



ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION
4th Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

Present

Sri. Justice G. Bhavani Prasad, Chairman
Dr. P. Raghu, Member
Sri. P. Rama Mohan, Member

Dated 23rd March, 2015

In the matter of

POWER PURCHASE PRICE DETERMINATION FOR RESCOS DURING FY2015-16

The Anakapalle Rural Electric Cooperative Society Ltd,	OP. No. 60 of 2014
The Chipurupalli Rural Electric Cooperative Society Ltd and,	OP. No. 61 of 2014
The Kuppam Rural Electric Cooperative Society Ltd.	OP .No. 62 of 2014

.....Applicants

The Aggregate Revenue Requirement filed by the Anakapalle Rural Electric Cooperative Society Ltd(Anakapalle RESCO), the Cheepurupalli Rural Electric Cooperative Society Ltd(Cheepurupalli RESCO) and The Kuppam Rural Electric Cooperative Society Ltd(Kuppam RESCO) in respect of their individual distribution and retail supply businesses for FY2015-16 for determination of Power Purchase Price to be paid by the applicants to the distribution licensees (from whom the applicants purchase the power) came up for consideration before the Commission. Upon careful consideration of the material available on record and additional information made available by the applicants, the Commission hereby passes this common order:

ORDER

Introduction

1. The three Rural Electric Cooperative Societies (RESCOs henceforth) in Andhra Pradesh State purchase electricity from distribution licensees for retail sale of electricity to consumers connected to Low Tension (LT) network in their designated areas of supply¹. Under the current regulatory provisions, the electricity purchased from distribution licensees by RESCOs is sold to retail consumers in their designated areas of supply at the tariff for retail sale of electricity as applicable to distribution licensees. The three RESCOs have filed the Aggregate Revenue Requirement (ARR) with the Commission for determination of Power Purchase Price to be paid to distribution licensees for supplies during FY2015-16². The Commission has taken these filings on record and used the information provided in these filings in determination of the power purchase price for each RESCO to be paid by RESCO to distribution licensee (Anakapalle and Cheepurupalli RESCOs to EPDCL and Kuppam RESCO to SPDCL) from whom they draw the electricity during FY2015-16 as detailed hereunder:

Methodology

2. The methodology for determination of power purchase price for a RESCO has been devised in such a manner that the RESCO after meeting its expenses prudently towards distribution and retail sale of electricity (excluding power purchase cost) from its revenues, remits the remaining revenue towards power purchase cost to the Distribution licensee who supplies the electricity to the RESCO. In this framework, the Commission;
 - a) Determines the expenditure/ARR for a RESCO towards distribution and retail sale of electricity (excluding power purchase cost) in its area of supply for a year (Expenditure),
 - b) Determines the sales volume in the area of supply of a RESCO and computes the revenue from the sale of electricity (at approved sales and tariff for retail sale of electricity) for a year (Revenue),
 - c) Determines the power purchase requirement/quantity for a RESCO based on the approved volume of sales and loss levels for a year (Power Purchase Quantity),

¹ Anakapalle RESCO has the designated area of supply in Visakhapatnam district and Cheepurupalli RESCO has the designated area of supply in Vizianagaram district, and these two RESCOs draw the electricity from Eastern Power Distribution Company of Andhra Pradesh Ltd (EPDCL). The Kuppam RESCO has the designated area of supply in Chittoor District and draws the electricity from Southern Power Distribution Company of Andhra Pradesh Ltd (SPDCL).

² The filing dates are: Anakapalle RESCO and Cheepurupalli RESCO-22/12/2014, Kuppam RESCO-28/11/2014.

- d) Computes the surplus available with a RESCO by deducting the expenditure from revenue and considers this amount as available for power purchase from the distribution licensee and
- e) Computes the power purchase price for a RESCO by dividing the amount available for purchase with the power purchase requirement/quantity determined for that RESCO.

Aggregate Revenue Requirement (ARR)

3. The gross ARR for a RESCO consists of a) return on capital computed on net capital base of RESCO and b) expenditure towards distribution and retail supply activities excluding power purchase cost. The gross ARR thus reflects the total expenditure to be recovered from the consumers to meet the capital and operating cost of a RESCO. The net ARR for a RESCO is the gross ARR net of non-tariff income (which is likely to be fixed in nature and independent of levy of charges and rates). The Commission has computed the net ARR for each RESCO for FY2015-16.

Return on Capital

4. The RESCOs have filed the capital base details for FY2015-16 in accordance with the format issued for this purpose by the Commission. The RESCOs are eligible to compute and claim 16% return on net capital as return on capital employed in the business during a year. Of the three RESCOs, Anakapalle RESCO has claimed the capital cost at ₹ 410.16 lakh and Cheepurupalli RESCO has claimed ₹ 44.07 lakh for FY2015-16 and the Commission has approved the same to be included in the ARR of these two RESCOs. In case of Kuppam RESCO, the net capital base has become negative on account of huge consumer contributions to the capital base and thus the RESCO did not claim the return on capital for FY 2015-16. The details of capital base and return on capital employed are given in Annexure-01.

Expenditure

5. The three RESCOs have filed the expenditure details for FY2015-16 in accordance with the format issued for this purpose. The Commission has approved the expenditure as filed by RESCOs for FY2015-16 with the following modifications/additions/deletions for FY2015-16;

- a) In case of Anakapalle RESCO, the Commission has provided ₹ 600 lakh as one time special expenditure provision to meet the damages caused by HUD HUD cyclone, 2014 to its distribution infrastructure against the RESCO's request of ₹ 800 lakh during FY2015-16. The Commission directs that:

The Anakapalle RESCO shall file quarterly reports during FY2015-16 with regard to the utilization of ₹ 600 lakh expenditure provided in this Order to meet the damages caused

by HUD HUD cyclone to its distribution infrastructure. The RESCO may stop filing of such quarterly reports after the amount is completely utilized for this purpose.

b) In case of Cheepurupalli RESCO, the Commission has disallowed the expenditure items under the heads of a) bad debts (₹ 21.71 lakh) and b) contribution to contingency reserve (₹5 lakh) with the view that the RESCO shall collect the dues from consumers on 100% basis and does not require contingency reserves under the present regulatory framework.

6. With these modifications to the filings made by the RESCOs, the Commission has computed the total expenditure at ₹ 3571 lakh for Anakapalle RESCO, ₹ 1101 lakh for Cheepurupalli RESCO and ₹ 1821 lakh for Kuppam RESCO during for FY2015-16. The expenditure details are given in annexure-02.

Non-Tariff Income

7. The RESCOs also earn some income from non-tariff sources (non-tariff income) such as customer charges, penalties, interest on deposits etc. The Commission has approved the non-tariff income as estimated and filed by RESCOs in their respective ARR filings at ₹ 628 lakh for Anakapalle RESCO, ₹ 259 lakh for Cheepurupalli RESCO and ₹ 105 lakh for Kuppam RESCO during FY2015-16.

Aggregate Revenue Requirement (ARR)

8. The Commission has computed the ARR for each RESCO (by adding return on capital and expenditure and then deducting the non-tariff income) for FY2015-16 at ₹ 3354 lakh for Anakapalle RESCO, ₹ 886 lakh for Cheepurupalli RESCO and ₹ 1715 lakh for Kuppam RESCO and these details are given in the table below.

Aggregate Revenue Requirement for RESCOs during FY2015-16(₹lakh)

Item	Anakapalle	Cheepurupalli	Kuppam
01. Return on Capital	410.16	44.07	0.00
02. Expenditure	3571.21	1100.67	1820.55
03. Gross ARR(01+02)	3981.37	1144.74	1820.55
04. Non-Tariff Income	627.59	259.00	105.20
05. Net ARR(03-04)	3353.78	885.74	1715.35

Sales, Power Purchase and Revenue from Tariffs

9. The Commission has determined the sales volume for the area of supply of each RESCO separately, after considering the historical sales volumes in the respective area of supply, distribution licensees' proposed sales volume to each RESCO and RESCO's proposed sales volumes, at 184 MU for Anakapalle RESCO, 57 MU for Cheepurupalli RESCO and 267 MU for Kuppam RESCO during FY2015-16. The Commission has computed the power purchase

requirement, by grossing up the sales with applicable loss levels, at 210 MU for Anakapalle RESCO, 66 MU for Cheepurupalli RESCO and 310 MU for Kuppam RESCO during FY2015-16.

10. Since RESCOs also sell electricity at the tariff determined for distribution licensees for retail sale of electricity, the revenue from tariff for each RESCO has been estimated at the tariff applicable for retail sale of electricity during FY2015-16 with corresponding sales volumes for FY2015-16. The revenue from tariffs has been computed on sales apportioned to different consumer categories at ₹ 6246 lakh for Anakapalle RESCO, ₹ 1028 lakh for Cheepurupalli RESCO and ₹ 2467 lakh for Kuppam RESCO during FY2015-16 and these details are given in annexure-03 and the summary is given in table below.

Sales, Power Purchase and Revenue from Tariffs during FY2015-16

Item	Anakapalle	Cheepurupalli	Kuppam
01. Sales, MU	183.57	56.99	266.52
02. Power Purchase Quantity, MU	210.06	65.89	310.13
03. Revenue from Tariff, ₹ lakh	6246.37	1027.58	2466.69

Excess Drawals by RESCOs during FY2015-16

11. The RESCOs may, without any restriction, draw the required additional quantum of energy to meet the requirement of additional sales to non-agricultural consumer categories from respective distribution licensees during FY2015-16. The additional net revenue that accrues to RESCOs as a result of higher sales volume to nonagricultural consumer categories will be transferred to Distribution licensees on completion of FY2015-16 through ARR determination for FY2016-17 or FY2017-18.
12. In case of supplies to agriculture, the RESCOs shall make all possible efforts not to exceed the sales volume approved in this Order while strictly implementing the polices of distribution licensee(from whom the RESCOs draw the power) in supplying energy to agriculture in its area of supply. Any excess sales volume to this consumer category will be reviewed separately in consultation with the distribution licensees.
13. However, the RESCOs shall continue to pay the rates determined for power purchase in this Order for excess volume also for all consumer categories during FY2015-16.

Surplus Available with RESCOs and Power Purchase Price for FY2015-16

14. The Commission, with the net ARR and Revenue from tariff as determined above, has computed the surplus available with RESCOs at ₹ 2893 lakh in Anakapalle RESCO, ₹ 142 lakh in Cheepurupalli

RESCO and ₹ 751 lakh in Kuppam RESCO during FY2015-16. The power purchase price for each RESCO has been determined (dividing the available surplus by approved power purchase quantity) at ₹ 1.38/kWh for Anakapalle RESCO, ₹ 0.22 /kWh for Cheepurupalli RESCO and ₹ 0.24/kWh for Kuppam RESCO during FY2015-16. The details are given in the table below:

Power Purchase Price for FY2015-16

Item	Anakapalle	Cheepurupalli	Kuppam
01. Net ARR (₹lakh)	3353.78	885.74	1715.35
02. Revenue (₹lakh)	6246.37	1027.58	2466.69
03. Surplus Available for Power Purchase ⁽⁰²⁻⁰¹⁾ (₹lakh)	2892.59	141.84	751.34
04. Power Purchase Quantity Approved (MU)	210.06	65.89	310.13
05. Power Purchase Price(03/04) ₹/ kWh	1.38	0.22	0.24

Conclusion

15. The Commission has not accepted the RESCOs' submissions to the extent modified in this Order and has recomputed the ARR, Power Purchase Requirement, Revenue from Tariff and the Available Surplus based on alternate calculations for FY2015-16. The Commission has determined the Power Purchase Price (in accordance with para 14) to be paid by RESCO for energy drawals from distribution licensees during FY2015-16 and each RESCO shall pay the Power Purchase Price determined in this Order to the respective distribution licensee for the energy drawals during FY2015-16.
16. The RESCO shall implement the tariff for retail sale of electricity determined by the Commission in its Order in O.P. No.1 of 2015 and O.P. No.2 of 2015 dated 23-03-2015 in their respective areas of supply as communicated separately in this regard.

This Order is signed on 23rd day of March, 2015.

Sd/-

**P. RAMA MOHAN
MEMBER**

Sd/-

**P. RAGHU
MEMBER**

Sd/-

**G.BHAVANI PRASAD
CHAIRMAN**

Annexure-01: Capital Base and Return on Capital during FY2015-16

Capital Base Item(₹ lakh)	Anakapalle		Cheepurupalli		Kuppam	
	RESCO	APERC	RESCO	APERC	RESCO	APERC
A: Positive Elements (01+...+05)	12121.87	12121.87	2125.93	2125.93	4020.41*	4020.41*
01. Original Cost of Fixed Assets	11836.87	11836.87	1813.66	1813.66	3336.26	3336.26
02. Cost of works in progress	250.00	250.00	209.56	209.56	556.55	556.55
03. Working Capital						
04. Average Cost of Stores	25.00	25.00	6.65	6.65	22.00	22.00
05. Avg. Cash and Bank balance	10.00	10.00	96.06	96.06	105.60	105.60
B: Negative Elements (06+...+11)	6098.62	6098.62	1850.50	1850.50	6429.14	6429.14
06. Accumulated Depreciation	2467.38	2467.38	1061.19	1061.19	5136.02	5136.02
07. Approved Loans	1000.00	1000.00	0.00	0.00	865.67	865.67
08. Consumer Security Deposit	256.00	256.00	126.40	126.40	396.45	396.45
09. Grants, aids & Subsidies	0.00	0.00	0.00	0.00	0.00	0.00
10. T&D Reserves	85.60	85.60	0.00	0.00	31.00	31.00
11. Consumer Contributions	2289.64	2289.64	662.91	662.91	0.00	0.00
C: Net Capital Base(A-B)	6023.25	6023.25	275.43	275.43	-2408.73	-2408.73
D: Return on Net Capital Base	410.16	410.16	44.07	44.07	0.00	0.00
<i>* Excluding consumer contributions.</i>						

Annexure-02: Expenditure Items for RESCOs during FY2015-16

Expenditure Item(₹ lakh)	Anakapalle		Cheepurupalli		Kuppam	
	RESCO	APERC	RESCO	APERC	RESCO	APERC
01. Wages and Salaries	1720.00	1720.00	746.10	746.10	676.15	676.15
02. Admin. & General Expenses	75.00	75.00	35.00	35.00	40.00	40.00
03. Repairs and Maintenance	200.00	200.00	79.78	79.78	146.30	146.30
04. Rent, Rates & Taxes	10.00	10.00	8.00	8.00	1.65	1.65
05. Approved Loan Interest	0.00	0.00	12.00	12.00	69.03	69.03
06. Depreciation	721.21	721.21	51.21	51.21	590.82	590.82
07. Contbn. to Employee Funds	150.00	150.00	71.00	71.00	93.01	93.01
08. Contbn. to Gratuity Funds	40.00	40.00	65.00	65.00		
09. Interest on Security Deposit	8.00	8.00	11.38	11.38	31.00	31.00
10. Legal Charges	5.00	5.00	5.00	5.00	0.50	0.50
11. Auditors' Fees	12.00	12.00	3.00	3.00	0.00	0.00
12. Int. on Share Capital	0.00	0.00	13.20	13.20	0.00	0.00
13. Bad Debts	0.00	0.00	21.71	0.00	0.00	0.00
14. Contbn.to Contingency Reserves	0.00	0.00	5.00	0.00	0.00	0.00
13. Taxes	30.00	30.00	30.00	30.00	0.00	0.00
14. Provision for HUD HUD cyclone loss	0.00	600.00	0.00	0.00	0.00	0.00
15. Others	0.00	0.00	0.00	0.00	23.97	23.97
16. Domestic tariff expenditure 2013-14	0.00	0.00	0.00	0.00	148.12	148.12
17. Errors and Omissions	0.00	0.00	0.00	-30.00	0.00	0.00
18. Expenditure	2971.21	3571.21	1157.38	1100.67	1820.55	1820.55

Annexure-03: Sales, Power Purchase and Revenue from Tariff

Anakapalle RESCO: Sales and Revenue during FY2015-16

Sales, Power Purchase and Revenue	RESCO		APERC	
	Sales (MU)	Revenue (₹lakh)	Sales (MU)	Revenue (₹lakh)
Consumer Category				
LT-I: Domestic	109.33	3076.45	91.56	2576.39
LT-II: Non-Domestic	13.02	1129.21	10.91	955.72
LT-III: Industry	33.27	2334.16	27.86	2052.49
LT-IV: Cottage Industries	0.03	1.06	0.02	0.93
LT-V: Agriculture	42.17	0.00	41.40	0.00
LT-VI: Street Lighting	12.86	665.30	10.77	585.02
LT-VII: General	1.09	70.65	0.91	61.62
LT-VIII: Temporary	0.17	16.14	0.14	14.19
Total	211.94	7292.97	183.57	6246.37
Power Purchase Quantity	238.42	n.a.	210.06	n.a.

Cheepurupalli RESCO: Sales and Revenue during FY2015-16

Sales, Power Purchase and Revenue	RESCO		APERC	
	Sales (MU)	Revenue (₹lakh)	Sales (MU)	Revenue (₹lakh)
Consumer Category				
LT-I: Domestic	23.30	519.72	20.53	457.80
LT-II: Non-Domestic	3.12	275.12	2.75	251.34
LT-III: Industry	2.82	205.40	2.48	189.60
LT-IV: Cottage Industries	0.00	0.00	0.00	0.00
LT-V: Agriculture	30.49	1.30	28.99	1.30
LT-VI: Street Lighting	2.38	127.95	2.09	118.34
LT-VII: General	0.17	10.23	0.15	9.20
LT-VIII: Temporary	0.00	0.00	0.00	0.00
Total	62.28	1139.72	56.99	1027.58
Power Purchase Quantity	72.00	n.a.	65.89	n.a.

Kuppam RESCO: Sales and Revenue during FY2015-16

Sales, Power Purchase and Revenue	RESCO		APERC	
	Sales (MU)	Revenue (₹lakh)	Sales (MU)	Revenue (₹lakh)
Consumer Category				
LT-I: Domestic	28.49	891.84	24.37	580.82
LT-II: Non-Domestic	7.56	689.39	6.47	644.42
LT-III: Industry	4.48	346.96	3.83	306.57
LT-IV: Cottage Industries	0.00	0.00	0.00	0.00
LT-V: Agriculture	443.48	109.61	213.30	0.00
LT-VI: Street Lighting	21.01	993.16	17.98	887.41
LT-VII: General	0.55	41.77	0.47	34.16
LT-VIII: Temporary	0.11	14.87	0.09	13.32
Total	505.68	3087.60	266.52	2466.69
Power Purchase Quantity	588.29	n.a.	310.13	n.a.