

**BEFORE THE HONOURABLE ANDHRA PRADESH ELECTRICITY
REGULATORY COMMISSION**

At its office at 4th Floor, Singareni Bhavan, Red Hills, Hyderabad-500 004

File No. /2019

Case No. /2019

IN THE MATTER OF:

Filing of Petition for Determination of the True up for Retail Supply Business for FY 2017-18 in accordance with the "Andhra Pradesh Electricity Regulatory Commission (Terms And Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulation No.4 of 2005 and amendments issued from time to time"

AND

IN THE MATTER OF:

1. SOUTHERN POWER DISTRIBUTION COMPANY OF ANDHRA PRADESH LIMITED

&

2. EASTERN POWER DISTRIBUTION COMPANY OF ANDHRA PRADESH LIMITED

- Petitioners

Affidavit

I, B. Lalitha, D/o B. Raja Rao, aged 51 years, working for gain at the Southern Power Distribution Company of Andhra Pradesh Ltd do solemnly affirm and say as follows:

1. I am the Chief General Manager/RAC/APSPDCL, the body corporate that has been awarded Distribution License by the Honourable Commission. I am competent and duly authorized by APSPDCL to affirm, swear, execute and file this affidavit in the present proceedings.
2. I am competent and duly authorized by APSPDCL to affirm, swear, execute and file this petition on behalf of both DISCOMs (APSPDCL & APEPDCL).

3. I have read and understood the contents of the accompanying petition. The statements made in the paragraphs of the accompanying application now shown to me are true to my knowledge derived from the official records made available to me and are based on information and advice received which I believe to be true and correct.

St. alk
DEPONENT
CHIEF GENERAL MANAGER
RAC
APSPDCL :: TIRUPATI

VERIFICATION:

I, the above named deponent do hereby verify & affirm the contents of this affidavit as true & correct.

Verified and attested at Tirupati on this15th day of July, 2019

St. alk
DEPONENT
CHIEF GENERAL MANAGER
RAC
APSPDCL :: TIRUPATI

solemnly affirmed and signed before me

[Signature]
COMPANY SECRETARY
APSPDCL :: TIRUPATI.

BEFORE THE

**HONOURABLE ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION
AT ITS OFFICE AT 4th FLOOR, SINGARENİ BHAVAN, RED HILLS, HYDERABAD 500 004**

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4. EASTERN POWER DISTRIBUTION COMPANY OF ANDHRA PRADESH LIMITED

... Petitioners

MOST RESPECTFULLY SHOWETH THE SUBMISSION:

The APDISCOMS humbly submit the following:

Petition for True-up of ARR for Retail Supply Business for FY 2017-18**1 Introduction**

"Terms and Conditions for determination of Tariff for Wheeling and retail supply of electricity" Regulation 4 of 2005 and First Amendment Regulation 2014 ("Regulation 1 of 2014"), lays down the principles for determination of True Up and Aggregate Revenue Requirement (ARR) for (a) Distribution Business and (b) Retail Supply Business of the Petitioners. True Up is being filed herewith this petition for FY 2017-18 that is 4th year of the 3rd Control Period."

Sub-Clause 10.4 of the principal regulation 4 of 2005 determines the expenditure to be considered for distribution business and retail supply business. The said Clause is reproduced below:

"The expenditure of the Distribution licensee considered as "controllable" and "uncontrollable" shall be as follows:

Distribution Business	
ARR Item	"Controllable" / "Uncontrollable"
<i>Operation & Maintenance Expenses</i>	<i>Controllable</i>
<i>Return on Capital Employed</i>	<i>Controllable</i>
<i>Depreciation</i>	<i>Controllable</i>
<i>Taxes on Income</i>	<i>Uncontrollable</i>
<i>Non-tariff Income</i>	<i>Controllable</i>

In addition to the above items the retail supply business shall include the following:

Retail Supply Business	
ARR Item	"Controllable" / "Uncontrollable"
<i>Cost of power purchase</i>	<i>Uncontrollable</i>

Further, on pass-through of gains and losses on variation in "uncontrollable" items, Sub-Clause 10.5 of the principal regulation 4 of 2005 states that *"The Distribution licensee shall be eligible to claim variations in "uncontrollable" items in the ARR for the year succeeding the relevant year of the Control period depending on the availability of data as per actuals with respect to effect of uncontrollable items".*

As per First Amendment to Principal Regulation 4 of 2005 (i.e. Regulation 1 of 2014), Sub-Clause 12.5 states that variation of power purchase cost can be claimed and also provides for its computation. The said sub-clause is mentioned below:

"a. The Distribution licensee shall include the power purchase cost variation over the previous year power purchase cost in the Tariff Order as expense (in the event of incurring excess cost) / rebate (in case of cost saving) in the ARR as special item with relevant details".

"To arrive at the power purchase cost variation, the least of the following quantity is to be considered:

- i) Actual power purchase quantity procured by the Discoms for its consumers
- ii) Power purchase quantity computed based on actual sales except LT Agriculture sales. LT Agriculture sales will be limited to Tariff Order quantity. These aggregated sales will be grossed up with approved losses for the relevant year in the MYT Orders."

2 Request for delay in filing the true-up petition

The Petitioners have put their best efforts in trying to file the every year true-up petition with the next year ARR filings. However, due to certain factors that are not under the control of the Petitioners, true-up filing has delayed. Some of the reasons for delay in filing the true-up for the respective years are -

- a) Payment of fixed charges due to AP Reorganization Act
- b) Take-over of FRP Bonds and Working capital loans under UDAY scheme in September 2015
- c) Regulation of power between AP and TS in 2017

Due to the above stated reasons, the Petitioners were not in position to file the Petition with the respective ARR filings. Hence, the Petitioners request the Honourable Commission to condone the delay in filing of the Petition.

3 Petitioners' Filings on True-up for FY 2017-18

The current filing follows the principles laid down under above Regulations, mentioned in Section 1 above, for determination of the true-up for the retail supply business for the year FY 2017-18. Therefore, the Petitioners herewith submit the Petition providing details with regard to the deviations resulting in True-Up requirement for FY 2017-18.

It is further submitted that the Petition is submitted based on costs that have been incurred over and above the costs mentioned in audited financial accounts. The audited financial accounts of the Petitioners have been prepared based on accrual basis whereas actual expenses incurred by the Petitioners are higher than the audited costs. Such additional costs have been incurred by the Petitioners due to various approvals/decisions taken at later dates based on representations made at Hon'ble Commission or at government and other reasons which have affected the costs being incurred by the Petitioners. For illustration, such cases include but are not limited to tariff approval for SDSTPS for which the Petitioners are liable to pay at the approved tariff which is higher than the tariff paid and accounted for in the audited accounts. This resulted in excess payments to be made to SDSTPS for Rs. 947 Cr.

4 Deviation in power purchase quantum

As part of the tariff order, the Honourable Commission approves monthly energy despatch for every year. In reality, actual energy despatch is different from approved energy despatch due to several factors like coal availability, transportation issues, renewable power generation, peak load, agricultural load, seasonal changes, drought, humidity, rainfall etc.

The Petitioners in the following sections have provided the following details

- a) Deviation in Source Wise Energy Despatch in FY 2017-18 with respect to the Approved Despatch as per Tariff Order FY 2017-18.
- b) Comparison of Approved Power Purchase Costs and Actual Power Purchase Costs

5 Deviation in Source wise Energy Despatch

The following table shows the difference between the approved and actual despatch from the major sources as approved by the Honourable Commission in the Tariff Order FY 2017-18:

Table 1 Comparison of approved and actual energy despatch

Generating Station		Energy Despatch (MU)		
		Approved	Actual	Deviation
1(a)	APGENCO Thermal	8,471	13,995	5,524
1(b)	APPDCL	6,597	4,483	-2,114
1(c)	TSGENCO	6,968	1,493	-5,475
1(d)	APGENCO Hydel	3,143	2,644	-499
1	APGENCO + TSGENCO	25,178	22,614	-2,564
2	Central Generating Stations	12,162	12,771	610
3	APGPCL	127	147	20
4	IPPs-Gas	346	2,236	1,889
5	NCE	10,316	9,788	-528
6	IPPs-Others	8,258	6,968	-1,290
7	MARKET	196	3,040	2,844
8	Surplus Sales	0	-1,540	-1,540
9	TOTAL (From All Sources)	56,584	56,024	-560

It can be observed that the Petitioners have procured power from Market and Gas based IPPs majorly due to the shortfall meeting energy requirements from following sources:

- i) TSGENCO thermal stations (around 5,500 MU),
- ii) IPPs – Others (around 1,300 MU)
- iii) APGENCO Hydro (around 500 MU), and
- iv) Non-conventional Sources (around 500 MU)

5.1 Shortfall in despatch from TSGENCO thermal stations

The following table shows the comparison between the approved and actual energy despatch from TSGENCO thermal stations:

Table 2 Comparison of approved and actual energy despatch from TSGenco

Generating Station	Total FY 17-18		
	Approved	Actual	Deviation
1 KTPS-ABC	1,992	403	-1,588
2 KTPS-V	1,620	335	-1,285
3 KTPS-VI	1,612	357	-1,255

Generating Station		Total FY 17-18		
		Approved	Actual	Deviation
4	KTPP-I	1,589	358	-1,231
5	RTS-B	155	39	-116
Total TSGENCO Thermal		6,968	1,493	-5,475

From the above table, it can be seen that the actual despatch from TSGenco stations is 1,493 MU against the approved despatch of 6,968 MU. This is due to regulation of power from TSGENCO stations to AP Discoms from 11th June 2017 onwards.

5.2 Shortfall in despatch from IPPs – Others

The following table shows the comparison between the approved and actual energy despatch from IPPs - Others:

Table 3 Comparison of approved and actual energy despatch from IPPs-Others

Generating Station		Energy Despatch (MU)		
		Approved	Actual	Deviation
1	Srivaths	37	53	17
2	KSK Mahanadi	2,592	1,880	-712
3	Hinduja	2,823	3,284	461
4	Thermal Power Tech	1,716	1,750	34
5	600 MW DBFOO	1,090	0	-1,090
Total IPPs- Others		8,258	6,968	-1,290

5.3 Shortfall in despatch from APGENCO Hydro

The following table shows the comparison between the approved and actual energy despatch from APGENCO Hydro stations:

Table 4 Comparison of approved and actual energy despatch from APGenco Hydel

Generating Station		Energy Despatch (MU)		
		Approved	Actual	Deviation
1	MACHKUND PH AP Share	144	234	90
2	TUNGBHADRA PH AP Share	64	71	7
3	Upper Sileru Power House	451	472	21
4	Lower Sileru Power House	1,093	1,087	-6
5	DONKARAYI	105	118	13
6	Srisailam Right Bank Power House	974	559	-415
7	Nagarjunasagar Right Bank Power House	130	57	-74
8	Penna Ahobilam	6	4	-3
9	MINI HYDEL(Chettipeta)	3	2	0
10	Nagarjunasagar Tail Pond Dam Power House	173	31	-143
11	NSTPHES	0	10	10
Total APGENCO Hydel		3,143	2,644	-499

Against the approved energy despatch of 3,143 MU only 2,644 MU of energy was despatched from these stations.

Table 5 Comparison of approved and actual energy despatch from APGenco Hydel stations in last 15 years

Year	Approved	Actual	Variation
2002-03	6,999	3,337	-52%
2003-04	6,757	2,959	-56%
2004-05	6,423	5,267	-18%
2005-06	5,979	7,873	32%
2006-07	7,586	9,328	23%
2007-08	8,592	9,566	11%
2008-09	9,046	7,729	-15%
2009-10	8,969	5,499	-39%
2010-11	7,662	6,751	-12%
2011-12	8,238	6,221	-24%
2012-13	6,407	3,171	-51%
2013-14	7,057	6,761	-4%
2015-16	3,404	2,320	-32%
2016-17	3,241	2,192	-32%
2017-18	3,143	2,644	-16%

5.4 Shortfall in despatch from Non-Conventional Energy Sources:

The following table shows the comparison between the approved and actual energy despatch from NCE sources:

Table 6 Comparison of approved and actual energy despatch from NCEs

Generating Station	Energy Despatch (MU)		
	Approved	Actual	Deviation
1 NCE - Bio-Mass	339	191	-148
2 NCE - Bagasse	100	67	-33
3 NCE - Industrial & Municipal Waste to Energy	34	17	-17
4 NCE - Wind Power	6,191	6,070	-121
5 NCE - Mini Hydel	98	77	-21
6 NCE - NCL Energy Ltd	11	10	-1
7 NCE - Solar	3,544	3,356	-188
Total Non-conventional Energy sources	10,316	9,788	-528

5.5 Procurement of Power from APGENCO, CGS, Gas IPPs and Short Term Sources to bridge the shortfall of power:

Due to the shortfall of power from the above mentioned stations and regulation of power from TSGENCO stations to AP Discoms & APGENCO stations to TS Discoms from 11th June 2017 onwards, the Petitioners have procured power from APGENCO thermal stations more than the Approved Power Purchase as shown below.

Table 7 Comparison of approved and actual energy despatch from APGenco

	Generating Station	Energy Despatch (MU)		
		Approved	Actual	Deviation
1	VTPS I-III	3,949	6,159	2,210
2	VTPS IV	1,608	2,472	864
3	RTPP Stage-I	1,218	2,143	925
4	RTPP Stage-II	1,146	2,289	1,143
5	RTPP Stage-III	550	931	381
6	Damodaram Sanjevaiah Thermal power plant - I	3,454	2,281	-1,173
7	Damodaram Sanjevaiah Thermal power plant - II	3,142	2,201	-941
Total APGENCO Thermal		15,067	18,478	3,410

Following table summarizes the power purchase from APGENCO and TSGENCO thermal stations.

Table 8 Comparison of approved and actual energy despatch from TSGenco + APGenco

	Generating Station	Energy Despatch (MU)		
		Approved	Actual	Deviation
1	APGENCO (including APPDCL)	15,067	18,478	3,410
2	TSGENCO	6,968	1,493	-5,475
Total APGENCO + TSGENCO		22,035	19,971	-2,064

From the above table, it can be observed that even after purchasing more energy from APGENCO thermal stations, the shortfall created by regulation of power from TSGENCO stations could not be compensated. Hence the Petitioners have tried to cover this shortfall and the shortfall from APGENCO Hydro and NCE sources as discussed above, from CGS and IPPs as shown below:

Table 9 Comparison of approved and actual energy despatch from CGS stations

	Generating Station	Energy Despatch (MU)		
		Approved	Actual	Deviation
1	NTPC (SR)	2,253	1,755	-498
2	NTPC (SR) Stage III	579	474	-105
3	Talcher Stage 2	1,453	1,195	-258
4	NTPC Simhadri Stage I	3,429	2,685	-744
5	NTPC Simhadri Stage II	1,579	1,015	-564
6	NTPC Kudgi (New Thermal Station from 31.07.17)	0	274	274

Generating Station		Energy Despatch (MU)		
		Approved	Actual	Deviation
7	NTPC Aravali Power	0	0	0
8	NVVNL Bundled Power COAL	0	253	253
9	NTPC NNVNL NSM Phase-II, Batch-II, Trench-I Bundled Power -COAL POWER	0	2,379	2,379
10	NLC Stage-I	226	213	-12
11	NLC Stage-II	415	423	8
12	NLC Tamilnadu Power Ltd Stage 1	0	603	603
13	NPC-MAPS	110	105	-5
14	NPC-Kaiga unit I &II	396	451	56
15	NPC-Kaiga unit III & IV	397	465	67
16	Vallur Thermal Power Plant	529	480	-48
17	Tuticorin Thermal Plant	797	0	-797
Total CGS		12,162	12,771	610

Table 10 Comparison of approved and actual energy despatch from IPPs-Gas

Generating Station		Energy Despatch (MU)		
		Approved	Actual	Deviation
1	GVK	0	1,030	1,030
2	Spectrum	0	560	560
3	Lanco	0	645	645
4	Reliance	346	0	-346
Total Gas IPPs		346	2,236	1,889

Even after considering the power available from Gas IPPs, the licensee fell short of energy availability. Hence, the licensee in order to ensure reliable and uninterrupted power supply has to meet the shortfall through short term purchases.

Table 11 Short Term Market Purchases

Generating Station	Despatch (MU)	Cost (Cr)
Indian Energy Exchange(Energy Charges)	1,581	575
Indian Energy Exchange(STOA Charges)	0	72
Steel Exchange India Ltd	7	3
Sarda Metal and Alloys Ltd.,	15	6
Shri Girija Alloy & Power Ltd.,	0	0
Manikaran Power Ltd	3	1
Manikaran(Swaping)-STOA Charges	0	10
APPCL (Swaping)-Trading Margin	286	1
APPCL (Swaping)-STOA Charges	0	15
Mittal Processors (Swaping)-Trading Margin	178	1
Mittal Processors (Swaping)-STOA	0	13
GMR Energy Trading SWAPPING Trading Margin	744	2

Generating Station	Despatch (MU)	Cost (Cr)
GMR Energy Trading SWAPPING STOA	0	42
Knowledge Infrastructure Systems Ltd	5	1
Total	2,820	742

5.6 Deviation in Sales and T&D losses from approved values

However, the total power procured was around 560 MU less than the approved value. This was because

- a) The actual sales were lower than the approved values, and
- b) The actual T&D losses were lower than the approved values.

The following table shows the details of the same:

Table 12 Comparison of approved and actual sales

Particulars for State	UoM	FY 2017-18		
		Approved	Actual	Variance
Total Sales	MU	50,077.30	49,685.80	(391.50)
Total Power Purchase	MU	56,583.52	56,023.51	(560.01)
Total Losses	%	11.50%	11.31%	(0.19)

While the actual sales were lower by around 391.5 MU from the approved values, the Petitioners also achieved losses better than the approved values by around 0.19% points. At the same time actual Agricultural sales for 10,828 MUs is equivalent to approved quantum i.e. 10,832 MUs. Thus, the overall energy requirement was lower by 560.01 MU as compared to total allowable power purchase.

6 Comparison of Approved Power Purchase Costs and Actual Power Purchase Costs

6.1 Fixed Costs

The Honourable Commission approved Rs. 4,026 Cr. as fixed costs payable to generators for FY 2017-18. Against the said amount, the Petitioners incurred Rs. 5,812 Cr. as fixed costs, i.e. the Petitioners paid fixed costs more by Rs.1,786 Cr.

The Petitioners were paying an interim tariff of Rs.3.63/Unit (Fixed Cost – Rs.1.02/Unit; Variable Cost – Rs.2.61/Unit) to SDSTPS-I. However, the Honourable Commission has determined the fixed costs of SDSTPS Stage-I (2*800 MW) on 02.03.2019. Consequent to this order, the Petitioners have incurred additional Rs. 946.66 Cr towards fixed cost of SDSTPS Stage-I for FY 17-18. The break-up of additional fixed cost of Rs.946.66 Cr is shown in the table below.

Table 13 Remaining fixed cost to be paid to SDSTPS-I (Cr)

Remaining fixed cost to be paid to SDSTPS-I (Cr)					
Year	Fixed Cost approved for 80% availability (Cr) (A)	Actual energy availability (%)	Fixed Cost for achieved availability (Cr) (B)	Fixed Cost (Cr) already paid @ Rs.1.02/Unit (C)	Remaining fixed cost to be paid (Cr) (B) - (C)
FY 17-18	1,782.29	56.72%	1,403.92	457.26	946.66

The following table shows the source wise comparison between the approved and actual fixed costs for FY 2017-18:

Table 24 Comparison of approved and actual fixed costs

Source	Fixed Cost (Cr)		
	Approved	Actual	Variance
APGENCO Thermal	965	1,787	822
APPDCL	0	457	457
TSGENCO Thermal	845	177	(668)
APGENCO Hydel	439	451	13
CGS	1,082	1,267	185
APGPCL	5	11	6
IPPs-Gas	26	91	64
NCE	0	0	0
IPPs-Others	664	574	(90)
Market Purchases	0	50	50
APPDCL Additional Cost	0	947	947
Total	4,026	5,812	1,786

Due to regulation of power from 11.06.2017, power was not procured from TSGENCO stations. Accordingly, the actual fixed cost paid to the TSGENCO stations is lower than the approved fixed cost of TSGENCO stations.

6.2 Variable Costs

The Honourable Commission approved Rs. 3.01 per unit as the average variable costs for FY 2017-18. This approved per unit variable cost is calculated by considering the total costs of following stations as variable costs as per Hon'ble Commission's approved tariff order for the FY 2017-18.

Table 15 Comparison of approved and actual variable costs

Source	Energy (MU)			Variable Cost (Cr)			Variable Cost (Rs./Unit)		
	Approved	Actual	Variance	Approved	Actual	Variance	Approved	Actual	Variance
APGENCO Thermal	8,471	13,995	5,524	2,288	4,582	2,294	2.70	3.27	0.57
APPDCL	6,597	4,483	(2,114)	2,664	1,170	(1,494)	4.04	2.61	(1.43)
TSGENCO Thermal	6,968	1,493	(5,475)	1,581	433	(1,149)	2.27	2.90	0.63
APGENCO Hydel	3,143	2,644	(499)	0	0	0	0.00	0.00	0.00
CGS	12,162	12,771	610	2,930	3,678	749	2.41	2.88	0.47
APGPCL	127	147	20	27	36	9	2.14	2.45	0.31
IPPs-Gas	346	2,236	1,889	73	576	503	2.10	2.57	0.47
NCE	10,316	9,788	(528)	4,906	4,503	(403)	4.76	4.60	(0.15)
IPPs-Others	8,258	6,968	(1,290)	2,508	2,093	(416)	3.04	3.00	(0.03)
Market Purchases	196	3,040	2,844	80	838	759	4.08	2.76	(1.32)
Sale of Surplus Power	0	(1,540)	(1,540)	0	(647)	(647)	0.00	4.20	4.20
Total	56,584	56,024	(560)	17,057	17,262	205	3.01	3.08	0.07

Actual variable cost for the Petitioners is Rs. 3.08/Unit i.e. increase in variable cost of Rs.0.07/Unit when compared to the approved variable costs.

6.3 Other Costs

The following table shows the comparison of approved and actual other costs paid by the Petitioners in FY 17-18.

Table 16 Comparison of approved and actual Other costs

Source	Other Cost (Cr)		
	Approved	Actual	Variance
APGENCO Thermal	387	684	297
TSGENCO Thermal	4	60	57
CGS	17	0	(17)
NCE	0	217	217
Total	408	961	553

6.4 Summary of Costs

The following table shows the summary of source wise power purchase costs borne by the Petitioners during the year FY 2017-18. (The detailed station-wise comparison of Costs is shown in **Annexure-I**):

Table 17 Comparison of approved and actual power purchase costs

Source	Fixed Cost (Cr)			Variable Cost (Cr)			Other Cost (Cr)			Total Cost (Cr)		
	App.	Act.	Var	App.	Act.	Var	App	Act.	Var	App.	Act.	Var
APGENCO Thermal	965	1,787	822	2,288	4,582	2,294	387	684	297	3,640	7,053	3,413
APPDCL	0	457	457	2,664	1,170	(1,494)	0	0	0	2,664	1,627	(1,037)
TSGENCO Thermal	845	177	(668)	1,581	433	(1,149)	4	60	57	2,431	670	(1,760)
APGENCO Hydel	439	451	13	0	0	0	0	0	0	439	451	13
CGS	1,082	1,267	185	2,930	3,678	749	17	0	(17)	4,029	4,945	916
APGPCL	5	11	6	27	36	9	0	0	0	33	47	15
IPPs-Gas	26	91	64	73	576	503	0	0	0	99	666	567
NCE	0	0	0	4,906	4,503	(403)	0	217	217	4,906	4,720	(186)
IPPs-Others	664	574	(90)	2,508	2,093	(416)	0	0	0	3,172	2,667	(505)
Market Purchases	0	50	50	80	838	759	0	0	0	80	889	809
Sale of Surplus Power	0	0	0	0	(647)	(647)	0	0	0	0	(647)	(647)
Transmission Charges	1,740	1,881	142	0	0	0	0	0	0	1,740	1,881	142
APPDCL Additional Cost	0	947	947	0	0	0	0	0	0	0	947	947
Total	5,766	7,694	1,928	17,057	17,262	205	408	961	553	23,231	25,917	2,686

As can be seen from the above table, there is an increase in power purchase costs for the Petitioners by Rs. 2,686 Crs.

However, for the computation of true-up as per Regulation 1 of 2014, the LT agriculture sales have to be fixed at the Tariff Order approved values. The same has been carried out in the next section in order to compute the True-up for FY 2017-18.

7 True-up Computation for FY 2017-18 as per Regulations

The Petitioners have computed the true-up for FY 2017-18, as per Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) First Amendment Regulation, 2014.

As per the said regulation,

"a. The Distribution licensee shall include the power purchase cost variation over the previous year Power purchase cost in the Tariff Order as expense (in the event of incurring excess cost)/ rebate (in case of saving) in the ARR as special item with relevant details. To arrive at the power purchase cost variation, the least of the following quantity is to be considered:

- iii) Actual power purchase quantity procured by the Discoms for its consumers*
- iv) Power purchase quantity computed based on actual sales except LT Agriculture sales. LT Agriculture sales will be limited to Tariff Order quantity. These aggregated sales will be grossed up with approved losses for the relevant year in the MYT Orders."*

The Petitioners have used the above methodology to compute the allowable power purchase quantity as per the following table:

Table 18 Allowable power purchase as per True-up Regulation

S. no.	Particulars	UoM	FY 2017-18		
			APEPDCL	APSPDCL	State
(1)	Total Sales - Actual	MU	18,351	31,335	49,686
(2)	Agricultural Sales - Approved	MU	2,090	8,742	10,832
(3)	Agricultural Sales - Actual	MU	2,188	8,640	10,828
(4) = (1) - (3) + (2)	Allowable Sales	MU	18,253	31,335 *	49,588
(5)	Approved Losses	%	10.51%	12.02%	11.50%
(6) = (4)/(1-(5))	Revised Power Purchase	MU	20,396	35,616	56,012
(7)	Actual Power Purchase adj. for Surplus Sale	MU	20,658	35,365	56,024
(8) = min((6),(7))	Allowable Power Purchase	MU	20,396	35,365	55,761

* For APSPDCL actual agricultural sales is less than the approved sales. Hence (4) = (1)

The aggregate of the differences between the approved and actual values of fixed costs, variable costs (as computed using the allowable power purchase quantum), and other expenses gives the regulatory True-up for FY 2017-18. The following table shows the summary of the computation of True-up for the state.

Application for True-up for FY 2017-18

Table 19 Comparison of approved and actual power purchase costs as per True-up Regulations

Source	True-Up Claim for FY 17-18														
	Energy (MU)			Fixed Cost (Cr)			Variable Cost (Cr)			Other Cost (Cr)			Total Cost (Cr)		
	App	Act	Var	App	Act	Var	App	Act	Var	App	Act	Var	App	Act	Var
APGENCO Thermal	8,471	13,995	5,524	965	1,787	822	2,288	4,582	2,294	387	684	297	3,640	7,053	3,413
APPDCL	6,597	4,483	(2,114)	0	457	457	2,664	1,170	(1,494)	0	0	0	2,664	1,627	(1,037)
TSGENCO Thermal	6,968	1,493	(5,475)	845	177	(668)	1,581	433	(1,149)	4	60	57	2,431	670	(1,760)
APGENCO Hydel	3,143	2,644	(499)	439	451	13	0	0	0	0	0	0	439	451	13
CGS	12,162	12,771	610	1,082	1,267	185	2,930	3,678	749	17	0	(17)	4,029	4,945	916
APGPCL	127	147	20	5	11	6	27	36	9	0	0	0	33	47	15
IPPs-Gas	346	2,236	1,889	26	91	64	73	576	503	0	0	0	99	666	567
NCE	10,316	9,788	(528)	0	0	0	4,906	4,503	(403)	0	217	217	4,906	4,720	(186)
IPPs-Others	8,258	6,925	(1,333)	664	574	(90)	2,508	2,076	(432)	0	0	0	3,172	2,650	(522)
Market Purchases	196	2,820	2,625	0	50	50	80	744	664	0	0	0	80	794	715
Sale of Surplus Power	0	(1,540)	(1,540)	0	0	0	0	(647)	(647)	0	0	0	0	(647)	(647)
Transmission Charges	0	0	0	1,740	1,881	142	0	0	0	0	0	0	1,740	1,881	142
APPDCL Additional Cost	0	0	0	0	947	947	0	0	0	0	0	0	0	947	947
Total	56,584	55,761	(822)	5,766	7,694	1,928	17,057	17,151	94	408	961	553	23,231	25,806	2,576

Thus, the required True-up for FY 2017-18 is Rs. 2,576 Crs. The detailed computation of true-up is shown in the following table.

Application for True-up for FY 2017-18

Comparison of approved and actual power purchase costs as per true-up regulation for FY 2017-18

Table 20 Comparison of approved and actual power purchase costs as per True-up Regulations

Station No	Station	Installed Capacity (MW)	AP Share (%)	AP Share (MW)	Energy Purchased (MU)		Cost Components (Rs.Cr)										Cost Variance Claim (Rs.Cr)								
					Tariff Order	Actual	Fixed		Variable		Incentive		Income Tax		Others		Total		Fixed	Variable	Incentive	Income Tax	Others	Total	
							Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Variance	Variance	Variance	Variance	Variance	Variance	Variance	Variance	
APGENCO																									
1	Dr.NTPPS - I, II, III	1260	46.11%	580.99	3,948.84	6,158.87	310.55	558.62	1,022.75	1,877.10	5.84	0.00	0.00	0.00	169.59	306.76	1,508.73	2,742.47	248.07	854.35	(5.84)	0.00	137.16	1,233.74	
2	Dr.NTPPS - IV	500	46.11%	230.55	1,607.63	2,472.01	210.56	387.18	376.19	685.19	2.83	0.00	0.00	0.00	67.30	121.73	656.88	1,194.10	176.62	309.00	(2.83)	0.00	54.43	537.22	
3	RTTP - I	420	46.11%	193.66	1,218.14	2,143.31	125.15	242.98	371.53	807.89	0.00	0.00	0.00	0.00	56.53	102.25	553.21	1,153.12	117.83	436.36	0.00	0.00	45.72	599.91	
4	RTTP - II	420	46.11%	193.66	1,145.87	2,289.14	191.06	370.93	349.49	864.52	0.00	0.00	0.00	0.00	56.53	102.25	597.08	1,337.70	179.87	515.03	0.00	0.00	45.72	740.62	
5	RTTP - III	210	46.11%	96.83	550.07	931.42	127.68	227.22	167.77	347.04	0.00	0.00	0.00	0.00	28.27	51.13	323.72	625.39	99.54	179.27	0.00	0.00	22.86	301.68	
101	Total APGENCO				8,470.55	13,994.75	965.00	1,786.94	2,287.73	4,581.73	8.67	0.00	0.00	0.00	378.22	684.11	3,639.62	7,052.79	821.94	2,294.00	(8.67)	0.00	305.89	3,413.17	
APPDCL																									
6	SDSTPS Stage-I	1600	100.00%	1600.00	6,596.68	4,482.95	0.00	457.26	2,663.88	1,170.05	0.00	0.00	0.00	0.00	0.00	0.00	2,663.88	1,627.31	457.26	(1,493.83)	0.00	0.00	0.00	(1,036.57)	
102	Total APPDCL				6,596.68	4,482.95	0.00	457.26	2,663.88	1,170.05	0.00	0.00	0.00	0.00	0.00	0.00	2,663.88	1,627.31	457.26	(1,493.83)	0.00	0.00	0.00	(1,036.57)	
TSGenco																									
7	KTPS A,B & C	720	46.11%	331.99	1,991.60	403.31	213.39	50.76	543.71	112.23	0.00	0.00	0.00	1.26	0.00	17.62	757.10	181.87	(162.63)	(431.48)	0.00	1.26	17.62	(575.23)	
8	KTPS Stage V	500	46.11%	230.55	1,620.08	334.95	104.75	24.90	327.26	88.62	3.74	0.00	0.00	0.87	0.00	12.23	435.75	126.62	(79.85)	(238.64)	(3.74)	0.87	12.23	(309.13)	
9	RTS B	62.5	46.11%	28.82	154.63	39.11	23.43	4.70	47.93	11.13	0.00	0.58	0.00	0.11	0.00	1.53	71.36	18.04	(18.73)	(36.80)	0.58	0.11	1.53	(53.32)	
10	Kakatiya Thermal Power Plant Stage I	500	46.11%	230.55	1,589.20	358.42	251.84	49.21	336.91	104.08	0.00	0.00	0.00	0.87	0.00	12.23	588.75	166.40	(202.63)	(232.83)	0.00	0.87	12.23	(422.35)	
11	KTPS Stage VI	500	46.11%	230.55	1,612.24	357.11	252.00	47.60	325.67	116.67	0.00	0.00	0.00	0.87	0.00	12.23	577.67	177.38	(204.40)	(209.00)	0.00	0.87	12.23	(409.20)	
103	Total TSGenco				6,967.75	1,492.89	845.41	177.17	1,581.48	432.73	3.74	0.58	0.00	3.98	0.00	55.85	2,430.63	670.31	(668.24)	(1,148.75)	(3.16)	3.98	55.85	(1,760.32)	
APGENCO Hydel																									
12	MACHKUND PH AP Share	84	46.11%	38.73	144.05	233.82	16.51	25.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.51	25.35	8.84	0.00	0.00	0.00	0.00	0.00	8.84	
13	TUNGBHADRA PH AP Share	57.6	46.11%	26.56	63.84	70.84	7.32	17.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.32	17.38	10.06	0.00	0.00	0.00	0.00	0.00	10.06	
14	Upper Sileru Power House	240	100.00%	240.00	450.78	471.67	46.11	55.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.11	55.84	9.73	0.00	0.00	0.00	0.00	0.00	9.73	
15	Lower Sileru Power House	460	100.00%	460.00	1,093.36	1,087.39	111.85	107.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.85	107.03	(4.82)	0.00	0.00	0.00	0.00	0.00	(4.82)	
16	DONKARAYI	25	100.00%	25.00	104.87	118.17	10.73	5.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.73	5.82	(4.91)	0.00	0.00	0.00	0.00	0.00	(4.91)	
17	Srisailam Right Bank Power House	770	100.00%	770.00	973.68	558.92	168.89	168.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	168.89	168.89	0.00	0.00	0.00	0.00	0.00	0.00		
18	Ramagiri Wind Mills	0	100.00%	0.00	0.00	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
19	Nagarjunasagar Right Bank Power House	90	100.00%	90.00	130.13	56.54	17.74	17.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.74	17.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
20	Penna Ahobilam	20	100.00%	20.00	6.40	3.68	10.44	10.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.44	10.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	MINI HYDEL (Chettipeta)	1	100.00%	1.00	2.59	2.25	0.77	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
22	Nagarjunasagar Tail Pond Dam Power House	50	100.00%	50.00	173.25	0.00	48.26	22.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.26	22.11	(26.15)	0.00	0.00	0.00	0.00	0.00	(26.15)	
65	NSTPHES (AP)	0	0.00%	0.00	0.00	9.52	0.00	20.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.11	20.11	0.00	0.00	0.00	0.00	0.00	20.11
23	Nagarjunasagar Power House (TS)	0	0.00%	0.00	0.00	30.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
104	Total APGENCO Hydel				3,142.95	2,643.56	438.62	451.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	438.62	451.48	12.86	0.00	0.00	0.00	0.00	0.00	12.86	
CGS																									
24	NTPC (SR)-Ramagundam Stage 1&2	2100	14.92%	313.24	2,253.07	1,755.32	148.50	124.11	477.65	432.43	6.30	0.00	0.00	0.00	0.00	0.00	632.45	556.54	(24.39)	(45.22)	(6.30)	0.00	0.00	(75.91)	
25	NTPC (SR)-Ramagundam Stage 3	500	15.70%	78.48	578.77	473.97	40.65	31.43	120.96	116.18	2.01	0.00	0.00	0.00	0.00	0.00	163.62	147.62	(9.22)	(4.78)	(2.01)	0.00	0.00	(16.00)	
26	Talcher Stage 2	2000	9.22%	184.40	1,453.02	1,195.21	92.66	81.28	236.84	190.87	4.78	0.00	0.00	0.00	0.00	0.00	334.28	272.15	(11.38)	(45.97)	(4.78)	0.00	0.00	(62.13)	
27	NLC TS-II Stage-I	630	8.49%	53.49	225.50	213.06	22.52	21.18	78.25	64.56	0.00	0.00	0.00	0.00	0.00	0.00	100.77	85.74	(1.34)	(13.69)	0.00	0.00	0.00	(15.03)	
28	NLC TS-II Stage-II	840	11.20%	94.08	415.29	423.01	38.77	35.93	144.11	126.85	0.00	0.00	0.00	0.00	0.00	0.00	182.88	162.78	(2.84)	(17.26)	0.00	0.00	0.00	(20.10)	
29	NPC-MAPS	420	4.83%	20.29	109.99	104.96	0.00	0.00	23.76	29.39	0.00	0.00	0.00	0.00	0.00	0.00	23.76	29.39	0.00	5.63	0.00	0.00	0.00	5.63	
30	NPC-Kaiga unit I&II	420	14.93%	62.71	395.59	457.92	0.00	0.00	123.82	172.72	0.00	0.00	0.00	0.00	0.00	0.00	123.82	172.72	0.00	48.90	0.00	0.00	0.00	48.90	
31	NPC-Kaiga unit III&IV	420	15.81%	66.40	397.04	457.92	0.00	0.00	124.27	172.72	0.00	0.00	0.00	0.00	0.00	0.00	124.27	172.72	0.00	48.45	0.				

Application for True-up for FY 2017-18

Station No	Station	Installed Capacity (MW)	AP Share (%)	AP Share (MW)	Energy Purchased (MU)		Cost Components (Rs.Cr)										Cost Variance Claim (Rs.Cr)								
					Tariff Order	Actual	Fixed		Variable		Incentive		Income Tax		Others		Total		Fixed	Variable	Incentive	Income Tax	Others	Total	
							Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Variance	Variance	Variance	Variance	Variance	Variance	Variance	Variance	
	APGCL																								
39	APGCL I - Allocated capacity	100	9.33%	9.33	27.79	33.69	1.05	6.83	6.50	11.58	0.00	0.00	0.00	0.00	0.00	0.00	7.55	18.41	5.78	5.08	0.00	0.00	0.00	10.86	
40	APGCL II - Allocated capacity	172	14.51%	24.96	99.55	113.32	4.25	4.25	20.81	24.46	0.00	0.00	0.00	0.00	0.00	0.00	25.06	28.71	0.00	3.65	0.00	0.00	0.00	3.65	
106	Total APGCL				127.34	147.01	5.30	11.08	27.31	36.04	0.00	0.00	0.00	0.00	0.00	0.00	32.61	47.12	5.78	8.73	0.00	0.00	0.00	14.51	
	IPPs - Gas																								
41	Spectrum	205	46.11%	94.53	0.00	560.40	0.00	5.00	0.00	181.13	0.00	0.00	0.00	0.00	0.00	0.00	186.13	5.00	181.13	0.00	0.00	0.00	0.00	186.13	
42	Kondapalli (Gas)	355	46.11%	163.69	0.00	645.05	0.00	64.30	0.00	144.18	0.00	0.00	0.00	0.00	0.00	0.00	208.49	64.30	144.18	0.00	0.00	0.00	0.00	208.49	
43	BSES	220	46.11%	101.44	346.49	0.00	26.14	0.00	72.76	0.00	0.00	0.00	0.00	0.00	0.00	98.90	0.00	(26.14)	(72.76)	0.00	0.00	0.00	0.00	(98.90)	
44	GGPP	216	100.00%	216.00	0.00	1,030.25	0.00	21.23	0.00	250.33	0.00	0.00	0.00	0.00	0.00	0.00	271.56	21.23	250.33	0.00	0.00	0.00	0.00	271.56	
107	Total IPPs - Gas				346.49	2,235.69	26.14	90.53	72.76	575.64	0.00	0.00	0.00	0.00	0.00	0.00	98.90	666.18	64.39	502.88	0.00	0.00	0.00	567.28	
	NCE																								
45	NCE - Bio-Mass					338.98	191.15	0.00	0.00	223.73	109.38	0.00	0.00	0.00	0.00	0.00	0.00	223.73	109.38	0.00	(114.35)	0.00	0.00	0.00	(114.35)
46	NCE - Bagasse					100.37	67.18	0.00	0.00	46.17	25.09	0.00	0.00	0.00	0.00	0.00	0.00	46.17	25.09	0.00	(21.08)	0.00	0.00	0.00	(21.08)
47	NCE - Industrial Waste based power project					33.97	17.10	0.00	0.00	21.71	9.81	0.00	0.00	0.00	0.00	0.00	0.00	21.71	9.81	0.00	(11.90)	0.00	0.00	0.00	(11.90)
48	NCE - Wind Power					6,190.56	6,069.50	0.00	0.00	2,699.08	2,577.32	0.00	216.83	0.00	0.00	0.00	2,699.08	2,794.15	0.00	(121.76)	216.83	0.00	0.00	0.00	95.07
49	NCE - Mini Hydel					98.02	76.73	0.00	0.00	31.17	21.93	0.00	0.00	0.00	0.00	0.00	0.00	31.17	21.93	0.00	(9.24)	0.00	0.00	0.00	(9.24)
50	NCE - NCL Energy Ltd					10.87	10.37	0.00	0.00	1.97	1.87	0.00	0.00	0.00	0.00	0.00	0.00	1.97	1.87	0.00	(0.10)	0.00	0.00	0.00	(0.10)
51	NCE - Solar Projects (SPD)					3,543.69	3,356.14	0.00	0.00	1,881.70	1,757.60	0.00	0.00	0.00	0.00	0.00	0.00	1,881.70	1,757.60	0.00	(124.10)	0.00	0.00	0.00	(124.10)
108	Total NCE					10,316.46	9,788.17	0.00	0.00	4,905.53	4,503.01	0.00	216.83	0.00	0.00	0.00	4,905.53	4,719.84	0.00	(402.52)	216.83	0.00	0.00	(185.69)	
	IPPs - Others																								
52	Srivatsa (Exclusive EPDCL)	17,202	100.00%	17.20	36.85	53.43	3.00	3.17	10.81	14.30	0.00	0.00	0.00	0.00	0.00	0.00	13.81	17.47	0.17	3.49	0.00	0.00	0.00	3.66	
53	KSK Mahanadi (MT)	400	100.00%	400.00	2,592.40	1,880.14	355.16	260.99	596.25	502.52	0.00	0.00	0.00	0.00	0.00	0.00	951.41	763.52	(94.17)	(93.73)	0.00	0.00	0.00	(187.89)	
54	Hinduja	1040	100.00%	1040.00	2,822.55	3,240.93	0.00	0.00	1,130.61	1,238.03	0.00	0.00	0.00	0.00	0.00	0.00	1,130.61	1,238.03	0.00	107.42	0.00	0.00	0.00	107.42	
55	Thermal Pow er Tech	500	46.11%	230.55	1,716.32	1,750.46	305.50	309.84	326.10	321.37	0.00	0.00	0.00	0.00	0.00	0.00	631.60	631.21	4.34	(4.73)	0.00	0.00	0.00	(0.39)	
56	600MW DBFOO	1000	60.00%	600.00	1,089.74	0.00	0.00	0.00	444.62	0.00	0.00	0.00	0.00	0.00	0.00	444.62	0.00	0.00	(444.62)	0.00	0.00	0.00	(444.62)		
109	Total IPPs - Others					8,257.86	6,924.96	663.66	574.01	2,508.39	2,076.22	0.00	0.00	0.00	0.00	0.00	0.00	3,172.05	2,650.23	(89.65)	(432.17)	0.00	0.00	0.00	(521.82)
	Market																								
57	Ul					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
58	Other Short Term Sources					195.67	2,820.30	0.00	50.16	79.83	744.31	0.00	0.00	0.00	0.00	0.00	0.00	79.83	794.48	50.16	664.48	0.00	0.00	0.00	714.65
59	Reactive Charges					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	Total Market					195.67	2,820.30	0.00	50.16	79.83	744.31	0.00	0.00	0.00	0.00	0.00	0.00	79.83	794.48	50.16	664.48	0.00	0.00	0.00	714.65
60	Sale of Surplus Pow er					0.00	(1,540.40)	0.00	0.00	(647.16)	0.00	0.00	0.00	0.00	0.00	0.00	(647.16)	0.00	(647.16)	0.00	0.00	0.00	0.00	(647.16)	
	Transmission Charges																								
61	APTRANSCO Transmission Charge					0.00	0.00	1,287.26	941.31	0.00	0.00	0.00	0.00	0.00	0.00	1,287.26	941.31	(345.95)	0.00	0.00	0.00	0.00	(345.95)		
62	SLDC Charges					0.00	0.00	37.89	33.10	0.00	0.00	0.00	0.00	0.00	0.00	37.89	33.10	(4.79)	0.00	0.00	0.00	0.00	(4.79)		
63	PGCL Expenses					0.00	0.00	399.74	903.97	0.00	0.00	0.00	0.00	0.00	0.00	399.74	903.97	504.23	0.00	0.00	0.00	0.00	504.23		
64	ULDC Charges					0.00	0.00	14.84	3.12	0.00	0.00	0.00	0.00	0.00	0.00	14.84	3.12	(11.72)	0.00	0.00	0.00	0.00	(11.72)		
111	Total Transmission Charges					0.00	0.00	1,739.73	1,881.49	0.00	0.00	0.00	0.00	0.00	0.00	1,739.73	1,881.49	141.76	0.00	0.00	0.00	0.00	141.76		
66	SDSTPS Additional Fixed Cost					0.00	0.00	946.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	946.66	946.66	0.00	0.00	0.00	0.00	946.66		
	Total					56,583.55	55,761.31	5,766.01	7,693.77	17,056.66	17,151.05	29.66	217.41	0.00	3.98	378.22	739.96	23,230.55	25,806.18	1,927.76	94.39	187.75	3.98	361.74	2,575.63

8 Revenue True-Up:

The Honorable Commission approves tariff and non-tariff income for the Retail Supply Business in its Retail Supply Tariff Order for every financial year. However, tariff and non-tariff income approved by the Honourable Commission is different from the actual revenue realized. If the actual revenue realized is lower than the approved revenue, the Petitioners incur losses. Hence, the Petitioners request the Honourable Commission to consider true-up/true-down for the revenue also.

Further, the Petitioners have written to a letter (Lr.No.CGM/Opn/SPDCL/TPT/RAC/F.Regn.4/D.No.12/16 dated 15-01-2017) to the Honourable Commission seeking amendment to the Regulation 4 of 2005 (seeking allowing variation of agricultural sales, allowing deviation in technical losses, allowing revenue true-up etc.)

The revenue true-up for the FY 17-18 is shown below.

Table 21 Comparison of approved and actual power purchase costs as per True-up Regulations

Revenue True-up for 17-18(Cr)					
S.No	Particulars	EPDCL	SPDCL	State	
A	Approved Tariff and Non-Tariff Revenue (Without Subsidy)	9,270	14,794	24,064	
B	Actual Tariff and Non-Tariff Revenue (Without Subsidy)	9,866	14,177	24,044	
C = A - B	Revenue True-Up	(596)	617	20	

9 Final True-Up

Final true-up considering the expense true-up and revenue true-up is shown in the following table. Carrying cost for the true-up is calculated considering a working capital interest rate of 12% (As per CERC Tariff Regulation for Generating Stations for the Control period FY 19-20 to FY 23-24, the interest on working capital loans is MCLR + 3.50%).

Table 22 Comparison of approved and actual power purchase costs as per True-up Regulations

Total True-up for 17-18(Cr)					
S.No	Particulars	EPDCL	SPDCL	State	
A	Expense True-up	942	1,634	2,576	
B	Revenue True-up	(596)	617	20	
C	Total	346	2,250	2,596	
D	Carrying Cost @ Interest Rate of 12%*	88	573	660	
E	Total true-up	434	2,823	3,257	

*** Considering FY 2019-20 as the year of approval.*

The Petitioners also request the Hon'ble Commission to take into consideration the carrying cost to be incurred by the licensee in the future till the complete true-up mentioned above is recovered.

10 Prayer

The Petitioners humbly pray that the Hon'ble Commission may:

- a) Approve the true-up of expenses and revenue for the Retail Supply Business for FY 2017-18.
- b) To approve the true-up required for FY 2017-18 pertaining to the Retail Supply Business for Rs. 3,257 Crs.
- c) To pass such order as the Honorable Commission may deem fit and proper in the facts and circumstances explained above.

**SOUTHERN POWER DISTRIBUTION COMPANY OF ANDHRA PRADESH LIMITED
EASTERN POWER DISTRIBUTION COMPANY OF ANDHRA PRADESH LIMITED**

(Petitioners)

Through

Place: Tirupathi
Date: 15.07.2019.

H. Balaji
Chief General Manager/RAC
APSPDCL: Tirupathi
CHIEF GENERAL MANAGER
RAC
APSPDCL :: TIRUPATI

Annexures

Annexure - I: Station-wise comparison of Power Purchase Costs

Comparison of approved and actual power purchase costs for FY 2017-18

Station No	Station	Installed Capacity (MW)	AP Share (%)	AP Share (MW)	Energy Purchased (MU)		Cost Components (Rs.Cr)										Cost Variance Claim (Rs.Cr)							
					Tariff Order	Actual	Fixed		Variable		Incentive		Income Tax		Others		Total		Fixed	Variable	Incentive	Income Tax	Others	Total
							Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Variance	Variance	Variance	Variance	Variance	Variance	Variance	Variance
APGENCO																								
1	Dr.NTPPS - I, II, III	1260	46.11%	580.99	3,948.84	6,158.87	310.55	558.62	1,022.75	1,877.10	5.84	0.00	0.00	0.00	169.59	306.76	1,508.73	2,742.47	248.07	854.35	(5.84)	0.00	137.16	1,233.74
2	Dr.NTPPS - IV	500	46.11%	230.55	1,607.63	2,472.01	210.56	387.18	376.19	685.19	2.83	0.00	0.00	0.00	67.30	121.73	656.88	1,194.10	176.62	309.00	(2.83)	0.00	54.43	537.22
3	RTTP - I	420	46.11%	193.66	1,218.14	2,143.31	125.15	242.98	371.53	807.89	0.00	0.00	0.00	0.00	56.53	102.25	553.21	1,153.12	117.83	436.36	0.00	0.00	45.72	599.91
4	RTTP - II	420	46.11%	193.66	1,145.87	2,289.14	191.06	370.93	349.49	864.52	0.00	0.00	0.00	0.00	56.53	102.25	597.08	1,337.70	179.87	515.03	0.00	0.00	45.72	740.62
5	RTTP - III	210	46.11%	96.83	550.07	931.42	127.68	227.22	167.77	347.04	0.00	0.00	0.00	0.00	28.27	51.13	323.72	625.39	99.54	179.27	0.00	0.00	22.86	301.68
101	Total APGENCO				8,470.55	13,994.75	965.00	1,786.94	2,287.73	4,581.73	8.67	0.00	0.00	0.00	378.22	684.11	3,639.62	7,052.79	821.94	2,294.00	(8.67)	0.00	305.89	3,413.17
APPDCL																								
6	SDSTPS Stage-I	1600	100%	1600.00	6,596.68	4,482.95	0.00	457.26	2,663.88	1,170.05	0.00	0.00	0.00	0.00	0.00	0.00	2,663.88	1,627.31	457.26	(1,493.83)	0.00	0.00	0.00	(1,036.57)
102	Total APPDCL				6,596.68	4,482.95	0.00	457.26	2,663.88	1,170.05	0.00	0.00	0.00	0.00	0.00	0.00	2,663.88	1,627.31	457.26	(1,493.83)	0.00	0.00	0.00	(1,036.57)
TSGENCO																								
7	KTPS A,B & C	720	46.11%	331.99	1,991.60	403.31	213.39	50.76	543.71	112.23	0.00	0.00	0.00	1.26	0.00	17.62	757.10	181.87	(162.63)	(431.48)	0.00	1.26	17.62	(575.23)
8	KTPS Stage V	500	46.11%	230.55	1,620.08	334.95	104.75	24.90	327.26	88.62	3.74	0.00	0.00	0.87	0.00	12.23	435.75	126.62	(79.85)	(238.64)	(3.74)	0.87	12.23	(309.13)
9	RTS B	62.5	46.11%	28.82	154.63	39.11	23.43	4.70	47.93	11.13	0.00	0.58	0.00	0.11	0.00	1.53	71.36	18.04	(18.73)	(36.80)	0.58	0.11	1.53	(53.32)
10	Kakatiya Thermal Pow er Plant Stage I	500	46.11%	230.55	1,589.20	358.42	251.84	49.21	336.91	104.08	0.00	0.00	0.00	0.87	0.00	12.23	588.75	166.40	(202.63)	(232.83)	0.00	0.87	12.23	(422.35)
11	KTPS Stage VI	500	46.11%	230.55	1,612.24	357.11	252.00	47.60	325.67	116.67	0.00	0.00	0.00	0.87	0.00	12.23	577.67	177.38	(204.40)	(209.00)	0.00	0.87	12.23	(400.29)
103	Total TSGENCO				6,967.75	1,492.89	845.41	177.17	1,581.48	432.73	3.74	0.58	0.00	3.98	0.00	55.85	2,430.63	670.31	(668.24)	(1,148.75)	(3.16)	3.98	55.85	(1,760.32)
APGENCO Hydel																								
12	MACHKUND PH AP Share	84	46.11%	38.73	144.05	233.82	16.51	25.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.51	25.35	8.84	0.00	0.00	0.00	0.00	8.84
13	TUNGBHA DRA PH AP Share	57.6	46.11%	26.56	63.84	70.84	7.32	17.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.32	17.38	10.06	0.00	0.00	0.00	0.00	10.06
14	Upper Sileru Pow er House	240	100%	240.00	450.78	471.67	46.11	55.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.11	55.84	9.73	0.00	0.00	0.00	0.00	9.73
15	Lower Sileru Pow er House	460	100%	460.00	1,093.36	1,087.39	111.85	107.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.85	107.03	(4.82)	0.00	0.00	0.00	0.00	(4.82)
16	DONKARAYI	25	100%	25.00	104.87	118.17	10.73	5.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.73	5.82	(4.91)	0.00	0.00	0.00	0.00	(4.91)
17	Srisailam Right Bank Pow er House	770	100%	770.00	973.68	558.92	168.89	168.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	168.89	168.89	0.00	0.00	0.00	0.00	0.00	0.00
18	Ramagiri Wind Mills	0	100%	0.00	0.00	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Nagarjunasagar Right Bank Pow er House	90	100%	90.00	130.13	56.54	17.74	17.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.74	17.74	0.00	0.00	0.00	0.00	0.00	0.00
20	Penna Ahobilam	20	100%	20.00	6.40	3.68	10.44	10.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.44	10.44	0.00	0.00	0.00	0.00	0.00	0.00
21	MINI HY DEL(Chettipeta)	1	100%	1.00	2.59	2.25	0.77	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.00	0.00	0.00	0.00	0.00	0.00
22	Nagarjunasagar Tail Pond Dam Pow er House	50	100%	50.00	173.25	0.00	48.26	22.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.26	22.11	(26.15)	0.00	0.00	0.00	0.00	(26.15)
65	NSTPHES (AP)						0.00	9.52	0.00	20.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.11	20.11	0.00	0.00	0.00	0.00
23	Nagarjunasagar Pow er House (TS)						0.00	30.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
104	Total APGENCO Hydel				3,142.95	2,643.56	438.62	451.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	438.62	451.48	12.86	0.00	0.00	0.00	0.00	12.86
CGS																								
24	NTPC (SR)-Ramagundam Stage1&2	2100	14.92%	313.24	2,253.07	1,755.32	148.50	124.11	477.65	432.43	6.30	0.00	0.00	0.00	0.00	0.00	632.45	556.54	(24.39)	(45.22)	(6.30)	0.00	0.00	(75.91)
25	NTPC (SR)-Ramagundam Stage 3	500	15.70%	78.48	578.77	473.97	40.65	31.43	120.96	116.18	2.01	0.00	0.00	0.00	0.00	0.00	136.62	147.62	(9.22)	(4.78)	(2.01)	0.00	0.00	(16.00)
26	Talcher Stage 2	2000	9.22%	184.40	1,493.02	1,195.21	92.66	81.28	236.84	190.87	4.78	0.00	0.00	0.00	0.00	0.00	334.28	272.15	(11.38)	(45.97)	(4.78)	0.00	0.00	(62.13)
27	NLC TS-II Stage-I	630	8.49%	53.49	225.50	213.06	22.52	21.18	78.25	64.56	0.00	0.00	0.00	0.00	0.00	0.00	100.77	85.74	(1.34)	(13.69)	0.00	0.00	0.00	(15.03)
28	NLC TS-II Stage-II	840	11.20%	94.08	415.29	423.01	38.77	35.93	144.11	126.85	0.00	0.00	0.00	0.00	0.00	0.00	182.88	162.78	(2.84)	(17.26)	0.00	0.00	0.00	(20.10)
29	NPC-MAPS	420	4.83%	20.29	109.99	104.96	0.00	0.00	23.76	29.39	0.00	0.00	0.00	0.00	0.00	0.00	23.76	29.39	0.00	5.63	0.00	0.00	0.00	5.63
30	NPC-Kaiga unit I&ii	420	14.93%	62.71	395.59	457.92	0.00	0.00	123.82	172.72	0.00	0.00	0.00	0.00	0.00	0.00	123.82	172.72	0.00	48.90	0.00	0.00	0.00	48.90
31	NPC-Kaiga unit III&IV	420	15.81%	66.40	397.04	457.92	0.00	0.00	124.27	172.72	0.00	0.00	0.00	0.00	0.00	0.00	124.27	172.72	0.00	48.45	0.00	0.00	0.00	48.45
32	NTPC Simhadri Stage I	1000	46.11%	461.10	3,429.14	2,684.89	297.87	442.97	891.58	761.25														

Application for True-up for FY 2017-18

Station No	Station	Installed Capacity (MW)	AP Share (%)	AP Share (MW)	Energy Purchased (MU)		Cost Components (Rs.Cr)										Cost Variance Claim (Rs.Cr)								
					Tariff Order	Actual	Fixed		Variable		Incentive		Income Tax		Others		Total		Fixed	Variable	Incentive	Income Tax	Others	Total	
						Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Tariff Order	Actual	Variance	Variance	Variance	Variance	Variance	Variance	Variance	Variance	
APGCL																									
39	APGCL I - Allocated capacity	100	9.33%	9.33	27.79	33.69	1.05	6.83	6.50	11.58	0.00	0.00	0.00	0.00	0.00	0.00	7.55	18.41	5.78	5.08	0.00	0.00	0.00	10.86	
40	APGCL II - Allocated capacity	172	14.51%	24.96	99.55	113.32	4.25	4.25	20.81	24.46	0.00	0.00	0.00	0.00	0.00	0.00	25.06	28.71	0.00	3.65	0.00	0.00	0.00	3.65	
106	Total APGCL				127.34	147.01	5.30	11.08	27.31	36.04	0.00	0.00	0.00	0.00	0.00	0.00	32.61	47.12	5.78	8.73	0.00	0.00	0.00	14.51	
IPPs - Gas																									
41	Spectrum	205	46%	94.53	0.00	560.40	0.00	5.00	0.00	181.13	0.00	0.00	0.00	0.00	0.00	0.00	186.13	5.00	181.13	0.00	0.00	0.00	0.00	186.13	
42	Kondapalli (Gas)	355	46%	163.69	0.00	645.05	0.00	64.30	0.00	144.18	0.00	0.00	0.00	0.00	0.00	0.00	208.49	64.30	144.18	0.00	0.00	0.00	0.00	208.49	
43	BSES	220	46%	101.44	346.49	0.00	26.14	0.00	72.76	0.00	0.00	0.00	0.00	0.00	0.00	98.90	0.00	(26.14)	(72.76)	0.00	0.00	0.00	0.00	(96.90)	
44	GGPP	216	100%	216.00	0.00	1,030.25	0.00	21.23	0.00	250.33	0.00	0.00	0.00	0.00	0.00	0.00	271.56	21.23	250.33	0.00	0.00	0.00	0.00	271.56	
107	Total IPPs - Gas				346.49	2,235.69	26.14	90.53	72.76	575.64	0.00	0.00	0.00	0.00	0.00	0.00	98.90	666.18	64.39	502.88	0.00	0.00	0.00	567.28	
NCE																									
45	NCE - Bio-Mass					338.98	191.15	0.00	0.00	223.73	109.38	0.00	0.00	0.00	0.00	0.00	0.00	223.73	109.38	0.00	(114.35)	0.00	0.00	0.00	(114.35)
46	NCE - Bagasse					100.37	67.18	0.00	0.00	46.17	25.09	0.00	0.00	0.00	0.00	0.00	0.00	46.17	25.09	0.00	(21.08)	0.00	0.00	0.00	(21.08)
47	NCE - Industrial Waste based power project					33.97	17.10	0.00	0.00	21.71	9.81	0.00	0.00	0.00	0.00	0.00	0.00	21.71	9.81	0.00	(11.90)	0.00	0.00	0.00	(11.90)
48	NCE - Wind Power					6,190.56	6,069.50	0.00	0.00	2,699.08	2,577.32	0.00	216.83	0.00	0.00	0.00	2,699.08	2,794.15	0.00	(121.76)	216.83	0.00	0.00	0.00	95.07
49	NCE - Mini Hydel					98.02	76.73	0.00	0.00	31.17	21.93	0.00	0.00	0.00	0.00	0.00	0.00	31.17	21.93	0.00	(9.24)	0.00	0.00	0.00	(9.24)
50	NCE - NCL Energy Ltd					10.87	10.37	0.00	0.00	1.97	1.87	0.00	0.00	0.00	0.00	0.00	0.00	1.97	1.87	0.00	(0.10)	0.00	0.00	0.00	(0.10)
51	NCE - Solar					3,543.69	3,356.14	0.00	0.00	1,881.70	1,757.60	0.00	0.00	0.00	0.00	0.00	0.00	1,881.70	1,757.60	0.00	(124.10)	0.00	0.00	0.00	(124.10)
108	Total NCE					10,316.46	9,788.17	0.00	0.00	4,905.53	4,503.01	0.00	216.83	0.00	0.00	0.00	4,905.53	4,719.84	0.00	(402.52)	216.83	0.00	0.00	0.00	(505.69)
IPPs - Others																									
52	Srivatsa (Exclusive EPCL)	17,202	100.00%	17.20	36.85	53.43	3.00	3.17	10.81	14.30	0.00	0.00	0.00	0.00	0.00	0.00	13.81	17.47	0.17	3.49	0.00	0.00	0.00	3.66	
53	KSK Mahanadi (MT)	400	100.00%	400.00	2,592.40	1,880.14	355.16	260.99	596.25	502.52	0.00	0.00	0.00	0.00	0.00	0.00	951.41	763.52	(94.17)	(93.73)	0.00	0.00	0.00	(187.89)	
54	Hinduja	1040	100.00%	1040.00	2,822.55	3,283.78	0.00	0.00	1,130.61	1,254.40	0.00	0.00	0.00	0.00	0.00	0.00	1,130.61	1,254.40	0.00	123.79	0.00	0.00	0.00	123.79	
55	Thermal Power Tech	500	46.11%	230.55	1,716.32	1,750.46	305.50	309.84	326.10	321.37	0.00	0.00	0.00	0.00	0.00	0.00	631.60	631.21	4.34	(4.73)	0.00	0.00	0.00	(0.39)	
56	600MV DBFO	1000	60.00%	600.00	1,089.74	0.00	0.00	44.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	444.62	0.00	0.00	(444.62)	0.00	0.00	0.00	(444.62)	
109	Total IPPs - Others					8,257.86	6,967.82	663.66	574.01	2,508.39	2,092.59	0.00	0.00	0.00	0.00	0.00	0.00	3,172.05	2,666.60	(89.65)	(415.80)	0.00	0.00	0.00	(505.45)
Market																									
57	UI					0.00	219.34	0.00	0.00	94.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.12	0.00	94.12	0.00	0.00	0.00	94.12	
58	Other Short Term Sources					195.67	2,820.30	0.00	50.16	79.83	744.31	0.00	0.00	0.00	0.00	0.00	0.00	79.83	794.48	50.16	664.48	0.00	0.00	0.00	714.65
59	Reactive Charges					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	Total Market					195.67	3,039.64	0.00	50.16	79.83	838.43	0.00	0.00	0.00	0.00	0.00	0.00	79.83	888.60	50.16	758.60	0.00	0.00	0.00	808.77
60	Sale of Surplus Power					0.00	(1,540.40)	0.00	0.00	0.00	(647.16)	0.00	0.00	0.00	0.00	0.00	0.00	(647.16)	0.00	(647.16)	0.00	0.00	0.00	0.00	(647.16)
Transmission Charges																									
61	APTRANSCO Transmission Charge					0.00	0.00	1,287.26	941.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,287.26	941.31	(345.95)	0.00	0.00	0.00	0.00	(345.95)	
62	SLDC Charges					0.00	0.00	37.89	33.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.89	33.10	(4.79)	0.00	0.00	0.00	0.00	(4.79)	
63	PGC Expenses					0.00	0.00	399.74	903.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	399.74	903.97	504.23	0.00	0.00	0.00	0.00	504.23	
64	ULDC Charges					0.00	0.00	14.84	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84	3.12	(11.72)	0.00	0.00	0.00	0.00	(11.72)	
111	Total Transmission Charges					0.00	0.00	1,739.73	1,881.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,739.73	1,881.49	141.76	0.00	0.00	0.00	0.00	141.76	
66	SDSTS Additional Fixed Cost					0.00	946.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	946.66	946.66	0.00	0.00	0.00	0.00	0.00	946.66	
	Total					56,583.55	56,023.51	5,766.01	7,693.77	17,056.66	17,261.54	29.66	217.41	0.00	3.98	378.22	739.96	23,230.55	25,916.67	1,927.76	204.88	187.75	3.98	361.74	2,686.12