REC Ltd & amount Rs.4136.35 Lakhs.
- Purchase Order Date: 16.02.2018 & Amount: Rs.3971.96 Lakhs.
- Date of Commission: 31.05.2019.

22. Feeding 132/33 kV SS Ghanpur through Ring Mains

- The scheme is formulated under “System Improvement Transmission Scheme to meet the industrial loads expected under the upcoming project of Hyderabad - Warangal industrial corridor.”
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 70, Dated 09.05.2017, Amount Rs.580.00 Lakhs.
- The scheme envisages the following work
 - (i) Stringing of 3rd conductor on the existing 132 kV Raghunathpally – Ghanpur Railway feeder so as to provide alternate supply to the 132 kV SS Ghanpur.- 16KM.
- Funding tie up with M/s. PFC Ltd & amount Rs.507.00 Lakhs.
- Purchase Order Date: 23.10.2018 & Amount: Rs.4.12 Cr.
- Date of Commission: 26.06.2019.

23. Erection of 132kV LILO line from 132 KV Makthal – Gadwal 2nd circuit line for the proposed 220 kV Substation Jurala along with bays in Mahabubnagar district

- The scheme is formulated for “System Improvement Transmission Scheme”.
- The administrative approval was accorded vide T.O.O (CE-Construction) MS. No. 350,Dated: 27.11.2010, Amount: Rs. 761.00 Lakhs.
- The scheme envisages the following work
 - (i) 132 kV Gadwal – Makthal 2nd circuit LILO to 220 kV Jurala SS- 10KM
 - (ii) 132 kV bays for Gadwal – Makthal 2nd circuit LILO at 220 kV Jurala SS- 2Nos.

(iii) 2 Nos. JC towers for river crossing 132 kV Gadwal – Makthal 2nd circuit LILo line.

- Funding tie up with M/s. Bank of Baroda & amount Rs.761.00 Lakhs.
- Purchase Order Date: 18.08.2011 & Amount: Rs.5.06 Cr.
- Date of Commission: 03.07.2019.

24. 132KV DC/SC line from 220KV SS Jurala to 132KV SS Ieeza

- The scheme is formulated under “System Improvement Transmission Scheme for providing 9 Hrs agricultural Supply during day”.
- The administrative approval was accorded vide T.O.O (CE-Construction) MS. No. 137, Dt: 29.07.2015, Amount: Rs.1654.00 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132 kV DC/SC line on Galvanised Towers with Panther ACSR from 220 KV Jurala SS to 132 KV Ieeza SS- 35KM.
 - (ii) Erection of 132 kV Bays at 132/33 kV Sub-Station, Ieeza and 220 KV SS Jurala- 2 Nos.
- Funding tie up with M/s. REC Ltd & amount Rs.3055.65 Lakhs.
- Purchase Order Date: 12.03.2018 & Amount: Rs.1867.86 Lakhs.
- Date of Commission: 07.08.2019.

25. 132KV DC line from 220KV Huzurnagar SS to 132 KV Mattampally SS

- The work is covered in 220KV Huzurnagar Scheme.
- The administrative approval was accorded vide T.O.O (CE-Construction-I) MS. No. 83, Dt: 21.06.2013, Amount: 5490.00 Lakhs.
- The scheme envisages the following work
 - (i) 132 kV DC Line from 132/33 kV Mattampally SS to proposed 220 kV Huzurnagar SS- 15Km. (Amount: Rs.675 Lakhs).
 - (ii) 132KV Bay extensions at 132KV SS Mattampally- 2 Nos. (Rs. 140.00 Lakhs).
- The investment approval No. CRN.No.APT/TS/220/132 kV SS-Huzurnagar/ F-INVST-01/2014, date.02.04.2013, Amount.Rs.52.49 Cr.
- Funding tie up with M/s. PFC Ltd & amount Rs.62.65 Cr.
- Purchase Order Date: 18.02.2016 & Amount: Rs.24.72 Cr.
- Date of Commission: 18.09.2019.

26. 132KV DC line from 220KV SS Huzurnagar to 132KV SS Vepalasingaram

- The work is covered in 220KV Huzurnagar Scheme.
- The administrative approval was accorded vide T.O.O (CE-Construction-I) MS. No. 83, Dt: 21.06.2013, Amount: 5490.00 Lakhs.
- The scheme envisages the following work
 - (i) 132 kV DC Line from 132/33 kV Vepalasingaram SS to proposed 220 kV Huzurnagar SS- 10KM. (Amount Rs.450Lakhs).
 - (ii) 132KV Bay extensions at 132KV SS Vepalasingaram- 2Nos. Amount: Rs.140 Lakhs).
- The investment approval No. CRN.No.APT/TS/220/132 kV SS-Huzurnagar/ F-INVST-01/2014, date.02.04.2013, Amount.Rs.52.49 Cr.
- Funding tie up with M/s. PFC Ltd & amount Rs.62.65 Cr.
- Purchase Order Date: 18.02.2016 & Amount: Rs.24.72 Cr.
- Date of Commission: 18.09.2019.

27. Second source of supply to 132/33 kV Sub-Station, Lalgadi Malakpet in Shameerpet Mandal of Ranga Reddy District

- The scheme is formulated under “System Improvement Transmission Scheme”
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No. 156,Dt 19.08.2015, Amount: Rs.731.00Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132 kV DC line for making LILO of 132 kV Line from 220 kV Sub-Station, Medchal to 132 kV Sub-Station,Gajwel to 132/33 kV Sub-Station, Lalgadi Malakpet.on Galvanised Narrow Based Towers- 1KM.
 - (ii) Erection of 132 kV DC line for making LILO of 132 kV Line from 220 kV Sub-Station, Medchal to 132 kV Sub-Station,Gajwel to 132/33 kV Sub-Station, Lalgadi Malakpet.on Galvanised Normal Towers- 7KM
 - (iii) Erection of 132 kV Bays at 132/33 kV Sub-Station, Lalgadi Malakpet- 2 Nos.
- Funding tie up with M/s. PFC Ltd & amount Rs.620Lakhs.
- Purchase Order Date: 20.10.2015 & Amount: Rs.6.04 Cr.
- Date of Commission: 18.10.2019.

28. 132kV DC line from proposed 220/132kV SS Peddagopati to 132/33kV SS Thallada

- The work is covered in 400KV Bhadradi Thermal Power Scheme.
- The administrative approval was accorded vide T.O.O. (CE-Projects-I) Ms.No.15, Dt: 29.04.2016, Amount: Rs.1304.36 Crores.
- The scheme envisages the following work
 - (i) 132kV DC line from proposed 220/132kV SS Peddagopati to 132/33kV SS Thallada-30KM. (Rs. 1443.3 Lakhs).
 - (ii) 132 KV Bay extensions at 132/33kV SS Tallada Substation- 2Nos. (Rs.179.54 Lakhs).
- The investment approval No.CRN/TST/TS/Bhadradi (4x270) MW Thermal Power Transmission/Investment Approval No.17/15, date. 07.01.2016 Amount.Rs.1179.61 Cr.
- Funding tie up with M/s. PFC Ltd & amount Rs.1150.16 Crores.
- Purchase Order Date: 15.03.2018 & Amount: Rs. 11.18 Cr.
- Date of Commission: 28.12.2019.

29. Erection of 132 kV DC Line on Narrow Based Towers for LILO of 132 kV Ibrahimpatnam - Turkayamzal SC Line to the proposed 220 kV SS, Bonguloor and 132 kV 630 sq.mm XLPE UG DC cable

- The work is covered in 220KV Bonguluru Scheme.
- The administrative approval was accorded vide T.O.O (CE-Construction-I) MS.No. 117,Dt: 30.05.2014, Amount: Rs.6340.00 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132 kV DC Line on Narrow Based Towers for LILO of 132 kV Ibrahimpatnam - Turkayamzal SC Line to the proposed 220 kV SS, Bonguloor- 5KM. (Rs.510 Lakhs).
 - (ii) Supply, Erection, Laying, Testing, Commissioning including the cost of accessories of 132 kV 630 sq.mm XLPE UG DC cable for LILO of 132 kV Ibrahimpatnam - Turkayamzal SC Line to the proposed 220 kV SS, Bonguloor- 3KM. (Rs.2100Lakhs).
- The investment approval No. CRN.No. APT/TS/220 KVSS - Bonguluru/F.Invest-27/2014, date. 28.02.2014, Amount.Rs.63.40 Cr.

- Funding tie up with M/s. NABARD & amount Rs.6340.00 Lakhs.
- Purchase Order Date: 02.03.2016 & Amount: Rs.5.61 Cr.
- Date of Commission: 04.01.2020.

Write up of works under progress (ongoing) : 220kV & 132kV Schemes

1. 132 kV DC line from the proposed 220/132/33 kV SS Parigi to 132/33 kV SS Dharmasagar

- The work is covered in 132KV SS Donthanpally.
- The administrative approval was accorded vide T.O.O.(CE-Construction) Ms.No.82, Dt:18.04.2018, Amount: 3215.00 Lakhs.
- The scheme envisages the following work
 - (i) 132 kV DC line from the proposed 220/132/33 kV SS Parigi to 132/33 kV SS Dharmasagar- 36KM (Rs.1836.00 Lakhs).
- The investment approval No CRN.No.TST/TS132 kV SSt Donthanpalli/F-INVST-06/2013, dt.18.10.2014, Amount in Rs.18.49 Cr.
- Funding tie up with M/s. REC Ltd & amount Rs.1926.27 Lakhs.
- Purchase Order Date: 13.12.2016 & Amount: Rs.23.94 Cr.

2. 132/33 kV SS at Nimmapalli with connected line in Karimnagar Dist

- The scheme is formulated under "System Improvement Transmission Scheme to meet increased load on 33/11 kV substations and also to reduce 33 kV line losses".
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No.161, Dated: 26.08.2015, Amount Rs.1970.00 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132/33KV Substation Nimmapalli with PTR capacity of 2x10/16 MVA.
 - (ii) 132KV DC/SC line from the proposed 220KV SS Sircilla to the proposed 132KV SS Nimmapalli-21KM.
- Funding tie up with M/s. REC Ltd & amount Rs. 1770.80 Lakhs.
- Purchase Order Date: 23.03.2018 & Amount: Rs. 1510.41Lakhs.

3. 132 KV DC/SC inter linking lines between substations 220 KV Yeddumailaram-132 KV Pashmailaram

- The scheme is formulated under “System Improvement Transmission Scheme”.
- The administrative approval was accorded vide T.O.O (CE-Construction-I) MS. No. 61,Dt: 25.05.2012, Amount Rs.931.00 Lakhs
- The scheme envisages the following work
 - (i) 132 kV DC/SC line with narrow based towers from 220 kV Yeddumailaram SS to 132 kV Pashmailaram SS- 7KM.
 - (ii) 132 kV Bay extension at 220 kV Yeddumailaram SS and 132 kV Pashmailaram SS – 2Nos.
- Funding tie up with M/s.NABARD & amount Rs. 931.00 Lakhs.
- Purchase Order Date: 09.05.2019 & Amount: Rs. 901.00 Lakhs.

4. 132 kV SS Kandukuru & connected lines in Rangareddy District

- The scheme is formulated under “System Improvement Transmission Scheme meet increased load on 33/11 kV substations and also to reduce 33 kV line losses”.
- The administrative approval was accorded vide T.O.O (CE-Construction-I) Ms.No. 347, Dated: 13.02.2013, Amount: Rs. 2275 Lakhs.
- The scheme envisages the following work
 - (i) 132/33 kV Substation at Kandukuru with 1x31.5 + 1 x 16 MVA (Released) PTR Capacity.
 - (ii) 132 kV DC/SC line from proposed 220/132 kV Fab city substation to the proposed 132/33 kV Kandukuru substation on narrow based towers and Normal towers- 18KM.
 - (iii) 132KV Bay extension at 132/33KV SS Fabcity- 1No.
- The investment approval No TST/TS/132 kV SS-Kandukuru/ F-INVST-05/2015.Dt.08.10.2014, Amount in Rs.22.74 Cr.
- Funding tie up with M/s. REC Ltd. & amount Rs.2005.78 Lakhs.
- Purchase Order Date: 09.09.2016& Amount: Rs.2179.17 Lakhs.

5. 2nd circuit stringing on 132kV DC/SC line from 220kV Durshed SS to 132kV Water Works SS

- The scheme is formulated for “System Improvement Transmission Scheme”.
- The administrative approval was accorded vide T.O.O (CE-Construction-I) MS.No.08, Dated: 26.02.2014, Amount: Rs.243.00Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132 kV 2nd circuit line on under construction 132 kV DC/SC line from 22kV Durshed SS to 132kV Water Works Karimnagar Town SS- 7.5KM.
 - (ii) 132 kV Bay extension at 220 kV Durshed substation- 1 No.
 - (iii) 132 kV Bay extension at 132 kV Water Work substation Karimnagar Town- 1No.
- Funding tie up with M/s. REC Ltd & amount Rs.218.25 Lakhs.
- Purchase Order Date: 26.02.2014 & Amount: Rs.141.05 Lakhs.

6. Erection of 132/33 kV Substation at Kondapur Village of Dhanwada Mandal in Mahaboobnagar District

- The scheme is formulated under “System Improvement Transmission Scheme to improve the voltage regulations and to provide quality power to the consumers in the area”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No. 2, Dt: 03.01.2015, Amount: Rs.2449.00 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station with 2 X 31.5 MVA PTRs.
 - (ii) Erection of 132 kV DC/SC Line with Zebra Conductor on Galvanized Towers from 132 kV SS, Maddur to the proposed 132/33 kV SS, Kondapur- 20KM
 - (iii) Erection of 132 kV Bays at 132 kV SS, Maddur- 1No.
- The investment approval No. CRN TST/TS/132 KVSS -Kondapur/ F.Invst. 06/2015, date.21.02.2015, Amount. Rs.24.49 Cr.
- Funding tie up with M/s. REC Ltd & amount Rs.2171.04 Lakhs.
- Purchase Order Date: 23.03.2017& Amount: Rs.1341.54 Lakhs.

7. Providing of alternate supply to 132/33 kV SS Chennur and 132/33 kV SS Kataram from 220/132kV SS, Manthani.

- The scheme is formulated under “System Improvement Transmission Scheme under the program for providing 9.00 Hrs Day Time Supply for Agriculture”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No. 2, Dt: 03.01.2015, Amount:Rs.1213.00 Lakhs.
- The scheme envisages the following work
 - (i) Stringing of two circuits on already approved (under construction) 132 KV Multi circuit towers from 220/132 kV SS Manthani upto Loc. No. 19 of existing 132Kv Manthani – Kataram line- 5 KM.
 - (ii) Erection of 132 kV DC line (5.00 KM) from existing Loc. No. 19 upto Loc.No. 34A, of 132 kV Manthani – Kataram line- 5KM.
 - (iii) Stringing of 2nd circuit from newly proposed DC line (from Loc No. 34A of 132 kV Manthani – Kataram) to 132/33 kV Chennur SS on the existing DC/SC line- 19KM.
 - (iv) Stringing of 2nd circuit from Loc. No. 34A of existing 132 kV Manthani – Kataram line to 132/33 kV SS Kataram-26KM.
 - (v) Erection of 132 KV bay (at 220/132 KVSS Manthan - 2 Nos., at 132 kV SS kataram - 1No.at 132 kV SS Chennur - 1 No.)- 4Nos.
- Funding tie up with M/s. REC Ltd & amount Rs.1091.70 Lakhs.
- Purchase Order Date: 07.02.2018 & Amount: Rs.970.27 Lakhs.

8. Erection of 220 KV D/C Line from 400/220/132kV Gajwel SS to 220/132 kV Siddipet SS

- The scheme is formulated under “System Improvement Transmission Scheme under the program for providing 9.00 Hrs Day Time Supply for Agriculture”.
- The administrative approval was accorded vide T.O.O (CE-Transmission) MS.No 225, Dt:10.12.2015, Amount: Rs.3811.70 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 220 kV DC line on Galvanised Towers with Moose ACSR from 400/220/132 kV SS Gajwel to 220/132 kv SS Siddipet- 40KM.
 - (ii) Erection of 220 KV Bays (Gajwel-2, Siddipet-2)- 4Nos.

- The investment approval No. CRN.No.TST/TS/Erection of 220 KV DC line Gajwel/Siddipet/Invest.App.04/17-2017-18.,date.02.07.2017 Amount.Rs.38.11 Cr.
- Funding tie up with M/s. REC Ltd & amount Rs.5694.93 Lakhs.
- Purchase Order Date:04.12.2017 & Amount: Rs.3568.42 Lakhs.

9. 132/33 kV Sub-stations at Aipoor in Nalgonda district

- The scheme is formulated under “System Improvement Transmission Scheme to overcome the low voltage problems, to cater to the upcoming loads and also to provide quality power supply to the consumers.
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms.No.195, Dt:14.10.2015, Amount:Rs.2132.00Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station at Aipoor in Atmakoor (S) Mandal of Nalgonda District with 3 X 10/16 MVA PTRs.
 - (ii) Erection of 132 kV DC/SC line on Galvanised Towers from 400/220/132 kV Suryapet SS to 132 kV SS Thungathurthy to the now proposed 132/33 kV SS Aipoor- 13KM.
 - (iii) 132 kV Second Circuit Stringing on existing DC/SC line from 400/220/132 kV Suryapet SS to 132 kV SS Thungathurthy for a distance of 13.00 KM.- 13KM.
 - (iv) Erection of 132/ kV Bay at 400/220/132 kV Suryapet SS- 1No.
- The investment approval No. TST/TS /132/33 kV SS Aipoor , Nalgonda /F-INVST- 01/2016-17. Date. 11.04.2016, Amount.Rs.21.32 Cr.
- Funding tie up with M/s. REC Ltd & amount Rs.1891.06 Lakhs.

10. 132/33 kV SS at Kotagiri with connected line & Bay in Nizamabad District

- The scheme is formulated “to meet the load growth, to improve the voltage regulation and for System Improvement Scheme”.
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 88 Dated: 30.06.2016, Amount: Rs.15.05 Crores.
- The scheme envisages the following work

- (i) Erection of 132/33 kV Sub-Station at Kotagiri in Nizamabad District with 3 X 10/16 MVA PTRs.
 - (ii) Erection of 132 kV DC/SC line on Galvanised Towers with Panther ACSR from 132/33 kV Sub-Station, Jakora to the proposed 132kV Sub-Station.-12KM.
 - (iii) 132 kV Bay extensions at 132/33 kV Sub-Station, Jakora-1 No.
- Funding tie up with M/s.PFC Ltd & amount Rs.12.97 Crores.
 - Purchase Order Date: 06.06.2018 & Amount: Rs. 11.23 Cr.

11. 220/132/33 kV Substation at Borampet in Ranga Reddy district

- The scheme is formulated “to evacuation of power from 2 X 800 MW Telangana STPP to be established by NTPC at Ramagundam”.
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 72 Dated: 13.05.2016, Amount: Rs.21.22 Crores.
- The scheme envisages the following work
 - (i) Erection of 220/132/33 kV Sub-Station at Borampet with 2 X 160 MVA + 2 X 80 MVA PTR Capacities.
 - (ii) 220 kV Multi Circuit OH line on MC Towers with Moose ACSR from 400 kV Narsapur SS to proposed 220 kV Borampet SS-38 KM
 - (iii) 220 kV DC line with UG Cable from 400 kV Narsapur SS to proposed 220 kV Borampet SS – 5 KM.
 - (iv) Erection of 220 kV Bays at 400 kV Narsapur-2 Nos.
- The investment approval No. TST/TS/ 220132/33 kV/Substation, Borampet RR District/ INVST- No. 07/16 - 2016-17.date.19.10.2016 Amount. Rs.21.22 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs. 182.98 Crores.
- Purchase Order Date: 28.11.2016, 10.03.2017 & 19.05.2020 & Amount: Rs.160.07 Cr.

12. Erection of 220/33 kV Sub-Station at Chanchalguda

- The scheme is formulated to “(i) reduce overloading of PTRs at 220/132/33 kV Sub-Station, Chandrayangutta and 132/33 kV Sub-Station, Imlibun, (ii) to provide alternate source of supply to the 33/11 kV Sub-

Stations (iii) to avoid load shedding and (iv) also to cater to the upcoming loads”.

- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 26 Dated: 27.02.2017, Amount: Rs.89.12 Crores.
- The scheme envisages the following work
 - (i) Erection of 220/33 kV GIS substation at Chanchalguda with 3 X 50 MVA PTR.
 - (ii) Erection of 220 kV DC line with 1000 Sqmm 220 kV UG cable for LILO of Chandrayangutta - Imlibun line (UG Cable) to the proposed 220/33 kV GIS substation, Chanchalguda.
- The investment approval No. CRN TS/TST/220/33 KV,GIS, Chanchaguda/ Invest.Approval No.7/17-2017-18.date. August-2017, Amount. Rs.89.12 Cr.
- Funding tie up with M/s REC Ltd & amount Rs. 80.20 Crores.
- Purchase Order Date: 28.02.2018 & Amount: Rs. 63.74 Cr.

13. 132/33 kV Substation at PTO, Petlaburz, Hyderabad District

- The scheme is formulated to (i) reduce overloading of PTRs at 220/132/33 kV Shivarampally Sub-Station & 132/33 kV Imlibun Sub-Station, (ii) reduce the length of 33 kV lines feeding the scheme area, thereby reducing the time taken in locating faults, attending breakdowns, restoration of supply & carrying out the regular maintenance works, (iii) to provide reliable & uninterrupted power supply, (iv) an alternate source of supply in the scheme area and (v) to cater to the upcoming loads.”
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 29 Dated: 27.02.2017, Amount: Rs.39.93 Crores.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV GIS substation at Police Transport Organisation (PTO), Petlaburz with 2X80 MVA PTR .
 - (ii) Erection of 132 kV DC line with 630 Sqmm 132 kV UG cable from the 220 kV GIS substation, Imlibun to the proposed 132/ 33 kV GS SS at Police Transport Organisation (PTO), Petlaburz-1.5 KM
 - (iii) Erection of 132 kV DC OH line on galvanised double circuit towers with Panther ACSR-3.5KM.

- The investment approval No. CRN TS/TST/132/33 KV, GIS, Petlaburz invest. Approval No.5/17-2017-18. date. August-2017, Amount.Rs.39.92 Cr.
- Funding tie up with M/s REC Ltd & amount Rs. 35.94 Crores.
- Purchase Order Date: 28.02.2018 & Amount: Rs.44.16 Cr.

14. Erection of 132kV DC line from proposed 220/132kV SS Madugula to existing 132/33 kV Takkalapally (Yacharam) SS

- The scheme is formulated to “reduce overloading of 132kV Godakandla – Takkalapally (Yacharam) line and to have reliable incoming supply from the 220 KV substation. Further there will be a load relief on 220 KV KM Pally Sub-Station.”
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 88 Dated: 02.06.2017, Amount: Rs.11.77 Crores.
- The scheme envisages the following work
 - (i) Erection of 132 kV DC line from 220/132/33 kV Madugula SS to 132/33kV Takkalapally (Yacharam) SS – 17Km.
 - (ii) Erection of 132kV bays at 132/33kV Takkalapally SS- 2 Nos.
- Funding tie up with M/s REC Ltd & amount Rs. 10.60 Crores.

15. 132/33 kV SS with connected line at Choppadandi in Karimnagar Dist

- The scheme is formulated “to feed the existing and upcoming loads and to extend power supply to Agriculture sector with quality & reliable power.”
- The administrative approval was accorded vide T.O.O (CE-Transmission) Ms. No. 86 Dated: 29.05.2017, Amount: Rs.22.85 Crores.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station at Choppadandi in Karimnagar District with 2 X 31.5 MVA PTRs.
 - (ii) Erection of 132 kV DC/SC line for LILO of 132 kV line from 220 kV Malyalapally Sub-Station to 220 kV Durshed Sub-Station at the proposed 132/33 kV Choppadandi Sub- Station-13 KM.

- The investment approval No.TS/TST/132/33 KV, Choppadandi, SS /Investment Approval No.20/18,2017-18, date.27.02.2018, Amount. Rs.22.85 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs. 19.97 Cr.
- Purchase Order Date: 06.06.2018, Amount: Rs.9.65 Cr.

16. Providing of 33 kV Features at upcoming 220/132 KV Sub-Station, Mahabubabad in Mahabubabad District.

- The scheme is formulated under “System Improvement Transmission Scheme”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No.170, Dt: 16.11.2017, Amount: Rs.854Lakhs.
- The scheme envisages the following work
 - (i) Providing of 33 kV Features at upcoming 220/132 KV Sub-Station, Mahabubabad with PTRs capacity of 2x10/16 MVA.
- Funding tie up with M/s. REC Ltd & amount Rs.743.62 Lakhs.
- Purchase Order Date:31.10.2018& Amount: Rs.236.00 Lakhs.

17. Erection of 132/33 kV Sub-Station at Chinna Shankarampet in Medak District

- The scheme is formulated under “System Improvement Transmission Scheme”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No. 124, Dt: 19.08.2017, Amount: Rs.1600Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station at Chinna Shankarampet in Medak District with 2 X 10/16 MVA PTRs.
 - (ii) Erection of 132 kV DC line for LILO of 132 kV Chegunta- Yeldurthy DC/SC line at the proposed 132/33 kV Chinna Shankarampet Sub-Station- 6KM.
- Funding tie up with M/s. REC Ltd & amount Rs.1396.33 Lakhs.
- Purchase Order Date: 18.09.2018 & Amount: Rs.929.56 Lakhs.

18. 132/33 kV Substation at Pitlam in Nizamabad District

- The scheme is formulated under “System Improvement Transmission Scheme to feed the existing & upcoming loads, to improve the voltage regulation in 33KV feeders and also to cater the loads of 24 hours Agriculture supply”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No.13,Dt: 20.01.2018, Amount Rs.3580.00 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132/33KV Substation at Pitlam with PTR capacity of 2x31.5MVA.
 - (ii) Erection of 132KV DC/SC line from 220KV SS Banswada to proposed 132KV SS Pitlam- 26.5KM.
- The investment approval No. CRN No. TST/TS/Erection of 132/33 KV SS at Pitlam in Khammam Dist. Approval/No.04/2018-19. Date.01.06.2018 Amount.Rs.35.80 Cr.
- Funding tie up with M/s. REC Ltd & amount Rs.3180.02 Lakhs.

19. Erection of 220/132 kV Sub-Station at Ammavaripet in Warangal-Urban District

- The scheme is formulated under “System Improvement Transmission Scheme to feed the upcoming industrial corridor at Madikonda and a Textile Park at Geesukonda”.
- The administrative approval was accorded vide T.O.O (CE-Construction) MS.No.294,Dt:29.01.2019, Amount: Rs.126.86 Crores.
- The scheme envisages the following work
 - (i) Erection of 220/132 kV Sub-Station at Ammavaripet with 2X100 MVA PTR Capacity in Warangal Dist.
 - (ii) Erection of 220 kV DC Line on Galvanized Towers with Moose ACSR Conductor for LILO of one circuit of 220 kV Mahabubabad - Warangal line to proposed 220 kV Ammavaripet SS- 31KM.
 - (iii) Erection of 132 kV DC Line on Galvanized Towers with Panther ACSR Conductor from the proposed 220/132 kV Sub-station

Ammavaripet to the existing 132/33 kV Sub-Station, Geesukonda- 23KM.

- (iv) Erection of 132 kV Line on Multi-circuit Towers with Panther ACSR Conductor for accomdation of 132 KV Line to 132KV SS Inavole and 132KV Line to 132KV SS Wardhannapet from the proposed 220/132 kV Sub-station Ammavaripet to AP 8- 6.98KM.
- (v) Erection of 132 kV DC/SC Line on Galvanized Towers with Panther ACSR Conductor from the AP.8 to the 132/33 kV SS Inavole-2.32KM.
- (vi) Erection of 132 kV DC/SC Line on Galvanized Towers with Panther ACSR Conductor from the AP.8 to the 132/33 kV SS Wardhannapet-16.25KM.
- (vii) Erection of 132 kV Bays (2 Nos at 132 kV Geesukonda, 1 No at 132 KV Wardannapet & 1No at 132 kV Inavole)- 4Nos.
- The investment approval No. CRN No: TST/TS/Erection of 220/132 kV Substation at Ammavaripet, Kazipet(M) in Warangal Urban District.F. Approval/ No.13/18/2018-19. date. 10.08.2018, Amount.Rs.126.91 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs.87.24 Crores.
- Purchase Order Date:20.02.2020 & Amount: Rs. 42.55 Cr.

20. 132/33 KV Substation at Nagaram in Suryapet District

- The scheme is formulated under “System Improvement Transmission Scheme to meet the 24 Hrs Agriculture power supply, load demand in the scheme area and to avoid low voltage problems”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No. 193 ,Dt: 30.08 2018, Amount Rs.3397 Lakhs.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station at Nagaram , Suryapet Dist with 1 X 31.5 + 1x10/16 MVA PTRs.
 - (ii) Erection of 132 kV line with ACSR Panther Conductor on Galvanised Towers by making making LILO of 132 kV DC/SC line from 400/220/132 kV Suryapet SS to 132/33 KV Thungathurthy SS at newly proposed 132/33 KV Nagaram SS- 16KM.

- The investment approval No. CRN No. TST/TS/Erection of 132/33 KV Sub station at Nagaram in suryapet District. Approval/No.14/18/2018-19. date. 12.12.2018, Amount .Rs.33.97 Cr.
- Funding tie up with M/s PFC Ltd & amount Rs.25.17 Crores.
- Purchase Order Date:27.10.2020 & Amount: Rs.10.81 Cr.

21. 33 KV features at 132 KV Railway Traction Switching Station, Kothagudem, Kothagudem Bhadradi District

- The scheme is formulated under “System Improvement Transmission Scheme to extend reliable supply to district head quarter and also to evacuate 25 MW SCCL solar power.
- The administrative approval was accorded vide T.O.O (CE-Construction) MS.No 217,Dt: 25.09.2018, Amount Rs:992 Lakhs.
- The scheme envisages the following work
 - (i) 33 KV features at 132 KV Railway Traction Switching Station, Kothagudem, Kothagudem Bhadradi District with 2 X 10/16 MVA PTRs.
- Funding tie up with M/s PFC Ltd & amount Rs7.35 Crores.

22. 132/33kV SS at Padmanagar in Karimnagar District

- The scheme is formulated “to meet the existing & upcoming load demand in the Karimnagar town”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No.254, Dated:26.11.2018. Amount: Rs.19.29 Crores.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station Padmanagar (V) in Karimnagar District with 2x10/16 MVA capacity.
 - (ii) LILO of132 KV Line (one circuit) from 220/132 KV SS Durshad to the 132/33 KV SS Siricilla to proposed 132/33 KV SS Padmanagar-7 KM.
- Funding tie up with M/s PFC Ltd & amount Rs. 14.29 Crores.
- Purchase Order Date: 31.10.2020 & Amount: Rs. 13.68Cr.

23. 132/33 kV Gas Insulated Sub-Station (GIS) at Manikonda in Ranga Reddy District.

- The scheme is formulated “to overcome the low voltage problems, to cater to the upcoming loads and also to provide quality power supply to the consumers.”
- The administrative approval was accorded vide T.O.O(CE-Construction) MS.No.402 Dated:08.07.2019, Amount:Rs.107.18 Cr.
- The scheme envisages the following work
 - (i) Erection of 132/33 GIS Sub-station at Manikonda with 2 x 80 MVA PTRs.
 - (ii) LILO of existing 132 KV Shivarampally-Erragadda SC OH feeder between Loc.No.80 & Loc.No.81 with laying of 132 KV XLPE UG cable Of 1200 Sq.mm for cable length of 2.5KM.
- The investment approval No. CRN/TST/TS/Erection of 132 KV SS at Manikonda in Rangareddy District.Approval NO 08/2019-20, date. 27.12.2019, Amount.Rs.107.18 Cr
- Funding tie up with M/s REC Ltd & amount Rs.96.46 Cr

24. 400/220 kV, 1X315 MVA ICT at Bhadradri Thermal Power Station (BTPS) switch yard, Manuguru, TSGENCO and erection of 220 KV DC line from 220/132/33 KV Manuguru SS to 400 KV BTPS switch yard 220/132/33 KV Sub-station at Meenajipet in Siddipet District

- The scheme is formulated “to provide start-up supply to Bhadradri Thermal Power Station (4X270 MW) under Black start restoration procedure & alternate evacuation of power from BTPS (4x270 MW).
- The administrative approval was accorded vide T.O.O(CE-Construction) MS.No.401Dated:08.07.2019, Amount:Rs.66.56 Cr.
- The scheme envisages the following work
 - (i) Supply,Erection, Testing & Commissioning of 400/220 kV, 1X315 MVA Auto Transformer along with PTR Bays and Bus coupler including civil works at BTPS.
 - (ii) Erection of 220 KV DC line from 220/132/33 KV Manuguru SS to 400 KV Bhadradri Thermal Power Station switch yard.
 - (iii) Erection of 220 kV Bays (2 Nos at 220 kV Manuguru, 2 Nos at BTPS).

- The investment approval No. CRN No. TST/TS Erection of 400/220 KV 1x315 MVA ICT at BTPS switch yard Manuguru & Erection of 220 KV DC line from 220/132/33 KV Manuguru SS to 400 KV BTPS switch yard Approval/No.06/2019-20, date, 22.12.2019, Amount:Rs.66.56 Cr.
- Funding tie up with M/s REC Ltd & amount Rs.59.91 Cr.
- Purchase Order Dates:15.10.2019, 18.11.2019 & Amount:Rs.28.49 Cr.

25. 132/33 KVSS Gachibowli in Ranga Reddy District.

- The scheme is formulated “to reduce overloading at 220/132/33 KV Substation Gachibowli, to provide alternate source of supply to the 33/11 KV Sub-stations in the scheme area and to extend supply to 33 kV dedicated feeder applications pending for feasibility from Gachibowli and Madhapur Sub-Stations area for a load of 71.5 MW & the upcoming loads.
- The administrative approval was accorded vide T.O.O(CE-Transmission) MS.No.27 Dated:27.02.2017, Amount:Rs.18.73 Cr.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station at Gachibowli with 2X80 MVA PTR
 - (ii) Erection of 132 kV DC OH line on galvanised towers with Panther ACSR from 220/132/33 kV Gachibowli SS to the proposed 132/33 kV Gachibowli SS.
- Funding tie up with M/s REC Ltd & amount Rs.16.52 Cr
- Purchase Order Date: 11.06.2019 & Amount: Rs.8.03 Cr

26. 132/33 KV Gas Insulated Sub-station (GIS) at Seetharambagh

- The scheme is formulated “to reduce overloading of PTRs at 220/132/33 kV Shivarampally Sub-Station & 132/33 kV Imlibun Sub-Station, to reduce the length of 33 kV lines feeding the scheme area, thereby reducing the time taken in locating faults, attending breakdowns & restoration of supply, to provide reliable & uninterrupted power supply, to reduce the overall energy losses in the system and to cater to the upcoming loads which are increasing multi-fold due to the vertical growth of the city and increase in commercial establishments.
- The administrative approval was accorded vide T.O.O(CE-Transmission) MS.No.28 Dated:27.02.2017, Amount:Rs.63.63 Cr.

- The scheme envisages the following work
 - (i) Erection of 132/33 kV GIS substation at Seetharambagh with 2X80 MVA PTR.
 - (ii) Erection of 132 kV DC line with 630 Sqmm 132 kV UG cable from Asifnagar Sub-Station to the proposed 132/33 kV GIS substation at Seetharambagh.
 - (iii) 132 kV Bay extensions at Asifnagar substation.
- The investment approval No. CRN TS/TST/132/33 KV, GIS, Seetharambagh /Invest.Approval No.6/17-2017-18. date.August-2017 Amount.Rs.63.63 Cr.
- Funding tie up with M/s REC Ltd & amount Rs.57.27 Cr.

27. 132/33 KV IDA Mallapur Sub-station in Medchal-Malkajgiri District.

- The scheme is formulated “to reduce overloading of PTRs at 220/132/33 kV Moulali Sub-Station, 220/132/33 kV Ghanapur Sub-Station & 132/33 kV Sub-Station, Bandlaguda, to improve voltage regulation, to reduce power losses, to provide reliable & uninterrupted power supply, to reduce the overall energy losses in the system and to cater to the upcoming loads of the IDA Mallapur having continuous and rapid industrial load growth.
- The administrative approval was accorded vide T.O.O(CE-Transmission) MS.No.30 Dated:27.02.2017, Amount:Rs.19.05 Cr.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV AIS substation at IDA Mallapur with 1X80 + 1X50 MVA PTR.
 - (ii) Erection of 132 kV DC OH line on galvanised NB towers with Panther ACSR for LILO of 132 kV Ghanapur - Moulali line at the proposed 132 kV IDA Mallapur SS.
- Funding tie up with M/s REC Ltd & amount Rs.16.81 Cr.

28. 132/33 KV Sub-station at Moulali ZTS in Medchal-Malkajgiri District

- The scheme is formulated “to reduce overloading at 400/220/132/33 kV Sub-Station, Malkaram & 220/132 33 kV Sub-Station, Moulali, to reduce the length of lines feeding the scheme area, to provide reliable & uninterrupted power supply, to reduce the overall energy losses in the system and to

cater to the upcoming loads which are increasing multi-fold due to the vertical growth of the city and increase in commercial establishments.

- The administrative approval was accorded vide T.O.O (CE-Transmission) MS.No.31 Dated:27.02.2017, Amount:Rs.49.78 Cr.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Moulali ZTS SS with 2X50 MVA PTR.
 - (ii) Erection of 132 kV DC line with 630 Sqmm 132 kV UG cable from 220 kV Moulali Sub-Station to the proposed Moulali ZTS SS.
- The investment approval No. CRN TS/TST/132/33 KV, Moulali-ZTS SS, Investment Approval No.17/17, 2017-18, date. October-2017, Amount.Rs.49.78 Cr.
- Funding tie up with M/s REC Ltd & amount Rs.44.47 Cr.
- Purchase Order Date: & Amount: Rs.37.84 Cr.

29. 2nd Circuit on 132KV DC/SC line from existing 220/132KV SS Waddekothapally to existing 132/33KV SS Peddanagaram.

- The scheme is formulated “to meet (N-1) Contingency in the Network for ensuring satisfactory Power Supply.”
- The administrative approval was accorded vide T.O.O(CE-Construction) MS.No.149 Dated:09.10.2017,Amount:Rs.7.02 Cr.
- The scheme envisages the following work
 - (i) Stringing of 2nd circuit on 132KV DC/SC line from existing 220/132KV SS Waddekothapally to existing 132/33KV SS Peddanagaram with Panther ACSR Conductor.
 - (ii) Erection of 132 KV feeder bays (at 220/132 KVSS Waddekothapally – 1Nos. and at 132 kV SS PeddaNagaram 1 No.) Total -2 No.s.
 - (iii) Diversion of Distribution HT & LT lines (33KV,11KV & LT lines).
- Funding tie up with M/s REC Ltd & amount Rs.6.32 Cr.
- Purchase Order Date: 22.02.2020 & Amount: Rs.3.22 Cr.

30. 132 kV features at 220 kV Thimmajipet Switching Station in Mahaboobnagar District and extending connectivity to 132 kV Jadcherla Sub-Station from Thimmajipet

- The scheme is formulated as part of “Comprehensive Transmission Requirement Scheme for the years 2012-2017”.
- The administrative approval was accorded vide T.O.O(CE-Construction) MS.No.103 Dated:11.07.2017, Amount:Rs.29.32 Cr.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV AIS substation at IDA Mallapur with 1X80 + 1X50 MVA PTR.
 - (ii) Erection of 132 kV DC line on Galvanised Towers with Panther ACSR from the existing proposed 220/132 kV Thimmajipet Sub-Station, to the existing 132/33 kV Jadcherla Sub-Station.
 - (iii) 132 kV Bay extensions at 132/33 kV Sub-Station, Jadcherla.
- The investment approval No. CRN TST/TS/220/Switching Station/ Mahaboobnagar / 132 KV Features /Invest,Approval No.14/17-2017-18.date.December-2017, Amount.Rs.29.32 Cr.
- Funding tie up with M/s REC Ltd & amount Rs.26.39 Cr.
- Purchase Order Date: 05.02.2020 & Amount: Rs.14.93 Cr.

31. 33 kV Features at upcoming 220/132 KV Sub-Station, Ammavaripet in Kazipet (M), Warangal Urban (District)

- The scheme is formulated “to meet the growing demand of the Warangal city with reliable supply and reduced line losses.”
- The administrative approval was accorded vide T.O.O(CE-Construction) MS.No.341 Dated:02.04.2019,Amount:Rs.8.10 Cr.
- The scheme envisages the following work
 - (i) Providing of 33 kV Features at upcoming 220/132 KV Sub-Station, Ammavaripet in Kazipet (M), Warangal Urban (District) with Released 2X50 MVA PTRs Erection of 132/33 GIS Sub-station at Manikonda with 2 x 80 MVA PTRs.
- Funding tie up with M/s REC Ltd & amount Rs.96.46 Cr.
- Purchase Order Date: 18-09-2020 & Amount: Rs.14.95 Cr (including other work).

32. 132/33kV SS at Pammy in Khammam District

- The scheme is formulated “to feed the supply to existing 6Nos 33/11KV Substations.”

- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No.14, Dated:20.01.2018. Amount: Rs.23.39 Crores.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station at Pammy in Khammam District with 2 X 31.5 MVA.
 - (ii) Erection of 132 kV DC line for LILO of 132 kV Kusumanchi-Chilakallu line at the proposed 132/33 kV Pammy Sub- Station -8Km.
- The investment approval No. CRN No. TST/TS/Erection of 132/33 KV SS at Pammy in Khammam Dist. Approval/No.03/2018-19, date. 01.06.2018 Amount Rs.23.39 Cr.
- Funding tie up with M/s REC Ltd & amount Rs. 20.64 Crores.

33. 132/33 kV SS at Peechara in Warangal Dist.

- The scheme is formulated “to meet the existing & upcoming load demand in the Karimnagar town”.
- The administrative approval was accorded vide T.O.O (CE-Construction) Ms. No.43, Dated:06.03.2018. Amount: Rs.43.92 Crores.
- The scheme envisages the following work
 - (i) Erection of 132/33 kV Sub-Station at Peechara, Warangal Dist with 2 X 31.5 MVA PTRs.
 - (ii) Erection of 132 kV DC line with HTLS Conductor on Galvanised Towers by making LILO of existing 132 kV line from 220/132/33KV Waranagal SS to 132/33KV Jangaon SS at proposed 132/33KV Peechara SS-12 KM.
- The investment approval No. CRN No.TST/TS/Erection of 132/33 KV Substation at Peechara in Wranagal District. Approval No. 05/2018-19. date 19.07.2018, Amount.Rs.43.92 Cr.
- Funding tie up with M/s REC Ltd. & amount Rs.39.11 Crores.

Lift Irrigation Scheme Works taken up by TSTRANSCO
under Deposit Contribution Works (FY 2019-20):

TSTRANSCO has taken up construction of Transmission lines and Substations at 132kV, 220kV and 400kV level for extension of power supply to Pumping stations under various Lift Irrigation schemes which are **funded by I&CAD Department, Govt. of Telangana.**

The Transmission system established under extension of power supply to LI Schemes is included in the Transmission system of TSTRANSCO.

The addition of Transmission network in respect of LI Schemes for FY 2019-20 is as detailed below.

Description	2019-20
400kV Lines (CKM)	397.6
220kV Lines (CKM)	88.12
132kV Lines (CKM)	85
400kV SS	3
220kV SS	2
132kV SS	1

The addition of Bays in respect of LI Schemes for FY 2019-20 is as detailed below:

Description	2019-20
400kV	91
220kV	40
132kV	7

Details of Commissioned Sub Stations and Connected Transmission Lines at 400 kV, 220 kV and 132 kV voltage levels under Lift Irrigation Scheme works for FY 2019-20

Sl. No	Name of the LIS	Name of the Line	Length (CKM)	Date of Commissioning
1	Kaleswaram Lift Irrigation Project	400 kV QMDC line from Ramadugu SS to Tippapur	92	29.04.2019
		400 kV QMDC line from Chandulapur SS to Tippapur	38	06.05.2019
		LILO of 400 kV TMDC from KTHP- Gajwel to Chandulapur SS	108.7	16.05.2019
		400 kV TMDC line from Narsapur to Tukkapur	110.158	21.03.2020
		400 kV TMDC line from Chandlapur to Tukkapur	48.75	19.09.2019
		220kV TMDC line from 400/220/132 KV Gajwel SS to 220/11kV Akkaram SS	14.12	29.02.2020
2	Lift System on FFC (Flood Flow Canal) in Karimnagar district.	220kV LILO of RSS-Bheemgal to proposed 220/11kV Rampur Substation in Jagityal district	2	17.05.2019
		220kV DC line (36KM) from proposed 220kV Rampur Substation to proposed 220/11kV Rajeshwar Rao Peta Substation	72	28.06.2019
3	Thotapally – Gouravelly LIS	132 kV DC line from Huzurabad to Regonda	63	27.09.2019
4	JCR Godavari LIS (Warangal)	132 kV LILO from Mulugu- Chelpur	2	25.10.2019
5	Chanaka - Korata barrage LIS	132kV LILO Line (5km) to 220/132/33kVSS at Nirmal from 132kV Pochamapad – Adilabad feeder	20	08.05.2019

List of Substations completed during FY 2019-2020				
Sl. No	Name of the LIS	Sub-station	Date of Commissioning	Remarks
1	Kaleswaram Lift Irrigation Project	400/11 kV Tippapur SS	29.04.2019	
		400/ 11 KV Chandlapur SS	06.05.2019	
		400/11 kV Tukkapur SS	19.09.2019	
2	Lift System on FFC in Karimnagar district.	220/11 KV Rampur SS	17.05.2019	
		220/11 KV Rajeshwaraopeta SS	28.06.2019	
3	JCR Godavari LIS (Warangal)	132/11 kV Rangaraopalli SS	25.10.2019	

List of Bays completed during FY 2019-2020					
Sl. No.	Name of the work	No. of Bays			Remarks
		400kV	220kV	132kV	
1	Kaleshwaram Lift Irrigation Project				
	400/11kV GIS at Medaram	10	0	0	
	400/13.8/11kV SS at Ramadugu	7	0	0	
	400/220/11 SS at Sundilla	2	9	0	
	220/11 SS at Annaram	0	5	0	
	220/11 SS at Medigadda	0	9	0	
	400/11kV SS at Tippapur	22	0	0	
	400/13.8/11kV Chandlapur	27	0	0	
	400/11kV Tukkapur	23	0	0	
	220/11kV Akkaram	0	2	0	
2	FFC				
	220/11 KV Rampur SS	0	7	0	
	220/11 KV Rajeshwar Rao Peta SS	0	5	0	
3	ThotapallyReservior to GourevellyReservior LIS				
	220/132kV SS at Huzurabad	0	2	0	
4	Phase-III works of Godavari Lift Irrigation Scheme				
	132/11kv Rangaraopally SS	0	0	5	
	220/11 kV SS at Bheemganpur(Additional Bays)	0	1	0	
5	ChanakaKorata LIS				
	a)132/11 KV Hathigat SS	0	0	2	
	Total	91	40	7	

(B) Details of Ongoing works during FY 2019-20

The ongoing Transmission Lines and Substations in respect of LI Schemes are as detailed below:

Description	2019-20
400kV Lines (CKM)	0
220kV Lines (CKM)	376.96
132kV Lines (CKM)	22
400kV SS	0
220kV SS	8
132kV SS	3
Additional PTR Bays under Kaleshwaram LIS	15

List of 400kV lines and Substations commissioned during FY2019-20

1. 400kV lines

S. No.	Name of Line	Length in CKM	Date of Commissioning
1	400kV QMDC Line from Jangaon SS-Tippapur LI SS	138.28	Line charged on 14.05.2019
2	400kV QMDC Line from Julurupadu SS to Jangaon SS	349.45	Line Charged on 26.06.2019
3	400kV QMDC Line from Nirmal SS to Dichpally SS	120.66	Line Charged on 16.12.2019
Total		608.40	

2. 400kV Substations

S. No.	Name of the Substation	Capacity	Date of commissioning
1	400/220kV Jangaon SS	3x500= 1500MVA	Charged on 14.05.2019 with 1 No.500MVA ICT. ICT-II Charged on 01.11.2019 ICT-III Charged on 13.11.2019 (Total 25 Nos bays charged)
2	400/220kV Ramadugu SS	2x500= 1000MVA	SS charged on 12.06.2019. 2 Nos 500MVA ICTs charged on 29.01.2020 (Total 17 Nos bays charged)
	Total Capacity	2500 MVA	

3. 400kV Bays

S. No.	Name of the Substation	No. of Bays	Date of commissioning
1	400/220/132kV Narsapur SS	4	2 Nos. NTPC Feeder Bays charged on 30.05.2019
2	400kV Dichpally SS	4	2 Nos Nirmal Feeder bays (2 Tie+2 Feeder bays) Charged on 02.08.2019
3	400/220/132kV Kethireddypalli SS	4	2 Nos Rayadurg Feeder bays (2 Tie+2 Feeder bays) charged on 20.11.2019
4	400/220kV Julurupadu Sub-Station	4	2 Nos Kamalapuram feeder bays (2 Tie+2 Feeder bays) charged on 07.01.2020
	Total	16	

400kV SCHEMES:

I WARDHA-HYDERABAD 765KV LINK TRANSMISSION SCHEME

- i) **400kV Quad Moose DC Line from 400kV Dichpally SS to 400kV Nirmal SS**
Check Survey: 60.332kMs out of 60.332kMs completed.
Foundations: 174Nos. out of 174 Nos. completed.
Tower erection:174 Nos out of 174Nos. completed.
Stringing: 60.332kMs out of 60.332kMs completed.
Charged on 16.12.2019.
- ii) **2 Nos. 400kV Feeder Bays at Dichpally SS for Nirmal feeders**
Equipment Foundations: 156 Nos. out of 156 Nos. completed.
Equipment Str. Erection: 156 Nos. out of 156 Nos. completed.
Equipment Erection:88 Nos. out of 88 Nos. completed.
Charged on 02.08.2019.
- iii) **4 Nos. 400kV Quad Moose Bays at Maheshwaram SS, Rangareddy District**
Tower foundations: 36/36 completed.
LM tower foundation: 6/9 completed.
Tower Erection: 36/36 completed.
Equipment foundation: 246/264 Completed.
Equipment structure erection: 171/264 Completed.
Equipment erection: 163/264 completed.
- iv) **LILO of both Circuits of 400kV Mamidipalli-Dindi TMDC line to 400kV Maheshwaram SS on Multicircuit Towers**
Work awarded in May 2019.
Check survey: 5.86/5.86kM completed.
Foundations: 22/22 Nos. completed.
Tower Erection: 17/ 22Nos. completed.
Stringing: 1.6/5.86 kM completed.

I. RAYADURG SYSTEM IMPROVEMENT SCHEME:

- i) **400/220/132kV GIS Substation at Rayadurg:**
Site handed over on 01.08.2018.
400kV,220kVand 132kV Switchyards: Civil works under progress.

- ii) **2 Nos. 400kV Quad Bay extension at 400/220kV Kethireddypalli SS :**
Site handed over on 01.08.2018 and all works completed and charged on 20.11.2019.
- iii) **400kV DC Line from Kethireddypalli SS Rayadurg GIS:**
 - a) 400KV DC Line (twin HTLS on Quad Conventional towers) from 400kV SS Kethiredypally SS to AP-41:
Check survey: 27.56kMs out of 27.56kMs completed.
Foundations:75/78 completed.
Tower Erection: 68/78No.s completed.
 - b) 400kV DC line from AP-41 to AP-75(ORR Junction) on Monopoles (Twin HTLS on Monopoles:11.741kMs):
Preliminary route survey completed for 11.741kMs.
Detailed survey under progress.
 - c) 400kV DC Line from AP-75(ORR Junction) to Rayadurg GIS with XLPE UG Cable:
Detailed survey completed.
Excavation and Cable laying works under progress.
- iv) **220kV DC lines with XLPE UG Cable:**
Detailed survey completed.
Excavation and Cable laying works under progress.
- v) **132kV DC Line with XLPE UG Cable:**
Detailed survey completed.
Excavation and Cable laying works under progress.
- vi) **132kV Bays at Madhapur SS and Jubilee Hills SS:**
Excavation of cable trench under progress.

II. KTPS Stage – VII (1x800MW) POWER EVACUATION SCHEME:

- i) **Supply, Erection, Testing and Commissioning of 400/220kV Jangaon Sub-Station.**
Works was awarded in March'2017.
All works completed and Charged on 14.05.2019 along with ICT-I (500MVA).
ICT-II & ICT-III charged on 01.11.2019 and 13.11.2019. respectively.

- ii) **400kV Quad Moose DC Line from 400kV Jangaon SS to 400kV Tippapur LI Sub-station - 69.142kms. approx.**

All works completed and the line charged on 14.05.2019.

- iii) **Execution of 400kV Quad Moose DC Line from 400/220kV Julurupadu to 400/220kV Jangaon SS – 174.727 kMs.**

Work was awarded in March'2017.

Foundations: 489 Nos. out of 489 Nos. completed.

Tower Erection: 489 Nos. out of 489 Nos. completed.

Stringing: 174.727kMs out of 174.727kMs completed.

Charged on 26.06.2019.

III. TELANGANA STPP-I (2X800MW) POWER EVACUATION SCHEME

- i) **400KV QMDC line from 400kV NTPC Common point (End of Multi Circuit Tower) to 400kV Narsapur SS**

Work awarded in August'2017.

Foundation: 492 Nos. out of 492 Nos completed.

Tower Erection: 492 Nos out of 492 Nos completed.

Stringing: 173.323 kMs out of 173.323 kMs completed.

- ii) **400kV Quad Moose DC Line from Telangana STPP (NTPC) to 400/220kV Ramadugu Sub-station**

Works awarded in April'2018.

Foundation: 162 Nos. out of 163 Nos. completed.

Tower Erection: 161 Nos. out of 163 Nos. completed.

Stringing: 50.5 kMs out of 52.574 kMs completed.

- iii) **400/220kV Substation at Ramadugu**

Work awarded in 13.04.2018.

400kV NTPC-I&II feeder Bays charged on 12.06.2019.

Gajwel bay -II charged on 06.08.2019.

ICT-I & ICT-II : Charged on 29.01.2020.

220kV Side : XLPE Cable : Charged on 31.01.2020.

220kV Feeder Bays charged on 10.02.2020.

- iv) **2 Nos. 400kV Quad bays at 400/220/132kV Narsapur SS**

Work awarded on 13.04.2018.

All works are completed & Charged on 30.05.2019.

IV. SITA RAMA LIFT IRRIGATION SCHEME:

Work awarded in August'2018

i) 220/11kV LI Substation at B.G.Kothur (V).

Site handed over to contractor on 29.08.2018.

Tower foundation:56/56 completed.

Tower Erection: 56/56 completed.

Equipment foundation: 223/223 completed.

Equipment structure erection:223/223 completed.

Equipment erection: 223/223 completed.

Substation test charged on 14.10.2019.

ii) LILO of one circuit of 220kV KTPS V-Lower Sileru -II Line to B.G.Kothur SS

Check survey: 16.694/16.694 kM.

Foundation: 74/74 Nos. completed.

Tower Erection: 74/ 74Nos. completed.

Stringing:16.694 out of 16.694 kM completed.

iii) Erection of LILO of one circuit of 220kVKTPS-Manuguru Line to B.G.Kothur SS

Check survey: 0.514/0.514kM.

Foundation: 5/5 Nos. completed.

Tower Erection:5/ 5Nos. completed.

Stringing:0.514/0.514 kM completed.

Line test charged on 14.10.2019.

iv) 220/11kV LI Substation at V.K.Ramavaram.

Sub-station site handed over to the contractor on 03.09.2018.

Tower Foundations: 56/56 completed.

Tower Erection: 56/56 completed.

Equipment foundation: 190/190 completed.

Equipment structure erection:190/190 completed.

Equipment erection:189/190 completed.

Substation test charged on 28.12.2019.

v) 220kV KTS-Lower Sileru-I line to 220kV V.K.Ramavaram LI SS (1.416*2)

Check survey: 1.416/1.416 kM Completed.

Foundations: 12/12 Nos. completed.

Tower Erection: 12/ 12 Nos. completed.

Stringing: 1.416/1.416 kM completed.

Line test charged on 28.12.2019.

vi) **LILO of 220kV KTS–Lower Sileru-I line to 400/220 kV Asupaka SS (0.524*2kM)**

Check survey: 0.524/0.524 kM Completed.

Foundations: 6/6 Nos. completed.

Tower Erection: 6/6 Nos. completed.

Stringing: 0.524/0.524 kM completed.

vii) **2Nos 220kV Bays at 220/11 KV VK Ramavaram LI SS**

Equipment foundations: 34/34 completed.

Equipment structure erection: 34/34 completed.

Equipment erection: 34/34 completed.

viii) **Erection of 220kV TMDC Line from 400/220/11kV Kamalapuram SS to 220/11 kV - V.K.Ramavaram SS.**

Check survey: 14.162/14.162kM completed.

Foundations: 64/64 Nos. completed.

Tower Erection: 64/ 64 Nos. completed.

Stringing: 14.162/14.162 kM completed.

ix) **400/220/11kV LI Substation at Kamalapuram**

Sub-station site handed over to contractor on 03.09.2018

400kV side

Tower foundation: 26/26 completed.

Tower erection: 26/26 completed.

Equipment foundation: 384/384 completed.

Equipment structure erection: 309/384 completed.

Equipment erection: 309/384 completed.

220kV side

Tower foundation: 86/86 completed.

Tower Erection: 86/86 completed.

Equipment foundation: 527/554 completed.

Equipment structure Erection: 500/554 completed.

Equipment Erection: 498/554 completed.

LM tower foundation: 11/12 completed.

LM tower erection: 11/12 completed.

Pressure main towers:

Foundation: 5/13 completed.

Tower Erection: 1/13 completed.

Stringing: Not yet started.

x) **2 Nos 400kV Quad Bay extension at 400/220kV Julurupadu SS**

Equipment foundation: 88/88 completed.

Equipment str.erection: 88/88 completed.

Equipment erection: 88/88 completed.

xi) **400kV TMDC line from Julurupadu SS to Kamalapuram LI Sub Station**

Check survey: 39.562/39.562km Completed.

Foundation: 118/123 Nos. completed.

Tower Erection: 106/123Nos. completed.

Stringing: 20/ 39.562 km completed.

ANNEXURE – II PERFORMANCE MEASURES

NUMBER AND DURATION OF SUPPLY INTERRUPTIONS

1. Requirement in the Guidelines:

Number and duration of supply interruptions on transmission networks, separately for 400kV, 220 kV, 132 kV. Details of steps proposed to improve performance and monitoring. (Guidelines – 11a)

2. TSTransco's Response:

(a) Interruptions on EHT lines during 2019-20

Number and Duration of System Interruptions & Transmission System Availability (FY2019-20)

Most of the feeders have alternative supply. Hence, whenever there is any interruption to one feeder, then supply is provided from the alternate source and interrupted feeder is restored immediately by taking necessary steps. All transmission line breakdowns are logged and recorded. The data sheets maintain information such as circuit name and number, date and time of occurrence, date and time of restoration, any remedial measures taken for alternate supply and a brief description of the cause. As the data is voluminous, and manually entered, all the log sheets have not been included in this filing. However, any data requested to prepare the booklet can be made available as and when requested. Considering the vast extent of the transmission system and the number of transmission circuits, the average availability factor of EHT lines of TSTransco for the year 2019-2020 works out at 99.98%. The details of the line availability for the year 2019-20 are shown in the tables below.

Interruptions on EHT lines during 2019-20

Year	EHT line voltage	No. of interruptions	Total time of interruptions (Hrs)	Avg. Duration Per Interruption (hrs)
2019-20	400kV	15	185.48	Beyond 2 Hrs.(12.36)
	220kV	133	1547.05	Beyond 2 Hrs.(11.63)
	132kV	156	1956.12	Beyond 2 Hrs.(12.54)

Voltage-wise Availability of Transmission System for FY2019-20 :

As per the guidelines given by the Central Electricity Authority, all 220kV and 400kV including 132kV EHV AC Transmission systems are considered for determining the Transmission system availability and the same has been calculated as per guidelines of Central Electricity Regulatory Commission.

As per the calculations, the Transmission system availability of TSTRANSCO system during the period 2019-20 i.e., from April 2019 to March 2020 of Telangana State works out to be **99.98%**.

Availability of Transmission system during 2019 - 20

Sl. No.	Financial year	Transmission System availability in percentage
1	2019-20	99.98%

Plans to improve performance monitoring

It is being planned to incorporate the Formula for calculation of availability factor in SAP duly integrating in the system to enable the data to be updated regularly in the real time system approval accorded towards rate contract for supply of transducers for data transfer.

(b) Major Grid Disturbances / Incidents occurred during the year 2019-20.

Grid Breaker trippings at 220 KV Ghanapur on 27.05.2019 @02.03 Hrs.

The fault was due to blasting of 220kV B phase CT of Bus coupler which is connected to Bus-2. Due to which Bus Bar Zone-2 protection operated and tripped all the breakers of feeders/ICTs connected to Bus-2 along with Bus coupler breaker instantaneously.

Due to blasting of faulty CT, the porcelain of blasted CT damaged the Y & B phase Bus coupler CTs which are connected to Bus-1 leading to second fault. This fault current was between Bus coupler CTs to Bus coupler breaker which is in the dead zone. Hence Dead zone protection has operated and cleared the fault after 150msec (time delay set for Dead Zone protection) tripping all the feeders/ICTs connected to Bus-1.

Performance Measures:

The CTs near the Bus coupler are very old of HBB make which are manufactured in the year 1983. All the 6 Bus coupler CTs connected to Bus-1&2 are replaced with new one.

Instructions were issued to DEE/MRTs to carry out the testing of CTs (like Tan delta, Oil sample test etc) on regular basis and to replace the defective CTs.

PERIODS WHEN VOLTAGE AND FREQUENCY WAS BEYOND PRESCRIBED LIMITS

1. Requirement in the Guidelines

Periods when voltage and/or frequency was beyond the prescribed limits on Transmission (400 kV, 220 kV, 132 kV) networks. Details of steps proposed to improve performance and monitoring. (Guidelines – 11b).

2. TSTransco's Response:

PERIODS WHEN FREQUENCY WAS BEYOND PRESCRIBED LIMITS

a. Frequency

TSTransco is one of the constituent members of the Southern Regional Grid and operates in synchronism with the power grids of the other southern states of Karnataka, Tamilnadu, Pondicherry, Kerala and a part of Goa. The system frequency is monitored by the Southern Regional Load Dispatch Center (SRLDC) located at Bangalore. As per the operating principles laid down by SRLDC, all constituent members are expected to maintain system frequency with the operating range of 49.90 HZ to 50.05 HZ.

The details of frequency duration, maximum and minimum frequency experienced during FY-2019-20 is shown below.

Southern Region frequency during 2019-20

Month	Average	Maximum		Minimum	
	HZ	HZ	Date	HZ	Date
Apr-19	50.00	50.29	7 th & 29 th	49.65	01 st
May-19	50.00	50.33	01 st	49.65	09 th & 21 st
Jun-19	49.99	50.31	16 th	49.63	11 th
Jul-19	50.00	50.32	7 th , 15 th & 24 th	49.64	04 th
Aug-19	50.00	50.32	15 th	49.55	20 th
Sep-19	50.01	50.27	05 th	49.62	09 th & 18 th
Oct-19	50.01	50.31	23 rd	49.67	24 th
Nov-19	50.01	50.27	26 th	49.65	18 th
Dec-19	50.01	50.34	15 th	49.65	11 th
Jan-20	50.00	50.27	01 st	49.69	6 th & 26 th
Feb-20	50.00	50.33	21 st	49.68	04 th
Mar-20	50.01	50.32	22 nd	49.69	19 th & 31 st
Year	50.00	50.33	01.05.2019 & 21.02.2020	49.62	09.09.2019 & 18.09.2019

Percentage of time frequency varied:

Month	<49.90 Hz	IEGC BAND (49.90-50.05 Hz)	>50.05 Hz
Apr-19	7.33	72.69	19.98
May-19	8.25	72.4	19.35
Jun-19	10.50	70.09	19.41
Jul-19	7.50	68.35	24.15
Aug-19	7.28	72.18	20.54
Sep-19	4.57	74.83	20.61
Oct-19	3.19	76.72	20.10
Nov-19	4.07	73.39	22.54
Dec-19	6.27	71.31	22.42
Jan-20	6.48	74.72	18.80
Feb-20	7.06	73.49	19.45
Mar-20	5.37	70.64	23.99
Average	6.49	72.56	20.95

b. VOLTAGES OF TS SYSTEM FOR 2019-20

Voltages recorded at some of the Generating Stations, Grid sub-stations and Tail-end sub-stations on 28.02.2020, the date on which the State Peak Demand Met i.e 13168 MW are as tabulated below.

Voltages profile at various Generating Stations as on 28.02.2020

400kV Level						
S.NO	STATION NAME	00:00	08:00	19:00	Max	Min
1	BHUPALAPALLY(KTPP)	411	402	412	415	398
2	BTPS	415	403	417	419	399
3	KTPS-VII	422	410	423	425	406
4	KTPS-VI	417	404	416	420	399
5	SINGARENI	419	417	420	423	412
220kV Level						
S.NO	STATION NAME	00:00	08:00	19:00	Max	Min
1	KTPS-V	230	223	229	231	221
2	LOWER JURALA	231	224	230	233	221
3	U.JURALA	233	220	235	237	217
4	N'SAGAR MAIN	231	220	233	237	215
132kV Level						
S.NO	STATION NAME	00:00	08:00	19:00	Max	Min
1	N'SAGAR	140	136	141	143	132
2	RTS-B	137	122	139	141	122

Voltages profile at various 400kV substations as on 28.02.2020

S.NO	STATION NAME	00:00	08:00	19:00	Max	Min
1	CHANDULAPUR	416	405	418	422	399
2	DICHPALLY	416	410	421	430	395
3	DINDI	424	412	422	426	404
4	GAJWEL	416	405	418	422	398
5	JANGAON	419	404	421	425	399
6	JULURUPADU	423	410	423	425	405
7	KETHIREDDY PALLI	421	409	422	428	399
8	MAHABOBNAGAR	421	413	423	428	402
9	MAHESWARAM	417	411	419	427	398
10	MAMIDIPALLY	419	405	417	423	396
11	MEDARAM	417	409	419	422	403
12	NARSAPUR	418	407	419	425	398
13	NIRMAL	417	409	422	429	397
14	RAMADUGU	418	409	420	423	403
15	SHANKARPALLY	418	407	419	426	396
16	SUNDILA	415	412	416	419	406
17	SURYAPET	429	409	423	429	402
18	TIPPAPUR	418	408	421	424	402

Voltages profile at various 220kV Major substations as on 28.02.2020

S.NO	STATION NAME	00:00	08:00	19:00	Max	Min
1	BONGULUR	234	225	234	236	222
2	BHEEMGAL	231	222	227	237	219
3	BHONGIR	230	218	231	233	215
4	CHALAKURTHY SWS	229	219	231	234	214
5	CHANDRAYANAGUTTA	229	222	228	230	218
6	DINDI	226	218	230	235	212
7	FABCITY	231	219	227	233	214
8	GACHIBOWLI	233	225	232	235	218
9	HAYATHNAGAR	229	220	227	231	215
10	IMLIBUN	233	224	230	234	219
11	JAGITYAL	233	224	231	235	218
12	KALWAKURTHY	227	219	228	232	213
13	KONDAMALLEPALLY	224	214	224	227	209
14	KAMAREDDY	228	220	227	230	216

Filing of Annual Performance Review for FY 2019-20 of TSTRANSCO

15	KONDAPAKA	225	211	228	232	208
16	MAHABUBNAGAR	233	218	235	236	205
17	MEDCHAL	225	216	227	230	210
18	MEDARAM	227	216	226	230	212
19	MALKARAM	231	219	228	232	216
20	MAMIDIPALLY	228	215	229	231	212
21	MOULALI	223	211	228	231	206
22	MURMUR	219	211	226	228	207
23	NARKETPALLY	231	221	229	236	218
24	NIRMAL	216	206	225	228	202
25	OSMANIA	234	225	235	237	221
26	PARGI	237	229	237	238	226
27	SIDDIPET	230	219	229	233	214
28	SINGOTAM	229	221	228	232	215
29	SHANKARPALLY	225	217	226	230	213
30	SHAPURNAGAR	231	222	229	233	217
31	SURYAPET	231	221	230	234	215

ANNEXURE - III
Scheme wise Details of capitalization for F.Y:2019-20 (400kV Schemes)

S. N o.	Name of the project	Investment approval date	Start Date		Completion Date (400kV works)		Approved cost as per Investment approval	Capitalization upto previous years (As per audited Financial Statements) (from FY 2016-17)	Capitalization claimed for the current year	Means of Finance			Date of Capitalization	Addition to Transmission Network (only 400kV data)			Reasons for cost overrun	Reasons for time overrun	Whether part capitalization or Full Capitalization	Physical Completion Certificate (400kV works only)	Financial Completion Certificate (400kV works only)	Electrical Inspector Certificate
			Schedule	Actual	Schedule	Actual				Debt	Equity	Grants		Lines (CkM)	Capacity (MVA)	Bays (No.)						
1	Jaipur Power Transmission Scheme(P-10-01,S-10-24)	21.01.2015 (Revised)	Mar'2013	Mar'2013	Mar'2018	June'2018	842.39	147.33	-0.39				17.05.2019	0	0	0	NA	ROW issues	Part	-	-	-
2	Ring Main Transmission Scheme(S-05-02)	24.11.2006	Aug'2007	July'2008	Mar'2017	Oct'2015	455.71	7.84	-1.30				5/25/2019	0	0	0	NA	-	-	-	-	-
3	Wind Power Transmission Scheme(P-12-04)	28.10.2013	Mar'2013	Aug'2013	Mar'2017	Nov'2016	525.37	156.50	0.24				16.05.2019	0	0	0	NA	-	-	-	-	-
4	400kV Aug-II Scheme :PTRs at Mamidipally and Gajwel (A-11-01)	24.09.2012	Jan'2013	Feb'2013	Mar'2017	Jan'2016	48.60	0.84	-0.04				16.05.2019	0	0	0	NA	-	Part	-	-	-
5	400kv Augmentation Scheme (PTRs at Veltloor & Dichpally & Gajwel) (A-15-11& A-15-10)	04.05.2017 (Revised)	Feb'2016	Feb'2016	Oct'2017	May'2018	95.59	44.19	0.43				15.05.2019	0	0	0	NA	upgradation to SAS	Part	-	-	-
6	Suryapet System Improvement Scheme (S-14-02)	21.01.2015 (Revised)	Jul'2013	Sep'2013	Mar'2017	Apr'2018	1738.03	639.54	9.89				19.03.2020	0	0	0	NA	Delay in land acquisition and ROW issues	Part	-	-	-
7	Reactor Scheme-II (S-14-01)	06.08.2014	Oct'2016	Aug'2016	Sep'2017	Feb'2018	80.74	47.92	0.27				06.05.2019	0	0	0	NA	works awarded after PSDF funding	Part	-	-	-
8	Nirmal Power Transmission Scheme(P-12-02,S-12-30,S-12-31)	19.07.2018 (revised)	Dec'2015	Dec'2015	Dec'2017	Sep 2018	1072.44	526.17	75.78				18.06.2019	0	0	0	NA	Due to pile foundation works & heavy hard rock at Sub-station site	Part	Y	Y	-

ANNEXURE - III

Scheme wise Details of capitalization for F.Y:2019-20 (400kV Schemes)

S. N o.	Name of the project	Investment approval date	Start Date		Completion Date (400kV works)		Approved cost as per Investment approval	Capitalization upto previous years (As per audited Financial Statements) (from FY 2016-17)	Capitalization claimed for the current year	Means of Finance			Date of Capitalization	Addition to Transmission Network (only 400kV data)			Reasons for cost overrun	Reasons for time overrun	Whether part capitalization or Full Capitalization	Physical Completion Certificate (400kV works only)	Financial Completion Certificate (400kV works only)	Electrical Inspector Certificate
			Schedule	Actual	Schedule	Actual				Debt	Equity	Grants		Lines (CkM)	Capacity (MVA)	Bays (No.)						
9	Bhadradi Thermal Power Transmission Scheme (P-15-03,S-12-23,S-15-20,S-15-21,S-15-22, S-15-25)	02.01.2016	Nov'2015	Dec'2015	Dec'2017	Feb 2019	1179.61	741.05	38.47				20.06.2019	0	0	0	NA	ROW issues and Forest clearances	Part	-	-	-
10	765kV Wardha-Hyderabad Link Transmission Scheme (s-15-13)	19.12.2017 (revised)	Jan'2016	Feb'2016	Mar'2019	ongoing	1178.97	507.38	190.42				13.06.2019	120.7	0	4	NA	severe ROW in the vicinity of Hyderabad	Part	Y	Y	-
11	Dindi System Improvement Scheme(P-15-01)	02.01.2016	Nov'2015	Dec'2015	Mar'2018	Dec'2017	333.54	91.17	32.89				29.05.2019	0	0	0	NA	-	Part	-	-	-
12	KTPS VII Stage Thermal Power Transmission Scheme (P-15-04,S-16-05,S-15-24)	Dec'2017 (Revised)	Nov'2015	Dec'2015	Nov'2019	Nov 2019	1306.92	139.92	849.62				17.06.2019	487.7	1500	25	NA	-	Part	Y	Y	-
13	Telangana STPP-I Power Evacuation Scheme (P-16-01)	23.08.2017	Apr-17	Oct'2017	Apr'2020	ongoing	1151.6	0.00	107.38				28.03.2020	0	1000	21	NA	400kV SS commissioed. 400kV Lines delayed due to RoW	Part	Y	Y	-
14	Rayadurg System Improvement Scheme (S-17-08)	24.05.2018	May'2018	Sep'2018	May'2020	ongoing	1786.40	0.00	13.80				30.03.2020	0	0	4	NA	-	Part	Y	Y	-
15	Augmentation Scheme-III (A-17-03)	30.08.2017	Sep'2017	Feb'2018	May'2018	Nov'2018	74.44	28.60	0.63				06.05.2019	0	0	0	NA	Due to site conditions	Part	-		-
	LI works																					-
16	Indira Sagar Rudrammakota LI scheme(L-13-01)	-	-	-	-	Aug'2017	-	109.84	-0.74				25.05.2019	0	0	0	NA	-	-	-		-
17	Sita Rama LI Scheme(L-18-04)	-	-	-	-	ongoing	-	-	8.45				30.03.2020	0	0	4	NA		Part	Y	Y	-

S. N o.	Name of the project	Investment approval date	Start Date		Completion Date (400kV works)		Approve d cost as per Investm ent approva l	Capitalization upto previous years (As per audited Financial Statements) (from FY 2016-17)	Capitaliza tion claimed for the current year	Means of Finance			Date of Capitalizatio n	Addition to Transmission Network (only 400kV data)			Reasons for cost overrun	Reasons for time overrun	Whether part capitaliz ation or Full Capitali zation	Physical Completion Certificate (400kV works only)	Financial Completion Certificate (400kV works only)	Electr ical Inspe ctor Certifi cate
			Schedule	Actual	Schedule	Actual				Debt	Equity	Grants		Lines (CkM)	Capacity (MVA)	Bays (No.)						
	DC Works																					
18	2 Nos bay extensions at 400kV Dichpally SS(D-15-09)	-	-	-	-	-	-	14.37	1.19				29.04.2019	0	0	0	NA	-	-	-	-	-
19	Feeder and Metering Bays at STPP,Jaipur(D-17-02)	-	-	-	-	-	-	22.64	0.99				22.05.2019	0	0	0	NA	-	-	-	-	-
20	Diversion of Gajwel-Shankerpally TMDC Line (D-18-02)	-	-	-	-	-	-	6.54	-1.74				13.05.2019	0	0	0	NA	-	-	-	-	-
	Other works																					-
21	400kV choutuppal SS land acquisition(O-17-03)	-	-	-	-	-	-	5.82	0.12				30.03.2020	-	-	-	NA	-	-	-	-	-
	Total							3237.66	1326.36					608	2500	58						

Scheme wise detail of Capitalisation for FY 2019-20 132kV & 220kV Schemes																							(Figures in Rs Crore)			
Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalisation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate		
				Schedule	Actual	Schedule	Actual					Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)							Lines (ckt km)	Capacity (MVA)
I		System Improvement schemes																								
1	S-10-17	132/33 KV Substation at N V Puram in Khammam District	06.05.2013	07.03.2014	17.08.2016	31.03.2020	24.06.2019	18.01	0.06	24.21	REC	10.550				10	32	2	RC pile foundations casted in Godavari river.			Kham-16 to 19 2020000530 2020000532, 2020000310, 2020000313	Yes			
2	S-11-16	220/132/33 kV substation at Huzumagar in Nalgonda District	02.04.2013	21.06.2013	18.02.2016	31.03.2020	10.12.2018	52.49	51.24	13.75	PFC	62.65				100	263	10				N-15,18,21&22 2020000545 2020000546 2020000547 2020000548 2019000924 2019000925 2019000926 2019000810 2019000812				
3	S-13-03	220/132/33KV SS at Bonguloor in RR District	28.02.2014	30.05.2014	05.09.2013	31.03.2020	23.05.2020	63.4	20.23	18.58	NABARD					20	300	6		ROW issues		ME-12,15&27				
4	S-14-12	132 KV substation Khaithalapur along with connected lines	01.09.2015	10.09.2014	04.07.2016	31.08.2020	27.08.2019	66.04	0.7	53.18	REC	59.090				15	63	4				MW-& to 9 2020000006, 2020000007 & 2020000008	Yes			
5	S-15-01	Providing second source of supply to 132/33 kV Sub-Station, Laigadi Malakpet in Shameerpet Mandal of Ranga Reddy District	06.05.2013	19.08.2015	20.10.2015	31.03.2020	18.10.2019	7.31	0.11	9.10	PFC	6.200				16	-	2	Additional towers erected due to ROW	Severe ROW issues. Some of the locations got completed with police protection		MW-10 & 11 2020000010, 2020000009				
6	S-15-02	Up-Gradation of 132/33 kV SS Aswaraopet to 220/132 kV SS	05.10.2015	24.08.2015	18.01.2017	31.03.2020	28.04.2018	52.82	36.45	3.57	PFC	42.55				100	200	8				Kham-5 to 6 2020000136, 2019000093 & 2019000613	Yes			

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalization	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
				Schedule	Actual	Schedule	Actual	Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)		Lines (ckt km)	Capacity (MVA)	Bays (No.)						
7	S-15-04	132/33 kV Sub-Station at Jangapally of Bejjanki Mandal in Karimnagar District.	06.05.2013	30.07.2015	03.03.2018	31.12.2019	02.06.2019	19.79	0.43	12.17	PFC	16.68				28	48	2				K-51		
8	S-15-31	erection of 2 nd circuit from 220kV Shivarampally SS to 132kV Asifnagar SS for providing 2 nd source of supply to 132kV Asifnagar substation	05.10.2015	25.03.2015	16.02.2018	31.03.2020	31.05.2019	45.97	20.58	21.07	REC	41.36				4.00	--	2				ME-25&26		
9	S-15-33	132/33 kV SS at Sarangapur in Adilabad District	06.05.2013	21-12-2015	04.04.2018	31.01.2020	11.12.2019	19.93	0.61	13.49	REC	17.66				28.00	48.00	2				ADB-3&4 2020000621 2020000620		
10	S-15-37	erection 132 kV line from 220 kV Jurala Sub-Station to 132 kV leeza Sub-Station under the program of providing 9.00 Hrs agricultural supply during day time	06.05.2013	29.07.2015	12.03.2018	31.03.2020	07.08.2019	16.54	0.64	15.20	REC	30.56				35.00	--	2				No		
11	S-15-38	Erection of 132 kV lines for making LILO of (i) 2nd Circuit of 132kV Warangal – Shapurnagar DC line at 132kV SS Jangaon and (ii) 2nd Circuit of 132kV Warangal – Shapurnagar DC line at 132kV SS Kolanpak	06.05.2013	22.08.2015	07.02.2018	31.03.2020	J-28.12.2019 K-16.11.2019	8.38	2.54	3.26	PFC	7.02				12.00	--	4				Wgl-2 2020000510		
12	S-16-08	33 kV Features at existing 220/11 kV LI Sub-Station, Bheemghanpur Warangal District.	25.04.2016	25.04.2016	05.05.2017	31.03.2020	08.07.2020	5.73	5.89	0.19	PFC	16.31				--	50.00	--		Delay in PTR supply		Yes 2020000505		
13	S-16-11	132/33 kV Substation at Bachannapet in Warangal District	25.05.2016	25.05.2016	06.06.2018	31.03.2020	31.10.2019	19.38	6.36	10.76	PFC	16.710				18.00	48.00	2				Wgl-10&11 2020000506 2020000507		
14	S-16-16	erection of 220/33 kV Sub-Station, at Domalapenta Village of Nagarkurnool District (erstwhile Mahaboobnagar District)	15.12.2016	15.12.2016	05.03.2018	30.11.2019	26.07.2019	14.2	0.15	11.85	PFC	12.411				2.00	63.00	2				No		
15	S-17-09	220/132/33 kV Substation at Toopran(meenaji pet) in Medak District along with connected lines	09.04.2015	27.05.2017	23.12.2016	31.03.2021	06.02.2020	76.78	0.65	48.25	REC	68.430				110.00	263.00	12				Yes 2020000000 2020000001	Yes	

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalisation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate							
				Schedule	Actual	Schedule	Actual	Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)		Lines (ckt km)	Capacity (MVA)	Bays (No.)													
16	S-17-13	erection of 132/33 kV Sub-Station at Yadagirigutta Temple with connected line Town of Yadadri (erstwhile Nalgonda) District	09.05.2017	09.05.2017	16.07.2018	31.03.2020	11.12.2019	15.06	5.08	11.69	PFC	13.160				4.00	63.00	2				Yes 2019000921 2019000922									
17	S-17-18	feeding 132/33 kV SS Ghanpur through Ring Mains	09.05.2017	09.05.2017	23.10.2018	31.03.2020	26.06.2019	5.8	2.62	4.88	PFC	5.07				4.00	--	8				Wgl-1 2020000517									
18	S-17-20	132 KV DC/SC line from 220KVSS Chegur (Kothur) to existing 132KVSS Kothur	30-11-2017	30-11-2017	12.03.2019	31.03.2020	24.07.2020	5.68	0.00	4.76	REC	5.110				6.00	--	2	Narrow based towers erected	RoW		No									
19	S-16-07	Erection of 33 kV Features at existing 132 kV Switching Station, Kodandapur in Nalgonda District.	18.02.2016	18.02.2016	20.08.2018	31.03.2020	25.03.2019	8.91	0.00	0.23	REC	8.010				--	63.00	--				Yes 2019000336									
20	S-07-03	Erragadda and O.U GIS &Cables scheme	29-09-2011	29-09-2011	27.12.2011	31.03.2020	E-27.05.2015 OU-14.10.2015		71.00	4.30	PFC	415.00				44.80	960.00	6				MC-1,2,3,4,5									
21	-	Erection of various 220 kV & 132 kV GIS substations and connecting XLPE UG cable lines in and around Hyderabad metropolitan city with JBIC funding Gunrock 220 kV SS.		Feb-10	12.8.2010	Nov'2012	30.11.2012		84.46	4.08	JICA	96.76				308.00	1,621.50	42.00													
	S-07-04-21	B) Hayatnagar 220 kV SS		Feb-13	8.2.2013	March'2017	03.05.2017	17.36																					ME-3,4,5&21		
	S-07-04-22	c) Imlibun 220 kV SS		Jun-13	10.5.2013	March'2017	31.01.2017	328.20																					MC-7&8		
	S-07-04-23	D) Moosarambagh 132 kV SS		Mar-15	19.03.2015	Mar'2017	26.10.2016	95.00																					MC-9	Yes	
	S-07-04-14	E) Balkampet 132 kV SS		Mar-15	16.11.2010	Mar'2017	29.09.2016	77.00																					MC-17		
	S-13-13.01	F) Bachupalli(Miyapur) 220 kV SS		Feb-14	24.7.2013	05.01.2015 Mar'2017	11.11.2016	78.41																					MW-17&18	Yes	
	S-07-04-13	G) Fever Hospital 132 kV SS		Nov-10	16.11.2010	March'2017	04.01.2017	69.15																					MC-3&4	Yes	
	S-07-04-15	H)NIMS																											MC-11&12		
	S-07-04-15	H) Pattigadda 132 kV SS		Apr-15	26.03.2015	March'2017	29.12.2016	66.30																					MC-6&15		
22	S-08-02	132/33 kV substation at Amarchinta in Mahaboobnagar district	6.8.2010	09.02.2009	13.12.2010	31.03.2020	27.01.2016	15.55	0.43	1.12	Uco Bank	15.55				20.00	47.50	2				Yes 2019000097 2019000099									
23	S-08-08	132/33 KV Narayanaguda GIS Sub-station	13.10.2016	13.10.2016	31.05.2013	31.03.2020	08.12.2017		0.57	6.90	PFC	31.19				3.00	47.50	2				MC-10									

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalization	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
				Schedule	Actual	Schedule	Actual	Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)		Lines (ckt km)	Capacity (MVA)	Bays (No.)						
24	S-08-14	Erection of 220/33 kV SS at Singotam 'X' Roads, instead of erection of 132/33 kV substation at Singotam 'X' Roads, Kollapur Mandal in Mahabubnagar district along with connected lines	13.02.2011	16.10.2010	25.01.2012	31.03.2020	02.09.2016	21.17	0.15	0.13	Syndicate Bank					14.00	40.00	2				Yes 2019000508 2019000510		
25	S-10-02	132/33 kV Substation at Asifabad in Adilabad district along with connected 132 kV & 33 kV lines	28.11.2011	06.10.2010	29.11.2012	31.03.2020	25.11.2015	20.14	0.02	0.68	REC	18.00				35.00	32.00	2				K-15		
26	S-10-06	132/33 kV Substation at Borapatla in Medak district along with connecting 132 kV and 33 kV lines	21.03.2011	18.06.2010	20.08.2011	31.03.2020	30.10.2017	15.4	0.12	0.31	NABARD	36.75				36.00	47.50	2				Yes 2019000344 2019000614		
27	S-10-09	Erection of 132/33 kV Substation at Geesukonda in Warangal district along with connected 132 kV & 33 kV lines	28.11.2011	25.09.2010	12.09.2012	31.03.2020	27.01.2014	12.28	0.00	0.03	REC	10.44				10.00	63.00	2				Yes 2019000301	Yes	
28	S-10-16	132/33 kV Substation at Narmetta in Warangal district along with connected 132 kV & 33 kV lines	07.11.2012	04.10.2010	07.08.2014	31.03.2020	19.10.2015	18.68	0.36	0.00	REC	15.98				25.00	47.50	2				Wgl-3&31 2019000300	Yes	
29	S-11-18	132kv SS Kamanpur & connected lines	23.11.2012	27.06.2014	16.07.2014	31.03.2020	05.10.2016	15.53	12.43	0.18	PFC	15.53				23.40	32.00	2				K-11,28&42		
30	S-11-19	132kV SS Kathlapur & connected lines	24.05.2013	21.11.2011	10.12.2015	31.03.2020	11.01.2018	14.15	0.57	0.09	TMB	14.15				15.00	32.00	2				K33&37		
31	S-11-25 S-11-26	132kV SS Munugodu & connected lines	24.05.2013	11.08.2011	13.06.2016	31.03.2020	05.10.2017	19.33	1.2	0.20	REC	16.14				25.00	47.50	2				N-8 2020000566		
32	S-11-27	132/33 kV Substation at Nellikuduru in Warangal district along with connected 132 kV & 33 kV lines	24.05.2013	06.04.2011	21.07.2016	31.03.2020	04.01.2018	21.21	0.29	0.38	REC	17.85				30.00	47.50	2				Wgl-18&19 2019000295 2019000296	Yes	
33	S-11-30	erection of 220/132 kV substation at Parigi in Ranga Reddy district	11.05.2012	09.08.2011	19.10.2013	31.03.2020	04.03.2016	60.35	0.97	0.18	REC	54.32				110.00	200.00	8				MW-1 to 4 2019000418, 2019000419, 2019000420 & 2019000412	Yes	

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalization	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
				Schedule	Actual	Schedule	Actual	Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)		Lines (ckt km)	Capacity (MVA)	Bays (No.)						
34	S-11-37	132/33 kV Substation at Shad Nagar (V) Hamlet of Wattipally in Medak District	14.06.2016.	14.06.2016	09.09.2015	31.03.2020	10.02.2018	19.07	0.42	0.18	REC	57.20				42.00	32.00	2				Yes 2019000442 2019000606	Yes	
35	S-11-38	132 kV SS Yeldurthy & connected lines	Jul-13	03.09.2012	29.12.2016	31.03.2020	02.08.2018	17.89	13.79	0.32	NABARD	17.27				18.00	63.00	2				Yes 2019000211 2019000170 2019000171	Yes	
36	S-12-01	220 kV features at proposed 132/33 kV Kosigi SS in Mahaboobnagar district	21.03.2013	13.01.2012	07.08.2014	31.03.2020	04.07.2016	52.25	0.79	0.05	REC	46.57				101.00	200.00	8				Yes 2019000450 2019000445 2019000446 2019000448 2019000452		
37	S-12-04	132/33 kV Substation at Inavole in Warangal district along with connected 132 kV & 33 kV lines	24.05.2013	24.02.2012	10.11.2016	31.03.2020	27.01.2018	24.11	2.79	0.07	PFC	20.79				59.00	32.00	4				Wgl-20&21 3019000403 2019000405		
38	S-12-10	132 kV SS MD Pally (Kattedan) & connected lines	21.07.2017	12.02.2015	05.08.2015	31.03.2020	25.09.2017	54.71	6.7	0.29	PFC	33.86				7.00	100.00	4				ME-9&10	Yes	
39	S-12-11	132kV SS Munagala(V&M) & connected lines	28.11.2015	17.07.2015	20.06.2016	31.03.2020	22.12.2017	35.53	26.95	0.14	REC	30.95				86.00	48.00	4				N-9,13&19 2020000551 2019000676		
40	S-13-06	132KV Dommarapochampally & connected lines	03.9.2014	17.05.2018	24.12.2016	31.03.2020	16.07.2018	36.32	22.29	1.28	REC	32.35				7.20	63.00	2				MW-15 & 16 2019000392 2019000394	Yes	
41	S-13-10	132/33kV SS Kachapur & connected lines	26.2.2016	07.10.2015	22.09.2015	31.03.2020	04.05.2018	21.53	11.59	0.64	REC	21.53				37.50	48.00	2				K-41		
42	S-13-14	220/132 kV SS at Sircilla in Karimnagar District	08.10.2015	03.08.2015	22.12.2015	31.03.2020	15.12.2016	87.3	2.32	0.29	REC	60.00				134.00	300.00	8				K-18&24		
43	S-15-03	132/33 kV Substation at Chandulapur Village of Chinnakodur Mandal in Medak District along with connected lines	04.02.2015.	04.02.2015.	27.04.2015	31.03.2020	06.10.2017	18.25	0.19	0.08	REC	30.56				8.00	63.00	4				Yes 2019000605 2019000343	Yes	
44	S-15-10	132/33 kV Substation at Narayanpet in Mahaboobnagar District along with connected 132 kV & 33 kV lines	18.8.2016	17.07.2015	21.09.2016	31.03.2020	28.12.2017	21.23	0.24	0.84	REC	34.98				15.00	63.00	2				Yes 2019000383 2019000384 2019000380		

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalization	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
				Schedule	Actual	Schedule	Actual	Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)		Lines (ckt km)	Capacity (MVA)	Bays (No.)						
45	S-15-11	220 kV 2nd circuit stringing on 220 kV RSS - Jagityal and 220 kV RSS - Nirmal	17.12.2015	06.11.2017	19.11.2016	31.03.2020	N-30.12.2016 J-02.11.2018	46.4	18.76	0.10	PFC	38.06				208.00	--	4				K-19&38		
46	S-15-30	2nd Circuit stringing on proposed 132 kV DC/SC line from the under construction 400/220/132 kV SS Suryapet to 132/33 kV Shah Ali Gowaram under the program for providing 9.00 Hrs agricultural supply during day time.	04.09.2015	04.09.2015	05.04.2016	31.03.2020	29.01.2018	6.04	5.08	0.53	REC	4.95				35.00	--	2				N-14 2019000650		
47	S-15-32	Erection of 220/132/33 kV SS at Pedagogapati in Khammam district	22.03.2016	07.11.2015	27.02.2017	31.03.2020	01.12.2018	124.44	42.08	2.66	REC	121.25				220.00	263.00	4				Kham-9&10 2019000088 2019000103	Yes	
48	S-16-09	132/33 kV Sub-Station at Regonda in Warangal District.	11.01.2017	06.04.2016.	08.01.2018	31.03.2020	05.12.2018	22.11	13.06	0.64	PFC	19.07				20.00	48.00	2				Wgl-26&27 2019000680 2019000681		
49	S-17-11	33 kV Features at existing 132/11 kV LI Sub-Station, CH. Kondur in Nizamabad District	23.05.2017	23.05.2017	16.04.2018	31.03.2020	01.10.2018	4.2	2.18	0.32	PFC	3.67				--	32.00	--				NZB-13 2019000143		
50	P-15-05	400/220KV 315MVA PTR in place of failed 400/132KV 200MVA PTR at NTPC Ramagundam and connected 220KV line & Bay Works	07.09.2015	07.09.2015	24.11.2015	31.03.2020	30.12.2016	30.80	2.56	0.28	PFC	25.26				--	315.00	--				K-17		
51	P-10-03	132kV LILO line from 132 KV Makthal – Gadwal 2nd circuit line for the proposed 220 kV Substation Jurala along with bays in Mahabubnagar district	27.11.2010	27.11.2010	18.08.2011	31.03.2020	03.07.2019	7.61	0	6.51	Bank of Baroda	3.52				20.00	--	2				No		
52	S-08-11	132 kV SS Mamidipally & connected lines	08/25016	31.10.2008	31.12.2008	31.03.2020	31.03.2016 20.08.2016	21.92		-0.11						20.00	81.50	4				Yes	.	
53	S-10-13	Erection of 132/33KV SS LGM Pet	08.08.2011	31.06.2011	16.09.2011	31.03.2020	18.08.2016	31.90		0.13	UCO Bank	14.79				19.58	47.50	2				Yes	Yes	
54	S-12-12	Erection of 220/132kV SS at Nagole(Uppal) for Metro	13.08.2012	05.07.2012	21.09.2012	31.03.2020	25.09.2016	80.55		-0.01	REC	80.55				28.00	263.00	4				Yes	Yes	
55	S-11-01	132kV SS Gudur & connected lines	22.12.2011	04.04.2015	16.06.2015	31.03.2020	28.07.2016	13.29		0.13	PFC	12.35				20.00	47.50	2				Yes		

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalization	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
				Schedule	Actual	Schedule	Actual	Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)		Lines (ckt km)	Capacity (MVA)	Bays (No.)						
56	S-11-21	132kV DC/SC line from 132kV Dharmapuri SS to 132kV Luxettipet SS and 2Nos bays at 132kV Dharmapuri SS and 2Nos bays at 132kV Luxettipet SS	12.07.2012	05.09.2014	12.12.2014	31.03.2020	12.12.2017	10.9		-0.03	PFC	10.90				25.00	0.00	2				Yes		
57	S-12-05	erection of 33 kV features at Jankampet 132/11 kV Lift irrigation substation in Nizamabad district	20.12.2012	20.09.2016	01.11.2016	31.03.2020	16.02.2018	4.18		-0.03	REC	7.54				0.00	32.00	0				Yes	Yes	
58	S-13-02	220/132 kV SS at Ayyagaripally in Mahaboobabad in Warangal district	09.05.2016	05.01.2016	02.03.2016	31.03.2020	29.01.2018	78.33		0.33	REC	68.90				94.00	200.00	9				Yes	Yes	
59	S-15-08	Erection of 132 kV DC line for making LILO of one circuit of existing 132kV DC line from 132 KV SS Jakora to 132 KV SS Bichkunda at 132/33 kV SS Banswada under the program for providing 9.00 Hrs Day Time Supply for Agriculture	26.08.2015	05.09.2016	01.11.2016	31.03.2020	29.12.2017	8.00		0.18	PFC	6.53				20.00	0.00	2				Yes		
60	S-15-12	Erection of 132/33 kV Sub-Station at Gandimasanipet of Yellareddy Constituency in Nizamabad District.	07.09.2015	05.05.2016	25.07.2016	31.03.2020	25.09.2018	15.89		-0.02	PFC	13.40				12.00	48.00	2				Yes		
61	S-10-20	220 kV Switching Station at Thimmajipeta & connected lines	Dec-17	05.07.2013	30.09.2013	31.03.2020	07.06.2017	29.32		0.32	PFC	67.46				94.00	0.00	8				Yes		
62	S-11-22	132 kV SS Madugula & connected lines	12.07.2012	01.09.2015	21.12.2015	31.03.2020	11.11.2017	22.09		0.05	PFC	19.05				39.40	63.00	4				Yes		
63	S-11-24	132 kV SS Srirangapur (Mogiligidda) & connected lines	06.04.2011	02.04.2014	07.08.2014	31.03.2020	13.06.2016	16.91		0.02	REC	13.14				14.00	81.50	2.00				Yes		
64	S-11-39	132 kv SS Yerrabelli(V), Nidmanoor(M) & connected lines	22.12.2011	05.07.2015	18.09.2015	31.03.2020	03.10.2016	19.37		-0.16	Dena Bank	13.71				25.00	47.50	2.00				Yes		
65	S-14-04	132/33 kV Substation at Ganeshpally in Medak District along with connected lines	09.04.2015	10.04.2015	04.07.2015	31.03.2020	08.06.2016	21.03		0.03	REC	19.06				24.00	63.00	3.00				Yes	Yes	

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation Upto Previous Year (n-1) (as per Audited Financial Statements) (up to 2019)	Expenditure/ Capitalisation claimed for the Current year (2019-20)	Loan Source	Means of finance			Date of Capitalization	Addition to Transmission Network			Reasons for cost overrun	Reasons for time overrun	Whether Part Capitalization or Full Capitalization	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
				Schedule	Actual	Schedule	Actual	Rs. Crore	Rs. Crore	Rs. Crore		Debt (Rs. Crore)	Equity (Rs. Crore)	Grants (Rs. Crore)		Lines (ckt km)	Capacity (MVA)	Bays (No.)						
66	S-14-03	132/33 kV Substation at Duddeda in Medak District along with connected lines	09.04.2015	10.05.2015	31.07.2015	31.03.2020	02.09.2016	24.60		0.03	REC	19.06				30.00	63.00	2				Yes	Yes	
67	S-12-02	132KV Arempula & connected lines	28.11.2015	01.04.2016	06.06.2016	31.03.2020	March'2017	21.53		0.03	Tamilnadu Mercantile Bank	19.38				30.00	48.00	2				Yes	Yes	
68	S-15-28	220 kV 2nd circuit stringing on 220 kV RSS - Jagityal and 220 kV RSS - Nirmal	17.12.2015	31.09.2015	27.11.2015	31.03.2020	30.12.2016	46.4		-0.02	PFC	38.06				204.00	--	4				Yes		
69	S-10-07	132/33KV SS Burugupally and connected Line	12.07.2013	31.04.2013	11.06.2013	31.03.2020	30.03.2016	20.71		0.01	REC	17.94				34.00	32.00	2				Yes		
TOTAL								2476.74	498.7	314.87						2961.9	7557	262						

Scheme wise Details of capitalization for F.Y:2019-20 (RMI)

Sl. No.	Scheme ID-SAP	Name of the Project	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation upto previous year as per Audited Financial Statements	Capitalisation claimed for the Current Year (Rs. Crores)	Means of Finance			Date of Capitalisation	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whether Part Capitalisation (or) Full Capitalisation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspection Certificate
				Scheduled	Actual	Scheduled	Actual				Debt	Equity	Grant		Lines (CKT KM)	Capacity (MVA)	Bays (Nos.)						
1	N-16-OM	O&M CAPITAL MAT. PROC. for FY: 2016-17	-	-	-	-	31.03.2020	-	-	0.25	-	-	-		-	-	-	-	-	-	-	-	-
2	N-16-OM	Migrate OMC Open Capital Inventory	-	-	-	-	31.03.2020	-	-	0.21	-	-	-		-	-	-	-	-	-	-	-	-
3	O-16-01	Rolling stock for FY 2016-2017	-	11.01.2017	11.01.2017	11.01.2018	31.12.2020	39.53	-	6.57									Procurement Delay due to poor response of Bidders		-	-	-
4	R-14-01	RMI for the year 2014	APERC in its tariff order dt.20.03.2009 has approved Rs.50.00 crs under RMI during F.Y:2013-14					50.00		0.01								No cost overrun					
5	R-15-01	RMI for the year 2015	APERC in its Tariff Order dt.09.05.2014 has approved Rs.98.50 Crores for combined state of Andhra Pradesh under Renovation & Modernization Scheme for the year 2015-16.After careful consideration, TSTRANSCO accords approval for Rs.53.08 Crores (53.89% of 98.50 Crores.	16.09.2015	16.09.2015	15.09.2026	31.03.2021	53.08		2.36	-	-	-		-	-	-	No cost overrun	Repeated Tendering		-	-	-
6	R-17-01	RMI for FY:2017-18 & 2018-19	TSERC in its tariff order dt.01.05.2017 has approved for investment of Rs.50.11Cr under RMI during each of F.Y:2017-18,2018-19	07.10.2017	07.10.2017	06.10.2018	31.03.2022	100.22	-	8.48	-	-	-		-	-	-	No cost overrun	Repeated Tendering		-	-	-
	TOTAL							242.83		17.42													

Scheme wise Details of capitalization for F.Y:2019-20 (RMI - Lines Augmentation).

Sl. No.	Scheme ID-SAP	Name of the Project	Decsription	Investment Approval Date	Start Date		Completion Date		Approve d Cost as per Investme nt Approval (in Rs. Crores)	Capitalisat ion upto previous year as per Audited Financial Statement s	Capitalis ation claimed for the Current Year (Rs. Crores)	Means of Finance			Date of Capitali- sation	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whethe r Part Capitali sation (or) Full Capitali sation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
					Sche duled	Act ual	Sche duled	Actual				Deb t	Equi ty	Grant		Lines (CKT KM)	Capacity (MVA) Shown Separately	Bays (Nos.)						
1	R-16-02.01	PSDF	Electrical	T.O.O Ms.No. 19, Dt: 08.02.2016				20-Sep-18	59.97					Yes	18-Jun-19				No Cost Overrun	As per Requirement Works were taken up		2019000726		
2	R-16-02.01	PSDF	Electrical					19-Sep-18						Yes	16-Sep-20				No Cost Overrun	As per Requirement Works were taken up		2020000618		
3	R-16-02.01	PSDF	Electrical					6-Sep-18						Yes	7-May-19				No Cost Overrun	As per Requirement Works were taken up		2019000083		
4	R-16-02.01	PSDF	Electrical					5-Sep-18						Yes	7-May-19				No Cost Overrun	As per Requirement Works were taken up		2019000084		
5	R-16-02.01	PSDF	Electrical					22-Sep-18						Yes	7-Oct-20				No Cost Overrun	As per Requirement Works were taken up		2020000644		
6	R-16-02.01	PSDF	Electrical					12-Jul-19						Yes	8-Oct-20				No Cost Overrun	As per Requirement Works were taken up		2020000645		
7	R-16-02.01	PSDF	Electrical					31-Aug-18						Yes	6-May-19				No Cost Overrun	As per Requirement Works were taken up		2019000053		
8	R-16-02.01	PSDF	Electrical					8-Oct-18						Yes	3-Jun-19				No Cost Overrun	As per Requirement Works were taken up		2019000583		
9	R-16-02.01	PSDF	Electrical					19-Sep-18						Yes	16-Sep-20				No Cost Overrun	As per Requirement Works were taken up		2020000619		
10	R-16-02.02	PSDF	Telecom					5-Mar-20						Yes	30-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000412		
11	R-16-02.02	PSDF	Telecom					5-Mar-20						Yes	30-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000411		
12	R-16-02.02	PSDF	Telecom					15-Feb-20						Yes	9-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000082		
13	R-16-02.02	PSDF	Telecom					26-Aug-20						Yes	13-Nov-20				No Cost Overrun	As per Requirement Works were taken up		2020000654		
14	R-16-02.02	PSDF	Telecom					17-Feb-20						Yes	9-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000083		
15	R-16-02.02	PSDF	Telecom					21-Mar-20						Yes	19-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000332		
16	R-16-02.02	PSDF	Telecom					26-Feb-20						Yes	18-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000286		
17	R-16-02.02	PSDF	Telecom					28-Feb-20						Yes	18-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000287		
18	R-16-02.02	PSDF	Telecom					16-Mar-20						Yes	30-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000414		
19	R-16-02.02	PSDF	Telecom					29-Aug-20						Yes	13-Nov-20				No Cost Overrun	As per Requirement Works were taken up		2020000655		
20	R-16-02.02	PSDF	Telecom					14-Feb-20						Yes	9-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000084		

Scheme wise Details of capitalization for F.Y:2019-20 (RMI - Lines Augmentation).

Sl. No.	Scheme ID-SAP	Name of the Project	Decsription	Investment Approval Date	Start Date		Completion Date		Approve d Cost as per Investme nt Approval (in Rs. Crores)	Capitalisat ion upto previous year as per Audited Financial Statement s	Capitalis ation claimed for the Current Year (Rs. Crores)	Means of Finance			Date of Capitali- sation	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whethe r Part Capitali sation (or) Full Capitali sation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
					Sche duled	Act ual	Sche duled	Actual				Deb t	Equi ty	Grant		Lines (CKT KM)	Capacity (MVA) Shown Separately	Bays (Nos.)						
21	R-16-02.02	PSDF	Telecom					19-Mar-20						Yes	9-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000081		
22	R-16-02.02	PSDF	Telecom					12-Mar-20						Yes	8-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000073		
23	R-16-02.02	PSDF	Telecom					12-Mar-20						Yes	8-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000075		
24	R-16-02.02	PSDF	Telecom					18-Mar-20						Yes	10-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000108		
25	R-16-02.02	PSDF	Telecom					19-Mar-20						Yes	10-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000105		
26	R-16-02.02	PSDF	Telecom					18-Mar-20						Yes	9-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000093		
27	R-16-02.02	PSDF	Telecom					17-Mar-20						Yes	11-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000193		
28	R-16-02.02	PSDF	Telecom					7-Mar-20						Yes	12-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000229		
29	R-16-02.02	PSDF	Telecom					18-Mar-20						Yes	8-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000059		
30	R-16-02.02	PSDF	Telecom					18-Mar-20						Yes	8-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000060		
31	R-16-02.02	PSDF	Telecom					17-Mar-20						Yes	8-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000055		
32	R-16-02.02	PSDF	Telecom					17-Mar-20						Yes	8-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000053		
33	R-16-02.02	PSDF	Telecom					17-Mar-20						Yes	8-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000056		
34	R-16-02.02	PSDF	Telecom					18-Mar-20						Yes	11-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000159		
35	R-16-02.02	PSDF	Telecom					16-Mar-20						Yes	11-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000160		
36	R-16-02.02	PSDF	Telecom					11-Feb-20						Yes	12-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000215		
37	R-16-02.02	PSDF	Telecom					17-Mar-20						Yes	11-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000161		
38	R-16-02.02	PSDF	Telecom					26-Feb-20						Yes	12-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000216		
39	R-16-02.02	PSDF	Telecom					19-Mar-20						Yes	9-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000094		
40	R-16-02.02	PSDF	Telecom					20-Mar-20						Yes	12-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000233		
41	R-16-02.02	PSDF	Telecom					20-Mar-20						Yes	12-Jun-20				No Cost Overrun	As per Requirement Works were taken up		2020000234		
	TOTAL								59.97															

Scheme wise Details of capitalization for F.Y:2019-20 (RMI - Augmentation of PTRs).

Sl.No	Scheme ID-SAP	Name of the Project	Decsription	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation upto previous year as per Audited Financial Statements	Capitalisation claimed for the Current Year (Rs. Crores)	Means of Finance			Date of Capitalisation (MM/DD/YYYY)	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whether Part Capitalisation (or) Full Capitalisation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspection Certificate
					Scheduled	Actual	Schedule	Actual in (MM/DD/YYYY)				Debt	Equity	Grant		Lines (CKT KM)	Capacity (MVA) Shown Separately	Bays (Nos.)						
1	A-13-03	Aug in WGL ZONE & Bandlaguda Metro Zone	AUG OF 50 MVA PTR AT BDLG SS	(**)	9-Jul-13	9-Jul-13	--	3/19/2019	12.5	-	0.044				6/11/2019				No Cost Overrun	As per Requirement Works were taken up		2019000656		
2	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	EREC of 80MVA at Nalgonda	Approval CRN No.2/16-17	1-May-15	1-May-15	--	5/23/2016	283.03		0.008				6/22/2019				No Cost Overrun	As per Requirement Works were taken up		2019000816		
3	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	3RD 10/16 AT THIRUMALIPALY					4/11/2016			0.032				5/29/2019				No Cost Overrun	As per Requirement Works were taken up		2019000529		
4	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	3RD 31.5 AT MIDJIL					4/7/2016			0.009				5/7/2019				No Cost Overrun	As per Requirement Works were taken up		2019000119		
5	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	3RD 31.5 AT MADDUR					4/18/2016			0.018				5/7/2019				No Cost Overrun	As per Requirement Works were taken up		2019000117		
6	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	3RD 31.5 AT NAGARKURNOOL					3/5/2016			0.017				5/7/2019				No Cost Overrun	As per Requirement Works were taken up		2019000120		
7	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	EREC of 50MVA in place of 31.5@Mothkur					2/5/2016			0.008				9/7/2020				No Cost Overrun	As per Requirement Works were taken up		2020000602		
8	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	31.5TO 50MVA PTR-1 NARAYANKHED SS					4/4/2016			0.015				6/17/2020				No Cost Overrun	As per Requirement Works were taken up		2020000283		
9	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	31.5 TO 50MVA PTR-1 KOWDIPALLY SS					3/26/2016			0.01				6/17/2020				No Cost Overrun	As per Requirement Works were taken up		2020000285		
10	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	31.5 TO 50MVA PTR-1 MEDAK SS					4/11/2016			0.041				6/18/2020				No Cost Overrun	As per Requirement Works were taken up		2020000297		
11	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	EREC of 50MVA in place of 31.5@Bhongiri					2/1/2016			0.026				9/7/2020				No Cost Overrun	As per Requirement Works were taken up		2020000604		
12	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	EREC of 50MVA in place of 10/16@Bhongiri					12/16/2015			0.016				9/7/2020				No Cost Overrun	As per Requirement Works were taken up		2020000605		
13	A-15-05	AUGof PTR@EHT SS for extending 9Hrs	AUG OF 10/1MVA PTR AT TKPL SS					11/18/2015			0.002				7/1/2020				No Cost Overrun	As per Requirement Works were taken up		2020000451		
14	A-15-07	Augmentation of PTR capacities at 220kV	Erection of 160 MVA PTR at 220/132 KV	(**)	2-Jul-15	2-Jul-15	--	5/20/2016	11.35		0.016				6/22/2019				No Cost Overrun	As per Requirement Works were taken up		2019000805		
15	A-15-07	Augmentation of PTR capacities at 220kV	Erection of 100 MVA PTR at 220/132 KV					4/26/2016			0.003				6/22/2019				No Cost Overrun	As per Requirement Works were taken up		2019000806		
16	A-15-23	AUG of 160MVA PTR at Dicpally SS	ERECTION OF 4th 160MVA PTR Bay at 220kV	(**)	2-Jul-15	2-Jul-15	--	12/4/2015	3.78		0.004				7/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000467		
17	A-15-24	Aug. of132KVSS Gunrock for additional 50	132 KV SS Gunrock	(**)	14-Feb-15	14-Feb-15	--	3/16/2019	4.51		0.606				5/10/2019				No Cost Overrun	As per Requirement Works were taken up		2019000178		
18	A-15-25	Aug. at 220KV SS Gachibowli ADDL. 50MVA.	CENTRAL STORES	(**)	23-Jun-15	23-Jun-15	--	5/23/2018	5.7		0.037				5/25/2019				No Cost Overrun	As per Requirement Works were taken up		2019000409		
19	A-15-25	Aug. at 220KV SS Gachibowli ADDL. 50MVA.	220KV SS Gachibowli					4/15/2018			0.189				5/22/2019				No Cost Overrun	As per Requirement Works were taken up		2019000355		

Scheme wise Details of capitalization for F.Y:2019-20 (RMI - Augmentation of PTRs).

Sl.No	Scheme ID-SAP	Name of the Project	Decsription	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation upto previous year as per Audited Financial Statements	Capitalisation claimed for the Current Year (Rs. Crores)	Means of Finance			Date of Capitalisation (MM/DD/YYYY)	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whether Part Capitalisation (or) Full Capitalisation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
					Scheduled	Actual	Schedule	Actual in (MM/DD/YYYY)				Debt	Equity	Grant		Lines (CKT KM)	Capacity (MVA) Shown Separately	Bays (Nos.)						
20	A-16-02	Aug . 80MVAs at Moulali & sivarampally	3rd 80MVAPTR,132KV bay@220KV SS SVPL	(**)	16-Feb-16	16-Feb-16	--	8/26/2016	11.51		0.207				5/31/2019				No Cost Overrun	As per Requirement Works were taken up		2019000557		
21	A-16-02	Aug . 80MVAs at Moulali & sivarampally	ADDL 80MVA PTR @ MOULALI SS					6/22/2016			0.1				5/31/2019				No Cost Overrun	As per Requirement Works were taken up		2019000555		
22	A-16-09	Augt. PTR Capacity at 220KV Malyalpally	Augmentation at 220KV SS Malyalapally	(**)	9-Dec-16	9-Dec-16	--	9/24/2019	5.38		0.039				6/26/2020				No Cost Overrun	As per Requirement Works were taken up		2020000388		
23	A-16-09	Augt. PTR Capacity at 220KV Malyalpally	Augmentation at 220KV SS Malyalapally					9/24/2019			0.053				6/26/2020				No Cost Overrun	As per Requirement Works were taken up		2020000389		
24	A-16-09	Augt. PTR Capacity at 220KV Malyalpally	Augmentation at 220KV SS Malyalapally					4/18/2019			0.261				6/27/2020				No Cost Overrun	As per Requirement Works were taken up		2020000394		
25	A-16-09	Augt. PTR Capacity at 220KV Malyalpally	Augmentation at 220KV SS Malyalapally					4/18/2019			0.009				6/27/2020				No Cost Overrun	As per Requirement Works were taken up		2020000395		
26	A-16-09	Augt. PTR Capacity at 220KV Malyalpally	160 MVA PTR at 400 KV Gajwel					12/16/2019			0.066				6/20/2020				No Cost Overrun	As per Requirement Works were taken up		2020000338		
27	A-16-09	Augt. PTR Capacity at 220KV Malyalpally	160 MVA PTR at 400 KV Gajwel					12/16/2019			3.62				6/16/2020				No Cost Overrun	As per Requirement Works were taken up		2020000271		
28	A-16-10	Aug. at 220KV SS Gunrock & Ghanapur 160M	GUNROCK 160MVA	(**)	8-Dec-16	8-Dec-16	--	5/24/2018	14.05		0.003				5/10/2019				No Cost Overrun	As per Requirement Works were taken up		2019000176		
29	A-16-10	Aug. at 220KV SS Gunrock & Ghanapur 160M	GHANAPUR 160MVA					1/25/2020			0.289				7/1/2020				No Cost Overrun	As per Requirement Works were taken up		2020000437		
30	A-17-01	24 Hrs. Agl. supply works in WGL ZONE	132 KV Khanapur	Approval CRN No.13/17, 2017-18	20-May-17	20-May-17	--	4/21/2018	72.23		0.001				6/14/2019				No Cost Overrun	As per Requirement Works were taken up		2019000694		
31	A-17-01	24 Hrs. Agl. supply works in WGL ZONE	132 KV SS Banswada					12/28/2017			0.004				6/29/2020				No Cost Overrun	As per Requirement Works were taken up		2020000402		
32	A-17-01	24 Hrs. Agl. supply works in WGL ZONE	50 MVA Morthad - Shamshabad					10/6/2018			0.061				5/3/2019				No Cost Overrun	As per Requirement Works were taken up		2019000020		
33	A-17-01	24 Hrs. Agl. supply works in WGL ZONE	50 MVA Dichpally - Moulali					12/19/2018			0.087				5/10/2019				No Cost Overrun	As per Requirement Works were taken up		2019000182		
34	A-17-01	24 Hrs. Agl. supply works in WGL ZONE	132 KV SS Narmetta					1/18/2018			0.082				9/22/2020				No Cost Overrun	As per Requirement Works were taken up		2020000629		
35	A-17-01	24 Hrs. Agl. supply works in WGL ZONE	50 MVA Mustyala - Waddepally					7/11/2019			0.087				10/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000646		
36	A-17-01	24 Hrs. Agl. supply works in WGL ZONE	132 KV SS Burugupally					9/1/2017			1.112				10/9/2020				No Cost Overrun	As per Requirement Works were taken up		2020000647		
37	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Asif nagar	Approval CRN No.13/17, 2017-18	2-Jun-17	2-Jun-17	--	1/27/2018	51.29		0.176				6/22/2020				No Cost Overrun	As per Requirement Works were taken up		2020000361		

Scheme wise Details of capitalization for F.Y:2019-20 (RMI - Augmentation of PTRs).

Sl.No	Scheme ID-SAP	Name of the Project	Decsription	Investmen t Approval Date	Start Date		Completion Date		Appro ved Cost as per Invest ment Appro val	Capitalisa tion upto previous year as per Audited Financial Statement s	Capitalis ation claimed for the Current Year (Rs. Crores)	Means of Finance			Date of Capitalisatio n (MM/DD/YYYY)	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whether Part Capitalisa tion (or) Full Capitalisa tion	Physical Completion Certificate	Financi al Comple tion Certifi cate	Electric al Inspect or Certific ate
					Scheduled	Actual	Sche dule d	Actual in (MM/DD/YYYY)				Debt	Equity	Grant		Line s (CKT KM)	Capacity (MVA) Shown Separat ely	Bays (Nos.)						
38	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Jubilee Hills					6/18/2018			0.085				5/13/2019				No Cost Overrun	As per Requirement Works were taken up		2019000217		
39	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Jubilee Hills					6/18/2018			0.003				5/13/2019				No Cost Overrun	As per Requirement Works were taken up		2019000222		
40	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Jubilee Hills					11/21/2017			0.003				6/25/2020				No Cost Overrun	As per Requirement Works were taken up		2020000381		
41	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Pashamailaram					7/16/2018			0.054				5/22/2019				No Cost Overrun	As per Requirement Works were taken up		2019000342		
42	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Jubilee Hills					6/18/2018			0.054				5/14/2019				No Cost Overrun	As per Requirement Works were taken up		2019000223		
43	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	CENTRAL STORES					6/18/2018			0.176				6/23/2020				No Cost Overrun	As per Requirement Works were taken up		2020000366		
44	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132 KV SS Turkayamjal					10/5/2018			0.087				5/3/2019				No Cost Overrun	As per Requirement Works were taken up		2019000022		
45	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	220KV SS Ghanapur					2/5/2019			0.117				7/1/2020				No Cost Overrun	As per Requirement Works were taken up		2020000431		
46	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	220KV SS Ghanapur					1/17/2019			0.018				6/20/2020				No Cost Overrun	As per Requirement Works were taken up		2020000344		
47	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Malkaram					8/28/2018			0.157				5/7/2019				No Cost Overrun	As per Requirement Works were taken up		2019000079		
48	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	220KV SS Ghanapur					2/5/2019			0.173				5/7/2019				No Cost Overrun	As per Requirement Works were taken up		2019000112		
49	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	220KV SS Ghanapur					2/5/2019			0.044				7/1/2020				No Cost Overrun	As per Requirement Works were taken up		2020000432		
50	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	220KV SS Ghanapur					2/3/2020			0.014				7/1/2020				No Cost Overrun	As per Requirement Works were taken up		2020000433		
51	A-17-02	Aug Sys Stren & 24 Hrs Agl METRO & RURAL	132KV SS Pashamailaram					7/16/2018			1.829				6/18/2020				No Cost Overrun	As per Requirement Works were taken up		2020000293		
52	A-17-05	Augmentation of PTR capacity at 132KV Ma	Augmentation of PTR at Manoharabad SS	(**)	16-Mar-18	16-Mar-18	--	12/31/2018	3.63		2.59				8/17/2020				No Cost Overrun	As per Requirement Works were taken up		2020000493		
53	A-18-02	Aug of PTR cap.at YWGI	Aug. of PTR at 132KV Ghanpur SS	(**)	17-Jul-18	17-Jul-18	--	11/26/2017	6.68		0.061				9/22/2020				No Cost Overrun	As per Requirement Works were taken up		2020000630		
54	A-18-03	Augmantation of PTR at RCPuram and 4 Oth	Aug of PTR at 132KV RCPuram SS	(**)	17-Nov-18	17-Nov-18	--	3/12/2019	9.09		0.001				6/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000069		
55	A-18-03	Augmantation of PTR at RCPuram and 4 Oth	Aug of PTR at 132KV RCPuram SS					3/12/2019			0				6/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000070		
56	A-18-03	Augmantation of PTR at RCPuram and 4 Oth	Aug of PTR at 132KV RCPuram SS					3/12/2019			0.043				6/5/2020				No Cost Overrun	As per Requirement Works were taken up		2020000027		

Scheme wise Details of capitalization for F.Y:2019-20 (RMI - Augmentation of PTRs).

Sl.No	Scheme ID-SAP	Name of the Project	Decsription	Investment Approval Date	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation upto previous year as per Audited Financial Statements	Capitalisation claimed for the Current Year (Rs. Crores)	Means of Finance			Date of Capitalisation (MM/DD/YYYY)	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whether Part Capitalisation (or) Full Capitalisation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspection Certificate
					Scheduled	Actual	Scheduled	Actual in (MM/DD/YYYY)				Debt	Equity	Grant		Lines (CKT KM)	Capacity (MVA) Shown Separately	Bays (Nos.)						
57	A-18-03	Augmantation of PTR at RCPuram and 4 Oth	Aug of PTR at 132KV RCPuram SS				3/12/2019			0.178				6/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000068			
58	A-18-03	Augmantation of PTR at RCPuram and 4 Oth	Aug of PTR at 132KV RCPuram SS				3/12/2019			0.014				6/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000072			
59	A-18-03	Augmantation of PTR at RCPuram and 4 Oth	Aug of PTR at 132KV RCPuram SS				3/12/2019			0.001				6/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000076			
60	A-18-03	Augmantation of PTR at RCPuram and 4 Oth	Aug of PTR at 132KV RCPuram SS				3/12/2019			2.412				6/8/2020				No Cost Overrun	As per Requirement Works were taken up		2020000051			
61	A-18-04	Aug of PTR at Jadcherla & 4 Other SS	Aug of PTR at 132KV Jadcherla SS	(**)	19-Nov-18	19-Nov-18	--	1/7/2019	3.49	0.001				5/8/2019				No Cost Overrun	As per Requirement Works were taken up		2019000129			
62	A-18-04	Aug of PTR at Jadcherla & 4 Other SS	Aug of PTR at 132KV Wardhannapet SS				2/28/2019			0				5/30/2019				No Cost Overrun	As per Requirement Works were taken up		2019000547			
63	A-18-04	Aug of PTR at Jadcherla & 4 Other SS	Aug of PTR at 132KV Wardhannapet SS				3/22/2019			0.129				9/21/2020				No Cost Overrun	As per Requirement Works were taken up		2020000622			
	TOTAL								498.2		15.602					0	0	0						

(Scheme Wise Capitalisation Details of Lift Irrigation Schemes for FY 2019-2020)

FY 2019-2020

Sl. No.	L1 WBS Element	Name of the Project	Start Date		Completion Date		Approved Cost as per Investment Approval	Capitalisation upto previous year as per Audited Financial Statements	Capitalisation claimed for the Current Year (FY 2019-2020) (Rs. Crores)	Means of Finance			Date of Capitalisation	Addition to Transmission Network			Reason for Cost Overrun	Reason for Time Overrun	Whether Part Capitalisation (or) Full Capitalisation	Physical Completion Certificate	Financial Completion Certificate	Electrical Inspector Certificate
			Scheduled	Actual	Scheduled	Actual				Debt	Equity	Grant		Lines (CKT KM)	Capacity (MVA)	Bays (Nos.)						
1	D-08-04	Extn of 220&132kV Supply to SPS LIS	Nov'09		Aug'10	Sep'16	189.36	46.31	0.04	Grant									Part Capitalisation			
2	D-15-03	400kV Supply to Myadaram/Ramadugu/Tippapur	Sep'16		Feb'19	Feb'19	889.99	586.41	129.81	Grant					2290	33			Part Capitalisation			
3	L-05-02	Extn of 220&132kV Supply to Godavari LIS	Apr'17		Jul'21		119.59	43.86	11.21	Grant				2	63	5						
4	L-11-01	Extn of Supply@132kV Thotapaly Gouravelly LI	Nov'14		Dec'16	Sep'19	43.733	19.22	16.45	Grant				63		2			Part Capitalisation			
5	L-14-01	Lift Irrigation Scheme at Jogapur	Apr'17		Jul'18	May'18	45.11	11.79	0.24	Grant									Part Capitalisation			
6	L-15-02	400 kV Supply to Tippapur	Jun'17		Oct'18	Apr'19	158.28		138.28	Grant				92								
7	L-15-03	400kV Supply to Myadaram	Aug'16		Aug'17	Nov'18	66.48	54.83	(-)0.15	Grant									Part Capitalisation			
8	L-15-04	400kV Supply to Ramadugu	Aug'16		Dec'17	May'18	113.96	88.22	0.89	Grant									Part Capitalisation			
9	L-16-04	Extn of 132 kV Supply to Kanakapur PCLI	May'17		Mar'19	Nov'18	31.00	12.79	4.77	Grant									Part Capitalisation			
10	L-16-05	Kaleshwaram Lift Irrigation Project	Mar'17		Dec'18	May'19	1638.46	436.83	166.86	Grant				108.7	2920	97			Part Capitalisation			
11	L-17-01	Chanaka - Korata Lift Irrigation Scheme	Mar'17		Jun'18	May'19	41.15	18.11	3.74	Grant				20		2			Part Capitalisation			
12	L-17-03	FFC	Feb'18		Nov'18	Jun'20	134.67		54.06	Grant				74	240	12			Part Capitalisation			
13	L-16-03	Erection of bulk load works of 400/11KV Tukkapur LI(Package 12) under Kaleshwaram Lift Irrigation Project (Dr.B.R.P.C.L.I.S)	Mar'17		Sep'18	Mar'20	219.28		172.73	Grant				196.908					Part Capitalisation			
14	L-18-02	220/11 kv SS at Bheemghanpur	Jun'18		Dec'18	Aug'19	23.99		11.00	Grant					128.5	1						
15	L-18-03	Thumilla LIS	Jul'18		Dec'18	Nov'18	28.17		11.92	Grant									Part Capitalisation			
		Total:					3743.22	1318.37	722.00					556.61	5641.50	152						

Form 1.1d: INVESTMENTS

400KV SCHEMES

Year:2019-20

(Rs. in Crores.)

Sl. No.	Code	Project Details				PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks	
		Project Code*	Project Title	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year					Annual				Annual								
															Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred		Percentage capitalisation
1	P-10-01	APT/TS/SCCL(Jaipur)-Evacuation-400kV Quad D/C /F-INVST-42/2013	Jaipur Power Transmission Scheme	Mar' 2013	Mar' 2021	686.42	20.59	61.59			73.79	842.39			898.49	11.15%	3 yrs	10 yrs	REC	3.50				25.21				25.21				
2	S-14-02	APT/TS/400kV Suryapet/F-INVST-28/2014	Suryapet Power Transmission Scheme	Jul' 2013	Mar' 2021	1,426.53	42.80	144.80			153.35	1,767.48			1572.43	11.15%	3 yrs	10 yrs	REC	8.00				5.26				5.26				
3	S-14-01	Lr.No.APERC/Secy/DD(Trans)/F:E-700-8/2014 dated 06.08.2014	Reactor Scheme -II	Sep' 2016	Mar' 2020	80.74						80.74								0.50				0.86				0.86			100	
4	P-15-01	TST / TS / 400kV Dindi Substation /Trans. improvement scheme /Invest. Appoval No.16/15, Dt.02.01.2016	Dindi System Improvement Scheme	Nov' 2015	Mar' 2021	251.97	7.56	27.08			34.92	321.53			273.55	10.75%	3 yrs	10 yrs after expiry of 3 yrs Mort.	REC	13.00				11.06				11.06				
5	P-15-04, S-15-24, S-16-05	TST / TS / KTPS VII STAGE (1x800MW)/POWER TRANSMISSION/INVEST. APPROVAL/Revised approval 17/17 , 2017-18, dec'2017	KTPS 1x800Mw, VII stage Power Evacuation scheme	Jul' 2015	Mar' 2022	1,150.31	34.17	105.61			122.43	1,412.52			937.63	10.75%	11 yrs	15 yrs from the date of 1st disb.(incl. Mort)	PFC	81.00				106.04				106.04				
6	S-15-13	TST/TS/765kV Wardha –Hyderabad Link Transmission scheme- investment proposal revised approval NO 16/17-2017-18 Dt.19.12.2017	765kV Wardha –Hyderabad Link Transmission scheme	Nov' 2015	Mar'2021	1,037.70	30.82	100.08			110.45	1,279.05			665.73	10.75%	11 yrs	15 yrs from the date of 1st disb.(incl. Mort)	PFC	103.00				178.07				178.07				
7	A-15-11, A-15-10	TST/TS/315 MVA PTR,Augmentation/DICHPALLY,VELTOOR,Gajwel/revised APPROVAL NO 03/17,2017-18 dated 04.05.2017	Augmentation Scheme	Feb' 2016	Mar' 2020	95.59						95.59			46.97	10.75%	11 yrs	15 yrs from the date of 1st disb.(incl. Mort)	PFC	0.50				3.92				3.92			100	
8	P-15-03, S-12-23, S-15-20, S-15-21, S-15-22, S-15-25	TST/TS/Bhadradri (4X270) MW Thermal power Transmission/ Investment Approval NO17/15, Dt.02.01.2016	Bhadradri Thermal Power Transmission Scheme 4 X 270 MW	Nov' 2015	Mar' 2021	1,055.78	31.67	103.41			113.496	1,304.36			1150.16	10.75%	11 yrs	15 yrs from the date of 1st disb.(incl. Mort)	PFC	27.00				39.28				39.28				
9	P-12-02, S-12-30, S-12-31	TST/TS/400kV Nirmal Power Transmission Scheme-Power Evacuation from M/s. SCCL 2x600MW units and for upcoming 1x800MW units. /F.Revised approval/NO 07/2018-19 dated 19.07.2018	Nirmal Power Transmission Scheme	Dec'2015	Mar' 2022	943.93	28.04	78.61			100.47	1,151.05			1009.47	10.75%	3 yrs	10 yrs	REC	43.00				68.49				68.49				
10	A-17-03	TS/TST/Invest. Approval/PTR Augmentation/400kV Malkaram & Shankerpally No 11/2017, 17-18 dated 30.08.2017	Augmentation Scheme-III	Dec' 2017	Mar' 2020	74.44						74.44								2.00				0.73				0.73			100	

Sl. No	Code	Project Details				PLANNED CAPITAL EXPENDITURE						SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks		
		Project Code*	Project Title	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year					Annual				Annual								
															Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred		Other expense incurred	Percentage capitalisation
11	S-17-08	TST/TS/Rayadurg System Improvement Scheme.Approval/NO 02/2018-19 dated 24.05.2018	Rayadurg System Improvement Scheme	Sep' 2018	May' 2021	1,469.01	43.63	117.40			156.36	1,786.40								700.00				572.68				572.68				
12	P-16-01	TS/TST/Investment approval/Telangana STPP-1 (2x800MW) NO. 10/2017 dated 23.08.2017	Telangana STPP-I Power Evacuation	Oct' 2017	May' 2021	1,013.61	30.11	105.26			107.88	1,256.86								184.00				193.73				193.73				
13	P-12-04		Wind Power Evacuation Scheme																	0.00				0.23				0.23			100	
14	A-11-01		400kV Augmentation Scheme-II																	0.00				0.11				0.11			100	
15	S-05-02		Ring Main Transmission Scheme												374.90	12.25%	0.00%	12 yrs	PFC	0.00				0.36				0.36			100	
16		TST/TS/Yadradri Thermal Power Evacuation/Approval No.09/2019-20	Yadradri Thermal Power Evacuation	Jan' 2020	Mar' 2024	1,887.67	56.07	209.70			200.91	2,354.35								14.00				0.12				0.12				
17		TST/TS/KTPP SIS/Approval No.03/2019-20	KTPP System Improvement Scheme	Jan' 2020	Mar' 2024	372.58	11.07	30.92			39.66	454.23								15.50				0.09				0.09				
18		TST/TS/Reactor Scheme-III/Approval No. 04/2019-20	Reactor Scheme -III	Jan'2020	May' 2022	201.44	5.98	20.92			21.44	249.78								5.00				0.00				0.00				
						11,747.73	342.50	1,105.38			1,235.15	14,430.76								1,200.00				1,206.24				1,206.24				
		<u>DC Works</u>																														
19	D-17-02		Execution of 2 Nos Feeder bays and 8 Nos Metering Bays at STPP,Jaipur	June'2017	Mar' 2020	28.21						28.21								1.50				0.93				0.93			100	
20	D-15-09		2 Nos Bay Extensions at 400kV Dichpally SS																	0.00				1.90				1.90			100	
21	D-18-02		Diversion of 400kV Gajwel-Shply TMDC Line																	0.00				2.14				2.14			100	
		DC Works Total				28.21						28.21								1.50				4.97				4.97				
		GRAND TOTAL				11775.94	342.50	1105.38			1235.15	14458.97								1201.50				1211.21				1211.21				

1.1D ACTUAL EXPENDITURE DURING FY 2019-20

Form 1.1d: INVESTMENTS

220KV & 132KV SCHEMES

Year:2019-20

(Rs. in Crores.)

SL. No.	Code	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks			
		Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year					Annual				Annual										
																Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expenses	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenses incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenses incurred		Percentage capitalisation		
1	S-10-17	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 KV Substation at N V Puram in Khammam District	System Improvement	07.08.2016	31.03.2020	19.95	0.60	1.99		1.25	2.14	25.93			10.550					REC	4.56				20.65				24.26					
2	S-11-11	CRN.No.TST/TS132 kV SSt Donthanpalli/F-INVST-06/2013/Dt:08.10.2014	132 kV DC line from the proposed 220/132/33 kV SS Parigi to 132/33 kV SS Dharmasagar (132/33 kV Substation at Donthanpalli)	System Improvement	13.12.2016	31.03.2020	15.95	0.48	1.59		0.9966	1.71	20.73			19.26					REC	5.42				3.14				4.07					
3	S-11-16	CRN.No.APT/TS/220/132 kV SS-Huzurnagar/F-INVST-01/2014/Dt:20.04.2013	220/132/33 kV substation at Huzurnagar in Nalgonda District	System Improvement	31.10.2013	31.03.2020	45.75	1.37	5.49		2.86	4.92	60.39			62.65					PFC	6.74				12.04				13.74					
4	S-11-28	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 kV SS at Nimmapalli with connected line in Karimnagar Dist	System Improvement	23.03.2018	31.03.2020	18.47	0.25	1.97		0.06	0.91	21.67			17.73					REC	9.84				8.49				11.85					
5	S-12-09	APT/TS/132/Yeddumailram /F-INVST-27/2013	132 KV DC/SC inter linking lines between substations 220 KV Yeddumailram-132 KV Pashmailaram	System Improvement	01.12.2018	30.09.2020	9.09	0.05	0.93		0.00	0.18	10.24							NABARD	4.90				0.02				0.03						
6	S-13-03	CRN.No. APT/TS/220 KVSS -Bonguluru/F.Invest-27/2014	220/132/33KV SS at Bonguloor in RR District	System Improvement	01.06.2014	31.03.2020	56.81	2.13	6.34		0.04	4.41	69.74							NABARD	25.67				19.35				26.12						
7	S-13-11	TST/TS/132 kV SS-Kandukuru/ F-INVST-05/2015	132 kV SS Kandukuru & connected lines	System Improvement	09.09.2016	31.03.2020	21.44	0.28	2.28		0.00	1.03	25.03			20.058					REC	16.50				1.83				6.22					
8	S-14-05	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	2nd circuit stringing on 132kV DC/SC line from 220kV Durshed SS to 132kV Water Works SS and 2 Nos. 132 kV bays at 220kV Durshed and 132kV Water works in Karimnagar Town substations	System Improvement	03.03.2018	31.03.2020	2.03	0.06	0.24		0.1215	0.22	2.66			2.18					REC	0.96				1.29				3.25					
9	S-14-12	APT/TS/132 KV SS Kaithlapur/F-INVST-4/2014	132 KV substation Khaithalapur along with connected lines	System Improvement	05.07.2016	31.08.2020	63.52	0.50	5.09		0.15	1.87	71.13			59.090					REC	8.61				47.04				53.30					
10	S-15-01	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Providing second source of supply to 132/33 kV Sub-Station, Lalgadi Malakpet in Shameerpet Mandal of Ranga Reddy District	System Improvement	20.10.2015	31.03.2020	7.03	0.06	0.73		0.02	0.20	8.04			6.200					PFC	1.49				8.56				9.18					
11	S-15-02	TST/TS/ 132/33 kV Aswaraopet SS Up-Gradation to 220/132 kV / F-INVST- 7/2015	Up-Gradation of 132/33 kV SS Aswaraopet to 220/132 kV SS	System Improvement	18.01.2017	31.03.2020	50.22	0.52	4.65		0.1926	1.88	57.47			42.55					PFC	7.77				2.70				3.69					
12	S-15-04	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 kV Sub-Station at Jangapally of Bejjanki Mandal in Karimnagar District.	System Improvement	03.03.2018	31.12.2019	18.28	0.31	1.74		0.0749	1.12	21.53			16.68					PFC	7.63				10.87				12.28					
13	S-15-05	CRN TST/TS/132 KVSS -Kondapur/F.Invst.06/2015	erection of 132/33 kV Substation at Kondapur Village of Dhanwada Mandal in Mahaboobnagar District along with connected lines	System Improvement	23.03.2017	31.03.2020	22.88	0.35	1.89		-	1.26	26.38			21.71					REC	6.91				1.29				7.65					
14	S-15-06 S-15-35	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Providing of alternate supply to 132 /33 kV SS Chennur and 132/33 kV SS Kataram from 220/132 kV SS, Manthani under the program for providing 9.00 Hrs Day Time Supply for Agriculture.	System Improvement	07.02.2018	31.03.2020	11.92	0.04	1.21		0.0178	0.15	13.34			10.92					REC	7.11				3.30				3.76					
15	S-15-31	CRN.No.TST/TSAsifnagar SS alternatesource of supply/Invest.App.06/2015	erection of 2 nd circuit from 220kV Shivrampally SS to 132kV Asifnagar SS for providing 2 nd source of supply to 132kV Asifnagar substation	System Improvement	16.02.2018	31.03.2020	43.80	0.41	4.05		0.30	1.47	50.02			41.36					REC	11.42				19.53				21.08					
16	S-15-33	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 kV SS at Sarangapur in Adilabad District	System Improvement	04.04.2018	31.01.2020	18.42	0.31	1.87		0.07	1.12	21.80			17.66					REC	5.37				10.59				12.96					

SL. No.	Code	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING					Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks			
		Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year					Annual				Annual									
																Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expenses	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenses incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred		Other expenses incurred	Percentage capitalisation	
17	S-15-34	CRN.No.TST/TS/Erection of 220 KV DC line Gajwel/Siddipet/Invest.App. 04/17-2017-18	220 KV D/C Line from 400KV GAJWEL-SIDDIPET	System Improvement	05.12.2017	31.12.2020	37.85	0.05	3.81		0.02	0.18	41.92			74.970					REC	14.20				26.31				37.40				
18	S-15-36	TST/TS /132/33 kV SS Aipoor , Nalgonda /F-INVST- 01/2016-17	132/33 kV SS at Aipoor in Nalgonda district	System Improvement	05.01.2017	31.03.2022	19.69	0.34	2.13		0.08	1.21	23.45			18.91					REC	0.10				0.15				0.51				
19	S-15-37	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	erection 132 kV line from 220 kV Jurala Sub-Station to 132 kV Ieeza Sub-Station under the program of providing 9.00 Hrs agricultural supply during day time	System Improvement	12.03.2018	31.03.2020	16.38	0.03	1.64		0.0128	0.11	18.18			30.56					REC	5.09				12.10				15.29				
20	S-15-38	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Erection of 132 kV lines for making LILO of (i) 2nd Circuit of 132kV Warangal – Shapurmagar DC line at 132kV SS Jangaon and (ii) 2nd Circuit of 132kV Warangal – Shapurmagar DC line at 132kV SS Kolanpak	System Improvement	10.03.2017	31.03.2020	8.15	0.05	0.84		0.0186	0.16	9.22			7.02					PFC	4.70				2.54				3.25				
21	S-16-08	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	33 kV Features at existing 220/11 kV LI Sub-Station, Bheemghanpur Warangal District.	System Improvement	05.05.2017	31.03.2020	4.78	0.14	0.57		0.2984	0.51	6.30			16.31					PFC	0.29				5.82				7.56				
22	S-16-11	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 kV Substation at Bachannapet in Warangal District	System Improvement	20.04.2017	31.03.2020	18.11	0.26	1.94		0.06	0.95	21.32			16.710					PFC	5.09				6.36				10.24				
23	S-16-12	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 kV SS at Kotagiri with connected line & Bay in Nizamabad District	System Improvement	06.06.2018	31.03.2020	13.85	0.24	1.51		0.0842	0.87	16.56			12.98					PFC	11.34				0.68				9.16				
24	S-16-14	TST/TS/ 220132/33 kV / Substation, Borampet RR District/ INVST- No. 07/16 - 2016-17	220/132/33 kV Substation at Borampet in Ranga Reddy district	System Improvement	28.11.2016	31.03.2021	196.49	3.34	20.37		0.38	11.99	232.57			182.980					PFC	37.83				48.90				56.40				
25	S-16-16	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	erection of 220/33 kV Sub-Station, at Domalapenta Village of Nagarkurnool District (erstwhile Mahaboobnagar District)	System Improvement	05.03.2018	30.11.2019	12.55	0.32	1.42		0.19	1.14	15.62			12.411					PFC	6.52				7.33				10.79				
26	S-17-01	CRN TS/TST/220/33 KV, GIS, Chanchaguda/Invest.Approval No.7/17-2017-18	Erection of 220/33 kV Sub-Station at Chanchalguda	System Improvement	28.02.2018	31.03.2020	78.65	2.28	8.19		-	8.18	97.31			80.208					REC	42.94				37.30				64.14				
27	S-17-06	CRN TS/TST/132/33 KV, GIS, Petlaburz invest.Approval No.5/17-2017-18	132/33 kV Substation at PTO, Petlaburz, Hyderabad District	System Improvement	02.03.2018	31.03.2021	35.43	0.98	3.99		0.00	3.52	43.92			35.930					REC	7.00				20.09				20.09				
28	S-17-09	TST/TS/132 kV SS- 220 kV Toopran, 132 kV Ganeshpally & 132 kV Duddeda SS / F-INVST- 07/2015	220/132/33 kV Substation at Toopran(meenajipet) in Medak District along with connected lines	System Improvement	27.01.2016	31.03.2021	60.80	1.82	6.08		3.80	6.54	79.04			68.430					REC	14.92				39.87				48.68				
29	s-17-10	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Erection of 132kV DC line from proposed 220/132kV SS Madugula to existing 132/33 kV Takkalapally (Yacharam) SS	System Improvement	01.04.2019	31.03.2021	9.81	0.29	0.98		0.59	1.05	12.73			10.60					REC	2.03				0.00				0.00				
30	S-17-12	CRN TST/TS/132/33KV, Choppadandi, SS /Invest.Approval No.20/18-2017-18	132/33 kV SS with connected line at Choppadandi in Karimnagar Dist.	System Improvement	06.06.2018	31.03.2020	21.18	0.34	2.51		0.13	1.21	25.36			19.970					PFC	17.74				0.02				0.10				
31	S-17-13	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	erection of 132/33 kV Sub-Station at Yadagirigutta Temple with connected line Town of Yadadri (erstwhile Nalgonda) .District	System Improvement	01.10.2018	31.03.2020	13.93	0.22	1.66		0.13	0.79	16.72			13.160					PFC	8.89				5.08				11.85				
32	S-17-14	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Providing of 33 kV Features at upcoming 220/132 KV Sub-Station, Mahabubabad in Mahabubabad District	System Improvement	31.10.2018	31.08.2020	6.63	0.18	0.85		1.08	0.65	9.39			7.440					REC	2.80				0.35				0.41				
33	S-17-15	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	erection of 132/33 kV Sub-Station at Chinna Shankarampet in Medak District	System Improvement	01.04.2018	31.03.2020	13.31	0.25	1.76		1.49	0.89	17.70			13.960					REC	12.01				0.62				5.90				

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		Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year					Annual			Annual										
																Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expenses	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenses incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenses incurred		Percentage capitalisation	
34	S-17-18	P.No.28/APERC/Secy/Dir(Engg)/E725/2013, Dt:06-05-2013	feeding 132/33 kV SS Ghanpur through Ring Mains	System Improvement	23.10.2018	31.03.2020	4.83	0.14	0.48		0.29	0.52	6.27			5.07					PFC	2.89				2.62				4.38				
35	S-17-19	CRN No. TST/TS/Erection of 132/33 KV SS at Pitlam in Khammam Dist. Approval/No.04/2018-19	132/33 kV SS at Pitlam in Nizamabad District (13, dt.20.1.18	System Improvement	31.10.2018	31.03.2022	29.55	0.28	3.24		1.71	1.0198	35.80			31.80					REC	0.10				0.05				0.05				
36	S-18-02	CRN No: TST/TS/Erection of 220/132 kV Substation at Ammavaripet, Kazipet(M) in Warangal Urban District.F. Approval/ No.13/18/2018-19	erection of 220/132 kV Sub-Station at Ammavaripetin Warangal-Urban District	System Improvement	31.10.2018	30.06.2021	84.90	2.55	15.02		15.28	9.13	126.88			87.24					PFC	20.26				0.24				5.47				
37	S-18-04	CRN No. TST/TS/Erection of 132/33 KV Sub station at Nagaram in suryapet District. Approval/No.14/18/2018-19, Dt:12.12.2018	132/33 KV SS Nagaram,Nalgonda District	System Improvement	01.04.2019	31.03.2022	26.26	0.29	4.64		1.74	1.04	33.97			25.17					PFC	0.98				0.00				0.49				
38		P.No.28/APERC/Secy/Dir(Engg)/E725/2013, Dt:06-05-2013	33 KV features at 132 KV Railway Traction Switching Station, Kothagudem, Kothagudem Bhadradi District	System Improvement	01.04.2019	31.03.2021	7.00	0.19	0.90		1.15	0.68	9.92			7.35					PFC	1.00				0.00				0.00				
39	--	Proceedings No: 28/APERC/Secy/Dir(Engg)/E-725/2013, dated.06.05.2013	132/33kV SS at Padmanagar in Karimnagar District	System Improvement	01.04.2019	31.03.2021	16.08	0.48	1.93		1.00	1.73	21.22			14.29					PFC	7.00				0.00				0.00				
40		CRN No.TST/TS/Erection of 132 KV Substation at Manikonda in rangareddy Dist.Approval/ No.08/2019-20	132/33 kV Gas Insulated Sub-Station (GIS) at Manikonda in Ranga Reddy District along with connected line with 132 KV XLPE UG cable	System Improvement	31.09.2019	30.03.2021	83.09	2.49	7.48		5.19	8.93	107.18			96.60					REC	10.00				0.00				0.00				
41	P-19-01	CRN No.TST/TS/Erection of 400/220 KV/1x31.5 MVA ICT at BTPS switching yard Manuguru and erection of 220 KV DC line from 220/132/33 KV Manuguru SS to 400 KV BTPS switch yard . Approval No.06/2019-20	400/220 kV, 1X315 MVA ICT at Bhadradi Thermal Power Station (BTPS) switch yard, Manuguru, TSGENCO and erection of 220 KV DC line from 220/132/33 KV Manuguru SS to 400 KV BTPS switch yard	System Improvement	31.09.2019	30.03.2021	51.60	1.55	4.64		3.22	5.55	66.56			59.91					REC	28.54				0.00				21.36				
42	S-17-04	P.No.28/APERC/Secy/Dir(Engg)/E725/2013, Dt:06-05-2013	Administrative approval for erection of 132/33 KVSS Gachibowli in Ranga Reddy District.	System Improvement	01.04.2019	31.03.2021	16.74	0.40	1.87		0.16	1.43	20.60			16.52					REC	10.00				0.00				2.52				
43	S-17-05	CRN TS/TST/132/33 KV, GIS, Seetharambagh/Invest.Approval No.6/17-2017-18	132/33 KV Gas Insulated Sub-station (GIS) at Seetharambagh with connected UG cable & bay in Hyderabad District and connectivity from Asifnagar SS.	System Improvement	01.04.2019	31.03.2022	56.31	1.59	6.36		0.01	5.71	69.99			57.27					REC	2.00				0.00				0.00				
44	S-17-07	P.No.28/APERC/Secy/Dir(Engg)/E725/2013, Dt:06-05-2013	132/33 KV IDA Mallapur Sub-station with connected line in Medchal-Malkajigiri District.	System Improvement	01.04.2019	31.03.2022	17.21	0.41	1.91		0.17	1.25	20.96			16.81					REC	1.00				0.00				0.00				
45	S-17-03	CRN TS/TST/132/33 KV, Mouali-ZTS SS, Investment Approval No.17/17, 2017-18	132/33 KV Sub-station at Mouali ZTS with connected UG cable & bay in Medchal-Malkajigiri District	System Improvement	01.04.2019	31.03.2021	44.12	1.23	4.98		0.16	4.26	54.76			44.47					REC	27.01				0.00				19.08				

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																Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expenses	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenses incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred		Other expenses incurred	Percentage capitalisation	
46	S-17-20	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132 KV DC/SC line from 220KVSS Chegur (Kothur) to existing 132KVSS Kothur	System Improvement	01.04.2019	31.03.2020	5.27	0.04	0.57		0.22	0.15	6.25			5.110					REC	6.24				0.00				4.76				
47	S-17-16	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	2nd CKT (30KM) on 132KV DC/SC line from existing 220/132KV SS Waddekothapally to existing 132/33KV SS Peddanagaram with Panther ACSR Conductor with connected bays	System Improvement	01.04.2019	31.03.2021	6.74	0.03	0.70		0.13	0.12	7.72			6.320					REC	5.00				0.00				0.00				
48	S-16-07	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Erection of 33 kV Features at existing 132 kV Switching Station, Kodandapur in Nalgonda District.	System Improvement	01.04.2019	31.03.2020	7.37	0.31	0.89		0.09	1.12	9.79			8.010					REC	1.03				0.00				0.00				
49	S-13-15 S-17-23	CRN /TST/TS/220/ Switching Station/Mahaboobnagar/13 2 KV Features /Invest,Approval No.14/17-2017, dt:06-05-2013	erection of 132 kV features at 220 kV Thimmajipet Switching Station in Mahaboobnagar District and extending connectivity to 132 kV Jadcherla Sub-Station from Thimmajipet	System Improvement	01.04.2019	31.03.2021	24.43	0.73	2.44		1.49	2.63	31.72			26.390					REC	3.50				0.00				0.51				
50	S-19-04	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	33 kV Features at upcoming 220/132 KV Sub-Station, Ammavaripet in Kazipet (M), Warangal Urban (District)-	System Improvement	01.04.2019	31.03.2021	6.28	0.19	0.57		0.39	0.68	8.10							TSTransco Funds	1.40				0.00				0.00					
51	S-07-03		Erragadda and O.U GIS &Cables scheme	System Improvement	27.12.2011	31.03.2020	437.70	13.13	43.77		26.2620	47.05	567.92			415.00					PFC	8.82				0.00				4.21				
52	S-07-04		TWIN CITIES TRANSMISSION SYSTEM & 132 kV SS NIMS & connected lines & erection of 220/132 kV substations at Gunrock, Imilibun (GIS) & Hayatnagar and 132 kV GIS Substations at Moosarambagh, Miralam Filter bed, Patigadda, Balkampet and with connected Under Ground XLPE Cables – Under Modernization and Strengthening of Hyderabad Metropolitan area	System Improvement	01.08.2014	31.03.2020	76.84	2.30	8.83		0.6132	8.49	97.08			85.36				JICA	16.66				0.00				4.01					
					01.08.2014	31.03.2020	11.75	0.35	1.18		0.7050	1.26	15.25			11.40																		
53	S-08-02	CRN.No./TST/TS/132 KV Amarachinta/F. Invst./ App./08/2011	132/33 kV substation at Amarchinta in Mahaboobnagar district	System Improvement	13.12.2010	31.03.2020	12.96	0.39	1.30		0.7775	1.39	16.81			15.55				Uco Bank	1.41				0.00				1.14					
54	S-08-08	CRN.No./TST/TS/220-132 KV Hyd/F. Invst./99/2019, Dt:20.02.2009	132/33 KV Narayanaguda GIS Sub-station	System Improvement	31.05.2013	31.03.2020	130.19	3.91	13.02		7.8115	14.00	168.92			31.19				PFC	7.97				0.00				6.90					
55	S-08-14	APT/TS/220/33 KV- Singotam x Roads//F- INVST-20/2011	Erection of 220/33 kV SS at Singotam 'X' Roads, instead of erection of 132/33 kV substation at Singotam 'X' Roads, Kollapur Mandal in Mahabubnagar district along with connected lines	System Improvement	12.02.2011	31.03.2020	17.64	0.53	2.12		1.1025	1.90	23.29							Syndicate Bank	0.72				0.00				0.14					
56	S-10-02	CRN.No.APT/TS/132 KVSS/ Asifabad/Invest.24/12	132/33 kV Substation at Asifabad in Adilabad district along with connected 132 kV & 33 kV lines	System Improvement	29.11.2012	31.03.2020	16.78	0.50	1.68		1.0070	1.80	21.78			18.00				REC	9.60				0.00				0.68					
57	S-10-06	CRN.No.TST/TS/132 KV SS Borabatta/F.INVT-24/2011, dt:21.03.2011	132/33 kV Substation at Borapatla in Medak district along with connecting 132 kV and 33 kV lines	System Improvement	20.08.2011	31.03.2020	12.83	0.38	1.28		0.7698	1.38	16.65			36.75				NABARD	1.25				0.00				0.06					
58	S-10-09	APT/TS/132 kV SS - Geesukonda/ F-INVST -20/2012	Erection of 132/33 kV Substation at Geesukonda in Warangal district along with connected 132 kV & 33 kV lines	System Improvement	30.10.2010	31.03.2020	10.24	0.31	1.22		0.6400	1.10	13.51			10.44				REC	0.52				0.00				0.03					
59	S-10-16	CRN.No.TST/TS/132 KV SS Narmetta/F.INVT-36/2013, dt:07.11.2012	132/33 kV Substation at Narmetta in Warangal district along with connected 132 kV & 33 kV lines	System Improvement	07.08.2014	31.03.2020	15.57	0.47	1.56		0.9340	1.67	20.20			15.98				REC	0.61				0.00				0.13					
60	S-11-18	APT/TS/132 kV SS - Kamanpur/ F-INVST -19/2013	132kv SS Kamanpur & connected lines	System Improvement	16.07.2014	31.03.2020	20.95	0.61	2.23		-	0.76	24.55			15.53				PFC	3.18				0.00				0.21					
61	S-11-19	APT/TS/132kV SS- Kathlapur/ F-INVST-09/2014	132kV SS Kathlapur & connected lines	System Improvement	10.12.2015	31.03.2020	13.17	0.21	1.42		0.0012	0.77	15.57			14.15				TMB	4.53				0.00				0.04					

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																Loan Amount	Intere st Rate	Morato rium Period	Repay ment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Prop osed IDC	Propo sed other expen se	Perce ntage capital isation	Actual investmen t in the year (Rs. Cr.)	IDC Incurred	Other expe nse incur red	Perce ntage capita lisatio n	Actual investme nt in the year (Rs. Cr.)	IDC Incurre d		Other expen se incur red	Perce ntage capital isation
62	S-11-25 S-11-26	APT/TS/132kV SS- Munugodu/F-INVST- 08/2014	132kV SS Munugodu & connected lines	System Improvement	13.06.2016	31.03.2020	17.31	0.25	1.85		0.0016	0.91	20.32			16.14				REC	1.73				0.00				0.20				
63	S-11-27	CRN.No.TST/TS/132 KVSS/Nellikoduru/F.Invest. 07/2014	132/33 kV Substation at Nellikuduru in Warangal district along with connected 132 kV & 33 kV lines	System Improvement	21.07.2016	31.03.2020	17.68	0.53	1.77		1.0605	1.90	22.93			17.85				REC	2.16				0.00				0.34				
64	S-11-30	APT/TS/220/132 kV SS - Parigi/F-INVST - 1/2013	erection of 220/132 kV substation at Parigi in Ranga Reddy district	System Improvement	19.10.2013	31.03.2020	57.51	0.61	6.04		-	2.23	66.39			54.32				REC	2.12				0.00				0.18				
65	S-11-37	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 kV Substation at Shad Nagar (V) Hamlet of Wattipally in Medak District	System Improvement	09.09.2015	31.03.2020	15.89	0.48	1.59		0.9535	1.71	20.62			19.06				REC	2.11				0.00				0.08				
66	S-11-38	APT/TS/132 kV SS - Yeldurthy/F-INVST - 7/2013	132 kV SS Yeldurthy & connected lines	System Improvement	12.08.2016	31.03.2020	19.23	0.58	0.19		1.1535	2.07	23.21			17.27				NABARD	1.10				0.00				0.30				
67	S-12-01	APT/TS/220KV-SS-Kosgi/F-INVST-50/2013	220 kV features at proposed 132/33 kV Kosigi SS in Mahaboobnagar district	System Improvement	07.08.2014	31.03.2020	43.54	1.31	4.35		2.6125	4.68	56.50			46.57				REC	0.37				0.00				0.07				
68	S-12-04	CRN.No.TST/TS/132 KV SS-Inavolu/F-INVST-15/2014/Dt:24.05.2013	132/33 kV Substation at Inavole in Warangal district along with connected 132 kV & 33 kV lines	System Improvement	10.11.2016	31.03.2020	20.09	0.60	2.01		1.2054	2.16	26.07			20.79				PFC	1.02				0.00				0.11				
69	S-12-10	TST/TS/132kV / MD Pally, Kattedan /F-INVST-03/2016	132 kV SS MD Pally (Kattedan) & connected lines	System Improvement	05.08.2015	31.03.2020	52.67	0.76	5.79		1.7015	2.77	63.69			33.86				PFC	0.28				0.00				0.15				
70	S-12-11	TST/TS/132/33kV SS Munagala / F-INVST-13/2015	132kV SS Munagala(V&M) & connected lines	System Improvement	20.06.2016	31.03.2020	33.88	0.35	3.55		0.0749	1.24	39.09			30.95				REC	0.27				0.00				0.09				
71	S-13-06	TST/TS/132kV SS/ Dommarapochampalli /F-INVST-04/2015	132KV Dommarapochampally & connected lines	System Improvement	24.12.2016	31.03.2020	35.96	0.43	4.03		2.3413	1.57	44.34			32.35				REC	3.36				0.00				1.14				
72	S-13-10	TST/TS/132kV / Kachapur SS/F-INVST-17/2016	132/33kV SS Kachapur & connected lines	System Improvement	22.09.2015	31.03.2020	19.92	0.33	1.89		0.0827	1.20	23.42			21.53				REC	2.51				0.00				0.52				
73	S-13-14	CRN.No./TST/TS/220/132KV Substation /Sircilla /F.Invt/ App./08/2015	220/132 kV SS at Sircilla in Karimnagar District	System Improvement	22.12.2015	31.03.2020	72.76	2.18	7.28		4.3655	7.82	94.40			60.00				REC	18.98				0.00				0.28				
74	S-15-03	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132/33 kV Substation at Chandulapur Village of Chinnakodur Mandal in Medak District along with connected lines	System Improvement	27.04.2016	31.03.2020	15.21	0.46	1.52		0.9125	1.63	19.73			30.56				REC	1.01				0.00				0.03				
75	S-15-10	CRN.No.TST/TS/132/33 KVSS/Narayanpet, Mahabubnagar/Invest.Apprl.No.5/16,2016-17	132/33 kV Substation at Narayanpet in Mahaboobnagar District along with connected 132 kV & 33 kV lines	System Improvement	21.09.2016	31.03.2020	17.69	0.53	1.77		1.0615	1.90	22.95			34.98				REC	0.66				0.00				0.70				
76	S-15-11	TST/TS/ 220 kV 2nd circuit / RSS to Nirmal SS and RSS to Jagityal SS / F-INVST-15/2015	220 kV 2nd circuit stringing on 220 kV RSS - Jagityal and 220 kV RSS - Nirmal	System Improvement	27.11.2015	31.03.2020	65.63	0.05	6.61		0.2699	0.19	72.75			38.06				PFC	2.01				0.00				0.16				
77	S-15-30	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	2nd Circuit stringing on proposed 132 kV DC/SC line from the under construction 400/220/132 kV SS Suryapet to 132/33 kV Shah Ali Gowaram under the program for providing 9.00 Hrs agricultural supply during day time.	System Improvement	05.04.2016	31.03.2020	5.92	0.02	0.60		0.0100	0.09	6.64			4.95				REC	0.57				0.00				0.53				
78	S-15-32	TST/TS/ 220 kV Pedagopati SS / Investment approval No. 19/16-2016	Erection of 220/132/33 kV SS at Pedagopati in Khammam district	System Improvement	27.02.2017	31.03.2020	120.24	0.85	10.95		0.3131	3.04	135.39			121.25				REC	3.62				0.00				2.63				
79	S-16-09	CRN.No.TST/TS/220/132/33 kV SS, Regonda,Warangal,Dist./In vest.Appl.No.8/17,2016-17	132/33 kV Sub-Station at Regonda in Warangal District.	System Improvement	07.02.2018	31.03.2020	20.51	0.33	1.95		0.0652	1.20	24.06			19.07				PFC	0.67				0.00				0.64				

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80	S-17-11	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	33 kV Features at existing 132/11 kV LI Sub-Station, CH. Kondur in Nizamabad District	System Improvement	16.04.2018	31.03.2020	3.50	0.11	0.35		0.2100	0.38	4.54			3.67				PFC	0.32				0.00				0.49				
81	S-17-21	CRN No. TST/TS/Erection of 132/33 KV SS at Pammy in Khammam Dist. Approval/No.03/2018-19	132/33kV SS at Pammy in Khammam District (14, dt.20.1.18)	System Improvement	01.04.2019	31.03.2022	18.47	0.30	1.73		1.8088	1.08	23.39			20.64				REC	0.04				0.00				0.00				
82	S-18-01	CRN No.TST/TS/Erection of 132/33 KV Substation at Peechara in Wranagal District. Approval No. 05/2018-19	132/33 kV SS at Peechara in Warangal Dist.	System Improvement	01.04.2019	31.03.2022	36.31	0.34	4.42		2.0594	1.23	44.36			39.10				REC	0.13				0.00				0.00				
83	P-15-05		400/220KV 315MVA PTR in place of failed 400/132KV 200MVA PTR at NTPC Ramagundam and connected 220KV line & Bay Works	System Improvement	01.04.2016	31.03.2020	25.67	0.77	2.57		1.5400	2.76	33.30			25.26				PFC	0.63				0.00				0.29				
84	P-10-03	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	132kV LILO line from 132 KV Makthal – Gadwal 2nd circuit line for the proposed 220 kV Substation Jurala along with bays in Mahabubnagar district	System Improvement	12.03.2018	31.03.2020	6.34	0.19	0.63		0.3805	0.68	8.23			3.52				Bank of Baroda	0.83				5.82				6.51				
85	S-08-11	APT/TS/132 kV SS- Mamidipalli/ F-INVST - 12/2013	132 kV SS Mamidipally & connected lines	System Improvement	26.06.2009	31.03.2016 20.08.2016	21.92						21.92							PFC					2.06				2.21				
86	S-10-13	APT/TS/132kv SS- LGM Peta/F-INVST-17/2012 (Revised approval awaited)	Erection of 132/33KV SS LGM Pet	System Improvement	16.09.2011	18.08.2016	35.51						35.51			14.79				UCO Bank					35.97				36.09				
87	S-12-12	APT/TS/ 220 kV SS - Nagole (Metro Rail) / F- INVST - 25/2013	Erection of 220/132kV SS at Nagole(Uppal) for Metro	System Improvement	21.09.2012	25.09.2016	80.55						80.55			80.55				REC					10.47				10.48				
88	S-11-01	APT/TS/132kV SS-Gudur/ F-INVST-13/2014	132kV SS Gudur & connected lines	System Improvement	16.06.2015	28.07.2016	13.29						13.29			12.35				PFC					12.99				13.11				
89	S-11-21	APT/TS/132 kV -DC/SC Line- Luxettipet- Dharmapuri/ F-INVST -13/2013	132kV DC/SC line from 132kV Dharmapuri SS to 132kV Luxettipet SS and 2Nos bays at 132kV Dharmapuri SS and 2Nos bays at 132kV Luxettipet SS	System Improvement	12.12.2014	12.12.2016	10.90						10.90			10.90				PFC					10.04				10.11				
90	S-12-05	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	erection of 33 kV features at Jankampet 132/11 kV Lift irrigation substation in Nizamabad district	System Improvement	01.11.2016	16.02.2018	4.18						4.18			7.54				REC					4.24				4.29				
91	S-13-02	TST/TS / 220/132 kV SS Ayyagaripally, Mahabubabad /F-INVST- 03/16 - 2016-17	220/132 kV SS at Ayyagaripally in Mahaboobabad in Warangal district	System Improvement	02.03.2016	29.01.2018	78.33						78.33			68.90				REC					21.19				25.38				
92	S-15-08	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Erection of 132 kV DC line for making LILO of one circuit of existing 132kV DC line from 132 KV SS Jakora to 132 KV SS Bichkunda at 132/33 kV SS Banswada under the program for providing 9.00 Hrs Day Time Supply for Agriculture	System Improvement	01.11.2016	29.12.2017	8.00						8.00			6.53				PFC					8.11				8.28				
93	S-15-12	P.No.28/APERC/Secy/Dir(E ngg)/E725/2013, Dt:06-05-2013	Erection of 132/33 kV Sub-Station at Gandimasaniptet of Yellareddy Constituency in Nizamabad District.	System Improvement	25.07.2016	25.09.2018	15.89						15.89			13.40				PFC					4.55				4.88				
94	S-10-20	APT/TS/220 kV - SW.Stn / F-INVST - 2/2013	220 kV Switching Station at Thimmajipeta & connected lines	System Improvement	30.09.2013	07.06.2017	74.76						74.76			67.46				PFC					78.59				78.88				
95	S-11-22	APT/TS/132 kV SS - Madugula/ F-INVST - 16/2013	132 kV SS Madugula & connected lines	System Improvement	21.12.2015	11.11.2017	22.09						22.09			19.05				PFC					18.27				18.32				

SL. No.	Code	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks	
		Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year					Annual			Annual									
																Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred		Percentage capitalisation
96	S-11-24	APT/TS/132 kV SS - Mogiligidda/F-INVST - 9/2013	132 kV SS Srirangapur (Mogiligidda) & connected lines	System Improvement	07.08.2014	13.06.2016	16.91					16.91			13.14					REC				16.64				16.66					
97	S-11-39	APT/TS/132kV SS- Yerrabelli/F-INVST-39/2013	132 kv SS Yerrabelli(V), Nidmanoor(M) & connected lines	System Improvement	18.09.2015	03.10.2016	13.71					13.71			13.71					Dena Bank				12.90				13.25					
98	S-14-04	TST/TS/132 kV SS- 220 kV Toopran, 132 kV Ganeshpally & 132 kV Duddeda SS / F-INVST-07/2015	132/33 kV Substation at Ganeshpally in Medak District along with connected lines	System Improvement	04.07.2015	08.06.2016	21.03					21.03			19.06					REC				20.06				20.13					
99	S-14-03	TST/TS/132 kV SS- 220 kV Toopran, 132 kV Ganeshpally & 132 kV Duddeda SS / F-INVST-07/2015	132/33 kV Substation at Duddeda in Medak District along with connected lines	System Improvement	31.07.2015	02.09.2016	24.60					24.60			19.06					REC				22.42				22.45					
100	S-12-02	TST/TS/132/33kV SS Arempula / F-INVST-12/2015	132KV Arempula & connected lines	System Improvement	06.06.2016	31.03.2017	21.53					21.53			19.37					Tamilnadu Mercantile bank				16.96				16.99					
101	S-15-28	TS/TST/220KV 2nd ckt/RSS to Nirmal SS & RSS to Jagityal SS/Invest.Approval No.15/15,Dt.12.11.2015	220 kV 2nd circuit stringing on 220 kV RSS - Jagityal and 220 kV RSS - Nirmal	System Improvement	27.11.2015	31.03.2017	66.14					66.14			59.97					PFC				41.26				41.30					
TOTAL							3528.77	67.24	313.97		111.76	236.52	4258.26			3306.34					554.09				729.66				949.63				

(Actuals Expenditure for FY:2019-2020)
RENOVATION MODERNISATION & IMPROVISATION (RMI) SCHEMES

Form 1.1d: INVESTMENTS

Year:2019-20

(Rs. in Crores.)

Sl. No.	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING							Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks		
	Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year						Annual				Annual				Cumulative progress (Year on year)					
															Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expenses	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation			
1	----	RMI (R-15-01)	Replacement of old and obsolete equipment of substations and lines of TSTRANSCO	1/4/2019	31/03/2020	53.08			inclusive	inclusive	Inclusive	53.08			47.72					PFC					3.59			6.76	3.59				38.30	
2	----	RMI (R-17-01)		1/4/2019	31/03/2020	100.22			inclusive	inclusive	Inclusive	100.22			90.22					REC					22.42			0.22					0.23	
3	----	Rolling Stock (O-16-01)	Procurement of Major SS Equipment	1/4/2019	31/03/2020	39.53	-	-	Inclusive	Inclusive		39.53			35.57					REC					12.32			31.17	12.32	-	-	31.17		
RMI TOTAL						192.83						192.83			173.51								38.33				15.91							
Augmentation of PTRs																																		
4	----	Erection of 2nd 160MVA PTR in place of 100 at Chandrayangutta SS	To Enhance PTR Capacities of Metro zone to avoid load relief/ Powercuts	22.12.2005	31.03.2019	114.46	Incl	Incl	Incl	Incl	Incl	114.46															0.03					1.00		
5	----	Augmentation of PTR at 132KV SS Ichoda			31.03.2019	0.61	Incl	Incl	Incl	Incl	Incl	0.61															0.59					1.00		
6	----	Augmentation of PTRs at various EHT SS for extending 9Hrs Rural,Metro Zone		01.05.2015	31.03.2019	283.03	Incl	Incl	Incl	Incl	Incl	283.03															0.03					1.00		
7	----	Augmentation of PTR capacities at various Substation Extending 9Hrs Agriculture during daytime Supply in Warangal		01.05.2016	31.03.2019	233.75	Incl	Incl	Incl	Incl	Incl	233.75															0.87					1.00		
8	----	Augmentation of PTR capacities at132KV Gunrock SS	To meet the Industrial, Agriculture and etc., loads	14.02.2015	3/31/2019	3.9	0.12	0	0	0.07	0.42	4.51								2.44		1.03	0.54	1.41			0.31	3.48				0.77		

Sl. No.	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks		
	Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contigency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year						Annual				Annual								
															Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred		Percentage capitalisation	
9	----	Augmentation of PTR capacities at 220KV Gunrock SS & 220KV Ghanapur SS	To meet the Industrial, Agriculture and etc., loads	12/8/2016	3/31/2019	11.83	0.4	0	0	0.36	1.46	14.05								8.61		7.66	0.61	0.95			0.07	6.39			0.45		
10	----	Augmentation of PTR capacities at 132 KV Malyalapally SS	To meet the Industrial, Agriculture and etc., loads	12/9/2016	3/31/2019	4.39	0.18	0	0	0.15	0.66	5.38			4.84				REC 13979	5.19		1.02	0.96	4.17			0.78	4.36			0.81		
11	TST/ TS/ Augmentation of Transformer capacities (24 Hrs. Agricultural supply) / Investment approval No.13/17, 2017-18	Augmentation of PowerTransformer capacities at various EHT SS in Warangal and Karimnagar Zones	For extending 24 Hrs. Agricultural Supply	5/20/2017	3/31/2019	59.91	2.2	0	0	2.23	7.89	72.23			63.13				PFC:37 203017	35.16		33.32	0.49	1.84			0.03	38.91			0.54		
12		Augmentation of Transformer capacities at various EHT SS for extending 24 Hrs. Agl. supply in Metro and Rural Zones	For extending 24 Hrs. Agricultural Supply	6/2/2017	3/31/2019	42.15	1.67	0	0	1.5	5.97	51.29			41.32				PFC:37 203017	9.37		5.54	0.18	3.83			0.07	45.75			0.89		
13	----	Augmentation of PTR capacities at 132 KV Manoharabad SS	To meet the Industrial, Agriculture and etc., loads	3/16/2018	3/31/2019	2.49	0.12	0	0	0.6	0.42	3.63								1.22		1.00	0.34	0.22			0.06	2.63			0.72		
14	----	Augmentation of PTR capacities at 220KV Gachibowli SS & 132KV Malkaram SS	To meet the Industrial, Agriculture and etc., loads	3/16/2018	3/31/2019	7.86	0.32	0	0	1.65	1.16	10.99								6.93		6.93	0.63	0			0.00	4.06			0.37		
15	----	Augmentation of PTR capacities at 220KV Chandrayangutta SS	To meet the Industrial, Agriculture and etc., loads	4/13/2018	3/31/2019	5.58	0.27	0	0	1.4	1	8.25								3.91		3.82	0.47	0.09			0.01	4.43			0.54		

Sl. No.	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks		
	Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year						Annual				Annual								
															Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred		Percentage capitalisation	
16	----	Augmentation of PTR capacities at 132KV Yerraballi ss, 220KV Waddekthapally SS, 132KV Ghanpur SS, 132KV Inavole SS.	To meet the Industrial, Agriculture and etc., loads	7/18/2018	3/31/2019	4.61	0.21	0	0	1.09	0.77	6.68								4.67		3.50	0.70	1.17			0.18	3.18			0.48		
17	----	Augmentation of PTR capacities at 132KV RC Puram SS, 220KV Alwal SS, 132KV Kathlapur SS, 132KV Mulkamur SS & 132KV Korutlu SS.	To meet the Industrial, Agriculture and etc., loads	12/1/2018	3/31/2020	6.86	0.23	0	0	1.17	0.82	9.08								6.10		5.65	0.67	0.45			0.05	3.43			0.38		
18	----	Augmentation of PTR capacities at 132KV Jadcherla SS, 132KV Ramapuram SS, 220KV SS, 132KV Wardhanapet SS, 132KV Inavole SS & 132KV Arempula SS.	To meet the Industrial, Agriculture and etc., loads	12/1/2018	3/31/2020	3.02	0.1	0	0	0.53	0.37	4.02								3.79		3.53	0.94	0.26			0.06	0.49			0.12		
19	New Scheme	Augmentation of PTR capacities at 220KV Gachibowli SS	To meet the growing loads	03.07.2019		4.61	0.14			0.86	0.6	6.21								6.21		2.48	1.00	3.73			0.60	3.73			0.60		
20	New Scheme	Augmentation of PTR capacities at 132 KV Chintal SS	To meet the growing loads	22.02.2020		0.505	0.02			0.09	0.07	0.685								0.00		0.00	-	0			0.00	-			0.00		
21	New Scheme	Augmentation of PTR capacities at 132 KV IDPL SS	To meet the growing loads	07.03.2020		0.54	0.02			0.1	0.07	0.73								0.00		0.00	-	0			0.00	-			0.00		
22	New Scheme	Augmentation of PTR capacities at 220KV Hayathnagar SS	To meet the growing loads	18.03.2020		10.7	0.32			1.98	1.4	14.4								0.00		0.00	-	0			0.00	-			0.00		
23	New Scheme	Augmentation of PTR capacities at 132KV Thirumalaipally SS & 132 KV Geesukonda SS	To meet the growing loads	18.03.2020		1.106	0.03			0.2	0.14	1.476								0.00		0.00	-	0			0.00	-			0.00		
AUGMENTATION TOTAL						801.91	6.35			13.98	23.22	845.46								93.60		75.48	7.54	18.12				122.36					
GRAND TOTAL						994.74	6.35			13.98	23.22	1038.29									93.60		75.48	7.54	56.45				138.27				

This form captures investments as planned and actually incurred

LIFT IRRIGATION SCHEMES

Form 1.1d: INVESTMENT PLAN

Year:2019-20

Sl. No.	Code	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks		
		Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year						Annual				Annual								
																Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expense incurred		Percentage capitalisation	
1	L-05-02	Bulk Load/ DC Works	Godavari LIS (a) (132/11kV Gandiramaram, 132/11kV Bommakuru, 132/11kV Rangaraopalli)	Extension of power supply to Lift Irrigation project taken up by Govt. of TS	April-17	Oct-19	442.55						442.55								Govt. of TS Grants I&CAD	8.3692				3.7000				12.5370				
2			(b) 132/11 kV Rajavaram SS		Sep'20	Feb'2021																10.0000				0.0000				0.0000				
3	D-15-03 L-15-02 L-15-03 L-15-04 L-16-02 L-16-03 L-16-05	Bulk Load/ DC Works	Kaleshwaram Lift Irrigation Project (400kV Medaram,400kV Ramadugu,400kV Sundilla,220kV Medigadda, 220kV Annaram, 400kV Tippapur, 400kV Chandlapur,400kV Tukkapur, 132kV Malakpet)	--do--	Aug-16	Sep'19	3283.8757						3283.8757								--do--	470.621				250.7600				1044.9920				
4	L-17-01	Bulk Load/ DC Works	Chanaka Korata LIS 132/11kV Hatighat	--do--	April-17	March-19	41.1500						41.1500								--do--	0.905				2.9100				2.8544				
5	D-11-05 L-11-01	Bulk Load/ DC Works	Thotapally Reservoir to Gouravelly Reservoir LIS (220/132kV Huzurabad SS and CL)	--do--	Feb-15	Jan-2021	69.7031						69.7031								--do--	9.120				0.4100				29.9210				
6	L-17-03	Bulk Load/ DC Works	Lift Irrigation Scheme along Flood Flow Cancal 220/11 kV Rampur SS, 220/11kV Rajeswerraopeta SS, 220/11kV Mupkal SS	--do--	Feb-18	June-19	207.3700	189.3608					207.3700								--do--	32.240				6.2600				80.9980				
7																																		
8	L-13-02	Bulk Load/ DC Works	Kaleshwaram Lift Irrigation Scheme OLD 132/11kV Beersagar(Kannepalli) LIS	--do--	Dec-16	Jun'20	50.6700						50.6700								--do--	11.810				4.6400				13.0300				
9	L-14-02	Bulk Load/ DC Works	Kaleshwaram PKGS-20,21&22 220/11kV Sarangapur, 220/11kV Manichippa, 220/11kV Yacharamthanda	--do--	Jan'19	June'21	270.99						270.99								--do--	88.930				61.1700				74.9590				
10	L-18-02	Bulk Load/ DC Works	JCR Phase-III Supplemental &Augmentation works at Bheemghanpur 220/11kV Bheemghapur	--do--	May-18	June'19	23.99						23.99								--do--	1.190				1.3700				11.7350				

(Rs. in Crores.)

Sl. No.	Code	Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks							
		Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MM-YYYY)	Project Completion date (DD-MM-YYYY)	Base Cost	Contingency	IDC	Duties	Taxes	Expenditure capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year					Annual				Annual														
																Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	Proposed investment in the year (Rs. Cr.)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenditure incurred	Percentage capitalisation	Actual investment in the year (Rs. Cr.)	IDC Incurred	Other expenditure incurred		Percentage capitalisation						
11	L-18-01	Bulk Load/	JCR Phase-III 220/11kV Devvanapeta SS	--do--	Feb'2020	Apr'2021	97.38					97.38			97.38					--do--	30.000				9.9000				9.9520										
	DC Works	220/11kV Devvanapeta SS																																					
12		Bulk Load/	Kaleshwaram Lift Irrigation Schemes	--do--	June'20	Dec'2021	67.77					67.77			67.77					--do--	5.000				0.0000				0.0000										
	DC Works	220/11 kV New Manchippa SS and 220/11 kV New Mentrajpalay SS																																					
13	L-17-04	Bulk Load/	Kaleshwaram Lift Irrigation Scheme-Package -14	--do--	Apr-18	Apr'20	197.66					197.66			197.66					--do--	80.00				72.10				83.3900										
	DC Works	(Akkaram & Markook)																																					
14	L-18-03	Bulk Load/	Thumilla Lift Irrigation (RDS)	--do--	June'18	Nov'18	28.1700					28.1700			28.1700					--do--	3.00				1.50				11.5300										
	DC Works	132/11kVThumilla																																					
15	L-17-05	Bulk Load/	PRLIS	--do--	May-18	Nov-21	18.2300					18.2300			18.23					--do--	9.00				4.890				8.8000										
	DC Works	Diversion of 3Nos. 220kV lines due to submerging in the proposed Anjanagiri Project																																					
		TOTAL					4799.51						4799.51			4799.51								760.19				419.61				1384.70							
	400kV -LIS Schemes																																						
16		Bulk Load/DC works	Sita Rama Lift Irrigation scheme (L-18-04)	Extension of power supply to Lift Irrigation project taken up by Govt. of TS	Sep'2018	May'2021	418.45	--					418.45								Govt TS	150.00				199.05				230.93									
17		Bulk Load/DC works	Palamuru Ranga Reddy Lift Irrigation Scheme (L-17-02)		--do--	Mar'2018	May'2023	1,901.46	--					1,901.46												0.42				1.04									
18		Bulk Load/DC works	Indira Sagar Rudrammakota LIS (L-13-01)		--do--									0.00												1.45				1.45				100					
		Total											2319.91															250.00				200.92			233.42				
		Grand Total					4799.51							7119.42			4799.51											620.53				1618.12							

ANNEXURE – V

LIST OF DIRECTIVES

Sl. No.	Directive	Subject of Directive	Compliance Report
1	Segregation of assets and liabilities between APTransco and TSTransco	The Commission directs the petitioner to submit a compliance report on the segregation of assets and liabilities between APTransco and TSTransco by 30.06.2020	Complied with.
2	Transmission works relating to LI Schemes	The Commission directs the petitioner to execute the Transmission works relating to LIS duly coordinating with the Irrigation Department.	Complied with.
3	Annual Performance Review	The Commission directs the petitioner to file the Performance Review (true up) for each year of the 4 th Control Period before 31 st December of the following year. As a first step, the petitioner shall file the Annual Performance Review for FY 2019-20 by 31.12.2020.	Complied with. (Submitted herewith)
4	Capitalisation details for 3 rd Control Period from FY 2014-15 to FY 2018-19	The Commission directs the petitioner to submit the complete details sought regarding the capitalisation for the 3 rd Control Period, in the Petition to be filed for the Annual Performance Review for FY 2019-20.	Complied with. (Submitted herewith)
5	Computations of Depreciation in accordance with CERC (Terms and Conditions of Tariff) Regulations, 2019	The Commission directs the petitioner to submit the computations of depreciation for each year of the 4 th Control period in accordance with the provisions of the CERC (Terms and Conditions of Tariff) Regulations, 2019 in Annual Performance Review for each year of the 4 th Control Period	Complied with. (Submitted herewith)
6	Capital Investments	<p>Considering the importance of capitalisation of works, the Commission lays down the following requirements to be fulfilled before accepting inclusion of the value of the capitalised work in the OCFA:</p> <ol style="list-style-type: none"> On completion of a capital work, a physical completion certificate (PCC) to the effect that the work in question has been fully executed, physically, and the assets created are put in use, to be issued by the concerned engineer not below the rank of Superintending Engineer. The PCC shall be accompanied or followed by a financial completion certificate (FCC) to the effect that the assets created have been fully entered in the fixed assets register by transfer from the CWIP register to OCFA. The FCC shall have to be issued by the concerned finance officer not below the rank of senior Accounts Officer. The above mentioned certificates have to be submitted to the Commission within 60 days of completion of work, at the latest. 	Complied with.

ANNEXURE-VI TSTRANSCO Contract Capacities in MW for FY 2019-20 (Actuals)				
Generating station/ source	Installed Capacity (MW)	Net Capacity TS Share	2019-20	
			TSSPDCL	TSNPDCL
KTPS-A	180	162.00	114.29	47.71
KTPS-B	120	108.00	76.19	31.81
KTPS-C	120	108.00	76.19	31.81
RTS-B	62.5	56.25	39.68	16.57
KTPS-D (V)	500	455.00	321.00	134.00
KTPS-VI	500	462.50	326.30	136.20
KTPS-VII	800	758.00	534.77	223.23
KTPP-I	500	462.50	326.30	136.20
KTPP-II	600	558.00	393.67	164.33
Total Thermal	3382.5	3130.25	2208.40	921.85
Total Thermal as on 31.03.2020 *	2962.5	3130.25	2208.40	921.85
Hydel				
NSPH	815.6	807.44	569.65	237.79
NSLCPH	60	59.40	41.91	17.49
Pochampad-PH	36	35.64	25.14	10.50
Nizamsagar-PH	10	9.90	6.98	2.92
Singur	15	14.85	10.48	4.37
SSLM-LBPH	900	889.20	627.33	261.87
Priyadarshini-Jurala	234	115.83	81.72	34.11
Lower-Jurala	240	237.60	167.63	69.97
Pulichintala	120	118.80	83.81	34.99
Mini Hydel (Peddapalli)	9.16	9.07	6.40	2.67
Mini Hydel (Palair)	2	1.98	1.40	0.58
Total Hydro	2441.76	2299.71	1622.45	677.26
Total Genco	5824.26	5429.96	3830.85	1599.11
Interstate Hydel Projects				
Machkund PH	84	44.82	31.62	13.20
Tungabhadra PH & Hampi	57.6	30.73	21.68	9.05
Total IS Hydel	141.6	75.55	53.30	22.25
CGS				
NTPC(SR)-Ramagundam-1-2	2100	321.16	226.58	94.58
NTPC(SR)-Ramagundam-3	500	81.29	57.35	23.94
NTPC Talcher-stage-2	2000	201.03	141.83	59.20
NLC-Stage-I	630	53.90	38.03	15.87
NLC-Stage-II	840	96.34	67.97	28.37
NPC-MAPS	440	20.45	14.43	6.02
NPCIL-Kaiga-Unit 1&2	440	63.30	44.66	18.64
NPCIL-Kaiga-Unit 3&4	440	67.16	47.38	19.78
NTPC-Simhadri-I	1000	507.91	358.33	149.58
NTPC-Simhadri-II	1000	218.00	153.80	64.20

Filing of Annual Performance Review for FY 2019-20 of TSTRANSCO

Generating station/ source	Installed Capacity	Net Capacity TS Share	2019-20	
			TSSPDCL	TSNPDCL
NTECL Vallur	1500	103.23	72.83	30.40
NLC Tamilnadu (Tuticorn) (NTPL)	1000	144.11	101.67	42.44
NTPC Kudgi-I & II	2400	254.70	179.69	75.01
KKNPP (Kudankulam Nuclear)	1000	46.10	32.52	13.58
NCE-Bundled power NVVNL ph 1	85	43.00	30.34	12.66
NCE-Bundled power NTPC Coal	200	414.00	292.08	121.92
Neyveli New Unit-1	500	29.13	20.55	8.58
Neyveli New Unit-2			0.00	0.00
Total CGS	16075	2664.81	1880.03	784.78
Joint Sector				
APGPCL-I	100	6.47	4.56	1.91
APGPCL-II	172	17.30	12.21	5.09
Total Joint Sector	272	23.77	16.77	7.00
Others				
Vemagiri	370	193.03	136.18	56.85
GVK Extension	220	115.43	81.44	33.99
Gautami	464	242.50	171.08	71.42
Konaseema	444	231.83	163.56	68.27
Thermal-Power-Tech (Unit - I)	660	269.45	190.10	79.35
Thermal-Power-Tech (Unit - II)	660	570.00	402.14	167.86
Singareni-TPP Stage – I	1200	1131.00	797.92	333.08
Chhattisgarh-Power	1000	948.00	668.82	279.18
Total Others	5018	3701.24	2611.24	1090.00
NCE#				
Bio-Mass	42	0.00	0.00	0.00
Bagasse	54.2	48.20	15.00	33.20
Industrial-Waste	15	7.50	7.50	0.00
MSW	19.8	19.80	19.80	0.00
Wind Power	100.8	100.80	100.80	0.00
Mini-Hydel	7.55	0.00	0.00	0.00
Solar	3243.74	2233.94	1613.94	620.00
Solar Bundled under Ph-II	45.81	45.81	32.32	13.49
Total NCE	3528.90	2456.05	1789.36	666.69
Discom Total		14351.38	10181.55	4169.83
Open Access (Total)		21.25	20.25	1.00
Grand Total Contractual Capacity		14372.63	10201.80	4170.83

* Unit-II of 60 MW Phased out on 02.02.2020, Unit – V of 120 MW Phased out on 13.03.2020, Unit - I of 60 MW Phased out on 28.03.2020, Unit-VII and IV of 120 MW and 60 MW Phased out on 31.03.2020.

The contracted capacities of NCE generators pertaining to TS SP/NPDCL connected at 132 kV level and above are tabulated.