



TELANGANA STATE POWER GENERATION CORPORATION LIMITED
(A Govt. Of Telangana Undertaking)

Tariff Filings
Of
TSGENCO
For the 3rd control period
F.Y. 2014-2019

Volume 1 of 2

**BEFORE THE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
AT HYDERABAD.**

O.P. of 2016

In the matter of:

Determination of tariff for the control period FY 2014-19 under Section 62 of the Electricity Act' 2003 for the electricity supplied by **TSGENCO** to Distribution Licenses.

Telangana State Power Generation Corporation Limited,

Applicant

And

Southern Power Distribution Company of Telangana Ltd., & 4Ors

Respondents.

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**BEFORE THE TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
#11-4-660, 5th Floor, Singareni Bhavan, Red Hills, Hyderabad – 500 004.**

O.P. of 2016

In the matter of:

Application for **determination of Generation tariff & New Stations Capital cost** for FY 2014-19 for TSGENCO, under Section 62 of the Electricity Act' 2003

And in the matter of:

**Telangana State Power Generation Corporation Limited,
Vidyut Soudha, Hyderabad – 82. Applicant**

Vs

- 1. Southern Power Distribution Company of Telangana Ltd.,
MintCompound, Hyderabad – 500 004.**
 - 2. Northern Power Distribution Company of Telangana Ltd.,
1-1-503, NIT Main Road, Chaitanyapuri, Kazipet, Warangal-506 004.**
 - 3. Eastern Power Distribution Company of Andhra Pradesh Ltd.,
P&T Colony, Seethammadhara, Visakhapatnam 530020.**
 - 4. Southern Power Distribution Company of Andhra Pradesh Ltd.,
Srinivasa kalyana mandapam Backside, Tiruchanoor Road, Kesvayana Gunta,
Tirupati-517 501.**
 - 5. ESCOMs of Karnataka state**
- Respondents.

**APPLICATION U/S 62 / 64 ELECTRICITY ACT 2003 FOR DETERMINATION OF
GENERATION TARIFF & CAPITAL COST FOR FY 2014-2019**

1. Telangana state power generation Corporation Limited (herein after referred to as "TSGENCO " or as the "Applicant") was established as a company registered under the Companies Act 2013 , 19th May 2014 upon coming into force of the Andhra Pradesh Reorganization Act, 2014 with effect from 2nd June 2014.

2. It is submitted that the Andhra Pradesh Reorganization Act, 2014, came into effect on 02.06.2014. Pursuant to the coming into force of the said Act, the APGENCO was demerged and the assets, liabilities, etc pertaining to the generating stations in Telangana State were transferred to the Telangana Power Generation Corporation Ltd (“TSGENCO”) in terms of the Transfer Scheme notified in GO Ms No 29 dated 31/05/2014. The valuation of assets, liabilities etc are only provisional based on the accounts as on 31/03/2014. The transfer valuation is yet to be finalized as at 01/06/2014 considering all relevant factors.
3. In terms of the Andhra Pradesh Electricity Reform (Transfer Scheme) Rules, 1999, notified by the Government of Andhra Pradesh in G.O.Ms. No. 9, Energy (Power-III), dt.29.01.1999 and amended subsequently by notification in G.O.Ms. No. 11. Energy (Power-III), dt.31.01.2000, certain assets, liabilities, personnel and proceedings of the erstwhile Andhra Pradesh State Electricity Board which had vested in the State Government upon coming into force of the Reform Andhra Pradesh Electricity 1998 Act, stood transferred and vested in TSGENCO which was incorporated on the 19th day of may ,2014 under the provisions of the companies act ,2013 on the values, terms, conditions and consequences provided therein. The aforesaid transfer and vesting were binding on all, without any exception or recourse to anyone in terms of the provisions contained in the AP Re Organization Act2014.
4. Thereupon, the TSGENCO had been generating and supplying electricity to the Transmission Corporation of Telangana State so long as it was the distribution licensee or bulk supply licensee, and thereafter to the four distribution licensees of the undivided State of Andhra Pradesh, viz Central Power Distribution Co of Andhra Pradesh Ltd., Southern Power Distribution Co of Andhra Pradesh Ltd., Eastern Power Distribution Co of Andhra Pradesh Ltd. and Northern Power Distribution Co of Andhra Pradesh Ltd.
5. The Central Power Distribution Co of Andhra Pradesh Ltd was re-named as Southern Power Distribution Co Ltd of Telangana Ltd (the 1st Respondent herein) with its area of supply as a distribution licensee excluding Anantapur and Kurnool Districts which was included in the area of supply of the Southern Power Distribution Co of Andhra Pradesh Ltd. The Northern Power Distribution Co of Andhra Pradesh Ltd was re-

named as Northern Power Distribution Co Ltd of Telangana Ltd (the 2nd Respondent herein).

6. The issue with regard to the validity of the PPAs and/or whether the distribution licensees in Telangana are entitled to any part or share of the power generated by the TSGENCO generating stations in Telangana state in terms of the provisions of the said AP Reorganization Act or otherwise has been pending and is yet to be resolved. In the meantime, the power is being supplied to the two distribution licensees of Telangana State and the two distribution licensees of Andhra Pradesh as per the inter-state allocation of the generation to the individual distribution licensees notified by the State Government of the undivided State of Andhra Pradesh.
7. As per G.O.MS. No. 29 dated 31.05.2014 power purchase agreements (PPA) entered with distribution companies were transferred from Erstwhile APGENCO. TSGENCO entered power purchase agreement with two TSDISCOMs in respect of KTPP Stage –II and valid up to 23.03.2041.

The particulars of the PPAs for the TSGENCO Generating Stations:-

S.No	Name of the Generating station	Installed capacity (MW)	PPA Date	Valid Up to	Commissioning/ COD of units
1	KTPS- ABC	720(4X60+ 4X120)	22.12.2009	31.03.2019	04.07.1966 to 10.01.1978
2	KTPS Stage -V	500(2X250)	22.12.2009	31.03.2019	31.03.1997 to 28.02.1998
4	KTPS- stage- VI	1X500	22.12.2009	22.10.2036	23.10.2011
3	RTS -B	1X62.5	22.12.2009	31.03.2019	17.10.1971
5	KTPP-Stage – I	1X500	22.12.2009	13.09.2035	14.09.2010
	Hydel Stations				
6	N' Sagar Complex HES(Main power house & left canal)	875.6(1X110+ 7X100.8 & 2X30)	22.12.2009	31.03.2019	07.03.1978 to 27.09.1992
7	SLBPH	900(6X150)	22.12.2009	06.03.2019	26.01.2001 to 04.09.2003

8	Small Hydel (singur, Pochampadu,Nizam sagar& palair HES)	54(2X7.5+ 3X9+2X5 & 1X2)	22.12.2009	31.03.2019	07.03.1978 to 31.03.2000
9	Mini hydel (Peddapalli HES)	9.16(6X0.22+ 3X0.23+ 2X0.325+ 10X0.5+ 2X0.75)	22.12.2009	31.03.2019	31.03.1986 to 29.01.2004
10	Pochampad -II	9	22.12.2009	11.10.2045	12.10.2010
11	Priyadarsini Jurala HES	234(6X39)	19.05.2014	03.08.2046	31.08.2008 to 04.08.2011

	New Stations	Installed capacity (MW)	PPA Date	Valid Up to	Commissioning/ COD of units
12	KTPP-Stage II	1X600	27.01.2016	23.03.2041	24.03.2016
13	Lower Jurala HES	240(6X40)	30.12.2010	30.09.2051	I-19.10.2015 II-05.10.2015 III-28.07.2016 IV-28.07.2016 V-20.08.2016 VI-01.10.2016
14	Pulichinthala HES	120(4x30)	30.12.2010	35 Years from last Unit COD.	I-29.09.2016 Proposed COD II-31.12.2016 III-31.03.2017 IV-31.03.2017

Note :

- i) Sl No 1-10, 13 and 14 the PPAs were entered between Erstwhile APGENCO and Erstwhile APDISCOMs*
- ii) Sl No.11 the PPAs were entered in between Erstwhile APGENCO, Erstwhile APDISCOMs and ESCOMs of Karnataka and as per the article 2.3 of PPA the fixed and the energy generated will be in the ratio of 50:50 between TSDISCOMs /APDISCOMs and ESCOMs of Karnataka State.*
- iii) Sl No 12 the PPA was entered between TSGENCO and TSDISCOMS.*

8. As per the terms of the AP Reorganization Act, 2014 the erstwhile APGENCO was demerged provisionally and the TSGENCO has been incorporated. Now the TSGENCO i.e the applicant is proposing for tariff determination of stations vested with TSGENCO after demerger.
9. It is submitted that the Applicant is proposing station-wise fixed costs for the control period 2014-19 in respect of all existing power generating stations and stations that are programmed to be commissioned by 31.3.2017. The Applicant has adopted a methodology as set out hereunder for the purpose of arriving tariff.

Details of Station wise Capital expenditure incurred are as follows

Table 1:GFA of Existing Stations with additions FY2014-15 & FY2015-16 Rs. in Crs.

Sl. No	Name of the Station	Capacity MW	GFA as on 31.3.2014	Additions 2014-15	GFA as on 31.3.2015	Additions 2015-16	GFA as on 31.3.2016
Thermal Stations							
1	KTPS O&M	720	1154.95	55.39	1,210.34	52.12	1262.46
2	KTPS-V	500	2196.6	14.79	2,211.39	2.14	2213.53
3	KTPS VI	500	2474.07	5.66	2,479.73	15.55	2495.28
4	RTS -B	62.5	69.36	20.40	89.76	7.31	97.07
5	KTPP-Stage -I	500	2664.55	30.36	2,694.91	12.79	2707.70
	Sub Total	2282.5	8559.53	126.60	8686.13	89.91	8776.04
Hydel Stations							
*6	Nagarjuna Complex (Main & Left canal power House)	875.6	1,104.80	47.06	1,151.86	608.46	1760.32
7	Srisaïlam LBHES	900	3,383.25	0.95	3,384.20	3.64	3387.84
8	Small Hydel (Pochapad -I ,Singur, Nizam sagar & Palair HES)	54	121.85	0.47	122.32	0.05	122.37

9	Mini Hydels (Pedda pally)	9.16	31.30	0.08	31.39	0.00	31.39
10	Pochampad Stage -II	9	30.07	0.04	30.11	0.01	30.12
11	Priya dharshini Jurala	234	702.76	1.78	704.54	1.68	706.22
	Sub Total	2081.76	5374.03	50.38	5424.41	613.84	6038.25
	<i>Grand Total</i>	<i>4364.26</i>	13933.56	176.98	14110.54	703.75	14814.29

Table 2:New Stations -year wise capital cost FY 2014-19 Rs. In Crs

Sl.No	Name of the Station					
1	KTPP-Stage- II (1X600MW)	2014-15	2015-16 (COD: 24.03.2016)	2016-17	2017-18	2018-19
	GFA at beginning	0	0	3237.85	4334.11	4334.11
	Additions	0	3237.85	1096.26	0	0

2	<i>Lower Jurala HES(6X40MW)</i>	<i>2014-15</i>	<i>2015-16 (05.10.2015)</i>	<i>2016-17</i>	<i>2017-18</i>	<i>2018-19</i>
	<i>GFA at beginning</i>			<i>1332.59</i>	<i>1969.14</i>	<i>1969.14</i>
	<i>Additions</i>		<i>1332.59</i>	<i>636.55</i>	<i>0.00</i>	<i>0</i>

3	Pulichinthala HES(4X30)	2014-15	2015-16	2016-17	2017-18	2018-19
	GFA at beginning	Expenditure incurred upto 31.03.16		425.30	563.5	563.5
	Additions	0	0	138.2	0	0

Detail of New projects

Thermal stations: Kakatiya Thermal Power Plant Stage-II (1X600MW) constructed at chelpur (v), Warangal district. COD of the unit is on 24.03.2016 and the capital cost considered for the FY 2015-16 is Rs. 3237.85 Crores. Fixed charges are computed for 8 Days for the FY 2015-16 i.e from COD.

Hydel stations:

a) Lower Jurala Hydro electric scheme (6X40 MW) located at Munnamalla(v) , Atmakur (m) Mahabub nagar district. Unit-1 and Unit-2 are considered for fixed charges for the F.Y.2015-16.

b) Pulichintala Hydro Electric Scheme (4X30 MW) located at Vazinepally (V) Mellacheruvu (M), Nalgonda (Dist.)

10. Parameters of Tariff Determination

1. Return on Capital Employed(RoCE & Working capital)
2. Depreciation
3. Operation and Maintenance Expenses.
4. Income Tax as per actual.
5. Other expenditure

(1) Return on capital employed (RoCE):

- 1.1 ROCE computed as per TSERC regulations.
- 1.2 Debt-Equity Ratio (D/E) is taken as 70:30 as per Clause 10.13 of the Regulation and applied to the Gross Fixed Assets.
- 1.3 Return on the Equity was taken as 15.5% and Interest on loans taken as 12.5 %.
- 1.4 ROCE is considered 14%.
- 1.5 The summary of the station-wise computation of ROCE is furnished at *Annexure A-3*.
- 1.6 The station-wise accumulated depreciation allowed in tariff orders up to 31/03/2013 has been subtracted from the station-wise Gross Fixed Assets.
- 1.7 Station-wise Working Capital is computed in accordance with Clause 12.4 of Regulation 1 of 2008 and the details are in *Annexure A-2* hereto.
- 1.8 Interest on Working Capital is considered as 14%

2) Depreciation

- 2.1 Depreciation of the Stations calculated as per MoP notification 1994 and Erstwhile APERC order dated 31.05.14 in OP 15 of 2009.

3) Operation & Maintenance Costs:

- 3.1 The O&M expenses provided in the Regulation was based upon the CERC 2004 Regulation as amended in 2006 for the control period 2004-2009. That methodology is not applicable or relevant for FY 2014-2019. Clause 10 of the APERC Regulation 1 of 2008 provides for the application of further amendments to the CERC Regulation upon adoption by the Hon'ble Commission by special or general order.
- 3.2 The CERC has subsequently issued revised Regulation in 2009 for the control period 2009-2014 which, inter alia, provided also for allowing pay revision as the pay revision was due for Central PSUs during that period.
- 3.3 The CERC has also issued a further revised Regulation for the control period 2014-2019.
- 3.4 It is therefore felt necessary that this Hon'ble Commission may be pleased to consider and adopt the methodology of the CERC 2014 Regulation with respect to O & M expenses and year-on-year escalation thereof , and allow such expenses on such basis.
- 3.5 The pay scales of the employees were revised with effect from 01/04/2014. Further, the State Government has revised the HRA, CCA and Gratuity which has been adopted by the TSGENCO also , as the same allowances as applicable to State Government employees are payable as per the service regulations.
- 3.6 Accordingly, the O & M expenses are considered in this application on the following basis for all the generating stations.
- 3.7 The methodology adopted for O&M estimate is in line with CERC regulations 2014 is as follows:

Existing and New (KTPP Stage- II) Thermal Stations

- 3.8 Thermal Stations O&M expenses the FY 2014-19 calculated as per CERC regulations 2014 along with pay revision commitment of 40% towards pay revision effect from 1st April 2014 (i.e. 20% addition on the O&M expense added by CERC regulations from 2014-19).
- 3.9 In respect of KTPS O&M (720MW (4X60+4X120)) and RTS-B(1X62.5 MW), the O&M expenses are considered as per the similar station of the NTPC Talcher Thermal

Power Station (TPS) 660MW (4X60+2X110) O&M expenses specified in the CERC 2014 Regulations along with pay revision commitment of 40% towards pay revision effect from 1st April 2014(i.e. 20% addition on the O&M expense allowed by CERC regulations from 2014-19).

Existing Hydel Stations :-

- 3.10 For Hydel Stations the actual O & M expenses for FY 2009-10 is escalated by 6.04% year-on-year till FY 2013-2014, and the average of the 5/3 years thus computed was escalated by 6.64% by way of normal annual escalation and a further 20% added towards 40% pay revision effect from 1st April 2014 to arrive at the normal O & M for FY 2014-2015 being the first year of the control period 2014-2019.
- 3.11 The O & M expenses for the 2nd and subsequent years of the control period were computed by escalating the 1st year O & M expenses by 6.64% year-on-year.

New Hydel Stations :-

- i. **Lower Jurala HES (6X40MW):**
- ii. **Pulichintala HES (4X30MW):-**

- 3.12 O&M expenses of New Hydel Stations **Lower Jurala HES (6X40MW) and Pulichintala HES (4X30MW)** calculated as per CERC regulations 2014 along with pay revision commitment of 40% towards pay revision effect from 1st April 2014 (i.e. 20% addition on the O&M expense allowed by CERC regulations from 2014-19)@2.5% and 4% respectively of the Original Project Cost for first year of Commercial operation and annual escalation of 6.64% per annum for subsequent years.
- 3.13 O&M expenses for FY 2018-19 towards pay revision commitment effect from 1st April 2018 is not considered.

The summary of the computation of O & M expenses as above are furnished as per **Annexure A-5**.

4) Income Tax

The Income tax paid is to be allowed at actual as an additional pass-through in terms of Clause 12.5 of the Regulation, and will be claimed on the basis of actual payment from time to time.

5) Other Expenditure: Interest on pension bonds Over and above scheduled interest

The liability of Rs 4,386.95 crores towards meeting the pension liability of the following was vested in the APGENCO in terms of the statutory First Transfer Scheme dated 30/01/2000 notified by the State Government under the AP Electricity Reforms Act, 1998 –

the pensioners / family pensioners of the erstwhile APSEB as on 31/03/1999 and

the employees of the erstwhile APSEB as on 31/03/1999 working thereafter for the APGENCO, APTRANSCO and the DISCOMs and since retired.

The APGENCO had issued bonds in favour of the Master Trust which are redeemable over a period of 30 years.

In order that the Master Trust is able to pay 100% of the pension commitments of pensioners as on 31/01/1999 and 74% of the pension commitment of employees who retired after 01/02/1999 (26% being funded by the separate P&G Trusts of the APGENCO, APTRANSCO and the 4 DISCOMs), the APGENCO is required to make the following annual payments as per the bond schedule –

an amount towards repayment of the principal as per the bond schedule, and

interest on the outstanding liability as per the bond schedule, and

additional interest, being the actual amount of pension payment in a year in excess of the aggregate for that year of the scheduled repayment and interest aforesaid as per the bond schedule , which is passed through in the tariff.

The additional interest has been recognized and allowed in the tariff on a year to year basis of APGENCO by the erstwhile APERC in the tariff orders dated 24/03/2003 and 04/07/2013.

By a transfer scheme notified by the State Government in G.O. Ms. 29 dated 31/05/2014 under the provisions of the A.P. Electricity Reforms Act, 1998, 42% of the outstanding pension liability (i.e. bonds issued to the Master Trust) as on 31/03/2014 was vested in the TSGENCO with the corresponding obligations for

repayment, payment of interest and payment of additional interest, and it was considered that the additional interest would pass through in the tariff of TSGENCO.

Accordingly, the additional interest on estimate basis is considered as a pass through in the tariff as part of fixed cost subject to adjustment for actuals on a year to year basis.

The above additional interest is in addition to the yearly contributions being made to the APGENCO's P & G Trust for funding the 26% Pension Liability for its employees who were in service as on 01/02/1999 and retiring thereafter and also gratuity liability for its employees which are included as part of O & M expenses.

11. Variable Costs

The Variable costs for the energy supplied from the thermal generating stations are computed on the basis of the operating norms specified in the Regulation and in accordance with the provisions of Clause 13.1 of the Regulation considering the actual landed cost and the GCV of fuels during the preceding three months.

The variable costs claimed on a month to month basis shall be adjusted to account for variation in the landed cost of fuels and the actual GCV of the fuels in accordance with the provisions of Clause 13.1b of the Regulation.

12. Incentives & Secondary Energy charges

The incentives for generation beyond the Target Plant Load Factor for thermal generating stations and the secondary energy charges for generation beyond the design energy for hydel generating stations shall be claimed annually at the rates specified in the Regulation

. 13. Reservation

Nothing in this application be construed as any admission or to prejudice any disputes, issues, dissensions or contentions of the TSGENCO and/or the State of Andhra Pradesh, whether raised hitherto or hereafter, on any matter arising out of the provisions of the A.P. Reorganization Act, 2014, or otherwise, including but not

limited to issues relating to the supply of power from the TSGENCO generating stations to the Distribution Companies or the validity of the PPAs.

Nothing in this application be construed to limit or affect the provisional nature of any valuation of any asset or liability by or under any transfer scheme or otherwise, and provision may be made to give full consequential effect for any variation or upon any finalization of the same hereafter.

14. Generation Tariff Proposal for 3rd Controlled period:-

Generation Tariff proposals of TSGENCO for FY 2014-19 are submitted hereunder for consideration by the Hon'ble Commission:

A. Fixed charges

Table 3:

(Rs in Crs)

S.No	Name of the Station	Capacity MW	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	Total FY 2014-19
I	Thermal Stations	1	2	3	4	5	6	7
1	KTPS O&M	720	559.64	580.57	609.61	627.51	635.16	3012.49
2	KTPS-V	500	296.16	303.49	309.11	315.31	322.19	1546.26
3	KTPS VI	500	627.64	602.69	586.83	568.03	549.68	2934.87
4	RTS -B	62.5	44.44	49.71	53.39	55.39	57.54	260.48
5	KTPP-I	500	624.55	610.09	591.47	570.80	550.58	2947.49
	Sub total	2282.5	2152.43	2146.56	2150.41	2137.04	2115.14	10701.58

II	Hydel Stations							
6	Nagarjuna Complex	875.6	167.08	173.07	272.89	270.95	269.31	1153.30
7	Srisailam LBHES	900	520.07	507.46	495.46	483.19	471.18	2477.36
8	Small Hydel	54	35.24	36.35	37.34	38.44	39.65	187.02
9	Mini Hydels	9.16	7.23	7.36	7.49	7.63	7.80	37.51
10	Pochampad Stage -II	9	8.49	8.59	8.71	8.84	8.98	43.61
11	Priya dharshini Jurala	234	134.19	132.67	131.25	129.68	128.23	656.01
	Sub total	2081.76	872.31	865.50	953.14	938.72	925.14	4554.81
III	New Stations							
12	KTPP Stage -II	600	0.00	13.56	890.41	1108.66	1068.27	3080.91
13	Lower Jurala HES	240	0.00	121.89	317.21	411.88	407.02	1258.00
14	Pulichinthala HES	120	0.00	0.00	19.44	130.72	129.99	280.15
	Sub Total	960.00	0.00	135.45	1227.06	1651.26	1605.28	4619.06
	Total (I+II+III)	5324.26	3024.73	3147.50	4330.61	4727.03	4645.57	19875.45
	Additional Interest on pension bonds (Over and above schedule)		469.84	552.96	603.21	660.31	723.40	3009.72
	Grand Total		3494.57	3700.46	4933.82	5387.34	5368.97	22885.17

B . Variable Charges : -

As initially applicable for April 2014 subject to adjustment for actual landed cost and GCV of fuels.

Station	Variable cost (paise/kwh) FCA (2014-15)	Variable cost (paise/kwh) FCA(2015-16)	Variable cost (paise/kwh) Q1 of FCA(2016-17) (FY2016-19)
KTPS O&M	267	257	287
KTPS V	219	221	219
KTPS -VI	338	289	298
RTS-B	263	303	353
KTPP-I	247	268	273
KTPP-II	---	---	268

The initial rates for subsequent periods would be on the same basis depending on the preceding three months' actuals and subject to adjustment for actual landed cost and GCV of fuels.

15. Payment Mechanism

(a) All taxes, duties, cess, fee payable to Government on the generation and/or supply of electricity and/or auxiliary consumption shall be extra and payable at actuals.

(b) Revolving Letter of Credit to be opened by the beneficiary for an amount of one month's receivable, and thereupon the applicable rebate be allowed.

(c) **Surcharge:**

1.25% per month as surcharge for belated payment may be allowed.

(d) **Billing and payment of charges:**

Billing and payment of charges shall be done on monthly basis.

16. Payment of Application Fee :-

The Applicant has submitted the DD No.309663 dt.30.11.2016 SBH ,Vidyut Soudha Branch , Hyderabad for Rs 150 lakhs towards fee for determination of tariff along with the Application.

17. Prayer for Interim Tariff

It is necessary that the Petitioner be provided with a legal basis for the claim and recovery of fixed, variable and other costs and amounts pending final disposal of this Application for determination of tariff and determination of Capital cost of new stations (KTPP-II, Lower Jurala HES and Pulichintala HES). The basis for the interim tariff could reasonably be the fixed costs and variable charges considered by the Hon'ble Commission in determining the power purchase costs in the Retail Supply Tariff Orders passed by the erstwhile Commission / this Hon'ble Commission for FY 2013-14, 2015-16 and 2016-17.

For the above reasons and for such other grounds and reasons as may be urged at the time of hearing, the Applicant prays that, pending disposal of this Application and subject to adjustment thereupon, the Hon'ble Commission may be pleased to direct the Respondent DISCOMs to pay to the Applicant for FY 2014-2015, 2015-2016 and 2016-17.

Variable costs for the energy delivered by the Applicant to the Respondent DISCOMs from 01/04/2014 at the various rates set out in ANNEXURE-F3 of the Tariff Order dated 30/03/2013 passed by the erstwhile Commission duly adjusted for actual gross calorific value of the fuel and the actual landed costs of fuel for each month; and Variable costs for the energy delivered by the Applicant to the Respondent DISCOMs from 01/04/2015 at the various rates set out in ANNEXURE-V of the Retail supply Tariff Order dated 27/03/2015 for FY 2015-16 and ANNEXURE-F of the Retail supply Tariff Order dated 23/06/2016 for FY 2016-17 passed by the Hon'ble Commission duly adjusted for actual gross calorific value of the fuel and the actual landed costs of fuel for each month; and

Incentives for generation as eligible on the basis of actual generation; and / or Such other order as the Hon'ble Commission may consider fit and expedient in the facts and circumstances of the case.

18. Main Prayer

For the above reasons and for such other and/or further reasons and grounds as may be urged at the time of hearing, the Applicant prays that the Hon'ble Commission may be pleased to

- a) Accept and take on record the Application for determination of tariff for the control period 2014-2019 under sections 62/64 of Electricity Act 2003; and
- b) Direct the Applicant to publish the application by notice as required by section 64, as per the draft annexed at Annexure A-7 to the Application, or in such other form as may be specified by the Hon'ble Commission, in two English and two Telugu daily news papers as may be specified by the Hon'ble Commission; and
- c) Consider and adopt the Operation & Maintenance Expenses and year-on-year escalation thereof in respect of generating stations as provided in the CERC 2014 Regulation; and
- d) Determine the tariff for the control period 2014-2019 for the supply of electricity generated by the Applicant from its various power generating stations to the Distribution Licensees at the rates proposed by the Applicant and/or as otherwise determined by the Hon'ble Commission in accordance with law and/or as the Hon'ble Commission considers fit in the facts and circumstances of the case.

**Signature of the applicant
Chairman & Managing Director
TSGENCO.**

**BEFORE THE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
AT HYDERABAD**

O.P. of 2016

In the matter of:

Determination of Tariff for the control period FY 2014-2019 under Section 62 of the Electricity Act, 2003 for the electricity supplied by TSGENCO to Distribution Licensees.

And in the matter of:

Telangana State Power Generation Corporation Limited,
Vidyut Soudha, Hyderabad 500082.

Applicant

And

1. **Southern Power Distribution Company of Telangana Ltd.,** Mint Compound, Hyderabad 500 004
2. **Northern Power Distribution Company of Telangana Ltd.,** 1-1-503, NIT Main Road, Chaitanyapuri, Kazipet, Warangal-506 004
3. **Southern Power Distribution Company of Andhra Pradesh Ltd.,** Tiruchanoor Road, Kesvayana Gunta, Tirupati-517 501
4. **Eastern Power Distribution Company of Andhra Pradesh Ltd.,** P&T Colony, Seethammadhara, Visakhapatnam 530020.
5. **ESCOMs of Karnataka state , Bangalore.**

Respondents

AFFIDAVIT VERIFYING THE APPLICATION

I D. Prabhakar Rao, son of shri. D.Pashupathi Rao, working for gain at Telangana State Power Generation Corporation Ltd. do solemnly affirm and say as follows:

- a) I am the Chairman and Managing Director of Telangana State Power Generation Corporation Ltd being a company in the business of generating electricity in state of Telangana. I am competent and duly authorized by Telangana state Power Generation

Corporation Ltd. to affirm, swear, execute and file this affidavit in the present proceedings

- b) I have read and understood the contents of the accompanying filing of proposals for determination of tariff for supply of electricity by Telangana State Power Generation Corporation Ltd. for the control period 2014-2019. The statements made in the paragraphs of the accompanying application now shown to me are true to the best of 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

Solemnly affirmed before me at Hyderabad
On this November 2016

Notary

VERIFICATION:

I, the above named Deponent solemnly affirm at Hyderabad on this __ Day of November 2016 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

ANNEXURE-A7**BEFORE THE**
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION
5th FLOOR, SINGARENI BHAVAN, RED HILLS, HYDERABAD**PUBLIC NOTICE**

Notice is hereby given to all that **Telangana State Power Generation Corporation Ltd. (TSGENCO)**, a company in the business of generation of electricity, has submitted the Application for **Determination of Tariff for supply of Electricity to Distribution Licensees** for the control period **2014-2019** which has been taken on record by the Hon'ble Commission in OP No of 2016.

A copy of the Application together with all annexures thereto is available on the website of TSGENCO at www.tsgenco.telangana.gov.in and on the website of the TSERC at WWW.TSERC.GOV.IN. Copies of the Application may be obtained on written application from the Chief Engineer (Coal & Commercial), TSGENCO, Vidyut Soudha, Hyderabad 500082 by e-mail free of cost or as hard copy on payment of the cost of photo-copying and postage if any. The Application may also be inspected at the aforesaid office.

Objections or suggestions if any on tariffs proposed by TSGENCO, together with supporting material may be filed with the Secretary, TSERC, at the address mentioned above, in person or through Registered Post, so as to reach him on or before _____, along with proof of service of the same on Chief Engineer (Coal & Commercial), TSGENCO, Vidyut Soudha, Hyderabad 500082. The objections/suggestions should be filed duly signed and should carry full name and postal address of the person(s) sending the objections/suggestions. If the objections are filed on behalf of any organization or any category of consumers, it should be so mentioned and if the objector also wants to be heard in person, it may also be specifically mentioned so.

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

BY ORDER OF THE COMMISSION
CHAIRMAN AND MANAGING DIRECTOR,
TSGENCO

Hyderabad, (Date)

Annexure A-I									
Additional Capitalisation During FY2009-14 , 2014-15 & 2015-16									
SL.No	Name of the Station	Capacity MW	Approved GFA for the period 2009-13	Additional Capital expenditure for the period 2009-14	GFA as on 31.3.2014	additional capital expenditure 2014-15	GFA as on 31.3.2015	additional capital expenditure 2015-16	GFA as on 31.3.2016
	Thermal Stations								
1	KTPS O&M	720	959.69	195.26	1154.95	55.39	1,210.34	52.12	1262.46
2	KTPS-V	500	2080.07	116.53	2196.6	14.79	2,211.39	2.14	2213.53
3	KTPS VI	500	2359.6	114.47	2474.07	5.66	2,479.73	15.55	2495.28
4	RTS -B	62.5	59.65	9.71	69.36	20.40	89.76	7.31	97.07
5	KTPP-Stage -I	500	2529.96	134.59	2664.55	30.36	2,694.91	12.79	2707.70
	Sub Total	2282.5	7988.97	570.56	8559.53	126.60	8686.13	89.91	8776.04
	Hydel Stations								
6	Nagarjuna Complex (Main & Left canal power House)	875.6	1071.71	33.09	1,104.80	47.06	1,151.86	608.46	1760.32
7	Srisailam LBHES	900	3367.99	15.26	3,383.25	0.95	3,384.20	3.64	3387.84
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	54	118.71	3.14	121.85	0.47	122.32	0.05	122.37
9	Mini Hydels(Pedda pally)	9.16	30.78	0.524	31.30	0.08	31.39	0.00	31.39
10	Pochampad Stage -II	9	29.36	0.71	30.07	0.04	30.11	0.01	30.12
11	Priya dharshini Jurala	234	670.15	32.61	702.76	1.78	704.54	1.68	706.22
	Sub Total	2081.76	5288.70	85.33	5374.03	50.38	5424.41	613.84	6038.25
	Grand Total	4364.26	13277.67	655.89	13933.56	176.98	14110.54	703.75	14814.29

Annexure A-II								
New Stations Year wise capital cost- (FY2014-19)								
(RS in Crs)								
	Name of the Station	Capacity	COD of the unit					
1	KTPP-Stage- II (1X600MW)	600	24.03.2016	2014-15	2015-16 (24.03.2016)	2016-17	2017-18	2018-19
	GFA at beginning			0	0	3237.85	4334.11	4334.11
	Additions			0	3237.85	1096.26	0.00	0
2	Lower Jurala HES(6X40MW)	240	COD of the units U-I 19.10.2015, U-II 05.10.2015, U-III 28.07.2016 U-IV 28.07.2016 U-V 20.08.2016 U-VI 01.10.2016	2014-15	2015-16 (05.10.2015)	2016-17	2017-18	2018-19
	GFA at beginning			0.00	0.00	1332.59	1969.14	1969.14
	Additions (05.10.2015)			0.00	1332.59	636.55	0.00	0
3	Pulichinthala HES(4X30)	120	COD of the units Unit-I 29.09.2016 Proposed Unit-II 31.12.2016, Unit-III 31.03.2017 Unit-IV 31.03.2017	2014-15	2015-16	2016-17	2017-18	2018-19
	GFA at beginning		Expenditure Incurred Up to 31.03.2016			425.30	563.5	563.5
	Additions			0	0.00	138.20	0	0

Annexure-A2							
Working Capital (FY2014-15)							
Sl.No	Name of the Station	Capacity (MW)	Cost of Fuel (30 days)	O&M (1Month)	Spares 1%	Receivables (2 Months)	Total Working Capital
		Rs in Cr					
	Thermal Stations	1	2	3	4	5	6
1	KTPS O&M	720	108.06	31.08	43.55	309.39	492.07
2	KTPS-V	500	63.95	11.95	34.56	177.26	287.72
3	KTPS VI	500	98.70	8.00	25.73	302.00	434.43
4	RTS -B	62.5	9.24	2.70	0.63	25.88	38.45
5	KTPP-I	500	72.12	8.00	27.71	248.34	356.18
	Sub Total	2282.50	352.07	61.72	132.19	1062.87	1608.85
	Hydel Stations						
6	Nagarjuna Complex	875.6	0.00	4.88	23.80	27.85	56.52
7	Srisailam LBHES	900	0.00	4.00	48.43	86.68	139.10
8	Small Hydel(Pochapad -I ,Singur , Nizam sagar & Palair HES)	54	0.00	1.79	2.50	4.87	9.15
9	Mini Hydels(Pedda pally HES)	9.16	0.00	0.30	0.45	1.21	1.96
10	Pochampad Stage -II	9	0.00	0.29	0.31	1.42	2.02
11	Priya dharshini Jurala	234	0.00	1.76	7.31	22.36	31.44
	Sub Total	2081.76	0.00	13.02	82.79	144.38	240.19
	Total (Thermal & Hydel)	5324.26	352.07	74.74	214.98	1207.25	1849.04

Annexure-A2

Working Capital(FY2015-16)

							(Rs in Crs)
SI.No	Name of the Station	Capacity MW	Cost of Fuel (30 days)	O&M (1Month)	Spares 1%	Receivables (2 Months)	Total Working Capital
	Thermal Stations		1	2	3	4	5
1	KTPS O&M	720	104.01	33.03	45.87	304.78	487.69
2	KTPS-V	500	64.53	12.70	36.10	179.65	292.98
3	KTPS VI	500	84.39	8.51	26.82	269.22	388.94
4	RTS -B	62.5	10.64	2.87	0.87	29.58	43.96
5	KTPP-I	500	78.26	8.51	29.14	258.19	374.09
	Sub Total	2282.50	341.83	65.60	138.79	1041.42	1587.65
	Hydel Stations						
6	Nagarjuna Complex	875.6	0.00	5.20	25.24	28.84	59.29
7	Srisaillam LBHES	900	0.00	4.26	50.37	84.58	139.21
8	Small Hydel(Pochapad -I ,Singur , Nizam sagar & Palair HES)	54	0.00	1.91	2.60	6.06	10.56
9	Mini Hydels(Pedda pally HES)	9.16	0.00	0.32	0.47	1.23	2.02
10	Pochampad Stage -II	9	0.00	0.31	0.33	1.43	2.07
11	Priya dharshini Jurala	234	0.00	1.88	7.62	22.11	31.61
	Sub Total		0.00	13.88	86.63	138.54	
	New Stations						
12	KTPP-Stage - II	600	93.91	7.66	32.38	273.27	407.21
13	Lower Jurala HES	240	0.00	4.92	13.33	37.49	55.73
14	Pulichinthala HES	120	0.00	0.00	0.00	0.00	0.00
	Sub Total	3041.76	93.91	12.58	45.70	310.75	462.94
	Grand Total	5324.26	435.74	92.06	271.13	1490.71	2050.59

Annexure-A2							
Working Capital(FY2016-17)							
							(Rs in Crs)
Sl.No	Name of the Station	Capacity (MW)	Cost of Fuel (30 days)	O&M (1Month)	Spares 1%	Receivables (2 Months)	Total Working Capital
	Thermal Stations		1	2	3	4	5
1	KTPS O&M	720	116.15	35.11	48.24	333.91	533.41
2	KTPS-V	500	63.95	13.50	37.57	179.41	294.43
3	KTPS VI	500	87.02	9.04	28.06	271.84	395.95
4	RTS -B	62.5	12.40	3.05	0.98	33.70	50.13
5	KTPP-O&M	500	79.72	9.04	30.43	258.01	377.20
	Sub Total	2282.5	359.23	69.73	145.28	1076.87	1651.12
	Hydel Stations						
6	Nagarjuna Complex	875.6	0.00	5.55	32.58	45.48	83.61
7	Srisaialam LBHES	900	0.00	4.55	52.42	82.58	139.55
8	Small Hydel(Pochapad -I ,Singur , Nizam sagar & Palair HES)	54	0.00	2.03	2.71	6.22	10.96
9	Mini Hydels(Pedda pally HES)	9.16	0.00	0.34	0.49	1.25	2.08
10	Pochampad Stage -II	9	0	0.33	0.34	1.45	2.12
11	Priya dharshini Jurala	234	0.00	2.01	7.94	21.87	31.82
	sub Total	2081.76	0.00	14.80	96.48	158.86	270.14
	New Stations						
12	KTPP-Stage - II	600	93.91	9.76	32.38	336.22	472.26
13	Lower Jurala HES	240	0.00	5.25	13.33	64.99	83.56
14	Pulichinthala HES	120	0.00	2.25	4.25	11.65	18.15
	sub Total	960.00	93.91	17.27	49.96	412.85	573.98
	Grand Total	5324.26	453.14	101.80	291.71	489.49	675.70

Annexure-A2							
Working Capital(FY2017-18)							
SI.No	Name of the Station	Capacity MW	Cost of Fuel (30 days)	O&M (1Month)	Spares 1%	Recievables (2 Months)	(Rs in Crs) Total Working Capital
	OLD Stations		1	2	3	4	5
1	KTPS O&M	720	116.15	37.32	50.17	336.89	540.53
2	KTPS-V	500	63.95	14.35	39.07	180.45	297.82
3	KTPS VI	500	87.02	9.61	29.18	268.70	394.51
4	RTS -B	62.5	12.40	3.24	1.02	34.03	50.69
5	KTPP-O&M	500	79.72	9.61	31.65	254.57	375.54
	Sub Total	2282.5	359.23	74.13	151.09	1074.64	1659.09
	Hydel Stations						
6	Nagarjuna Complex	875.6	0.00	5.92	33.88	45.16	84.95
7	Srisaialam LBHES	900	0.00	4.85	54.52	80.53	139.90
8	Small Hydel(Pochapad -I ,Singur , Nizam sagar & Palair HES)	54	0.00	2.17	2.81	6.41	11.39
9	Mini Hydels(Pedda pally HES)	9.16	0.00	0.37	0.51	1.27	2.15
10	Pochampad Stage -II	9	0.00	0.35	0.35	1.47	2.17
11	Priya dharshini Jurala	234	0.00	2.14	8.26	21.61	32.01
	sub Total	2081.76	0.00	15.79	100.34	156.45	272.58
	New Stations						
12	KTPP-Stage - II	600	93.91	10.38	45.07	372.59	521.95
13	Lower Jurala HES	240	0.00	5.60	20.48	68.65	94.72
14	Pulichinthala HES	120	0.00	2.40	5.86	21.79	30.05
	Sub Total	960.00	93.91	18.38	71.41	463.03	646.73
	Grand Total	5324.26	453.14	108.29	322.84	1694.12	2578.40

Annexure-A2							
Working Capital(FY2018-19)							
							(Rs in Crs)
Sl.No	Name of the Station	Capacity (MW)	Cost of Fuel (30 days)	O&M (1Month)	Spares 1%	Recievables (2 Months)	Total Working Capital
	Thermal Stations		1	2	3	4	5
1	KTPS O&M	720	116.15	39.66	52.18	338.16	546.16
2	KTPS-V	500	63.95	15.26	40.63	181.59	301.43
3	KTPS VI	500	87.02	10.22	30.35	265.64	393.22
4	RTS -B	62.5	12.40	3.44	1.06	34.39	51.30
5	KTPP-I	500	79.72	10.22	32.92	251.19	374.04
	Sub Total	2282.50	359.23	78.79	157.14	1070.99	1666.15
	Hydel Stations						
6	Nagarjuna Complex	875.6	0.00	6.31	35.24	44.89	86.43
7	Srisaillam LBHES	900	0.00	5.17	56.70	78.53	140.40
8	Small Hydel(Pochapad -I ,Singur , Nizam sagar & Palair HES)	54	0.00	2.31	2.93	6.61	11.84
9	Mini Hydels(Pedda pally HES)	9.16	0.00	0.39	0.53	1.30	2.22
10	Pochampad Stage -II	9	0.00	0.37	0.37	1.50	2.24
11	Priya dharshini Jurala	234	0.00	2.28	8.59	21.37	32.24
	Sub Total	2081.76	0.00	16.83	104.35	154.19	275.37
	New Stations						
12	KTPP-Stage - II	600	93.91	11.03	46.88	365.86	517.67
13	Lower Jurala HES	240	0.00	5.97	21.30	67.84	95.10
14	Pulichinthala HES	120	0.00	2.56	6.09	21.67	30.32
	Sub Total	960	93.91	19.56	74.27	455.36	643.10
	Total (Thermal & Hydel)	5324.26	453.14	115.19	335.75	1680.54	2584.63

Annexure - A3									
Return on Capital Employed (RoCE) (FY2014-15)									
								@14%	Rs in Cr
	G.F.A. as on 31.03.14	30% Equity on 31.03.14 GFA.	70% loan	Accumulated depreciation as on 31.3.14	Net Equity	Net Loans.	Working Capital	Capital Employed	RoCE (Rs in Cr)
Thermal Stations	2	3	4	5	6	7	8	9	10
KTPS O&M	1154.95	346.49	808.47	804.20	346.49	4.26	492.07	842.820	117.99
KTPS-V	2196.60	658.98	1537.62	1621.73	574.87	0.00	287.72	862.589	120.76
KTPS VI	2474.07	742.22	1731.85	408.84	742.22	1323.01	434.43	2499.660	349.95
RTS -B	69.36	20.81	48.55	40.99	20.81	7.56	38.45	66.823	9.36
KTPP-I	2664.55	799.37	1865.19	636.88	799.37	1228.31	356.18	2383.845	333.74
Sub Total	8559.53	2567.86	5991.67	3512.64	2483.75	2563.14	1608.85	6655.74	931.80
Hydel Stations									
Nagarjuna Complex	1104.80	331.44	773.36	634.86	331.44	138.50	56.52	526.46	73.70
Srisaïlam LBHES	3383.25	1014.98	2368.28	963.92	1014.98	1404.36	139.10	2558.43	358.18
Small Hydel (Pochampad - I, Singur, Nizam sagar & Palair HES)	121.85	36.56	85.30	62.17	36.56	23.12	9.15	68.83	9.64
Mini Hydel (Pedda pally HES)	31.30	9.39	21.91	14.58	9.39	7.33	1.96	18.68	2.62
Pochampad Stage -II	30.07	9.02	21.05	3.24	9.02	17.81	2.02	28.85	4.04
Priya dharshini Jurala	702.76	210.83	491.93	89.68	210.83	402.25	31.44	644.52	90.23
Sub Total	5374.03	1612.21	3761.82	1768.46	1612.21	1993.36	240.19	3845.76	538.41
New Stations									
KTPP Stage -II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower Jurala HES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulichinthala HES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	0	0	0	0	0	0	0	0	0
Total	13933.56	4180.07	9753.49	5281.10	4095.96	4556.50	1849.04	10501.50	1470.21

Annexure - A3										
Return on Capital Employed (RoCE) (FY2015-16)										
								@14%		Rs in Cr
Name of the Station	G.F.A. as on 31.03.15	30% Equity on 31.3.15 GFA.	70% loan	Accumulated depreciation as on 31.3.15	Net Equity	Net Loans.	Working Capital	Capital Employed	Availability	RoCE
Thermal Stations	2	3	4	5	6	7	8	9	10	11
KTPS O&M	1210.34	363.10	847.24	872.94	337.40	0.00	487.69	825.09	100%	115.51
KTPS-V	2211.39	663.42	1547.97	1653.73	557.66	0.00	292.98	850.64	100%	119.09
KTPS VI	2479.73	743.92	1735.81	590.53	743.92	1145.28	388.94	2278.14	100%	318.94
RTS -B	89.76	26.93	62.83	43.70	26.93	19.13	43.96	90.02	100%	12.60
KTPP-I	2694.91	808.47	1886.44	831.69	808.47	1054.75	374.09	2237.31	100%	313.22
Sub Total	8686.13	2605.84	6080.29	3992.59	2474.38	2219.16	1587.65	6281.19		879.37
Hydel Stations										
Nagarjuna Complex	1151.86	345.56	806.30	669.71	345.56	136.59	59.29	541.43	100%	75.80
Srisaillam LBHES	3384.2	1015.26	2368.94	1077.83	1015.26	1291.11	139.21	2445.58	100%	342.38
Small Hydel(Pochampad -I ,Singur , Nizam sagar & Polair HES)	122.32	36.70	85.62	66.34	36.70	19.28	10.56	66.54	100%	9.32
Mini Hydel(Pedda pally)	31.39	9.42	21.97	15.56	9.42	6.41	2.02	17.85	100%	2.50
Pochampad Stage -II	30.11	9.03	21.08	4.24	9.03	16.84	2.07	27.94	100%	3.91
Priya dharshini Jurala	704.54	211.36	493.18	112.47	211.36	380.71	31.61	623.68	100%	87.32
Sub Total	5424.42	1627.33	3797.09	1946.15	1627.33	1850.94	244.76	3723.02		521.22
New Stations										
KTPP Stage -II	3237.85	971.36	2266.50	0.00	971.36	2266.50	407.21	3645.06	8 days	11.15
Lower Jurala HES	1332.59	399.78	932.81	0.00	399.78	932.81	55.73	1388.32	46.99%	91.34
Pulichinthala HES	0	0	0	0	0	0	0	0	0	0.00
Sub Total	4570.44	1371.13	3199.31	0.00	1371.13	3199.31	462.94	5033.38	0.00	102.50
Grand Total	18680.99	5604.30	13076.69	5938.74	5472.84	7269.41	2295.35	15037.60	0.00	1503.09

Annexure -A3									
Return on Capital Employed (RoCE) (FY2017-18)									
								@14%	Rs in Cr
Name of the Station	G.F.A. as on 31.03.16	30% Equity on 31.3.16 GFA.	70% loan	Accumulated depreciation as on 31.3.17	Net Equity	Net Loans.	Working Capital	Capital Employed	RoCE
Thermal Stations	2	3	4	5	6	7	8	9	10
KTPS O&M	1262.46	378.74	883.72	1010.42	252.04	0.00	540.53	792.57	110.96
KTPS-V	2213.53	664.06	1549.47	1717.73	495.80	0.00	297.82	793.62	111.11
KTPS VI	2495.28	748.58	1746.70	953.91	748.58	792.79	394.51	1935.88	271.02
RTS -B	97.07	29.12	67.95	49.12	29.12	18.83	50.69	98.64	13.81
KTPP-I	2707.70	812.31	1895.39	1221.31	812.31	674.08	375.54	1861.93	260.67
Sub Total	8776.04	2632.81	6143.23	4952.49	2337.86	1485.70	1659.09	5482.64	767.57
Hydel Stations									
Nagarjuna Complex	1760.32	528.10	1232.22	751.38	528.10	480.85	84.95	1093.89	153.15
Srisailam LBHES	3387.84	1016.35	2371.49	1305.65	1016.35	1065.84	139.90	2222.09	311.09
Small Hydel(Pochampad -I ,Singur , Nizam sagar& Debari HES)	122.37	36.71	85.66	74.68	36.71	10.98	11.39	59.08	8.27
Mini Hydel(Pedda pally)	31.39	9.42	21.97	17.52	9.42	4.45	2.15	16.02	2.24
Pochampad Stage -II	30.12	9.04	21.08	6.24	9.04	14.84	2.17	26.05	3.65
Priya dharshini Jurala	706.22	211.87	494.35	158.05	211.87	336.30	32.01	580.18	81.23
Sub Total	6038.26	1811.48	4226.78	2313.52	1811.48	1913.26	272.58	3997.32	559.62
New Stations									
KTPP Stage -II	4334.11	1300.23	3033.88	253.85	1300.23	2780.03	521.95	4602.22	644.31
Lower Jurala HES	1969.14	590.74	1378.40	79.94	590.74	1298.46	94.72	1983.92	277.75
Pulichinthala HES	563.5	169.05	394.45	2.71	169.05	391.74	30.05	590.84	82.72
Sub Total	6866.75	2060.03	4806.73	336.50	2060.03	4470.22	646.73	7176.97	1004.78
Grand Total	21681.05	6504.32	15176.74	7602.51	6209.36	7869.18	2578.40	16656.93	2331.97

Annexure -A4

Depreciation FY2014-19

Sno	Name of the Station	(Rs in Crs)					(Rs in Crs)
		FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019	Total (1-5)
	Thermal Stations	1	2	3	4	5	6
1	KTPS O&M	68.74	68.74	68.74	68.74	57.05	332.01
2	KTPS-V	32.00	32.00	32.00	32.00	32.00	160.00
3	KTPS VI	181.69	181.69	181.69	181.69	181.69	908.45
4	RTS -B	2.71	2.71	2.71	2.71	2.71	13.55
5	KTPP-I	194.81	194.81	194.81	194.81	194.81	974.05
	Sub total	479.95	479.95	479.95	479.95	468.26	2388.06
	Hydel Stations						
6	Nagarjuna Complex	34.85	34.85	46.82	46.82	46.82	210.15
7	Srisailam LBHES	113.91	113.91	113.91	113.91	113.91	569.55
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	4.17	4.17	4.17	4.17	4.17	20.84
9	Mini Hydels(Pedda pally HES)	0.98	0.98	0.98	0.98	0.98	4.90
10	Pochampad Stage -II	1.00	1.00	1.00	1.00	1.00	5.00
11	Priya dharshini Jurala	22.79	22.79	22.79	22.79	22.79	113.95
	Sub total	177.70	177.70	189.67	189.67	189.67	924.39
	New Stations						
12	KTPP Stage -II	0.00	0.00	253.85	339.79	339.79	933.44
13	Lower Jurala HES	0.00	21.29	58.65	66.95	66.95	213.84
14	Pulichinthala HES	0.00	0.00	2.71	19.16	19.16	41.03
	Sub Total	0.00	21.29	315.21	425.90	425.90	1188.31
	Grand Total	657.65	678.94	984.83	1095.52	1083.83	4500.77

Annexure -A5

O&M charges (FY2014-19)

							(Rs in Cr)	(Rs in Cr)
S.No	Name of the Station	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019	Total(2014-19)	
	Thermal Stations	1	2	3	4	5	1 to 5	
1	KTPS O&M	372.90	396.32	421.29	447.81	475.98	2114.29	
2	KTPS-V	143.40	152.40	162.00	172.20	183.06	813.06	
3	KTPS VI	96.00	102.06	108.48	115.32	122.58	544.44	
4	RTS -B	32.37	34.40	36.57	38.87	41.32	183.53	
5	KTPP-I	96.00	102.06	108.48	115.32	122.58	544.44	
	<i>Sub total</i>	740.67	787.24	836.82	889.52	945.52	4199.77	
	Hydel Stations	After considering 6.64% escalations	After considering 6.64% escalation					
6	Nagarjuna Complex	58.53	62.42	66.56	70.98	75.70	334.19	
7	Srisaillam LBHES	47.98	51.17	54.56	58.19	62.05	273.94	
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	21.44	22.86	24.38	26.00	27.73	122.41	
9	Mini Hydels (Pedda pally HES)	3.64	3.88	4.14	4.41	4.70	20.77	
10	Pochampad Stage -II	3.45	3.68	3.93	4.19	4.47	19.72	
11	Priya dharshini Jurala	21.16	22.57	24.07	25.67	27.37	120.84	
	Sub total	156.20	166.58	177.64	189.43	202.01	891.86	
	New Stations							
12	KTPP Stage -II	0.00	2.41	117.14	124.56	132.34	376.45	
13	Lower Jurala HES(New Station)	0	9.25	46.89	67.18	71.64	194.96	
14	Pulichinthala HES(New Station)	0	0	5.08	28.84	30.76	64.68	
	sub total	0.00	11.66	169.11	220.58	234.74	636.09	
	Grand Total	896.88	965.48	1183.56	1299.54	1382.26	5727.72	

Annexure A-6					
Fixed charges (FY2014-15)					
					(Rs in Crs)
S.No	Name of the Station	RoCE	Depreciation	O&M	Fixed charges
Thermal Stations		1	2	3	4
1	KTPS O&M	117.99	68.74	372.90	559.64
2	KTPS-V	120.76	32.00	143.40	296.16
3	KTPS VI	349.95	181.69	96.00	627.64
4	RTS -B	9.36	2.71	32.37	44.44
5	KTPP-I	333.74	194.81	96.00	624.55
	Sub Total	931.80	479.95	740.67	2152.43
Hydel Stations					
6	Nagarjuna Complex	73.70	34.85	58.53	167.08
7	Srisaïlam LBHES	358.18	113.91	47.98	520.07
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	9.64	4.17	21.44	35.24
9	Mini Hydels(Pedda pally HES)	2.62	0.98	3.64	7.23
10	Pochampad Stage -II	4.04	1.00	3.45	8.49
11	Priya dharshini Jurala	90.23	22.79	21.16	134.19
	Sub total	538.41	177.70	156.20	872.31
New Stations					
12	KTPP Stage -II	0.00	0.00	0.00	0.00
13	Lower Jurala HES	0.00	0.00	0.00	0.00
14	Pulichinthala HES	0.00	0.00	0.00	0.00
	Sub total	0.00	0.00	0.00	0.00
	Total (Thermal & Hydel Stations)	1470.21	657.65	896.88	3024.73
	Additonal Interest on pension bonds (Over and above schedule)				469.84
	Grand Total	1470.21	657.65	896.88	3494.57

Annexure A-6					
Fixed charges (FY2015-16)					
(Rs in Crs)					
S.No	Station	RoCE	Depreciation	O&M	Fixed charges
	Thermal Stations	1	2	3	4
1	KTPS O&M	115.51	68.74	396.32	580.57
2	KTPS-V	119.09	32.00	152.40	303.49
3	KTPS VI	318.94	181.69	102.06	602.69
4	RTS -B	12.60	2.71	34.40	49.71
5	KTPP-I	313.22	194.81	102.06	610.09
	Sub total	879.37	479.95	787.24	2146.56
	Hydel Stations				
6	Nagarjuna Complex	75.80	34.85	62.42	173.07
7	Srisaillam LBHES	342.38	113.91	51.17	507.46
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	9.32	4.17	22.86	36.35
9	Mini Hydels(Pedda pally HES)	2.50	0.98	3.88	7.36
10	Pochampad Stage -II	3.91	1.00	3.68	8.59
11	Priya dharshini Jurala	87.32	22.79	22.57	132.67
	Sub total	521.22	177.70	166.58	865.50
	New Stations				
12	KTPP Stage -II	11.15	0.00	2.41	13.56
13	Lower Jurala HES	91.34	21.29	9.25	121.89
14	Pulichinthala HES	0.00	0.00	0.00	0.00
	Sub total	102.50	21.29	11.66	135.45
	Total (Thermal & Hydel Stations)	1503.09	678.94	965.48	3147.50
	Additonal Interest on pension bonds (Over and above schedule)				552.96
	Grand Total	1503.09	678.94	965.48	3700.46

Annexure A-6

Fixed charges (FY2016-17)

(Rs in Crs)					
S.No	Station	RoCE	Depreciation	O&M	Fixed charges
	Thermal Stations	1	2	3	4
1	KTPS O&M	119.59	68.74	421.29	609.61
2	KTPS-V	115.11	32.00	162.00	309.11
3	KTPS VI	296.66	181.69	108.48	586.83
4	RTS -B	14.11	2.71	36.57	53.39
5	KTPP-I	288.18	194.81	108.48	591.47
	Sub Total	833.65	479.95	836.82	2150.41
	Hydel Stations				
6	Nagarjuna Complex	159.51	46.82	66.56	272.89
7	Srisailam LBHES	326.99	113.91	54.56	495.46
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	8.79	4.17	24.38	37.34
9	Mini Hydels(Pedda pally HES)	2.37	0.98	4.14	7.49
10	Pochampad Stage -II	3.78	1.00	3.93	8.71
11	Priya dharshini Jurala	84.39	22.79	24.07	131.25
	Sub total	585.84	189.67	177.64	953.14
	New Stations				
12	KTPP Stage -II	519.42	253.85	117.14	890.41
13	Lower Jurala HES	211.68	58.65	46.89	317.21
14	Pulichinthala HES	11.65	2.71	5.08	19.44
	Sub total	742.74	315.21	169.11	1227.06
	Total (Thermal & Hydel Stations)	2162.23	984.83	1183.56	4330.61
	Additonal Interest on pension bonds (Over and above schedule)				603.21
	Grand Total	2162.23	984.83	1183.56	4933.82

Annexure A-6					
Fixed charges (FY2017-18)					
					(Rs in Crs)
S.No	Station	RoCE	Depreciation	O&M	Fixed charges
	Thermal Stations	1	2	3	4
1	KTPS O&M	110.96	68.74	447.81	627.51
2	KTPS-V	111.11	32.00	172.20	315.31
3	KTPS VI	271.02	181.69	115.32	568.03
4	RTS -B	13.81	2.71	38.87	55.39
5	KTPP-I	260.67	194.81	115.32	570.80
	Sub total	767.57	479.95	889.52	2137.04
	Hydel Stations				
6	Nagarjuna Complex	153.15	46.82	70.98	270.95
7	Srisaillam LBHES	311.09	113.91	58.19	483.19
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	8.27	4.17	26.00	38.44
9	Mini Hydels(Pedda pally HES)	2.24	0.98	4.41	7.63
10	Pochampad Stage -II	3.65	1.00	4.19	8.84
11	Priya dharshini Jurala	81.23	22.79	25.67	129.68
	Sub total	559.62	189.67	189.43	938.72
	New Stations				
12	KTPP Stage -II	644.31	339.79	124.56	1108.66
13	Lower Jurala HES	277.75	66.95	67.18	411.88
14	Pulichinthala HES	82.72	19.16	28.84	130.72
	Sub total	1004.78	425.90	220.58	1651.26
	Total (Thermal & Hydel Stations)	2331.97	1095.52	1299.54	4727.03
	Additonal Interest on pension bonds (Over and above schedule)				660.31
	Grand Total	2331.97	1095.52	1299.54	5387.34

Annexure A-6

Fixed charges (FY2018-19)

		(Rs in Crs)			
S.No	Station	RoCE	Depreciation	O&M	Fixed charges
	Thermal Stations	1	2	3	4
1	KTPS O&M	102.12	57.05	475.98	635.16
2	KTPS-V	107.13	32.00	183.06	322.19
3	KTPS VI	245.41	181.69	122.58	549.68
4	RTS -B	13.52	2.71	41.32	57.54
5	KTPP-I	233.19	194.81	122.58	550.58
	Sub total	701.37	468.26	945.52	2115.14
	Hydel Stations				
6	Nagarjuna Complex	146.80	46.82	75.70	269.31
7	Srisailam LBHES	295.22	113.91	62.05	471.18
8	Small Hydel(Pochapad -I ,Singur, Nizam sagar & Palair HES)	7.75	4.17	27.73	39.65
9	Mini Hydels(Pedda pally HES)	2.12	0.98	4.70	7.80
10	Pochampad Stage -II	3.52	1.00	4.47	8.98
11	Priya dharshini Jurala	78.07	22.79	27.37	128.23
	Sub total	533.46	189.67	202.01	925.14
	New Stations				
12	KTPP Stage -II	596.14	339.79	132.34	1068.27
12	Lower Jurala HES	268.43	66.95	71.64	407.02
13	Pulichinthala HES	80.07	19.16	30.76	129.99
	Sub total	944.64	425.90	234.74	1605.28
	Total (Thermal & Hydel Stations)	2179.47	1083.83	1382.26	4645.57
	Additonal Interest on pension bonds (Over and above schedule)				723.4
		2179.47	1083.83	1382.26	5368.97