



**ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION**

4<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Hyderabad – 500 004

O.P.No.44 of 2019

**FRIDAY, THE TWELFTH DAY OF JULY, TWO THOUSAND AND NINETEEN**

Present

Sri Justice G. Bhavani Prasad, Chairman

Dr. P. Raghu, Member

Sri. P. Rama Mohan

**In the matter of determination of tariff for intra-state transmission lines of AP Transco for FY2019-20 to include the same in PoC Transmission charges as per Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010.**

Between:

Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO)

..... Petitioner

AND

NIL

..... Respondent

The petition has come up for public hearing on 06-07-2019 in the presence of Sri P. Shiva Rao, learned standing Counsel for the petitioner and Sri Ch. V. Subba Rao, CGM/HRD/Plg/APTransco representing the petitioner. After carefully considering the material available on record and after hearing the petitioner, Commission passed the following:

## **ORDER**

1. A petition dated 14.06.2018 from Transmission Corporation of Andhra Pradesh Ltd. (hereinafter referred to as APTRANSCO or the petitioner), under Section 62 of the Electricity Act, 2003, Central Electricity Regulatory Commission (hereinafter referred to as CERC) (Sharing of Inter State Transmission Charges and Losses) (third amendment) Regulations, 2015 and CERC (Terms and Conditions of Tariff) Regulations, 2019 to:

- i. approve the annual fixed charges for the assets covered under the Petition;
- ii. determine the tariff of the Intra-State transmission lines of APTRANSCO carrying interstate power for FY2019-20 and
- iii. pass any other order or relief as the Commission may deem fit and proper in the facts and circumstances of the case.

2. A public notice along with the petition was placed on the website of the Commission inviting views/objections/suggestions from interested persons / stakeholders. A date of public hearing was also fixed as 06.07.2019. In response to the public notice and also during the public hearing, no objections were received.

3. The important submissions in the petition are as hereunder :

- i. The National Electricity Policy (NEP) issued by the Government of India, mandates transmission prices to be distance and direction sensitive and must capture the utilization of the network by each network user. In line with the said mandate, the CERC has issued Sharing of Interstate Transmission Charges and Losses Regulations, 2010 and it came into force with effect from 01.7.2011. Six amendments to the said Sharing Regulations were notified on 25.11.2011, 29.03.2012, 01.05.2015, 03.07.2015, 14.12.2017 and 27.03.2019.

ii. There are a number of transmission lines which are intra-state, but are incidental to the power flow of Inter-state power. As per the CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, these intra-state transmission lines also can be included in the Point of Connection (PoC) mechanism, if individual Yearly Transmission Charges (hereinafter referred to as YTC) for these lines are available.

iii. The extract of sub clause(y) of Clause 1 of Regulation 2 of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 principal Regulations and its amendments is as below :

*“(y) Yearly Transmission Charge (YTC) means the Annual Transmission Charges for the existing and new transmission assets of the inter-State transmission licensees, deemed ISTS Licensees, owners of inter-State transmission lines connecting two states and owners of non-ISTS lines certified by Regional Power Committees for inter-State transmission of power, determined by the Appropriate Commission under Section 62 of the Act or adopted by the Appropriate Commission under Section 63 of the Act or as otherwise provided in these Regulations.*

*Provided that in case of non-ISTS lines, the asset-wise tariff determined by the respective State Commissions or approved by the Central Commission based on the approved Annual Revenue Requirement of STU, shall be used:*

*Provided further that transmission charges received by the STU under these regulations shall be adjusted in the Annual Revenue Requirement of the concerned STU approved by the respective State Commission.”*

iv. a) Accordingly, after obtaining the SRPC certification, APTRANSCO has filed a petition before APERC vide O.P. No. 40 of 2017 for determination of tariff for intrastate lines for FY2017-18 based on

indicative cost methodology. APERC has issued the orders on 06.01.2018. The said assets were included in the PoC mechanism by POSOCO.

b) Further, APTRANSCO had filed a petition before APERC vide O.P No. 15 of 2018 for determination of tariff for intrastate lines for FY2018-19 based on indicative cost methodology. APERC has issued the orders on 21.07.2018 based on the methodology adopted by CERC orders passed in the petition No. 237/TT/2016.

- v. Now, SRPC has issued certification of Non-ISTS lines carrying inter-state power for FY2019-20 which were having more than 50% utilization during the FY2018-19 vide letter No. SRPC/SE-I/2019/1277-1309, dt.07.03.2019 for 34 lines. The details of all the lines are given below:

S. No.	Asset	Voltage	Config.	Length in KM	COD	Sl. No. as per SRPC certification	Asset Name
1	CHITTOOR 42 - CHITTOOR 1:2	220	D/C	17.1	14.02.2006	1	Asset I & II
2	CHITTOOR 42 - CHITTOOR 1:1	220				2	
3	SULURPET 1 - NELLORE 42:1	220	S/C	85.8	26.12.2006	4	Asset III
4	GOOTY - PG - DHONE 1:2	220	D/C	90.16	24.08.2011	6	Asset IV & V
5	GOOTY - PG - DHONE 1:1	220				7	
6	KONDAPALLI-CHILLAKALLU1:1	220	D/C	59.7	30.09.1989	8	Asset VI & VII
7	KONDAPALLI-CHILLAKALLU1:2	220				9	
8	SRISAILAMRB1-TALLAPLLI:1	220	D/C	98.82	1985	10	Asset VIII & IX
9	SRISAILAMRB1-TALLAPLLI:2	220				11	
10	SRISAILAMRB1-SOMYZULPALLI:1	220	S/C	106	1985	12	Asset X
11	TALLAPLLI-VTS1:1	220	S/C	125.14	30.06.1984	13	Asset XI
12	TALLAPLLI-VTS1:3	220	D/C	137.25	17.10.2012	14	Asset XII & XIII
13	TALLAPLLI-VTS1:2	220				15	
14	VTS1-CHILAAKALLU1:2	220	D/C	67.8	12.03.1997	16	Asset XIV & XV
15	VTS1-CHILAAKALLU1:1	220				17	
16	VTS1-RENTACHNTHALA1:2	220	S/C	111.49	30.06.1984	18	Asset XVI
17	KURNOOL1-BRAHMANKTKUR:1	220	S/C	23.18	29.10.2010	19	Asset XVII

S. No.	Asset	Voltage	Confg.	Length in KM	COD	Sl. No. as per SRPC certification	Asset Name
18	GAZUWAKA2-KALPAKKA1:2	400	D/C	3.39	10.12.2000	28	Asset - XVIII & XIX
19	GAZUWAKA2-KALPAKKA1:1	400			27.01.2002	29	
20	SULURPET 1 - NELLORE 42:2	220	D/C	68.13	10.11.2014	3	Asset - XX & XXI
21	SULURPET 1 - NELLORE 42:3	220				5	
22	URAVAKONDA-VAJRAKARUR:2	220	D/C	16.826	14.07.2016	22	Asset - XXII & XXIII
23	URAVAKONDA-VAJRAKARUR:1	220				23	
24	HINDUJA- KV KOTA1:2	400	D/C Twin Moose	242.98	24.07.2017	31	Asset - XXIV & XXV
25	HINDUJA- KV KOTA1:1	400				32	
26	JAMALAMADUGU1-URAVAKONDA:2	400	D/C	127.62	15.07.2016	33	Asset - XXVI
27	JAMALAMADUGU1-URAVAKONDA:1	400				34	
28	CHITTOOR2-KALIKIRI1:1	400	D/C Twin Moose	96.87	01.04.2018	24	Asset - XXVIII & XXIX
29	CHITTOOR2-KALIKIRI1:2	400				25	
30	REGULAPADU-SUZLON-W1:1	220	D/C	5.129	31.03.2012	20	Asset - XXX & XXXI
31	SUZLON-W1-VAJRAKUR:1	220		5.2	12.08.2016	21	
32	NUNNA2-VEMAGIRI1:1	400	SC/DC	145	30.12.2005	26	Asset - XXXII
33	NUNNA2-SATTENAPALLI1:1	400	SC/DC	115.89	12.10.2015	27	Asset - XXXIII
34	VEMAGIRI1-SATTENAPALLI:1	400	SC/DC	244.85	12.10.2015	30	Asset - XXXIV

vi. The petitioner is stated to have followed the methodology used to compute the tariff in line with the CERC (Terms and Conditions of Tariff) Regulations, 2019 as detailed in following paragraphs.

vii. **Capital Cost**

**A. For the Assets I to XIX**

The individual audited capital cost of these 19 lines is not available and hence the capital cost is considered in line with the CERC's methodology. The benchmark cost taken is the same as in order dated 21.06.2018 for the petition 237/TT/2016 used for tariff calculation of interstate lines for FY2016-17.

The methodology in the order dated 21.06.2018 in petition 237/TT/2016 is extracted as below:

*“PGCIL’s Annual Report data has been used as the reference data; based on which, year wise benchmark cost has been derived.*

*As per the petitions filed by the states, their ISTS lines generally have the configuration of 132 kV, 220 kV or 400 kV. In the absence of an established tariff data base, in order to develop this methodology Annual Reports of PGCIL from 1989-90 to 2013-14 have been referred to. The Annual Reports depict, inter alia, the information pertaining to year wise total transmission lines’ length in ckt-km and corresponding Gross Block. This pan-India data represents all the five transmission regions and is a composite mix of parameters like terrains, wind-zones, tower and conductor type etc. +/- 500 kV HVDC and 765 kV & above voltage level AC lines too have come up in between and the data also includes those lines. Voltage level-wise data as on 30<sup>th</sup> April 2017, obtained from PGCIL indicates that the percentage of 220 kV, 132 kV and 66 kV TL taken together makes it around 8.3 % of the total line length owned by PGCIL. Further, 132 kV TLs were established in NER prior to 1990, and Transmission Lines of 220 kV voltage levels were last commissioned in around the year 2004 in NR. Majority of the transmission lines consist of 400 kV which corresponds to 66% of the total transmission line lengths. Thus, the 400 kV and lesser voltage levels account for approximately 75% of the transmission lines. Assuming the above referred spread of voltage wise percentages for earlier years too, it can be said that the year wise average TL cost figures derived from PGCIL data, when further reduced by 25%, fairly represent the average transmission line capital cost corresponding to a 400 kV S/C line. Considering 400 kV S/C transmission line cost as reference cost, Analysis of PGCIL’s indicative cost data (P/L Feb 2017) suggests the following:*

Reference cost of 400 kV S/C TL		Rs <b>X</b> lakh/km
1	400 kV D/C TL	1.39 <b>X</b>
2	220 kV D/C TL	0.57 <b>X</b>
3	220 kV S/C TL	0.36 <b>X</b>
4	132 kV D/C TL	0.43 <b>X</b>
5	132 kV S/C TL	0.31 <b>X</b>

Therefore, for arriving at the costs of transmission lines of other voltage levels and circuit configurations, the average TL cost data shall be multiplied by the factors illustrated in the above table. Lower voltage levels can be treated as part of 132 kV. The above table contemplates Twin Moose conductor which is widely used in States' transmission lines."

The Capital Cost for the 19 assets has been considered as per Commission order dt. 21.07.2018 in O.P.No. 15 of 2018 and is as mentioned below:

S. No.	Asset name	Rationalised cost of 400 kV line in Rs Lakh per km	Transmission Line length, in km	Multiplication factor	Gross block in Rs Lakhs (Capital cost)
1	<b>Asset-I and II</b>	47.54	17.1	0.57	463.37
2	<b>Asset-III</b>	42.53	85.8	0.36	1313.67
3	<b>Asset-IV &amp; V</b>	62.27	90.16	0.57	3200.13
4	<b>Asset-VI and VII</b>	0	59.7	0	0.0
5	<b>Asset-VIII and IX</b>	0	98.82	0	0.0
6	<b>Asset- X</b>	0	106	0	0.0
7	<b>Asset- XI</b>	0	133	0	0.0
8	<b>Asset-XII and XIII</b>	65.67	137.25	0.57	5137.60
9	<b>Asset- XIV and XV</b>	38.2	67.8	0.57	1476.28
11	<b>Asset-XVI</b>	0	111.49	0	0.0
12	<b>Asset-XVII</b>	52.26	23.18	0.36	436.10
13	<b>Asset- XVIII &amp; XIX</b>	44.28	3.39	1.39	208.65

**B) For the Assets XX to XXXIV**

As these lines are commissioned after 2014, the Audited capital cost has been taken for calculation of YTC.

- a) **For the Assets XX to XXVII**, the Gross Block is as given below:

<b>Asset</b>	<b>Gross block in Rs Lakhs (Capital cost)</b>
Asset XX & XXI	5129.92
Asset XXII & XXIII	1981.04
Asset XXIV & XXV	36970.67
Asset XXVI & XXVII	16004.00

- b) **For the Assets XXVIII & XXIX.**

Regarding the assets XXVIII & XIX (Chittoor - Kalikiri I & II feeders), the 400 KV Chittoor-RTPP TMDC line was constructed for evacuation of RTPP stage-IV, 600 MW thermal generation in the year 2017. Recently in the year 2018 the 400 KV Chittoor - RTPP TMDC line was made LILO at 400 KV Kalikiri substation. Then the 400 KV chittoor - RTPP TMDC line became 400 KV Chittoor - Kalikiri TMDC line and 400 KV Kalikiri-RTPP TMDC line.

For computing YTC for 400 KV Chittoor - Kalikiri I & II feeders, the 400 KV Chittoor - RTPP feeder upto LILO point from Chittoor end is taken as section-1 (proportionate audited capital cost of Chittoor - Pedajangampalli part) and LILO point to Kalikiri is taken as section-2 (proportionated audited capital cost of LILO point to Kalikiri). The YTC for section-1 and section-2 are combined together for arriving total YTC of Chittoor - Kalikiri I & II feeders.

The Gross block (capital cost) for section - 1 is **23526.14 Lakhs** and for section - 2 is **4841.995 Lakhs**.



c) **For the Assets XXX & XXXI.**

Regarding the assets XXX & XXXI (Regulapadu – Suzlon-W1:1 and Suzlon – W1-Vajrakur:1), Regulapadu and Vajrakarur substations are in the same compound but are not interconnected. Regulapadu is a LIS substation and Vajrakarur is a Wind power evacuation Substation. Both the 220 KV Regulapadu – Suzlon & Suzlon - Vajrakarur feeders are carried on a DC line starting from Suzlon substation and terminating near the substations i.e Regulapadu and Vajrakarur with SC/DC line. The line was constructed by M/s Suzlon only under DC work. Hence, O&M charges were only taken into consideration for computation of YTC.

d) **For the Assets XXXII, XXXIII & XXXIV**

Regarding the Assets XXXII, XXXIII & XXXIV, the 400 KV Vemagiri-Nunna TMDC line was commissioned in the year 2005. The 400 KV TMDC line from Sattenapalli to LILO point of 400 KV Vemagiri – Nunna Feeder-1 was commissioned in the year 2015. After made LILO, the 400 KV Vemagiri - Nunna Feeder-1 became 400 KV Vemagiri – Sattenapalli and 400 KV Nunna – Sattenapalli feeder.

For computing the YTC for the above three lines, the Gross block (capital cost) for 400 KV Vemagiri - Nunna TMDC line is taken as Section-1 based on the rationalized capital cost and 400 KV TMDC line from Sattenapalli upto LILO point of Vemagiri-Nunna feeder – 1 is taken as Section-2 based on audited capital cost and combined together.

The Gross block (capital cost) for section – 1 is **8128.512 Lakhs** and for section – 2 is **16131.65 Lakhs**.

**viii. Debt- Equity Ratio for all the assets**

The debt- Equity ratio is considered as 70:30.

**ix. Depreciation for all the assets**

In line with the CERC (Terms and Conditions of Tariff) Regulations, 2019, asset is depreciated up to 90% of the capital cost, remaining 10% being the salvage value of the asset. For the assets commissioned before 2014 for which the audited capital costs are not available, the rate of depreciation is taken as 5.28% till 12 years and 2.05% beyond that till 25 years as per the methodology adopted by CERC while issuing the orders in Petition No. 237/TT/2016 filed by APTRANSCO. For the assets commissioned after 2014, the rate of depreciation is taken as 5.28%. Further, Normative loan repayment during a year shall be deemed to be equal to the depreciation allowed for that year.

**x. Interest on Loan**

**a) For the Assets I to XIX**

The rate of interest on loan for the assets has been considered from the weighted average rate of loan for APTRANSCO as a whole, as there is no individual line wise breakup of interest rates available. The rate of interest for 2019-20 has been considered as the weighted average rate of loan of FY2018-19.

<b>Year</b>	<b>2019-20</b>
<b>Rate of Interest on Loan</b>	9.98%

**b) For the Assets XX to XXXIV**

The rate of interest on loan for the assets XX to XXXIV for FY2019-20 is as given below:

<b>Asset</b>	<b>Loan Funded by</b>	<b>Rate of Interest on Loan (%) for FY 2019-20</b>
Asset XX & XXI	NABARD	10.30%
Asset XXII & XXIII	REC	9.375%
Asset XXIV & XXV	REC	9.375%
Asset XXVI & XXVII	REC	9.375%
Asset XXVIII & XXIX	REC	9.375%
Asset XXX & XXXI	Under DC works	
Asset XXXIII & XXXIV	REC	9.375%

**xi. Return on Equity**

Clause (1) and (2) of Regulations 30 and Clause (2) of Regulation 31 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 specify as under:-

**“30. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 18.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system....”

**“31. Tax on Return on Equity:**

..(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non- transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

In line with the CERC (Terms and Conditions of Tariff) Regulations, 2019, the RoE considered is as follows:

APTRANSCO is a profit-making entity, the total tax rate (including surcharge and Education cess) for the 2019-20 is as below:

	<b>2019-20</b>
Base Rate	30%
Surcharge	12%
Education Cess	4%
<b>Total Tax</b>	<b>34.9440%</b>

<b>Return on Equity</b>	<b>2019-20</b>
Return on Equity (Base Rate) (%)	15.50%
Tax Rate for respective year (%)	34.94%
Rate of Return on Equity (%)	23.83%

**xii. O & M Expenses**

The O & M expenses have been considered in line with the Clause 3(a) of Regulation 35 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 which specify the norms for O&M Expenses for the transmission system viz Norms for sub-stations bays (Rs - Lakh per bay), Norms for Transformers (Rs - Lakh per MVA) and Norms for AC and HVDC lines (Rs - Lakh per km)

Bays have been arrived duly considering the connected bays of that asset. Utilization of PTR's capacity in MVA for each feeder is proportioned by considering 50% of total Sub Station PTR's capacity per feeder connected at that Voltage level.

**xiii. Interest on Working Capital**

In accordance with the Clause 7 of Regulation 3 of the CERC (Terms and Conditions of Tariff) Regulations, 2019, one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1.4.2019 is 8.55%. So the rate of interest on working capital is considered to be 12.05%. In accordance with the Clause 1(c) of Regulation 34 of the CERC (Terms and Conditions of Tariff) Regulations, 2019, the working capital is taken as the sum of maintenance of spares (@15% of the yearly O&M Expenses), O&M expenses for 1 month and Receivables (equivalent to 45 days of annual fixed cost).

**xiv.** Accordingly, the YTC estimated by the petitioner for his 34 transmission lines assets for the FY2019-20 are summarized as below:

Sl. No.	Asset	Asset Name	YTC for FY2019-20
1	Asset I & II	CHITTOOR 42 - CHITTOOR 1:2	236.53
2		CHITTOOR 42 - CHITTOOR 1:1	
3	Asset III	SULURPET 1 - NELLORE 42:1	260.84
4	Asset IV & V	GOOTY - PG - DHONE 1:2	662.12
5		GOOTY - PG - DHONE 1:1	
6	Asset VI & VII	KONDAPALLI-CHILLAKALLU1:1	177.02
7		KONDAPALLI-CHILLAKALLU1:2	
8	Asset VIII & IX	SRISAILAMRB1-TALLAPLLI:1	233.07
9		SRISAILAMRB1-TALLAPLLI:2	
10	Asset X	SRISAILAMRB1-SOMYZULPALLI:1	126.75
11	Asset XI	TALLAPLLI-VTS1:1	144.71
12	Asset XII & XIII	TALLAPLLI-VTS1:3	1118.20
13		TALLAPLLI-VTS1:2	
14	Asset XIV & XV	VTS1-CHILAAKALLU1:2	323.69
15		VTS1-CHILAAKALLU1:1	
16	Asset XVI	VTS1-RENTACHNTHALA1:2	150.33
17	Asset XVII	KURNOOL1-BRAHMANKTKUR:1	147.26
18	Asset - XVIII & XIX	GAZUWAKA2-KALPAKKA1:2	186.27
19		GAZUWAKA2-KALPAKKA1:1	
20	Asset - XX & XXI	SULURPET 1 - NELLORE 42:2	1115.34
21		SULURPET 1 - NELLORE 42:3	
22	Asset - XXII & XXIII	URAVAKONDA-VAJRAKARUR:2	506.57
23		URAVAKONDA-VAJRAKARUR:1	
24	Asset - XXIV & XXV	HINDUJA- KV KOTA1:2	7087.21
25		HINDUJA- KV KOTA1:1	
26	Asset - XXVI & XXVII	JAMALAMADUGU1-URAVAKONDA:2	3340.22
27		JAMALAMADUGU1-URAVAKONDA:1	
28	Asset - XXVIII & XXIX	CHITTOOR2-KALIKIRI1:1	5562.81
29		CHITTOOR2-KALIKIRI1:2	
30	Asset - XXX & XXXI	REGULAPADU-SUZLON-W1:1	38.93
31		SUZLON-W1-VAJRAKUR:1	
32	Asset - XXXII	NUNNA2-VEMAGIRI1:1	4065.49
33	Asset - XXXIII	NUNNA2- SATTENAPALLI1:1	
34	Asset - XXXIV	VEMAGIRI1-SATTENAPALLI:1	
<b>Total YTC (in Lakhs)</b>			<b>25483.37</b>
<b>Total YTC (in Crores)</b>			<b>254.834</b>

4. After careful examination of the submissions made by the petitioner and the material available on record, the Commission has determined YTC as detailed in following paragraphs for all the 34 intra-state lines carrying interstate power which were approved by the SRPC as furnished in the petition.
5. The Commission has classified all the 34 intra-state lines as below:
- i. Transmission lines which have completed 25 years of life as given in the table below:

TRANSMISSION LINES COMPLETED 25 YEARS OF LIFE AS ON 31.03.2019							
S.No.	ASSET No. (Filings)	Name of the Line	Voltage Level	Configuration	Length in Ckm	Date Of Commissioning	Life as on 31.03.2019
1	Asset VI & VII	KONDAPALLI-CHILLAKALLU1:1	220	D/C	59.7	30.09.1989	29
2		KONDAPALLI-CHILLAKALLU1:2	220		59.7		
3	Asset VIII & IX	SRISAILAMRB1-TALLAPLLI:1	220	D/C	98.82	1985	34
4		SRISAILAMRB1-TALLAPLLI:2	220		98.82		
5	Asset X	SRISAILAMRB1-SOMYZULPALLI:1	220	S/C	106	1985	34
6	Asset XI	TALLAPLLI-VTS1:1	220	SC/DC	125.14	30.06.1984	34
7	Asset XVI	VTS1-RENTACHNTHALA1:2	220	SC/DC	111.49	30.06.1984	34

- ii. Transmission lines which were executed under Deposit Contributions (DC) and being maintained by the petitioner. The lines Regulapadu-Suzlon-W1:1(Asset No.XXX) and Suzlon-W1-Vajrakur:1 (Asset No. XXXI) were executed under deposit contributions.
- iii. Transmission lines which were commissioned before 31-03-2014 for which Capital Costs are not available and subsequently, made Line - In Line-Out (LILO) arrangement for new substation and capital costs are submitted by the petitioner for such LILO arrangements. The lines, Nunna2-Vemagiri1:1(Asset-XXXII), Nunna2-Sattenapalli1:1 (Asset-XXXIII) and Vemagiri1-Sattenapalli:1 (Asset-XXXIV) have been considered under this category.

- iv. Transmission lines commissioned before 31-03-2014 for which capital costs are not available as given in the table below:

LINES COMMISSIONED BEFORE 31-03-2014 BUT NOT COMPLETED 25 YEARS OF LIFE							
Sl. No.	Asset No.(Filings)	Name of the Line	Voltage Level	Configuration	Length in Ckm	Date of Commissioning	Life As on 31-03-2019
1	Asset I & II	CHITTOOR 42 - CHITTOOR 1:2	220	D/C	17.1	14.02.2006	13
2		CHITTOOR 42 - CHITTOOR 1:1	220		17.1		
3	Asset III	SULURPET 1 - NELLORE 42:1	220	S/C	85.8	26.12.2006	12
4	Asset IV & V	GOOTY - PG - DHONE 1:2	220	D/C	90.16	24.08.2011	7
5		GOOTY - PG - DHONE 1:1	220		90.16		
6	Asset XII & XIII	TALLAPLLI-VTS1:3	220	D/C	137.25	17.10.2012	6
7		TALLAPLLI-VTS1:2	220		137.25		
8	Asset XIV & XV	VTS1-CHILAAKALLU1:2	220	D/C	67.8	12.03.1997	22
9		VTS1-CHILAAKALLU1:1	220		67.8		
10	Asset XVII	KURNOOL1-BRAHMANKTKUR:1	220	S/C	23.18	29.10.2010	8
11	Asset - XVIII & XIX	GAZUWAKA2-KALPAKKA1:2	400	D/C	3.39	10.12.2000	18
12		GAZUWAKA2-KALPAKKA1:1	400		3.39		

- v. Transmission lines commissioned after 31-03-2014 for which audited capital costs details are submitted by the petitioner. The details of the lines are given below:

TRANSMISSION LINES COMMISSIONED AFTER 31.03.2014 AND WITH AUDITED CAPITAL COST							
S.No.	Asset No.(Filings)	Name of the Line	Voltage Level	Configuration	Length in Ckm	Date of Commissioning	Life as on 31.03.2019
1	Asset - XX & XXI	SULURPET 1 - NELLORE 42:2	220	D/C	68.13	10.11.2014	4
2		SULURPET 1 - NELLORE 42:3	220		68.13		
3	Asset - XXII & XXIII	URAVAKONDA-VAJRAKARUR:2	220	D/C	16.826	14.07.2016	2
4		URAVAKONDA-VAJRAKARUR:1	220		16.826		
5	Asset - XXIV & XXV	HINDUJA- KV KOTA1:2	400	D/C	242.98	24.07.2017	1
6		HINDUJA- KV KOTA1:1	400		242.98		
7	Asset - XXVI	JAMALAMADUGU1-URAVAKONDA:2	400	D/C	127.62	15.07.2016	2
8	Asset - XXVII	JAMALAMADUGU1-URAVAKONDA:1	400		127.62		
9	Asset - XXVIII & XXIX	CHITTOOR2-KALIKIRI1:1	400	D/C	96.87	01.04.2018	1
10		CHITTOOR2-KALIKIRI1:2	400		96.87		

6. With respect to transmission lines which have completed 25 years of life, only the O&M expenses and interest on working capital are allowed. The details of computation of YTC of these lines are given in the Annexure- I.
7. With respect to the transmission lines which were executed with deposit contributions, as there was no investment by the petitioner, only O&M expenses and interest on working capital are allowed. The details of computation of YTC of these lines are given in the Annexure - II.
8. With respect to transmission lines mentioned in para 6 and para 7, the O&M expenses per circuit kilometer for the Financial Year 2019-20 is considered as per the Transmission Tariffs order dated 8<sup>th</sup> March, 2019 for the 4<sup>th</sup> control period issued by the Commission. The interest on working capital is estimated in accordance with the CERC (Terms & Conditions of Tariff) Regulations, 2019 as submitted by the petitioner.
9. With respect to transmission lines which were commissioned before 31-03-2014 for which Capital Costs are not available and subsequently, made Line-In Line-Out (LILo) arrangement for new substation and capital costs are submitted for such LILo arrangements, the YTC are determined taking the capital costs as per the methodology adopted by CERC in order dated 21-06-2018 in petition 237/TT/2016 for part-1 (original line) for which no capital cost data is available. The audited capital cost for part-2 (LILo) arrangement has been furnished by the petitioner and hence, the same has been considered for the determination of YTC. The details of computations of YTC of these lines are given in the Annexure - III.
10. With respect to Transmission lines commissioned before 31-03-2014 for which capital costs are not available, the YTC are determined taking the capital costs as per the methodology adopted by CERC in order dated 21-06-2018 in petition 237/TT/2016(14). The details of computations of YTC of these lines are given in the Annexure - IV.



11. With respect to transmission lines commissioned after 31-03-2014 for which audited capital cost details are submitted by the petitioner, the same has been considered for determination of YTC. But the length of the line Hinduja-KV kota DC line has been considered as 242.928 km as per the audit certificate as against 242.98 filed. The details of computations of YTC of these lines are given in the Annexure- V.
12. For all the lines mentioned in paragraph nos. 9, 10 & 11, the depreciation rates have been adopted as per CERC (Terms & Conditions of Tariff) Regulations, 2019. The rate of interest on loan as submitted by the petitioner has been considered which is the weighted average of loan portfolio of the petitioner for FY2018-19 and less than the rate of interest considered by the Commission in its Transmission Tariff Order dated: 08-03-2019 issued for the Forth Control Period. But, for the lines mentioned in paragraph 11, the rate of interest on loan asset wise has been considered based on the audit certificate furnished by the petitioner. The return on equity (RoE) is considered as approved in Commission's order dated 21.07.2018 in O.P.No. 15 of 2018. The O&M expenses per circuit kilometer for the FY2019-20 is considered as per the Transmission Tariffs order dated 8<sup>th</sup> March, 2019 for the 4<sup>th</sup> control period issued by the Commission. Debt equity ratio and the interest on working capital are estimated in accordance with the CERC (Terms & Conditions of Tariff) Regulations, 2019 as submitted by the petitioner.
13. The petitioner has also claimed the connected bay O&M charges and apportioned PTR MVA charges as per CERC (Terms & Conditions of Tariff) Regulations, 2019 for all the lines. The same has not been considered by the Commission in line with CERC orders for interstate lines.
14. As detailed above, the YTC determined by the Commission asset wise / line wise for the Financial Year 2019-20 are given below:

YTC DETERMINED BY THE COMMISSION				
Sl. No.	Asset No. (Filings)	Name of the Line	Voltage	YTC in Rs.Lakhs
1	Asset I & II	CHITTOOR 42 - CHITTOOR 1:2	220	84.66
2		CHITTOOR 42 - CHITTOOR 1:1	220	
3	Asset III	SULURPET 1 - NELLORE 42:1	220	167.94
4	Asset IV & V	GOOTY - PG - DHONE 1:2	220	914.79
5		GOOTY - PG - DHONE 1:1	220	
6	Asset VI & VII	KONDAPALLI-CHILLAKALLU1:1	220	98.96
7		KONDAPALLI-CHILLAKALLU1:2	220	
8	Asset VIII & IX	SRISAILAMRB1-TALLAPLLI:1	220	163.81
9		SRISAILAMRB1-TALLAPLLI:2	220	
10	Asset X	SRISAILAMRB1-SOMYZULPALLI:1	220	87.85
11	Asset XI	TALLAPLLI-VTS1:1	220	103.72
12	Asset XII & XIII	TALLAPLLI-VTS1:3	220	1634.92
13		TALLAPLLI-VTS1:2	220	
14	Asset XIV & XV	VTS1-CHILAAKALLU1:2	220	244.08
15		VTS1-CHILAAKALLU1:1	220	
16	Asset XVI	VTS1-RENTACHNTHALA1:2	220	92.40
17	Asset XVII	KURNOOL1-BRAHMANKTKUR:1	220	74.28
18	Asset - XVIII & XIX	GAZUWAKA2-KALPAKKA1:2	400	30.96
19		GAZUWAKA2-KALPAKKA1:1	400	
20	Asset - XX & XXI	SULURPET 1 - NELLORE 42:2	220	802.67
21		SULURPET 1 - NELLORE 42:3	220	
22	Asset - XXII & XXIII	URAVAKONDA-VAJRAKARUR:2	220	334.72
23		URAVAKONDA-VAJRAKARUR:1	220	
24	Asset - XXIV & XXV	HINDUJA- KV KOTA1:2	400	6314.61
25		HINDUJA- KV KOTA1:1	400	
26	Asset - XXVI	JAMALAMADUGU1-URAVAKONDA:2	400	2690.29
27	Asset - XXVII	JAMALAMADUGU1-URAVAKONDA:1	400	
28	Asset - XXVIII & XXIX	CHITTOOR2-KALIKIRI1:1	400	4696.88
29		CHITTOOR2-KALIKIRI1:2	400	
30	Asset - XXX & XXXI	REGULAPADU-SUZLON-W1:1	220	8.56
31		SUZLON-W1-VAJRAKUR:1	220	
32	Asset - XXXII	NUNNA2-VEMAGIRI1:1	400	1404.85
33	Asset - XXXIII	NUNNA2- SATTENAPALLI1:1	400	2647.3
34	Asset - XXXIV	VEMAGIRI1-SATTENAPALLI:1	400	
Total Yearly Transimission Charges for FY2019-20				<b>22598.26</b>
Total Yearly Transimission Charges for FY2019-20 in Crores				<b>225.98</b>

15. On inclusion of the assets covered in the petition in the PoC methodology by the implementing agency, in line with the sharing of inter-state transmission charges and losses regulations, 2010 and the amendments thereto and upon receiving of the transmission charges, the YTC recovered shall be adjusted against the ARR of the petitioner.
16. The petition is ordered accordingly.

**Sd/-**

**P. RAMA MOHAN  
MEMBER**

**Sd/-**

**Dr. P. RAGHU  
MEMBER**

**Sd/-**

**JUSTICE G.BHAVANI PRASAD  
CHAIRMAN**

<b>Annexure -I</b>			
Name of the Tr. System:	Asset- VI & VII	<b>KONDAPALLI-CHILLAKALLU1:1 &amp; KONDAPALLI-CHILLAKALLU1:2</b>	
		COD:	30-09-1989
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	0.00	<b>Life in years</b>	25
Transmission Line length in Ckm	119.40	<b>Voltage, kV</b>	220 kV D/C
Multiplication factor	0.57		
			<b>FY 2019-20</b>
<b>Gross Block</b>			0.00
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			0.00
Average Gross Block			0.00
<b>Depreciation</b>			
Rate of Depreciation(%)			0.00%
Depreciable value		<b>0.90</b>	0.00
Elapsed Life as on 31.03.2019			29.00
Balance useful life of the asset			0.00
Remaining Depreciable value			0.00
Cumulative Depreciation			0.00
Depreciation			<b>0.00</b>
<b>Interest on Loan</b>			
Gross Normative Loan			0.00
Cumulative Repayment upto			0.00
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			0.00
Opening Equity			0.00
Average Equity			0.00
Rate of Return on Equity			15.50%
Return on Equity			<b>0.00</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O & M		14.22
O & M expenses	1 Months		7.90
Receivables	1.5 Months		12.37
Total			34.49
Interest	12.05%		<b>4.16</b>
<b>Annual Transmission Charges</b>			
Depreciation			0.00
Interest on Loan			0.00
Return on Equity			0.00
Interest on Working Capital			4.16
O & M Expenses			94.80
<b>Total</b>			<b>98.96</b>
Norms for O&M Per Km			0.794

<b>Annexure - I</b>			
<b>Name of the Tr. System:</b>	<b>Asset-VIII and IX</b>	<b>SRISAILAMRB1-TALIAPLLI:1 &amp; SRISAILAMRB1-TALIAPLLI:2</b>	
		<b>COD:</b>	<b>01-01-1985</b>
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			<b>(Rs. In lacs)</b>
Rationalised cost of 400 kv line Rs lakh per ckt km	0.00	<b>Life in years</b>	25
Transmission Line length in Ckm	197.64	<b>Voltage, kV</b>	220 kV D/C
Multiplication factor	0.57		
			<b>FY 2019-20</b>
<b>Gross Block</b>			0.000
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			0.000
Average Gross Block			0.000
<b>Depreciation</b>			
Rate of Depreciation(%)			0.00%
Depreciable value		<b>0.90</b>	0.00
Elapsed Life as on 31.03.2019			34.00
Balance useful life of the asset			0.00
Remaining Depreciable value			0.00
Cumulative Depreciation			0.00
Depreciation			<b>0.00</b>
<b>Interest on Loan</b>			
Gross Normative Loan			0.00
Cumulative Repayment upto			0.00
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
Interest			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			0.00
Opening Equity			0.00
Average Equity			0.00
Rate of Return on Equity			15.50%
Return on Equity			<b>0.00</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		23.54
O & M expenses	1 Months		13.08
Receivables	1.5 Months		20.47
Total			57.09
Interest	12.05%		<b>6.88</b>
<b>Annual Transmission Charges</b>			
Depreciation			0.00
Interest on Loan			0.00
Return on Equity			0.00
Interest on Working Capital			6.88
O & M Expenses			156.93
<b>Total</b>			<b>163.81</b>
Norms for O&M Per Km			0.794

Annexure -I			
Name of the Tr. System:	Asset - X	SRISAILAMRB1-SOMYZULPALLI:1	
		COD:	01-01-1985
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	0.00	Life in years	25
Transmission Line length in Ckm	106.00	Voltage, kV	220 kV S/C
Multiplication factor	0.36		
			FY 2019-20
<b>Gross Block</b>			0.00
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			0.00
Average Gross Block			0.00
<b>Depreciation</b>			
Rate of Depreciation(%)			0.00%
Depreciable value		<b>0.90</b>	0.00
Elapsed Life as on 31.03.2019			34.00
Balance useful life of the asset			0.00
Remaining Depreciable value			0.00
Cumulative Depreciation			0.00
Depreciation			<b>0.00</b>
<b>Interest on Loan</b>			
Gross Normative Loan			0.00
Cumulative Repayment upto			0.00
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			0.00
Opening Equity			0.00
Average Equity			0.00
Rate of Return on Equity			15.50%
Return on Equity			<b>0.00</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		12.62
O & M expenses	1 Months		7.01
Receivables	1.5 Months		10.98
Total			30.62
Interest	12.05%		<b>3.69</b>
<b>Annual Transmission Charges</b>			
Depreciation			0.00
Interest on Loan			0.00
Return on Equity			0.00
Interest on Working Capital			3.69
O & M Expenses			84.16
<b>Total</b>			<b>87.85</b>
Norms for O&M Per Km			0.794

Annexure - I			
Name of the Tr. System:	Asset- XI	TALLAPLLI-VTPS1:1	
		COD:	30-06-1984
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	0.00	Life in years	25
Transmission Line length in Ckm	125.14	Voltage, kV	220 kV DC/SC
Multiplication factor	0.36		
			FY 2019-20
<b>Gross Block</b>			0.00
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			0.00
Average Gross Block			0.00
<b>Depreciation</b>			
Rate of Depreciation(%)			0.00%
Depreciable value		<b>0.90</b>	0.00
Elapsed Life as on 31.03.2019			34.00
Balance useful life of the asset			0.00
Remaining Depreciable value			0.00
Cumulative Depreciation			0.00
Depreciation			<b>0.00</b>
<b>Interest on Loan</b>			
Gross Normative Loan			0.00
Cumulative Repayment upto			0.00
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			0.00
Opening Equity			0.00
Average Equity			0.00
Rate of Return on Equity			15.50%
Return on Equity			<b>0.00</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		14.90
O & M expenses	1 Months		8.28
Receivables	1.5 Months		12.96
Total			36.14
Interest	12.05%		<b>4.36</b>
<b>Annual Transmission Charges</b>			
Depreciation			0.00
Interest on Loan			0.00
Return on Equity			0.00
Interest on Working Capital			4.36
O & M Expenses			99.36
<b>Total</b>			<b>103.72</b>
Norms for O&M Per Km			0.794

Annexure - I			
Name of the Tr. System:	Asset-XVI	VTS1-RENTACHNTHALA1:2	
		COD:	30-06-1984
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	0.00	Life in years	25
Transmission Line length in Ckm	111.49	Voltage, kV	220 kV DC/SC
Multiplication factor	0.36		
			FY 2019-20
<b>Gross Block</b>			0.00
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			0.00
Average Gross Block			0.00
<b>Depreciation</b>			
Rate of Depreciation(%)			0.00%
Depreciable value		<b>0.90</b>	0.00
Elapsed Life as on 31.03.2019			34.00
Balance useful life of the asset			0.00
Remaining Depreciable value			0.00
Cumulative Depreciation			0.00
Depreciation			<b>0.00</b>
<b>Interest on Loan</b>			
Gross Normative Loan			0.00
Cumulative Repayment upto			0.00
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			0.00
Opening Equity			0.00
Average Equity			0.00
Rate of Return on Equity			15.50%
Return on Equity			<b>0.00</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		13.28
O & M expenses	1 Months		7.38
Receivables	1.5 Months		11.55
Total			32.21
Interest	12.05%		<b>3.88</b>
<b>Annual Transmission Charges</b>			
Depreciation			0.00
Interest on Loan			0.00
Return on Equity			0.00
Interest on Working Capital			3.88
O & M Expenses			88.52
<b>Total</b>			<b>92.40</b>
Norms for O&M Per Km			0.794



<b>Annexure -II</b>			
<b>Name of the Tr. System:</b>	<b>Asset- XXX &amp; XXXI</b>	<b>SUZLON-W1-VAJRAKUR:1 (COD : 12-08-2016) &amp; REGULAPADU-SUZLON-W1:1 (COD:31-03-2012)</b>	
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			<b>(Rs. In lacs)</b>
Rationalised cost of 400 kv line Rs lakh per ckt km	0.00	<b>Life in years</b>	25
Transmission Line length in Ckm	5.2 & 5.13	<b>Voltage, kV</b>	220 kV D/C
Multiplication factor	0.00		
			<b>FY 2019-20</b>
<b>Gross Block</b>			0.00
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			0.00
Average Gross Block			0.00
<b>Depreciation</b>			
Rate of Depreciation(%)			0.00%
Depreciable value		<b>0.90</b>	0.00
Elapsed Life as on 31.03.2019			7.00
Balance useful life of the asset			0.00
Remaining Depreciable value			0.00
Cumulative Depreciation			0.00
Depreciation			<b>0.00</b>
<b>Interest on Loan</b>			
Gross Normative Loan			0.00
Cumulative Repayment upto			0.00
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			0.00
Opening Equity			0.00
Average Equity			0.00
Rate of Return on Equity			15.50%
Return on Equity			<b>0.00</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O & M		1.23
O & M expenses	1 Months		0.68
Receivables	1.5 Months		1.07
Total			2.98
Interest	12.05%		<b>0.36</b>
<b>Annual Transmission Charges</b>			
Depreciation			0.00
Interest on Loan			0.00
Return on Equity			0.00
Interest on Working Capital			0.36
O & M Expenses			8.20
<b>Total</b>			<b>8.56</b>
Norms for O&M Per Km			0.794

<b>Annexure -III</b>			
<b>Name of the Tr. System:</b>	<b>Asset - XXXII</b>	<b>NUNNA2-VEMAGIRI:DC LINE(PART-1)</b>	
		<b>COD:</b>	<b>30-12-2005</b>
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			<b>(Rs. In lacs)</b>
Rationalised cost of 400 kv line Rs lakh per ckt km	40.33	<b>Life in years</b>	25
Transmission Line length in km	145.00	<b>Voltage, kV</b>	400 kV D/C
Multiplication factor	1.39		
			<b>FY 2019-20</b>
<b>Gross Block</b>			16257.023
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			16257.023
Average Gross Block			16257.023
<b>Depreciation</b>			
Rate of Depreciation(%)			2.05%
Depreciable value		<b>0.90</b>	14631.32
Elapsed Life as on 31.03.2019			13.00
Balance useful life of the asset			12.00
Remaining Depreciable value			3997.73
Cumulative Depreciation			10633.59
Depreciation			<b>333.14</b>
<b>Interest on Loan</b>			
Gross Normative Loan			11379.92
Cumulative Repayment upto			10633.59
Net Loan-Opening			746.32
Addition due to Additional			0.00
Repayment during the year			333.14
Net Loan-Closing			413.18
Average Loan			579.75
Weighted Average Rate of Interest on Interest			9.98%
			<b>57.86</b>
<b>Return on Equity</b>			
Gross Notional Equity			4877.11
Opening Equity			4877.11
Average Equity			4877.11
Rate of Return on Equity			15.50%
Return on Equity			<b>755.95</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		34.54
O & M expenses	1 Months		19.19
Receivables	1.5 Months		175.60
Total			229.33
Interest	12.05%		<b>27.63</b>
<b>Annual Transmission Charges</b>			
Depreciation			333.14
Interest on Loan			57.86
Return on Equity			755.95
Interest on Working Capital			27.63
O & M Expenses			230.26
<b>Total</b>			<b>1404.85</b>
Norms for O&M Per CKm			0.794

<b>Annexure -III</b>			
<b>Name of the Tr. System:</b>	<b>Asset - XXXIII &amp;XXXIV</b>	<b>SATTENAPALLI TO LILO POINT OF NUNNA-VEMAGIRI LINE(PART-2)</b>	
		<b>COD:</b>	<b>12-10-2015</b>
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			<b>(Rs. In lacs)</b>
Rationalised cost of 400 kv line Rs lakh per ckt km	---	<b>Life in years</b>	25
Transmission Line length in km	107.87	<b>Voltage, kV</b>	400 kV D/C
Multiplication factor	----		
			<b>FY 2019-20</b>
<b>Gross Block</b>			16131.650
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			16131.650
Average Gross Block			16131.650
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	14518.49
Elapsed Life as on 31.03.2019			3.00
Balance useful life of the asset			22.00
Remaining Depreciable value			11963.23
Cumulative Depreciation			2555.25
Depreciation			<b>851.75</b>
<b>Interest on Loan</b>			
Gross Normative Loan			11292.16
Cumulative Repayment upto			2555.25
Net Loan-Opening			8736.90
Addition due to Additional			0.00
Repayment during the year			851.75
Net Loan-Closing			7885.15
Average Loan			8311.03
Weighted Average Rate of Interest on Interest			9.98%
			<b>829.44</b>
<b>Return on Equity</b>			
Gross Notional Equity			4839.50
Opening Equity			4839.50
Average Equity			4839.50
Rate of Return on Equity			15.50%
Return on Equity			<b>750.12</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		25.69
O & M expenses	1 Months		14.27
Receivables	1.5 Months		330.86
Total			370.83
Interest	12.05%		<b>44.68</b>
<b>Annual Transmission Charges</b>			
Depreciation			851.75
Interest on Loan			829.44
Return on Equity			750.12
Interest on Working Capital			44.68
O & M Expenses			171.30
<b>Total</b>			<b>2647.30</b>
Norms for O&M Per CKm	D/C		0.794

<b>Annexure - IV</b>			
Name of the Tr. System:	Asset-I and II	CHITTOOR 42 - CHITTOOR 1:2 & CHITTOOR 42 - CHITTOOR 1:1	
		COD:	14-02-2006
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	40.33	Life in years	25
Transmission Line length in km	17.10	Voltage, kV	220 kV D/C
Multiplication factor	0.57		
			FY 2019-20
<b>Gross Block</b>			786.19
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			786.19
Average Gross Block			786.19
<b>Depreciation</b>			
Rate of Depreciation(%)			2.05%
Depreciable value		0.90	707.57
Elapsed Life as on 31.03.2019			13.00
Balance useful life of the asset			12.00
Remaining Depreciable value			193.33
Cumulative Depreciation			514.24
Depreciation			<b>16.11</b>
<b>Interest on Loan</b>			
Gross Normative Loan			550.34
Cumulative Repayment upto			514.24
Net Loan-Opening			36.09
Addition due to Additional			0.00
Repayment during the year			16.11
Net Loan-Closing			19.98
Average Loan			28.04
Weighted Average Rate of Interest on Interest			9.98%
			<b>2.80</b>
<b>Return on Equity</b>			
Gross Notional Equity			235.86
Opening Equity			235.86
Average Equity			235.86
Rate of Return on Equity			15.50%
Return on Equity			<b>36.56</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		4.07
O & M expenses	1 Months		2.26
Receivables	1.5 Months		10.58
Total			16.92
Interest	12.05%		<b>2.04</b>
<b>Annual Transmission Charges</b>			
Depreciation			16.11
Interest on Loan			2.80
Return on Equity			36.56
Interest on Working Capital			2.04
O & M Expenses			27.15
<b>Total</b>			<b>84.66</b>
Norms for O&M Per CKm			0.794

Annexure - IV			
Name of the Tr. System:	Asset-III	SULURPET 1 - NELLORE 42:1	
		COD:	26-12-2006
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	42.53	Life in years	25
Transmission Line length in km	85.80	Voltage, kV	220 kV S/C
Multiplication factor	0.36		
			FY 2019-20
<b>Gross Block</b>			1313.67
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			1313.67
Average Gross Block			1313.67
<b>Depreciation</b>			
Rate of Depreciation(%)			2.05%
Depreciable value		<b>0.90</b>	1182.30
Elapsed Life as on 31.03.2019			12.00
Balance useful life of the asset			13.00
Remaining Depreciable value			349.96
Cumulative Depreciation			832.34
Depreciation			<b>26.92</b>
<b>Interest on Loan</b>			
Gross Normative Loan			919.57
Cumulative Repayment upto Previous Year			832.34
Net Loan-Opening			87.23
Addition due to Additional Capitalisation			0.00
Repayment during the year			26.92
Net Loan-Closing			60.31
Average Loan			73.77
Weighted Average Rate of Interest on Loan			9.98%
Interest			<b>7.36</b>
<b>Return on Equity</b>			
Gross Notional Equity			394.10
Opening Equity			394.10
Average Equity			394.10
Rate of Return on Equity			15.50%
Return on Equity			<b>61.09</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		10.22
O & M expenses	1 Months		5.68
Receivables	1.5 Months		20.99
Total			36.89
Interest	12.05%		<b>4.44</b>
<b>Annual Transmission Charges</b>			
Depreciation			26.92
Interest on Loan			7.36
Return on Equity			61.09
Interest on Working Capital			4.44
O & M Expenses			68.13
<b>Total</b>			<b>167.94</b>
Norms for O&M Per CKm			0.794

<b>Annexure - IV</b>			
Name of the Tr. System:	Asset- IV and V	GOOTY - PG - DHONE 1:2 & GOOTY - PG - DHONE 1:1	
		COD:	24-08-2011
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	58.97	<b>Life in years</b>	25
Transmission Line length in km	90.16	<b>Voltage, kV</b>	220 kV D/C
Multiplication factor	0.57		
			<b>FY 2019-20</b>
<b>Gross Block</b>			6061.08
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			6061.08
Average Gross Block			6061.08
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	5454.97
Elapsed Life as on 31.03.2019			8.00
Balance useful life of the asset			17.00
Remaining Depreciable value			2894.77
Cumulative Depreciation			2560.20
Depreciation			<b>320.02</b>
<b>Interest on Loan</b>			
Gross Normative Loan			4242.75
Cumulative Repayment upto Previous Year			2560.20
Net Loan-Opening			1682.56
Addition due to Additional Capitalisation			0.00
Repayment during the year			320.02
Net Loan-Closing			1362.53
Average Loan			1522.54
Weighted Average Rate of Interest on Loan			9.98%
Interest			<b>151.95</b>
<b>Return on Equity</b>			
Gross Notional Equity			1818.32
Opening Equity			1818.32
Average Equity			1818.32
Rate of Return on Equity			15.50%
Return on Equity			<b>281.84</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		21.48
O & M expenses	1 Months		11.93
Receivables	1.5 Months		114.34
Total			147.75
Interest	12.05%		<b>17.80</b>
<b>Annual Transmission Charges</b>			
Depreciation			320.02
Interest on Loan			151.95
Return on Equity			281.84
Interest on Working Capital			17.80
O & M Expenses			143.17
<b>Total</b>			<b>914.79</b>
Norms for O&M Per CKm			0.794

Annexure - IV			
Name of the Tr. System:	Asset-XII and XIII	TALLAPLLI-VTPS1:2 & TALLAPLLI-VTPS1:3	
		COD:	17-10-2012
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	65.67	Life in years	25
Transmission Line length in km	137.25	Voltage, kV	220 kV D/C
Multiplication factor	0.57		
			<b>FY 2019-20</b>
<b>Gross Block</b>			10275.21
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			10275.21
Average Gross Block			10275.21
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	9247.69
Elapsed Life as on 31.03.2019			6.00
Balance useful life of the asset			19.00
Remaining Depreciable value			5992.50
Cumulative Depreciation			3255.19
Depreciation			<b>542.53</b>
<b>Interest on Loan</b>			
Gross Normative Loan			7192.64
Cumulative Repayment upto			3255.19
Net Loan-Opening			3937.46
Addition due to Additional			0.00
Repayment during the year			542.53
Net Loan-Closing			3394.93
Average Loan			3666.19
Weighted Average Rate of Interest on Interest			9.98%
			<b>365.89</b>
<b>Return on Equity</b>			
Gross Notional Equity			3082.56
Opening Equity			3082.56
Average Equity			3082.56
Rate of Return on Equity			15.50%
Return on Equity			<b>477.80</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		32.69
O & M expenses	1 Months		18.16
Receivables	1.5 Months		204.35
Total			255.21
Interest	12.05%		<b>30.75</b>
<b>Annual Transmission Charges</b>			
Depreciation			542.53
Interest on Loan			365.89
Return on Equity			477.80
Interest on Working Capital			30.75
O & M Expenses			217.96
<b>Total</b>			<b>1634.92</b>
Norms for O&M Per CKm			0.794

<b>Annexure - IV</b>			
Name of the Tr. System:	Asset-XIV and XV	VTS1-CHILAAKALLU1:2 & VTS1-CHILAAKALLU1:1	
		COD:	12-03-1997
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	38.20	Life in years	25
Transmission Line length in km	67.80	Voltage, kV	220 kV D/C
Multiplication factor	0.57		
			<b>FY 2019-20</b>
<b>Gross Block</b>			2952.55
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			2952.55
Average Gross Block			2952.55
<b>Depreciation</b>			
Rate of Depreciation(%)			2.05%
Depreciable value		0.90	2657.30
Elapsed Life as on 31.03.2019			22.00
Balance useful life of the asset			3.00
Remaining Depreciable value			181.51
Cumulative Depreciation			2475.79
Depreciation			<b>60.50</b>
<b>Interest on Loan</b>			
Gross Normative Loan			2066.79
Cumulative Repayment upto			2066.79
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			885.77
Equity paid			409.00
Opening Equity			476.77
Equity paid this year			60.50
Closing Equity			416.26
Average Equity			446.52
Rate of Return on Equity			15.50%
Return on Equity			<b>69.21</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		16.15
O & M expenses	1 Months		8.97
Receivables	1.5 Months		30.50
Total			55.62
Interest	12.05%		<b>6.70</b>
<b>Annual Transmission Charges</b>			
Depreciation			60.50
Interest on Loan			0.00
Return on Equity			69.21
Interest on Working Capital			6.70
O & M Expenses			107.67
Total			244.08
Norms for O&M Per CKm			0.794



Annexure - IV			
Name of the Tr. System:	Asset-XVII	KURNOOL1-BRAHMANKTKUR:1	
		COD:	29-10-2010
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	52.26	Life in years	25
Transmission Line length in km	23.18	Voltage, kV	220 kV S/C
Multiplication factor	0.36		
			FY 2019-20
<b>Gross Block</b>			436.10
Addition during 2014-19 due to Projected Additional Capitalisation			0.00
Gross Block total			436.10
Average Gross Block			436.10
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	392.49
Elapsed Life as on 31.03.2019			8.00
Balance useful life of the asset			17.00
Remaining Depreciable value			208.28
Cumulative Depreciation			184.21
Depreciation			<b>23.03</b>
<b>Interest on Loan</b>			
Gross Normative Loan			305.27
Cumulative Repayment upto			184.21
Net Loan-Opening			121.06
Addition due to Additional			0.00
Repayment during the year			23.03
Net Loan-Closing			98.04
Average Loan			109.55
Weighted Average Rate of Interest on Interest			9.98%
			<b>10.93</b>
<b>Return on Equity</b>			
Gross Notional Equity			130.83
Opening Equity			130.83
Average Equity			130.83
Rate of Return on Equity			15.50%
Return on Equity			<b>20.28</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		2.76
O & M expenses	1 Months		1.53
Receivables	1.5 Months		9.28
Total			13.57
Interest	12.05%		<b>1.64</b>
<b>Annual Transmission Charges</b>			
Depreciation			23.03
Interest on Loan			10.93
Return on Equity			20.28
Interest on Working Capital			1.64
O & M Expenses			18.40
<b>Total</b>			<b>74.28</b>
Norms for O&M Per CKm			0.794

Annexure -IV			
Name of the Tr. System:	Asset - XVIII & XIX	GAZUWAKA2-KALPAKKA1:1 & GAZUWAKA2-KALPAKKA1:2	
		COD:	27-01-2002
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	44.28	Life in years	25
Transmission Line length in km	3.39	Voltage, kV	400 kV D/C
Multiplication factor	1.39		
			<b>FY 2019-20</b>
<b>Gross Block</b>			417.304
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			417.304
Average Gross Block			417.304
<b>Depreciation</b>			
Rate of Depreciation(%)			2.05%
Depreciable value		<b>0.90</b>	375.57
Elapsed Life as on 31.03.2019			17.00
Balance useful life of the asset			8.00
Remaining Depreciable value			68.41
Cumulative Depreciation			307.16
Depreciation			<b>8.55</b>
<b>Interest on Loan</b>			
Gross Normative Loan			292.11
Cumulative Repayment upto			292.11
Net Loan-Opening			0.00
Addition due to Additional			0.00
Repayment during the year			0.00
Net Loan-Closing			0.00
Average Loan			0.00
Weighted Average Rate of Interest on Interest			9.98%
			<b>0.00</b>
<b>Return on Equity</b>			
Gross Notional Equity			125.19
Equity Paid			15.05
Opening Equity			110.14
Equity Paid this year			8.55
Closing Equity			101.59
Average Equity			105.87
Rate of Return on Equity			15.50%
Return on Equity			<b>16.41</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		0.81
O & M expenses	1 Months		0.45
Receivables	1.5 Months		3.87
Total			5.13
Interest	12.05%		<b>0.62</b>
<b>Annual Transmission Charges</b>			
Depreciation			8.55
Interest on Loan			0.00
Return on Equity			16.41
Interest on Working Capital			0.62
O & M Expenses			5.38
<b>Total</b>			<b>30.96</b>
Norms for O&M Per CKm			0.794

ANNEXURE-V			
Name of the Tr. System:	Asset - XXVIII & XXIX	CHITTOOR2-KALIKIRI1:1,CHITTOOR2-KALIKIRI1:2	
		COD:	01.04.2018
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	---	Life in years	25
Transmission Line length in km	96.87	Voltage, kV	400 kV D/C
Multiplication factor	----		
			<b>FY 2019-20</b>
<b>Gross Block</b>			28368.14
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			28368.135
Average Gross Block			28368.135
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	25531.32
Elapsed Life as on 31.03.2019			1.00
Balance useful life of the asset			24.00
Remaining Depreciable value			24033.48
Cumulative Depreciation			1497.84
Depreciation			<b>1497.84</b>
<b>Interest on Loan</b>			
Gross Normative Loan			19857.69
Cumulative Repayment upto			1497.84
Net Loan-Opening			18359.86
Addition due to Additional			0.00
Repayment during the year			1497.84
Net Loan-Closing			16862.02
Average Loan			17610.94
Weighted Average Rate of Interest on Interest			9.38%
			<b>1651.03</b>
<b>Return on Equity</b>			
Gross Notional Equity			8510.44
Opening Equity			8510.44
Average Equity			8510.44
Rate of Return on Equity			15.50%
Return on Equity			<b>1319.12</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		23.07
O & M expenses	1 Months		12.82
Receivables	1.5 Months		587.11
Total			623.00
Interest	12.05%		<b>75.07</b>
<b>Annual Transmission Charges</b>			
Depreciation			1497.84
Interest on Loan			1651.03
Return on Equity			1319.12
Interest on Working Capital			75.07
O & M Expenses			153.83
<b>Total</b>			<b>4696.88</b>
Norms for O&M Per CKm			0.794

ANNEXURE-V			
Name of the Tr. System:	Asset - XX & XXI	SULURPET 1 - NELLORE 42:2, SULURPET 1 - NELLORE 42:3	
		COD:	10.11.2014
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	---	Life in years	25
Transmission Line length in km	68.13	Voltage, kV	400 kV D/C
Multiplication factor	----		
			FY 2019-20
<b>Gross Block</b>			4623.680
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			4623.680
Average Gross Block			4623.680
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		0.90	4161.31
Elapsed Life as on 31.03.2019			4.00
Balance useful life of the asset			21.00
Remaining Depreciable value			3184.79
Cumulative Depreciation			976.52
Depreciation			244.13
<b>Interest on Loan</b>			
Gross Normative Loan			3236.58
Cumulative Repayment upto			976.52
Net Loan-Opening			2260.05
Addition due to Additional			0.00
Repayment during the year			244.13
Net Loan-Closing			2015.92
Average Loan			2137.99
Weighted Average Rate of Interest on Interest			10.30%
			220.21
<b>Return on Equity</b>			
Gross Notional Equity			1387.10
Opening Equity			1387.10
Average Equity			1387.10
Rate of Return on Equity			15.50%
Return on Equity			215.00
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		16.23
O & M expenses	1 Months		9.02
Receivables	1.5 Months		100.33
Total			125.57
Interest	12.05%		15.13
<b>Annual Transmission Charges</b>			
Depreciation			244.13
Interest on Loan			220.21
Return on Equity			215.00
Interest on Working Capital			15.13
O & M Expenses			108.19
<b>Total</b>			802.67
Norms for O&M Per CKm			0.794

ANNEXURE-V			
Name of the Tr. System:	Asset - XXII & XXIII	URAVAKONDA-VAJRAKARUR:1, URAVAKONDA-VAJRAKARUR:2	
		COD:	14.07.2016
<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	---	Life in years	25
Transmission Line length in km	16.83	Voltage, kV	400 kV D/C
Multiplication factor	----		
			<b>FY 2019-20</b>
<b>Gross Block</b>			1981.040
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			1981.040
Average Gross Block			1981.040
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	1782.94
Elapsed Life as on 31.03.2019			2.00
Balance useful life of the asset			23.00
Remaining Depreciable value			1573.74
Cumulative Depreciation			209.20
Depreciation			<b>104.60</b>
<b>Interest on Loan</b>			
Gross Normative Loan			1386.73
Cumulative Repayment upto			209.20
Net Loan-Opening			1177.53
Addition due to Additional			0.00
Repayment during the year			104.60
Net Loan-Closing			1072.93
Average Loan			1125.23
Weighted Average Rate of Interest on Interest			9.38%
			<b>105.49</b>
<b>Return on Equity</b>			
Gross Notional Equity			594.31
Opening Equity			594.31
Average Equity			594.31
Rate of Return on Equity			15.50%
Return on Equity			<b>92.12</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		4.01
O & M expenses	1 Months		2.23
Receivables	1.5 Months		41.84
Total			48.07
Interest	12.05%		<b>5.79</b>
<b>Annual Transmission Charges</b>			
Depreciation			104.60
Interest on Loan			105.49
Return on Equity			92.12
Interest on Working Capital			5.79
O & M Expenses			26.72
<b>Total</b>			<b>334.72</b>
Norms for O&M Per CKm			0.794

ANNEXURE-V			
Name of the Tr. System:	Asset - XXIV & XXV	HINDUJA- KV KOTA1:1, HINDUJA- KV KOTA1:2	
		COD:	24.07.2017
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	---	Life in years	25
Transmission Line length in km	242.93	Voltage, kV	400 kV D/C
Multiplication factor	----		
			FY 2019-20
<b>Gross Block</b>			36970.670
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			36970.670
Average Gross Block			36970.670
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	33273.60
Elapsed Life as on 31.03.2019			1.00
Balance useful life of the asset			24.00
Remaining Depreciable value			31321.55
Cumulative Depreciation			1952.05
Depreciation			<b>1952.05</b>
<b>Interest on Loan</b>			
Gross Normative Loan			25879.47
Cumulative Repayment upto			1952.05
Net Loan-Opening			23927.42
Addition due to Additional			0.00
Repayment during the year			1952.05
Net Loan-Closing			21975.37
Average Loan			22951.39
Weighted Average Rate of Interest on Interest			9.38%
			<b>2151.69</b>
<b>Return on Equity</b>			
Gross Notional Equity			11091.20
Opening Equity			11091.20
Average Equity			11091.20
Rate of Return on Equity			15.50%
Return on Equity			<b>1719.14</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		57.87
O & M expenses	1 Months		32.15
Receivables	1.5 Months		789.33
Total			879.34
Interest	12.05%		<b>105.96</b>
<b>Annual Transmission Charges</b>			
Depreciation			1952.05
Interest on Loan			2151.69
Return on Equity			1719.14
Interest on Working Capital			105.96
O & M Expenses			385.77
<b>Total</b>			<b>6314.61</b>
Norms for O&M Per CKm			0.794

ANNEXURE-V			
Name of the Tr. System:	Asset - XXVI,XXVII	JAMALAMADUGU1-URAVAKONDA:1, JAMALAMADUGU1-URAVAKONDA:2	
		COD:	15.07.2016
CALCULATION OF ANNUAL TRANSMISSION CHARGES			
			(Rs. In lacs)
Rationalised cost of 400 kv line Rs lakh per ckt km	---	Life in years	25
Transmission Line length in km	127.62	Voltage, kV	400 kV D/C
Multiplication factor	----		
			<b>FY 2019-20</b>
<b>Gross Block</b>			16004.000
Addition during 2014-19 due to Projected Additional Capitalisation			0
Gross Block total			16004.000
Average Gross Block			16004.000
<b>Depreciation</b>			
Rate of Depreciation(%)			5.28%
Depreciable value		<b>0.90</b>	14403.60
Elapsed Life as on 31.03.2019			2.00
Balance useful life of the asset			23.00
Remaining Depreciable value			12713.58
Cumulative Depreciation			1690.02
Depreciation			<b>845.01</b>
<b>Interest on Loan</b>			
Gross Normative Loan			11202.80
Cumulative Repayment upto			1690.02
Net Loan-Opening			9512.78
Addition due to Additional			0.00
Repayment during the year			845.01
Net Loan-Closing			8667.77
Average Loan			9090.27
Weighted Average Rate of Interest on Interest			9.38%
			<b>852.21</b>
<b>Return on Equity</b>			
Gross Notional Equity			4801.20
Opening Equity			4801.20
Average Equity			4801.20
Rate of Return on Equity			15.50%
Return on Equity			<b>744.19</b>
<b>Interest on Working Capital</b>			
Maintenance Spares	15% of O&M		30.40
O & M expenses	1 Months		16.89
Receivables	1.5 Months		336.28
Total			383.57
Interest	12.05%		<b>46.22</b>
<b>Annual Transmission Charges</b>			
Depreciation			845.01
Interest on Loan			852.21
Return on Equity			744.19
Interest on Working Capital			46.22
O & M Expenses			202.66
<b>Total</b>			<b>2690.29</b>
Norms for O&M Per CKm			0.794