# **Retail Supply Tariffs** 2018-19



## **ORDER** on **Tariff for Retail Sale of Electricity** during FY2018-19

27<sup>th</sup> March, 2018

**Andhra Pradesh** Electricity Regulatory Commission 4<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500 004



## Andhra Pradesh Electricity Regulatory Commission

4<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500 004

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# Tariff for Retail Sale of Electricity during FY2018-19

In the areas of Supply of

Southern Power Distribution Company of A.P. Ltd. (APSPDCL) and Eastern Power Distribution Company of A.P. Ltd. (APEPDCL)

27<sup>th</sup> March, 2018

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#### ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION HYDERABAD

#### Present

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

Dated 27<sup>th</sup> March, 2018

In the matter of

## TARIFF DETERMINATION FOR RETAIL SALE OF ELECTRICITY DURING FY2018-19

in

O.P.No.60 of 2017 Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL) and

#### **O.P.No.61 of 2017** Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL)

The Aggregate Revenue Requirement (ARR) and Filing for Proposed Tariff (FPT) filed by Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL or EPDCL), vide O.P.No. 60 of 2017 and Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL or SPDCL), vide O.P.No.61 of 2017 in respect of their individual Retail Supply businesses for various consumer categories for FY2018-19 came up for consideration before the Commission. Upon following the procedure prescribed for determination of such tariff u/s 64 of the Electricity Act, 2003 (Central Act No.36 of 2003) and after careful consideration of the material available on record, the Commission in exercise of the powers vested in it under the said Central Act No.36 of 2003, The Andhra Pradesh Electricity Reform Act, 1998 (State Act 30 of 1998) and the APERC (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulation, 2005 (Regulation No.4 of 2005); hereby passes this common order:

## ORDER CHAPTER – I INTRODUCTION

1 Consequent to coming into force of the Andhra Pradesh Reorganization Act, 2014 (Central Act No.6 of 2014) (hereinafter referred to as the Reorganization Act) and in terms of the provisions of Section 92 of the said Act read with Schedule XII (C) (3) and Section 82 of the Electricity Act, 2003, the Government of Andhra Pradesh issued notification in G.O.Ms.No.35, Energy (Power III) Department, dt.01.08.2014 and constituted the Andhra Pradesh Electricity Regulatory Commission.

#### **APERC** (Adaptation Regulation), 2014

2 In exercise of the power conferred by Section 181 of the Electricity Act, 2003 (Central Act No.36 of 2003) and all other powers thereunto enabling, including those conferred by the Andhra Pradesh Electricity Reform Act, 1998 (State Act No.30 of 1998) and the Reorganization Act, the Commission issued APERC (Adaptation) Regulation, 2014 (Regulation No.4 of 2014) and notified that with effect from 01.08.2014, all regulations made by, all decisions, directions or orders of, and all the licenses and practice directions issued by the Commission in existence as on the date of G.O.Ms.No.35 dt.01.08.2014 referred to above, shall apply in relation to the State of Andhra Pradesh and shall continue to have effect until duly altered, repealed or amended. The said Regulation No.4 of 2014 was published in the Extraordinary Gazette of the State of Andhra Pradesh on 29.11.2014.

#### Antecedents of Tariff Determination for FY2018-19

- **3** Regulation No.4 of 2005 notified by the Commission, introduced Multi Year Tariff (MYT) framework and accordingly, each distribution licensee has to file ARR along with FPT with the Commission for determination of Tariff for (a) Distribution business (Wheeling Charges) and (b) Retail Supply Business for a period of 5 years (called Control Period). The 3<sup>rd</sup> Control Period covers five years from FY2014-15 to FY2018-19.
- 4 With regard to determination of Retail Supply Tariff for the 3<sup>rd</sup> Control Period, the Licensees expressed their inability to submit filings for Retail Supply business for a period of 5 years from FY2014-15 to FY2018-19, as per MYT framework and instead

sought the approval of the then Commission to file ARR and FPT on annual basis for FY2014-15 citing certain reasons and the then Commission permitted the Licensees to file the ARRs and FPTs for retail supply business for FY2014-15. In view of the constraints/difficulties/uncertainties expressed by the Distribution licensees, this Commission permitted them to file ARRs and FPTs relating to retail supply business on annual basis for FY2015-16, FY2016-17, FY2017-18 and FY2018-19 also.

#### Filing Requirements and permission for Annual Filings

- 5 The Central Act No.36 of 2003 as well as the Regulation No.4 of 2005 mandate that a distribution licensee shall file for each of its licensed business an application, in such form and in such manner as specified and in accordance with the guidelines issued by the Commission, for each year of the Control Period, not less than 120 days before the commencement of the first year of the Control Period, for approval of the Commission. As the EPDCL and SPDCL (hereinafter jointly referred to as the 'Distribution Companies' or 'DISCOMs' or 'Licensees'), have to file their Aggregate Revenue Requirement (ARR) and Filings of Proposed Tariff (FPT) before 30.11.2017 under Regulation No.4 of 2005, the Commission brought the same to their notice by separate letters date: 01.11.2017.
- **6** By letter dt.15.11.2017, APEPDCL on its behalf and on behalf of APSPDCL requested that for the reasons mentioned therein, the requirements of multi-year filing for retail supply business should be waived and permission may be given for filing ARR and tariff petitions for retail supply business on an annual basis during the 3<sup>rd</sup> control period. As an alternate measure and given the significant nature of both supply and demand side uncertainties existing now, it was requested that the Commission may allow the distribution licensees to file ARR and tariff petitions for retail supply business for FY2018-19. In view of the constraints/ difficulties / uncertainties expressed by the distribution licensees, the Commission in its Proceedings No. T-70/2017/23, dt.23.11.2017 permitted them to file ARR/Tariff Petitions relating to their retail supply businesses on annual basis for FY2018-19 which is the last year of the 3<sup>rd</sup> Control Period.

#### **ARR Filings for FY2018-19 and Public Notice**

7 On 01.12.2017, Licensees filed separate applications for approval of their Aggregate Revenue Requirement (ARR) and Filing for Tariff Proposals (FPT) for FY2018-19 along with Cross Subsidy Surcharge (CSS) and Additional Surcharge (AS) proposals. The licensees, in the filings, have stated that they have not considered the True up for FY2016-17 and provisional True up for FY2017-18 in the ARR projections for FY2018-19 and requested permission to file as separate petitions. The ARRs and FPTs along with Cross Subsidy Surcharge and Additional Surcharge proposals for FY2018-19 filed by the Licensees were admitted by the Commission and assigned O.P. Nos.60 of 2017 (APEPDCL) and 61 of 2017 (APSPDCL).

8 The Commission by its letter dated 01.12.2017 directed the Licensees to issue public notice incorporating the ARRs and FPT Schedule submitted to the Commission and further directing to upload the filings of ARRs and FPTs in their official websites and copies of their filings are to be made available at the corporate offices and circle offices at district levels. In compliance thereof, on 08-12-2017, the Licensees caused publication of public notices in two Telugu and two English daily newspapers (Annexure-01), for information and calling for views/objections/suggestions on the same from individuals, representatives of consumer organizations and other stakeholders to be submitted on or before 29.12.2017 by 5 PM and further informing that the copies of the filings are made available at the Corporate offices and at Circle offices of both the licensees. The filings were also uploaded in the websites of the respective Licensees as well as in the website of the Commission.

#### **Notices for Public Hearings**

- 9 Subsequently, the Commission by its letter dated 09.01.2018, directed the licensees to issue notifications intimating the details of the venues and the timings of public hearings at 5 different places in the State of Andhra Pradesh (2 places in respect of APEPDCL and 3 places in respect of APSPDCL) and at the headquarters of the Commission and that the views/objections/suggestions submitted up to 5 PM on 14.02.2018 will also be considered while determining the ARRs, Retail Tariffs, Cross Subsidy Surcharge and Additional Surcharge for the Licensees for FY2018-19. The Commission decided to conduct last public hearing at Hyderabad, thereby providing a final opportunity to the stakeholders to submit their views/objections/suggestions, in writing as well as in person, on ARR, FPT, CSS and AS filings of the two Licensees, for various consumer categories for FY2018-19.
- 10 In compliance with directions of the commission, The licensees published notifications on 12.01.2018 in their respective areas of operation in two (2) Telugu and two (2) English daily newspapers (Annexure-02), informing that all the interested

persons/associations/ stakeholders/objectors who want to be heard in person/through authorized representatives may appear before the Commission during public hearings and submit their views/objections/suggestions in respect of ARRs, FPTs, CSS and AS for various consumer categories for FY2018-19.

- 11 The Government of Andhra Pradesh in its Energy, I&I Department has also been informed so that the Government may make a statement before the Commission on the proposals of the Licensees at the public hearings. Prior to conducting public hearings, the views of members of the State Co-ordination Forum and the State Advisory Committee were ascertained in the joint meeting held on 08-01-2018 in the Meeting Hall of APTRANSCO, Vidyut Soudha at Vijayawada on the ARRs, FPTs, CSS and AS of the distribution licensees.
- 12 Subsequently, the licensees vide a letter dated 26.01.2018 have filed an addendum to the ARR application in respect of Retail Supply business and Proposed Tariff for FY2018-19 requesting to include the following proposals:
  - a) Separate Category under HT-II (Others) as HT-II (d) Start up power for Captive Generating Plants, Co-generation Plants and Renewable Generation Plants.
  - b) Change of applicability of tariffs under LT Category VII (A): General Purpose. Commission had taken the addendum on record and vide public notice dated 01.02.2018 invited views/objections/suggestion on the above proposals from the stake holders and directed the licensees also to upload the public notice on addendum in their respective websites.

#### **Response to the Public Notices**

13 In response to the public notices, the Commission received several objections/suggestions/views in writing and/or in person at its Office and during public hearings. The views/objections/suggestions received reflected all shades of public opinion on the issues and questions involved including those of public utilities like Railways, Organizations of Industry, Trade, Consumers, Farmers, Employees, Labourers, Political Parties, Awareness Groups and Non-Governmental Social Activists as well as experienced and expert individuals acting in public interest. As directed by the Commission, the Licensees communicated their written replies to the views/objections/suggestions received from various stakeholders.

#### **Public Hearings**

14 The Commission decided to conduct public hearings at Visakhapatnam and

Rajamahendravaram in the area of operation of APEPDCL and at Vijayawada, Ongole and Tirupati in the area of operation of APSPDCL to have the widest consultations possible and the benefit of maximum inputs in finalizing the tariff for retail sale of electricity by APDISCOMs including CSS and Additional Surcharge for various consumer categories for FY2018-19. Accordingly, the public hearings were conducted as published in the public notices and as informed to the Licensees and the Government of Andhra Pradesh as follows:

Sl. No.	Name of Licensee	Venue/place of Public Hearing	Date of Public Hearing
1	APEPDCL	Conference Hall, ATC Building, Corporate Office, APEPDCL, P&T Colony, Seethammadhara, Visakhapatnam – 530 013.	05-02-2018 (Monday)
2	APEPDCL	Office of the Superintending Engineer/ Operation Circle, APEPDCL, Vidyut Bhavan, Ullithota Street, Godavari Bund, Rajamahendravaram – 533 101.	06-02-2018 (Tuesday)
3	APSPDCL	O/o. SE/Operation/Vijayawada, APSPDCL, Opp. PWD Ground, Beside CM camp office, Vijayawada.	07-02-2018 (Wednesday)
4	APSPDCL	Old Zilla Parishad Building, South by pass road, Near mini stadium, Ongole, Prakasam (Dt).	08-02-2018 (Thursday)
5	APSPDCL	Conference Hall, Corporate Office, (Vidyuth Nilayam), APSPDCL, Behind Srinivasa Kalyanamandapams, Sreenivasapuram, Tiruchanoor Road, Tirupati.	09-02-2018 (Friday)
6	Hyderabad	APERC Court Hall, 4 <sup>th</sup> Floor, #11-4-660, Singareni Bhavan, Red Hills, Hyderabad.	14-02-2018 (Wednesday)

\* **Timings:** 10.00 AM to 1.00 PM and 02.00 PM to till all the interested persons who desire to be heard in person or through their authorized representatives are exhausted on all dates.

- 15 During the public hearings, the Chairman & Managing Director of the licensee concerned made a brief presentation on their filings. Then the participating stakeholders were heard in detail, apart from receiving all written representations presented by them. Then the Chairman & Managing Director of the Licensee concerned gave a detailed response to each of the issues / aspects raised by the objectors.
- 16 The views/objections/suggestions expressed by the stakeholders and/or their representatives (Annexure-03), in writing and/or in person and the replies provided by the licensees in writing and/or through oral responses during the public hearings held from 05.02.2018 to 14.02.2018 in respect of ARR and FPT filings of the Licensees,

CSS & Additional Surcharge for FY2018-19 and the views of the members of State Coordination Forum (SCF) & State Advisory Committee (SAC) have been duly considered in arriving at the appropriate conclusions in this Order, in so far as they relate to the determination of ARR, tariff for retail sale of electricity, CSS & Additional Surcharge for FY2018-19.

#### **Summary of Filings**

#### **Sales and Power Purchase Requirement**

17 The Licensees have forecasted/estimated the sales volume to different consumer categories during FY2018-19 at 54537.03 MU for the entire State, comprising of 34785.63 MU in respect of SPDCL and 19751.40 MU in respect of EPDCL in their respective areas of supply. For grossing up of sales with losses to arrive at the Power Purchase requirement, the licensees have adopted the following losses; a) Distribution losses: The distribution loss percentages considered by the Commission in the Retail Supply Tariff order for FY2017-18 have been adopted after reducing the same by 2% by both the licensees; b)Transmission losses with in State: The transmission loss percentage of APTRANSCO as approved in the Retail Supply Tariff order for FY2017-18 has been adopted; c) Losses outside the State: The same loss percentage as considered by the Commission in the Retail Tariff order for FY2017-18 has been adopted. The power purchase requirement for FY2018-19 computed in the above manner (by grossing up the sales volume forecast with applicable loss levels) is 61042.47 MU comprising of 39245.33 MU in respect of SPDCL and 21797.14 MU in respect of EPDCL respectively in their areas of supply. The summary of sales, losses and power purchase requirement as per filings is given in the table below:

Item	Sales	Losses	Power purchase requirement
(1)	(2)	(3)	(4)
SPDCL	34785.63	4459.70	39245.33
EPDCL	19751.40	2045.74	21797.14
Total	54537.03	6505.44	61042.47

 Table 1: Filings - Sales, Losses and Power Purchase Requirement (MU)

#### Availability, Dispatch and Surplus

**18** Based on pre-arranged supply sources, the licensees have estimated the available energy during FY2018-19 at 63073.14 MU for the entire State, comprising of

41415.60 MU in respect of SPDCL and 21657.54 MU in respect of EPDCL. With the analysis of month wise power purchase requirement and availability, the Licensees' computations have led to surplus of availability at 2030.67 MU for the entire State during FY2018-19, comprising of 2170.26 MU surplus in respect of SPDCL and (-139.59) MU surplus in respect of EPDCL. The summary of power purchase requirement, availability, dispatch and surplus for each licensee and for the entire State as per filings is given in the table below:

Item	SPDCL	EPDCL	TOTAL
	(2)	(3)	(4)
Power Purchase Requirement	39245.33	21797.13	61042.47
Availability	41415.60	21657.54	63073.14
Dispatch	39566.29	21977.05	61543.34
Surplus/Deficit (-)	2170.26	-139.59	2030.67

 Table 2: Filings: Power Purchase Requirement and Surplus (MU)

#### **Aggregate Revenue Requirement Items**

- 19 The licensees have computed/estimated the power purchase cost during FY2018-19 at ₹25756.75 Cr for the entire State comprising of ₹16572.87 Cr in respect of SPDCL and ₹9183.88 Cr in respect of EPDCL with reference to their respective areas of supply. The licensees have computed the cost based on expected volume of dispatch for each month (depending on monthly sales volume), and fixed and variable costs applicable for each generation source/station for FY2018-19.
- 20 The licensees have computed/estimated the transmission cost at ₹1416.63 Cr for the entire State during FY2018-19, comprising of ₹931.18 Cr in respect of SPDCL and ₹485.45Cr in respect of EPDCL in accordance with the MYT Order for Transmission business for third control period as applicable for FY2018-19 (capacities and transmission charges to be paid to APTransco) with an upward revision in respect of SPDCL to account for expansion of its area of supply consequent to inclusion of Ananthapur and Kurnool districts in it.
- 21 The Licensees have computed/estimated the State Load Dispatch Centre (SLDC) cost at ₹40.41 Cr for the entire State during FY2018-19 comprising of ₹26.56 Cr in respect of SPDCL and ₹13.85Cr in respect of EPDCL in accordance with the MYT Order for third control period as applicable for FY2018-19 (capacities, charges and fee for SLDC) with an upward revision in respect of SPDCL to account for expansion of its

area of supply consequent to inclusion of Ananthapur and Kurnool districts in it.

- 22 The Licensees have considered the distribution cost at ₹4691.91 Cr for the entire State during FY2018-19, comprising of ₹2919.66 Cr. inrespect of SPDCL and ₹1772.25 Cr. in respect of EPDCL in accordance with the MYT Order for third control period on wheeling charges as applicable for FY2018-19 (i.e. Distribution cost approved for FY2018-19) with an upward revision in respect of SPDCL to account for expansion of its area of supply consequent to inclusion of Ananthapur and Kurnool districts in it.
- 23 The Licensees have computed/estimated the costs associated with usage of PGCIL network and services of ULDC to evacuate the power from Central/Inter State Generating Stations at ₹1054.33 Cr for the entire State during FY2018-19, comprising of ₹695.21 Cr in respect of SPDCL and ₹359.12 Cr in respect of EPDCL.
- 24 The Licensees have computed the interest cost on consumers' security deposits held with Licensees at ₹256.43 Cr for the entire State during FY2018-19, comprising of ₹154.10 Cr in respect of SPDCL and ₹102.33 Cr in respect of EPDCL. The Licensees have computed these amounts while applying the interest rates of 6.25% (SPDCL) and 6.25% (EPDCL) on average of projected opening and closing balances of consumer security deposits likely to be held with them during FY2018-19.
- 25 The Licensees have computed the supply margin for retail supply business at ₹19.21 Cr for entire State during FY2018-19, comprising of ₹13.05 Cr in respect of SPDCL and ₹6.16 Cr in respect of EPDCL. These amounts have been computed based on the approved Regulated Rate Base (RRB) as applicable to each licensee for FY2018-19 in accordance with the MYT Order for third control period on wheeling charges.
- 26 The Licensees are implementing energy conservation projects (replacing incandescent bulbs with LED bulbs, installation of solar pump sets and energy efficient pump sets etc) in their respective areas of operation. The licensees included an amount of ₹230.19 Cr towards the above works in the ARR and FPT filings for FY2018-19. This amount comprises of ₹116.76 Cr for SPDCL and ₹113.43 Cr for EPDCL. The Licensees stated that the benefits of these measures have been factored in the power purchase calculations.
- 27 With these ARR line items, as detailed above, the Licensees have computed/estimated the ARR at ₹33465.85 Cr for the entire State for FY2018-19, comprising of

₹21429.39 Cr in respect of SPDCL and ₹12036.46 Cr in respect of EPDCL in their respective areas of supply. The summary of ARR as per Licensees' filings is given in the table below:

ARR Items	SPDCL	EPDCL	TOTAL
(1)	(2)	(3)	(4)
1. Transmission Cost	931.18	485.45	1416.63
2. SLDC Cost	26.56	13.85	40.41
3. Distribution Cost	2,919.66	1,772.25	4,691.91
4. PGCIL Expenses	682.28	355.72	1,038.00
5. ULDC Charges	12.93	3.40	16.33
6. Network and SLDC Cost (1+2+3+4+5)	4,572.61	2,630.67	7,203.28
7. Power Purchase Cost	16,572.87	9183.88	25,756.75
8. Interest on CSD	154.10	102.33	256.43
9. Supply Margin in Retail Supply Business	13.05	6.16	19.21
10. Other Costs, if any	116.76	113.43	230.19
11. Supply Cost (7+8+9+10)	16,856.78	9,405.80	26,262.58
12. Aggregate Revenue Requirement (ARR) (6+11)	21,429.39	12,036.46	33,465.85

Table 3: Aggregate Revenue Requirement (ARR) / Cost Items (₹ Cr)

#### **Expected Revenue from Charges (ERC)**

- 28 The Licensees have computed the Expected Revenue from Charges (ERC) in case they levy the existing/current tariff for retail sale of electricity during FY2018-19 on the forecast sales volume to different consumer categories in their respective areas of supply. The ERC (including NTI) computed in this manner is at ₹24977.95 Cr for the entire State, comprising of ₹14816.47 Cr in respect of SPDCL area of supply and ₹10161.48 Cr in respect of EPDCL area of supply.
- 29 The Revenue Gap (RG) i.e., the ARR in excess of ERC, for FY2018-19 has been computed by licensees at ₹8487.90 Cr for the entire State, comprising of ₹6612.92 Cr RG in respect of SPDCL and ₹1874.98 Cr RG in respect of EPDCL. In short, the Licensees in the State will incur a total of ₹8487.90 Cr financial loss during FY2018-19 in the event of supplying the forecast sales volume of 54537.03 MU, without any external resources or tariff revision during FY2018-19. The summary of ARR, ERC and RG for each Licensee during FY2018-19 is given in the table below:

ARR Item	SPDCL	EPDCL	TOTAL
(1)	(2)	(3)	(4)
1. Aggregate Revenue Requireme	nt 21,429.39	12,036.46	33,465.85
2. Revenue from Sale of Energy (	including NTI) 14,816.47	10,161.48	24,977.95
3. <b>Revenue</b> Gap (1-2)	<b>6,612.9</b> 2	1,874.98	8,487.90

Table 4: Filings: ARR, ERC and RG for FY2018-19 (₹ Cr)

#### Ways and means to handle the Revenue Gap

- 30 The Licensees have proposed to meet the estimated revenue gap of ₹8487.90 Cr during FY2018-19 through the following means;
  - a) Revenue of ₹505.95 from Cross Subsidy Surcharge and Additional Surcharge.
  - b) Subsidy of ₹7983.39 Cr. expected from Government of Andhra Pradesh for FY2018-19.
- 31 The summary of ARR and Revenues is given in the table below:

Table 5: Filings: ARR, Revenue, Subsidy requirement for FY2018-19 (₹ Cr)

Items	SPDCL	EPDCL	TOTAL
1. Aggregate Revenue Requirement	21,429.39	12036.46	33,465.85
2. Revenue at Current Tariff	14816.47	10,161.48	24,977.95
3. Tariff revision proposed	0	-1.44	-1.44
4. Revenue from CSS & Additional Surcharge	394.29	111.66	505.95
5. Government Subsidy	6218.63	1764.76	7983.39
6. Revenue Gap (1-2-3-4-5)	0	0	0

32 Licensees have not proposed any tariff increase for FY2018-19 and proposed to continue with current tariffs as approved by Commission for FY2017-18 as given below:

Consumer Category	Energy	Fixed Charge (₹/Month)	Energy Charge	
	Unit		(₹/Unit)	
LT Category-I: DOMESTIC (Telescopic)				
Group A: Annual Consumption <=900 Units during FY2017-18				
0-50	kWh		1.45	
51-100	kWh		2.60	
101-200	kWh		3.60	
Above 200	kWh		6.90	
Group B: Annual Consumption > 900 and <=2700 units during FY2017-18				
0-50	kWh		2.60	
51-100	kWh		2.60	
101-200	kWh		3.60	
201-300	kWh		6.90	
Above 300	kWh		7.75	
Group C: Annual Consumption >2700 units during FY2017-18				
0-50	kWh		2.68	
51-100	kWh		3.35	
101-200	kWh		5.42	
201-300	kWh		7.11	
301-400	kWh		7.98	
401-500	kWh		8.52	
Above 500 units	kWh		9.06	
LT Category-II: OTHERS				
LT Category-II (A): Upto 50 Units/Month	kWh/kVAh	55/kW	5.40	
LT Category-II(B): Above 50 Units/Month				
0-50	kWh/kVAh		6.90	
51-100	kWh/kVAh		7.69	
101-300	kWh/kVAh	75/kW	9.06	
301-500	kWh/kVAh		9.61	
Above 500	kWh/kVAh		10.19	
LT Category-II(C): ADVERTISEMENT HOARDINGS	kWh/kVAh	75/kW	12.28	

Consumer Category	Energy	Fixed Charge	Energy Charge (₹/Unit)	
consumer category	Unit	(₹/Month)		
LT Category-II(D): FUNCTION HALLS/ AUDITORIUMS	kWh/kVAh	Nil	11.77	
LT Category-III: INDUSTRY				
Industry (General)	kWh/kVAh	75/kW	6.71	
Seasonal Industries (off season)	kWh/kVAh	75/kW	7.45	
Aquaculture and Animal Husbandry	kWh/kVAh	30/kW	3.86	
Sugarcane crushing	kWh/kVAh	30/kW	3.86	
Mushroom & Rabbit Farms	kWh/kVAh	75/kW	5.91	
Floriculture in Green House	kWh/kVAh	75/kW	5.91	
Poultry Hatcheries & Poultry Feed mixing plants	kWh/kVAh	75/kW	4.89	
LT Category-IV: COTTAGE INDUSTRIES & OTHERS				
a) Cottage Industries Upto 10 HP	kWh	20/kW	3.75	
b) Agro Based Activity upto 10 HP	kWh	20/kW	3.75	
LT Category-V: AGRICULTURE				
LT Category-V(A): AGRICULTURE WITH DSM MESURES				
Corporate Farmers & IT Assesses	kWh		2.50	
Wet Land Farmers (Holdings >2.5acre)	kWh	525/HP/Year*	0.50	
Dry Land Farmers (Connections > 3 nos.)	kWh	525/HP/Year*	0.50	
Wet land Farmers (Holdings ≤ 2.5 Acre)	kWh		0.00	
Dry Land Farmers (Connections $\leq 3$ nos.)	kWh		0.00	
LT Category-V (B): AGRICULTURE WITHOUT DSM MEASURES				
Corporate Farmers & IT Assesses	kWh		3.50	
Wet Land Farmers (Holdings >2.5acre)	kWh	1050/HP/Year*	1.00	
Dry Land Farmers (Connections > 3 nos.)	kWh	1050/HP/Year*	1.00	
Wet land Farmers (Holdings $\leq 2.5$ Acre)	kWh	525/HP/Year*	0.50	
Dry Land Farmers (Connections $\leq 3$ nos.)	kWh	525/HP/Year*	0.50	
LT Category-V (C): OTHERS				
Salt Farming units upto 15 HP	kWh	20/HP	3.70	
Rural Horticulture Nurseries upto 25 HP	kWh	20/HP	3.70	
LT Category-VI: STREET LIGHTING AND PWS				
LT Category-VI(A): STREET LIGHTING				
Panchayats	kWh	75/kW	5.98	
Municipalities	kWh	75/kW	6.53	

Consumer Category	Energy Unit	Fixed Charge	Energy Charge
		(₹/Month)	(₹/Unit)
Municipal Corporations	kWh	75/kW	7.09
LT Category-VI(B): PWS SCHEMES			
Panchayats	kWh/kVAh	75/HP	4.87
Municipalities	kWh/kVAh	75/HP	5.98
Municipal Corporations	kWh/kVAh	75/HP	6.53
LT Category-VI(C): NTR Sujala Padhakam	kWh/kVAh	10/HP	4.00
LT Category-VII: GENERAL			
LT Category-VII(A): GENERAL PURPOSE	kWh/kVAh	30/kW	7.28
LT Category-VII(B): RELIGIOUS PLACES			
(i) Religious Places ( $CL \le 2 KW$ )	kWh	30/kW	4.84
(ii) Religious Places (CL > 2 KW)	kWh	30/kW	5.04
LT Category-VIII: TEMPORARY SUPPLY	kWh/kVAh	30/kW	10.50
HT Category-I: INDUSTRY			
HT Category-I(A): INDUSTRY GENERAL			
11 kV	kVAh	475/kVA	6.33
33 kV	kVAh	475/kVA	5.87
132 kV & Above	kVAh	475/kVA	5.44
INDUSTRIAL COLONIES			
11 kV	kVAh		6.32
33 kV	kVAh		6.32
132 kV & Above	kVAh		6.32
TIME OF DAY TARIFFS (6 PM to 10 PM)			
11 kV	kVAh		7.38
33 kV	kVAh		6.92
132 kV & Above	kVAh		6.49
SEASONAL INDUSTRIES (off season Tariff)			
11 kV	kVAh	475/kVA	7.66
33 kV	kVAh	475/kVA	6.98
132 kV & Above	kVAh	475/kVA	6.72
HT Category-I(B): ENERGY INTENSIVE INDUSTRIES			
11 kV	kVAh		5.82
33 kV	kVAh		5.37

Consumer Category	Energy Unit	Fixed Charge	Energy Charge
		(₹/Month)	(₹/Unit)
132 kV & Above	kVAh		4.95
HT Category-I(C): AQUA CULTURE AND	kVAh	30/kVA	3.86
ANIMAL HUSBANDRY			
HT Category-I(D): POULTRY	kVAh	475/kVA	4.89
HATCHERIES AND POULTRY FEED			
MIXING PLANTS			
HT Category-II			
HT Category-II (A): Others			
11 kV	kVAh	475/kVA	7.66
33 kV	kVAh	475/kVA	6.98
132 kV & Above	kVAh	475/kVA	6.72
TIME OF DAY TARIFFS (6 PM to 10 PM)			
11 kV	kVAh		8.71
33 kV	kVAh		8.03
132 kV & Above	kVAh		7.77
HT Category-II(B): RELIGIOUS PLACES	kVAh	30/kVA	5.03
HT Category-II(C): FUNCTION HALLS/ AUDITORIUMS	kVAh	Nil	11.77
HT Category-III: PUBLIC			
INFRASTRUCTURE AND TOURISM			
11 kV	kVAh	475/kVA	7.30
33 kV	kVAh	475/kVA	6.69
132 kV & Above	kVAh	475/kVA	6.38
TIME OF DAY TARIFFS (6 PM to 10 PM)			
11 kV	kVAh		8.35
33 kV	kVAh		7.74
132 kV & Above	kVAh		7.43
HT Category-IV: Govt. LIFT IRRIGATION, AGRICULTURE AND CPWS			
Govt. and Private Lift Irrigation & Agriculture	kVAh	0	5.82
Composite Water Supply Schemes (CPWS)	kVAn kVAh	0	5.82 4.89
HT Category-V: RAILWAY TRACTION	kVAn kVAh	0 300/kVA	4.89 3.55
HT Category-VI: TOWNSHIPS AND	kVAh	75/kVA	6.32
RESIDENTIAL COLONIES	л у <i>г</i> лШ		0.34
HT Category-VIII: TEMPORARY SUPPLY	1.5 times of corresponding HT Category		
* Equivalent flat rate tariff per year		1	

33 Further, the licensees proposed the following new sub-categories to be included in FY2018-19 Tariff schedule:

# a) LT – 1 (C) Smart Meters with ToD Discount for Domestic Consumers (Optional)

The licensees are planning to roll out the installation of smart meters in the upcoming months. For the consumers with smart meters, the licensees have proposed a discount of ₹1.00/Unit during 10 AM - 12 PM slot (2 hours) to understand the response from the consumers and the discount is applicable for the consumers with consumption of more than 500 units/month in the LT-I(C) Domestic Category. The installation of smart meters is optional to consumers. The cost of the smart meter with modem, as per recent bids is estimated as ₹2,503 per smart meter. The cost of the smart meter along with the installation cost after adjusting for the grants from central government schemes like IPDS has to be borne by the consumer by paying EMI for a period of 24 months.

#### b) LT II (C): Non-Domestic - Electric Vehicles (EVs)

The licensees have proposed a separate sub-category for EV Charging Stations within the LT: II Non-domestic category as follows.

Energy Charges	₹ 6.95/kWh
Time of Day (ToD) tariff	Additional charge of ₹ 1.00/kWh levied for usage from 06 AM to 10 AM and 06 PM to 10 PM Rebate of ₹ 1.00 / kWh offered for usage between 10 PM to 06 AM

#### c) LT –V (C): Others - Rural Horticulture with Connected Load up to 5HP

The licensees have proposed for a separate sub-category within the LT-V(C): Others category with sub category name as 'Rural Horticulture with Connected Load up to 5 HP' and have proposed energy charge of ₹1.50/kWh.

34

Subsequently, Licensees have Submitted an Addendum dated 26.01.2018 to the ARR and FPT for FY 2018-19 with following proposals.

a) Separate Category under HT-II (Others) as HT-II (d) - Start up power for Captive Generating Plants, Co-generation Plants and Renewable Generation Plants with following tariff irrespective of the supply voltage.

Demand Charges	Energy Charges		
(₹/kVA/Month)	(₹/kVAh)		
475	11.77		

₹1.05/kVAh Time of the Day (ToD) tariff is leviable on energy consumption during the period from 06:00 P.M. to 10.00 PM, in addition to the normal energy charges at respective Voltages.

#### **Conditions:**

- **i.** Contracted maximum demand under this category is limited to percentage norm (10% in Thermal, 6% in Gas, 3% in Hydel) of the maximum capacity unit in the Generating Station.
- **ii.** Supply is to be used strictly for startup operations, maintenance, and lighting purposes only and shall not be extended for process plant.
- **iii.** Demand charges are leviable only if the monthly load factor of the consumer exceeds 10% in accordance with billing demand condition under HT-II(A).
- **iv.** If RMD exceeds CMD the penal charges on Demand & Energy will be applicable as per the existing conditions of HT-II(A) others category, even if the monthly load factor is equal or below 10%.
- v. Monthly minimum charges on energy are not applicable to this category.
- vi. All other conditions applicable to HT-II(A) Others category shall also apply to this category.
- b) Change of applicability of tariffs under LT Category VII (A): General Purpose as follows:

Applicable for supply of energy to places of Crematoriums, Government Educational Institutions and student hostels run by Government agencies, Charitable Institutions i.e. Public Charitable Trusts and Societies registered under the Societies registration Act running educational and medical institutions rendering totally free service to the general public, recognized service institutions and registered old age homes.

#### **Conclusion**

The Commission has decided to consider the ARR, FPT, CSS and AS filings and the addendum submitted by the licensees, which are mentioned in brief in this Chapter, as the basis for determination of ARR and tariff for retail sale of electricity with due weight being given to views/objections/suggestions of stakeholders, as discussed in subsequent chapters of this order.

#### CHAPTER - II

#### STATEMENT OF GOVERNMENT OF ANDHRA PRADESH

- 35 On behalf of the Government of Andhra Pradesh, the Principal Secretary, Energy Department made a statement before the Commission during the public hearing at Vijayawada on 07.02.2018.
- 36 All the Electricity utilities have performed exceptionally well during this year. The Transmission and Distribution (T&D) losses of AP Discoms are the lowest in the country.
- 37 Number of consumers in Andhra Pradesh as on 31<sup>st</sup> December 2017 is 1.75 Crores, out of which 15.8 lakh are agriculture consumers. Both DISCOMs have been implementing HVDS for agriculture consumers in order to give them better quality of power. This has been done by reducing the length of conventional LT Lines.
- 38 Andhra Pradesh became the third State in the country after Gujarat and Punjab to achieve 100% electrification of households in FY2016-17 and the APDISCOMs have set a target of ensuring uninterrupted, reliable and quality power supply to all the consumers.
- **39** APDISCOMs are implementing DSM initiatives in domestic lighting, municipal street lights and also in gram panchayats besides in agricultural pump-sets. The investment is made by EESL, a Public Company owned by Central PSUs of Power Sector under an ESCO Model. Under this program around 2.32 Cr. incandescent bulbs were replaced by energy efficient LEDs and 6.10 Lakh Street Lights have been replaced in the state as on December 2017. A total of 9,534 no. of old and inefficient agricultural pump sets have been replaced with energy efficient pump sets and the Government targets to implement this project across the entire state in a phased manner to cover all existing pump sets of around 15 Lakhs. The DISCOMs have also started the first of its kind programme of distribution of energy efficient fans to interested consumers. Around 2.61 Lakh fans have been distributed till December 2017, and it is further targeted to distribute 19 Lakh energy efficient fans in the state. Around 71,706 Nos. of Energy efficient tube lights have also been distributed.

- 40 In line with Government of India's vision to promote Renewable Energy to add 175 GW of Renewable Energy in the Country, Government of Andhra Pradesh has been encouraging Renewable Energy, particularly Solar and Wind. As a result of promotion, State's cumulative renewable energy capacity has reached 6,553 MW including 3,819 MW of wind and 2,144 MW of Solar. APDISCOMs plan to install 50,000 solar pump-sets by FY2019-20. 20,575 Solar pump sets have been installed in the state till Jan'2018 and is expecting to energize 20,000 more pump sets by end of FY2018-19.
- 41 Discoms are also contemplating Electric charging stations for Electric vehicles.
- 42 As per the Ujjwal Discom Assurance Yojana (UDAY) tripartite agreement between Government of Andhra Pradesh, APDISCOMs and Government of India, Government of Andhra Pradesh has issued bonds worth ₹8,256 Crore. This has reduced the financial burden on the DISCOMs and there is improvement in the financial performance of DISCOMs.
- **43** The Government is committed to the welfare of the farmers and will provide free power to all eligible agriculture consumers. Government will provide necessary support for this purpose.
- 44 In order to protect the interest of consumers, APDISCOMs have proposed no tariff increase for all consumers in the tariff filing for FY2018-19.
- **45** The Government is committed to the cause of industrial development in the State and it is a matter of pride that the State of Andhra Pradesh has amongst the lowest HT Industrial Tariffs in the country. The Government aims to supply 24/7 high quality interruption free power to all the Industrial consumers in the State.
- **46** To conclude, the Government is committed to provide any necessary financial assistance to power sector and subsidy to the utilities in accordance with the provisions of Section 65 of the Electricity Act, 2003. This would enable the Government to meet its objective of ensuring quality power supply to all consumers and also in extending necessary assistance to domestic consumers and agricultural sector.

#### **CHAPTER – III**

#### **OBJECTIONS, RESPONSES AND COMMISSION'S VIEWS**

#### Filings are not in accordance with MYT Regulations

47 Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru, West Godavari Dist. has stated that the DISCOMs'filings are not in accordance with"Multi Year Tariff Regulations" for the reason that the DISCOMs are filing their ARR filings annually and the annual filings are strongly objected.

**Discoms Response:** DISCOMs have been following Multi Year Tariff (MYT) Regulation issued by APERC and National Tariff Policy (NTP) issued by the Ministry of Power, Govt. of India, with regard to filing of ARR & Proposed Tariffs for Retail Supply Business. In view of difficulties in making realistic projections on Power Purchase costs and sales on a multi year term of 5 years, DISCOMs have sought the permission of APERC to submit the RST filings on annual basis. For FY2018-19 APERC has accorded permission vide Proceedings No. T-17/2017/23, Dt. 23-11-2017 to file the Retail Supply Filings on Annual basis.

**Commission's view:** Out of the third control period from FY2014-15 to FY2018-19, for the first four years, the ARR filings were annual and were permitted by the Commission accordingly for the said four years. FY2018-19 being the only remaining year of the third control period, the Commission had to give a similar permission for the filings on annual basis. However, the Commission has noted the perceptions of the objector and the DISCOMs to be kept in view in future.

#### Difficulty in assessing the data sheets filed by the DISCOMs

48 Sri T.S. Appa Rao, Secretary General and Sri Sourabh Srivastava, The Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industry (FTAPCCI), Hyderabad have stated that the use of excel sheets of the tariff forms cannot be emphasized more. The licensees may be directed to upload the excel sheets in absence of which the objectors or the APERC may not be able to conduct the requisite prudence check.

Sri O.L. Kantha Rao, Secretary, A.P. Spinning Mills Association, Guntur has stated that it was pointed out even in the last year that the data in the form of excel sheet should be available in CD so that any calculation with due diligence can be done easily by the objectors. Despite the repeated requests over the years this has not been attended to by the DISCOMS, giving an impression of lack of transparency. The Commission is requested to direct the DISCOMS to make available the presented tables/data in the ARR petition to the objectors whenever asked for, in excel sheet friendly CD.

**Discoms Response:** All the relevant data pertaining to ARR & FPT filings for FY2018-19 presented before APERC has been made available in the form of CDs or e-mail to all the persons who have approached the licensees. The data has also been uploaded into licensees' websites.

**Commission's View:** The DISCOMs should make every effort to avoid such short comings.

#### How the revenue gap would be bridged and to what extent GoAP provides subsidy?

49 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao,State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu,State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that both the Discoms have not proposed any tariff hike and requested the Commission to permit them to collect tariffs for FY2018-19 at the rates determined by it for FY2017-18. The DISCOMs have claimed that their proposal not to hike tariffs for FY2018-19 would 'benefit' 1.13 Crore consumers under SPDCL and 58 lakh consumers under EPDCL. However, the Discoms have not explained how they propose to bridge the projected revenue gap of ₹7982.76 Cr. and to what extent the GoAP would provide subsidy to bridge the projected revenue gap.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that as per the filings both the DISCOMs together will run up a deficit of ₹7983.39 Crore during the ensuing year. Despite such a deficit both the DISCOMs did not propose any tariff hike. This may imply that the State Government is ready to shoulder any deficit through subsidy. In the recent past both the Chief Minister of AP and Minister for Power of GoAP declared that there will not be any tariff hike in future as they would be procuring renewable energy at lower cost. But their handling wind energy PPAs shows that those declarations about 'no tariff hike' are only for public consumption and in the end tariff hike will be a

reality. The Tripartite Understanding under UDAY stipulated that "Government of Andhra Pradesh endeavours to ensure that tariff hikes as reflected in Annexure -B are undertaken." (Section 1.2 p) Annexure B of the MoU indicated tariff hike of 5% and total government subsidy of ₹3,714.80 Crore. If they stand by their current tariff proposals of no hike both the APDISCOMs and the GoAP have to clear the air about any surreptitious steps at a later date to hike tariffs in the name of truing up, the way it has been done in the case of FY2015-16.

Smt. P. Bharathi, Eguvapalakuru, Chittoor Dist. has questioned how the gap would be filled up without tariff hike for FY2018-19.

**Discoms Response:** It is expected that the State Government would support the DISCOMs by way of extending the required subsidy as may be determined by APERC in the retail supply tariff order for FY2018-19.

Commission's view: The revenue gap as estimated by the Commission on the ARR and FPT proposals for FY2018-19 submitted by the distribution licensees has to be bridged after taking into account the provision of subsidy by the State Government under Section 65 of the Electricity Act, 2003 and by the distribution licensees taking effective measures for effective and better realization of the tariff and non-tariff incomes, dues from the consumers including the State Government in its various departments, organizations, institutions and local bodies and arrears of subsidy liable to be paid upto 31.03.2018, reducing transmission, distribution and commercial losses, improvement of organizational efficiency, reduction of power purchase cost, O&M expenses etc. and adoption of all technological developments which help in running the power sector more economically etc. The Commission took note of the Statement of Government of Andhra Pradesh made through the Principal Secretary / Energy department on 07.02.2018 at Vijayawada during the public hearing to provide any necessary financial assistance to the power sector and subsidy to the utilities and the further communication from the State Government in response to the intimation from the Commission on the amount of subsidy required to give effect to the policy of the State Government indicated in the statement in this regard and ensure that the principle of full cost recovery is satisfied in determining the tariffs on a holistic view of all the relevant factors.

#### Efforts shall be made to reduce revenue deficit

50 Sri K. Ramakrishnam Raju, President, Vessel Contractors Welfare Association, Visakhapatnam has stated that anticipated revenue deficit (₹1763.32) of APEPDCL is on much higher side and the same is increased year to year. All out efforts shall be made to reduce revenue deficit by ensuring timely receipt of Cross Subsidy from GoAP/ GOI & increasing tariff to highly profitable H.T. Consumers.

**Discoms Response:** DISCOM is making all out efforts to contain the revenue deficit. The average cost of power purchase which is the major cost element in the Aggregate Revenue Requirement (ARR) of the DISCOM is ₹4.18 /kWh for the ensuing year FY2018-19, when compared to the approved value of ₹3.73/kWh for FY2017-18. Thus, there is an increase of 12% in the power purchase cost. The Average cost of service (COS) projected for FY2018-19 is ₹6.09/Unit whereas the approved value for FY2017-18 is ₹5.48/Unit, an increase of 11.13%. The increase in Cost of Supply is resulting in deficit in average realization to the extent of ₹0.89/Unit for APEPDCL for the ensuing year.

**Commission's view:** There cannot be two opinions about the indispensable necessity to minimize the revenue deficit in all possible ways and the estimated increase in power purchase cost and average cost of service should be avoided by taking recourse to all possible measures.

#### Surplus and revenue gap will be much more

51 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao,State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu,State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that the projected revenue gap of the Discoms for FY2018-19 will turn out to be much higher, if additional power is to be purchased by them under binding obligations of PPAs, as explained above, leading to availability of abnormal surplus of energy with attendant adverse consequences of backing down the same and paying hefty amounts towards fixed charges for such non-generation of power.

#### Discoms Response: NIL

**Commission's view:** The apprehended hidden dangers cannot be altogether ruled out but the factual matrix as of now alone can form the basis for the various estimates in

the present tariff order.

#### **Details of Other Costs**

52 Sri B. N. Prabhakar, President, Society for Water, Power & Natural resources conservation Awareness and Monitoring (SWAPNAM), Certified Energy Manager & Auditor, Vijayawada has stated that APSPDCL has projected 77 paise/Unit (~14%) under the head 'other cost ' against the approved 9 paise. Similarly, APEPDCL has projected 105 paise/Unit (~19%) under the head 'other cost' against the approved 10 paise. The Discoms may elaborate the reasons giving full details therefor.

**Discoms Response:** The licensees have projected the following expenditure under other costs. (a) Amount payable towards DELP to M/s EESL, New Delhi, (b) Amount payable towards solar pumpsets, (c) Amount payable towards Energy Efficient Pump sets, (d) shortfall/gain in the revenues from the RESCOs during FY2017-18 and (e) Expenses for electrical accidents compensation.

DELP: The licensees, with the approval of the Commission, are distributing 2 Nos. LED bulbs in all the districts of its jurisdiction. In accordance with the approval of the Commission, the licensees have projected the amounts payable to M/s EESL, New Delhi.

APEPDCL: Total Number of LEDs distributed up to the end of FY2017-18 is around 7540961 Nos. and amount paid ₹52.78 Crs.

APSPDCL: Number of LEDs distributed up to the end of FY2015-16 is around ₹1.10 Cr for which Discom incurred ₹49.27 Cr. in FY2016-17 and is liable to pay ₹51.25 Cr. in FY2017-18 and ₹37.71 Cr. in FY2018-19 as annuity payments.

Energy Efficiency Pumpsets:

APEPDCL: 973 Nos. Energy efficient pump sets were energized upto FY2016-17, 950 Nos. pump sets were energized in FY2017-18 (H1) and 3750 Nos.proposed to be released in H2 of FY2017-18 and 30,300 Nos. are proposed in FY2018-19.

APSPDCL: The licensee proposed to replace 65,000 Nos. of old pumpsets with BEE 5 Star rated 5 HP energy efficient submersible pump sets with smart control panels with a cost of ₹292.54 Cr. The licensee is projecting to incur costs of ₹9.79 Cr and ₹29.25 Crs. towards repayment of loan towards the above projects for FY2017-18 and FY2018-19 respectively.

Solar Agriculture Pumpsets:

APEPDCL: 4048 Nos. Solar Agricultural pump sets were energized upto FY2016-17, 1861 Nos. pump sets were energized in FY2017-18 (H1) and 5000 Nos. pumpsets areexpected to be energized in H2 of FY2017-18 and 5500 Nos.in FY 2018-19.

APSPDCL: The licensee has erected 5,750 Nos. of solar pumpsets in FY2016-17 and is expected to erect further 6,214 Nos. and 8010 Nos. in FY2017-18 and FY 2018-19 respectively.

Total Investment:

The consumer contribution is 11% of the project cost, the MNRE, Govt. of India provides 33% of the project cost as subsidy and balance 56% is to be borne by the licensees. For the pumpsets already installed and yet to be installed in FY2018-19, the expenditure contribution by the DISCOMs net off consumer contribution & MNRE subsidy is around ₹ 281 Cr in respect of APEPDCL and around ₹ 344 Cr. in respect of APSPDCL. The amount is expected to be paid by taking loan for a tenure of 10 Years at an interest rate of 12%. The Annuity amount is to be paid after considering the above financial parameters for FY2018-19.

	FY2017-18		FY2018-19	
Particulars	APEPDCL (₹)	APSPDCL (₹)	APEPDCL (₹)	APSPDCL (₹)
Payments to M/s EESL towards DELP	30.54	51.25	21.07	37.71
Payment to Agriculture Solar Pumpsets	30.11	20.33	45.06	34.80
Energy Pumpsets	21.81	9.75	21.05	29.25
Shortfall / gain in the revenues from the RESCOs during FY2017-18	0.00	-	16.25	-
Expenses for electrical accidents compensation	10.00	15.50	10.00	15.00
Total	92.46	96.83	113.43	116.76

The details of Other Costs projected by the Licensees for FY2017-18 & FY2018-19

The other cost for FY2017-18 revised estimate may be read as ₹0.077 instead of ₹0.77 in respect of APSPDCL and ₹0.105 instead of ₹1.05 in respect of APEPDCL. The typographical error in the ARRs filings is regretted.

**Commission's View:** Any significant inflation of the other costs beyond the approved was explained to be for the specific reasons stated by the DISCOMs to disbelieve

which there is no strong reason for the Commission.

#### **Regulation of power between AP and TS**

53 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that the Discoms have explained that due to "regulation of power" (stoppage of supply of power) to TS Discoms by AP Genco and to AP Discoms by TS Genco with effect from 10.6.2017, it is decided, on the request of AP Genco, to avail the excess power of AP Genco which was stopped to TS Discoms by paying the same fixed cost and variable cost as what AP Discoms would have paid to TS Discoms due to regulation of power. However, the differential fixed cost of ₹227.47 crore, the differential variable cost of ₹237.33 crore and the differential additional interest on pension bonds of ₹380 crore will be admitted by AP Discoms subject to approval of APERC, they have explained. The Discoms have also pointed out that the total impact of the above is an additional burden of around ₹844.80 crore which may vary based on the actual energy availed. Subsequently, it was decided that AP Discoms should pay 100% fixed charges in anticipation of approval from GoAP and APERC, the Discoms have informed. By foregoing their share of power from the thermal plants of TS Genco, AP Discoms will be imposing an avoidable additional burden of ₹844.80 per annum subject to variation on their consumers of power. The AP Discoms have not explained as to why TS Genco stopped supply of their share of power from its thermal plants to them, whether they have contested the decision of TS Genco legally and whether TS Genco is raising bills for payment of fixed charges for power not being supplied to AP Discoms, treating such non-supply as backing down. Without resorting to legal course of action to protect their interest in terms of binding obligations under the relevant PPAs in force for supply of power by TS Genco to AP Discoms, GoAP and the Discoms have resorted to the easier way of purchasing additional power from AP Genco at the cost of imposing such huge additional burden on consumers of power. The Commission is requested to examine the whole issue and give appropriate directions to the Discoms to protect larger interest of consumers of power.

Discoms Response: APGENCO regulated the power to TSDISCOMs

w.e.f.11.06.2017 due to non-payment of outstanding dues and TSGENCO also regulated the power to APDISCOMs due to non-settlement of dues. APDISCOMs are availing entire power from APGENCO stations as per the approval of GoAP and after informing APERC. TSGENCO are not raising bills on APDISCOMs. TSGENCO is not raising bills for payment of fixed charges for power not being supplied to APDISCOMs.

**Commission's view:** The ex-post facto situation presented to the Commission in the inter-state relationships between the State Governments and the State Utilities does not appear to be reversible or amenable to correction by the intervention of the Commission within the scope of its prescribed functions. The determination of issues herein is on the fact scenario as of now.

#### True-up claims must be submitted in time

54 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that the projected revenue gaps of both the Discoms have to be seen in the background of tariff hike for the year 2017-18 to the tune of about ₹800 Crore and true-up claims of ₹968 Crore - APEPDCL ₹324 Crore and APSPDCL ₹644 Crore for the year 2015-16 for additional cost of power purchase pending before the Commission. (They also got directions from the Commission to GoAP to provide additional subsidy of ₹414.06 Crore for additional agricultural sales during 2015-16). Against revised revenue gap of ₹2001.49 Crore (actual revenue of ₹12380.11 Crore against a target of ₹14381.60 Crore fixed by the Commission) for the year 2016-17 and a revised revenue gap of ₹1850.67 Crore (estimated revenue of ₹13482.96 Crore against a target of ₹14794.21 Crore fixed by the Commission) for the year 2017-18, APSPDCL has sought permission of the Commission for filing a separate petition for true up of the same. APEPDCL has shown a revenue deficit of ₹1168.59 Cr (estimated revenue of ₹7810.39 Crore against a target of ₹ 8978.98 Cr fixed by the Commission for the year 2017-18) and a revenue surplus of ₹94.58 Cr (estimated revenue of ₹ 9364.48 Cr against a target of ₹ 9269.90 Cr fixed by the Commission for the year 2017-18) and sought permission of the Commission for filing a separate petition for true up of the same. Going by the trend of showing

substantial revenue gap for true up for the last two and current financial years, the proposal of the Discoms not to hike tariffs for FY2018-19 and their failure to explain how they propose to bridge the projected revenue gaps for the same year and for various other factors not taken into consideration by them for FY2018-19, it can be asserted that they will come up with true-up claims for FY2018-19 also later in the post-election period. Therefore, the claim of the Discoms that their proposal not to increase tariffs for FY2018-19 would 'benefit' 1.71 Crore consumers in Andhra Pradesh is a futile attempt to hoodwink the people of the State that there are no additional burdens of tariff hikes in the pre-election period to meet political expediency of the party-in-power. Since auditing of their accounts for the year 2016-17 must have been completed already, the Discoms should have submitted their true up claims without further delay. Though the Discoms have sought the permission of the Commission to file separate petitions for true up claims for the years 2016-17 and 2017-18, they have not made it clear as to when they would do so. Left to themselves, the Discoms want to collect what is permissible from the consumers in time and do not prefer to postpone submission of their true up claims unnecessarily; it is beneficial neither to the Discoms, nor to their consumers. It is for the Commission to exercise its legitimate authority to direct the Discoms to submit the same in time and issue orders after holding public hearings promptly.

Sri T.S.Appa Rao, Secretary General and Sri Sourabh Srivatsava, The Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industry (FTAPCCI), Hyderabad; Sri O.L. Kantha Rao, Secretary and Sri R. Shiva Kumar, A.P. Spinning Mills Association, Guntur have stated that despite the APERC's directions to the AP Discoms in the letter dated 1.11.2017 to comply with Clause 12.5 of Tariff Regulations, DISCOMS have not filed the true-up applications along with the presentpetition.

Sri O.L. Kantha Rao, Secretary and Sri R. Shiva Kumar, A.P. Spinning Mills Association, Guntur have stated that the revenue shortfall for APSPDCL for the year 2016-17 is of the order of ₹2000 Crores and for the year 2017-18 is ₹1312 Crores (estimated) totalling to a current deficit of ₹3312 Crores. This is more than 22% of the current ARR of APSPDCL. Unless this true up petition is filed, finalizing the ARR and the ways & means to recover the uncontrollable, and pass through deficit cannot be finalized. Atleast on the matter of incremental fuel cost recovery provisions have to

be enacted by a fresh regulation. Have DISCOMS made such a request to APERC? There appears to be a veil of secrecy in this matter. The Commission is requested to direct the DISCOMS to clarify the above position. DISCOMS may be directed to present their True-Up petitions immediately to be heard along with this ARR petition.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that true up claim shall be submitted by DISCOMs immediately.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that true up claims for FY2016-17 be submitted immediately by the DISCOMs and public hearings shall be conducted. True up for FY2018-19 shall not be allowed.

**Discoms Response:** As per APERC Regulation No.4 of 2005, true up of power purchase cost variations is permitted annually. Remaining items such as O&M Costs, Distribution cost etc. are allowed to be trued up during MYT filing only. In view of the delay associated with finalization of annual audited accounts for FY2016-17, APEPDCL could not file the true up requirements for FY2016-17. The revenue deficit of APSPDCL for FY2016-17 is ₹1890 Cr. The revenue deficit for FY2017-18 upto December 2017 is ₹70 Cr. Hence the projected revenue deficit for FY2016-17 and FY2017-18 is likely to be ₹2000 Cr. The true up petition for FY2016-17 and FY2017-18 will be filed at the earliest.

**Commission's view:** The apprehensions of the objectors on possible true up claims cannot be dismissed as unreal and the need for making such true up claims promptly cannot be understated if the desired predictability of the possible burden on the consumers were to be transparent. The distribution licensees, if they have any sustainable true up claims for FY2016-17 and FY2017-18, may take the permissible steps in this regard as per the Regulations in force promptly. It is only when such true up claims are actually made that the Commission can examine on merits in accordance with law, the permissibility and reasonableness of such claims item-wise and pass appropriate orders thereon after the required public hearings. While the protection of interests of the consumers is the paramount consideration for the Commission in any such consideration, no further opinions can be expressed on

the issue by the Commission at this stage.

# Revenue Gaps should not be permitted under True-up claim or Regulatory Asset

55 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M ) State Committee Member, Tirupati have stated that since the Discoms have not made it clear as to how they would propose to bridge the projected revenue gaps for FY2018-19, the Commission is requested to make it clear that no true up claim would be permitted later for the revenue gap, if any, that is going to be determined by it after taking into account the subsidy amount the GoAP is willing to provide. The Commission is also requested to make it clear to the Discoms that the remaining revenue gap, if any, to be determined for FY2018-19 will not be treated as regulatory asset. Regulatory asset can be considered only when hefty tariff hike is required and only a part of it is permitted by the Commission to avoid tariff shock to the consumers and that such revenue gap treated as regulatory asset can be permitted to be collected from the consumers in later years. Here, in the subject proposals of the Discoms, as they have not even proposed any tariff hike for FY2018-19, the question of considering regulatory asset does not arise.

Sri T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad has stated that no tariff hike shall be granted on account of revisions during truing up for FY2018-19.

**Discoms Response:** As per Regulation No.4 of 2005, DISCOMs are permitted to claim true up for variations in power purchase costs and any increase in power purchase costs over the approved costs will be filed before APERC.

**Commission's view:** Fortunately for the State, there is no tradition of creation of any regulatory asset so far and hopefully the tradition will continue towards which the Commission will make every effort. Any request for true up will be considered by the Commission item-wise strictly in accordance with the Electricity Act, 2003, the Andhra Pradesh Electricity Reform Act, 1998 and Regulation 4 of 2005. There cannot be any wholesale grant of the entire revenue gap as a permissible true up claim.

# Non-Tariff income must be strictly as per audited accounts

56 Sri T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad, Sri Sourabh Srivatsava have stated that the ARR may be appproved by applying the non-tariff incomes as earned by the Licensee in the past strictly in line with audited accounts.

**Discoms Response:** Non-Tariff income has been estimated based on the reasonable actual data available for the first half of the current Financial Year 2017-18. **Commission's View:** Discoms' response is adequate.

# Claim full subsidy from GoAP and do not burden subsidizing consumers

57 Sri K. Rajendra Reddy, P. Kothakota, Chittoor Districthas stated that the notification says that the APSPDCL will be incurring a revenue deficit of ₹6218.63 Cr. does not propose any tariff increase for FY2018-19 and proposes to continue with current tariff as approved by the Commission during FY2017-18 and did not disclose how such huge revenue gap will be matched. As the State government barred the licensee from tariff hike, to bridge the revenue gap, the license is entitled for hundred percent reimbursement from the State government under sec 65 of Electricity Act, 2003. As such the licensee should claim from government of Andhra Pradesh the entire cost allocated for LT-V i.e. ₹5295.66 Cr. Further the licensee should consider the revenue realization from LT-V of ₹82.83Cr. and also, should take in to consideration of ₹1.44 Cr. loss being sustained by the licensee due to direction of G.O.A.P. to subsidize tariff to horticultural nurseries.

Item	Amount
Cost Allocation for LT-V	5295.66 Cr.
Revenue Realization from LT-V	82.83 Cr.
Net Cost of LT-V	5212.83 Cr.
Loss due to subsidized supply to horticulture nursery to be	1.44 Cr.
reimbursed by GoAP	
Total cost of LT-V due from GoAP	5214.27 Cr.
Revenue deficit	6218.63 Cr.
Due from GoAP under Sec 65 of 2003 Act	5214.27 Cr.
Net Deficit	1004. 36 Cr.

The net subsidy due from G.O.A.P should be as follows.

Sri. T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad has stated that the subsidy required from the Govt. of Andhra Pradesh based on estimated consumption levels of subsidized categories shall be adjusted such that the cost of supplying subsidized power to selected consumer categories is not borne by the other non-

subsidized consumers in terms of adjustment of the revenue gap of FY2018-19. ARR may be approved by considering total subsidy of ₹7613.06 Crores for APSPDCL and of ₹2961.47 Crores for APEPDCL for FY2018-19.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that Government shall bear the total deficit of ₹7982 Cr. projected by the DISCOMs

**Discoms Response:** Discoms expect that the State Govt. would support by way of extending the required subsidy as may be determined by the APERC in the Retail Supply Tariff order for FY2018-19.

Commission's View: Hopefully the State Government will expeditiously pay all arrears due respectively to the two distribution companies towards subsidy (including all incentives and concessions to different categories of consumers which are also possible only under Section 65 of the Electricity Act, 2003) till the end of the FY2017-18 and will promptly pay the subsidy payable in FY2018-19 so as to provide the desired financial relief to the distribution licensees under severe economic stress. The Commission advises the State Government accordingly under Section 86(2) of the Electricity Act, 2003.

#### Sales requirement is over projected

58 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that according to ARRs of APDISCOMs during the FY2018-19, electricity requirement in Andhra Pradesh would be 61,543 MU. An examination of UDAY Document signed by both the DISCOMs and GoAP with the Gol shows that during FY2018-19, electricity requirement would be about 58,690 MU. ARR estimate of electricity requirement appears to be higher by nearly 3,000 MU entailing an additional expenditure of more than ₹1,500 Cr. It is important to review electricity requirement estimate arrived at by the APDISCOMs in their ARRs.

APSPDCL projected 7.87% increase in total electricity consumption during 2018-19 while during the previous year it increased by 4.92% only. Particularly, in the case of HT consumers, APSPDCL projected 10.25% increase in consumption during 2018-19 while during the previous year its consumption in fact declined by 0.24%. This trend

points to the need to exercise caution while adopting DISCOMs' estimate of power consumption and procurement during the ensuing year i.e. 2018-19. Overestimation of HT sales will have adverse impact on finances of DISCOMs. Lower than projected consumption by high tariff consumers will lead to under realization of revenue and consequent increase in deficit of DISCOMs.

DISCOM	ARR	<b>UDAY Document</b>
		( <b>MU</b> )
APEPDCL	21977	20999
APSPDCL	39566	37591
Total	61543	58690

**Consumption Estimate:** 

Power Consumption in the pase: (MU)

DISCOM	2016-17				2017-18	3
	ARR	<b>R</b> APERC Actual		ARR	APERC	Present
						Estimate
EPDCL		18575	17042	19721	18760	19537
SPDCL		35881	33577	37297	35658	35359
Total	55565	54456	50619	57018	54418	54896

Sri Katuri Hari Kishore Kumar Reddy, Paturu, Kovuru Mandal, Nellore Dist. has stated that due to lack of proper estimation of sales, excess power purchases are being made by DISCOMs puttingthem to losses. For example, the sales estimation for FY2016-17 in HT-IV was 1757 MU whereas the actuals were 744 MU only resulting in a difference of 1013 MU.

Sri T.S. Appa Rao, Secretary General and Sri Sourabh Srivastava, The Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industry (FTAPCCI), Hyderabad have stated that the Sales estimate of the Petitioner does not conform to the Business Plan filed before the Commission during August 2017.

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur desired the DISCOMS to re-consider their sales estimate for industrial sector and downsize their HT size sales estimate.

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that a growth of 10.5% in HT industries and 7.1% in LT industries is being forecast. These are highly unlikely and therefore require downgrading of sales forecast. This is specifically necessary in the context that HT industry consumption is of the order of 21.37% of APSPDCL but is expected to be yielding 37.25% of the total revenue of APSPDCL. A proper due diligence on the business plan of the DISCOMS along with their sales forecast etc., is absolutely required before any ARR application is to be entertained by the Commission. The sales estimate of the petitioner does not conform to the business plan filed before the Commission during August, 2017. The Commission is requested to direct the DISCOMS to clarify this matter.

**Discoms Response:** The Sales projections have been made based on the latest historical sales data available and as per most realistic assumptions/estimates made at the time of preparation of ARR & proposed filings.

The difference in the approved and actual sales in HT-IV category in FY2016-17 was due to the lift irrigation schemes not coming up as expected.

The minor variation in sales estimate in Business Plan and ARR are due to the consideration of actual sales for the months from July to September, 2017.

**Commission's View:** The overall requirements of quantity of electricity for FY2018-19 projected by the DISCOMS are cross-checked by the Commission with reference to the data and information obtained by it from the Irrigation Department of the State Government and the historical data available with the Commission.

#### Estimate of energy requirement needs to be thoroughly reviewed

**59** Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that past experience shows that actual power procurement by the DISCOMs is much less than their ARR proposals. During FY2016-17 while APDISCOMs as part of ARR proposals, projected energy requirement of 55,565 MU the actual procurement was only 50,619 MU. This was much less than that allowed by the Commission also. Similarly, during FY2017-18 while they estimated energy requirement of 57,018 MU the actual procurement will be 54,896 MU. Given this past experience, the present estimate of DISCOMs for the ensuing year 2018-19 also needs to be thoroughly reviewed.

Er. A. Punna Rao, Vijayawada has stated thatas per the DISCOMs, the energy requirement in FY2015-16 (ARR filing 27-12-2015) is 58,191 MU and in FY2018-19 (ARR filing 30-11-2017) is 61,543 MU, growth of 5.726% only for 3 years. SPDCL, for the year 2018-19, stated the growth rate in Industrial HT will be 10.49% (2017-18,

-2.28%), which is on higher side. For Street Lighting LT-VI, DISCOMs projected the growth rates of 4.59% (SPDCL), 5.77% (EPDCL). DISCOMs did not consider the energy saving of 40% to 50% (200 MU) through distribution of 30 lakhs LED Street Lights in the year 2018-19. Overall, the DISCOMs projected higher growth rates. APERC may have to reduce the energy requirement to 59,500 MU, which may result in back down of APGENCO thermal power to 3,500MU. It is suggested that the DISCOMs may revise the requirement of power on real growth rates.

**Discoms Response:** The projections are made based on the actual data available on metered sales and the realistic assumptions on the expected sales for the ensuing year. Installation of 30 Lakh LED Street Lights is expected to spread throughout the ensuing financial year 2018-19 and the exact impact in reduction of the consumption is only known after completion of one year of installation. In the light of the above, it is to inform that there is no necessity to revise the requirements.

**Commission's View:** The estimates of the DISCOMs for the ensuing financial year are assessed keeping in view the difference between the projections, permissions and actuals in the earlier years so as to estimate the energy requirement in as realistic a manner as possible.

# Increasing and unwarranted surplus power

**60** Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that notwithstanding the stated objectives of reducing global warming and protecting environment for encouraging generation and consumption of NCE, entering into long-term PPAs with NCE units, especially wind and solar energy units, at higher tariffs exceeding even the average cost of power purchase by the Discoms, far exceeding their obligations under RPPO, requirement of power and availability of power under existing PPAs in force and agreements or PPAs with ongoing projects, leads to increasing and unwarranted surplus power and payment of fixed charges for backing down the same not only at present but also in the medium term.

**Discoms Response:** In view of the down trend of wind and solar tariffs, now almost all the States in the Country are coming for setting up of wind and solar projects. This

clean power certainly would helpful to reducing global warming and protecting environment.

**Commission's view:** The distribution licensees may balance the need for reducing global warming and protecting environment with the possible liability for payment of fixed charges and management of unwarranted surplus.

#### Present holistic view to the Government

61 Sri O.L. Kantha Rao, Secretary; Sri R. Siva Kumar, A.P. Spinning Mills Association,Guntur have stated that in the matter of power purchase, it appears that the DISCOMS are facing the issues of higher procurement in terms of quantity of energy and higher procurement price. It is well known that 80% or more of the ARR of the DISCOMS is because of power purchase costs and unless these power purchase issues are addressed, there is very little the DISCOMS can do in terms of offering better tariff and unless the tariff is reduced, there is no way the consumption can go up from the energy intensive manufacturing sector be it Textiles, Steel, Cement etc. Since the principal share holders are the Government, it is suggested that DISCOMS present a holistic view to the Government as to how on reducing the tariff for the industrial segment, consumption would go up in the next 2 to 3 years, leading to better plant load factor for the generating companies and consequent reduced power purchase cost.

**Discoms Response:** The projections of the DISCOM requirements & energy availability have been carried out by the licensees as per the historical data trends and most realistic assumptions/estimates available at that point of time of preparing the filings.

**Commission's View:** As both the distribution licensees are State Government companies, meaningful exchange of information on all aspects including the above can be presumed to be taking place, which forms the basis for policy making in the Power sector.

#### **Energy requirement inflated**

62 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that going by the trend of growth of requirement of power by the Discoms for the last two years and current financial year, their requirement turns out to be less than what they proposed and what the Commission determined. In this background, energy requirement of 61,543MU for the year 2018-19 shown by the Discoms seems inflated, as usual.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that over estimates shall be corrected.

**Discoms Response:** The projections of the DISCOMs requirements & energy availability have been carried out by the licensees as per the historical data trends and most realistic assumptions/ estimates available at that point of time of preparing the filings.

**Commission's view:** The projected energy requirement is trimmed to realistic levels as already stated in response to para no. 59.

# **APSPDCL** failed in achieving sales targets

63 Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that performance of APSPDCL with regard to its metered sales and agricultural sales is disastrous as the licensee has failed in successive years in achieving the targets fixed by the Commission. While target for 2016-17 with regard to metered sales is 24415.30MU i.e. 68.04%, actual is 21465.0MU i.e. 63.93%. Even for 2017-18 also the licensee is not likely to achieve the target as target for 2017-18 metered sales is 23879.36 MU i.e. 66.97%. Present consumption trend indicates that sales will be only 22710.70MU i.e. 64.23% only with regards to agriculture sales. APERC order for 2016-17 is 8392.70MU i.e. 23.39%, actual consumption is 9269.50 MU i.e. 27.61%. For FY2017-18 APERC order for agriculture sales is 8741.43 MU i.e. 24.52%. Trend indicates that agriculture consumption will be 9536.85i.e. 26.97% during 2017-18. The License is requested to furnish the details regarding APERC Orders and actual regarding consumption of LT-V and LT metered sales from FY2006-2007 to 2016-17.

	API	ERC	Actuals		
Year	LT Metered Sales (MU)	LT Agl. Sales (MU)	LT Metered Sales (MU)	LT Agl. Sales (MU)	
2006-07	4302.90	3291.60	4076.83	3684.13	
2007-08	4559.50	3291.06	4505.63	3189.62	
2008-09	5006.50	3291.06	5191.81	3459.25	
2009-10	5624.85	3455.55	5800.39	4167.82	
2011-12	7109.09	4074.52	6584.81	4366.34	
2012-13	7621.01	4478.35	6635.58	4587.91	
2013-14	7621.02	4478.35	6668.48	5513.46	
2014-15			9264.69	7998.16	
2015-16	10252.29	8020.16	10636.93	8482.33	
2016-17	12221.39	8392.70	11716.70	9269.50	

# **Discoms Response:**

**Commission's View:** The DISCOMs will hopefully further improve their performance.

# **Energy Availability Understated**

64 Er. A. Punna Rao, Vijayawada has stated that as per DISCOMs submissions, Energy Availability is 66,173 MU, requirement is 61,543 MU, Sales - 4630 MU and Backdown -1530MU. It appears that DISCOMs understated that Energy availability from APGENCO.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that APDISCOMs estimated 27,452.46 MU of energy availability from APGENCO thermal power plants during FY2018-19. Total installed capacity of APGENCO thermal power plants listed under availability stands at 5010 MW. At 80% PLF these plants shall be able to generate 35,110.08 MU. This shows that the APDISCOMs under estimated power availability from APGENCO thermal power plants by 7,657.62 MU. Against projected availability of an installed capacity of thermal stations of APGENCO, including two units of SDSTPS of 5010 MW, the DISCOMs have shown availability of 27,452.46 MU only. In other words, if the thermal units of APGENCO generate power with a PLF of 80%, additional 7657.62 MU would be available to APDISCOMs.

**Discoms Response:** The projections of energy availability have been carried out by the licensees as per the most realistic estimates available at that point of time. DISCOMs filed the energy availability for APGENCO stations based on the minimum guaranteed coal supply as per Fuel Supply Agreement.

The DISCOMs have projected the availabilities from the thermal stations of APGENCO based on the actual coal supplies. Shortage of supply of allotted coal to thermal power plants in the country has been experienced. The matters of supply of sufficient coal and their timely transport are under the purview of GoI. DISCOMs on their part are requesting the CIL to allot extra coal to the APGENCO stations in the periodical meetings held by the coal company.

**Commission's view:** The projection of energy availability from thermal stations of APGENCO by the DISCOMs is reassessed with reference to the accepted norms applicable for such estimates. The estimate by the DISCOMS is found to be on the lower side and has been enhanced to the optimum level (but not to the theoretical maximum level) based on the data of actual supplies of coal in the first nine months of this financial year i.e. FY2017-18.

# AP GENCO stations availability under projected

65 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao,State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that against projected availability of the installed capacity of thermal stations of AP Genco, including two units of SDSTPS, of 5010 MW, the Discoms have shown availability of 27452.46 MU only. With a capacity of 5010 MW, 35110.08 MU can be generated with a PLF of 80%. In other words, if the thermal units of AP Genco generate power with a PLF of 80%, additional 7657.62 MU would be available to AP Discoms.

**Discoms Response:** DISCOMs filed the energy availability for APGENCO and SDSTPP-I&II stations based on the minimum guaranteed coal supply as per Fuel Supply Agreement. Further, the availability from RTPP-IV (which is expected to commence operation in Apr'18) is projected low considering the present coal supply position and unstable operation of the new unit during the initial stages.

**Commission's View:** As stated earlier, the projected generation has been upgraded to realistic levels as per accepted norms by the Commission.

# Power Purchase quantity estimates from APGENCO thermal stations and CGS stations are based at Low PLFs

Sri O.L. Kantha Rao, Secretary; Sri R. Siva Kumar, A.P. Spinning Mills Association, Guntur have stated that the power purchase quantity estimates from APGENCO (Thermal)are based at no more than 62.5% Plant Load Factor (PLF). From CGS stations also it is estimated at 62.5%. It has been stated that the fixed cost of the generating stations is being calculated on the presumption of 85% of PLF. There is no mention of the effect of a substantially lower PLF of 62.5% on the variable costs. The variable cost is a dominant cost in the power procurement, a lower PLF would automatically imply a higher heat rate and consequently higher coal consumption and cost. The Commission is requested to direct the DISCOMS to give a detailed note on station-wise approved heat rates at 85% PLF. It was known that CERC has directed that all costs should be calculated for Thermal units at 85% PLF. The Commission is requested to see that power procurement be calculated considering 85% PLF in both variable and fixed costs.

**Discoms Response:** The PLFs were projected based on the actual likely supply of coal to the thermal stations of APGENCO, CGS and IPPs. It is true that Station Heat Rates of thermal stations will be higher at lower PLFs and as a result the specific coal consumption (kg/kWh) will be more. However, the variable costs will be paid based on the normative Station Heat Rates specified in the PPAS/ Regulations. Hence, there will be no additional burden on the consumers due to low Station Heat Rates.

Commission's View: The view expressed at para 64 holds good.

# High per unit cost of thermal plants working below threshold PLF is leading to increased Cost of Supply

67 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that he average cost of supply during FY2018-19 is projected to increase by 10.7% over the cost approved for the FY2017-18. One of the reasons for this increased power purchase cost would be increased per unit fixed cost as most of the thermal power plants will be working at below threshold PLF. **Discoms Response:** Due to the shortage of coal prevailing in the Country as a whole, the PLFs of thermal Generating Stations are expected to be lower.

**Commission's View:** The capacity to generate and the actual generation may not be the same due to multiple factors and the obligation to pay fixed cost depends upon the terms and conditions of the respective power purchase agreements. Such vagaries may not totally absolve the distribution licensees of their obligations and liabilities under such agreements and planning for reduction in the power purchase cost necessarily has to take into account these factors.

# Variable costs of AP Genco stations projected by the licensees are on lower side

**68** The Chief Engineer, Commercial, APGenco, Vijayawada has stated the following:

The variable cost projected by APGenco in the ARR proposals and the restricted variable cost for APGENCO stations projected by APDiscoms are as tabulated below.

Station	AP Genco Projection for H2 FY2017-18 (₹)	AP Discoms Projection for H2 FY2017-18 (₹)	AP Genco Projection for FY2018-19 (₹)	AP Discoms Projection for FY2018-19 (₹)
Dr.NTTPS	3.03	2.59	3.03	2.67
(I,II,III)				
Dr.NTTPS-IV	2.62	2.34	2.62	2.41
RTPP-I	3.87	3.05	3.87	3.14
RTPP-II	3.87	3.05	3.87	3.14
RTPP-III	3.87	3.05	3.87	3.14
RTPP-IV	-	-	3.87	3.14

APGenco proposed the above variable cost for the ARR projections for FY2018-19 based on the actual variable cost incurred the period 01.04.2017 to 31.08.2017. Further, M/s SCCL has increased coal rates with effect from 01.11.2017 by about 10%. As a result the variable cost for Dr. NTTPS O&M and RTPP-I,II,III will increase by 6 paise/kWh and 31 paise/kWh respectively with effect from 01.11.2017.The coal companies are raising coal prices and railways are increasing freight charges from time to time and it is impacting the variable cost of thermal stations. Unless the costs are considered at the time of ARR filings itself, there will be severe cash crunch for generators to meet coal and railway freight payments. Further to this as per clause 13 (h) of APERC Regulation 1 of 2008, the prevailing rates are to be considered for the fixation of variable cost and any subsequent increase will be allowed as a pass through in the form of FSA. In addition to this Discoms are not admitting FSA claims on quarterly basis since it was changed to yearly basis for

licensees. But for the Generators coal and railway freight are to be paid on cash and carry basis and no credit. In this context, it is to submit that the restricted variable cost proposals for APGenco stations submitted by APDiscoms are on lower side when compared with the ARR proposals submitted by APGenco. The Commission is requested to consider the APGENCO ARR proposed variable charges in APDiscoms Retail Supply Tariff Order for FY2017-18.

**Discoms Response:** For FY2017-18 (H2), the variable charges were projected as per the rates approved in the Tariff Order for FY2017-18. For FY2018-19, AP Discoms projected the variable rates by escalating the variable rates approved by APERC in the tariff order for FY2017-18 by 3% keeping in view the increase in costs of coal freight charges. If there are any variations in the landed cost of fuel leading to variation of variable rates, the same will be admitted after approval by APERC.

**Commission's view:** The variable cost admissible to AP Genco stations at actual level is arrived at in the background of 3% appreciation proposed by the DISCOMs and the data furnished by the AP Genco in this regard on actual coal prices and Railway freight charges demanded and paid.

# Tariff and availability of Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS)

69 The Chief General Manager, Andhra Pradesh Power Development Corporation Ltd. (APPDCL), Vijayawada stated that APPDCL has commissioned the two units of 2X800MW-Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) Stage-1 and the same are in operation. The Amended and Restated PPA for SDSTPS Stage-1 has been entered with the two APDISCOMs (APEPDCL & APSPDCL) on 24.08.2016 and the same has been registered as O.P.No.21/2016 by APERC and the orders are reserved. APPDCL has already made tariff filings for determination of tariff for the control period 2014-19 (O.P.No.47/2017) and the hearings are under progress. The proposed ARR filings are applicable for the period from 01.04.2018 to 31.03.2019, by that time the PPA consent and tariff determination of APPDCL will be completed. APPDCL has proposed ₹1.77 per kWh towards Fixed Charges for the units generated from SDSTPS, whereas APDISCOMs have proposed ₹1.02/- per kWh in their ARRs which is not sufficient for debt servicing and APPDCL have obligation of Operation & Maintenance besides debt servicing. Hence, it is requested to consider provisional fixed cost of ₹1.59 (i.e. 90% of the Fixed Cost) as per CERC regulations till determination of Fixed Cost by the APERC.

Sri B. N. Prabhakar, President, Society for Water, Power & Natural resources conservation Awareness and Monitoring (SWAPNAM), Certified Energy Manager & Auditor, Vijayawada has stated that AP Discoms have considered 100% power from Damodaram Sanjeevaiah TPP. The basis for such consideration may be indicated. Commission may instruct the Discoms to provide a copy of the same.

Sri. O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated with reference to the capital cost and power purchase approval from Sri Damodaram Sanjivaiah Thermal Power Station (SDSTPS) that CAG vide their report 17-02-2017 has made some serious observations with respect to capital cost and performance of the generating stations. The Commission is requested to confirm that corrective actions in the above matter have been taken by the DISCOMS at least for the future.

**Discoms Response**: APDISCOMs are admitting the bills for the energy supplied from SDSTPP-I&II at an adhoc tariff of ₹3.63/kWh as approved by APERC. Since the PPA is yet to be consented by APERC, APDISCOMs projected the same rate for FY2018-19 also. The fixation of tariff falls under the purview of the Commission. If APERC finalizes the tariff, the same will be admitted by APDISCOMs.

Availabilities are considered as per the projections made available to the DISCOMs by the respective Generating plants. APPDCL filed application before APERC for determination of the Tariff. APDISCOMs are filing counter against the higher capital cost claimed by APPDCL in O.P.No.47 of 2017. However, APERC will finalize the Tariff after conducting the due regulatory process.

**Commission's view:** The DISCOMs were ordered by the Commission in O.P. No. 21 of 2016 to pay to this generator adhoc tariff at ₹3.63 paise per unit subject to any further or final orders that may be passed by the Commission and O.P. 21 of 2016 has been reserved for orders. O.P.No.47 of 2017 is the appropriate proceeding in which the Commission has to determine the regular tariff for the third control period, in which also no interim orders or directions are given. Hence, subject to any further or final orders that may be passed in O.P. 21 of 2016 and / or O.P.No.47 of 2017, the fixed and variable charges proposed by the DISCOMs in the ARR proposals for FY2018-19 in tune with the interim tariff of ₹3.63 paise have to be accepted. The expected cent percent generation was stated to be based on the information from the generating plant.

# Power from IPPs and Krishnapatnam Plant of APGenco shall not be purchased.

70 Sri Jalagam Kumara Swamy, Vijayawada; Sri Yallapu Surya Narayana, Chinnampeta, E.G.Dist.; Sri Rasamsetty Raja, Prattipadu, E.G.Dist.; Sri Donga Nageswara Rao, Ambajipeta, E.G.Dist.; Sri Adabala Rajamohan, Ambajipeta, E.G. Dist.; Sri Muthyala Jamil, Ambajipeta, E.G. Dist.; Sri Kavuluri Pathi Raju, Kethavaram, W.G.Dist.; Sri Mandapati Vidyadhara Reddy, Chatrayi, Krishna Dist.; Sri Medasani VijayaBhasker, Thatigadapa, Krishna Dist: Sri Bheemavarapu Bramhananda Reddy, Gudibandivaaripalem, Guntur Dist.; Sri Vanga Sambi Reddy, Gudibandivaaripalem, Guntur Dist.; Sri Aavuya Venkateshwar Reddy,Kollipara, Guntur Dist.; Sri Godagattu Sreerambabu, Paluru, Prakasam Dist.; Sri Addagadda Satish Kumar, Nagulapalem, Prakasam Dist.; Sri Katuri Harikishorekumar Reddy, Paturu, Nellore Dist.; Sri Polireddy Rammohan Reddy, Buchireddypalem, Nellore Dist.; Sri Vemireddy Hanuma Reddy, Chemudugunta, Nellore Dist.; Sri Kukati Sunil Kumar Reddy, Manegunta, Nellore Dist.; Sri Inamadugu Venkata Ramanareddy, Vavveru, Nellore Dist.; Sri Seernam Venugopalreddy, Chatrai, Nellore Dist.; Sri Chemikala Madhavareddy, Proddutur, Kadapa Dist.; Sri N. Janardhana Reddy, Y.M.Palli, Kadapa Dist.; Sri B.Obul Reddy, Paatha Giriyapalli, Kadapa Dist.; Sri A. Gangireddy, Pagadalapalli, Kadapa Dist. representing Bharatiya Kisan Sangh (BKS) and others have stated that power shall not be purchased from M/s Hinduja, M/s Meenakshi, M/s Simhapuri and other IPPs in view of surplus situation. Power also shall not be purchased from Krishnapatnam power plant as its unit cost is high i.e.  $\gtrless$  4.04. Discoms are purchasing excess power at higher rates and selling the same at lower rates and hence incurring loss. In FY2017-18, Discoms incurred loss by selling 2208.34 MU @ ₹ 2.79.

#### **Discoms Response:**

APSPDCL: Discoms have not proposed power purchase from M/s Hinduja, M/s Meenakshi and M/s Simhapuri IPPs and are purchasing power from M/s Krishnapatnam plant @ ₹ 3.63 per unit.

APEPDCL: Discoms are following the merit order principles as prescribed by APERC in purchasing power.

Commission's View: The suggestions are kept in view.

# **RTPP-IV and SDSTPS shall not be included**

71 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that APDISCOMs under estimated power availability from APGENCO thermal power plants by 7657.62 MU. This is more than power availability projected from RTPP IV (2,426.24 MU) and DSTPS-II (4,607.06 MU). Given the power surplus situation both these plants shall not be included under the list of power plants available. Also, PPA with respect to RTPP -IV has not yet been approved by the Commission. Through this measure ₹737 Cr can be saved from fixed cost burden.

Sri. O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that Power purchase cost for RTPP(IV) has been considered on certain assumptions at an average rate of ₹4.24 per kWh. However, AP GENCO has not filed any application with detailed cost related aspects for this Station.

**Discoms Response:** The DISCOMs have projected the availabilities from the thermal stations of AP GENCO based on the actual coal supplies.

The then APDISCOMs have signed a PPA with APGENCO on 22.11.2010. The Amended and Restated PPA for Rayalaseema Thermal Power Project Stage – IV (1 x 600 MW) is yet to be entered by APGENCO with APDISCOMs by limiting to two DISCOMs of AP. An interim tariff of ₹4.24/kWh was proposed in the ARR based on CERC/APERC norms and the details produced by APGENCO subject to finalization and approval of the same by APERC.

**Commission's View:** The Commission's view on para no. 69 may be referred to on SDSTPS-II. Though RTPP-IV is referred to regarding power availability, the Commission is not yet approached with any Power Purchase Agreement with the plant or any request for determination of any tariff. The distribution licensees can actually procure any power from that unit only on obtaining a specific permission in any such proceedings or otherwise from the Commission at which time the then power availability position and fixed and variable cost burden will also be taken into account, among other things.

# 3% escalation in variable cost of thermal plants should not be allowed

72 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that the APDISCOMs have proposed an

escalation of 3% over the values of variable cost approved for 2017-18 for coal-based thermal power plants of APGENCO and CGSs. If the cost of coal and the resultant variable cost increase during 2018-19, the APDISCOMs can claim the additional expenditure under true-up. The Commission is requested not to allow the proposed 3% escalation in variable cost for coal-based thermal stations.

**Discoms Response:** DISCOMs projected the variable rates for FY 2018-19 by escalating the variable rates approved by APERC in the tariff order for FY 2017-18 by 3%. The proposed escalation of 3% is on account of increase in cost of SCCL coal by 10% w.e.f. 1.11.2017. The proposed rates are estimates only. Regulation 4 of 2005 permits the DISCOMs to claim true ups of amounts arising out of variations in power purchase costs and any increase in variable rates over that proposed now will be claimed in line with Regulation.

**Commission's View:** The variable cost admissible to AP Genco stations at actual level is arrived at in the background of 3% appreciation proposed by the DISCOMs and the data furnished by the AP Genco in this regard on actual coal prices and Railway freight charges demanded and paid. Similar will be the case with CGS. In any view any increase in variable cost to the extent permissible can be the subject of a request for true up to be considered on merits in accordance with law.

#### Coal issues are to be resolved

**73** Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that the Discoms cannot deflate availability of power from thermal stations of AP Genco and CGSs on the presumption that adequate coal will not be available to them for the entire year 2018-19. Till a few months back the Union Minister for Coal used to claim repeatedly that stocks of coal piled up at pitheads of coal mines and that there was no need for importing coal. During the recent months, shortage of supply of allotted coal to thermal power plants in the country has been experienced. The reasons for such shortage have not been explained and the concerned must come out with any specific proposals to overcome the shortage situation and their plan of action to get production of coal increased and to ensure timely transportation of allocated coal to thermal plants. Whatever be the reason for

creating such artificial scarcity for coal, the real beneficiaries of artificial shortage for coal and resultant decrease in generation of power are the generators/traders who sell their power in the market and through power exchanges to extract higher tariffs from the Discoms which opt to purchase that power. There is no justification in allowing the situation of scarcity for coal in the country, in the face availability of deposits abundantly and substantial stocks at pitheads and scope for increasing production of coal at mines of the publicsector mining companies. GoAP and its power utilities should take up the issue with GoI and insist on ensuring timely supply of coal allocated to the thermal plants from which they purchase power.

**Discoms Response:** The DISCOMs have projected the availabilities from the thermal stations of APGENCO and CGS based on the actual coal supplies. The objectors themselves have acknowledged the fact that during the recent months, shortage of supply of allotted coal to thermal power plants in the country has been experienced. The matters of supply of sufficient coal and timely transport are under the purview of GoI. DISCOMs on their part are requesting the CIL to allot extra coal to the APGENCO stations in the periodical meetings held by the coal company.

**Commission's view:** The distribution licensees and the Government of Andhra Pradesh may pursue their efforts vigorously with the Government of India and its agencies for adequate allotment and regular supply of the required quantity of coal to the generating stations of AP Genco.

# **Real and Transparent bidding for Imported Coal**

74 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao,State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali,CPI(M) State Committee Member, Tirupati have stated that the Discoms also have informed that AP Genco proposed to procure imported coal to meet the shortfall in domestic coal, if any, to the extent of total requirement. Earlier, on several occasions, it was brought to the notice of the Commission allegations of manipulations in importing coal and its transportation at inflated costs and the failure of the Discoms in questioning the same, but of no avail. It is once again requested that the Commission may give necessary directions to the Discoms and AP Genco to ensure real and transparent competitive bidding for importing coal and its transportation when it is really needed. Sri M. Venugopala Rao through a letter dated 15.03.2018 has requested the Commission to call for relevant information and explanation from the authorities concerned, hold public hearings at appropriate time and to issue necessary orders to curb malpractices and irregularities in import of coal and its transportation by AP GENCO.

**Discoms Response:** APDISCOMs are paying the variable costs (coal and oil costs) of APGENCO stations after securitization and approval of the same by APERC.

**Commission's view:** The distribution licensees and the AP GENCO shall ensure transparency and competition in arriving at the price and cost of transport of imported coal.

# Escalation of variable cost not admissible

75 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that the Discoms have considered an escalation of 3% over the values of variable cost approved for FY2017-18 for coal-based thermal power plants of AP Genco and CGSs, without explaining the basis for such consideration. If for any reason the cost of coal and the resultant variable cost increase during FY2018-19, the Discoms will have the opportunity to claim the additional expenditure under true-up. Therefore, the Commission is requested not to allow the presumptuous consideration of 3% escalation in variable cost for coal-based thermal stations.

**Discoms Response:** DISCOMs projected the variable rates for FY2018-19 by escalating the variable rates approved by APERC in the tariff order for FY2017-18 by 3%. The proposed escalation of 3% is on account of increase in cost of SCCL coal by 10% w.e.f. 1.11.2017. The proposed rates are estimates only. Regulation 4 of 2005 permits the DISCOMs to claim true ups of amounts arising out of variations in power purchase costs and any increase in variable rates over that proposed now will be claimed in line with Regulation.

**Commission's view:** The reason to support the estimated escalation is stated by the DISCOMs.

# **True up of AP GENCO**

76 Sri. O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that Generation tariff for AP GENCO Stations has been finalized vide APERC order dated 26-03-2016 in OP NO. 3/2016, however, no true up has been conducted for the previous tariff period 2009-14.

**Discoms Response:** APERC conducted public hearings and issued a true up order on 05.12.2015 for the Distribution and Retail Tariff businesses of DISCOMs for the control period FY2009-14 in O.P.Nos. 22 to 25 of 2015. In case of APGENCO, the MYT tariff order issued on 31.05.2014 in O.P.No.15 of 2009 already trued up the provisional tariffs of APGENCO stations approved in the Retail Tariffs Orders during the years 2009-14.

**Commission's View:** That true-up has already been done for the relevant control period is stated by the DISCOMs.

# Central Generating Stations availability under projected

77 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that while availability of power from Central Generating Stations is projected at 16,112 MU for FY2018-19, the Discoms have considered 13,169 MU only in anticipation of coal and energy requirement of APDiscoms. When the CGSs have projected availability of 16,112 MU, the Discoms cannot reduce it by 2943 MU arbitrarily on whimsical "anticipation of coal," whatever it may mean. If energy requirement of the Discoms is one of the reasons for such reduction, they cannot ignore binding obligations to purchase power from CGSs under existing PPAs, as it would lead to backing down and payment of fixed charges for the same. In such a situation, there is no point in the Discoms' opting for power from other sources without binding obligations or by entering into long-term PPAs afresh for unwarranted power.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that Power availability from CGS Units is underestimated. It is less than threshold level PLF as well as what was achieved during the previous year.

Station	Threshold PLF (%)	PLF during H2 FY 2017- 18 (%)	PLF considered for FY 2018-19 (%)	Energy availability projected (MU)	Energy availability at threshold PLF (MU)
Ramagundam St I & II	85	89	66	1,370.00	1,764.39
Ramagundam St III	85	85	62	320.27	439.08
NTPC Talcher St II	85	96	75	1,016.15	1,151.64
Simhadri St I	85	83	66 ·	2,507.82	3,229.77
Simhadri St II	85	79	65	988.58	1,292.76
NLC TPS II St I	80	71	56	197.44	282.06
NLC TPS II St II	80	69	56	368.45	526.36
Vallur	85	79	70	643.42	781.30
Tuticorin	85	77	61	695.21	968.74
Kudigi	85	27	40	699.99	1,487.48
Total				8,807.33	11,923.58

APDISCOMs estimated availability of 8,807.33 MU from the above CGS thermal power stations. In arriving at this availability figure, they have adopted lower PLF. This PLF is lower than that recorded during 2017-18. This PLF is also lower than threshold level PLF at which generators are expected to produce power. APDISCOMs shall have adopted threshold level PLF, except in the case of new plants which are yet to reach their full potential, in arriving at the estimates of energy availability. Because of adopting lower PLF in calculating energy availability during 2018-19 APDISCOMs under estimated energy availability from the above thermal power stations by 3,116 MU. This is also confirmed by APDISCOMs submission that, "The CGS stations projected 16,112 MU for FY2018-19. But APDISCOMs have considered 13169 MU in anticipation of shortage of coal and energy requirement of APDISCOMs." (APSPDCL ARR - p,21)

**Discoms Response:** CGS availabilities were projected based on the actual coal supplies during the previous six months. There will be no backing down of CGS stations as generation will also be less due to lesser availabilities. Payment of fixed charges to CGS will also be limited to the extent of lesser availabilities only.

**Commission's View:** The understatement of energy availability from the central generating stations and the AP GENCO stations has been corrected on the lines already stated in para no.64.

# Surrender NNTPS under the power surplus situation

78 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that Neyveli New Thermal Power Station (NNTPS) is a new CGS which is under execution and 68.59 MU are expected to be procured from this plant at the total cost of ₹ 31.99 Crore. Under the given surplus power situation this plant may be surrendered.

# **Discoms Response:** NIL

**Commission's View:** The distribution companies can procure power from the Neyveli New Thermal Power Station (NNTPS) out of the projected capacity of 68.59 MU only if such procuration is in compliance with all the necessary legal formalities and requirements. Assuming that such circumstances exist, the projected availability of energy from this generating station is not excluded from the estimated power availability. However, on completion of execution of the project and readiness for commercial operation, the distribution licensees shall procure any quantum of power from the said plant only on obtaining prior consent from the Commission which will consider any such request only on being satisfied about the compliance with the legal formalities and requirements and the acceptability of the tariff and the necessity for procurement of such power.

# Disallow plants which did not figure in Load Forecast and Resource Plans of DISCOMs

**79** Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that APDISCOMs have included the 400 MW solar power project to be set up by Solar Energy Corporation of India (SECI) at Galiveedu Mandal, Kadapa district and the 400MW solar power project being set up by APGenco at Talaricheruvu (V), near Tadipatri, Ananthapuram District in the list of power plants available to the State as a part of ARR for FY2018-19. These two plants do not figure in the revised load forecast and resource plans of APDISCOMs for the third and fourth control periods. AP Discoms would be achieving RPPO stipulated by the Commission without these plants. Given the surplus power situation and the increasing power purchase costs, these plants may not be allowed.

**Discoms Response:** Projections of ARR & FPT for FY 2018-19 have been made based on the latest information & assumptions available on Demand and Supply projections.

**Commission's View:** The inclusion of these two public sector Solar generating plants is not deleted from consideration in listing the sources of supply of Power for FY2018-19 as per merit order despatch and the question of actual permission for procuring power from these two plants will be considered on merits depending on the then power supply and demand position and the regulation / reduction of the power purchase cost as and when the plants are ready for commercial operation and respective power purchase agreements and determination of the tariff are brought before the Commission for consideration and approval only after which the distribution companies can procure energy from these two generating plants.

#### **Regulate Power Purchases from external sources**

80 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao,State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that for the year 2018-19, the Discoms have considered a uniform rate of ₹4.08 per kWh for purchase of power from bilateral sources (1812 MU), through power exchange (810 MU) and from other short-term sources (400 MU). This consideration of uniformity of tariffs bristles with manipulative tendencies, as if there was no scope for competitive tariffs. The Commission is requested to regulate such purchases, if at all required and the costs realistically by issuing appropriate directions to the Discoms.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that even under surplus situation, when most of the thermal power plants available to the State are expected to be operated at below the threshold PLF, APDISCOMs proposed as part of ARR for FY2018-19 to procure power from bilateral purchases and from electricity exchanges. APDISCOMs are planning to invite bids for RTC power of 500 MW. APDISCOMs have projected energy availability of 12 MU per day for 3 months in H2 FY2017-18 and 5 months in FY2018-19 from bilateral purchases. Besides this, APDISCOMs have projected around 6 MU per day of power purchase from power exchanges to meet the deficit on need basis. (APSPDCL ARR p.31) APDISCOMs proposed to spend ₹531.64 Cr. on procuring power from bilateral and power exchanges at an average cost of ₹4.08 per unit. This is higher than the variable cost of thermal power plants of APGENCO

which are expected to work at below their threshold PLF capacity. Given the surplus power situation and attendant fixed cost burden the Commission is requested not to allow bilateral and power exchange purchases during the FY2018-19.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that power shall not be purchased from the unapproved sources in view of power surplus scenario.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that it is not fair to purchase at high tariffs when there is a surplus of 12013 MU.

Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization, Ongole has stated that it is not justifiable to purchase power from market having 12000 MU surplus power.

**Discoms Response:** The rate of ₹4.08/kWh is the ceiling price approved by APERC for the purchases from Power Exchanges/DEEP e-bidding portal of GOI for the FY2017-18. The said rate of ₹4.08/kWh is only indicative figure. The actual rates will be discovered through Power Exchanges/DEEP e-bidding portal and these rates are competitive in nature. Depending on the market situations, the discovered price may be less than ₹4.08/kWh in which case the DISCOMS will be paying the lesser price. A price of ₹4.08/kWh was taken tentatively to estimate the cost of short term purchases. Estimates do vary over the course of the year. Matter is in the purview of the APERC.

Commission's view: The distribution licensees shall ensure any inevitable requirement for short term purchase of power from sources other than approved in the merit order despatch should be met only after ensuring the price to be the lowest available among all possible sources at that particular time, on which verifiable information should be placed before the Commission expeditiously from time to time at least once in a month to enable a regular check.

# HNPCL is not considered without any reason

81 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali,CPI(M) State Committee Member, Tirupati have stated that the Discoms have not considered availability of power from HNPCL (1040 MW) for FY2018-19 without giving any reasons and despite the fact that APERC has reserved the petitions for determination of capital cost and tariff and consideration of PPA for orders. If the Discoms have to purchase power from HNPCL, they will get 6778.52 MU with a PLF of 80%.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that the APDISCOMs did not include HNPCL (1040 MW) under the list of plants available during the FY2018-19. The Commission had included this plant in the tariff order for the FY2017-18 among the plants to be scheduled and 1,130 MU were expected to be drawn from this plant. This plant is also included in the revised load forecast and resource plans submitted by APDISCOMs to the Commission for third and fourth control periods. The Commission has reserved the petitions for determination of capital cost and tariff and consideration of PPA related to this plant for orders. APDISCOMs did not provide any reasons for not listing the plant under the capacity available to the State during 2018-19. At 80% PLF about 7,200 MU of energy will be available from this plant.

Sri G. Sreenivas, Senior Manager, Corporate Relations, Hinduja National Power Corporation Limited (HNPCL), Hyderabad and Sri Sridhar Prabhu, Advocate for HNPCL have stated that HNPCL has submitted data on Plant Availability, Energy Availability and tariff in the required format for ARR Projections vide its letters bearingNos.(i)HNPCL/VPP/APPCC/285/2017dt.19.09.2017;(ii)HNPCL/VPP/APPCC /287/2017 dated 24.10.2017; (iii) HNPCL/ VPP / APPCC /315/2017 dated 02.11.2017 and Lr.No. CE/Comml./SE/DE-IPP&BPP-III / D.No. 346 /17, dated 12.10.2017 and email dated 02.11.2017. The Energy Availability and tariff projections as submitted by AP Discoms are in deviation with the data submitted by HNPCL for ARR Projections for FY2018-19. Though HNPCL's availability is 100%, the AP Discoms have not planned power procurement for FY 2018-19 from HNPCL. Exclusion of HNPCL from the list of available generators, surprisingly data or reasons having not been given for such unilateral exclusion, is strongly objected. The allocation to the generating station shall be based on the Merit Order i.e. Variable charges and HNPCL is competitive in terms of the variable cost and the procurement of power from the Generating stations should be done based on the Merit Order system as laid down by the Commission. Commission in the interest of justice may seek cogent reasons from

AP Discoms for not considering HNPCL in the proposed scheduling for FY2018-19 and thus the proposals of AP Discoms are bound to be subjected to scrutiny. As a developer who has encumbered its 100% capacity to State of Andhra Pradesh, it is unjust to eliminate HNPCL from the proposed power purchase in FY2018-19. In the order for ARR for FY2017-18, the Commission has noted the confirmation of AP Discoms that both the units of HNPCL plant will be available at normative availability. The sudden departure from this position is unexplained. The Commission has in its FY2017-18 order reiterated that the Merit Order Despatch System will be determined only on the basis of variable cost. The indicative power costs in the filing of AP Discoms indicate a cost in the range of ₹3.68/- to ₹4.08/- from various sources. In the light of the above, the Discoms are bound to produce data before the Commission to establish the method of selection of short listing the proposed developers. With its sustained availability and competitiveness vis-a-vis other developers, HNPCL certainly deserves to be considered for power off-take for FY2018-19 to the extent of its full normative availability. Discoms are also planning procurement of power on short term basis indicated at a high rate. The same may be avoided and power from Long Term PPA power plants such as HNPCL may be scheduled. The Commission is requested to revise the Plant Availability, Energy Availability, fixed cost and variable costs of HNPCL Power Station in the Annual Revenue Requirement (ARR) for the Retail Supply Business for FY2018-19 to make it consistent with the tariff as projected by HNPCL vide its letter dated 02.11.2017 and consider inclusion of HNPCL in list of developers for FY2018-19 in the interest of justice.

**Discoms Response:** APDISCOMS decided to withdraw the HNPCL PPA submitted before APERC. Hence, availability from HNPCL was not projected.

**Commission's View:** The Commission passed orders on 31.01.2018 dismissing O.P. 19 of 2016 for approval of the power purchase agreement as withdrawn and closing O.P.21 of 2015 for determination and fixation of tariff, with appropriate liberty to M/s Hinduja National Power Corporation Ltd., to pursue all remedies available to it under law for fixation and payment of a reasonable price for electricity supplied by it to both the distribution companies of Andhra Pradesh. The said order is the subject matter of Appeal No.41 of 2018 on the file of Hon'ble Appellate Tribunal for Electricity and the matter is *subjudice*. Hence, as a matter of judicial propriety and

discipline, no opinion is expressed on the issue.

The Hon'ble Appellate Tribunal for Electricity was pleased to order in I.A.No. 211 of 2018 in Appeal No. 41 of 2018 on 16.03.2018 that "having regard to the peculiar facts and circumstances of the case, it would be appropriate to direct status quo as prevalent before 31.01.2018 be maintained, without prejudice to the rights and contentions of the parties in the main Appeal and further that the Appellant shall not be entitled to claim any vested right or otherwise base any arguments on the basis that the power has been scheduled on adhoc basis by Respondents 2 and 3 at the provisional rate of ₹ 3.82/kWh during the pendency of the Appeal. The respondents 2 and 3 can proceed to decide on the Merit Order Despatch on the above quantum of power. In the Appeal proceedings, it shall be open to this Tribunal to adjust the equity between the parties while deciding finally the Appeal on merits. The arrangement of status quo prior to 31.01.2018 is an arrangement without prejudice to the rights and contentions of the parties until further Orders.

The Hinduja National Power Corporation Limited, in addition to their objections filed on 12.01.2018, filed an additional Affidavit on 19.03.2018 before this Commission stating about their submission during public hearing and through their objections to include it in the ARR of FY2018-19 allocation based on normative availability and the subsequent orders of the Hon'ble APTEL in I.A. 211 of 2018 extracted above. The HNPCL, while narrating the background stated that the distribution licensees may be directed to consider scheduling of power from it pursuant to the orders of the Hon'ble APTEL. It also requested that the order of this Commission dated 03.03.2018 on pooled power purchase cost for FY2017-18 also be amended recognizing HNPCL as a long-term power producer. Hence, HNPCL requested for inclusion in the Resource Plan for FY2018-2024 for FY2018-19 and for a direction to the distribution licensees for scheduling of power from HNPCL for power procurement for FY2018-19 as per the order dated 16.03.2018 of Hon'ble APTEL.

The advocate for the respondents (2) and (3) filed a Memo before this Commission on 21.03.2018 to consider their petition dated 21.03.2018 filed in Appeal No. 41 of 2018 before the Hon'ble APTEL for stay of execution of its order dated 16.03.2018 for a period of 45 days.

The interlocutory application in Appeal No. 41 of 2018 by the two distribution licensees mentioned that they intend to file an Appeal against the status quo order dated 16.03.2018 and the despatch in respect of HNPCL permitted by APERC in the Retail Supply Tariff Order for FY2017-18 was exhausted as on 31.01.2018 and no more power can be or is procured from HNPCL after 31.01.2018 by the two distribution licensees (respondents 2 and 3). As an appeal is intended to be filed, the respondents 2 and 3 requested the Hon'ble APTEL to grant stay of execution / enforcement of the order dated 16.03.2018 under Order 41 Rule 5 (2) of the Code of Civil Procedure, 1908 for a period of 45 days and grant any other Order including an Order to maintain status quo as on 16.03.2018. The respondents 2 and 3 undertook to abide by the final orders that may be passed.

The situation existing as on today is therefore that the Order dated 16.03.2018 of the Hon'ble Appellate Tribunal continues to be operative and in force and an application for interim stay of the said order is pending before the Hon'ble APTEL. No appeal before the Hon'ble Supreme Court and no Writ Petition before the Hon'ble High Court appear to have been filed so far and no Order interim or final on the request for stay is claimed to have been passed by the Hon'ble APTEL or any other forum so far. As mere filing of an application for interim stay or mere intention to file an appeal do not operate as stay on the interim Order in question, the same has to be given effect to by this Commission.

Though the Hon'ble Appellate Tribunal directed status quo as prevalent before 31.01.2018 to be maintained, giving effect to the direction to the respondents 2 and 3, the distribution licensees to schedule the power at the provisional rate of ₹3.82/kWh is further subject to the respondents 2 and 3 proceeding to decide on the merit order dispatch on the above quantum of power. The Order of the Hon'ble Appellate Tribunal also stated that ₹3.82/kWh provisionally determined by the State Commission is a total tariff comprising both the fixed charges and variable charges and if the total tariff is split into two, the power project of HNPCL may come well within the merit order. The respondents 2 and 3 are also contending before the Hon'ble APTEL in their interim stay application that they are not procuring any power from HNPCL subsequent to 31.01.2018 which may not have any impact on the interim direction dated 16.03.2018 about the status quo being that prevalent before 31.01.2018.

However, as respondents 2 and 3 can proceed to decide on the merit order despatch on the quantum of power to be procured from HNPCL, they shall forthwith communicate their decision to this Commission in compliance with the Order of the Hon'ble APTEL dated 16.03.2018. On receipt of such communication, which is a precondition for this Commission to faithfully give effect to the interim Order dated 16.03.2018, this Commission will include HNPCL for scheduling power from it in the power procurement for FY2018-19 as per merit order dispatch, through an appropriate amendment to this Order on Tariff for Retail Sale of Electricity during FY2018-19, subject to any further or final Orders that may be passed by the Hon'ble APTEL or in any appeal or writ petition against the Orders of the Hon'ble APTEL.

# Purchases from LANCO and SPECTRUM should not be permitted

Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that in its order dated 29.11.2017, in I.A.No.8 of 2017 in O.P.Nos.28 & 29 of 2016, the Commission has permitted the Discoms to procure power from Lanco Kondapalli Power Pvt. Ltd., Spectrum Power Generation Ltd. and Godavari Gas Power Plant on short-term basis during FY2017-18. However, the Discoms have projected a procurement of 2711.13 MU from these IPPs for the year 2018-19. In view of the likely availability of substantial surplus power during FY2018-19, as explained above, it is requested not to consider and permit procurement of power from Lanco and Spectrum as projected by the Discoms.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that Power is proposed to be procured from gas-based plants of Lanco and Spectrum. These plants shall not be allowed to use any alternate fuel like naphtha.

Sri B.N. Prabhakar, President, Society for Water, Power & Natural resources conservation Awareness and Monitoring (SWAPNAM), Certified Energy Manager & Auditor, Vijayawada has stated that the power from Reliance project is not considered for the reason that the PPA is getting expired on 23.12.2017 whereas, the power from Lanco and Spectrum is considered though their PPAs expired earlier. This needs a justification by AP Discoms, particularly in view of the instructions of APERC not to

enter into PPA with any IPPs for any form of energy sources (while disposing the petition on 41 Nos. of wind PPAs).

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that the Discoms have considered power purchase from Gas based stations (Godavari Gas, Spectrum, Lanco, Kondapalli), during 2018-19 citing reference of the order dated 29-112017 of APERC, wherein the APERC allowed power purchase confined only to the short term purchasers for FY2017-18 and no other issue or matter, thus, the claim of the petitioners in this respect appears to be a clear violation of the observations of the APERC.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M), have stated that the licensees shall not purchase from the power plants whose PPAs have expired and new agreements shall be entered.

**Discoms Response:** Gas power stations are essential in the energy portfolio of APDISCOMs as they are (i) clean energy, (ii) cheap compared to any other conventional sources (iii) cheap compared to other renewable sources like solar and wind on RTC basis (iv) very much essential to cater to the sudden surges in the solar and wind generation because of their quick response time. If power from these stations is not procured, the gas gets diverted to APGPCL because of which APDISCOMs are losing revenue from its industrial consumers. Because of these advantages, APDISCOMs have requested GoAP for their approval to renew the PPA with IPP M/s Spectrum Power Generation Limited (SPGL) for further period of 15 years. Accordingly, APDISCOMs have projected for procurement of power for FY2018-19 from M/s SPGL.In case of Lanco permission for renewal of PPA is already given by GoAP and the draft PPA is submitted before APERC. Anticipating consent from the Commission for renewal of the PPA APDISCOMs has projected for procurement for power from Lanco for the FY2018-19. While projecting the power purchases from old IPPs, Lanco, GVK and Spectrum, the order dt.29.11.2017 was mentioned incidentally. The projections are not based on the above order which will be evident if the ARR is read carefully.

**Commission's view:** As the proposals for consent to the Power Purchase Agreements with LANCO and SPECTRUM are said to be pending consideration of the

Commission and the State Government respectively, no opinion on that aspect can be expressed herein and the factors stated by the DISCOMs about the economic and physical advantages in procuring power from these generators are kept in view in considering the issue.

# If new Gas based power projects are considered surplus will be much more

83 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that the Discoms have not considered availability of power from new gas based power projects of Vemagiri, Konaseema, GVK extension and Goutami, with a total capacity of 1499 MW, on the ground that natural gas would not be available to them. If these plants generate and supply power with a PLF of 80%, AP Discoms will get 4835.52 MU as their share.

**Discoms Response:** The gas supplies to new gas-based power projects namely Vemagiri, Konaseema, GVK extension and Gautami became zero from 01.03.2013 onwards. In the earlier ARRs also APDISCOMs have considered Zero availability from said projects as there are no gas supplies to the said projects from 01.03.2013 onwards. Till date the situation remains the same. Further, there is no official communication from MoP, GoI on augmentation of natural gas supplies to said projects. Hence APDISCOMs have considered zero availability in the ARR for the FY2018-19.

Commission's View: If Vemagiri, Konaseema, GVK extension and Gouthami gas based power projects can supply power of a quantity of 4835.52 MU with a PLF of 80% provided natural gas is available and if there is availability / augmentation of natural gas supplies to them during FY2018-19, the distribution licensees shall take appropriate permissible steps immediately for procuring cheaper power as per merit order despatch for the benefit of the consumers by reduction of power purchase cost.

# Schedule power from GMR Vemagiri Power Generation Ltd.

84 M/s GMR Vemagiri Power Generation Ltd. (GVPGL), Peddapuram, East Godavari (Dist.) have stated that DISCOMs shall consider scheduling of power from GVPGL under the PPA with Natural Gas and revise their ARR projections on power availability accordingly. Even though natural gas supply from RIL-KG Basin fields was stopped from 01.03.2013, ONGC has started production of Natural Gas from K.G. Basin and offered to supply the same to GVPGL from 08.10.2016. The statement of DISCOMs that any natural gas from K.G. Basin shall be considered only if the same is allocated by MoPNG to the IPPs is wrong. It may be noted that GOI, vide Notification No. O-22013/27/2012-ONG-D-V (VOL-II) dated 21.03.2016 notified the marketing including pricing freedom to producers for the Gas to be produced from discoveries in deep water, ultra-deep water and high pressure & high temperature areas. Further, MOPNG, vide its letter dated 12.05.2017 to GVPGL, also clarified that no allocation of Gas from the fields of ONGC (S-1 & VA) is warranted in line with GOI Notification dated 21.03.2016. The price of Natural Gas from domestic discoveries is being regulated by GOI in accordance to the formula notified vide notification no.0-22013/27/2012-ONG-D-V (VOL-II) dated 21.03.2016.

As per PPA, there is no restriction on cost of gas or on source of gas. The PPA stipulates that the cost of Gas is pass through and accordingly to be borne by DISCOMs. When the gas is sourced from other than KG D6 then cost of gas notified by GAIL shall be the bench mark price for reimbursing cost of gas.

As such, GVPGL is declaring plant availability to AP&TS DISCOMs from 28.05.2017 with Natural Gas from ONGC to be supplied by GAIL. The said declaration is in accordance with and in compliance with the terms of existing PPA. Accordingly, invoices are being submitted to AP&TS DISCOMS claiming fixed charges under the provisions of PPA. Therefore, the Commission shall take note of the above when ARR is finalized.

### Back Ground:

<u>GVPGL PPA provisions</u>: PPA provision Article 1.1.27- Fuel means Natural Gas only. Article 3.3, Case-1 of PPA, "C" is the cost of fuel delivered at metering point is inclusive of cost of Gas and transportation charges, and other taxes as per the invoices given by the GAIL. Per PPA terms it is the responsibility of Generator to source the Natural Gas.

<u>Natural Gas availability in the FY2018-19</u>: As per the indications from ONGC and GAIL, Natural Gas supplies will increase up to 5.45 MMSCMD from April 2018.

Impact on DISCOMs if they don't consider the Natural Gas availability in ARR: DISCOMs would be obligated to pay Capacity Charges (fixed Charges) to GVPGL under the provisions of PPA without availing power.

Discoms Response: The natural gas supplies from RIL KG-D6 fields to M/s GVPGL become zero from 01.03.2013 onwards. As seen from the history of the Gas projects, the gas allocations were made by MoP&NG based on the recommendations of the State Govt. Accordingly in 2000, MoP&NG allocated 1.64 MMSCMD of natural gas to M/s GVPGL. The latest natural gas allocations from RIL KG D-6 fields were also made by MoP&NG in 2009 at the rate approved by EGOM, which is affordable to APDISCOMs.Further, MoP&NG, GoI have revised the price of Domestic Natural gas based on New Domestic Natural Gas Pricing Guidelines, 2014. The price is revised half yearly. As per the above guidelines, the MoP&NG sets a ceiling price for gas produced from the deepwater fields and operators have pricing and marketing freedom subject to that price ceiling.Further, the ceiling price is calculated based on the landed price of alternative fuels and the pricing is arrived based on lowest of the (i) landed price of imported fuel oil (ii) Weighted average import landed price of substitute fuels and (iii) landed price of imported LNG. The ceiling price for the period from 01.10.2017 to 31.03.2018 is US\$6.30/MMBTU on GCV basis with this the variable cost arrived is around ₹4.09 per unit and total cost per unit to APDISCOMs is ₹5.18 per unit.Further, APERC vide its Tariff order 2017-18 considered ceiling price of ₹4.08 per unit for purchases from Power Exchanges/DEEP e-Bidding portal of GOI.In view of the above, because of the high cost factor, which is paramount consideration in the public interest, to avoid unjustified burden on the end consumers, the APDISCOMs decided not to permit the company to generate power and supply to DISCOMs with Natural Gas sourced from Deep water fields, which is a premium priced gas having much higher price of 6.30 US\$/ MMBTU, whereas the domestic natural gas price is 2.89US\$/MMBTU for the period from 01.10.2017 to 31.03.2018. As such APDISCOMs have rejected their availability and also not considered the availability from M/s GVPGL in the ARRs for FY2018-19 with gas supplies from deep water fields.

**Commission's View:** If the high cost factor was the reason for the DISCOMs not to permit generation and supply of power from M/s GMR VPGL and if the legal rights and obligations of the parties permit the same, such refusal may not be open to

interference. Otherwise the response of the Commission in para No.83 shall hold good. This tentative view is without prejudice to the rights of the parties to invoke the adjudicatory jurisdiction of the Commission on any of the questions in controversy between them on the subject matter if they are otherwise entitled to invoke such jurisdiction.

# Availability and PoC charges of M/s KSK Mahanadi

- **85** M/s KSK Mahanadi Power Company Ltd. represented by Sri A. Srikanth during the public hearings and again through a letter dated 20.03.2018, have stated the following:
  - Since the purchase of power from KSK Mahanadi is already approved by APERC vide order dated 19/08/2015 (in O.P. No.03 of 2015) under the Agreement dated 19.12.2017 at normative availability, Discoms should consider normative availability as furnished for purchase of energy from KSM Mahanadi at tariff agreed as per PPA.

**Discoms Response:** Though M/s KSK Mahanadi has projected the normative availability of 2978.4 MU as per the PPA, APDISCOMs have considered the net energy availability of 2500 MU only for FY2018-19 based on the past performance during the FY2017-18. It may be noted that the cumulative availability was only 68.68% till Dec-2017. Further, if the projections are not accurate, it will result in shortage of actual energy. If APDISCOMs resort to purchases from open market to bridge the gap, the limit set by APERC on quantum of short term purchases from market will be exceeded. Hence, the net availability has been projected at around 72% only.

Commission's View: The response of the DISCOMs is noted.

ii) Since AP Discoms are aware that the PoC charges as per CERC Regulations are variable from time to time, it is requested to seek approval from the Commission for payment at actual based on prevalent PoC slab rates as will be decided by CERC from time to time during the FY 2018-19.

**Discoms Response:** APDISCOMs projected the PGCIL and ULDC charges after considering 5% escalation over the previous year charges to take care of expected increase in charges. However, as suggested, APDISCOMs request the Commission for payment of PGCIL (POC) & ULDC charges on actual basis as notified by CERC from time to time for FY 2018-19.

# Commission's View: The request of the DISCOMs is accepted.

# Proposed new wind projects shall not be considered

86 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that wind power generators in the State are being paid generation-based incentive (GBI) of ₹0.50 per unit. APERC had set the generation tariff for wind units on cost plus basis. Given this fact GBI shall be used to bring down the cost of this power for Licensees / consumers in the State. Generators are pocketing this incentive without any basis. This will help to bring down cost of wind power in the State. In the petition before the Commission in limiting the control period of the Regulation No.1 of 2015 up to 31.3.2017 APDISCOMs did not envisage any capacity addition after that date based on this Regulation. It implies that no new wind power plant would be allowed at the old rate of ₹4.76 per Unit. New capacity additions under this category are expected to be allowed under tariff realized through competitive bidding. In the initial bidding for wind power at the national level the price realized was ₹3.46 per unit. During later biddings this has come down to below  $\overline{\mathbf{x}}$  per unit. In spite of their own petition to limit the control period of the applicable Regulation APDISCOMs in the current ARR filings included 917.7 MW of Axis ventures and 8 MW of ZR Green Energy under upcoming projects. The PPAs with these units are yet to receive consent of the Commission. These units shall not be allowed under the old rates based on cost plus principle. They shall be allowed only if they agree for latest price realized under competitive bidding. As already RPPO targets are met there is no need to access any more power under RE category at higher rates.

**Discoms Response:** Commission issued Wind Tariff orders from time to time as per the APERC Regulation 01 of 2015. APPCC vide letter dtd. 30.10.2015, requested the Commission for certain amendments to the APERC regulations 1 of 2015, besides amendment of tariff order dated 01.08.2015 in respect of FY2015-16. In reply, vide letter dtd. 15.02.2016 it was informed that "the amendments sought for in regulation 01 of 2015 have been noted in the Commission and as the said regulation was notified only on 31st July 2015, its efficacy or otherwise needs to be observed for a reasonably sufficient period of time and thereafter the Commission may take necessary action as deemed fit". Later, APDISCOMs once again addressed to APERC vide letter dated 10.12.2016 for review of the tariff taking into account the incentive (GBI) offered by

Central Government. Thereafter, APDISCOMs also filed O.P.No.01 of 2017 for factoring GBI in the Wind Tariff Order dated 01.08.2015 and 26.03.2016. Meanwhile pending disposal of petition in O.P.No.1 of 2017, APDISCOMs have been deducting GBI of ₹0.50/Unit from the energy bills of wind power developers. Also, the payment of tariff is restricted to CUF of 23.5% as envisaged in the APERC regulation 01 of 2015. Commission has issued order dated 13.12.2017 in respect of 41PPAs entered by APSPDCL with the Wind Developers, as regulated to be having consent and taken on record. Further, APDISCOMs filed O.P.No.05 of 2017 seeking curtailment of control period of APERC Regulation 01 of 2015 upto 31.03.2017 and to determine the tariff for FY2017-18 considering the prevailing market conditions and CERC 2017 RE tariff Regulations. This petition was taken up for hearing on 06.01.2018 and the matter is reserved for orders. Commission has issued Wind tariff order for FY2017-18 determining tariff of ₹4.76/unit without AD benefit and ₹4.35/unit with AD benefit duly mentioning that this order is subject to any further or final orders that may be passed by it in accordance with law in O.P.No.5 of 2017 and O.P.No.1 of 2017.As per the APERC tariff order dated 30.03.2017, APDISCOMs have considered tariff of ₹4.76 /unit for the wind projects those have entered PPAs after 01.04.2017. This Tariff is subject to outcome of O.P.No.01 and O.P.No.05 of 2017.

With regard to PPAs of M/s Axis Energy Ventures Limited of capacity 585.9MW, adhoc tariff of ₹4.76/unit is considered purely for ARR projections only. However, based on the GoAP directions, APSPDCL would request the Commission to determine Projects specific Tariff after taking into consideration of the prevailing competitive bidding tariffs realized for wind power projects in the country.

**Commission's View:** The Generation Based Incentive and the operation of Regulation 1 of 2015 are subject to the orders on merits in O.P.s 1 and 5 of 2017. In respect of Axis Ventures and Green Energy, the DISCOMS themselves have clarified that the reference to Power Purchase Agreements and adhoc tariffs in the ARRs was only for purposes of ARR projections but will be subject to the determination of project specific tariffs by the Commission on their request.

## Limit the power purchases from Wind & Solar power plants.

Sri Jalagam Kumara Swamy, Vijayawada; Sri Yallapu Surya Narayana, Chinnampeta,
 E.G.Dist.; Sri Rasamsetty Raja, Prattipadu, E.G.Dist.; Sri Donga Nageswara Rao,
 Ambajipeta, E.G.Dist.; Sri Adabala Rajamohan, Ambajipeta, E.G. Dist.; Sri Muthyala

Jamil, Ambajipeta, E.G. Dist.; Sri Kavuluri PathiRaju, Kethavaram, W.G.Dist.; Sri Mandapati Vidyadhara Reddy, Chatrayi, Krishna Dist.; Sri Medasani VijayaBhasker, Thatigadapa, Krishna Dist.: Sri Bheemavarapu Bramhananda Reddy, Gudibandivaaripalem, Guntur Dist.; Sri Vanga Sambi Reddy, Gudibandivaaripalem, Guntur Dist.; Sri Aavuya Venkateshwar Reddy, Kollipara, Guntur Dist.; Sri Godagattu Sreerambabu, Paluru, Prakasam Dist.; Sri Addagadda Satish Kumar, Nagulapalem, Prakasam Dist.; Sri Katuri Harikishorekumar Reddy, Paturu, Nellore Sri Polireddy Rammohan Reddy, Buchireddypalem, Nellore Dist.; Dist.; Sri Vemireddy Hanuma Reddy, Chemudugunta, Nellore Dist.; Sri Kukati Sunil Kumar Reddy, Manegunta, Nellore Dist.; Sri Inamadugu Venkata Ramanareddy, Vavveru, Nellore Dist.; Sri Seernam Venugopalreddy, Chatrai, Nellore Dist.; Sri Chemikala Madhavareddy, Proddutur, Kadapa Dist.; Sri N. Janardhana Reddy, Y.M.Palli, Kadapa Dist.; Sri B.Obul Reddy, Paatha Giriyapalli, Kadapa Dist.; Sri A. Gangireddy, Pagadalapalli, Kadapa Dist. representing Bharatiya Kisan Sangh (BKS) and others have stated that power purchases from wind and solar power plants shall be limited to 11 percent of Discom sales.

## **Discoms Response:**

SPDCL: It is proposed 39566.29 MU sales in FY2018-19. Power purchase from Wind plants is 5132.90 MU (12.97%) and from Solar plants is 2467.80 MU (6.24%). 19 percent renewable power purchase is being done in line with Govt. policies to protect the environment.

EPDCL: 11 percent of power purchase of Discom sales from Wind &Solar plants is decided as per the Regulation no. 01 of 2017 of APERC. 20 percent renewable power purchase is being done in line with Govt. policies to protect the environment.

**Commission's View:** Any limitations on power purchases with reference to the fuel or method of generation of power may not be legally permissible.

88 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI (M) State Committee Member, Tirupati and others, as mentioned at the respective issue, have stated that

### Generic Tariff of wind is high

(i) The manufacturers of wind turbines and generators of wind power projects, through their associations, had managed the powers-that-be in the past and got two G.O.s issued by the GoAP, to enhance the generic tariff for wind power determined by the Commission by ₹0.50 per unit twice within a span of three months each. And the then APERC had revised the generic tariffs accordingly, without any justification and unmindful of the components that had been taken into consideration while determining generic tariffs for wind power and ignoring the principles and regulations for determining tariffs! It had ignored even section 108 of Electricity Act under which the Commission has to direct the Government, when the latter issues a directive to it, to bear the financial burden that may arise as a result of implementing that directive. That is how systems are being managed, manipulated, perverted and subverted.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that wind tariff is higher than Karnataka and the same is to be reduced.

Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization, Ongole has stated that wind tariff is high compared to Gujarat and Karnataka States.

**Discoms Response:** APDISCOMs have followed the APERC Wind tariff orders and regulations issued from time to time.

**Commission's view:** The present Commission is not a privy to the events and is disabled from making any comment. However, the orders of the Government and the then Commission referred to the reasons for the actions.

### Need for competitive bidding in wind

(ii) When a petition filed by AP Discoms, requesting the Commission to limit the control period of Regulation No.1 of 2015 up to 31.3.2017, instead of 2019-20, relating to generic tariffs fixed for wind power to be purchased by them and to allow them to go in for competitive bidding is pending before APERC, the latter has issued an order suo motu on 30.3.2017, fixing generic tariffs of ₹4.76 per kWh without AD benefit and ₹4.35 per kWh with AD

benefit for wind power projects entering into power purchase agreements with AP Discoms on or after 1.4.2017. In that order, the Commission has made it clear that this order is subject to any further or final orders that may be passed by it in accordance with law in O.P.No.5 of 2017 and O.P.No.1 of 2017 (petitions relating to curtailing control period and factoring GBI in to tariffs) on its file and on the letters/communications received by the Commission and clubbed with the said O.P.s and any other orders that may be passed in any matter incidental or ancillary thereto. However, the urgency, as well as purpose, in issuing the said order suo motu, without even holding any hearing or public hearing, is left unexplained. It was pointed out that "till orders are issued by the Commission in the subject petition (O.P.No.5 of 2017), the said order (dated 31.3.2017) issued by it suo motu would only provide time to the developers of wind power projects to manage the powers-that-be to force the Discoms to enter into long-term PPAs with them to purchase wind power at the generic tariffs fixed by the Commission at the cost of consumers of power." No wonder, the Discoms, in their ARR submissions, have pointed out that "the tariff has been considered as ₹4.76/Unit as determined by APERC vide orders dated 30.03.2017 subject to outcome of the petitions O.P.No.01 of 2017 and O.P.N.05 of 2017 in respect of M/s Axis Energy Ventures projects 585.9 MW capacity subject to determination of specific tariff by APERC as per the GoAP directions." This higher tariff is considered by the Discoms for Axis Energy Ventures projects with 176.4 MW and ZR Green Energy project of 8 MW also. This approach of APERC is in glaring contrast to the proconsumer initiatives taken suo motu by SERCs of Gujarat and Karnataka, restraining their Discoms not to enter into PPAs with wind power developers to buy power at a tariff higher than  $\gtrless 3.46$  and  $\gtrless 3.61$  per kWh, respectively, and emphasizing on the need for following competitive bidding.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M), have stated that all power purchases shall be through transparent competitive bidding.

**Discoms Response:** Commission has issued Wind tariff order for FY2017-18 determining tariff of ₹4.76/unit without AD benefit and ₹4.35/unit with AD

benefit duly mentioning that this order is subject to any further or final orders that may be passed by it in accordance with law in O.P.No.5 of 2017 and O.P.No.1 of 2017. As per the APERC tariff order dated 30.03.2017, APDISCOMs have considered tariff of ₹4.76 /unit for the wind projects those have entered PPAs after 01.04.2017. This Tariff is subject to outcome of O.P.No.01 and O.P.No.05 of 2017.With regard to PPAs of M/s Axis Energy Ventures Limited of capacity 585.9 MW, adhoc tariff of ₹4.76/unit is considered purely for ARR projections only. However, based on the GoAP directions, APSPDCL would request the Commission to determine Project specific Tariff after taking into consideration of the prevailing competitive bidding tariffs realized for wind power projects in the country.

**Commission's view:** The Commission is bound by Regulation 1 of 2015 to issue the generic tariff order suo motu on 31.03.2017 for FY2017-18 and why a public hearing is unnecessary has already been stated. The information to this Commission is that the Karnataka State Electricity Regulatory Commission had to go back to the original tariff under its Regulation on directions under Section 108 from their State Government. The need for following competitive bidding in future will be definitely considered on merits.

## Grid stability problems with WIND power

(iii) Wind energy units, especially, create problems for grid maintenance, with scope for unexpected wild fluctuations in generation.

**Discoms Response:** APSLDC is taking all possible measures in order to maintain the grid system stability particularly during wind generation.

**Commission's view:** The APSLDC shall continue to take all possible measures to maintain the Grid stability.

### Long-term PPAs with High Tariffs

(iv) Instead of going in a cautious and gradual manner to purchase NCE through real and transparent competitive bidding periodically to get the benefit of falling tariffs, the Governments have forced, and are forcing, the Discoms to enter into long-term PPAs at higher tariffs to purchase NCE, with adverse consequences to the Discoms and their consumers, which confirms their anxiety to do undue favours to generators and manufacturers, even with manipulative and extraneous considerations, and in the process the powersthat-be are encouraging themselves.

**Discoms Response:** DISCOMs are procuring the solar power through competitive bidding route in a phased manner to get the benefits of falling tariffs. In case of Wind Power MNRE recently on 08.12.2017 issued guidelines for Intra State procurement of Wind power through competitive biddings.

**Commission's view:** There cannot be any comment on this perception without adequate data and information.

### **Solar Power is costly**

(v) AP Discoms entered into a long-term PPA with NTPC, following an understanding between the GoI and GoAP, for purchasing 250 MW of solar power @ ₹6.16 per unit under stage-I of NP Kunta Ultra Mega Solar Power Project in Anantapur district. APERC took the initiative as a result of which NTPC agreed to reduce the tariff to ₹5.96 per kWh. While giving its consent to the PPA in 2016, the Commission ignored the fact that solar power at such exorbitant tariff is unwarranted, especially in view of the fact that it has determined, in its tariff order for FY2016-17, that an unwarranted surplus of 10472 MU was available for AP Discoms to be sold in market at ₹4.29 per unit, that the Discoms already far exceeded the obligation of purchasing a minimum of 5% NCE under RPPO and the trend of falling tariffs for solar power being discovered through competitive bidding. It was agreed to evacuate power in a circuitous manner, starting from 33 kV to 400 kV, covering in between 220 kV, and then step down it from 400 kV to 220 kV and to 33 kV, utilizing the networks of three utilities of AP Transco, A.P. Solar Power Corporation Limited and PGCIL, without any justification whatsoever. We submitted detailed analysis and suggestions on various issues involved, in our written submissions for almost fifteen times during the course of public hearings, wherein it was pointed out that such an irrational arrangement for evacuation of power would result in an abnormal burden of ₹3.905 per kWh towards wheeling charges, other charges and transmission losses. As a result, the cost per unit to be borne by the Discoms increases to ₹9.865 per kWh. The Commission failed to take cognizance of such serious

manipulations and the kind of avoidable burdens running into a few thousand Crores of Rupees over a period of 25 years of the PPA that would befall on the consumers of power. As per ARR submissions for FY2018-19, the weighted average tariff for NVVNL bundled power – solar is ₹10.65 per kWh and for NTPC Ramagundam solar power ₹9.35 per kWh. Entering into such agreements and giving consents to the same for purchasing unwarranted power at such abnormal tariffs is detrimental to larger consumer interest and baffles elementary commonsense.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that in the background of falling solar power prices there is need to review PPAs that APDISCOMs have entered into in the past for procurement of solar power. In the past the Commission has consented to procure 250 MW of solar power from NVVNL at a cost of ₹5.96 per unit stage I of NP Kunta Ultra Mega Solar Power Project in Anantapur district. Combined with transmission cost of about ₹3.90 per unit its total cost comes to ₹9.86 per unit. Equally costly is solar power from NVVNL bundled power (₹10.65 per unit) and NTPC Ramagundam solar power (₹9.35 per unit). As these PPAs are long term, stretching to 25 years, it is important to review them given the long-term impact.

**Discoms Response:** APERC approved the tariff of ₹5.96/unit in respect of 250 MW NTPC NP Kunta Solar Park after following due regulatory process. While regulating the price of 250 MW Solar Power at NP Kunta, Commission passed order dated 04.06.2016 in O.P.No.26 of 2015, duly considering the proposed bundling of 750 MW and mentioned as "In the event of proposed bundling of 750 MW Solar Power to be generated from stage-2 of this Project the effective Power purchase price of ₹4.20 Per Unit including for the 250 MW proposed to be generated from stage-1 of this 250 MW Project. Recently GoAP vide letter dated 05.12.2017 has given permission to NTPC to proceed with the implementation of Solar PV Project incase Tariff discovered is less than the ceiling Tariff of ₹3.00 Per Unit. As such the effective Tariff of this Project is less than ₹3.74 Per Unit. The weighted average Tariff of NVVNL bundled Power (Solar & Thermal) is around ₹4.02 Per Unit and NTPC Ramagundam bundled Power is around ₹4.11 Per Unit. As such, with the

bundled scheme the effective tariff of Solar Power would be cheaper to APDISCOMs.

**Commission's view:** The claims about the failure of the Commission to take cognizance of the specified serious manipulations and avoidable burdens running to a few thousands of Crores of Rupees over 25 years and the Commission giving consent to purchasing unwarranted power at such abnormal tariffs are matters for others to judge. However, the response of the DISCOMs shows that the effective tariff of this project is less than ₹3.74 per unit and that the weighted average tariff of NVVNL bundled power (Solar and Thermal) is around ₹4.02 per unit and NTPC Ramagundam bundled power is around ₹4.11 per unit. If the effective tariff of solar power is thus cheaper as claimed by the DISCOMS, the objection stands answered.

### Early resolution of the issues requested

APERC had issued tariff orders dated 1.8.2015 and 26.3.2016 determining (vi) generic tariffs for wind power suo motu. The consumers of power have been suffering silently, with generation-based incentive (GBI) of ₹0.50 per kWh not factored in to the tariffs determined by the Commission in the above two orders, depriving them of reduction in burden of higher generic tariffs and allowing the generators of wind power to pocket the same unduly. No public hearings were held before issuing those orders. During the public hearing on the petition of the Discoms seeking correction of its orders by factoring of GBI in to tariffs, the Chairman responded, observing that the Commission did not consider holding public hearing necessary then, as it was a matter of calculating tariffs based on applicable formula. When there was no need for holding public hearings for determining tariffs for wind power, there is no need for holding a public hearing on correcting an error or omission in the same calculation in not factoring GBI into those tariffs. Based on the letter written by the Discoms, pointing out the error or omission and seeking its correction, the Commission should have issued an order, amending the earlier orders, by factoring GBI in to the tariffs as per clause 20 of its Regulation 1 of 2015. The Commission's order is awaited, though hearing on this petition was completed earlier than the petitions of the Discoms relating to purchasing power from Lanco and Spectrum and 41 PPAs SPDCL had with wind power generators the hearing on which was taken up and completed by the Commission. Similarly, though the petition relating to curtailing control period for wind power tariff (O.P.No.5) was filed much earlier, hearing is not taken up so far. These petitions are in consumer interest.

Discoms Response: Commission issued Wind Tariff orders from time to time as per the APERC Regulation 1 of 2015. APTRANSCO vide letter dtd.30.10.2015, requested the Commission for certain amendments to the APERC regulations 1 of 2015, besides amendment of tariff order Dated 01.08.2015 in respect of FY2015-16. In reply, vide letter dtd.15.02.2016 informed that "the amendments sought for in regulation 01 of 2015 have been noted in the Commission and as the said regulation was notified only on 31<sup>st</sup>July 2015, its efficacy or otherwise needs to be observed for a reasonably sufficient period of time and thereafter the Commission may take necessary action as deemed fit". Later, APDISCOMs once again addressed to APERC vide letter dated 10.12.2016 for review of the tariff taking into account the incentive (GBI) offered by Central Government. Thereafter, APDISCOMs also filed O.P.No.01 of 2017 for factoring GBI in the Wind Tariff Order dated 01.08.2015 and 26.03.2016. Meanwhile pending disposal of petition in O.P.No.1 of 2017, APDISCOMs have been deducting GBI of ₹0.50/Unit from the energy bills of wind power developers. Also, the payment of tariff is restricted to CUF of 23.5% as envisaged in the APERC regulation 01 of 2015. Commission has issued order dated 13.12.2017 in respect of 41 PPAs entered by APSPDCL with the Wind Developers, as regulated to be having consent and taken on record. Further, APDISCOMs filed O.P.No.5 of 2017 seeking curtailment of control period of APERC Regulation 01 of 2015 upto 31.03.2017, and to determine the tariff for FY2017-18 considering the prevailing market conditions and CERC 2017 RE tariff Regulations. This petition was taken up for hearing on 06.01.2018 and the matter is reserved for orders.

**Commission's view:** The tariff orders determining the generic tariff for wind power since Regulation 1 of 2015 came into force were merely carrying out the formulae specified in the Regulation in fixation of such tariff and the matter is one of mathematical calculation and not discretion to form any opinion on public hearings. The Regulation was made after regular public hearings considering all the relevant aspects at that time. The orders on O.P.No.1 of 2017 and O.P. 5 of 2017 are to be pronounced in due course and disposals of contested matters by judicial or quasi- judicial institutions are never in chronological order. Factoring Generation Based Incentive (GBI) is not a matter of mere calculation or correcting an omission but is a matter for determination on the contents of the GBI scheme and the Regulation. In any view, DISCOMs have informed in their response that they are already deducting the GBI from the energy bills of wind power developers. Similarly, no Power Purchase Agreement entered into after 31.03.2017 relating to any wind developer has been consented to by the Commission, the earlier agreements being governed by Regulation 1 of 2015 only, even if O.P.No.5 of 2017 were to be allowed. Thus, the pendency of these two petitions caused no damage to consumer interest.

### **Biomass Energy is costly**

(vii) APERC had communicated its consent through its letter dated 27.1.2017 to the PPA APEPDCL had with Vishnu Vidyut India Ltd. in Visakhapatnam district to purchase power on long-term basis from its biomass-based power plant with a capacity of 7.5 MW, simply based on a letter written by the Discom on 17.1.2017, without holding any hearing or public hearing. This information was not even made public; it was simply not put in the web site of the Commission. The weighted average tariff for bio-mass energy is ₹.7.00 per kWh, as per ARR submissions for FY2018-19.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that even when the existing biomass-based power plants are operating at below their capacity due to lack of adequate biomass fuels APEPDCL has entered in to a long term PPA with Vishnu Vidyut India Ltd. in Visakhapatnam district to purchase power from its biomass-based power plant with a capacity of 7.5 MW. APERC also had given consent to it through its letter dated 27.1.2017. Power from this plant will be procured at a cost of ₹ 7 per unit. In the past the Commission disallowed addition of capacity of biomass-based power plants due to shortage of fuels and consequent increase in biomass fuel prices. The present high cost of this

power is due to this fact. There is no sign of any improvement in the availability of biomass fuels. There is also lack of transparency in signing PPA with this power generator. Given the high cost of this power and lack of transparency in accessing power from this plant the same shall be set aside. This will go along way in bringing down power purchase cost.

**Discoms Response:** Commission has issued consent to the PPA entered with M/s Vishnu Vidyuth India Limited by APEPDCL on 27.01.2017.

**Commission's view:** The Commission has decided after a public hearing on merits in accordance with law by an order dated 08.09.2016 in O.P.No.18 of 2016 that "the direction not to purchase power from new biomass power projects other than those already sanctioned by NEDCAP/APTRANSCO by 20.03.2004 and the further direction dated 27.09.2005 that no further bio mass based power shall be purchased by the distribution licensees than that already committed through the power purchase agreements already entered into and consented to by the Commission and any other orders or directions to a similar effect or believed or understood to be of a similar effect are declared to be henceforth of no effect. It is perfectly legitimate and open to any generator and /or licensee to take a decision on merits in accordance with law regarding sale/purchase of power generated by generating plants using biomass as fuel and the terms and conditions thereof. The parties to both the original petitions are therefore at liberty to take an appropriate decision in this regard accordingly." It is only in consequence to this order, which also considered the views of Sri M. Venugopala Rao, the leading objector herein also, that the request for consent to the Power Purchase Agreement between the parties to O.P. 18 of 2016 was accepted by this Commission which hence did not require a second public hearing, more so when what was adopted was the generic tariff for Biomass plants. Thus, there was nothing secret or sinister about it.

### NCE Tariffs are high

(viii) The tariffs to be paid by the Discoms to NCE units are very much higher and are nowhere near the lower tariffs discovered through competitive biddings for solar and wind energy earlier this year elsewhere in the country. The average cost per kWh of NCE purchase by AP Discoms is ₹4.76 as per tariff order for FY2017-18. Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that APDISCOMs propose to procure 12,182.91 MU of power from renewable energy sources accounting for 18.85% of the total power to be procured during FY2018-19. Average cost of this power will be ₹4.99 per unit. While there is no denying the need to promote RE power it has to be seen that it will not burden the consumers and State Government unnecessarily. There is scope to bring down the cost of this power.

**Discoms Response:** Due to old PPAs of Biomass, Industrial Waste and certain Solar Power Projects, the average NCE Purchase Cost is ₹4.76/-. But, DISCOMS are taking all possible steps in order to reduce the NCE Power Purchase Cost, such as entering of PPA with a lower tariff of ₹3.15/- for the remaining capacity of 750 MW, whereas earlier DISCOMs entered the NTPC 250 MW Solar Park PPA with a Tariff of ₹5.96/- per unit, in 2014. APDISCOMs are already on record in O.P.No.5 of 2017 seeking curtailment of control period of APERC Regulation 01 of 2015 upto 31.03.2017, and to determine the tariff for FY2017-18 considering the prevailing market conditions and CERC 2017 RE tariff Regulations. Also, requested the Commission for permitting the APDISCOMs to procure Wind Power through Competitive bidding from FY2018-19 onwards. This petition was taken up for hearing on 06.01.2017 and the matter is reserved for orders. With the above initiatives NCE Power purchase prices will be reduced in future.

**Commission's view:** The steps taken by the DISCOMs to reduce the NCE purchase cost are appreciated and they shall continue to devise and implement such measures in future also.

## Must run status of NCE is a liability

(ix) The NCE units being treated as must-run ones, with no scope for backing down, and as the higher tariffs continue for the entire period of PPAs of 25 years, the Discoms must purchase the entire power generated by them, irrespective of their requirement and availability of relatively cheaper power from other sources under PPAs.

**Discoms Response:** APSLDC being a load dispatch operator, schedules the power flow from all the sources based on the system requirement and follow

Merit order dispatch from time to time based on the APERC orders. Commission approved standard PPA format for Wind Power Projects with a tenure of 25 years. MNRE has notified the guidelines for procurement of Grid connected Solar Power with the PPA tenure of 25 years. MNRE in the recent bidding guidelines for Wind power has also considered the PSA / PPA tariff period as 25 years. As such, APDISCOMs are following the tenure of PPA period of 25 years in line with the GOI guidelines. APDISCOMs are purchasing Power from various categories of NCE sources with a tenure of 20/25 year with the consent of Commission.

**Commission's view:** The PPA period of 25 years hitherto specified in the agreements came into vogue in the circumstances stated by the DISCOMs and the present trend of quickly falling renewable energy prices may have to make the DISCOMs examine the necessity of limiting the agreement periods to minimum possible time limits. **The distribution companies may come up with their detailed views before the Commission expeditiously to mould the power purchase process to achieve the desired effect.** 

## Solar and Wind Power cannot meet peak requirements

(x) With generation of solar power taking place only during day time when adequate radiation of the Sun is available, and generation of wind energy being seasonal and dependent on wind velocity, admittedly, those units cannot meet peak requirements of the Discoms.

**Discoms Response:** The statement made by the objectors is correct that the solar and wind energy may not meet peak requirement of the day. But, the solar power can be used for agricultural pump sets in day time besides meeting the day time demand.

Commission's view: The statement is not in dispute.

# Disequilibrium between NCE and non-NCE

(xi) By entering into long-term PPAs with NCE units with seasonal generation of power, the Discoms have to depend on other base-load stations to meet their requirement during the periods when NCE units cannot generate. It leads to some kind of in-equilibrium, when non-NCE units have to be backed down during the periods when NCE units generate power. **Discoms Response:** The overall policy of GoI is to encourage renewable energy power in the Country in a big way. In order to support the policy, GoAP is also focusing on expansion of renewable energy. Further, recently the country had faced severe shortage of coal in the last three to four months. Owing to this, many States in the country struggled to meet the peak demand. At least if the RE sources are encouraged, coal reserves can be stored for future usage/generation. The Solar tariffs are falling consistently since 2014.

**Commission's view:** The distribution licensees shall make every effort to maintain the equilibrium.

### **Delay in commissioning of NCE Projects**

(xii) There are instances of extending time for completion of NCE projects, especially solar and wind, in a questionable manner. While PPAs were entered into with generators for purchasing NCE with higher generic and other tariffs determined through bidding, there have been delays in executing the units in agreed time schedules. While the generators are getting the benefit of falling prices of wind turbines and solar panels in the market with such impermissible delays, the Discoms continue to pay old higher tariffs to them, without corresponding reduction in tariffs. There are instances when PPAs are submitted to ERCs seeking their consent after NCE units are commissioned and started generation and supply of power to the Discoms, thus presenting the Commissions with a fait accompli.

**Discoms Response:** After formation of the new State in 2014, the first solar bidding was initiated for procurement of 1000 MW solar power through competitive bidding route. In this bidding, most of the solar power developers have completed their projects as per the timelines stipulated in the PPA. In view of the falling of solar tariffs, no additional timelines were granted for the solar power developers, who have not completed the projects in specified time as per the PPA. Further, as per the provisions of the PPA, DISCOMs have levied the penalties on the defaulters.

**Commission's view:** The response of the DISCOMs shows that delays are adequately penalized as per agreements.

## Long-term NCE PPAs are imprudent

(xiii) Existing and ongoing thermal and other non-NCE projects and the obligations of purchasing power from them under PPAs by the Discoms cannot be wished away. It is imprudent to enter into long-term PPAs with NCE units to purchase unwarranted power, when adequate power is, and going to be, available from other sources under PPAs.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M) have stated that power purchase agreements with NCE sources shall not be entered for more than five years.

Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization, Ongole has stated that long term PPAs shall be terminated.

**Discoms Response:** Government of India has set a target of setting up of 100 GW solar and 60 GW Wind capacities by 2022. As on date over 15.6 GW Solar and 32.7 GW Wind capacity has already been installed and balance capacity is required to be setup in a period of next 5 years. GoAP had issued the Wind and solar policies in order to promote Wind and solar power projects in the State of Andhra Pradesh. As per the said policy, the target was fixed a minimum total solar power capacity addition of 5000 MW and Wind capacity addition of 4000 MW in the next five years in the State with a view to meet the growing demand for power in an environmentally sustainable manner.

**Commission's view:** The distribution licensees shall avoid entering into any power purchase agreements which may burden them with unwarranted power.

### NCE encouragement must be gradual

(xiv) Till viable and economical inverter-like mechanism is developed and put to use to store NCE and use the same as and when required, the problems and adverse consequences, as explained above, among others, would continue to persist. Needless to say, research and development in that direction need to be encouraged. Hence, the need for a gradual, cautious and pragmatic approach is imperative for encouraging NCE.

**Discoms Response:** APDISCOMs have issued LoI for setting up of pilot projects for 1 MW 4MWh Battery Energy Storage System integrated with 5

MW Solar Power. SECI has proposed to establish a 160 MW (120 MW Solar and 40MW Wind) along with storage of 40 MWH in Anantapur district in A.P. with grant from World Bank. The same is under process.

**Commission's view:** A beginning is proposed to be made for developing an economic and dependable storage system with the Commission permitting setting up of two pilot projects in this regard during FY2017-18.

### NCE alone is not the solution for environmental issues

(xv) Global warming by its very definition is global in nature and needs to be tackled accordingly in a holistic and multi-dimensional way with international cooperation. Thermal power stations alone are not responsible for global warming and environmental problems and NCE alone is not the solution to the same.

**Discoms Response:** Need of encouraging renewable energy in a big way is essential in India in order to reduce global warming and protecting environment.

**Commission's view:** All the environmental issues are not answered by NCE but it is one of the answers to tackle such issues.

### **Renewable Power Purchase Obligation**

The Commission pointed out that purchasing NCE more than the minimum (xvi) determined by it under RPPO "should be a commercial and practical decision to be taken by the utilities concerned." At the same time, it is for the Commission to determine whether the decisions of the Discoms to purchase power are "commercial and practical," taking into account various issues submitted above and with a holistic view and regulate such purchases on "commercial and practical" grounds which should include the impact of avoidable additional burdens on consumers in the form of resultant higher tariffs and as a result of availability of substantial surplus power. Leaving it to the discretion of the Discoms would tantamount to the Commission shirking its regulatory responsibility and allowing itself to be seen as a regularization Commission. Already enough damage has been done to larger consumer interest by the powers-that-be and the utilities of GoAP in taking decisions to purchase NCE on long-term basis at very high cost and by the Commission in giving its consents, approvals and orders accordingly. Allowing the Discoms

to purchase 23.44% of NCE on long-term basis and at higher tariffs and imposing avoidable huge burdens on consumers cannot be justified under vague assertions of "commercial and practical" grounds and generalized assertions of environmental protection and promoting renewable energy. Promotion of renewable energy should not be allowed to degenerate into promoting the vested interests of developers, manufacturers and the powersthat-be at the cost of the vast multitude of consumers of power. It is untenable to presume that unless NCE is purchased on long-term basis and at higher tariffs, unrelated to requirement of power to meet growing demand and binding obligations of the Discoms under existing and proposed PPAs to purchase power from other sources, environment cannot be protected. The Commission observed that "ultimately it becomes a question of balancing conflicting factors and interests and there appeared to be no absolutes either way." We would like to assert that allowing the Discoms to purchase 23.44% NCE, by no stretch of imagination, can be treated as "balancing conflicting factors" and that, even though no justifiable "absolutes" appear, objective conditions and the real implications of such questionable decisions and consents are discernible and can be understood and the same should be taken into account before taking decisions and giving consents. In this regard, the powers-that-be and the Commission appear to be found wanting in taking prudent decisions and already irreparable damage has been caused to larger consumer interest on long-term basis.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that DISCOMs have proposed to purchase of 22.34% from NCEs against the obligation of 9% which is objectionable.

**Discoms Response:** APDISCOMs are purchasing power from RE sources based on the Policies and directions of GoI, GoAP and APERC Regulations from time to time.

**Commission's view:** Regularization also may be a facet of Regulation and the Commission can only say that time alone will decide the prudence or imprudence of its decisions on merits in accordance with law and the Commission firmly believes that any irreparable damage to larger consumer interest on long term basis has not happened because of its consents, approvals and orders.

The belief of the Commission is fortified by the fact that the ever increasing power purchase cost from year to year reaching 82.74 percent of the ARR in FY 2013-14 (continued in FY2014-15 during the middle of which year this Commission has been constituted for the residuary State of Andhra Pradesh) gradually came down to 80.33% in FY2015-16, 79.37% in FY2016-17 and 77.40% in FY2017-18 of the respective ARRs:

S.	Year>	2018-19	2017-18	2016-17	2015-16	2014-15
No.		Projected				
1	PP Cost (Rs. Cr.)	24565.32	21490.8	21150.77	20496.0	33626.6
2	ARR (Rs.Cr.)	31982.87	27764.22	26649.98	25515.31	40639.5
3	% PP COST	76.81	77.40	79.37	80.33	82.74

The regulatory oversight, monitoring and insistence on observing financial prudence by the Commission obviously protected larger consumer interest which will have long term impact. With continued vigilance and constructive criticism from public spirited experts in power sector like Sri M Venugopal Rao, Sri M Thimma Reddy and others, the appreciation for whose selfless services the Commission wishes to place on record, the Commission hopes to inculcate more financial and operational discipline in the power sector so as to provide satisfactory and quality services to all the consumers/stakeholders.

## **RPPO** targets must be realistic

(xvii) To argue that RPPO stipulates only minimum of NCE to be purchased by the Discoms and that there is no maximum limit for such purchases is to misinterpret the spirit behind RPPO in a perverse way. Since the cost of non-conventional energy is very much higher and as such the Discoms may not incline to purchase the same, in order to encourage generation and consumption of NCE, the system of RPPO has been introduced and implemented. The misinterpretation that since RPPO stipulates only a minimum of NCE to be purchased by the Discoms, the latter are free to purchase NCE to any extent arbitrarily, irrespective of requirement and

availability of power, defeats the very spirit of Electricity Act and the objectives of ensuring orderly development of power sector and ensuring competitive and reasonable tariffs to the consumers. The argument that consent of the Commission is not even required to PPAs the Discoms entered into with NCE developers or that the Commission has to give its consent to such PPAs automatically negates the very objective of regulatory process and defeats the very purpose of the existence of electricity regulatory Commissions. Conditions specific to different States need to be taken into account for encouraging NCE and, as such, uniform targets under RPPO to all the States are unwarranted. That is the reason why the GoI is constrained to make it clear in its proposals for increasing percentages of NCE under RPPO, that they are guidelines only and that it is for the concerned ERC to determine such percentages. In other words, the concerned ERCs have to take a realistic view of objective conditions in the respective State while issuing RPPO orders and in considering long-term PPAs the Discoms have with NCE units, to protect larger consumer interest and ensuring orderly development of power sector to the extent permissible under their jurisdiction, instead of inclining to be more loyal than the king in allowing the Discoms to enter into long-term PPAs with NCE units indiscriminately and unrelated to requirement to meet growing demand for power periodically.

**Discoms Response:** Ministry of Power issued order on 22.07.2016, fixing the RPPO targets initially for a period of 3 years from FY2016-17 to FY2018-19 as 11.5% to 17.00% respectively. Commission issued Regulation 1 of 2017 for FY2017-18 to FY2021-22 for fixing RPPO ranging from 9% to 17% respectively duly considering APDISCOMs proposals and MoP order dated 22.07.2016. On the representations of various Wind and Solar Developers and manufactures associations, the Secretary, MNRE, GoI vide D.O. letter dated 18.10.2017 addressed to all State/UT Power Secretaries, State/UT Nodal Agencies and clarified "that the RPPO obligation communicated as per Ministry of Power's letter no. 23/3/2016 dated 22<sup>nd</sup> July, 2016 indicate only the minimum percentage of renewable energy to be purchased by a State/UT and there is no bar on purchase of renewable energy power beyond the RPO limit communicated."

**Commission's view:** The Commission gave its reasons for its conclusions in the order dated 13.12.2017 relating to 41 Power Purchase Agreements with Wind Power developers. Regulation 1 of 2017 was issued only on a realistic view of the objective conditions in Andhra Pradesh with the twin objective of protecting larger consumer interest and ensuring orderly development of the Power sector and the Government of India clarified through the Secretary / MNRE in letter dated 18.10.2017 that the RPPO obligation indicates only the minimum percentage of renewable energy to be purchased and there is no bar on purchase beyond the minimum limits. All the submissions of the objectors were duly considered before making Regulation 1 of 2017. The targets were duly fixed and implemented.

## GOI is imposing policy decisions on States

(xviii) Ignoring these realities, among others, the Government of India has been exercising its authority, taking undue advantage of power being in the concurrent list of the Constitution, to impose its whimsical policy decisions on the States, without any responsibility and accountability for the adverse consequences that arise as a result of implementing the same by the States.

**Discoms Response:** A letter to be addressed from GoAP to GoI with a request to allocation of funds from National Clean Energy Cess to subsidize High Cost Power Purchases from Solar and Other Renewable Sources.

**Commission's view:** The regulatory oversight of the Commission does not extend to the policy decisions of the Government of India.

## **Irrational Policy approaches of governments**

(xix) Allowing pollution-causing thermal and other power projects indiscriminately and irrespective of demand growth, on the one hand, and talking of need for encouraging NCE, on the other, in the name of environmental protection, is one of the glaring dichotomies in the policy approaches of the Governments. **Discoms Response:** As per the approval of GoAP & MNRE, APDISCOMs are entering PPAs with the solar parks in consonance with the revised national tariff policy, 2016. This clean power certainly would helpful to reduce global warming and protecting environment.

**Commission's view:** Policy making is not within the purview of the Commission, except to the extent specified by the Electricity Act, 2003 and the A.P. Electricity Reform Act, 1998.

### Dual burden on consumers

(xx) In order to purchase power from NCE units, even in a situation of availability of substantial surplus power, the Discoms have to pay higher tariffs to them, and back down other thermal stations with relatively lower tariffs. In other words, it imposes dual burdens on consumers of the Discoms, in the form of higher tariffs to NCE, on the one hand, and payment of fixed charges for backing down thermal stations, on the other.

**Discoms Response:** Solar projects are helpful to meet demand in day time to some extent. Base load plants would be helpful to meet the peak requirements. In general, the peak load tariff is very high compared to the day time tariff. Even after periodical backing down and paying fixed charges to such generators, still thermal plants would be useful for peak load operations and for overall balance of system stability.

**Commission's view:** The distribution licensees shall endeavor to minimize any dual burden on consumers.

#### Sale of surplus power is difficult

(xxi) Since the tariffs for NCE are higher, the Discoms cannot compete in the market to sell their surplus power at remunerative tariffs.

**Discoms Response:** The statement is not correct. Some States still have not achieved the RPPO obligations set by GOI/State Commissions. Those States who are not having adequate RE power are showing interest to purchase RE power from surplus States like AP at tariff nearing NCE tariff.

**Commission's view:** Hopefully the demand for renewable energy at a comparable tariff will continue to exist.

# **Reduction of Power Purchase Cost**

**89** Sri G. Venkateswara Rao, KCP Sugar & Ind. Corp Ltd., Vuyyuru, Krishna District has stated that reduction in Power Purchase cost is inevitable in the present scenario, to avoid further burden on consumers. It's time to identify and control the generation cost or power generation from such plants. Case Study: variable cost for the power

generated from NTPC Talcher-II is ₹1.39 and whereas for NTPC Kudigi Stage -1 is ₹3.58.

Sri T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad, Sri Sourabh Srivatsava have stated that the power purchase cost in cases where the purchase has been projected at exorbitantly high price not relatable to the incumbent market situations is to be disallowed. Power Purchase prudence based on actuals, True up of APGENCO Tariff and prudence check of cost of Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) and Rayalaseema Thermal Power Project (RTPP-IV) shall be done before approval of Retail Tariff.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M), have stated that all PPAs shall be reviewed in view of decreasing prices of Wind and Solar Power.

**Discoms Response:** DISCOMs are taking all possible steps in order to reduce the power purchase cost.

Commission's View: Let the efforts continue to reduce the power purchase cost.

### What is the experience of sale of surplus power?

90 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that while APDISCOMs projected power requirement during FY2018-19 as 61,543 MU, they propose to procure 64,643 MU of power at a cost of ₹26,791.15 Crore. 3,100 MU are proposed to be sold in the market. In the Tariff Order for the FY2017-18 the Commission directed the Licensees to sell any surplus energy that might be available with them up to the last unit at an economically beneficial price to the maximum extent possible (para. 211). Given the present proposal to sell part of surplus energy in the open market, the experience of APDISCOMs in disposing of surplus energy in the open market in the past years and its contribution to bridge the revenue deficit may be made known.

Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization,Ongole has stated that sale of surplus power @ ₹2.75 per unit is not justifiable.

**Discoms Response:** APDISCOMs are proposing for sale of about 3100 MU of potential surplus energy in the market for FY2018-19. As per the projections of ARR & FPT for FY2018-19, there exists a potential to generate surplus energy and the

DISCOMs are proposing to sell the same, if it materializes on real time basis, during the ensuing financial year.

**Commission's View:** In compliance with the direction of the Commission at para 211 in the Retail Supply Tariff Order for FY2017-18 the licensees have informed on enquiry that from 1.04.2017 till 31.12.2017 they were able to sell 1048.51 MU at a cost of ₹3.95 per unit as against their own estimated potential to sell at ₹2.79 per unit in their ARR proposals. They realized ₹413.89 Cr. from such sales. As a reasonable percentage out of the estimated sales was achieved, a similar request for this year is considered in that back ground.

## **Energy Intensive Industries Category**

**91** Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru stated that Commission may consider categorising ChloroAlkali Industries under HT-I(B) Energy Intensive Industrial category on par with Ferro Alloys Industries as 70% of the production cost is towards electricity Consumption and power is also one of the raw materials.

Sri T.G. Venkatesh, Member of Parliament (Rajya Sabha), Sri A. Venkat Rao, Vice President, Finance, Sri K. KarunakarRao, Executive Director, Fin. & Comml., M/s TGV SRAAC Ltd., Sri Alladi Ravinder, Advocate have stated that Caustic Soda Industry shall be classified under HT Category-I(B) Energy Intensive Industries on par with Ferro Alloys as the major component of cost being electricity charges constituting 70% of the total cost of production and in an earlier classification, the erstwhile APSEB considered their industry as HT Category-III on account of incidence of cost of power in relation to the cost of production.

Sri V.R. Raghuraman, Vice President and Sri R. Subha Chandra, Manager, Finance and Accounts, M/s Teamec Chlorides Ltd., Gundlapalli (V), Maddipadu (M), Prakasam (Dist.) have stated that upon the request for treatment of their unit as Energy Intensive unit the Commission was pleased to record in the Tariff Order for FY2016-17 (Page 158, Para 186).

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that the DISCOMs may be directed to categorize the Spinning Mills as energy intensive with appropriate tariff for that category. The APSMA, over the last 3 tariff hearings have been reiterating that Spinning Mills are energy intensive by the criteria of the Load Factor and the claim as such should be accepted on the basis of Load Factor basis itself. The Commission is requested to consider our claims and enable such a categorization from FY2018-19 at least.

Sri B. Sankaraih, General Manager and Sri M.V. Satyanarayana, Senior Manager, M/s Grindwel Norton Ltd. have stated that Silicon carbide factories shall be included in HT-I(B) Energy Intensive Category since more than 60 percent production cost is from power and load factor is more than 90 percent.

**Discoms Response:** In compliance to the one of the directives of APERC in the Tariff Order for FY2016-17, DISCOMs have constituted a Committee of Experts to identify the criteria / data based on which Energy Intensive Industries can be classified to extend concessions in tariff. The Committee has opined that, if any industry is to be included in the HT Cat-I (B), the following conditions are to be fulfilled.

- a) The total electricity charges of any plant / industry are beyond 30% of total expenditure of the plant / industry and
- b) The load factor shall be more than 70%.

Above information has been brought to the notice of the Commission.

Present HT-I(b) category covers Ferro Alloy Industries, PV Ingots, and Cell manufacturing units, Poly silicon industry and Aluminum industry. The DISCOMS are of the view that further in-depth analysis is to be carried out to extend the coverage of this concessional tariff to other types of industries such as Chloro Alkali and the matter is well brought to the notice of Commission also.

Commission's view: Both the DISCOMs shall examine the request of the above industries to be brought within the category of HT-I (b) - Energy Intensive Industries with reference to the conditions identified by the committee of experts constituted by the DISCOMs and report to the Commission within three months from the date of this Order whether the said industries deserve such change of categorization. If the industries are found to satisfy the criteria / data for fulfillment of the identified conditions, the change of categorization as requested will be open for consideration. If the conditions are not fulfilled, the present categorization may have to continue. All similar requests shall also be dealt with similarly.

### Demand and Energy Charges shall be decreased for Industry

**92** Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru stated that even though there is no increase proposed in the Demand and Energy Charges in the present filings, the tariff is still on higher side due to lopsided policy of the Government to incentivise certain sections of society with free power policy & load the HT consumers, who are bearing heavy financial burden, leading to huge financial impact and requested to decrease the present Demand and Energy Charges for the survival of HT consumers particularly Chloro-Alkali Industry, who are power intensive category consumers.

Sri K. KarunakarRao, Executive Director, Fin. & Comml., M/s Sri Rayalaseema Alkalies and Allied Chemicals Ltd., Kurnool has stated that the proposals to maintain the energy and Demand Charges in FY2018-19 same as FY2017-18 lack bonafide reasons. Lack of reasons and rationale amounts to arbitrary proposal which will have huge impact on the Energy Intensive Units. The purpose of imposing the demand charges on consumers is to maintain Grid stability and discipline among the Consumers. Any Consumer consuming more than the permitted Contracted Maximum Demand (CMD) shall be imposed penalty. Once the penal provisions are intact, the question of maintaining the Demand Charges at the same level does not arise. The demand charges cannot be linked with Cost of Energy. Therefore, the proposal submitted by the DISCOMs is highly arbitrary and it appears to be to eliminate the drawal of power through Open Access. The proposed Demand Charges submitted to the Commission which are contra to the objects and intention of the Electricity Policy, ought to have been fixed as in FY2016-2017 i.e. ₹385.84 per kVA. The proposed charges will burden the Industries to pay the fixed charges to the DISCOM monthly without consumption of energy, which amounts to unbearable shock to the Industry. Section 61 of the Electricity Act, 2003 provides for determination of Tariff and in doing so, the Commission has to safeguard the consumer interest and at the same time, the recovery of the cost of electricity has to be in reasonable manner and also according to National Electricity Policy and Tariff Policy. The proposal made by the DISCOMs is contra to the principles underlined by the Electricity Act in respect of the protection of Consumers Interest vis-a-vis recovery of the cost of electricity as the proposed levy of Demand Charges Energy charges is an Anti Industry Policy and the same is not connected to reality. The legislative intention and object of the Electricity Act, 2003 are rationalization of the Tariff, ensuring transparent policies more particularly protecting the interest of the Consumers. The Tariff should not be a discrimination among the consumers and maintaining the Energy Charges and demand charges same as FY2017-18 is undue enrichment to the DISCOMs.

Sri G. Venkateswara Rao, KCP Sugar & Ind. Corp Ltd., Vuyyuru, Krishna District has stated that Tabular form shown below clearly shows the scope for reduction of demand charges and Commission may revise the MD charges.

Gujarat	For first 500 kVA of billing demand	₹ 150/- per kVA per month
	For next 500 kVA of billing demand	₹ 260/- per kVA per month
	For billing demand in excess of 1000 kVA	₹ 475/- per kVA per month
Rajasthan	Flat Rate	₹ 190/- per kVA per month
Maharashtra	Flat Rate	₹ 250/- per kVA per month
Tamil Nadu	Flat Rate	₹ 350/- per kVA per month
Karnataka	Flat Rate	₹ 210f- per kVA per month

Sri V. Poyyamozhi, Director/Operation and Sri K. Ramachandra Rao, M/s Srikalahasthi Pipes, Srikalahasthi have stated that MD charges of ₹475/kVA per month be reduced to ₹300/kVA per month particularly for 132 kV consumers.

Sri Gowra Srinivas, President, FTAPCCI, Hyderabad has stated that Demand and Energy charges for the units under 11 kV with a contracted demand upto 250 kVA be at a lower level.

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that the industrial tariff should be re-worked downwards to promote demand instead of shooting the messenger for Open Access.

Sri G. Koteswara Rao, Senior General Manager, M/s Sri Sarvaraya Sugars Ltd., Chelluru, E.G.Dist. has stated that Demand charges shall be reviewed and minimum billing on maximum demand shall be withdrawn.

Sri Valluri Surya Prakasa Rao, President, Upland Area Rice millers Associaltion, Samalkot, E.G.Dist., Sri Jonnada Satyanarayana, The Rajamahendravaram area Rice millers Assosiation have stated that MD Charges are levied heavily. Monthly minimum charges on MD & Energy shall be removed since Rice Milling is a seasonal activity.

Sri J. Sridhar, M/s Sameera Agro Inustries, Rajanagaram, E.G. Dist, Sri Laxmi Srinivasa Modern Rice mill; Sri M. Venakateswara Rao, M/s Sri Venkateswara Rice Industry, Gandepalli have requested that MD charges shall be reduced.

Sri C. Bhupathi Naidu, Nellore has stated that minimum bill for H.T. Consumers shall be reasonably fixed.

**Discoms Response:** As per the ARR & FPT filings for the ensuing year FY2018-19, the fixed cost of power purchase is **23.05%** of the total cost of Power purchase. Whereas the fixed charges recovered from the tariffs in the form of Demand/Fixed charges is **11.03%** in the total revenue (excluding Non-Tariff Income) as per the filings. Comparison of Demand & Energy Charges of major HT Consumers across different States is as following:

Category / State	Demand Charges ₹kVA	Energy Charges ₹/kWh		
HT Industrial				
Andhra Pradesh	475	5.44 @ 132 kV, 5.87 @ 33kV, 6.33 @11 kV		
Tamilnadu	350	6.35		
Maharastra - except Mumbai	250	7.07		
HT Commercial / Others				
Andhra Pradesh	475	6.72 @ 132 kV, 6.98 @ 33kV, 7.66 @11 kV		
Tamilnadu	350	8.00		
Maharastra - except Mumbai	235	11.35		
HT Water works/Sewerage				
Andhra Pradesh	0	4.89		
Tamilnadu	350	6.35		
Maharastra - except Mumbai	235	5.60		
HT-Agriculture / Lift Irrigation		-		
Andhra Pradesh	0	5.82		
Tamilnadu	0	6.35		
Maharastra - except Mumbai	40	3.30		

Fixed cost recovery is very less when compared to the actual cost incidence. The energy charges in AP are lesser when compared to the energy charges in other States and as such the overall realization is lesser from the HT Consumers and the tariffs in AP are most competitive. In view of the above, reduction of demand charges cannot be considered at this point.

As the State was power deficit till FY2016-17, the licensees have increased Energy Charges to efficiently manage the energy consumption and ensure power is supplied to all consumers. But since the State has moved to surplus scenario from FY2017-18 onwards, the licensees, to encourage higher energy consumption from the consumers and be competitive with the open access market, have rationalized the energy charge and demand charge.

**Commission's view:** The demand and energy charges for the industry were always attempted by the Commission to be maintained at reasonable levels, the latest such exercise being in the Retail Supply Tariff Order of FY2017-18, though the DISCOMs proposed very high demand charges with marginally lesser energy charges. Which category of consumers has to be incentivized and which not is a policy matter for the State Government and not for the Commission under Section 108 or Section 65 of the Electricity Act, 2003. The tabular information provided by the DISCOMs may suggest their claim of the energy charges in Andhra Pradesh being lesser than the energy charges in other States to be not untrue. Infact the analysis made by this Commission on HT Industrial Tariff comparision for FY2017-18 as seen from the table given below confirms that the energy and demand charges in Andhra Pradesh follow a middle path among the States in India:

H.T Industrial Tariff Comparision (FY2017-18) - Average Unit Rate (Rs./unit)											
Load Factor	Gujarat	Kerala	Bihar	Tamil nadu	Karna taka	Andhra Pradesh	Madhya Pradesh	Chhattisgar h	Telan gana	Rajasthan	Mahara stra
100%	4.81	5.91	6.61	6.83	6.94	6.98	7.05	7.16	7.18	7.23	7.33
90%	4.85	5.96	6.66	6.88	6.97	7.05	7.10	7.19	7.24	7.25	7.37
80%	4.90	6.01	6.71	6.95	7.01	7.14	7.17	7.23	7.32	7.28	7.43
70%	4.96	6.09	6.79	7.03	7.06	7.26	7.25	7.27	7.41	7.32	7.50
60%	5.04	6.18	6.88	7.15	7.13	7.41	7.35	7.33	7.54	7.38	7.59
50%	5.16	6.32	7.02	7.31	7.23	7.63	7.50	7.42	7.72	7.45	7.72
40%	5.34	6.53	7.23	7.55	7.37	7.96	7.73	7.55	7.99	7.57	7.92
30%	5.64	6.87	7.57	7.95	7.61	8.50	8.11	7.77	8.43	7.75	8.25
20%	6.23	7.55	8.25	8.75	8.09	9.58	8.86	8.20	9.32	8.13	8.92
10%	8.01	9.61	10.31	11.14	9.53	12.84	11.12	9.50	11.99	9.26	10.90

## Levy of TOD Charges:

93 Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru stated that TOD Charges have been introduced in the Tariff year 2012-13 when there was restrictions & controls on usage of Electricity due to severepower shortage prevailed at that point of time to maintain the Grid discipline. But, it is being continued in subsequent years even though there is no power shortage and surplus power is available, which is unnecessary, unjustified, meaningless and also causes another additional burden on HT Consumers. Levy of TOD CC charge is strongly objected for the consumption during 18.00 Hrs. to 22.00 Hrs. and Commission is requested to remove the TOD CC charges completely and supply power 24 Hrs. at normal tariff rate. Commission may introduce concession on the Power utilization during off peak period to encourage utilisation of the DISCOM power by the HT Consumers.

Sri G. Venkateswara Rao, KCP Sugar & Ind. Corp Ltd., Vuyyuru, Krishna District, welcoming the proposal of Discoms to manage with present Tariff for FY2018-19, stated that further scope is available to reduce tariff by taking effective measures to reduce losses, other costs, effective metering and collecting bad debts.

S.	State	ToD charges	Rebate in off-peak
No.		(6 pm to 10 pm)	(10 pm to 6 am)
1	Andhra Pradesh	₹1.05	NIL
2	Karnataka	₹1.00	₹1.25
3	Tamilnadu	20%	5%
4	Gujarat	₹0.9 / ₹1.0	₹0.60
5	Maharashtra	₹1.5	₹1.50

The aim of providing differential tariff for peak and off-peak hours is to shift load from peak to off-peak hours with a view to optimize the generation capacity and minimize power procurement cost. The tariff order supports separate charges for ToD consumption but no incentives for off-peak power consumption are given as provided in other States as shown in the Table. This off-peak (22.00 to 06.00) incentive helps to shift load curve to night hours which is helpful for optimum power generation.

Sri M. R. Samanta Ray, General Manager; Sri G. Raghu, Rashtriya Ispat Nigam Limited, Visakhapatnam have stated that off peak benefit shall be given to implement the TOD tariffs in true spirit.

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur has stated that during period of shortage TOD was essentially a mechanism for demand management, or at least that is what was explained by the DISCOMS. Whereas, it is now a problem of plenty and therefore the concept of TOD if it is to be continued for the purpose of revenue, consumers using power during non-peak hours should be incentivized with a separate category as Lean Time Tariff (LTT). It is hoped that the Commission would find the submission just and equitable and make suitable provisions in the Tariff.

Sri V. Poyyamozhi, Director/Operation and Sri K. Ramachandra Rao, M/s Srikalahasthi Pipes, Srikalahasthi have stated that the TOD Charges of  $\gtrless$ 1/- per unit were introduced during power shortage period and now there being no such scenario, shall be withdrawn.

Sri. T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad, Sri Sourabh Srivatsava have stated that TOD Tariffs should be adopted only as a Demand Control measure but not for revenue mobilization. If peak time Charges are levied, reciprocal lean time Incentive also should be given. The practice of levying only Peak Time Charges is counterproductive and damaging mainly in power surplus times.

Sri Gowra Srinivas, President, FTAPCCI, Hyderabad has stated that ToD charges shall be removed for small scale industry category.

Sri G. Koteswara Rao, Senior General Manager, M/s Sri Sarvaraya Sugars Ltd., Chelluru, E.G.Dist. has stated that ToD charges shall be removed.

Sri Valluri Surya Prakasa Rao, President, Upland Area Rice millers Associaltion, Samalkot, E.G.Dist., Sri Jonnada Satyanarayana, The Rajamahendravaram area Rice millers Assosiation have stated that TOD tariff is to be relaxed since there is no shortage of power during peak load hours. Off peak incentives have to be given as many Rice Industries can run during night times.

Sri J. Sridhar, M/s Sameera Agro Inustries, Rajanagaram, E.G. Dist, Sri Laxmi Srinivasa Modern Rice mill; Sri M. Venakateswara Rao, M/s Sri Venkateswara Rice Industry, Gandepalli have requested that ToD charges shall be reduced/waived.

**Discoms Response:** TOD charges are intended to bring in Grid Discipline in usage of power during the peak load time in order to bring down to a flat load curve. Thus, TOD is not intended for severe shortage period alone. The objective with which TOD charges are levied is to inculcate grid discipline to maintain within the stringent bandwidth of frequency of 50 Hz and to reduce the burden on the Grid during peak load time. The TOD tariff is proposed based on the cost of service of the licensee. Licensee is obligated to procure power at high variable costs to meet peak during 18:00-22:00 Hrs. As the cost to serve is uniform for times other than peak hours, licensees did not propose any incentive for off-peak hours. Matter under the purview of APERC.

Commission's view: For the first time in the State of Andhra Pradesh, ( as earlier or now) an attempt is made to strike a reasonable balance between the necessity for grid discipline in usage of power during the peak load time and the desirability of encouraging utilization of more power by HT Consumers during off-peak period by providing for levy of Time-of-Day consumption charges during the peak hours and concessional consumption charges during off-peak hours, which if properly utilized, will be an added incentive to the industrial sector, which satisfies the requests of the stakeholders referred to above .

## **Introduce Load Factor Incentive**

**94** Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru stated that the Commission may direct DISCOMS to introduce load factor-based tariff incentive for Chloro Alkali Energy Intensive Industries as power will play major role in cost of production, which also encourages utilisation of the DISCOM power by all HT Consumers.

Sri T.S. Appa Rao, Secretary General; Sri Gowra Srinivas, President, FTAPCCI, Hyderabad, Sri Sourabh Srivatsava have stated that Load Factor incentive should be provided (on the lines of Madhya Pradesh etc.) to encourage Consumers with higher loads so that it may result in increased sales, higher PLFs for thermal Plants.

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that high load factor consumers, who are now forced to move to open access for lower tariff may be incentivized with an appropriate load factor incentive where categories of 60 to 65% load factor may be given ₹0.50 per kVAh followed by ₹0.75 per kVAh for 65 to 70% load factor and ₹1/- for 70 to 75% and subsequently ₹1.25 per kVAh for 75% and above load factor. Providing such load factor incentive is a more prudent methodology for customer retention rather than the approach of trying to scuttle Open Access with unreasonable cross subsidy surcharge and additional cross subsidy surcharges.

**Discoms Response:** High load factor consumers automatically get the benefit of low tariff. For example, demand charges will be ₹0.82 / kVAh at 80% load factor and ₹1.10 at 60% load factor. Hence there is no need for load factor incentive. Matter is under the purview of APERC.

**Commission's view:** HT Load factor incentive scheme was in operation for several years with modifications from time to time till 31.07.2010 as seen from paras 217 and 218 at page 107 of the tariff order for FY2010-11 which are extracted below:

"217. At present, the HT-I(A) Industrial consumers are provided with a load factor incentive scheme in which a concession / rebate on energy charges is given if the load factor is above certain threshold levels. This scheme has been in operation for the past several years with modifications from time to time as approved by the Commission. The scheme was originally intended to encourage

and stabilize demand and was intended to ensure fuller utilization of surplus power generation capacity available at that time.

218. The surplus power situation has changed since then significant power shortages are observed in recent times that have even led to restrictions and control measures in supply by licensees. Shortages and deficits are now becoming a norm and the situation is not likely to improve substantially in the foreseeable future. Short term market purchases, sometimes even at the rates ranging from ₹7 to 10 per unit, are being resorted to, to meet the demand in the last 3 years. Buying such costly power and then supplying it at half the cost and then even pay incentive / rebate for power consumption is an anomalous situation. In this context, the Commission decided to discontinue the incentive scheme w.e.f. 1st August, 2010."

Therefore, both the distribution companies may thoroughly examine the entire issue and submit their reports on the need, justification and reasonableness of either reintroducing the HT Load factor incentive scheme or continuing the status quo in this regard. The circumstances stated in para 218 of the tariff order of FY2010-11 about significant power shortages do not exist from FY2016-17 since when surplus power generation capacity is reported by the DISCOMs. After the bifurcation of the State, the State of Andhra Pradesh is badly in need of industrial, business and economic growth and such a scheme may encourage and stabilize the demand and ensure fuller utilization of the power generated. Hence, the distribution companies may submit their reports on the subject within two months from the date of this order for consideration and necessary further action by the Commission.

## Actual MD utilized from DISCOM shall only be billed for OA consumers

**95** Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru stated that Commission may please withdraw the concept of minimum billing on Contracted Maximum Demand as it leads to double billing when Open Access is availed as Transmission and wheeling charges are being paid, for the power purchased through open access in addition to the Demand charges which is already included i.e. the transmission and wheeling costs for the Contracted Maximum Demand. It is unjust and arbitrary. It is therefore necessary to provide that, when open access is availed, the Demand attributable to open access shall be withdrawn from the billing demand (whether it is 80% of CMD / Recorded Demand) and the Demand charges shall be applied only to the actual utilized demand from DISCOM.

**Discoms Response:** Demand Charges are meant to recover, if not full, at least certain portion of fixed costs associated with the power procurement. As per the ARR & FPT filings for the ensuing year 2018-19, the fixed cost of power purchase is 23.05% of the total cost of Power purchase. Whereas the fixed charges recovered from the tariffs in the form of Demand/Fixed charges is 11.03% in the total revenue (excluding Non-Tariff Income) as per the filings. Since fixed cost recovery is very less when compared to the actual cost incidence, reduction of demand charges cannot be considered.

**Commission's view:** The response of the DISCOMs to question at para no. 79 at Page 87 of the tariff order for FY2017-18 answers this objection and it is extracted below:

"When consumer consumes from the licensee's grid, the demand charge is being charged for the Maximum Demand or 80% of the contracted demand. However, in case of open access consumption, the maximum demand is set off by the open-access demand. Hence, an open access consumer pays the demand charge, for the adjusted demand or 80% of the contracted demand whichever is higher; transmission and wheeling charges and the cross-subsidy surcharge (which doesn't include the transmission and wheeling charges). Hence, the situation of double billing doesn't arise in case of consumers going for open access."

### **Drop Penal Energy Charges for exceeding CMD**

**96** Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru; Sri G. Koteswara Rao, Senior General Manager, M/s Sri Sarvaraya Sugars Ltd., Chelluru, E.G.Dist. have stated that Commission may drop levy of penal Energy Charges for exceeding contracted maximum demand.

**Discoms Response:** Penal Energy Charges are levied on entire energy if the recorded maximum demand is over and above 120% of the Contracted Maximum Demand. 20% provision has been given in the Recorded Maximum demand to take care of any operational exigencies in usage of power. This penal provision is meant for bringing

in grid discipline and usage of excess contracted demand beyond the sanctioned contracted maximum demand cannot be permitted.

**Commission's view:** The response of the DISCOMs contains the rationale for imposition of such charges and maintenance of grid discipline is a must.

## Separate HT tariff for defence establishments

97 Sri K. Ramakrishnam Raju, President, Vessel Contractors Welfare Association, Visakhapatnam has stated that separate tariff category of HT shall be included for defence establishments as existing in some States or otherwise all Govt. establishments may also be considered, which may help increase in licensee's revenue. There will not be any problem for agencies concerned by increase of tariff and timely payments will be received which will help increase in licensee's revenues.

Discoms Response: The matter is in the purview of APERC.

**Commission's view:** The defence establishments are the life line of the safety and security of the Country the resources of which should be mostly, if not solely, devoted to meet the functional defence requirements and not the maintenance costs including electricity consumption charges. Hence, the suggestion to increase the revenues of the licensees by creation of a separate category for them is not feasible of acceptance.

## **Unified Tariff for all Voltage levels**

98 Sri P. Vijay Gopal Reddy, A.P. Ferro Alloys Producers Association, Hyderabad has stated that till the year 2012 it was a unified tariff across all voltage levels. After introduction of voltage wise tariff all 33 kV MSME producers are put to huge disadvantage as cost of production has gone up abnormally. The Commission is once again requested to keep unified tariff for all voltage levels. The tariff difference which is 43 paise between 132 kV and 33 kV is un-substantiated as the cost of service difference is only 15 paise in SPDCL.In light of the critical dependence of this Power Intensive Industry on the Electricity Tariff in the present days marked by volatility and the need for continued support required for consolidation as the Steel Sector has been badly affected by global downturn and in view of the fact that almost all of the member industries are located in the backward areas of the State and fragile paying capacity.The Commission is requested to consider sympathetically and pass favorable orders for survival of the industry which constitutes a bulk load in times marked by

back downs and stranded capacities.

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur; Sri Gowra Srinivas, President; Sri T.S. Appa Rao, Secretary General, FTAPCCI, have stated that Cost of Service (CoS) between 33 kV and 132 kV is ₹0.15 but the tariff difference between the 2 categories is abnormally high at ₹0.43. This abnormally high difference which has been pointed out even last yearis hoped will be corrected this year at least by reducing the 33 kV tariff by 25 paise.

**Discoms Response:** Non-uniform tariffs across voltages reflect voltage wise network usage and losses. The Cost of Service (CoS) for the same category of consumption for different voltages is different. The proposed voltage wise retail supply tariffs commensurate with the voltage wise CoS in that category. In the light of the above, the request of the consumer to keep unified tariffs across all categories cannot be considered.

**Commission's view:** Introduction and continuance of voltage specific tariff is a timetested consideration and experience and if power intensive industries are otherwise in trouble, some other supportive measures are to be devised by the State Government to make them sustainable.

## Rebate on energy charges to Railways and exemption from Cross Subsidy Surcharge

99 Sri G.V. Mallikarjuna Rao, Chief Electrical Distribution Engineer, S.C. Railway, Secunderabad has stated that Railways serve the public at large and being a public utility, it should be supplied with electricity at a reasonable price which would reduce its requirement for diesel. In the process there would be saving of foreign exchange. It will also prevent upward revision of fares for transportation of passengers and goods by the Railways. Indian Railway avails traction power through 41 Traction Sub-Stations at 220/132 kV (26 Traction sub-stations of SC Railway, 2 of Southern Railway and 11 of East Coast Railways & 2 in South Western Railways) in Andhra Pradesh. The total consumption of Railway traction is 1390 MU projected for the year 2017-18 and paying a substantial amount of ₹665 Crores to various DISCOMs in Andhra Pradesh. The Railways are a bulk consumer and pay major revenues to DISCOMs and the grievances of Railways are to be considered while fixing the tariff for HT-V category. By way of electrification of Railway network in Andhra Pradesh additional infrastructure will be added, resulting into faster movement of goods and

passenger traffic. Ultimately there is every possibility of upcoming industries in the area of coastal region and backward region like Rayalaseema in newly formed Andhra Pradesh.In view of new electrification works nine (9) more traction substations in Andhra Pradesh are going to be commissioned in 2018-19 and further consumption will be increased.

At present the traction tariff is ₹300 / kVA as demand charges and ₹3.55 per kVAh as energy charges. Now, Discoms have proposed same as tariff of 2017-18.

It is to mention that Railway traction is power intensive and loads are for passenger & goods train services which are run round the clock. There is no distinction of peak to non-peak hours. Most of the goods trains are run during night time which is off peak period. Thus, Railways are improving base loads of DISCOMs and supporting the grid stability. Apart from this, Railways is maintaining higher power factor.

Railway traction provides base load, maintains high power factor and saves imported precious oil, apart from speedy, energy efficient and environmental friendly public transport. Encouragement for new electrified sections is needed in view of development of infrastructure in newly formed AP in particular and also to act as growth engine for the economy of country in general. The tariff under category HT-V Railway traction is to be fixed reasonably by reducing further to encourage electrification projects in Andhra Pradesh. To give impetus to electrification of Railway network, a rebate of at least 10% of energy charges be allowed for a period of five years similar to Madhya Pradesh and Chhattisgarh. Exempt Railways from cross subsidy surcharge considering Railways as deemed licensee.

Discoms Response: The DISCOMs are purchasing power from generating stations and supplying power to the various sectors of consumers with different tariffs duly considering subsidized tariffs with an intention to serve the public at large including Railways at concessional tariff of ₹3.55/kVAh of energy charges and nominal Demand charges of ₹300/kVA/month as against the Cost of Supply of ₹5.66/kWh.

The licensees procure power from different generating stations to ensure power supply to all retail consumers in the State. Based on demand and supply projections, the licensees enter into long term, medium term and short-term power purchase agreements with the generating stations. The licensees are obliged to pay fixed costs to the thermal power generators that are available as per the PPA conditions, even if the licensee does not procure any power. The licensees also have an obligation to procure power from renewable energy sources such as solar, wind and other nonconventional energy sources which are classified as must-run stations.

Accordingly, the fixed cost obligation to the generating stations was projected to be around ₹6171.63 Cr. for FY2018-19. This is around 25% of Aggregate Revenue Requirement of the Discoms at the state level. However, with the current tariff structure comprising demand charges, 12% of revenue at current tariffs is projected to be recovered as demand charge by the licensees. Due to this difference between current tariff structure and actual cost structure for the licensee, the licensees incur a loss, if there is deviation in the projected sales due to open access, change in energy availability from must run stations like Hydel stations, Solar, Wind and other NCE stations etc. Hence, in order to overcome these shortfalls, the licensees propose to rationalize the demand charge and energy charge to reflect the licensees' PPA structure. It can also be noted that even the Chhattisgarh DISCOM is offering the at two-part tariff for Railways. The licensee wants to mention that the average cost of service is ₹5.66/kWh for FY2018-19. Selling power at lower than cost of service would lead to financial distress for the licensee. Even presently DISCOMs are offering most competitive tariff to the Railway Traction activity. Further offering Off Peak incentives cannot be considered at this point of time in view of technical constraints associated with load management. The matter of exemption from Cross subsidy surcharge is in the purview of APERC.

**Commission's view:** The understanding between the distribution licensees and the Railways prior to the Retail Supply Tariff Order of FY2017-18 resulted in the Railways being extended an admittedly reasonable tariff of ₹3.55/kVAh of energy charges and ₹300/kVA/month of demand charges as against the cost of supply of ₹5.66/kWh. The Commission played a proactive role in bringing together both sides which are in the service of the public at large, irrespective of any economic disadvantage to which the DISCOMS are put, in the hope of the same facilitating a significant increase of the infrastructure and services of the Railways in the infant State. In fact, in between FY2016-17 and FY2017-18, while there was a significant increase in consumption of energy by the Railways from 634.34 MU to 685.74 MU in APEPDCL and from 649.67 MU to 697.53 MU in APSPDCL, the consumption charges realized by the DISCOMs came down from ₹423.79 Cr. to ₹320 Cr. and

₹435.54 Cr. to ₹348.79 Cr., which is proof positive of the favorable treatment meted out to Railways in the State of Andhra Pradesh. While the Commission is always available to the Railways to render all possible assistance for betterment of the Railway infrastructure and services in the State, any downward revision of the tariff for the Railways hence could not be considered. The issue of exempting Railways from Cross subsidy surcharge considering it as a deemed licensee will be considered appropriately at an appropriate time.

#### Voltage-wise tariff above 132 kV

100 Sri S De Sarkar, Business Head, M/s Abhijeet Ferrotech Limited, Visakhapatnam, thanking APEPDCL for the cooperation extended so far, has stated that the tariffs in respect of EHT consumers receiving power at 132 kV, 220 kV and 400 kVare being proposed by APEPDCL at same level, during the past few years. The losses in the power network depend upon the voltage of the system. The losses in the transmission system are different which operate at 132 kV, 220 kV and 400 kV. Higher the voltage lower is the loss. The reduction in the cost of supply therefore deserves to be passed on to high voltage consumers in the form of lower tariff. The cardinal principles under the Electricity Act, 2003 also provide for passing on such reduction in losses to the respective EHT consumers in the form of reduced tariffs. The proposal is objected and it is suggested that APEPDCL has to propose separate voltage wise tariffs in respect of consumers receiving power at 132 kV, 220 kV and 400 kV as is being provided by the eighteen (18) nos. of Discoms of other States viz. Chhattisgarh, West Bengal, Haryana, Madhya Pradesh, Uttar Pradesh, Karnataka and Kerala. In the tariff order for FY2017-18 and in the past years as well, APEPDCL had stated that the transmission system of Andhra Pradesh is operated in ring mode (Integrated System) and hence voltage wise losses for 132 kV, 220 kV and 400 kV systems cannot be separately determined. The transmission systems in all other States in the country are operated in ring mode only. Still, various DISCOMs in the country have implemented voltage wise tariffs for EHT consumers. This it makes amply clear that the transmission system being operated in ring mode should not be a stigma to desist from proposing voltage wise tariffs for EHT consumers by APEPDCL.

Further, Hon'ble APTEL laid down the following principles in relation to determination of retail supply tariff vide its order dated 30th May 2011 (Appeal no. 102 of 2010) and Order dated 31st May 2013 (Appeal no. 179 of 2012).

- The 'Cost of Supply' as appearing in respect of voltage wise consumers should be the basis for determination of retail supply tariffs,
- The voltage wise tariffs for consumers can be determined as per the formulation laid down by the Hon'ble ATE, in absence of necessary metering data at respective voltage levels,
- The voltage wise tariff determination cannot be delayed indefinitely for want of necessary data.

Not determining separate voltage-wise tariff will lead to non-determination of cross subsidy levels at these voltages, which is violation of the provisions of the Electricity Act, 2003 which provides for progressive reduction of cross subsidies. Determination of such tariff is also mandatory as per clause 8.3 (2) of the NTP which requires the tariff to be within±20% of the average cost of supply. The Section 61 (g) of the Electricity Act, 2003 provides that the tariff has to reflect the actual cost of service, which can happen only in the event of determination of voltage wise cost of service. Once such voltage wise tariff for EHT consumers at 132 kV, 220 kV and 400 kV is determined there is no question of any hidden increase in the tariff, as apprehended by the APERC in its view at sr. no. 146 (k) of the retail supply tariff order dated 31<sup>st</sup>March 2017. On the contrary such determination shall be at realistic and acceptable level as outlined by APERC.

The implementation of voltage wise tariff for EHT consumers shall be in the overall public interest and shall encourage more industries to avail power at higher voltages thereby helping the state to grow further. These principles are already adopted by the APEPDCL while proposing different tariffs for 11 kV and 33 kV consumers at distribution levels. Similar policy needs to be urgently adopted by the APEPDCL in respect of the EHT consumers as well.

In view of above, APEPDCL is requested to propose to the APERC, by way of amending the ARR petition, the voltage wise tariffs for EHT consumers availing power at 132 kV, 220 kV and 400 kV, in line with various directions of Hon'ble ATE and as already implemented by various other DISCOMs in the country.

Further, vide letter dated 03.03.2018 they have requested to consider tariff for 220 kV consumers lower by around ₹ 20 paise per unit as compared to tariff for 132 kV consumers.

Sri M. R. Samanta Ray, General Manager; Sri G. Raghu, Rashtriya Ispat Nigam Limited, Visakhapatnam have stated that the cost of supply at higher voltage levels shall be less compared to that at lower voltage and this cost advantage shall be passed on to such category of conusmers. Hence, there shall be separate tariff for 132 kV, 220 kV and 400 kV EHT consumers.

**Discoms Response:** APERC, based on the similar objections in FY2013-14 has taken the decision not to have voltage wise tariff for 132 kV, 220kV and 400kV separately. The transmission system of Andhra Pradesh is operated in ring mode (integrated system) which consists of 400 kV, 220 kV and 132 kV. The power flow path in a transmission system cannot be defined. In EHT system, the power can flow from lower to higher voltage or higher to lower voltage, depending upon the physics of the system. The physics of the system determines the power flow path and hence EHT system losses can only be determined and voltage wise losses for 132 kV, 220 kV and 400 kV cannot be separately determined. Further, the Central Electricity Regulatory Commission (Rates, Charges and Terms and Conditions for use of Intervening Transmission Facilities) Regulations, 2010, were issued to determine transmission charges and wheeling losses for intervening transmission system. The losses mentioned in Clause 12 of the said Regulation are normative losses and arrived based on thermal loading limit of each voltage level per 50 kM length of contract path. Hence, the licensees have proposed single tariff for EHT system and have not proposed any voltage wise incentive for 220kV and 400kV Voltage levels. Even as per the Transmission MYT Order for the third control period spanning FY2014-19, the transmission charges are prescribed embedding all available EHT voltages in the System (132 kV, 220kV & 400kV). In view of single classification of existing transmission charges, Voltage wise EHT tariffs are not proposed. Matter is in the purview of APERC.

Commission's View: The working of voltage wise tariffs in eighteen (18) other distribution companies, the decisions of Hon'ble Appellate Tribunal for Electricity on this aspect and the other circumstances pointed out by the objector may be studied by a joint group of senior officers of both the distribution licensees and the transmission licensee with reference to the operation of the transmission and distribution system in the State of Andhra Pradesh more particularly the peculiarities in this State like there being no consumer of 400 kV and the methodology adopted by the Central Electricity Regulatory Commission. The distribution and transmission licensees in the State may take a view on the report of the study group and submit the report and their views to the Commission before the end of July, 2018 to enable the data to be considered on merits in assessing the tariff proposals for the FY2019-20. The distribution and transmission licensees should report to the Commission about the constitution of the joint group before the end of April of 2018.

#### **Discard kVAh billing**

**101** Sri M. Krishna Murthy, Chief Engineer (Retd.), Vizianagaram that the following are the disadvantages in the present system of kVAh billing that is being adopted from 2011-12.

Technical reasons: The very electrical engineering texts narrate that kWh power is the power said to be used by the consumer. kVARh power is the magnetising power required to consume kWh power. kVAh is power resultant of the above two. These three powers that are kWh, kVARh, kVAh are called the trinity of Electrical Power. Hence billing for kWh power that is Units is correct as per technical reality because the kVAh power is to be generated to supply the units required by the consumers. They were insisted to install Power Capacitors at their end to minimize the kVAh generation to the optimum values. If the capacitors are not installed or not in proper service the kVAh consumed by the consumer would be high, supplier suffer with increased generation of kVA at generator end. Hence to make the consumer alert in keeping his capacitors of sufficient capacity at his end penalty is introduced for high kVAh value or low power factor surcharge. This was the old practice of billing before 2011-12.

In the absence proper understanding of above theory behind billing system and the connectedness of service of capacitors in reducing kVAh power most of consumers are paying blindly for the bills raised for kVAh units. On review of monthly bills of district collector's complex, Vizianagaram upon their request, it was found that 4 Nos. of 15 kVAr capacitors were found disconnected and as a result they were getting excess bill to the tune of ₹ 30,000 per month.

Moral reasons: Every HT service is tested annually by MRT wing, AE/ADE/DE operation takes readings of HT service every month and SAO of circle office reviews

consumption every month. Nobody seems to hint the customer about high kVAh units and higher bills and the avoided by principle of keeping in service of capacitors of proper rating for the service. Every month so many officers of DISCOM conduct grievance solving and attending to the consumer help desks.

Information may be collected for some more HT consumers who are paying the sacred bills for high kVAh without knowing that no capacitors or low capacitors are the reason behind their higher bills. A lapse in the system in guiding the consumer for getting good service with no exploitation in Govt. owned organization. The Commission is requested to arrange proper justice.

Social reasons: A learned person has the intensity to serve the public without any cause behind unlike a commercial man aiming his own prosperity. All members in society cannot be expected to have equal understanding of science. Innocence shall be guided instead of penalizing. It is requested to adopt the old system of penalty levying for low power factor say for below0.9 or 0.95 for the HT consumers with kWh (Units) billing as before 2011-12 so that consumer gets awareness to keep his capacitors active through his technical person or from hired one in case of power factor surcharge is found in his bill.

Sri B. Hume Sastri, Chief Engineer (Rtd.), Visakhapatnam has stated that from 01.04.2011 the billing procedure changed to kVAh billing for services of connected load more than 10 kW. And so many consumers are paying higher amounts due to kVAh billing but the EPDCL authorities are maintaining the low power factor in services of their own offices. They have not changed over to LED lighting and 50W ceiling fans.

Sri G. Koteswara Rao, Senior General Manager, M/s Sri Sarvaraya Sugars Ltd., Chelluru, E.G. Dist. has stated that awareness shall be created on kVAh billing.

**Discoms Response:** The concept of kVAh metering, measurement of kVAh and related tariffs are expected to help in reducing reactive currents in the system by commercially motivating consumers to install reactive compensation at their premises. Introduction of kVAh metering and kVAh tariffs is therefore seen as a commercial inducement on consumers to ensure a smaller electricity bill by ensuring that they do not draw reactive power. KVAh tariffs will always tend to provide a commercial disincentive for reactive indiscipline of consumers. The kVAh billing concept is in

operation for quite some time i.e. almost 6 years in AP Power Sector, as prescribed by APERC vide their Retail Supply Tariff Orders issued from time to time. All the consumers to whom the kVAh tariff is applicable (all HT Consumers and a certain portion of LT Consumers) are fully aware of the consequences and the kVAh mode of billing is under successful implementation. It is to state that the request of the objector to revert back to the old system of kWh billing with low power factor penalty is not warranted. APEPDCL has already taken up changing to LED lighting and energy efficiency fans in its offices.

**Commission's View:** Though kVAh billing may not be perfect, kWh billing was replaced by kVAh billing six years back for the same reason. There appear no compelling reasons to revert back to the past practice though there may be merits and demerits in either method.

#### Reduce tariff for HT-I (A) and HT-I (B)

102 Sri V. Poyyamozhi, Director / Operation and Sri K. Ramachandra Rao, M/s Srikalahasthi Pipes, Srikalahasthi have stated that the proposed unit rate of ₹5.44 for HT-I (A) is objected and it is suggested to review the rate at par with IEX power of around ₹3.00 / unit.

They have further stated that their proposal for a Ferro Alloy project has been kept pending on account of prevailing power tariff of ₹4.95/unit. The tariff may be reduced to ₹3.45/unit including MD charges for 132 kV consumers and also the tariff may be unchanged for the next five years to enable setting up of new Ferro Alloy units in the State. The system of reimbursement of ₹1.50/unit from the Govt. to the consumers to be straight away reduced in this tariff to ₹3.45 per unit.

**Discoms Response:** Procurement of power from exchanges is short term measure and cannot be compared with that from Discom which has long term commitments with generators. Further, even though the average rate in IEX has been around ₹3.02/kWh, however, the actual rate varied from ₹0.52/kWh to ₹10.40/kWh in 2017.

Govt. of AP has provided reimbursement of ₹1.50/unit towards energy charges of Ferro Alloy units for FY2016-17 only. From FY2017-18 onwards GoAP has not extended reimbursement of energy charges to the Ferro Alloy units. Hence the proposal of the objector for reduction of energy charges to the Ferro Alloy units from ₹4.95 / unit (132 kV) to ₹3.45 / unit is not justified.

**Commission's View:** The basic requirement of full cost recovery gives no scope for consideration of the request.

#### **Re-instate Green Power Tariff Category**

103 Sri Aditya Machani, CEO, M/s MGB Mobiles, Anantapuramu has stated that they were initially a HT Consumer (Mahindra and Mahindra Ltd. Automotive dealers, Anantapuramu) under HT-II(A) category with consumer no. ATP 460 and have established a 150 kW roof top solar plant with net metering facility in June 2016. As per provisions of the Tariff Order for FY2016-17, they have opted for conversion of category from HT-II(A) to HT-VII - Green Power Category, to further their business and economic requirements and was granted by APSPDCL pursuant to their application dated 21.11.2016 and they have entered into a revised agreement on 1.03.2017 which is valid for a minimum period of two years i.e. upto 28<sup>th</sup> February, 2019. Later, in the tariff order for FY2017-18 the HT-VII category was deleted on the ground that historically there were no sales in the said category, which is not correct. Immediately after knowing about the deletion of the category, the Commission was informed by a letter dated 1.04.2017 that they have been converted to HT Green Power category on 1.03.2017 with prior permission of APSPDCL and a copy the letter was also given to APSPDCL. While their request for reconsideration of the matter was pending before APERC, APSPDCL issued a letter on 13.04.2017 pursuant to which the agreement executed on 1.3.2017 was cancelled. They are incurring substantial losses due to minimum consumption charges and Maximum Demand charges which charges were not required to be paid under the HT-VII - Green Power Category. Thereafter they have filed O.P. 59 of 2017 on the file of APERC and the same was not pressed reserving libertywhile withdrawing the same. Commission is requested to consider including the Green Power Category in the tariff order for FY2018-19.

#### **Discoms Response: NIL**

Commission's View: The Green Power Category is restored and if the consumer falls under that category, it will be governed by the tariff prescribed for the same. The APSPDCL may take necessary action expeditiously and report to the Commission with in one month.

#### **Voltage-wise Cost of Service**

104 Sri T.S. Appa Rao, Secretary General and Sri Sourabh Srivastava, The Federation of Telangana and Andhra Pradesh Chambers of Commerce and Industry (FTAPCCI), Hyderabad have stated that the tariff determination exercise based on the voltage wise cost of supply has been emphasised through the state Tariff Regulations, Model distribution Regulations of the Forum of Regulators, Tariff policy and several judgments of the APTEL. FTAPCCI has repeatedly submitted in various objections that though the Licensees calculate the category-wise CoS for all classes of consumers, they do not use the same to determine tariffs. This renders the exercise of calculating the category-wise CoS futile and misleading. Further the licensees have not been able to adhere to the mandate by the Tariff Policy of designing tariff at  $\pm 20$ % of the average cost of supply. As per the provisions of the Electricity Act and Tariff Policy, the subsidizing consumers such as industrial consumers cannot be penalised, for making good the cost, to be recovered from the subsidized category beyond the permissible  $\pm 20\%$  of the average cost of supply. Any benefit which the licensees want to confer to the subsidized category beyond the maximum of  $\pm 20\%$  can and should be recovered through Government subsidy and cannot in any way be loaded to the subsidising consumers.

Sri O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that though the DISCOMs calculate category-wise COS for all classes of consumers, it does not use the same to determine the tariff, thus, rendering the exercise of calculating category-wise COS futile and misleading. Further, the DISCOMS have not adhered to the mandate of the tariff policy of designing tariff at  $\pm 20\%$  of the average cost of supply. Currently industrial consumers are suffering a tariff of 135 to 150% of the average cost of supply. This is well above the permissible 20% limit. A trajectory and a plan of how and by when the DISCOMs propose to get to the tariff policy directive of  $\pm 20\%$  of COS, basically a timeline may be given.

**Discoms Response:** The revised tariff policy notified on 28.01.2016 states that the Commission has to notify a roadmap for bringing down the tariffs within  $\pm 20\%$  of the average cost of supply.

Provisions of the revised tariff policy 2016 is reiterated as below:

"8.3 Tariff design: Linkage of tariffs to cost of service

2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within  $\pm 20\%$  of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy."

Voltage wise/Category Wise Cost of Service (CoS) is computed and submitted to the APERC as part of ARR & FPT filings.

Commission's View: The DISCOMS and the learned objector may assist the Commission by providing their considered and studied suggestions on the subject of voltage wise cost of service and draft road maps therefor so as to comply with the revised tariff policy, 2016.

#### **Start-up Power Category**

105 Sri M.S. Venkateswara Rao, M/s Sri Girija Alloys & Power (I) Pvt. Ltd., Peddapuram, East Godavari (Dist.) have stated that APEPDCL is rendering start-up Power under HT-1, HT-2 and energy net off system. APERC published a gazette dated 6<sup>th</sup> June 2017 for creation of start-up power category and advised DISCOMS to supply to all these generating plants either at Low Tension or High Tension as desired by the producer / developer for maintenance, start-up operations and lighting purpose. The tariff for these plants for FY2017-18 shall be charged at the rate of ₹11.77/Unit without any fixed and minimum charges. The DISCOMs shall file tariff proposals under section 62 of the Electricity Act, 2003 in the ARR Proposal of FY2018-19, for supply of electricity to this type of Power Plants. But APEPDCL has not filed any tariff proposal as such in the New Tariff Proposal for the FY2018-19. The New Tariff Proposal for FY2018-19 does not indicate separate category for start-up power for Power Plants and the same may be incorporated and Commission is requested to approve a separate category for start-up power loads of for power plant and remove the criteria of minimum energy consumption charges and remove the demand and ToD charges.

Sri Rajendra Vohra, President, M/s Sarda Metals and Alloys Ltd., Visakhapatnam has stated that APEPDCL has filed the ARR proposal for FY2018-19 without considering the directives of the Commission dt.06.06.2017 issued vide clause 17 of Regulation 3 of 2017. The Commission is requested to issue directives to DISCOMS for submission of revised tariff schedule considering separate category for extension of

power supply for start-up operations or for plant maintenance for FY2018-19.

Sri V. Chandrasekhar Reddy, M/s Manihamsa Power Projects Ltd. has stated that Tariff of HT @ ₹11.47 shall be implemented for startup power as per Regulation No.3 of 2017.

M/s Steel Exchange India Ltd., Sreerampuram, Viziangaram have stated that tariff for Start up power category shall be implemented as specified in Regulation 3 of 2017 only, without TOD charges.

**Discoms Response:** The Licensee has filed the addendum to the ARR application in respect of Retail Supply Business and proposed Tariffs for FY2018-19 on dt. 27.01.2018 before APERC wherein it is proposed to include a separate category under HT –II (Others) as HT –II (d) start-up Power for Captive Generating Plants, Co-Generation Plants and Renewable Generation Plants, with the proposed tariff and conditions as below.

Voltage of	HT II-(d)		
Voltage of SupplyDemand Charges (₹/kVA/Month)I		Energy Charges (₹/kVAh)	
All Voltages	475	11.77	

₹1.05/kVAh Time of the Day (TOD) tariff is leviable on energy consumption during the period from 06:00 PM to 10:00 PM, in addition to the normal energy charges at respective Voltages.

Conditions:

- Contracted maximum demand under this category is limited to percentage norm (10% in Thermal, 6% in Gas, 3% in Hydel) of the maximum capacity unit in the Generating Station.
- ii. Supply is to be used strictly for start-up operations, maintenance, and lighting purposes only and shall not be extended for process plant.
- iii. Demand charges are leviable only if the monthly load factor of the consumer exceeds 10% in accordance with billing demand condition under HT –II (A).

- iv. If RMD exceeds CMD the penal charges on Demand & Energy will be applicable as per the existing conditions of HT-II (A) others category, even if the monthly load factor is equal or below 10%
- v. Monthly minimum charges on energy are not applicable to this category.
- vi. All other conditions applicable to HT-II (A) Others category shall also apply to this category.

**Commission's View:** The addendum has already been taken on file and the DISCOMs stated that monthly minimum charges are not applicable to this Category. The request for inclusion and exclusion of demand charges and TOD charges is considered on merits.

#### Rural Industrial consumers must be charged proportionate to the power supplied

106 Sri B. Hume Sastri, Chief Engineer (Rtd.), Visakhapatnam has stated that cost to serve at L.T terminals for industrial services is shown as ₹ 6.58 and tariff for the services is ₹5.65. Fixed charges are raised to ₹200/- per month per kW but L.T. industries connected to 11 kV rural feeders are supplied power only for 7 hrs., a day. There is discrimination between industries in urban areas and those in rural areas as ₹200 per kW per month is a burden on rural industries as they get power supply only 7 hrs. per day. Long time back, when supply to the agriculture feeders were not reduced to 7hrs. per day, the industries both on rural and urban feeders were availing 24hrs. power supply but after the introduction of 7hrs. power supply to agricultural pump sets, the rural industries are forced to avail only 7 hrs. power supply where as those industries on in urban areas are availing 24 hrs. power supply. To avoid this discrimination, industries on rural feeders must be charged only 7/24 of this ₹200 per kW tariff. To supply free power to agriculture consumers, LT power consumers who are paying handsomely to the utility are being denied of power supply. This is resulting in reduced revenue to utility and forcing higher tariff to other consumers.

**Discoms Response:** The licensee is contemplating to increase the hours of supply to rural Industrial consumers/ feeders wherever possible for promoting Industrial development by taking up feeder segregation.

Commission's View: The request ex-facie appears to be rational but the licensees hope to increase the hours of supply to rural industrial consumers / feeders. From May, 2018 onwards, the licensees shall submit monthly reports to the Commission by 15th of every month about the progress of feeder segregation undertaken for the purpose and the actual increase in the hours of supply to rural industrial consumers / feeders with the data of the consumers benefitted. If no action is taken on the projected contemplation during the FY2018-19, the request for relief in charges to rural industrial consumers will be considered on merits for the purposes of the Retail Supply Tariff Order for FY2019-20.

#### Advise licensee to bill on actual consumption

107 Sri M. Vesweswara Rao, Vice President, The Barytes Pulverising Mill Owners Association, Kadapa has stated that there are about 170 Barytes Pulverising Mills in Kodur and Obullavaripalle mandals of Y.S.R Kadapa Dist. All these mills are SSI units and are utilizing HT Cat-I power supply for operating the mills. Each mill has a CMD ranging from 160 kVA to 200 kVA. For the last 4 years there has been slump in the International market and the export of Barytes Powder has reached rock bottom. Due to the poor market conditions majority of these SSI units were idle most of the time and they also could not furl the purchase agreements with APMDC. Only a few mills operated partially to 25% of their capacity during these last 4 years. APSPDCL charges a minimum Demand charges of 80% of the CMD and minimum energy Charges @ 50 units per kVA. As these mills are having a CMD ranging from 160 to 180 kVA, every month the minimum electricity bill comes to around ₹1 lakh even if the consumption is minimal. There is a huge gap between the actual consumption and the billed Demand charges and Energy charges. However, if the consumption is more than the stipulated minimum the actual which are higher are charged. When the mills are idle, electricity is used only for lighting or drinking water purpose. As the machinery is not operated the kVA recorded would be very low and usually will be less than 5 kVA. However, 80% of the contracted maximum demand works out to somewhere between 125 kVA and 150 kVA depending on the CMD. Thus, the Demand charges being paid are several times higher than the actual consumption. In the same way energy charges are billed at the rate of 50 units for each kVA, for 80% CMD. The minimum monthly units work out to anywhere between 6250 to 7500 units, whereas the actual consumption would be around 1000 units to 1500 units. However, if the energy units exceed the monthly minimum the same will be charged. In this case also we are paying seven higher than the actual consumption, the power supply to these mills is only from the normal lines and not through any dedicated line.

This has been an unbearable burden on the finances of the mills which are already crippled by lack of market and fall in sale price. All the mills are in deep financial crisis and further deterioration will lead to closure of the mills. It is very much required to provide succor to these small scale industrial units. There are nearly 170 pulverising units in and around Managampet. In view of the above facts, the Commission is requested to kindly consider to advise APSPDCL to raise Electricity Bills on the actual consumption instead of the present billing method of 80% of CMD and proportionate units.

**Discoms Response:** The licensees procure power from different generating stations to ensure power supply to all retail consumers in the State. Based on demand and supply projections, the licensees enter into long term, medium term and short-term power purchase agreements with the generating stations. The licensees are obliged to pay fixed costs to the thermal power generators that are available as per the PPA conditions, even if the licensees do not procure any power. The licensees also have an obligation to procure power from renewable energy sources such as solar, wind and other non-conventional energy sources which are classified as must-run stations. Accordingly, the fixed cost obligation to the generating stations was projected to be around ₹8052Cr. (including charges of ₹3997 Cr. towards must run stations and ₹4055 Cr. towards fixed charges for Thermal & Hydel stations) for FY2018-19. At the current tariffs, the licensees have projected to recover only 21% of fixed charges paid to the generators. The minimum charges are specified to cover the part of fixed charges of the licensee. Hence, the licensee is not in a position to reduce demand charges and minimum charges.

**Commission's View:** Any consumer specific concession in demand charges may lead to a chain reaction for some reason or other jeopardizing the already feeble finances of the DISCOMs. However, **if the woes of Barytes Pulverising mills which are SSI units are true, the State Government in its Industries Department will be better advised to consider providing necessary support to prevent their collapse, just as has been done in the case of Ferro Alloys industry. It is not out of place to recollect that the Governmental support to Ferro Alloys Industry revived almost all the Ferro Alloy units in the State and restored livelihood for thousands of workers employed in them. <b>The State Government is requested to consider the same on merits.** 

#### **Special Incentives for Plastic Industry**

**108** Sri Gowra Srinivas, President, FTAPCCI has stated that special incentives shall be provided to plastic industry (recycling units) by creating a special sub-category as is done for ferro alloys industry keeping in view the social obligation towards environmental protection.

#### **Discoms Response:** NIL

**Commission's View:** Providing any incentive to any category of consumers is within the province of the State Government under Section 65 of the Electricity Act, 2003 and the same has to be considered by the State Government accordingly on merits.

#### **Category for Small Scale Industries**

**109** Sri Gowra Srinivas, President, FTAPCCI, Hyderabad has stated that all the industrial units with a contracted demand of 100 kVA and above upto 250 kVA shall be treated as small scale industries and a separate category shall be considered for determination of the demand and energy charges.

Smt. Sujatha, MSME has stated that in LT Category-III the upper limit of connected load shall be enhanced from 100 HP to 150 HP or a sepate category for MSME may be created.

Discoms Response: Will be reviewed in detail and suitable decision will be taken.

Commission's View: The answer at Para 108 above holds good for this also.

#### Levy of Cross Subsidy Surcharge and Additional Surcharge

110 Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru has stated that there is no wisdom in imposing cross subsidy surcharge and additional surcharge that makes Open Access impossible and illusory, inflicts wholly unjustified and unwarranted costs in complying with RPP obligations by obligated entities and the licensees' obligation to supply. The Commission is requested to review the cross-subsidy surcharge.

Sri M. R. Samanta Ray, General Manager; Sri G. Raghu, Rashtriya Ispat Nigam Limited, Visakhapatnam have stated that heavy levy of CSS and Additional surcharge will eliminate the competition which is intended to be fostered in generation and supply of power directly to the consumers through open access and hence CSS of ₹1.44 and Additional Surcharge of ₹0.95 as proposed may not be accepted by the

#### Commission.

Sri T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad and Sri Sourabh Srivatsava have stated that the Cross Subsidy and Cross Subsidy surcharge are to be rationalized and the claim of Additional surcharge must be disallowed due to lack of any justification for the claim.

Sri V.R. Raghuraman, Vice President and Sri R. Subha Chandra, Manager, Finance and Accounts, M/s Teamec Chlorides Ltd., Gundlapalli (V), Maddipadu (M), Prakasam (Dist.) have stated that the very objective of open access provisions will be defeated if the quantum of cross subsidy is a measure to fill the gap. Since the electricity business in the State of AP is monopolistic, the units like the one of the objectors would be severely stressed if the proposal is approved. The additional surcharge of  $\gtrless$  0.95 per unit proposed to be levied for the open access consumers is leviable only by way of Regulations issued by the Commission in respect of additional cross subsidy surcharge as per Section 42(4) read with Section 2(62) of the Electricity Act, 2003. The Commission is requested to issue a Regulation specifying methodology for calculation of Additional Surcharge on Wheeling charges only. Until such time the Regulations are issued the licensees cannot approach the Commission for levy of surcharge based on its own methodology.

Sri T.G. Venkatesh, Member of Parliament (Rajya Sabha), Sri A. Venkat Rao, Vice President, Finance, Sri K. KarunakarRao, Executive Director, Fin. & Comml., M/s TGV SRAAC Ltd., have stated that the intention of Legislation more particularly Section 42 of Electricity Act 2003 provided that the duty of the Distribution Licensee is to develop and maintain an efficient, co-ordinated and economical distribution system in its area of supply and the Commission is required to provide Open Access on payment of Surcharge in addition to the Charges for Wheeling as may be determined. Therefore, the DISCOMs should always maintain the efficient and economical distribution system including encouraging the Open Access System on payment of Surcharge. It is submitted that if the industry purchases the energy from Open Access, the industry needs to pay the CSS and Addl. Charges as fixed by the Commission along with the Demand Charges. The demand Charges are more compared with the Other States.Purchase of energy from Open access system has become not viable and same is contrary to the object sought to be achieved by the intention of the Legislation rendering Open Access inaccessible.

Sri V. Poyyamozhi, Director/Operation and Sri K. Ramachandra Rao, M/s Srikalahasthi Pipes, Srikalahasthi have stated that cross subsidy charges for open access consumers be reviewed and should be brought to a nominal level of below ₹0.50/unit as against the proposal of ₹1.38/unit so as to enable buying power from the cheapest source available in the country.

Sri G. Chakradhar, Satyanarayana Spinning Mills, Tanuku, W.G.Dist. has stated that Additional Surcharge shall not be levied.

Sri Gowra Srinivas, President, FTAPCCI, Hyderabad has stated that Cross Subsidy shall be made zero for MSME category as AP is now power surplus.

Smt. Yadlapati Padmaja, Director, M/s RPP Ltd., Hyderabad has stated that all electricity from renewable energy sources ought to be exempted from cross subsidy surcharge and additional surcharge.

Sri Shruti Bhatia, Vice President, Indian Energy Exchange Ltd., New Delhi and Smt. Mandakini Ghosh, Advocate have stated that the claim of the distribution licensees for additional surcharge under Section 42 (4) is misconceived and is liable to be rejected as the licensees are still procuring short term power, data of stranded power 15 minutes block-wise not given, the surplus power of 3100 MU proposed to be sold being included for arriving at the calculation and only long term commitments are to be taken into account and not the short term purchase. Discoms may be asked for better data.

Sri. O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur has stated that the Electricity Act and Tariff Policy mandates availability of Open Access to consumers in a phased manner at compensatory charges of a cross subsidy to recover the imbedded cross subsidy in the tariff and additional cross subsidy if stranded assets are proven.

Sri G. Koteswara Rao, Senior General Manager, M/s Sri Sarvaraya Sugars Ltd., Chelluru, E.G.Dist. has stated that Cross Subsidy Surcharge and Additional Surcharge shall not be levied on captive use.

Sri P. Kodanda Ramaiah, Chief Engineer (Rtd.), Visakhapatnam has stated that the Electricity Act, 2003 envisages gradual elimination of cross subsidy and finally any citizen should be served at cost to serve.

M/s Sri Vishnu Educational Society, Hyderabad have requested to waive off the

surcharge levied on the 11 kV HT -II (A) Category consumers for purchase of Open Access power.

**Discoms Response:** Proposals on Cross Subsidy Surcharge (CSS) and Additional Surcharge for FY2018-19 are filed before APERC in accordance with the National Tariff Policy (NTP) issued by the Ministry of Power, Govt. of India.

As per Electricity Act, 2003, Section 42 (4), the consumer receiving supply of Electricity from a person other than the Distribution licensee shall be liable to pay an additional surcharge to meet the fixed cost of distribution licensee arising out of his obligation to supply.

Purchase of power by the electricity consumers from Open Access results in underrecovery of fixed costs of stranded assets due to backing down of generating stations in case of surplus power. As the state is in power surplus for FY2018-19, the licensees have an unavoidable fixed cost obligation for FY2018-19 and will have to bear the fixed costs consequent to the Power Purchase Agreements and the generation assets would get stranded in case of shift to open access sales. Hence, the licensees have filed for Additional Surcharge to cover the loss arising from under recovery of fixed costs of stranded assets.

Discoms have proposed to retain the tariffs in line with that approved for FY2017-18. Any changes in the tariff for one category needs to be compensated by similar changes in some other category. Cross subsidy surcharge has been calculated in line with the formula specified in the revised National Tariff Policy issued on 28-01-2016.

Specifying the trajectory of Cross Subsidy Surcharge reduction as per the provisions of the Act and National Tariff Policy is within the purview the APERC.

Commission's view: So long as Section 39 (2) (d) (ii), Section 40 (c) (ii) and Section 42 (2) provide for Cross Subsidy Surcharge and Section 42(4) of the Electricity Act, 2003 provides for Additional Surcharge, any filings of the DISCOMS for granting such surcharges have to be examined on merits and decided, notwithstanding any wisdom or otherwise in the statute providing for such surcharges. Hence, the filings in this regard are examined on merits in accordance with law. Incidentally the information gathered from IEX clearly shows and establishes that the landed cost of energy for an open access consumer including cross subsidy surcharge and additional surcharge, if any, in the State of Andhra Pradesh is the third lowest in this country and hence the claim that any prospective or existing entreprenuer or industrialist is scared away from Andhra Pradesh due to its CSS and additional surcharge is factually not correct as seen from the table given below:

	Realization / Landed Cost (Rs./kWh) for sales / purcahses through IEX											
IEX	Generator	Buyer (Consumer) in										
IEX Price	/ Seller in AP	Telangana	Kerala	Andhra Pradesh	Karnatak a	Tamilnadu	Chhattisgarh	Bihar	Madhya Pradesh	Gujarat	Maharastra	Rajasthan
3.00	2.54	5.10	5.22	5.24	5.38	5.42	5.55	5.62	5.85	5.99	6.69	6.77
3.10	2.63	5.21	5.33	5.34	5.49	5.52	5.65	5.73	5.95	6.09	6.79	6.88
3.20	2.73	5.31	5.44	5.45	5.59	5.62	5.76	5.83	6.06	6.20	6.90	6.99
3.30	2.83	5.42	5.54	5.55	5.70	5.72	5.86	5.94	6.16	6.30	7.01	7.09
3.40	2.92	5.52	5.65	5.66	5.80	5.83	5.97	6.04	6.27	6.41	7.11	7.20
3.50	3.02	5.63	5.76	5.76	5.91	5.93	6.08	6.15	6.37	6.51	7.22	7.31
3.60	3.12	5.73	5.87	5.87	6.01	6.03	6.18	6.25	6.48	6.62	7.33	7.42
3.70	3.21	5.84	5.97	5.97	6.12	6.13	6.29	6.36	6.58	6.72	7.43	7.52
3.80	3.31	5.94	6.08	6.08	6.22	6.23	6.39	6.46	6.69	6.83	7.54	7.63
3.90	3.40	6.05	6.19	6.18	6.33	6.34	6.50	6.57	6.79	6.94	7.64	7.74
4.00	3.50	6.15	6.30	6.29	6.43	6.44	6.60	6.68	6.90	7.04	7.75	7.85

Separate hearing for Cross Subsidy Surcharge and Additional Surcharge

111 Sri S. Surya Prakasa Rao, Former Director (Commercial), erstwhile APCPDCL & Former Secretary, erstwhile APERC, Hyderabad has suggested that Commission may conduct separate proceedings for Cross Subsidy Surcharge and Additional Surcharge to enable more focused deliberations with reference to the scheme of the Electricity Act on promotion of competition in supply in consumer interests vis-a-vis DISCOMs interests, and the key role of Electricity Regulatory Commissions in tariff rationalization.

**Discoms Response:** In the purview of the Commission.

**Commission's View:** As the deliberations including the proposals and objections on cross subsidy surcharge are fairly satisfactory, a decision on Cross Subsidy Surcharge is made keeping the factors stated by Sri Surya Prakasa Rao in view while a decision on additional surcharge is left for future proceedings due to inadequacy of data which needs to be gone into.

## Provide reasonable tariff for Ferro Alloy industry or exempt from levy of Cross Subsidy and Additional Surcharges

**112** Sri P. Vijay Gopal Reddy, A.P. Ferro Alloys Producers Association, Hyderabad has stated that the sales achieved by the AP DISCOMs as per the tariff orders for

Year	Approved Sales (MU)	Achieved Sales (MU)
2015-16	16910	12277
2016-17	14781	12171
2017-18	14448	13036

FY2015-16, FY2016-17 and FY2017-18 are as follows:

From the above, it can be observed that DISCOMs could not achieve the approved sales in any year which is completely out of tune with the make in India programme of Central Government and Sunrise State of Andhra Pradesh. It is further observed that there is a back down of 529 MW in 2015-2016, 308 MW in 2016-2017 and 161 MW in 2017-2018. Considering the above it can be concluded that industrial consumers are to be provided with more affordable tariff, as the industrial growth is not picking upto the expected levels.

It is also noticed from the proposal of 2018-19 that the Energy Intensive Industries have recorded a growth of ₹991.14 Cr. when compared to 2016-17 (Page No.94 of ARR). This expected projection can be achieved only when the tariff is maintained at affordable level to the industry.

For the energy intensive industries under HT-1B from 2016-17, the estimated sales have gone up by more than 60% as the Commission and the Government of Andhra Pradesh have supported the industry by providing power subsidy, introduction of minimum charges in place of deemed consumption charges. The industry has been supported by the Commission looking at the paying capacity of the industry and consequent effect on employment in the backward areas.

The Ferro alloy producers in the State can draw about 400 MW if an affordable tariff is provided on a long-term basis, say for 5 years. There is every possibility that the industries capacity will grow on account of new investments. From the approved power purchase cost of the licenses in 2017-18 (Page No.215 of the tariff order) the variable cost of each unit of power is ₹2.41 and fixed cost ₹1.38 totalling to is ₹3.79. Page 139 of ARR for FY2018-19 shows that the back down energy is 4629.80 million units and DISCOMs are proposing to sell 2784.71 MU, still leaving 1845.09 MU of back down energy resulting in loss of ₹275.06 Cr. of fixed cost. DISCOMs are expecting to sell the power with a profit margin of 56paise per unit through Open Access at variable cost-plus margin basis.

As the Ferro alloy industry is with DISCOMs over the years and also there is surplus energy even after DISCOMs' proposal of Open Access sale, ferro alloy industry can be provided with power at variable cost of ₹2.41 paise along with expected profit margin of 56 paise totalling to ₹2.97 paise which is a reasonable power tariff for this industry and it will be close to the tariff of 2012 i.e. ₹2.65 per unit. With this tariff the stranded capacity of DISCOMs will come down and will attract new investments in the industry. It will also save the hassles of DISCOMs selling through Open Access system and this will be a win-win situation for both DISCOM and consumers.

Alternately, the Commission is requested to exempt ferro alloys industry from proposed additional surcharge and cross-subsidy charges, which will allow the industry to sustain by procuring power from alternative sources on its own without seeking any reduction in tariff and Government subsidy.

**Discoms Response:** Sales projections include the expected sales to the Power Intensive Industries (Ferro Alloy Units and others) for the ensuing FY2018-19. Expected sales from Ferro Alloy Industries could not be achieved as most of the Ferro alloy industries faced financial crunch and other operational and internal issues inspite of concessional Tariff allowed to Ferro Alloy Industries. Only after extension of support by Govt. of AP by extending subsidy of ₹1.50 to help Ferro Alloy industries, the sales have gradually picked up from 2016-17 and most of the industries have come to full operation by 2017-18. The projections on expected generation availability, potential to generate surplus energy have been carried out by the Licensees as per the most realistic estimates available at that point of time. Since the requirement of Ferro alloy units is included in the DISCOMs requirement already, allocating potential surplus energy to the ferro alloy units at a price of ₹2.97/Unit cannot be considered. Cross Subsidy Surcharge and Additional Surcharge are being levied as per the provisions of the Act, National Tariff Policy and orders of the APERC from time to time.

**Commission's view:** An affordable tariff may be one of the stimulants for industrial growth may be an acceptable statement but there is no concrete data or information to believe the tariff levels in Andhra Pradesh to be prohibitively unaffordable. A comparison of tariffs of different categories of consumers in different States in

the Country may suggest Andhra Pradesh to be charting a middle course with its electricity tariffs being neither the highest nor the lowest for different categories. It is gratifying to note that the supporting role of the Commission and the incentivization by the State Government helped the Energy Intensive Industries in particular and that too in backward areas. The extent to which subsidization should go is for the State Government to decide and not for the Commission to determine. The Commission's view on para no. 111 holds good in respect of the Cross-subsidy surcharge and Additional Surcharge.

#### **Reduce interest on delayed payments**

113 Sri P. Vijay Gopal Reddy, A.P. Ferro Alloys Producers Association, Hyderabad has stated that the present rate of Interest on delayed payments in the regime of falling interest rates all over and as well the substantial relief received by DISCOMs on interest obligations by virtue of joining UDAY Scheme, the Consumers are seeking reduction in charges. The Electricity Act 2003, itself provides interest rate @ 16% even for the consumers who commit theft of energy whereas DISCOMs are collecting higher interest rates from genuine consumers for delayed payments. The Commission is requested to fix up interest rate with a marginal spread over the RBI rate of interest as specified in GTCS for payment of interest on ACD and Consumption dues.

Sri T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad has stated that Interest on instalment at 18% is exorbitant. In view of the falling interest rates, it should be brought down suitably. Further as against the penal interest levied on delayed payments, concessional interest should be charged on sanctioned instalments to make it easier for the consumer already in distress.

**Discoms Response:** The intention of the licensee is not to accrue revenue through Interest on delayed payments but to inculcate discipline amongst the consumers for timely payment which will result in prompt payment to the generators by the licensees. The licensees are actually at loss as the payment is made to the generator before the realization of the revenue from delayed payment surcharge from the consumer. Hence, the request for reduction of interest on delayed payments cannot be considered. In view of the revenue deficit situation the licensees are encountering delayed payment of around ₹200 Cr. per month to the Generators. Surcharge is also payable to the generator up to 15% - 18% for delayed payments. DISCOMs are not in a position to reduction of interest rates for delayed payments as charges are to be paid to generators for delayed payments. Delayed Payment Surcharge (DPS) is being collected as specified by the APERC in the relevant regulations. In view of the above, the proposal is not accepted.

**Commission's view:** The request and the response will be kept in view for balancing the level of imposition of delayed payment surcharge.

#### **Additional Consumption Deposit**

114 Sri P. Vijay Gopal Reddy, A.P. Ferro Alloys Producers Association, Hyderabad has stated that the industry being hard pressed for working capital, the Commission is requested to consider for accepting Bank Guarantee (BG) against cash deposit towards security deposit for two months. Alternatively, one-month cash deposit and BG for one month may be allowed. Also, these deposits are taken to ensure the payments to DISCOM. Bank Guarantee should be good enough to safeguard against risk for extended credit. Alternatively, consumers can deposit one-month consumption bill two working days before the start of new billing cycle. On generation of monthly bill any excess payment can be adjusted in subsequent month billing. This will ensure zero credit risk to DISCOM and spare consumers from paying two (2) months security deposit.

Sri T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad has stated that Bank Guarantee (BG) should also be accepted in place of complete Cash deposits towards additional Consumption deposits. To begin with at least one month's Consumption may be accepted in BG from Consumers whose monthly bills exceed ₹10,00,000/-

Sri. M.Prabhakar Rao, President, Federation of Indian Chambers of Commerce, Hyderabad has stated that as per the Regulation No.6 of 2004 of the Commission, the industrial consumers have to pay consumption deposit equivalent to 2 months consumption charges by cash or DD. The amount of two months charges will be very huge running into many crores of Rupees, especially for large industrial consumers. Apparently, this deposit is meant to secure the licensees against possible default in payments, towards the energy utilized by the consumer before disconnection could be done for such default. From this point of view, a valid Bank Guarantee would also serve the same purpose.

Hence it may be permitted that 50% of the Security Deposit to be made by way of B.G. so that the consumer will be able to invest this amount in the core industrial

activity and consume more energy. In other words, the existing consumers who are promptly paying bills within due date regularly and also who take up expansion and increase energy consumption, may be allowed the facility of providing 50% of the Security Deposit by way of B.G.

Discoms Response: In the similar lines of industry which is submitted to be hardpressed for working capital, the DISCOMs also require to manage critical situation in terms of working capital. The Additional Consumption deposit is being collected as per the Regulations / directions of APERC from time to time. The consumer is billed every month in respect of one-month consumption and fifteen (15) days time (due date) is allowed for payment from the date of bill without delayed payment surcharge. Further, fifteen (15) additional days are allowed from the due date without being disconnected. The average revenue collection period is two (2) months. The consumer is given two (2) months time to avail the services from the licensee without being disconnected. Hence, security deposit for two (2) months is reasonable in case of monthly billing. The Power Purchase Cost contributes to nearly 78% of the total Retail ARR and certainty in projection of power purchase cost has become very critical. Any deviation in power purchase cost has to be funded through internal sources and to be recovered in subsequent years through ARR. On the other hand, subsidy from government contributes to be 19% of the Retail ARR. This would mean that Discoms are effectively getting two (2) months consumer security deposit on 81% of retail ARR. While payment to generators is being done on a monthly basis, the revenue cycle is nearly two (2) months. Hence, the working capital requirement of the Distribution Licensees has become difficult to manage in recent times. As per Regulation 6 of 2004, Security Deposit shall be two months charges in case of monthly billing and 3 months charges for bi-monthly billing and interest shall be paid/adjusted annually against the amounts outstanding from the consumer to the Licensee as on 1<sup>st</sup> May of every year and the amounts becoming due from the consumer to the Licensee immediately thereafter. ACD Collections and mode of payment are followed in accordance with the Regulations of APERC. The proposal for bank guarantee in lieu of ACD amounts cannot be accepted in view of working capital constraints.

**Commission's view:** The response of the DISCOMs presents satisfactory circumstances not to disturb the *status quo* or the statutory and regulatory provisions

governing the issue. In fact, the estimate of the distribution licensees in the ARR for FY2018-19 regarding their liability for interest on security deposits is ₹102.33 Cr., for APEPDCL and ₹154.10 Cr., for APSPDCL which will be adjusted annually against the outstanding amounts of the consumers as on 1<sup>st</sup> May of every year and the amounts due from the consumers to the licensees immediately thereafter which indicates the consumers making such deposits to be getting reasonable returns from them. The interest at the rate of 6.25% per annum so paid compares favourably with the interest being paid by the banks on term deposits.

# Consider rebate / paying interest on deposits to reduce expenditure on revenue collection

115 Sri B. Hume Sastri, Chief Engineer (Rtd.), Visakhapatnam has stated that Lot of expenditure is incurred for collecting monthly electrical bill. BSNL is paying interest on one-year average bill amount deposit made with them on reduced balance. If the system is adapted hundreds of Crores of rupees can be collected by EPDCL which can be used for their regular expenditure. Reliance and other utilities adopted the system since several years. EPDCL is any now paying 8% interest on consumer deposit. If 7% given on consumer advance deposit Crores of rupees can be saved in avoiding expenditure for collection of monthly bills.

Sri T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad has stated that rebate of 0.5% is to be offered for advance payment.

**Discoms Response:** As per APERC Regulation No. 5 of 2004 and sub-clause No.4.3.9, the consumer shall have the facility to make advance payments towards the consumption charges and require the AP Discoms to adjust the amount against bills that may be raised by the AP Discoms from time to time. Such advance payments do not draw any interest. Matter is under the purview of the APERC

Commission's View: The distribution licensees may communicate their considered views on the advantages or disadvantages of increasing advance deposits of consumption charges with liability to pay interest.

#### **Incentive for online payments**

**116** Sri. T.S. Appa Rao, Secretary General, FTAPCCI, Hyderabad has stated that 0.25% incentive should be offered for online Payments.

Discoms Response: Discoms are not in a position to consider online payment rebate

as it will affect the DISCOM finances.

Commission's View: The suggestion is noted.

#### Allow de-ration of CMD with one month notice in the changed circumstances

117 Sri P. Vijay Gopal Reddy, A.P. Ferro Alloys Producers Association, Hyderabad has stated that the erstwhile APSEB was incurring entire expenditure while extending a new service connection. Hence, investment made by the erstwhile APSEB used to recover their investment for a minimum period of two years and were not allowing for De-ration of CMD for 2 years. From 1993 onwards, the DISCOMs are collecting service line charges towards line cost and development charges towards infrastructure cost. Now in this Open Access regime and consumers are made to pay service line and development charges, the de-ration must be permitted immediately without insisting for minimum agreement period of one year. As a step towards course correction, we are grateful to the Commission for reducing the minimum agreement period to 1 year from 2 years. Keeping in view the present business dynamics, the Commission is requested to consider de-ration of CMD with one month notice without insisting for one-year agreement period, so that the industry can take shock of financial losses for a period of one month only.

**Discoms Response:** The Commission has already reduced the minimum period of Supply Agreements to one year. The licensees procure power from different generating stations to ensure power supply to all retail consumers in the State. Based on demand and supply projections, the licensees enter into long term, medium term and short-term power purchase agreements with the generating stations. The licensees are obliged to pay fixed costs to the thermal power generators that are available as per the PPA conditions, even if the licensee does not procure any power. The HT consumers accordingly enter into an agreement with DISCOM for a specified period. DISCOMs are entering into Long Term PPAs (up to 25 Years) for procurement of committed power from various generating sources and expecting the same degree of certainty from the Power Supply Contracts with the Consumers. In view of the existing business conditions, the request of the consumer to consider de-ration of CMD with one month notice without insisting for one-year agreement period cannot be accepted as it affects the management of power procurement and grid stability due to frequent de-ration and restoration of CMD causing inconsistency in load management.

**Commission's view:** Reduction of the minimum agreement period from two years to one year was made by the Commission balancing the difficulties of the entrepreneurs and the orderliness in resource management and power procurement of the utilities to avoid a shock of financial losses to both. Allowing de-ration monthly will be a cause of uncertainty in power procurement and resultant difficulties for the utilities, which cannot be accepted.

#### **Issuance of Technical Feasibility for Open Access NOC**

118 Sri P. Narendranadh Chowdary, Managing Director, The Andhra Sugars Limited, Chemicals & Fertilisers Division, Kovvuru stated thatCommission is requested to issue directions to DISCOMS for issuance of Technical Feasibility (FORM - A) immediately on the request of consumers in order to obtain "No Objection Certificate" from Transmission Corporation of AP Ltd. to avail the facility to purchase Open Access Power from Indian Energy Exchange beyond the permitted quantum of power by SLDC. Since, DISCOMS are delaying issue of FORM-A and sometimes stalling the same resulting in HT consumers being forced to purchase the power from DISCOMS at a higher tariff impacting production cost. This is totally contrary to the Open Access Regulations and invariably casts substantial financial burden on operations.

Sri N. Shyambabu, M/s Laxmi Narasimha Spinning Mills, Vipparlavaripalem, Prakasam Dist. has stated that NOC is not issued even though application was submitted six months back.

**Discoms Response:** Open Access Regulations and directions, if any, specified by APERC are being followed by the DISCOMs in this regard.

**Commission's view:** In the absence of specific instances from the objectors and in view of the assertion by the DISCOMs that they are following the regulations and directions of the Commission in this regard, any violation of the regulations cannot be presumed. At any rate any grievance of any consumer in this regard is within the jurisdiction of the concerned Consumer Grievances Redressal Forum (CGRF).

#### **Higher T&D losses projected**

119 Sri B. N. Prabhakar, President, Society for Water, Power & Natural resources conservation Awareness and Monitoring (SWAPNAM), Certified Energy Manager & Auditor, Vijayawada has stated that APSPDCL has projected higher losses i.e. 9.76% against 9.54% in the previous year, which cannot be afforded in the reform age. The reasons need critical examination in view of huge investments made in the name of improvement of distribution networks in the last few years. APSPDCL may make elaborate discussion with reference to the investments, objects contemplated and results achieved thereof.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that APEPDCL and APSPDCL show higher T&D losses during 2018-19 than they have achieved in the previous years. During 2017-18 T&D losses of APEPDCL stood at 6.72% and during the ensuing year (2018-19) these losses are estimated to be 10.13%. Similarly, in the case of APSPDCL during 2017-18 T&D losses stood at 8.80% and during the ensuing year (2018-19) these losses are estimated to be 12%. Over the period in fact these losses shall come down. ARRs for the ensuing year present an opposite picture.

For the FY 2018-19 the Tripartite MoU under UDAY set the AT&C losses of APEPDCL at 5.44% and APSPDCL at 10.89%. The T&D losses projected by APDISCOMs in the ARR for FY2018-19 are higher than the levels stipulated under the Tripartite MoU. This shows that there is scope to bring down T&D losses from the levels projected in the ARRs. When the estimated T&D losses are brought down to the previous or even to lower levels the quantum of power to be procured will also come down.

#### **Discoms Response:**

APEPDCL: The licensee has considered 2% reduction on the losses approved by the APEPRC in the tariff order for FY2017-18. Voltage wise % losses considered in ARR filings for FY2018-19 are LT-4.18%, 11 kV-3.35% and 33 kV-2.84%. On an aggregate including DISCOM losses, Transmission losses & PGCIL losses, the percentage works out to 10.13%. The quantum of power procurement would be reduced to the extent of losses brought down, but simultaneously the power procurement increase with the increase of load growth.

APSPDCL: The licensee has projected losses in line with the actual losses of FY2017-18 and lower than the APERC approved losses at each voltage level. The actual distribution losses during FY2017-18 upto Dec'17 is around 8.31% as against

approved 8.56% for the entire year. As per page No 7 of ARR filings, it is stated that T&D losses of APSPDCL are 8.30% (excluding EHT losses).

**Commission's View:** The distribution companies of Andhra Pradesh are maintaining lower T&D losses than any other distribution companies in the Country but they shall still keep the constructive criticism made about escalated estimates of T&D losses in view to further lower down such losses to record levels.

### Issues related to General Terms and Conditions of Supply (GTCS) Review threshold limits of CMD for 11 kV and 33 kV consumers

120 The Director, NSL Textiles Limited, Hyderabad; Sri M. Prabhakara Rao, President, Federation of Indian Chamber of Commerce & Industry (AP Chapter), FICCI have stated that Clause 3.2.2.1 of the GTCS and para 6 of the 'General Conditions of H T Supply' in Part-B, H.T Tariffs, in Chapter-XI of the Tariff Order, 2017-18 specifies the limits of CMDs for availing of supply by H.T. Consumers on `Common / Mixed' feeders at the 'stipulated voltages' as follows:

Voltage level	Permissible CMD in kVA
11 kV	Up to 1500
33 kV	1501 to 5000
132 or 220 kV	Above 5000

The above threshold CMDs for supply at 33kV and 11 kV, need review by the Commission in view of the following problems faced by the industries especially Large and Medium Scale Industries:

#### 33 kV Supply:

(a) 33 kV feeders of DISCOMs and Service Lines of 33 kV consumers are generally designed with 'Dog' (100 <u>sq.mm</u>. AAC) or 'Raccoon' conductor which has current carrying capacity of 283 Amperes in each phase at an ambient temperature of 45 degrees Celsius, which translates to a power of about 16,000 kVA.

(b) Thus, with the limit of 5,000 kVA, the service lines of H.T. consumers are grossly under loaded, i.e. the loading is only about 30% of continuous power carrying capacity, leaving huge spare / un-utilized capacity of about 11,000 kVA in the service lines of consumers.

(c) Even when such substantial spare capacity margin is available in the service lines, the 33 kV consumers seeking small additional demands of even 10 to 15 % over the threshold CMD, are required to switch over to 132 kV supply which involves the following implications:

- (i) Erection of 132 kV tower line which is beset with serious 'Right of Way' problems as the towers occupy substantial land and farmers vehemently oppose routing of tower lines through their fields and any attempt to lay the line will lead to violent protests, leading to Law & Order problems.
- (ii) Huge additional capital investment is required for switchover from 33 kV to 132 kV, making it un-viable and prohibitive for marginal additional demands of say 10 to 15%, and consequently it becomes a deterrent in the natural growth of Medium and Large-scale industries in the State.

#### **<u>11 kV Supply:</u>**

- (a) Similarly, the 11 kV feeders erected with 'Raccoon' or 'Dog' conductor which have the same current carrying capacity 283 Amps, can safely transmit power of 3,000 kVA.
- (b) 11 kV HT consumers are presently allowed supply up to 1500 kVA in mixed feeders. All these are mostly small and medium scale industries which find it extremely difficult to take up marginal expansion of their industries due to the condition of switching over to 33 kV supply even for small additional demand of 100 to 300 kVA. Establishment of 33 kV/ 11kV substation of their own is an uphill task for these small /marginal industries, considering huge investment and its maintenance cost.

**Discoms Response:** Vide proceedings No. APERC/Secy./04/2016, dated 06-01-2016, APERC has amended certain clauses of GTCS. They are presented as below:

For Clause 3.2.2.1 the following Clause shall be substituted, namely:

3.2.2 1 HT consumers intending to avail supply on common feeders.

Contracted Demand	Voltage level
Upto1500kVA	11 kV or 33kV
1501 kVATo 5000 kVA	33 kV
Above 5000 kVA	132 kV or 220 kV as may be decided by
	the Company

For total Contracted Demand with the Company and all other sources

5). For Clause 3 2.2.2, the following Clause shall be substituted, namely: -

"3.2.2.2, HT Consumers seeking to avail supply through independent (Dedicated) feeder from the substations where transformation to required voltage takes place shall be:

For total contracted Demand with the Licensees and all other sources.

Capacity	Supply Voltage
Upto 3000 kVA	11kV or 33kV
3001 kVA to 5000 kVA	33 kV
5001 kVA to 20,000 kVA	33kVor132kV
Above 20,000 kVA	132 or 220kV

The Director, NSL Textiles Limited, Hyderabad; Sri M. Prabhakara Rao, President, Federation of Indian Chamber of Commerce & Industry (AP Chapter), FICCIhave stated that the limits on the CMD at 'stipulated voltages' can be made flexible especially for marginal excess demand over the specified limits, subject to `Technical Feasibility'. In fact, some States have permitted equal CMDs on both `dedicated feeders' and 'common feeders' subject to 'technical feasibility'. Some States have allowed 20% excess over the specified limits. The limits of Demands emitted in some States are tabulated here under:

Many States have been allowing much higher Contracted Maximum Demands at 11 kV and 33 kV even in mixed feeders and in some states the Licensees are authorized to deviate from the specified demand limits based on technical feasibility in each case on its merits with or without approval of the Commission.

Sri. M. Prabhakar Rao, President, Federation of Indian Chambers of Commerce (FICCI), Hyderabad stated that necessary amendments may be issued to clause 3.2.2.1

of GTCS enhancing the limits of Contracted Demands at 11 kV and 33 kV supply to 2500 and 8000 kVA respectively on 'mixed feeders / common feeders'.

Sri M. Prabhakar Rao, President, Federation of Indian Chambers of Commerce, Hyderabad has stated that the voltage surcharge condition specified in the Tariff Order to levy the surcharge only on the excess demand and on the energy proportional to the excess demand should be relaxed.

**Discoms Response:** APERC has already enhanced the threshold CMD limits on different types of feeders across voltages vide their proceedings in January 2016. Additional relaxations as sought by the Consumer / Objector cannot be entertained on technical grounds.

Allowing usage of excess CMD over and above the specified limits on a continuous basis may cause over loading on the lines and Transformers on long run and result in loss of system security and imperilment of the distribution system. Hence, the request of the Consumer cannot be accepted.

#### Allow marginal excess demand

The Director, NSL Textiles Limited, Hyderabad; Sri M. Prabhakara Rao, President, Federation of Indian Chamber of Commerce & Industry (AP Chapter), FICCI have stated that higher demand limits and allowing a marginal excess demand over the specified limit are justified subject to technical feasibility on following considerations:

- (i) H.T. Distribution Systems of Licensees as well as Service Lines of consumers are designed to ensure declared voltage at the point of commencement of supply within the limits of + 6%, -9% apart from other Technical considerations.
- (ii) There will be substantial diversity of incidence of peak demands on different 33/11kV substations connected to a 33 kV feeder of 132 kV Sub-Station. The simultaneous maximum demand on the 33 kV feeder also varies from season to season.
- (iii) In the case of old feeders, the Current Carrying Capacity increases with the age of the conductor and hence such feeders can accommodate marginal additional demands from industrial consumers to the extent of up-rated capacity in case of feeders of more than 10 years of age.

(iv) Augmentation of existing 33 kV feeders can be taken up wherever possible to accommodate new or additional industrial loads considering the improvements in design of HTlines, subject to limits of voltage regulation at the consumer premises.

Enhancement of limits of CMDs will facilitate natural growth of Industries and at the same time improve the revenues of the Respondents as explained here under.

- Industrial Tariffs contain very high level of Cross-Subsidy content and hence yield higher financial gains to DISCOMs due to increased energy consumption on account of additional / higher demands.
- Large/Medium scale industries operate at an average load factor of about 75 to 80 % and hence more revenues will accrue to the respondents due to higher energy consumption.
- (iii) The importance of revenue realized by the DISCOMs from Industrial Sector is conspicuous from the table made out from the data available in the tariff order for FY 2017-18 issued by this Hon'ble Commission.

Sl. No.	Particulars	H.T. Industrial	All Categories
1	Projected Sales	14,448 MU	50,077 MU
2	% Of Total Sales	29%	
3	Projected Revenues	₹10,553 Crs	₹ 24,064 Crs
4	% Of Total Revenues	44 %	

 (iv) It may be seen from the above analysis that H.T industrial consumers are contributing 44 % of the revenues while consuming only 29 % of the energy, thus contribute substantial cross subsidy to distribution licensees.

Residual AP needs speedy industrial growth. Natural growth of existing industries by way of capacity expansion plays vital role in this task with least investment and in a shorter period. However, there are some constraints in respect of the conditions of supply, which are retarding the natural growth of medium / Large industrial sector. It is requestd that Commission may facilitate natural growth of existing as well as upcoming Marginal/Large industries in line with the recent initiatives taken by GOAP in the industrial sector, by rationalizing the General Terms and Commercial Conditions of Supply, inter-alia, enhancing the limits of Contacted Maximum

Demands (CMDs) at 33 kV and 11 kV and allowing existing consumers to avail of additional demands up to the enhanced limits for HT supply at 11 kV and 33 kV on 'Common / Mixed Feeders'

Commission is requested to enhance the limits of CMD as proposed below, subject to technical feasibility, considering the above submissions.

Voltage level	Contracted Demand Existing	Contracted Demand proposed
11 kV	Up to 1,500 kVA	Upto 2,500 kVA
33 kV	1501 kVA to 5,000 kVA	2501 kVA to 8,000 kVA
132 kV or 220 kV	Above 5,000 kVA	Above 8,000 kVA

Any such enhancement will not be of any detriment to the safety of the distribution network, as the DISCOMs may sanction the load only after being satisfied of its technical feasibility on case to case basis. Perhaps this is the basis on which some States have specified higher limits for mixed feeders also.

H.T. consumers availing supply at 11 kV and 33 kV at threshold CMD, may be allowed marginal additional demands up to 20 % in excess of the threshold CMD. DISCOMs may be permitted to examine case by case and allow new or additional demands over the threshold CMD on merits of each case.

**Discoms Response:** DISCOM is geared up to provide necessary infrastructure to meet the industrial load growth. In line with the policies of the GoAP such as EODB and regulations of the APERC, the DISCOMs are releasing the Industrial services and additional loads in timely manner subject to the payment of relevant charges payable by the prospective consumers. Rationalization of General Terms & Conditions of Supply (GTCS) is in the purview of the APERC. As explained above, the proposal cannot be accepted. APERC has already enhanced the threshold CMD limits on different types of feeders across voltages vide their proceedings in January 2016. Additional relaxations as sought by the Consumer / Objector cannot be entertained on technical grounds.

#### Misinterpretation of GTCS by Licensees needs review by Commission

Sri S. Surya Prakasa Rao, Former Director (Commercial), erstwhile APCPDCL & Former Secretary, erstwhile APERC, Hyderabad thanking the DISCOMS for not proposing any increase in the tariff for 2018-19 which is a progressive measure in so

far as subsidizing consumers are concerned, has stated that some of the Terms and Conditions of HT Supply, which from part of the Tariff Order need review by the Commission.

Broadly the following charges are proposed in the General Conditions of HT supply in Chapter-XI, Part-B.

Para	Subject	Existing	Proposed
No.			
5	Min. Contracted	56 kW / 75 HP	75 kW/100 HP
	Load for HT Supply		
	Min. Contracted	70 kVA	100 kVA
	Load for HT Supply		
6.1	Limit on CMD at	11 kV – 1500	11 kV – 2500 kVA
(i)	stipulated voltage in	kVA	33 kV – 8000 kVA
	common feeders	33 kV - 5000	Subject to Technical
		kVA	feasibility to be decided by
			DISCOM in each case
6.2	Voltage Surcharge for exceeding CMD limits at stipulated voltage	Presently being levied on total recorded demand and total recorded energy	Should be levied only on excess demand over the limit and on prorate energy.
6.6	Additional Charges for exceeding CMD	Penal charge of 15 to 20% on total energy if RMD exceeds 20% of CMD	In view of surplus energy, addl. Charge on energy may be totally withdrawn, or may be limited to the energy prorate to excess demand.

DISCOMs are misinterpreting the provisions of para 6.2 above, and levying voltage surcharge on the total consumption if the Recorded Max. Demand exceeds by even 1 kVA (over the cut-off CMD of 5000 kVA for mixed feeders) though there is no express authorization of the Commission for levy of surcharge on total Demand and total Energy consumption. There is absolutely no need for such harsh treatment to high revenue yielding categories in a severe revenue deficit scenario, more so in a surplus power situation.

Hon'ble Supreme Court upheld the power of the Electricity boards to stipulate 'specified voltages' from the view point of efficient use of electricity but would have never thought that such power would be implemented in such an irrational manner in the procedure of levy of surcharge. Commission may be pleased to rationalize the procedure for levy of this voltage surcharge.

## HT Supply Terms and Conditions needs to be reviewed

The Director, NSL Textiles Limited, Hyderabad; Sri M. Prabhakara Rao, President, Federation of Indian Chamber of Commerce & Industry (AP Chapter), FICCI while thanking the DISCOMs for not proposing any tariff hike, have stated that some of the Terms and Conditions of HT Supply, especially the limits on CMD for availing supply at 'stipulated voltage levels' which form part of the Tariff Order, needs to be reviewed by Commission before issue of the Tariff Order of 2018-19.

**Discoms Response:** As per the Terms & Conditions of the Retail Supply Tariff Order for FY 2017-18, LT Tariffs are applicable for supply of electricity to LT Consumers with a contracted load of 75kW/100 HP and below. The minimum Contracted Demand requirement for HT services is 70kVA. APERC has already enhanced the threshold CMD limits on different types of feeders across voltages vide their proceedings in January 2016. Additional relaxations as sought by the Consumer / Objector cannot be entertained on technical grounds. Voltage surcharge is being levied as per the terms of the relevant tariff order and GTCS.

# **Relaxations for Common/Mixed feeders**

The Director, NSL Textiles Limited, Hyderabad expressing gratitude to the Commission for amending Clause 3.2.2.2 of the General Terms and Conditions of Supply' (GTCS) of Distribution Licensees permitting higher limits of CMD for HT consumers availing of supply at 11 kV and 33 kV on 'Dedicated Feeders' / `Independent Feeders' vide Proceedings dated 6-1-2016 and incorporating the contents in the Tariff Orders of FY2016-17 and FY2017-18, further stated that similar relaxations in respect of `Common Feeders' / 'Mixed Feeders' are the need of the hour.

**Discoms Response:** Enhancing threshold limit of Contracted Maximum demand (CMD) on common/mixed feeders across different voltages cannot consented in view of technical feasibility issues.

Sri. O.L. Kantha Rao, Secretary; Sri R. Sivakumar, A.P. Spinning Mills Association, Guntur have stated that at present many of the Spinning Mills are located amidst areas which are heart lands for agriculture. By historical circumstances the agriculture and industry are sharing lines and thus they are on mixed feeders. When the industry is expanding load requirements are going above 5 MW on mixed feeders there have been cases where industrial requirement has been disallowed on grounds that above 5 MW MD cannot be given additional load on mixed feeders. This is putting the industry into forcibly considering the uneconomical and un-viable option of laying new line from the Substation, when in fact, 33 kV input voltage is permissible upto 10MW. Further, there have been demands that agricultural and industry feeder should be separated out to facilitate stable and quality power to industry and also controllable supply to agriculture. It is requested to seriously consider the request of the industry on mixed feeders to be permitted MD above 5 MW whenever such request is made.

**Discoms Response:** APERC has recently enhanced the threshold limits of availing Contracted Maximum Demand (CMD) on different feeders (Mixed/Express) across different voltage in the Year 2017. Apart from incidence of Industrial Loads, several other loads of different category of consumers are present on the mixed feeders. If we take aggregate of all the Contracted Loads/Demands of the consumers located on mixed feeders, and technical constraints of receiving end Voltage Regulation & losses in the feeders, it is technically not feasible to enhance CMD limit than the present specification in the General Terms & Conditions of Supply (GTCS).

Sri M. Prabhakar Rao, President, Federation of Indian Chambers of Commerce, Hyderabad has stated that the voltage surcharge condition specified in the Tariff Order to levy the surcharge to be relaxed to be levied only on the excess demand and on the energy proportional to the excess demand.

**Discoms Response:** All consumers are supposed to maintain Grid discipline and they are not supposed to cause system exigencies. Voltage Surcharge being levied as per provisions of the Retail Supply Tariff Order.

**Commission's view:** Various suggestions / requests have come from different stakeholders for modification / amendment / changes / new provisions in the Terms and Conditions of Supply of electricity to HT and LT consumers and all of them will be consolidated. The considered views and suggestions of the State Government and the licensees on the same will then be sought for before examining and deciding the further course of action.

# Sri P.H. Janakiram, Company Secretary, APSEB Engineers' Association, SPDCL unit has stated the following.

(a) Electricity being the life line energy for living standards as well as for the economy of the State/Nation, study of trend analysis of various components of ARR viz. Network Cost, Transmission cost, Distribution cost, Supply Cost, Power Purchase Cost and its related aspects is very much necessary without which corrective steps cannot be taken. In the ARR filings the previous years' data has been furnished in absolute values with which the understanding of ARR will be limited to some extent. In addition to the above it is always better to give the trend analysis of all the components of ARR in terms of per unit with graphical presentations along with explanatory notes on the trend analysis.

**Discoms Response:** Historical trend analysis is being carried out by the DISCOMs while making the projections of important parameters such as Power purchase cost, Cost of Service, DISCOM Network Cost, Transmission cost & SLDC Cost etc. Annual ARRs& FPT are being presented in pursuance to the prescribed formats given by APERC wherein it is required to show actual for previous year, actual for the first half of the current financial year, and projections for second half of the current financial year for the ensuing financial year. The formats prescribed by APERC also capture the multiyear data of the current control period from the base year onwards.

b) As the Transmission cost, Distribution cost and Power purchase cost have got significant impacts on the cost of service, an independent committee shall be formed with eminent persons as members to evaluate all the components of the above aspects. The committee may be advised to study the above aspects at least once in six months and submit the report to APERC. The above said aspects will help the managements of APGenco, APTransco and APDiscoms to know what is happening and to take corrective steps if required. This will help the consumers also. These aspects shall be incorporated in the ARR and tariff filings and Tariff orders from the present year onwards. The Commission is requested to consider the suggestions and take necessary action to implement immediately so as to improve the transparency in ARR filings.

**Discoms Response:** Considering the Suggestions on merits is in the purview of APERC.

**Commission's View:** The APSEB Engineers' Association can play an active role through its members in gathering the data and analyzing the same appropriately which will be of useful guidance to the licensees and the Commission. The Commission takes this opportunity to place on record its appreciation for the commitment and devotion of the Engineers and all other employees of the licensees for the betterment of their employer organizations and the power sector.

c) Suggestions:

- i. The items which are not good for the society such as cigarettes, Liquor manufacturing industries, bars and pubs etc. shall have to be discouraged by fixing abnormal high tariff rates. Different tariff rates shall be fixed for small and big Cat-II consumers, duly prescribing methodology to make distinguishing.
- ii. A nominal charge of ₹1/- per month per each consumer shall be charged from the consumers with more than 100 units monthly consumption towards accidents claim fund. For the consumers who pay bills within three days of issuance of bill, some discount shall be given and for the late payers' penalties shall be increased. This will help to improve DISCOM revenues.
- iii. To encourage energy conservation, discounts on monthly consumption charges shall be given if the monthly consumption is less than the average consumption of previous three years. This kind of encouragement will help to motivate the consumers towards energy conservation and Discoms need not promote schemes such as LED bulbs distribution, energy efficient fans distribution etc.

**Discoms Response:** Considering the Suggestions on merits is in the purview of APERC.

**Commission's View**: The DISCOMs may first take a view of the suggestions and their merits as any decision by the Commission on the suggestions affects them and the consumers.

# **Reduce Tariffs**

122 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI (M); Sri Kandharapu Murali, CPM State Committee Member, Tirupatihave stated that tariffs shall be reduced in view of power surplus situation and falling prices of wind and solar energy.

Sri Malladi Vishnu, Ex. MLA, YSR Congress Party, Vijayawada has stated that tariffs can be reduced in view of surplus power availability.

Sri R. Mohan, District Additional Sectretary, Akhila Bharata Raithu Kooly Sangham, Ongole has stated that tariffs shall be reduced for consumption upto 500 units.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that as DISCOMs are receiving awards in arresting theft of energy, energy conservation and reduction of losses, the benefits gained shall be passed on to the consumers in form of reduction of tariffs.

Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization, Ongole has stated that tariff shall be reduced.

**Discoms Response:** APSPDCL: The State Government has taken a decision not to raise the electricity tariffs. It is great step to be appreciated and also a step forward to re-work the tariffs in coming days. The revenue deficit at present tariff is  $\gtrless$  6218 Cr. and hence tariff reduction is not possible.

Commission's View: From a state of invariable annual increase of tariffs, some progress could be achieved since establishment of this Commission to achieve some discipline, some reduction in power purchase cost and some accountability which helped in the DISCOMs being able to venture to suggest no increase in tariffs in FY2018-19. If the process of self introspection and self improvement continues at a desirable level, the possibility of reduction in tariffs progressively from the next financial year may become a distinct possibility.

## All liabilities of DISCOMs to be considered in arriving at justified unit rates

123 Sri K. Ramakrishnam Raju, President, Vessel Contractors Welfare Association, Visakhapatnam has stated that the total anticipated income, expenditure, reimbursement of subsidy expected from Govt., depreciation, interest payable, wages/ salary bills, pay revision, increased bonus & EPF limits, other liabilities should be considered in arriving cost to serve unit rate / all in cost unit rate of previous year for guidance and to be considered for FY2018-19 to arrive tariff rates for highly profitable HT Consumers without any budgetary deficit / revenue gap for APEPDCL. Accordingly justified unit rates may be ordered by APERC. **Discoms Response:** All the parameters mentioned by the Objector are taken for assessing the Aggregate Revenue Requirement (ARR) of the DISCOM for FY2018-19.

Commission's view: The response of the DISCOMs answers the suggestion.

#### Grouping based on previous year consumption is not correct

124 Sri Kakarla Guruswamy Naidu, Surineni Vaari Palle, Paakala Mandalam, Chitoor Dist. has stated that groupsare proposed based on previous year consumption in the present tariff order and collecting higher charges. This shall be corrected by the Commission. Consumers having greater than 600 units of consumption in the previous year comes under B group and hence there is a burden of ₹120 per unit for current year consumption. This is not reasonable. Commission shall decide the groups based on current year consumption only.

Sri Nachhukuru MuniRatnam Reddy, Ganugapenta Village, Chittoor Dist.; Sri P. Subramanya Yadav, Surinenivaripalle, Chittoor Dist. have stated that slabs range shall be made 1-100 instead of 1-50 units and not be based on previous year consumption.

Sri D. Narasimhulu Naidu, Adenapalli panchayathi, PakalaMandalam, Chittoor Dist. has stated that 0-50 units slab is being imposed in villages and minimum slab shall be made 0-100 units.

Sri K. Munaswamy Naidu, Kundetivaripalle, Chittoor Dist. has stated that it is not appropriate to decide the slabs based on previous year consumption and collecting the charges accordingly.

Sri N. Ravindranath Reddy, Pakala, Chittoor Dist. has stated that slabs are proposed based on previous year consumption in the present tariff order and collecting higher charges. The slabs shall be based on current consumption only for collecting the charges.

Sri Kondapalli Vasudeva Rao, Chief Editor, Electrical and Electronics General Samaacharam magazine, Visakhapatnam has stated that burden on LT Domestic consumers is considerable in every month due to grouping shift (0-900, 901-2700, >2700).

Sri Hemanth Kumar, Andhra University Students Union Leader has stated that no

slabs shall be considered for electrical consumption.

**Discoms Response:** In the billing based on the tariff order for FY2015-16, when monthly consumption changed from lower slab to higher slab, substantial increase of monthly billing amount was being experienced and if high capacity paying consumer's consumption is low in any month, the same was being counted in lower slab meant for low capacity paying consumers. In view of the above two reasons, the present proposal is made, benefitting all.

₹1.45 per unit was finalized upto the consumption level of 50 units per month keeping in view of poor and backward classes. Increasing this to 100 units per month is not appropriate.

Commission's View: Upto FY2013-14 (which continued for FY2014-15 in the absence of a tariff order) the consumption in domestic category was stated to be charged in a telescopic manner with the energy charges increasing at each level of consumption every month. In the tariff order for FY2015-16 the domestic consumers were divided into three sub-categories depending on the levels of consumption in the same telescopic method but variations in consumption resulted in being charged in different sub-categories each month. When it came to the tariff order for FY2016-17, the limits for inclusion in sub-categories LT-I(A), LT-I(B) and LT-I(C) were enhanced giving a benefit of enhancement of consumption of 300 units per annum to be still included in the lower category. To avoid monthly variation in the level of charging slabs, the previous year's consumption was made the basis for categorisation for the entire financial year thus removing monthly variation in charges payable. Thus, actually substantial benefit was conferred within two years on the consumers of first two sub-categories who may not be able to afford costly power. Even the marginal increase in energy charges at 3% in FY2017-18 was confined only to the Group-C sub-category of domestic consumers who are only about 5.83 lakhs. As there should be some reasonable basis for classification of the domestic consumers, this becomes inevitable and grouping on the basis of current year's consumption will inevitably lead to going back to monthly billing variations, which will be a retrograde step.

## **Arrangement of Smart Prepaid Meters**

125 Sri G. Venkateswara Rao, KCP Sugar & Ind. Corp Ltd., Vuyyuru, Krishna District has stated that Consumers shall be categorized basing on their regularity in bill payment and Prepaid Meters shall be arranged for irregulars, which avoids bad debts and reduces financial burden on Discoms.

**Discoms Response:** Suggestion is noted.

**Commission's View:** It is for the distribution licensees to take appropriate action on the noted suggestion.

## Assess consumption of SC & ST families and extract its cost from GoAP

126 Sri K. Rajendra Reddy, P. Kothakota, Chittoor Districthas stated that licenseesare supplying power free of cost to scheduled caste and scheduled tribe families under category LT-I at the rate of 75 units per month. This consumption is not being assed separately and as a result this burden is being borne by other consumers of this category. The consumption of SC & ST families should be assessed and the cost of the same should be extracted from GoAP under section 65 of Electricity Act, 2003. The revenue deficit will be further reduced if the licensees succeed in extracting from GoAP the cost of power supplied to SC & ST families during FY2017-18 and FY2018-19.

**Discoms Response:** The licensees are issuing bills for the total consumption of the SC & ST consumers and rebate of 75 units is given to the consumers who consume less than 100 units. The C.C. Charges of the rebated 75 units are being reimbursed by the GoAP. As the revenue related to the rebated 75 units is factored in the ARR, the revenue deficit remains the same.

**Commission's View:** The perception of the objector that the other consumers are bearing the burden of SC and ST consumers cannot be correct as the distribution licensees are claimed to be reimbursed by the Government of Andhra Pradesh to the extent of the consumption charges for the rebated 75 units per month for each SC and ST consumer.

# Apartments must be supplied through regular LT distribution system

127 Sri B. Hume Sastri, Chief Engineer (Rtd.), Visakhapatnam has stated that EPDCL authorities are propagating about efforts being made to reduce L.T. system losses but a very significant amount of transformer losses is being contributed by individual

transformers installed in apartment complexes. Only 10% loading take place in these transformers from 10AM to 4 PM and much less from 10PM to 5AM. To reduce these losses, it is desirable that the system of supplying power to these apartments by individual transformers has to be dispensed with and supply shall be extended through the regular L.T. distribution system. A pilot study may be made to determine the actual losses and a few transformers replaced to determine the reduction of losses. This fact is confirmed by giving concessional tariff from 10PM to 6 AM and charging 1 rupee more per unit during peak load hours that is from 4PM to 10 PM and 5AM to 10 AM.

**Discoms Response:** All the Apartment complexes with more than certain aggregate contracted load are fixed with a dedicated distribution transformer to ensure more reliability, good voltage profiles and to accommodate future load growth. The contention of the objector that only 10% loading take place in these transformers from 10AM to 4 PM and much less from 10PM to 5AM is hypothetical. If Apartment complexes are extended supply from public DTRs, the same along with connected LT lines get overloaded and cause much losses than the LT less system adopted in Apartment complexes. Dedicated DTRs are felt necessary to Apartment complexes to reduce the interruptions (SAIFI, SAIDI parameters) and improve reliability.

**Commission's View:** It is for the distribution licensees to take decision on the need to have a pilot study on the subject as suggested by the retired Chief Engineer with his vast experience.

## Relax upper limit for SC & ST consumers

**128** Sri Ch. Narasinga Rao, State Secretariat Member, CPI (M), Visakhapatnam has stated that SC/ST Domestic consumers shall be extend free units upto 100 instead of the existing 50 units.

Sri Kothapalli Subramanyam, KVPS, Tirupathi has stated that shall provide free supply to SC/ST consumers without any limit.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M), have stated that free power shall be given upto 100 units for SC/ST consumers and all arrears of SC/ST consumers shall be waived off. **Discoms Response:** Presently 75 Units per month are given free to the SC/ST households. Extending the same to 100 units is in the purview of the State Govt.

Commission's View: The request is brought to the notice of the State Government for favourable consideration.

#### Provide conventional submersible motors with ISI standards

129 Sri K. Rajendra Reddy, P. Kothakota, Chittoor District expressing gratitude for providing day time supply of power to agriculture consumers, has stated that the free supply of solar pump sets to limited farmers is not doing uniform justice to all farmers. Only farmers with abundant ground water at low depth are being benefited. In order to do justice to all farmers it is suggested that conventional submersible motors with ISI standards may be provided to all farmers in exchange of old motors without any limitation of HP.

#### **Discoms Response:**

APEPDCL: The programs on solar energy pumpsets and Energy efficiency pumpsets are being implemented as per the directions of the State Govt. APEPDCL will follow any further directions in this regard.

APSPDCL: At present, 3 HP & 5 HP Solar pump sets are provided to the farmers. The request for providing of submersible pump sets to farmers without any limitation of horse power cannot be considered due to the financial constraints.

**Commission's View:** It is matter of policy for the State Government to decide and implement and the suggestion may be examined on its merits by the State Government and implemented if found meritorious.

## Statistics of Agriculture services are shocking

130 Sri K. Rajendra Reddy, P. Kothakota, Chittoor Districthas stated that considering the number of agricultural services released and load (HP) added during FY2016-17 and 2017-2018 and also number of services to be released and load i.e. horse power to be added during 2018-2019 as provided in ARR pages 84 and 85 the average horse power per each service released in each circle is calculated and it is as follows.

CIRCLE	FY2016-17	Avg. HP	FY2017-18	Avg. HP	FY2018-19	Avg. HP
Vijayawada	2216/3113	0.71	10195/5000	2.03	27611/5165	5.34
Guntur	14896/1.96	1.96	37684/4900	7.69	25578/5062	5.05
Ongole	30599/12096	2.5	46281/8000	5.85	41845/8264	5.06
Nellore	22257/5807	3.83	17603/5000	3.52	40296/5165	7.80
Tirupati	75368/3528	21.36	15841/3000	5.28	84024/3099	27.11
Kadapa	40966/4658	8.79	11261/4200	2.68	53896/4339	12.42
Anantapur	163111/18318	8.9	94699/8500	11.14	69763/8781	7.94
Kurnool	108311/13592	7.96	54696/9800	5.58	39676/10125	3.91

As the license has projected a load of 7690792 HP with 1424965 agricultural services on 31.03.2019, average horse power will be 5.93 HP per service but a look at the table gives shock as average load per service is as low as 0.71 HP during 2016-2017 and 2.03 HP during 2017-18 these requires study and explanation from the licensee.

Discoms Response: The issue will be studied and informed separately.

**Commission's View:** The DISCOMs may communicate the result of their studies as promised to the objector and the Commission as expeditiously as possible to consider the necessary further action.

# **Estimation of Agricultural Consumption - providing meters**

131 Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that controversy exists since long regarding agriculture consumption as agriculture services are not being metered. There are about 1,13,00,000 total services in the area of APSPDCL, out of which there are 14,24,965 are agricultural services i.e. only 12.6 percent are agricultural services. When 87.4 percent of the services are metered the licensee's reluctance to provide meters to 12.6 percent agricultural services is not understandable. One reason being advocated by the licensee is that the agricultural services are scattered and as such it will be difficult to take readings. It is suggested that readings from the agricultural service meters can be taken quarterly instead of monthly and that will give necessary relief to licensee.

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that Electricity consumption in the previous years would have been much less if DISCOMs have not projected higher consumption in the agriculture sector than the quantum allowed by the Commission. During 2017-18 in the case of APSPDCL while the Commission allowed 8,742 MU for agriculture sector the DISCOM projected consumption of 9,537 MU. Similarly, in the case of APEPDCL while the Commission allowed 2,090 MU for agriculture sector the DISCOM projected consumption of 2,251 MU. This again brings to the fore the issue of estimation of electricity consumption in the agriculture sector.

Circle	No. Pump sets	Connected load (HP)	Projected Consumption	Per HP	Per HP
	5015	10au (111)	(MU)	Consumption (U)	Consumption (U) 2017-18*
Vijayawada	1,05,722	5,54,896	693.49	1250	1072
Guntur	1,11,266	5,14,027	717.25	1395	878
Ongole	1,75,587	8,40,947	894.22	1063	877
Nellore	1,68,907	8,09,814	842.39	1040	913
Tirupati	2,80,909	16,88,607	1884.74	1116	1075
Kadapa	1,58,628	10,83,128	1438.49	1328	1327
Anantapur	2,55,377	14,02,014	2156.86	1538	1545
Kurnool	1,70,569	7,97,358	1134.11	1422	1144
Total	14,24,965	76,90,792	9761.55	1269	1146

\*Based on 2017-18 ARR filings

Though both the DISCOMs claim that they are following the sample methodology as recommended by ISI and the Commission, it is difficult to say how far they have followed the said methodology. According to Section 1.3 (h) iv) of Tripartite MoU under UDAY APDISCOMs have to achieve 100% Distribution Transformer (DT) metering by 30th September, 2017. The Commission is requested to direct the DISCOMs to estimate agriculture consumption on the basis of readings of meters installed at the DTRs serving agriculture services. This will help to do away with arbitrariness of estimates of electricity consumption in agriculture sector. The progress in metering DTRs serving agriculture connections may be given.

Smt. P. Bharathi, Eguvapalakuru, Chittoor Dist. has stated that meters shall be provided for all agriculture services to arrive actual agriculture sales instead of approximations and sampling methods.

# **Discoms Response:**

APEPDCL: The Agriculture consumption approved by APERC for FY2016-17 is 2281.16 MU against a filed quantity of 2372.34 MU. The actual sales recorded during FY2016-17 is 2399.41 MU. APEPDCL has adopted a modified trend approach in forecasting of Agriculture sales for the Current Financial Year, FY2017-18. In respect of Agriculture, a negative growth rate was observed in H1 of 2017-18 w.r.t. H1 of

2016-17 which was due to favourable climate conditions prevailed during that period. In view of that negative trend, the estimated sales for FY2017-18 are pegged at 2251.46 MU which are lesser than the approved quantum of 2090.27 Actual agriculture consumption for FY2017-18 is expected to be lesser by around 150MU than the consumption in FY 2016-17.

Taking readings of all agricultural services meters and maintenance of the meters will be extremely difficult given the scattered existence.

As per the status report on implementation of UDAY scheme submitted by the APEPDCL to the Ministry of Power, GOI.

Description	Existing DTRs as on 31.03.2016	DTRs Metered by 31.10.2017	Balance DTRs to be metered
Urban Area	29,388	23,837	5,551
Rural Area	1,33,587	69,512	4,075
Total	1,62,975	93,349	69,626

All new DTRs whether in Urban or Rural areas are being commissioned with metering only.

It is proposed to revise the target for DTR metering in Urban areas as 31.03.2018 and in Rural areas as 31.03.2019 i.e. extension of target date for a period of 1<sup>1</sup>/<sub>2</sub> years.

APSPDCL: At present APSPDCL has installed meters for 4020 Nos. of agriculture DTRs. Projections have been made in the filings based on the most realistic data available and assumptions made at that point of time.

**Commission's View:** Theoretical advantages in metering all agricultural consumption are said to be outweighed by practical considerations claiming the same to be socially sensitive and politically explosive. Hence, it is left to the distribution companies to progressively achieve cent percent metering of individual agricultural consumption which has nothing to do with any policy of subsidizing agricultural supply. However, the Commission was and even in the present order is making suggestions from time to time for improving accuracy in recording agricultural consumption.

# Sample survey needed for checking Agriculture DSM measures

132 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that DISCOMs are claiming to follow scrupulously State government's policy regarding Agriculture DSM measures. For example, APSPDCL in the ARR for FY 2018-19 claimed, "89.15% of the existing pump sets as on 30.9.2017 are provided with capacitors... ". (p. 104) It is in no way different from its previous year claim, "So far 89.35% of the existing pump sets as on 30-09-2016 are provided with Capacitors by the consumers. The licensee is taking all necessary steps to provide Capacitors for balance pump sets also." (p.64, ARR for FY2017-18) In its 2016-17 submission APSPDCL claimed that capacitors were installed at 89.63% of agriculture services (p.64). In the ARR for 2012-13 APSPDCL claimed, "So far, 86.34% of the existing pump sets as on 31.03.2011 are provided with Capacitors. The licensee is taking all necessary steps to provide Capacitors for the balance pump sets also." (p.39) Field experiences show that the picture is completely different. There are definite benefits from installing Capacitors. The Commission is requested to institute a sample survey to verify claims of DISCOMs in this regard.

## **Discoms Response:** NIL

Commission's View: The distribution licensees may have recourse to a thirdparty audit or any other dependable method for quantifying the achievements or failures of the DSM measures and attempt to place the results before the Commission within six (6) months with a copy of such information to the learned objector also.

## List off-grid and grid connected solar pump sets separately under agriculture services

133 Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has requested the Commission to direct the DISOMs to list off-grid and on-grid solar pump sets separately under agriculture services because cost and revenue from these pump sets are different from other pump sets.

## **Discoms Response:**

APEPDCL: Details on Agriculture Consumption & No. of Consumers on Grid is as following.

Financial Year	No. of consumers	Energy Sales (MU)	Connected Load/ Contract Demand (HP)
FY 2016-17	212,144	2,399	1,431,721
FY 2017-19	216,253	2,251	1,477,438
FY 2018-19	220,064	2,296	1,777,918

Details of No. of Solar Pumpsets installed in APEPDCL

Name of the Circle	3 HP	5HP	Total
Srikakulam	312	412	724
Vijayanagaram	209	2880	3089
Visakhapatnam	104	1316	1420
Rajahmundry	7	1797	1804
Eluru	1	1009	1010
Total	633	7414	8047

APSPDCL: NIL

**Commission's View:** Both the distribution licensees may note the suggestion and act upon.

# **DTR level metering for Agriculture feeders**

134 Sri B. N. Prabhakar, President, Society for Water, Power & Natural resources conservation Awareness and Monitoring (SWAPNAM), Certified Energy Manager & Auditor, Vijayawada has stated that It is noted from the press in the recent past that the GoI is contemplating for the Discoms to ensure 100% metering and any failure below 85% will not be allowed as pass through in the tariff from 2020-21 onwards. APERC, for the last 10-15 years has been instructing the Discoms to ensure DT level metering for all agriculture feeders, which is not fulfilled. In view of the above upcoming mandatory provision, the Discoms may detail their action plan.

**Discoms Response:** UDAY progress report is provided to the objector.

**Commission's View:** UDAY progress is claimed to be self explanatory.

# Treat Sugar Cane Crushing, Salt farming and Aquaculture on par with Rural Horticulture

135 Sri B. Tulasi Das, Vijayawada has stated that the DISCOMS proposed energy charge of ₹ 1.50/kWh for Rural Horticulture with Connected Load up to 5 HP within the LT- V(C): Others category. The same treatment may be given for small and marginal farmers availing LT power with a connected load up to 5 HP in (1) Sugarcane crushing (with no Demand charges for Agriculture connections permitted seasonally) (2) Salt farming, (3) Aquaculture. Sugar Cane crushing can even be given free supply on par with Agriculture as India is the biggest exporter of Jaggery.

Explanation: Jaggery is known as "poor man's sweetener". Family labour is mainly involved in preparation of jaggery in our State. As there has been commercial cultivation of Sugarcane and preparation of jaggery, to distinguish the small and marginal farmers and also the tenant farmers from others, the connected load of 5 HP, is proposed. Agriculture connections are permitted to carry out sugarcane crushing and they should not be burdened with Demand Charges. Salt is the daily need of everybody and it has a historic role in the National movement. In this sector also, there are big corporates. Hence, the connected load condition is proposed. The Government of AP wants to make our State as "Aquaculture Hub" and so the Aquaculture has been increasing in a big way. There are many contentions of pollution and other violations. But some small and marginal farmers are involved in Aquaculture and they have to be protected. Hence, the connected load condition is proposed.

Sri Jalagam Kumara Swamy, Vijayawada; Sri Yallapu Surya Narayana, Chinnampeta, E.G.Dist.; Sri Rasamsetty Raja, Prattipadu, E.G.Dist.; Sri Donga Nageswara Rao, Ambajipeta, E.G.Dist.; Sri Adabala Rajamohan, Ambajipeta, E.G. Dist.; Sri Muthyala Jamil, Ambajipeta, E.G. Dist.; Sri Kavuluri Pathi Raju, Kethavaram, W.G.Dist.; Sri Mandapati Vidyadhara Reddy, Chatrayi, Krishna Dist.; Sri Medasani VijayaBhasker, Dist; Sri Bheemavarapu Thatigadapa, Krishna Bramhananda Reddy, Gudibandivaaripalem, Guntur Dist.; Sri Vanga Sambi Reddy, Gudibandivaaripalem, Guntur Dist.; Sri Aavuya Venkateshwar Reddy, Kollipara, Guntur Dist.; Sri Godagattu Sreerambabu, Paluru, Prakasam Dist.; Sri Addagadda Satish Kumar, Nagulapalem, Prakasam Dist.; Sri Katuri Harikishorekumar Reddy, Paturu, Nellore Dist.; Sri Polireddy Rammohan Reddy, Buchireddypalem, Nellore Dist.; Sri Vemireddy Hanuma Reddy, Chemudugunta, Nellore Dist.; Sri Kukati Sunil Kumar Reddy, Manegunta, Nellore Dist.; Sri Inamadugu Venkata Ramanareddy, Vavveru, Nellore Dist.; Sri Seernam Venugopalreddy, Chatrai, Nellore Dist.; Sri Chemikala Madhavareddy, Proddutur, Kadapa Dist.; Sri N. Janardhana Reddy, Y.M.Palli,

Kadapa Dist.; Sri B.Obul Reddy, Paatha Giriyapalli, Kadapa Dist.; Sri A. Gangireddy, Pagadalapalli, Kadapa Dist. representing Bharatiya Kisan Sangh (BKS) and others as mentioned at the respective issue have stated that free power supply shall be extended to sugarcane crushing machines under category-III. Jaggery making is also a part of sugarcane farming and it will not cause much financial burden onDiscoms.

Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam has stated that Sugar Cane crushing shall be identified as agricultural activity and concessional tariffs shall be extended.

Sri Daadi Veerabhadra Rao, Ex. Minister and President, Anakapalle Agricuturists Association has stated that Sugar cane crushing shall be given concessional tariffs and shall be treated as LT Agriculture instead of LT Industry.

Sri Karri Appa Rao, Sri Karri Ganesh, Sri Karri Gangu Naidu, AP Cheraku Rythula Sangham and AP Rythu Sangam, Visakhapatnam have stated that all the sugar cane crushing units to be given free power in similar lines of Agriculture.

Sri A. Balakrishna, District Secretary, Andhra Pradesh Koulu Rythula Sangham, Visakhapatnam has stated that free power shall be supplied to the Sugar Cane Crushing farmers.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that tariff shall be reduced for sugar cane crushing to benefit small farmers.

**Discoms Response:** Power consumed by sugarcane crushing machines is treated under agriculture allied industry and charges are being collected accordingly which are as follows.

Category	Fixed charges	Energy charges
Industry	₹ 75 per KW	₹ 6.71 per unit
Sugarcane crushers	₹ 30 per KW	₹ 3.86 per unit

Reduction of tariff to this category is under the purview of the Commission.

**Commission's view:** In LT category, the tariff for pisciculture / prawn culture and sugar cane crushing in FY2015-16 was  $\overline{\mathbf{x}}$ 21/ kW fixed charge and  $\overline{\mathbf{x}}$ 4.63 / unit energy charge, while it was  $\overline{\mathbf{x}}$ 20/HP and  $\overline{\mathbf{x}}$ 3.70/Unit respectively for salt farming and rural horticulture nurseries upto 15 HP. The tariff for aqua culture (which includes pisciculture and prawn culture) and animal husbandry as well as sugar cane crushing

was reduced to ₹21/kW fixed charge and ₹3.75 energy charge per unit in FY2016-17 and continued at the same level in FY2017-18. In addition, aqua culture and animal husbandry in HT category (a new sub-category) was also imposed the same tariff. Salt farming and horticulture continued to have the same tariff while the benefit to rural horticulture nurseries was raised to 25 HP in FY2017-18. Due to similarity in these activities akin to agriculture, the tariff was thus attempted to be made less burdensome. In so far as the rural horticulture nurseries are concerned, the proposal in the present ARR for tariff at ₹1.50 per kWh was stated to be in pursuance of a policy decision of the State Government and provision of subsidy is a matter for State Government to decide under Section 65 of the Electricity Act, 2003. Hence, this Commission proposes to advise the State Government under Section 86 (2) of the Electricity Act, 2003 and Section 11 of the Andhra Pradesh Electricity Reform Act, 1998, to consider on merits in accordance with law the request for treating sugar cane crushing, salt farming and aqua culture on par with agriculturists eligible for subsidy or with rural horticulture nurseries or extend such subsidy as it may deem reasonable and just.

#### Subsidized tariff for hair stylists

**136** Sri Yanadaiah, State President, APNayee Brahmana Sangham, Tirupathi has stated that subsidized tariff shall be considered for hair stylists shops similar to the benefit extended in Telangana State.

**Discoms Response:** Commercial activity is done in the hair stylists' shops. Extending free power upto 250 units and applying domestic tariff for the remaining units is not justifiable.

Commission's View: The State Government may consider the request under Section 65 of the Electricity Act, 2003 to fully subsidize such consumers.

## Tariff for sale of power to Electric Vehicle Charging

137 Sri G. Venkateswara Rao, KCP Sugar & Ind. Corp Ltd., Vuyyuru, Krishna District has stated that Introduction of Electric vehicles is in initial stage in the State and as well as in country and may not shoot the power demand on grid for minimum couple of years. At present Additional charge of `1.00/kWh may not be levied for usage of power from 06:00 AM to 10:00 AM which panic the public in initial stage.

Sri B. N. Prabhakar, President, Society for Water, Power & Natural resources

conservation Awareness and Monitoring (SWAPNAM), Certified Energy Manager & Auditor, Vijayawada suggested that the tariff for Electric Vehicle Charging stations at ₹6.95/Unit proposed by the Discoms under a separate category may be applied for the stations exclusively used as EV charging stations. Whenever, the existing petrol pumps, vehicle repair shops etc. establish such EV charging facilities, the tariff applicable to them at present may be continued to avoid misuse/ litigations.

**Discoms Response:** In the world of technology disruptions, a new force which is emerging is Electric Vehicles (EVs). Two major factors driving the trend for higher penetration of EVs are steep reduction in the battery technology costs and decarbonisation policies introduced by different economies the world over. The trends in battery costs are promising with significant reductions witnessed during the last five years. EV price parity with internal combustion engines (ICEs) depends upon type of vehicle, and usage. It is expected that EVs shall achieve price parity with ICEs by 2022-24. Globally, the support on policy and regulatory front has helped accelerate the demand for EVs. Over 2.1 million vehicles were sold globally in 2016 compared to one (1) million vehicles in 2015 resulting in sale of one (1) million vehicles in eighteen (18) months. Government of India (GoI) has also set an ambitious target of 100% incremental EV sales by 2030 which is estimated to result in oil imports savings of \$ 60-70 billion annually. Thus, TOD is envisaged on par with similar category of consumers to avoid undue preference to a class of consumers.

Suggestion is noted. The matter is under the purview of APERC.

**Commission's View:** An element of guess and estimate becomes inevitable in respect of an evolving demand for energy for Electrical Vehicles and the proposal by the DISCOMs was after due deliberation as seen from their response. Any discrimination in the energy charges for Electrical Vehicle charging stations on the ground of their being new or old may not answer the test of reasonable classification.

## **Reduce tariff to Poultry**

**138** Dr. V. Sundar Naidu, President and Sri K.V. Subba Rao, Vice President, M/s Andhra Pradesh Poultry Federation have stated that though there was no hike in the proposed power tariff for the FY2018-19, the power tariff in the FY2017-18 has been increased exorbitantly in respect of fixed charges/contract maximum demand charges and also unit charges in LT-III category, HT-1(C) and HT-1(D) category for poultry sector by

APERC/DISCOMS.The APERC as well the DISCOMS are requested to consider to reduce the unit charges to the level of FY2016-17 and slash the demand charges/fixed charges to be on par with ferro alloy units and other related power oriented units for the proposed power tariff for the FY2018-19 for poultry sector, as requested through letter dated 25.01.2016 that "poultry farms having their own feed mixing plant for preparing feed for their birds under one electricity connection should be treated under the category of poultry farming under LT-III or HT-I (C) depending upon the connected load. This will give a big relief to the poultry farming community."

Certain poultry farming divisions are in same premises with hatchery units and the HT billing is made on HT-1(D) consumption basis, whereas the poultry farming units does not consume on HT line basis. The unit cost shall be as per HT-1(C) and here itself the poultry sector farmers shall have a big relief.

APERC/DISCOMS and Government of Andhra Pradesh are requested to extend the revival and restoration package to poultry sector of LT-III /HT-1(C)/HT-1(D) category consumers in the proposed electricity tariff for FY2018-19, to slash contract demand charges, reduce the unit charges and include Poultry Feed Mixing Plants and Poultry Hatcheries under category LT-III/HT-1(C) depending on the load availed.

Sri Jalagam Kumara Swamy, Bharathiya Kissan Sangh, Vijayawada has stated that Poultry Feed Mixing Plants to be categorized as Poultry Farms.

Sri A. Doraiah, a representative from The AP Poultry Federation, West Godavari has stated that Poultry Hatcheries and feed mixing plants to be treated as part of Poultry firms.

Sri Padala Subba Reddy, General Secretary of AP Poultry Federation and President, Anaparthy Region Poutry Farmers Welfare Society, Anaparthy has stated that Feed Mixing plants to be classified as Poultry farming activity. Clarification also issued by Animal Husbandry Dept. to classify all activities like Hatcheries, Farming, Feed Mixing into one activity. Offices in Poultry farms are treated under commercial category and penalties are being levied. Offices shall be considered part of poultry farm and the new category for feed mixing plants shall be deleted.

Sri K. Trinadha Reddy, printing press, Rajamahendravaram has stated that Poultry hatcheries & feed mixing plants to be treated as Poultry farming activity and concessional tariff be extended both in LT & HT Categories.

**Discoms Response:** As per the Retail Supply Tariff Order for FY2017-18, there is a separate dispensation for poultry hatcheries and feed mixing plants. The request "to consider poultry farms having their own feed mixing plants for preparing feed for their birds having under one electricity connection should be treated under the category of poultry farming under LT-III or HT-I (C) depending upon the connected load" cannot be considered as there is differentiation in the line of activity & purpose of usage between feed mixing plant & poultry hatcheries. As the poultry farming and hatcheries existing in same premises means no segregation is possible. Hence, the DISCOM is not in a position to consider the request for billing the service as HT Cat-I(C) instead of HT Cat-I (D). Matter is under the purview of Govt. of AP and APERC.

Wherever office is maintained, it will be treated under commercial since as per Tariff Order. If connection is applied under commercial, no penalty will be levied.

Commission's view: The tariff for Poultry farms in LT category during FY2015-16 was ₹53/kW fixed charges per month and ₹5.63 energy charges per unit and in HT category, it was ₹371/kVA/month demand charges and ₹5.15, ₹5.57 and ₹6.02 energy charges per unit for voltages of 132 kV and above, 33 kV and 11 kV respectively. In the retail supply tariff order for FY2016-17, in LT category substantial relief was given to the Poultry sector by reducing the demand charges to ₹21/kVA/month and the energy charges to ₹3.75 per kVAh while Poultry hatcheries and Poultry feed mixing plants were imposed a tariff of ₹55.12/kW demand charges and ₹4.75/kVAh energy charges. In HT category, only the fixed charges were ₹ 385.84/kVA/month while the energy charges were the same. In the retail supply tariff order for FY2017-18 the increase was very marginal to ₹3.86 per unit energy charges and ₹30/kW/month demand / fixed charges for LT category poultry farms and ₹4.89 per unit energy charges and ₹75/kW/month demand/fixed charges for LT category poultry hatcheries and poultry feed mixing plants. In HT category, the fixed/demand charges per month were imposed at ₹475/kVA/month. The increase was limited to 3% in LT category and 3.6% in HT category which is much less than the rate of inflation in FY2016-17 making the real value of the charges being collected in fact a little less than the actual value of the charges at 2016-17 level. While there is no hike in power tariff proposed or accepted for FY2018-19, the fixed/demand and energy

## charges for the poultry sector are thus at a reasonable level.

In so far as the request for treating poultry farms having their own feed mixing plant under one electricity connection as poultry farms only, a number of poultry hatcheries and poultry feed mixing plants approached the Hon'ble High Court by way of writ petitions (illustratively WP 44464 of 2017 and WP 44505 of 2017) to declare the creation of the sub-category poultry hatcheries and poultry feed mixing plants as arbitrary, illegal and unjust and the Hon'ble High Court was pleased in all such cases to grant a stay of disconnection of power supply. The writ petitions are pending to which this Commission was also made a party apart from the distribution licensees and any expression of opinion on the issue may become an act of impropriety and is open to be construed as over reaching the Court. Hence, the Commission refrains from expressing itself on the issue.

The extension of revival and restoration package to poultry sector by the State Government or the DISCOMs is a policy matter within their purview.

#### **Issues of Printing Presses categorization.**

**139** Sri K. Trinadha Reddy, Printing press, Rajamahendravaram has stated that Printing activity is MSME and is being categorized in Cat-II. The printing press shall be treated as Industry.

Sri M. Venkata Reddy Rajahmundry Printers Associations has stated that printing is to be treated as Industry. LT-III was applied till 2011. Even though tariff changed in 2011-12 back billing done only in the year 2016. After a lapse of 5 yrs. Newspaper printing is still in Industry.

Sri Manchala Babji, The Rajahmundry Printers Association, Rajamahendravaram has stated that Printing Presses may be continued to be treated as Category-III as prevailed prior to 2011 and the back-billing charges may be condoned.

Smt. V. Amulya, M/s Eeswar printing press, Rajahmahendravaram has stated that even though tariff categorization is changed in FY2011-12, back billing is done in 2016. Cannot differentiate between News paper printing and ordinary printing. We are SSI registered as well.

Sri Velagala Udya Bhaskara Reddy, M/s Eswar Graphic Printers and M/s Sarvodaya Publications, Rajamahendravaram have stated that they were reclassified to Category-II from Category-III in 2016 with retrospective effect from 2011 and imposed back

billing charges for 6 years amounting to lakhs of rupees and requested for needful justice.

Sri Dwarampudi Bapi Reddy and Smt. D. Ratna Sireesha, M/s Kumari Offset printers, Rayavaram, E.G.Dist.; Sri S.V. Raja Sekhar, M/s Arunodaya note book manufacturers pvt. Ltd., Vijayawada stated that printing press category shall be changed from Category- II to Category-III.

Sri K.J. Chandra Rao, New Tech Printers, Vijayawada has stated that printing press was included in category-II in 2011 and prior to that it was in Category-III. Therefore, Printing press shall be included in category-III to have reasonable tariff for them.

Sri B. Trinadh Babu, Printers Welfare Association, Ongole, Prakasam Dist. has stated that printing press category shall be changed from Category-II to Category-III.

Sri N. Samba Siva Rao, President, AP State off-set printers association has stated that printing press category suddenly reclassified as Category-II from Category-III based on Tariff order 2011 and raised huge back billing amounts against many of its members and it is unjust. It shall be rectified and shall be changed back to Category-III.

Sri G. Pratap Reddy, President, Nellore Printers Association, Nellore has stated that the printing industry is suffering major setbacks one among them is power tariff. Upto 2011, printing is in Category-III (considered as under SSI units). From 2011, the Category was changed to Cat-II from Cat-III and the power tariff is doubled. In an average, every printing press is paying 100% excess every month. This is a big amount. Even in our neighboring states of Karnataka, Kerala and Tamilnadu, the tariff is in industrial category and their tariff is far lesser than ours.

**Discoms Response:** Since printing press is under Commercial category in Retail Supply Tariff Order issued by the Commission, the same is being billed under Category-II. The printing presses invariably have sales in the premises. Hence the request for conversion of printing presses to Cat-II is not justified.

Commission's view: Though the categorization was specified for printing presses in the tariff order of FY2011-12 only and not earlier and though admittedly printing presses were billed for consumption charges as belonging to LT-III Industry category earlier, the tariff orders of FY2010-11 and FY2011-12 did not specify any reasons or grounds stated by the distribution licensees or found by the Commission justifying the change in categorization. The grievance of the individual and representative objectors on behalf of the printing presses is mainly about back billing from 2011-12 in FY2016-17 and the abnormally heavy amounts of arrears demanded to be paid at a time. While they recovered the cost of printing including the electricity consumption charges from their customers till FY2016-17 at the old rates, there is no scope for collecting such arrears from the customers who utilized their services and they have no means to pay the huge arrears from their own meager resources. The grievance clearly appears to be genuine. Clause 3.4.1 of GTCS as it stood before 31.05.2014 limits the right to recover arrears of consumption charges to six months only in such cases. Though the said clause after 31.05.2014 did not specify any time limit, Section 56(2) of the Electricity Act, 2003 limits the right to recover any sum due from any consumer to two years from the due date even in case of a person who neglects to pay the electricity charges. Persons against whom no demand was ever made for higher charges on change of categorization and who were regularly paying the bills as demanded at the original rate should, in law and equity, stand on a better footing. The distribution companies shall have to therefore arrive at any arrears recoverable with reference to Clause 3.4.1 of GTCS with a limit of six months upto 31.05.2014 and thereafter in accordance with the limitation under the Electricity Act, 2003 or otherwise in law before making a demand for the arrears in question. Both the DISCOMS shall therefore obtain competent legal advice on the issue and revise their demand bills for the arrears from each of the printing press consumers within their respective jurisdictions as per such advice and issue them afresh. The demand bills already issued towards the arrears claimed from FY2011-12 till 2016 shall not be further acted upon and shall stand stayed without any further coercive action till such revised bills are issued. If the amounts claimed under such demand bills are already collected and if any amounts are found to be collected in excess on revision, such excess amounts shall be adjusted in future bills. The consumers having been put on notice about the current categorization from 2016, shall be liable to pay the consumption charges at the tariffs applicable for such categorization from then onwards. The printing press consumers are of course otherwise at liberty to pursue all the remedies available to them under law against the change in categorization or the quantum of consumption charges claimed.

#### Tariff for Corn drying units on par with Dairy and Aqua

140 Sri Maganti Venkateswara Rao, Member of Parliament, Eluru has stated that tariff for corn seed drying units may be revised to lower tariff i.e. demand charges ₹21 and energy charges ₹3.75 like Dairy and Aqua.

#### **Discoms Response:** NIL

Commission's View: The representation of the Hon'ble Member of Parliament is forwarded to the State Government and the DISCOMs for communication of their response within one month to enable the Commission to take a decision on merits till which time of course the existing tariff will continue.

## **Concessional tariff for Educational Institutions**

141 Prof. V. Umamaheswara Rao, Registrar, Andhra University, has stated that the Andhra University is drawing electric power at HT-11 kV and the electricity consumption in the University is categorized under HT Category-II. The electricity consumption in the University is mainly for Classrooms, Laboratories, Research Work, Student Hostels, Water Supply System, Street Lighting, Health Centre, Offices, etc., which are run on non-commercial basis with the funds provided by State and Central Governments and other Institutions. The educational institutions, students' hostels run by the Government Agencies, Public Trusts are on no profit basis, street lighting, water supply schemes etc. connected with L.T. Power supply are given concessional rates. The University is utilizing electric power for the same purposes. Since it is connected with HT-11 kV power supply, the concessional rates are not extended to the University as per tariff orders. The Commission is requested to extend concessional rates for the electricity consumption in the Andhra University under special category with other Government Educational institutions.

Sri B. Suryanarayana, President, Acharya Nagarjuna University Private Colleges Management Welfare Association, Guntur has stated that all the private educational institutions (both aided and un aided are paying the electricity bills in commercial category i.e. Category-II. All these institutions except for a few (Corporate) are doing service to the public and they are not commercial. Educational Institutions are neither malls nor multiplexes. As the class rooms, labs, office rooms, staff rooms, computer labs being used for training the students are not commercial complexes, the Commission is requested to consider changing the category from Category-II to

## Category-VII.

M/s Vishnu Educational Society a member of AP Private Engineering colleges management Association, Hyderabad have requested for change of category from HT-II to non-residential and non-commercial category for all of its member institutions.

Discoms Response: Matter is in the purview of APERC.

Commission's View: The DISCOMs may examine the request on merits and formulate their views in consultation with the State Government and communicate the same to this Commission regarding the manner in which energy consumption charges have to be levied on various educational institutions as defined in Section 2(18) of the Andhra Pradesh Education Act, 1982 to enable further consideration of the issue. This exercise shall be completed within four (4) months.

## Concessional tariffs for Street lights and Rural Water Works

142 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M), have stated that the street lights and water supply schemes of local bodies shall be treated as public service and not commercial and tariffs shall be fixed accordingly.

**Discoms Response:** LT-VI Category tariff is applicable for street lights and drinking water supply schemes of local bodies and LT-II tariff is applicable for commercial utilization. LT-VI tariff is less than LT-II tariff.

**Commission's View:** The licensees requested for creation of a separate consumer category for these categories of consumers in their ARRs for FY2015-16 and the Commission had brought all Composite Water Supply Schemes under LT-VI (B) from that year while they were claimed to be charged under LT industry. For such composite water supply schemes in HT, even fixed / demand charges are not imposed. As the act of balancing to maintain the existing tariffs for this year has already become a tough job, further concession to these categories of consumers is not possible in this year.

# Tariff for purified drinking water plants

143 M/s Mother's Memorial Society of Charities, Ongole, Prakasam Dist. have stated that as part of their charity programs they are supplying purified drinking water at ₹ 5 per

20 litres to the people in the villages and towns of Andhra Pradesh, without profit motive. This process is being done through government and voluntary organizations. The tariff for the purified drinking water plants may be implemented as per the Memo.No. CGM/Opn./SPDCL/TPT/RAC/F./D.No.270/2017, Dt. 4.5.2017, wherein it was mentioned that "Mineral water plants / Drinking Water Plants run by any individuals or Co-operative Societies shall be billed under LT Category-III Industry-General (Such premises shall not be mixed with shops or retail sales outlet)"

**Discoms Response:** LT-III tariff is applicable for the mineral water plants and drinking water plants which do not have sales and retail outlets. But Mother's memorial society have sales and retail outlets. For such plants, tariff of Category-II only applies.

Commission's View: As providing safe and pure drinking water is the duty of the Government and as the society is doing the same without any profit as a service, the State Government is being requested by the Commission to subsidize the consumption of energy by the society in full under Section 65 of the Electricity Act, 2003.

## Water Supply Schemes in SC/ST areas to be given concession

144 Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam has stated that NTR Sujala Sravanthi water supply schemes existing in SC/ST Areas shall be given concession.

## **Discoms Response:** NIL

**Commission's View:** NTR Sujala Sravanthi water supply schemes are already enjoying a lower tariff from FY2015-16 by creation of a new sub-category on the proposals of the licensees.

145 Sri Jalagam Kumara Swamy, Vijayawada; Sri Yallapu Surya Narayana, Chinnampeta, E.G.Dist.; Sri Rasamsetty Raja, Prattipadu, E.G.Dist.; Sri Donga Nageswara Rao, Ambajipeta, E.G.Dist.; Sri Adabala Rajamohan, Ambajipeta, E.G. Dist.; Sri Muthyala Jamil, Ambajipeta, E.G. Dist.; Sri Kavuluri PathiRaju, Kethavaram, W.G.Dist.; Sri Mandapati Vidyadhara Reddy, Chatrayi, Krishna Dist.; Sri Medasani VijayaBhasker, Thatigadapa, Krishna Dist; Sri Bheemavarapu Bramhananda Reddy,Gudibandivaaripalem, Guntur Dist.; Sri Vanga Sambi Reddy, Gudibandivaaripalem, Guntur Dist.; Sri Aavuya Venkateshwar Reddy,Kollipara, Guntur Dist.; Sri Godagattu Sreerambabu, Paluru, Prakasam Dist.; Sri Addagadda Satish Kumar, Nagulapalem, Prakasam Dist.; Sri Katuri Harikishorekumar Reddy, Paturu, Nellore Dist.; Sri Polireddy Rammohan Reddy, Buchireddypalem, Nellore Dist.; Sri Vemireddy Hanuma Reddy, Chemudugunta, Nellore Dist.; Sri Kukati Sunil Kumar Reddy,Manegunta, Nellore Dist.; Sri Inamadugu Venkata Ramanareddy, Vavveru, Nellore Dist.; Sri Seernam Venugopalreddy, Chatrai, Nellore Dist.; Sri Chemikala Madhavareddy, Proddutur, Kadapa Dist.; Sri N. Janardhana Reddy, Y.M.Palli, Kadapa Dist.; Sri B.Obul Reddy, Paatha Giriyapalli, Kadapa Dist.; Sri A. Gangireddy, Pagadalapalli, Kadapa Dist. representing Bharatiya Kisan Sangh (BKS) and others as mentioned at the respective issue have stated the following.

#### (i) Free power to all consumers of LT Category V(A) and V(B)

Power at free of cost for 7 hours shall be supplied to all the consumers of category V(A) and V (B) as considered by Government of Telangana recently. Income to the DISCOMs at the current tariff is only ₹ 38 Crores per annum from this category.

**Discoms Response:** Free power supply for 7 hours is being extended to all farmers having less than 2.5 acres of wetland and having less than three connections for dry land with DSM measures as per the Govt. directions. Extending free power supply to other farmers is not under the purview of Licensees.

**Commission's View:** The consumer or the class of consumers to be subsidized under Section 65 of the Electricity Act, 2003 have to be identified by the State Government and the required quantum of subsidy has to be provided by it. The request for supply of power free of cost for 7 hours a day to all consumers of category V(A) and V(B) as already done in the State of Telangana hence can only be commended to the State Government of Andhra Pradesh and cannot be decided by the Commission. Hence, the Commission requests the Government of Andhra Pradesh to consider the same positively.

## (ii) Tariff reduction/free power for LT Category V (C) consumers.

Power @ ₹ 1.50 per unit shall be supplied to all the consumers having connected load from 1 HP to 25 HP of category V(C) as upland farmers

require higher HP compared to delta land farmers for lifting same quantity of water.

Sri B. Tulasidas, Vijayawada has stated that concessional tariffs may be extended for 5 HP and below Aqua Culture farmers and Salt Farming Units.

Sri Pulla Satyanarayana, Sir Arthur Cotton Nursery Association, Kadiyapulanka, E.G.Dist. has stated that power supply to small nurseries shall be considered under agriculture and shall be subsidized.

Sri Kandula Durgesh, Ex-MLC and Smt. Jakkampudi Vijayalakshmi, Coordinator, YSRCP Rajanagaram Constituency, Sri A. Veerraju; Sri Girijala Veerraju, Co-ordinator, YSRCP Rajamendravaram Rural, E.G.Dist. have stated that nursery farmers are under tremendous pressure being insisted for payment of electricity charges at ₹ 3.50 per unit. Free power shall be extended on par with Agricultural Consumers.

Sri J. T. Rama Rao, APJAC, Visakhapatnam has stated that the proposal for concessional rates to nurseries is improper.

Sarva Sri B.Vekat Rao, Arjun Rao, Srinivasa Babu, Kadiyam Narayana Rao, Reddy Gani Raju, S.R.J.R. Veera Raju, B.Venkata rayudu, K.L.Rayudu, K.Veera Venkaiah, K.Nageswara Rao, P.Srirangam, G.S.N.Murthy, V.R.Rao, S.V.S.Rao, Naga Lakshmi, Vijayalakshmi, V.Kanaka Raju, K.Krishna Rao, Durga Rao, Surya Chandra Rao, Jalli Lazer, Narayanamma, Mudragada Bhima Raju, Satyanarayana Murthy, Koteswara Rao, Manyam Rama Krishna Rao, M. Sivaji, S.Chinna Satyam, Mudragada Subba Raju, Darmasam Sivaji, S.Varalakshmi, G.M.Rao, Bathula Subba Rao, Adimulam Satyam, E.Brahmamma, Mudragada Rama Rao, K.Ratnam, B.Venkata Rao, B.Krishna Murthy, Ramella Andallamma, Venkata Ratnam, Ratnam Sreenivas, Sreenu Babu, A. Rama Krishna, A. Chandra Rao, Parvathi, Veera Nagamani, N. Anantha Lakshmi, S.M.Lakshmi, J. Chinna Surya Rao, Satyanarayana, Nageswara Rao, Chalapati Rao, Anjaeyulu, Akula Chandra Rao, G. Subba Rao, Adapa Santhosh Kumar, Patamsetti Thrimurthulu, Gatti Nageswara Rao, Patamsetti Venkatrao, D.Rama Krishna, K.Surya Rao, R.V.R. Linga Rao, M.Suryabharathamma, Dontamsetti Satya Narayana, Kuppala Chakravarthi, R.Chinna Rao, Adimulam Sesha Ratnam, A. Sree Rama Ratnam, A. Veeraraju, R.V.R.Prasada Rao, Kamireddi Maha Lakshmi, Sarojini, Ramella Venkata Ramanayya, Adimulam Surya Chandra Rao, G.V.Lakshmi,

Krishna Veni, Kothapalli Yesaiah, M.Venkata Lakshmi, E.Someswara Rao, Annamdevula Konda Ramudu, A. Manayya, Kothapalli Sarvarayudu, A. Surya Prasad, D. Surya, D. Veera Prasad, M. Sivaji, K.Baby, K.L. Narasimha Rao, Putta Venkata Rao, Raju, P. Sreerangam, K. Kondaiah, T. Polaiah, Sreenivasa Rao, Thulasamma, T. Kondaiah, B. Pullaiah, Satyavathi, T.S. Raju, R. Ramanna, Pulla Rao, A. Subba Rao, V. Lakshmi, P. Rama Rao, A.V. Rao, K. Veera Raju, Y. Durga Lakshmi, M.V.V. Satya Narayana, K. Srinivasa Rao, T. Ganga Raju, S. Surya Raju, P.T.S. Devi, P. Sreenu, R. Satyam, Pulla Nagalakshmi, T. Dharma Raju, R. Venkata Ramaiah, Devanagamani, Torati Subhadra, Dontamsetti Veera Bhadraya, G. Pullaiah, A. Thirupati Rao, Ch. Venkata Rao, S. Rama Rao, B. Tata Rao, Garapati Satyanarayana, Thorathi Nageswara Rao, V. Rama Lakshmi, Borsu Veera Swamy, M. Sri Lakshmi, G. Gopala Krishna, K. Papa Rao, Allampalli Satyavathi, E. Bramarambha, Annamdevula Muniyya, A. Satya Narayana, Ramdla Venkata Ramaiah, K. Veerayamma, Gatti Chandrayya, Alla Raghavamma, Mogalappa Pullaiah, Tirupati Anjaneyulu, Kalidhinidi Chandra Rao, Sunkara Satyam, V. Sarojini, Tadala Durga Rao, S. Ramayamma, Kandipudi Kondaiah, Ramella Venkata Ramaiah, B. Suramma, D. Papa Rao, E.S.K Narayana Murthi, G. Sriniyappa, R.P.S. Venkata Rao, E. Thirupati Rayudu, B.V. Venkata Rao, T. Veera Swamy, V. Govinda, P.V.V. Satya Narayana, P. Ramamurthy, D. Rajarao, Kesava Swamy, SVVR Manikyam, Mudragada Bheema Raju, Pilla Subba Lakshmi, Bala Krishna, Mudragada Rama Rao, K. Veera Venkata Rao, Surya Kumari, Satyavathi, Nagamani, A. Surya Prasad, K. Banthi Raju, A. Dharma Rao, B. Surya Rao, Kami Reddy Ramulu, Annamdeevula Satyavathi, Pantham venkata Lakshmi, Kaasi Devi, A. Surya Prasad, Masreenu Rao, P. Manjula Devi, C. Eeswara Rao, M. Lakshmi, P. Rajeswari, P. Veera Vathi, G. Adhi Narayana, D. Babu, G. Sundaram, P. Thata Rao, B. Satyam, T. Subba Rao, M. Savitri, Ch. Venkanna, VN Ratnam, T. Ramanna, Pulla Satyanarayana, Gopala Krishna, M. Veeranna, G. Satyam, T. Sesha Ratnam, VN Ratnam, A. Bhupathi Raju, P. Varalakshmi, M. Bhanumurthy, B. Dharma Raju, Y. Rama Prasad, Sekha Giri Rao, Anantha Lakshmi, Subba Rao, K.Venkatrao, K. Satyanarayana Murthy, Ch. Easwarudu, K. Boorayya, N. Yesayya, K. Satyanarayana, Rama krishna, Y. Venkatra rao, K. Ramulu and K. Veera Raju of Kadiam, East

Godavari District have stated that rural horticulture nurseries shall be provided with subsidized power.

**Discoms Response:** It is proposed to supply power at subsidized rate of ₹ 1.50 per unit to the horticulture farmers whose connected load is less than 5 HP for encouraging small farmers. Concessional rate is proposed as per the directions of the State Govt. Matter is in the purview of APERC.

**Commission's View:** The Commission accepts the proposal in the ARRs to supply power at ₹ 1.50 to horticulture farmers whose connected load is less than 5 HP as it was stated to be on the directions of the State Government who have hence to invariably subsidize the power so supplied, under Section 65 of the Electricity Act, 2003. As already stated above, subsidizing any other category of consumers is within the province of the State Government and not the Commission. Nursery farmers were extended all the benefits on par with agriculture connections (free category) by G.O.Rt.No. 39, E, I&I (Power-I) dept. dated 14.03.2018, thus accepting the request.

# (iii) Tariff for Prawn culture hatcheries & feed mixing plants

Tariff of ₹ 4.87 per unit shall be fixed to Prawn culture hatcheries & Prawn feed mixing plants similar to Poultry hatcheries & Poultry feed mixing plants under Category-3.

**Discoms Response:** The unit rate ₹ 4.89 was decided to encourage small scale industry Poultry hatcheries& Poultry feed mixing plants under Category-III. Applying the same unit rate for Prawn culture hatcheries & Prawn feed mixing is not under the purview of Licensees.

**Commission's View:** Aqua culture hatcheries and Aqua culture feed mixing plants were not separately specified while fixing the tariff for Aqua culture in the same manner in which such hatcheries and feed mixing plants relating to Poultry were specified in the tariff orders of FY2017-18 and FY2016-17 resulting in some ambiguity relating to them. As hatcheries and feed mixing plants relating to poultries or aqua culture are qualitatively similar, Aqua culture hatcheries and Aqua culture feed mixing plants are also specifically included in item (iv) of LT Category-III: Industry liable for fixed charges at ₹ 75/kW/month and energy charges of ₹ 4.89/Unit, giving the desired relief to them. The reasonable classification of the hatchery and feed mixing activity

separately from the poultry and aqua culture activity is based on intelligible criteria, with the former being more industrial/commercial in character and the latter being akin to activities like agriculture, dairy farming etc.

#### (iv) Implementation of Regulation no. 4 of 2013

EPDCL is not implementing the regulation no 4 of 2013 properly and collecting the DTR cost from Agriculture consumers.

**Discoms Response:** Exemptions are being given in DTR cost, development charges and service line charges as per the guidelines dated 09.09.2016 of APERC for all categories of consumers.

Dr. Uppuganti Bhaskara Rao, Ex-Agriculture Officer, Bharatiya Kisan Sangh has stated that Regulation 4 of 2013 is not being implemented. Transformer cost is being collected against the provisions of the APERC Regulations. Regulation is to be implemented from the date of issue of order and repayments shall be made to the consumers from whom transformer charges were collected.

**Discoms Response:** Regulation is being implemented from 01.04.2017. Issues if any will be sorted out.

**Commission's View:** The DISCOMs swear by faithful implementation of Regulation 4 of 2013. The loss caused to any consumer by non-compliance with the said Regulation even after the directions of this Commission may be brought to the notice of the respective licensees through written representations from the effected consumers and they shall be examined and ordered on merits by the respective CMDs within 6 months and compliance reported to the Commission with all the necessary details. The licensees shall also have proof of service of such orders on the respective consumers to enable them to approach the CGRF concerned for redressal of their grievances against such orders.

#### (v) 9 hours free power supply to Agriculture.

Free power shall be supplied to agriculture for 9 hours a day in view of surplus power.

Sri B. Tulasi das, Vijayawada has stated that 9 Hours supply shall be extended to Agl. Sector.

Sri Daadi Veerabhadra Rao, Ex. Minister and President, Anakapalle

Agricuturists Association has stated that supply shall be enhanced from 7 to 9 hours for and shall be given uninterrupted for agriculture.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that 9 hours free power shall be supplied to farmers.

**Discoms Response:** Free power supply is being extended 7 hours a day as per the Govt. directions. Extending to 9 hours a day is not under the purview of Discoms.

**Commission's View:** The matter is not within the purview of the Commission but **the Commission commends the request for positive consideration of the State Government and the DISCOMs.** 

## (vi) Pending Agriculture Connections.

Supply shall be granted to all pending 75,000 agriculture connections immediately in view of surplus power availability.

Sri Kakarla Guruswamy Naidu, Surineni Vaari Palle, Paakala Mandalam, Chitoor Dist. has stated that number of pending applications are increasing day by day for new connections. There are 1,12,931 pending applications and many of these pertain to SPDCL. 1,02,428 applications are pending in SPDCL for various reasons and 1,50,000 farmers are waiting for new connections and only 50,000 are considered and status of balance applications is not clear. Therefore, all the pending agriculture connections shall be sanctioned.

Sri M.V. Srinivasa Rao, Gavarapalem, Anakapalli, Visakhapatnam has requested for release of pending agriculture connections.

Sri S. Saravana, Pakala, Chittoor Dist. has stated that all the fees have been paid for agriculture connection in pakala sub division and waiting for release of supply for six months.

Sri K. Munaswamy Naidu, Kundetivaripalle, Pakala post, Chittoor Dist. has stated that for the consumers who have paid all fees for agriculture connections and waiting for release of supply in villages shall be granted supply immediately. Sri. B. Tulasi das, Vijayawada has stated that no new connections are being given in agriculture sector.

Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that farmers are desperate as there are 1,56,990 agricultural connections pending as on 30.09.2017. Applicants do not know when they will be given their agricultural connections. When there is plenty of power any reason could not be found for accumulation of applications. The licensees should come out with truth regarding pending agricultural connections.

Sri R. Mohan, District Additional Sectretary, Akhila Bharata Raithu Kooly Sangham, Ongole has stated that all pending agriculture connections shall be released.

Sri T. Adikesavulu Reddy, District President, YSR Congress Party farmers wing, Chittoor Dist. has stated has stated that agriculture connections to the farmers in western part of the district who have already paid charges were not given.

Sri Vaada Gangaraju, CITU, Chittoor has requested that all the pending agriculture connections in Pileru division must be sanctioned.

Sri E. Hemadri, All India Agriculture Workers Union, Tirumalayyapalli, Chittoor Dist. has requested for release of agriculture connection.

# **Discoms Response:**

APEPDCL: Status of release of Agriculture Connections in APEPDCL for FY2017-18 is as follows.

Name of the Circle	Target for FY2017-18	Released so far	Agl. Paid pending
Srikakualm	500	592	670
Vizianagaram	75	390	483
Visakhapatnam	300	405	419
Rajamahendravaram	250	363	553
Eluru	475	502	239
Total	1600	2252	2364

Agriculture connections status for FY2017-18

APSPDCL: GoAP has targeted for sanction of 48,400 connections for FY2017-18. The licensee has addressed GoAP for additional quota in order to release the pending services. After receipt of additional quota from GoAP, the pending services will be released.

Applications are being taken from Agl. Consumers, necessary estimation charges are being intimated and soon on receipt of payments those are being kept in priority list. Soon on receipt of necessary target approvals for the next financial Year from Govt. of Andhra Pradesh, agriculture connections are being released as per priority. However, instructions will be issued to get the applications registered and maintain priority in order to implement release of agriculture services as per Govt. instructions.

Commission's View: The State Government and the distribution licensees shall attempt to release agricultural connections to all pending applicants within a reasonable time as the duty to supply on request is a statutory duty under Section 43 of the Electricity Act, 2003 and the relevant statutory regulations. The surplus power scenario and the need for rapid growth of the infant State probably would require release of all power connections of all categories to all pending applicants.

#### (vii) Star rated Motors and ISI pumpsets

Supply 7.5 HP energy efficient pump sets to dry land farmers.

#### **Discoms Response:**

SPDCL: Supply of 5 HP energy efficient motors is being done based on average load of agricultural Consumers. Supply of 7.5 HP motors will be examined.

EPDCL: 973 nos.old pump sets were replaced with 5 HP,7.5HP and 10HP energy efficient pump sets in Rajanagaram Mandal of East Godavari district as part of pilot project for dry land farmers. Supply of 5 HP energy efficient motors is being done based on average load of agricultural Consumers in other areas. Supply of 7.5 HP motors will be examined.

Sri Cherukuri Venugopal Rao, Federation of Farmers Association, Guntupalli has stated that Non-ISI pumps shall be replaced with ISI pumps.

**Discoms Response:** APEPDCL is implementing Agriculture DSM programme for replacing old pump sets with Energy Efficient pump sets. Scheme is going on to replace 35000 Pumps in EPDCL by 31st March 2018. So far, about 8100 pump sets have been replaced.

**Commission's View:** The DISCOMs shall make all efforts to have energy efficient pumpsets universally for the benefit of both the farmers and themselves.

#### (viii) Restore Call centers/Customer Service Centers

Sri Kakarla Guruswamy Naidu, Surineni Vaari Palle, Paakala Mandalam, Chitoor Dist. has stated that without prior information all customer service centres in sub-division offices are closed in SPDCL and therefore lot of inconvenience is caused to the customers. All services are being transferred to "Mee Seva". All "Mee Seva" offices are not providing information as required and hence lot of inconvenience is being caused to the customers. Therefore, necessary action shall be taken in this regard.

Sri K. Munaswamy Naidu, Kundetivaripalle, Pakala post, Chittoor Dist. has stated that Consumers are facing problems due to removal of call centers at sub division level. The same shall be restored.

Sri N. Ravindranath Reddy, Pakala, Chittoor Dist. has stated that consumers are facing problems due to removal of call centers at sub division level without any prior public notice. The same shall be reviewed & restored.

#### **Discoms Response:**

SPDCL: Call centers were removed since June 2017 as per the instructions of Govt. All electricity services are being offered through "MEESEVA" now.

EPDCL: For better service to consumers and to increase the number of service delivery centers, services are being offered through 2600 nos. of "MEE SEVA" centers. All the services offered in call centers are being offered through "MEE SEVA" only now, which have better accessibility.

**Commission's View:** Interaction of the Commission with various stake holders consistently projected the more satisfactory service rendered by the call centers of the DISCOMs free of cost. The services of MEE SEVA centers are not only charged but the electricity sector is one of the various sectors served by such centers resulting in lack of necessary focus and attention to the issues of the power consumers. The DISCOMS and the State Government may re-examine the matter in the said back ground.

# (ix) Concessional tariff for Dairy Farm & Mush room farming sheds.

Sri Donga Nageswara Rao, Ambajipeta, E.G. Dist. has stated that Discoms shall supply power to dairy farms (cattle sheds) and mush room farming sheds  $@ \gtrless 0.50$  per unit.

Sri Adabala Raja Mohan, Ambajipeta, E.G. Dist. has stated that Discoms shall Supply power to dairy farms @ ₹ 1 per unit.

Dr. Uppuganti Bhaskar Rao, Bharatiya Kissan Sangh has stated that dairy shall be given subsidized power.

**Discoms Response:** Dairy is treated as agriculture allied activity and being charged @ ₹ 3.75 per unit for energy and ₹ 20 per kW as fixed charge up to 10 HP load. For loads above 10 HP, unit rate of ₹ 3.86 and fixed charge of ₹30 per kW are being charged. It is not appropriate to charge only ₹0.50 per unit to such consumers.

Commission's View: The suggestions are kept in view.

# (x) Print Bills and GOs in Telugu language

Sri Medasani Vijayabhasker, Thatigadapa, Krishna Dist. has stated that all bills and GOs in Telugu language shall be supplied.

Sri Kakarla Guruswamy Naidu, Surineni Vaari Palle, Chitoor Dist. has stated that Commission made available Regulation 3 of 2016, 2 of 2017 and other Regulations in Telugu language, in print which are very helpful to the consumers. Similarly, Electricity Act, 2003 shall also be made available in Telugu language.

Sri P. Kodanda Ramaiah, Chief Engineer Rtd., Visakhapatnam has stated that ARRs shall be made available in Telugu language.

**Discoms Response:** It is under the purview of the Commission.

Commission's View: The Electricity Act, 2003 in its English and Telugu official versions will be made available by the Commission at subsidized rates shortly. The Commission commends to all the licensees to have their interactions with the public in Telugu including having the consumption bills in Telugu as far as possible.

## (xi) Consumer Grievance Redressal Forum (CGRF)

Sri Godagattu Sree Rambabu, Paluru post, Prakasam Dist. has stated that it is not known whether CGRF is active or not.

Sri Jalagam Kumara Swamy, Bharathiya Kissan Sangh, Vijayawada has stated that CGRFs are not given enough publicity. Consumer awareness shall be created and additional CGRFs shall be created for strengthening.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that CGRF which is inactive, shall be revamped.

Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization, Ongole has stated that CGRF is to be strengthened and many people do not know about CGRF.

#### **Discoms Response:**

SPDCL: CGRF is working actively.

EPDCL: Awareness creation will be carried out. Strengthening of CGRF and additional CGRF is under the purview of the Commission.

Sri B. Tulasidas, Vijayawada has stated that CGRFs may take suo-motu complaints based on reports by media.

Discoms Response: Suggestion noted.

Commission's View: The existence of CGRFs and Vidyut Ombudsman for redressal of the grievances of consumers has been widely publicised throughout the State through extensive circulation of Regulation 3 of 2016, through the media and through the legal literacy programs being organized by the District Legal Services Authorities and Mandal Legal Services Committees with the approval of Hon'ble High Court of Andhra Pradesh and through the website of the Commission. The increase in the complaints being received by CGRFs and the representations being received by the Vidyut Ombudsman is substantial. The CGRFs and Ombudsman are holding their hearings at the places of the aggrieved to the maximum extent possible. The number of complaints received and pending will not justify creation of additional CGRFs as of now. Section 42(5) and (6) of the Electricity Act, 2003 restricts the CGRFs only to "Redressal of grievances of the consumers" and the Ombudsman to representations by "Aggrieved consumers". Any attempt to confer power of suo-motu cognizance on them through Regulation will be violating the statutory provision.

**146** Sri Kakarla Guruswamy Naidu, Surinenivaaripalle, Chitoor Dist. and others as mentioned at the respective issue, have stated the following.

# (i) Extend neutral wire to prevent accidents

The neutral wire from substation shall be extended to single phase DTRs in villages to prevent accidents.

Sri P. Subramanya Yadav, Surinenivaripalle, Chittoor Dist. has stated that neutral wire from substation shall be extended to single phase DTRs in villages to prevent accidents.

**Discoms Response:** Neutral wire from substations was extended up to 5 kM in every 11kV line in villages and proper earthing is made at each and every DTR. Concerned staff are taking regular steps in this regard. If earthing is not proper at any DTR, the same may be complained in concerned section office. **Commission's View:** As desired by the DISCOMS, any local deficiency may be brought to the notice of the concerned field staff.

# (ii) Low hanging wires, old conductors and damaged poles are leading to accidents and AB switches shall be provided.

The electricity lines, agriculture lines in particular are hanging low and posing danger in rural areas and leading to accidents. These lines should be rectified.

**Discoms Response:** Directions have been issued to replace damaged poles and low hanging wires with new material. Already works are under execution. Complaint shall be reported to the concerned section officer for resolving any further issues.

Sri Nachhukuru MuniRatnam Reddy, Ganugapenta, Chittoor Dist. has stated that old conductors in lines shall be replaced and lines shall be taken care by at least once in a month by technical staff to save lives of people.

**Discoms Response:** All lines and DTRs are being inspected as per time bound schedules and necessary repairs are carried out. If specific suggestions are reported to the concerned Assistant Engineer, suitable action will be taken.

Sri S. Saravana, Pakala, Chittoor Dist. has stated that iron poles are in dangerous state at Ramakrishna Mandiram road, Pakala town and house service wires are hanging at low height. Due to this, high voltage induced in service wires causing to burn wires as well as domestic appliances in rainy season. And also, electricity lines are hanging low and dangerous in rural areas. Rectify these lines and prevent accidents.

Smt. P. Bharati, Chittoor Dist. has stated that iron poles are causing accidents.

**Discoms Response:** Report complaint to the concerned section officer and it will be resolved after examining the complaint.

Sri K. Munaswamy Naidu, Kundetivaripalle, Chittoor Dist. has stated that all wires around the electric poles are hanging low giving alarm bell in villages and no time bound supervision in this regard.

**Discoms Response:** All lines are being inspected in time bound schedules and directions are issued to rectify this kind of issues immediately.

Sri P. Subramanya Yadav, Surinenivaripalle, Chittoor Dist. has stated that old iron current poles are causing accidents during rainy season in villages. Action shall be taken to replace all these poles and prevent accidents. Electricity lines are hanging low and dangerous in rural areas and leading to accidents. Rectify these lines.

**Discoms Response:** All lines and DTRs are being inspected as per time bound schedules and necessary repairscarried out. If specific suggestions are reported to concerned the Assistant Engineer, suitable action will be taken accordingly.

Sri D. Narasimhulu Naidu, Adenapalli, Chittoor Dist. has stated that HVDC wires of poor quality and shall be replaced.

**Discoms Response:** Quality wires are being used in HVDS schemes. If there is a quality lapse, complain to the concerned Assistant Engineer for a solution.

A.B switches shall be provided to DTRs erected under HVDS scheme. Old and damaged A.B. switches shall be rectified to protect the farmers from accidents.

Sri Nachhukuru MuniRatnam Reddy, Ganugapenta, Chittoor Dist.; Sri K. Munaswamy Naidu, Kundetivaripalle, Chittoor Dist., Sri P. Subramanya Yadav, Surinenivaripalle, Chittoor Dist. have stated that AB switches shall be provided to lines &DTRs erected under HVDS scheme.

Sri Y. Siddaya Naidu, Diguvamagam, Chittoor Dist. has stated that for the requests are being made for the last 3 years for providing AB switches for at least 2 or 3 services. It was agreed but not implemented.

Sri N. Subramaniam Naidu, Vaddipalli, Chittoor Dist. has stated that damaged poles and AB Switches shall be replaced.

Sri V. Madhusudana Rao, Damalcheruvu, Chittoor Dist. has stated that AB Switches shall be provided.

**Discoms Response:** AB Switches are provided at all mother DTRs and three A.B. Switches are provided in every feeder.

Sri Reddappa Reddy, Maddinayanapalli, Chittoor Dist. has stated that A.B switches are not provided at many places.

Discoms Response: Specific suggestions shall be made to the Assistant Engineer concerned.

**Commission's View:** The existing infrastructure being outdated or outlived or ill-maintained at considerable number of places is a matter of common knowledge and the DISCOMs shall make every effort to keep the entire infrastructure updated, safer and properly maintained within a reasonable time frame within their available resources. **The Commission recommends to the State Government to extend its helping hand in all possible ways in the matter as electricity is an essential and indispensible public service which must be available round the clock all through and as the deficiencies in its infrastructure are life threatening or life extinguishing to innocent citizens and a disincentive for the industrial, business, commercial and agricultural growth of the State.** 

## (iii) Provide sufficient staff

The consumers are facing problems due to vacant technical JLM and ALM posts in villages. They shall be filled up immediately. All appointments in field shall be transparent. Preference was given based on contractor and hence many eligible are remained unemployed. Many technical staff are being transferred to ERO leading to lack of staff at field level and thus poor service to the consumers. This shall be stopped immediately.

Sri S. Saravana, Pakala, Chittoor Dist.; Sri K. Munaswamy Naidu, Kundetivaripalle, Chittoor Dist.; Sri P. Subramanya Yadav, Surinenivaripalle, Chittoor Dist.; Sri N. Ravindranath Reddy, Pakala, Chittoor Dist.; Sri T. Adikesavulu Reddy, District President, YSR Congress Party farmers wing; Sri S. Jayachandra, Member, CPM District Committee, Tirupati; Smt. P. Bharathi, Eguvapalakuru, Chittoor Dist. have stated that vacancies of lower level technical staff in villages shall be filled up immediately for extending better service to consumers. Transfer of technical staff to EROs shall be stopped.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M), have stated that sufficient staff commensurate with the number of consumers shall be provided to attend the compliants quickly.

**Discoms Response:** Action is being taken to fill up the vacant posts at all levels. The necessary steps to see that the complete staff is available would be taken up immediately. All appointments are made following the due rules in a transparent manner. All customer services are being transferred to "Mee Seva". Lower level staff is being trained regularly. Order was placed on APTS for "TAB"s to provide the same to O&M staff. All customer services like new connections, D-list will be executed/monitored through TABs only here afterwards. Transfers of technical lower level staff to EROs is being stopped and will not be done in future as well.

Sri Nachhukuru Muniratnam Reddy, Ganugapenta Village, Chittoor Dist. has stated that Bills collection shall not be entrusted to lower level technical staff.

**Discoms Response:** Bills are being collected from appointed staff of Licensee only.

Sri D. Narasimhulu Naidu, Adenapalli, Chittoor Dist. has stated that all the vacant posts in substations shall be filled up immediately.

**Discoms Response:** Five (4+1) out sourced staff are being appointed in all substations. This staff is sufficient for substation operation.

Sri K. Bala Krishna Chari, Chennugaripalli, Chittoor Dist. has stated that all the vacant technical staff (JLM, ALM) in villages shall be filled up. Instructions shall be issued to the staff to stay at headquarters for better service to consumers.

**Discoms Response:** Action is being taken to fill up the vacant posts at all levels. Instructions are already in place to stay at headquarters. Instructions will be issued again.

Sri S. Palababu and Sri M. Arogya das representing APSPDCL District Stores Hamali workers Union (CITU) have requested for regularisation of their services.

Sri B. Venkatesh, President; Sri S. Khadarvalli, Secretary, United Electricity Contract Workers Union (CITU), Tirupati have stated that contract workers shall be regularized.

**Commission's View:** The number of consumers each employee in power sector is serving now as against such number in the earlier years is self explanatory of the fact that the power utilities are grossly under staffed. The non-filling of a significant number of vacancies at all levels, considerable increase every year in the number of new consumers of different categories, deployment of unqualified, untrained and under paid outsourced staff and unavailability of the required stores and infrastructure etc. are some of the major reasons for the dissatisfaction regarding the quality of services rendered by the power utilities. Though the deficiency in services may be blown out of proportion by some quarters, pretending that all is well will also be closing our eyes to reality. Therefore, the Commission requests the State Government and the licensees to treat the shortage of manpower, stores and infrastructure as a matter of top priority to be progressively improved as early as possible, if not totally rectified at one go.

## (iv) Collection of fixed charges

As per the current norms for domestic power consumption, every consumer whose consumption is above 1 kW is being charged ₹ 50 per kW. For the purpose of sanctioning supply ₹1400 (₹1200/- as development charges ₹ 200 as fixed charges) is being collected. In addition, ₹ 50 per kW per month is also being charged based on load.

**Discoms Response:** For the purpose of development of DISCOM lines and substations and expansion of supply works, development charges are being collected as approved by the Commission from time to time. ₹ 50 per kW is not being collected as alleged. Tariff order for FY2017-18 may be referred for verification.

**Commission's View:** The monthly minimum charges are not collected on kW basis and realization of minimum income from each consumer for

providing and maintaining the power supply to them is inevitable for the DISCOM to be able to sustain itself.

# (v) Lift restrictions on release of agriculture connections in dark areas

Many villages in SPDCL are kept in dark area in view of depleting ground water table. Due to better rains now, the ground water table has been improved. Therefore, restrictions shall be lifted in these villages and new agriculture connections shall be released.

Sri Y. Siddaya Naidu, Diguvamagam, Chitoor Dist. has stated that due to sufficiency in availability of ground water, dark areas should be lifted and electricity connections should be granted on request. 5 H.P. motors are being freely issued in all the areas where ground water is available sufficiently. Free ISI motors should also be supplied to farmers in areas where ground water table is very high.

Sri C. Nagaraj, Sri G. Uday Kumar, Sri C. Nagaraju, Sri G. Ramakrishna, Sri M. Gopal, Sri G. Gangulappa, Sri P. Venkat, Sri B. Ramana and Sri C. Vamsi from Diguvamaachireddygaaripalle, Chittoor Dist. have stated that the Nimmanapalli Mandal shall be removed from dark area list for releasing agriculture connections.

**Discoms Response:** Lifting of dark areas is not under the purview of DISCOMs.

**Commission's View:** Regulating the use of the available ground water through identification of dark areas is an inevitable necessity for sustaining ecological balance and it is not desirable for the Commission to interfere in such matters.

# (vi) Provide meters to Street lights and RWS and collect charges

Large number of panchayath street lights and rural water supply schemes are not provided with meters. Provide meters immediately and collect charges. Sri K. Munswamy Naidu, Kundetivaripalle, Chittoor Dist. has stated thatmeters shall be fixed to all street lights and water supply schemes in villages to improve the income of the company by preventing electricity theft. Sri K. Bala Krishna Chari, Chennugaripalli, Chittoor Dist.; Sri P. Subramanya Yadav, Surinenivaripalle, Chittoor Dist.; Sri D. Narasimhulu Naidu, Adenapalli panchayathi, Chittoor Dist. have stated that meters shall be fixed to all street lights and water supply schemes in villages and collect the charges.

**Discoms Response:** Street lights and water supply schemes are provided with meters.

**Commission's View:** Universal metering of the energy supplied is an ideal to reach which the DISCOMS shall make all efforts.

# (vii) Replacement of Burnt/Stolen agriculture DTRs

All burnt/stolen agriculture DTRs in villages are not being replaced in time and hence causing crop loss. Sufficient stock of DTRs is not being maintained and not as per the tariff order. Hence this issue shall be resolved to avoid inconvenience to the customers.

Sri K. Munaswamy Naidu, Kundetivaripalle, Chittoor Dist. has stated that Failed/stolen agriculture DTRs shall be replaced immediately without showing any technical reasons.

**Discoms Response:** All burnt/stolen DTRs are being replaced within 48 hours on report of complaint. Toll-free number 1912 may be contacted for resolving all issues.

**Commission's View:** The action being taken by the DISCOMs is appreciated.

#### (viii) Supply interruptions

There is interruption in power supply during rainy season in villages due to frequent failure of 11 kV porcelain disk insulators and pin insulators. These shall be replaced with Polymer insulators to improve the service to consumers. Latest technology may be adopted to detect failure of insulators for replacing immediately to restore the supply at the earliest to the consumers.

**Discoms Response:** All 11 kV porcelain insulators are being inspected and repaired wherever necessary in a scheduled time period. Specific suggestions may be reported to a concerned Asst.Engineer for taking necessary action.

**Commission's View:** The DISCOMs will hopefully improve their services in this regard.

# (ix) Readability of Bills

The billing details recorded against each item of printed heading are not getting matched in the bills generated. It is an inconvenience and shall be rectified.

Sri K. Bala Krishna Chari, Chennugaripalli, Pakala post, Chittoor Dist. has stated that Billing details recorded against each item of printed heading would not match and not relevant in monthly bills generated. It is an inconvenience and shall be rectified.

**Discoms Response:** Directions already issued to concerned offices of SPDCL to record billing details matching with the printed headings in monthly bills generation and relevant software is also changed. Now, the bills generated are in order. For further concerns in this regard, concerned ERO office may be consulted.

Commission's View: Let the bills be readable and understandable.

# (x) Additional Charges are more than current consumption in monthly Electricity Bill

The Fixed charges, customer charges, electricity duty are more than electricity charges in a bill and is burdening the consumers. All such additional charges shall be reduced. Disconnection/reconnection charges are being levied in the bills without actually effecting in the field. This shall be stopped immediately.

**Discoms Response:** Different charges are proposed based on actual expenditure of DISCOMs. Disconnection/reconnection charges will be examined and suitable instructions will be given.

Sri Y. Siddaya Naidu, Diguvamagam, Chittoor Dist. has stated that Charges should be applied only to the units consumed by domestic users. Service charges, customer charges, electricity duties and other taxes should not be charged.

**Discoms Response:** Only energy charges and customer charges are being charged according to the tariff order.

**Commission's View:** Only the permissible charges, duties and taxes shall be collected from the consumers.

# (xi) Solar pump sets

3 HP & 5 HP Solar pump sets offered by SPDCL in co-ordination with MNRE are not useful for farmers in Chittoor Dist. Hence 7.5 HP and 10 HP solar pump sets shall be sanctioned.

**Discoms Response:** 3 HP & 5 HP solar pump sets are being installed as per the guidelines of GoI, MNRE and NREDCAP.

Dr. Uppuganti Bhaskar Rao, Bharatiya Kissan Sangh has stated that payment shall be considered for the power supplied by farmers from Grid connected solar pump sets.

SriK.Trinadha Reddy, printing press, Rajamahendravaram has stated that Solar Pumpetsproblems shall be arranged to be rectified.

**Discoms Response:** Agency has given 5 years guarantee period for any problems in the Solar pumpsets. If not rectified within the guarantee period penalties can be levied on the agency and 10% of the money can be retained. Company will take the initiate and get it rectified by another agency in case of any problems.

Commission's View: The assurance by DISCOMS be acted upon.

# (xii) Concession to senior citizens in electricity charges.

Sri K. Munaswamy Naidu, Kundetivaripalle, Chittoor Dist.; Sri. RavindranathReddy, Pakala, Chittoor Dist.; Sri K. Bala Krishna Chari, Chennugaripalli, Pakala, Chittoor Dist. have stated that Discoms shall give concession to electricity consumed by senior citizens similar to concessions extended by State Governments in various sectors.

**Discoms Response:** It is not under the purview of Discoms.

**Commission's View:** Except in cases where the senior citizens are living alone, the learned objectors may suggest the manner in which the quantity of electricity consumed by the senior citizens alone under any service connection can be quantified.

## **Protection of larger consumer interest**

147 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad; Sri B. Tulasi Das, Vijayawada; Sri Ch. Narasinga Rao,State Secretariat Member,CPI(M), Visakhapatnam; Sri Penumalli Madhu, State Secretary CPI (M), Vijayawada; Sri Kandharapu Murali, CPI(M) State Committee Member, Tirupati have stated that in its order dated 29.11.2017, in I.A.No.8 of 2017 in O.P.Nos.28 & 29 of 2016, the Commission has observed, "the Commission only wishes to place on record that all its actions and orders or expressions are in bona fide, honest and neutral belief of their correctness, reasonableness and justification in fact and law and hopefully the credibility of the Commission, on that count is not in doubt. The Commission might have gone wrong in its conclusions and its actions but never knowingly or designedly. However, the Commission does not claim to be infallible and will continue to make every effort to improve itself without giving any scope for repetition of its mistakes, if any" (para 53). It is hoped that the Commission would endeavor in all its earnestness to live up to such graceful and laudable intentions in discharging its regulatory obligations and functions and set an exemplary record in protecting larger consumer interest within the limitations of its jurisdiction.

#### **Discoms Response: NIL**

**Commission's view:** The Commission is thankful to the objectors for the live hopes they have in it and wishes to live upto their expectations.

#### Other miscellaneous Discoms' service issues

- **148** Sri K. Bala Krishna Chari, Chennugaripalli, Pakala post, Chittoor Dist. has stated the following:
  - i. There are two single phase transformers in Chennugaripalli. But always only one transformer is being kept for use. Due to this voltage is coming low and therefore street lights are not glowing.

**Discoms Response:** It will be examined through concerned assistant engineer and issue would be resolved.

ii. Higher readings are being recorded for new domestic services released. This is not being rectified in spite of many reminders.

**Discoms Response:** Complaint shall be reported to Assistant Engineer concerned with meter particulars of service. Assistant engineer would arrange meter testing and it would be replaced if found erratic in the testing.

- iii. Old iron current poles carrying supply to agriculture wells shall be replaced.Discoms Response: Action would be taken if specific complaint is reported to the Assistant Engineer concerned in this regard.
- iv. ELRs shall be avoided during the timings supply extended to agriculture.

**Discoms Response:** ELRs are being issued in unwarranted situations during timings supply extended to agriculture. Attempt to minimize these interruptions.

v. Meetings shall be conducted at least once in a quarter on electricity supply issues at Mandal level.

**Discoms Response:** Meeting is being conducted every month at substation level.

vi. Disconnection of supply charges are being levied in electricity bills without undertaking disconnections. It is unjust.

Discoms Response: Instructions will be issued after examination.

- A. Sri C.V. Mohanrao, Secretary, Repalle Pattanabhivruddi Sangham, Repalle, Guntur Dist. has stated the following:
  - i. Charges were collected from new domestic consumers who have taken supply from 01.04.2016 considering under Group C billing and which are supposed to be billed under Group-A as indicated in letter Dt .21.03.2017 written by CMD/SPDCL to Chairman APERC. Thus, excess amounts paid under Group C during that period shall be adjusted in future bills.

**Discoms Response:** At the time of granting new connection to domestic consumer, it will be allocated Group A or B or C based on connected load and estimated average consumption in first year. Group allocation in subsequent years is based on previous year consumption only.

ii. When the service meter recorded higher units of consumption and foundproved in challenge testing, in all such cases, excess units recorded are being taken into account and billed under Group C. If excess units are exempted, the same comes under Group A. Hence all such consumers are paying extra amounts than they are supposed to pay. Therefore, Groups shall be decided based on actual consumption only in those cases.

**Discoms Response:** When the meters are found to be recorded excess in challenge testing, all such excess units are being exempted in billing consumption and the same is considered for deciding the group and not based on average units. If there is any specific complaint in this regard, the same shall be reported to AAO/ERO concerned for examination to take appropriate decision.

- B. Sri Reddappa Reddy, Maddinayanapalli, Chittoor Dist. has stated the following:
- i. More time is taken to replace failed fuses at DTRs due to lack of sufficient lower level staff and also demanding money to such things.

**Discoms Response:** DTRs fuse replacement is being done as per the citizens charter. Specific complaint shall be reported with reference to money demanding.

ii. There are loose lines in some places.

**Discoms Response:** Intimate details of all such loose lines to the Assistant Engineer concerned.

 Money is being demanded for installation of poles and lines for extending supply to new agriculture connections granted.

Discoms Response: Specific complaint shall be reported.

C. Sri A. Bhasker Reddy, Karinapalli, Pakala Mandalam, Chittor Dist. has stated that four DTRs which supplying power to 14 services in P. kothakota village were stolen 4 years back and FIR was also filed in puthalapattu police station. It is brought to the notice in last three APERC public hearings. Farmers have lost income due to this. Hoping for kind action to install four transformers at least now.

**Discoms Response:** Will be resolved after examination.

- D. Sri Jalagam Kumara Swamy, Bharathiya Kissan Sangh, Vijayawada has stated the following:
  - i. Construction of plinths, Transportation of materials all are being done by farmers with their expenses. This is not acceptable and instructions may be issued to field to stop such practice.

**Discoms Response:** Construction of Plinths, Transportation materials is to be done by EPDCL and being monitored. Field Officers will be instructed once again in this matter. Specific issues deviating the same may be brought to the notice for taking appropriate action.

ii. Substation meetings to be conducted

**Discoms Response:** As per instructions of Secretary/Energy/GoAP, the substation level meetings will be conducted from 26.02.2018 to 02.03.2018 duly informing the local MLAs covering all the substations.

- E. Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam has stated the following:
  - i. Interruptions are more for agricultural supply. 24 Hour supply to be given to agriculture sector.

**Discoms Response:** Efforts will be made to reduce interruptions to agriculture sector. Extending 24 Hr supply is in the purview of the State. Govt and EPDCL will oblige directions of GoAP in this regard.

ii. EPDCL consumers are appreciated for not indulging in theft and therefore request to extend benefits to the Consumers.

**Discoms Response:** In terms of AT&C losses and Revenue collections EPDCL is performing very well in view of the best consumer mix.

- iii. Mobile Apps shall be upgraded.
  Sri J. T. Rama Rao, APJAC, Visakhapatnam has stated that Mobile APP is not being updated. Facility shall be given to pay even bill of ₹ 50.
  Discoms Response: Suggestion is noted. Will be verified and upgraded.
- F. Sri J. T. Rama Rao, APJAC, Visakhapatnam has stated the follwoing.
  - i. Water usage in Sileru basin- disputes with Odisha State to be solved in view of the generation issues.

Discoms Response: Matter is in the purview of the GoAP.

ii. Spandana to be implemented in all Circles.

**Discoms Response:** Spandana is meant for all districts. So, complaints are being received from all districts. Spandana is also being conducted at all the respective circles offices by Superintending Engineer/Operation. Consumers can avail this opportunity to get the complaints resolved.

iii. Quality Control wing is to be strengthened. Those officers to be allowed to work with free hand in checking the works.

**Discoms Response:** Suggestion is noted. Quality Control wing has been given free hand to conduct inspection. No pressures on the officers.

iv. Covered DTR premises shall be used to propagate safety, energy conservation etc. instead used by outsiders.

Discoms Response: Suggestion is noted.

- G. Sri P. Kodanda Ramaiah, Rtd. Chief Engineer, Visakhapatnam has stated the following:
  - i. The essence of commercial organization is not reflected in filings
  - ii. Subsidy, Cross subsidy components shall be indicated in monthly bills issued to consumers similar to Maharashtra.
  - iii. Tariff structure shall be rationalized.
  - iv. No tariff hike is proposed ignoring the UDAY provisions.
  - v. Commission has to take judicial independent approach in decisions.
     Discoms Response: All suggestions are noted.
- H. Sri T. Gopal, Social Activist, Visakhapatnam has stated that monthly bill collections shall be permitted through Meter Readers to help senior citizens.
  Discoms Response: Bill Collection from consumers is being done by through online methods as well as at EROs. Collection by Meter reader is not advisable.
- Sri Karri Appa Rao, A.P. Cheraku Rythula Sangham has stated that co-generation in Sugar factories to be encouraged. All Co-op & private sugar factories to be encouraged.

Discoms Response: Matter is in the purview of the Commission.

J. Sri D. Butchhiraju, Veeranarayanapuram, Madugula Mandalam has stated that low voltage problem is being faced in the agriculture pumpset since 2010. Several times the motor was burnt but still the problem is not rectified.

**Discoms Response:** The Superintending Engineer/Operation/Visakhapatnam was instructed to examine the issue.

K. Sri Balaji Prasad Pandey, Member CGRF has stated that DISCOM Equipment i.e. Transformers, Lines shall be insured.

Discoms Response: Suggestion noted.

L. Sri Balaji Prasad Pandey, Member CGRF has stated that 1912 to be given more publicity

**Discom Response:** Issue will be examined and action will be taken accordingly.

M. Sri A. Doraiah, a representative from The AP Poultry Federation, West Godavari has stated that Solar pump sets shall be supplied to poultry similar to Agriculture.

**Discoms Response:** Can approach Discom for the purpose of solar power to poultry.

N. Sri V. Lakshman, Sunrise nets, Sampathnagaram has stated that more number of momentary interruptions (40 interruptions per month) and variations in voltages in the line supplying power to his industry.

**Discoms Response:** Matter entrusted to the Superintending Engineer/ Operation/ Rajamahendravaram for redressal of the grievance.

O. Smt. V. Padmaja, Ullithotaveedhi, Rajamahendravaram, E.G.Dist. has stated that small household activities like papad making, stiching, other lively hood activities etc. are not to be charged in Commercial category.

**Discoms Response:** The activity in households using motors etc. will be surely considered as commercial and will be billed under commercial category. Such motors etc. are to be kept in a separate premises so that households and commercial activity will be separately billed as per Categorization done under GTCS provisions.

- P. Sri K. Trinadha Reddy, printing press Rajamahendravaram has stated the following:
  - i. Bills to the extent of ₹ 60,000/- were issued to agriculture consumers. All arrears of farmers shall be waived.

**Discoms Response:** If such bills are brought to the notice of APEPDCL, surely, they will be rectified immediately. Before 2004, as per the Govt. orders all the arrears were waived off and from then only bills for maintenance charges of  $\overline{\mathbf{x}}$  30/- month issued to agriculture Consumers for every 6 months amounting to  $\overline{\mathbf{x}}$  180/-. Only those maintenance charges are under arrears. There are no arrears on Energy charges and Demand charges.

ii. Prior intimation to be given to farmers before laying of DISCOM's 33 kV or 11 kV lines.

**Discoms Response:** Licensee's works regulation is being followed, however, field officers will be once again instructed.

iii. Bolts and Nuts are not available in the stores. Jointing kits are being purchased by the consumers.

**Discoms Response:** Superintending Engineers/Operation are empowered to place purchase orders for jointing kits. However, instructions will be issued to field officers to not to cause any inconvenience to consumers.

iv. DISCOM to come forward to make aware the common man about the procedure of attending breakdown, and rectification activities so that common

consumers can understand the whole exercise and hard work done by the DISCOM employees.

Discoms Response: Suggestion noted.

Q. Sri G. Chakradhar, Satyanarayana Spinning Mills, Tanuku has stated that transformer wise metering is to be installed so as to know the exact losses. Old transformers which measure 3%-4% losses to be replaced.

Discoms Response: Suggestion noted.

R. Sri M. Narasimha Rao, GM(Operation), M/s Sudha Agro oil and Chemical Industry Ltd., Samalkot has stated that Cross Subsidy Orders are not being implemented as per APERC orders. Energy Charges are not being adjusted as per the provisions of the PW&PA thereby penalizing for excess CMD. Penal demand charges levied on third party consumers shall be waived off.

**Discoms Response:** M/s Sudha Agro approached Hon'ble High Court. Hon'ble High Court has issued stay orders. APEPDCL filed a stay vacate petition. Matter is sub-judice. However, matter will be looked into and sorted out.

S. Smt. Jakkampudi Vijayalakshmi, Co-ordinator, YSRCP Rajanagaram Constituency has stated that BPL households service connection is levied ₹ 1425. When Meter is burnt, meter cost being collected. Several loose spans in Sitanagaram Mandal.

Discoms Response: Matter will be looked into by the DISCOM officials.

#### **Charges for shifting of poles**

T. Sri Girajala Veerraju has stated that levying charges for shifting poles or lines that belonged to panchayath in villages is not correct.

Sri T. Adikesavulu Reddy, District President, YSR Congress Party farmers wing, has stated that shifting charges shall not be insisted from those farmers who have shifted their connections from one point to another point in their fields in case original bore had been dried up.

**Discoms Response:** If lines are laid after construction of building then the shifting charges will be borne by the DISCOMS. But if the lines are laid prior to the construction of building, then the charges have to be borne by consumers.

#### Low voltage problem

U. Sri Chintapalli Narayana Reddy has stated that Low voltage problem for two years and substation was not sanctioned.

**Discoms Response:**SE/O/Rajamahendravaram was instructed to examine the matter and rectify the low voltage problem.

#### Higher charges in Lower voltage

V. Sri K. Rama Krishna from Ambajipeta, a HT consumer has stated that DISCOMs are charging more energy charges for 11 kV consumers than 33 kV or 132 kV or above.

**Discoms Response:** Distribution costs will be more in case of 11 kV and hence charges are also more.

#### **Agriculture DTRs Transportation by farmers**

 W. Sri Jalagam Kumara Swamy, Bharathiya Kissan Sangh, Vijayawada has stated that Construction of plinths, transportation of materials all are being done by farmers. Such practice is not acceptable and instructions may be issued to field.
 Discoms Response: Construction of Plinths, Transportation materials is to be

done by EPDCL and being monitored. Field Officers will be instructed once again in this matter. Specific issues deviating the same may be brought to the notice for taking appropriate action

#### Solar Roof Top

X. Sri J. T. Rama Rao, APJAC, Visakhapatnam has stated that Awareness on Solar rooftopmust be created.

**Discoms Response:** All efforts are being made to create more awareness on Solar Rooftop installations implemented in APEPDCL.

Y. Sri. T. Gopal, Vizag, Social Activist has stated that Rooftop Solar subsidy from the State Govt. shall be enhanced.

**Discoms Response:** Rooftop Solar plants are being installed in accordance with the directions of the State Govt.

Z. Sri K. Trinadha Reddy, printing press, Rajamahendravaram, E.G.Dist., has stated that more clarity is to be given on Rooftop Solar. Many Consumers are ready to go for solar. Awareness to be created.

**Discoms Response:** Solar roof top policy is clearly displayed in APEPDCL website. Application can be registered with the concerned Divisional Engineer, connections will be given accordingly.

- AA. Sri V. Nagaraju, CPM Party district leader, Tirupati has stated that APSPDCL is collecting charges from SC/ST consumers for the units consumed less than 75 units and same shall be stopped.
- BB. Sri R. Mohan, District Additional Sectretary, Akhila Bharata Raithu Kooly Sangham, Ongole has stated that free power upto 75 units for SC/ST consumers is not implemented 100% in Ongole Circle.
- CC. Sri P. S. Ellappan, Pudupet, Nagiri, Chittoor Dist. has stated that capacitor surcharge being levied regularly and unable to find a solution and wanted relief from capacitor surcharge.
- DD. Sri Joy Hemanath Kumar, IOCL, Chittoor has stated that their service at Chittoor shall be changed from LT Category – II to LT Category – III as per tariff order for FY2017-18.
- EE. Sri A. Rajanaidu, Damalcheruvu, Pakala Mandal, Chittoor Dist. has requested to release connection to his home remotely located in his farm.
- FF. Sri N. Subrahmanyam, Sri T. Purushottam, Vettala Taduku Village, Narayanavanam Mandal, Chittoor Dist. stated that there are 100 nos. of families in AAW Colony and requested to release service connections.
- GG. Sri S.W. Sambandan, Ex. Warrant Officer, Pakala, Chittoor Dist. has requested for release of connection to the shifted bore well from the existing service.
- HH. Sri Maarella Srinivasulu, KVPS, Tirupati has stated that free power upto 75 units is not being given to SC/ST families in all villages in Chittoor Dist.
- II. Sri R. Mohan, District Additional Sectretary, Akhila Bharata Raithu Kooly Sangham, Ongole has stated that DDUGJY should be continued and services shall be released.
- JJ. Sri N. Shyambabu, M/s Laxmi Narasimha Spinning Mills, Vipparlavaripalem, Prakasam Dist. has stated that frequent low voltage problems are being faced by them.
- KK. Sri Ch.V.N. Raghurama Gupta, Managing Director, M/s Ceasan Glass Pvt. Ltd., Ongole, Prakasam Dist. has stated that their request for grant of installments for payment of pending CC charges was not granted by the APSPDCL.

LL. Sri Daadi Mutya Raju, Veeranarayanapuram, Maadugula Mandal, Visakhapatnam District has stated that agriculture connection was disconnected in 2010 and not restored till now.

Commission's View: The suggestions which deserve acceptance on merits be accepted and acted upon. The individual grievances be attended to and resolved to the extent permissible and possible. The other aspects raised be considered and decided on merits. It does not speak well of the Commission or the DISCOMs if a grievance remains un-redressed even after being complained against during three public hearings of APERC in the earlier three years. We should not only be accountable to the public at large but also appear to be so to their satisfaction.

#### **Revise Standards of Performance (SoP)**

149 Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that revision of standards of performance is long due. The present standard of performance i.e. Regulation no. 09 of 2013 needs thorough revision. The commission is request to take up the revision of 09/ 2013 on priority basis in consultation in consumers.

**Discoms Response:** Matter is in the purview of APERC.

Commission's View: Both the distribution licensees and the transmission licensee of the State shall appoint respective committees of senior officers from their operation, maintenance and finance wings to make a thorough study of all the duties and functions to be performed by them, the standards to be prescribed for their performance and the penalties to be imposed for violation / non-compliance of such standards and submit their reports to the Commission within six (6) months. Such reports of self introspection shall be placed by the Commission in public domain and taking into account the views of all stake holders, the Commission shall make an attempt to make an upto date revision of Standards of Performance.

#### Savings of Energy Conservation Measures are not getting reflected

**150** Er. A. Punna Rao, Vijayawada has stated thatif AP has achieved 10% (5000 MU) by energy conservation out of 25% in the crucial sectors as stated by the CEO of AP State Energy Conservation Mission on 14-12-2017 at New Delhi, the energy requirement in AP should show a decline trend but in reality, it is not. The CEO has

also stated that 1700MU was saved by use of 2.17Cr. LEDs (7/9 Watts) in 2015-16, (life of LEDs said to be 50,000hours some of them got burnt in 50/500 hours). In 2015-16, the LT domestic consumption was about 11,000MU and as per USAID standards the domestic lighting consumption is 3300MU (30%). The claim of saving of 1700MU out of 3300MU of lighting load appears to be unreasonable and most unjustified. The high decibel chorus of DISCOMs in this matter is objectionable. The DISCOMs are requested to give the number of single bulb consumers in their jurisdictions. It is learnt that more than 10% LEDs burnt in a few days /weeks and were not replaced as promised. Will the DISCOMs withdraw the claim of saving of 1700MU in 2.17Cr LED lamp usage? Will the APERC can discover the truth and direct the DISCOMs to keep the tall claim in cold storage?

Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated that Installation ISI standard efficient pump sets is another important part of Agriculture DSM measures. Recently, the Commission also allowed special programmes under both the DISCOMs to install energy efficient pump sets. The programmes are being implemented by EESL. Implementation of these programmes appears to be slow. The Commission in its Order in O.P. No. 20 of 2017 dated 17-06-2017 directed, "The petitioner shall submit a quarterly performance and compliance report on the implementation of the project, more particularly about quantum of actual energy savings and the cost benefit analysis done through a 3rd party, the first such report becoming due by 15t August 2017." (Para 22.j) How far these savings are taken in to account in estimating agriculture consumption for the FY2018-19?

**Discoms Response:** AP Discoms on their own are promoting energy efficiency and participating in major initiatives of the State Govt. such as LED Bulbs distribution, Distribution of LED tube lights and Energy Efficient Fans, replacement of old/obsolete Agriculture pumpsets with Energy efficient pumpsets etc. A comprehensive third-party inspection for assessing the impact of DELP scheme on energy savings has been carried out by the State Energy Conservation Mission (SECM), Dept. of Energy, I&I GoAP on behalf of APEPDCL. Andhra University, Visakhapatnam has been engaged for carrying out the study in Srikakulam & West Godavari Districts and ESCI, Hyderabad has been engaged for carrying out the study in Anantapur & Guntur Districts; wherein the DELP scheme has been taken up in first

phase. Detailed survey has been carried out in around 28,000 households in the two districts of APEPDCL and around 31,054 households in the two districts of APSPDCL, where the scheme was launched. The annual energy savings was found to be 73.7 Units per bulb as against the Agreement value of 55.65 Units (32% more savings) in APEPDCL. The annual energy savings was found to be 62 units in DELP in Phase-I and 60 units per LED bulb in Phase-II in respect of APSPDCL. Approved Domestic consumption for FY2017-18 as per the Tariff Order is 13, 841 MU. Failed bulbs are being replaced wherever the consumers approached the constituency wise authorized counters.

APEPDCL: As part of pilot project on installation of Energy Efficiency Pump sets (EEPS) 973 existing pumpsets were replaced in Rajanagaram Mandal in E.G. Dist.In this Financial Year, as part of AGDSM programme, APEPDCL has contemplated to replace 35,000 nos. 5 HP pumpsets with Energy efficiency pumpsets and so far, 4103 pumpsets have been replaced.

APSPDCL: The savings from energy efficient pumps are were taken into account while estimating agricultural consumption for FY2018-19.

**Commission's View:** The quest for truth by Sri A. Punna Rao and Sri M. Thimma Reddy, with vast experience in power sector obviously did not result in the actual energy conservation and savings out of the various energy conservation measures taken arrived at. Both the distribution licensees may furnish both the learned objectors the data or the results of the third-party inspections or studies or any other positive material with them on the savings effected with the copies of the same to the Commission to satisfy that the gap between the desired and achieved is little.

#### Awareness on online payments

151 Sri B. Hume Sastri, Chief Engineer (Rtd.), Visakhapatnam has stated that payment of monthly bills through bank (ECS) is not propagated at all, as this will reduce bill collection expenses. Pamphlets advertising such system, are affixed only in corporate offices, but not exhibited at bill collection centers and e-seva centers to enlighten consumers about such simple method of bill payment. Huge ques are formed at bill collection centers in hot son and consumers are put to a lot of inconvenience. Efforts may be made to affix these pamphlets at all bill collection centres and e-seva centres. **Discoms Response:** APEPDCL has already taken up consumer awareness on different payment options available for payment of monthly electricity bills by the consumers by way of pamphlets, display at collection centers, previous call centers as well as through the website. Further, digital marketing awareness is being proposed under digital strategy of EPDCL. Thus, by continuous efforts, EPDCL has achieved around 30% of its collection through online line payments. However, though various payment methods are available, general public are inclined and prefer to pay at collection centers as accustomed.

**Commission's View:** Consumer awareness education on payment options is stated to have been already taken up in a big way by the licensee. It is unfortunate that the licensees, the State Government in its Energy Department and its other agencies and Organizations have themselves not been completely made energy conservative, energy efficient and energy saving. The Commission addresses the State Government and all its agencies in this regard.

#### **Energy conservation**

152 Sri K. Ramakrishnam Raju, President, Vessel Contractors Welfare Association, Visakhapatnam has stated that all offices/ under takings under GOI & GoAP/ others have got entitlements / scales of accommodation issued from time to time for A/Cs and coolers etc. to ensure energy conservation as per rules / guidelines / act in vogue. But many establishments are not complying above. If officers concerned for provision of specific electrical Items and acting against to the Interest of State / energy conservation policy, licensee may be directed to educate through their vigilance / electrical safety officers & brought to the notice of HOD's/ CVC etc. Licensee may organize counseling / public participation in true spirit during energy conservation week at sub-station level which is lagging at present.

Sri Kondapalli Vasudeva Rao, Chief Editor, Electrical and Electronics GeneralSamaacharam magazine, Visakhapatnam has stated that energy conservation in domestic consumers shall be encouraged which reduces cross subsidy charges from other consumer categories.

Sri Karri Appa Rao and Sri Karri Ganesh, AP Cheraku Rythula Sangham, Visakhapatnam have stated that energy efficient equipment shall be sold at concessional rates. Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization, Ongole has stated that energy conservation shall be taken up in a big way.

**Discoms Response:** The suggestions of the objectors are noted. For promotion of energy efficiency in the State there is a separate nodal agency under the provisions of the Energy Conservation Act 2001 which is the AP State Energy Conservation Mission (APSECM). The APEPDCL on its part is promoting energy efficiency and participating in major initiatives of the State Govt. such as LED Bulbs distribution, Distribution of LED tube lights and energy efficient Fans, replacement of old/obsolete agriculture pump sets with energy efficient pump sets. Energy conservation week has also been conducted with big fanfare during December 2017 duly involving all filed level officers.

Commission's view: Apart from the educative and propagating energy conservation week, continuous efforts are being made through APSECM and APSEEDCO in association with EESL and also by the State Government and the licensees to promote and sustain energy conservation to the maximum extent possible. The APERC played its own role as an active catalyst, for example APERC facilitated the ongoing work to make all the court buildings and judicial residential quarters in Andhra Pradesh energy efficient, the project being executed by APSEEDCO and EESL under an agreement with the Hon'ble High Court of Andhra Pradesh. Andhra Pradesh is a good performer at the National level in the matter of energy savings. However, much more needs to be done which shall be a committed ongoing process.

**Energy Efficiency measures** 

153 Sri K. Ramakrishnam Raju, President, Vessel Contractors Welfare Association, Visakhapatnam has stated that Licensee may take initiative to arrange out lets for the sale of energy conservation fittings like LED / CFL lamps / ceiling fans / tube light fittings etc. with subsidized rates / company original sale rates to achieve desired energy conservation and thus environmental safety. APEPDCL may address suitably to keep these items by canteen stores department of Ministry of Defence and INCS under Eastern Naval Command also. Since about one lakh customers can utilitize to ultimate energy conservation.

Discoms Response: In Association with AP State Energy Efficiency Development

Corporation (APSEEDCO) the APEPDCL has taken initiatives to arrange outlets for sale of Energy Efficiency equipment (LED Bulbs, Tube Lights and Energy Efficiency Ceiling Fans) as a promotional measure for the convenience of the Consumers.

**Commission's view:** The steps taken by the DISCOMs shall continue with more vigour.

## IE Rules are not followed

154 Sri B. Hume Sastri, Chief Engineer (Rtd.), Visakhapatnam has stated that as per IE rules a minimum ground clearance of 6 feet should be maintained from live L.T. point. But in case of all distribution transformers, the fuse box is kept at a height of 4 feet or less. Everyday photographs of such items are published in the newspapers for remedial action and every new distribution transformer is fixed in the same fashion. In several places even the 11 kV bushing of transformer is accessible at a height of 5 or 6 feet. Will the matter be examined and remedial action taken?

**Discoms Response:** Such distribution boxes are being identified and are being replaced with SMPC distribution boxes. The licensees are very particular in implementation of IE Rules relating to safety aspects.

**Commission's View:** As the licensees are already on the job, they will continue with it in all seriousness.

## Issues of Safety, Electrical Accidents and Compensation

- **155** Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation (PMGER), Hyderabad has stated the following:
  - a) In reporting electrical accidents while APEPDCL provided information on departmental and non-departmental accidents and the number of accidents which were due to department fault APSPDCL did not provide such disaggregate information. The availability of disaggregate information would help to understand and formulate steps to tackle them.

FY	Due to Dept. fault	Not due to dept. fault	Total	No. of ex-gratia paid (as on 31st Jan 2018)
2016-17	70	172	242	163
2017-18 (Upto Sept'2017)	52	142	194	82

Discoms Response: Information of accidents in APSPDCL

b) Despite of highlighting the issue of these electrical accidents and the need to take steps to prevent them and including the recent Commission's Regulation on electrical accidents there is no let up in incidence of these avoidable accidents. During FY2016-17 the number of fatal accidents stood at 443. During the first half of2017-18 this number has already reached 361.

**Discoms Response:** APEPDCL is taking all required measures in respect of ensuring Safety by spending huge amounts towards the same and by giving wide awareness as well as training to the field officers and staff in order to eliminate accidents etc.

The following preventing actions are being taken in the field by APSPDCL from time to time to prevent electrical accidents:

- (i) Rectification of loose lines, replacement of short/damaged poles.
- (ii) Providing of safety fencing to the distribution transformers.
- (iii) Renewal of earth electrodes/pipes.
- (iv) Arranging tree clearances.
- (v) Replacement of damaged A.B. Switches & LAs.
- c) The Construction, Operation& Maintenance of electrical plant & lines especially at distribution level by DISCOMs is in a very unsafe condition. DISCOMs are not following the basic statutory safety regulations of CEA. The State government and its CEIG are not taking action on DISCOMs.

**Discoms Response:** The guidelines / directions of the Commission in this regard from time to time are being followed. The DISCOMs are following all the safety regulations of CEA and in course of time, if any deviation found due to damage of poles & stays, laying of roads, etc. the same are being rectified.

d) At many places especially in rural areas, bare live parts in DTRs and associated bare lines and wires are not kept inaccessible to living beings. Barriers, fences and enclosures and minimum clearances to ground are not maintained so that live parts are out of reach to prevent fatal shocks as required in Regulations 58,17,37(1) and 44(1)(i) of CEA (Measures relating to safety and electric supply) Regulation, 2010.For safety, isolating AB switches on HV side of DTRs are to be kept in working condition as per Regulation 80(2)(a)(b) of CEA (Technical Standards for construction of electrical plants and lines) Regulations, 2010. At many DTRs, AB switches are stuck in closed position and do not open.

#### **Discoms Response:**

APEPDCL: Suggestion noted.

APSPDCL: The lines & DTRs are erected as per standards only, but wherever less clearances lines /DTRs structures found, due to raising of road levels, are being rectified with insertion/ replacement of poles and raising the DTRs plinths as per standards. Suggestion is noted. Damaged AB Switches of DTRs are rectified by replacing with new spares and further additional AB Switches are provided at spur lines in lengthy 11 kV lines in rural area.

e) As per Regulations 74(1) (2) of CEA (Measures relating to safety and electric supply) Regulation, 2010 and Regulation 78(1) and (2) of CEA (Technical Standards for construction of electrical plants and lines) Regulations, 2010, on all DTRs on H.V. sides of transformers, surge diverters are to be provided to protect consumers against transient over voltages due to lightning and switching surges and protect consumers equipment getting damaged. But in almost all DTRs these are not in working condition and are disconnected. The statutory CEA (Safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011 give very important and elaborate policy and management systems for ensuring electrical safety. Regulation 4(4) requires the supplier to provide physical/financial resources for safety management, internal and external audit of safety. Regulation 5 requires preparation and application of detailed safety manuals / it gives what matters are to be covered (Refer schedule I & II). Regulations 6(1)(c)(ii) requires appointment of a very senior level officer for safety, working directly under Chief Executive. Regulations 6(1)(d)(e)(t)(g)gives his functions and duties like periodic inspection, audit, training, advising management on prevention of injuries. Regulation 5 of CEA (Measures Measures relating to safety and electric supply) Regulations 2010 which is being revised also deals with electrical safety officer and authorized Chartered electrical safety engineer for periodical testing and to conform to Regulation 30 & 43. APDISCOMs are not implementing the above mandatory regulations. APERC is requested to order APDISCOMs to submit detailed report and evidence to show their top down commitment to these management level Regulations. Public awareness is very important in promoting electrical safety. APDISCOMs do not have any materials even in their websites for creating awareness in safety among general public and consumers. Recently IEEE Hyderabad Section produced a video film and designed posters on electrical safety. These may be used by APDISCOMs in their work on promoting electrical safety.

#### **Discoms Response:**

APEPDCL: Suggestions noted.

APSPDCL: All new DTRs are provided with surge diverters only and whenever old surge diverters damaged are replaced with new ones. Already instructions are issued to maintain safety equipment, viz., hand gloves, helmets, safety belts, earth electrodes etc. and the Employees Unions also insisting for the same. The CEA guidelines and ERC regulations issued from time to time are being followed. Danger boards are provided at DTRs structures, RMU, etc. and safety information is provided in web site. However, the suggestions given are noted and will be examined.

f) Accident statements / statistics are not available to public. These must be kept in public domain and submitted annually to the Commission. Many Circles in DISCOMs do not discharge their statutory duty of informing details of accidents to CEIG. Auditing and accident investigations need to be reviewed by an independent agency like the Commission. Action is not taken many a time by DISCOMs even when dangerous conditions are brought to the notice by public and media.

#### **Discoms Response:**

APEPDCL: Suggestion noted.

APSPDCL: Payment of ex-gratia / compensation is being intimated to the individual claimants directly and payment also done online to their individual accounts from the Corporate Office. Already instructions were issued from the Corporate Office to the field officers to intimate the details of accident to the CEIG.

g) Payment of compensation to electrical accident victims continues to be an area of concern. In APSPDCL area majority of accidents have taken place in two Circles Anantapuram and Kumool. 144 fatal accidents had taken place in these two circles during FY2016-17. During the first half of 2017-18 this number stands at 106. This disappointing tack record applies to compensation also. During the FY 2016-17 in these two circles compensation was paid in 11 cases only. During FY2017-18 compensation was not at all paid. This after the Commission has allowed separate funds to pay compensation as a part of the Tariff Order.

Vijayawada and Guntur Circles present a different picture. Under Vijayawada Circle while 51 fatal accidents had taken place during the period under examination compensation was paid in 103 cases. Similarly, under Guntur Circles while 38 fatal accidents had taken place during the period under examination compensation was paid in 68 cases. This also needs to be scrutinized.

Accidents for FY2017-18 (upto Sept 2017)							
Circle	Due to	Not due to	Total	Ex-gratia			
	Dept. fault	Dept. fault		Paid			
VJA	2	7	9	9			
GTR	5	4	9	8			
OGL	0	33	33	15			
NLR	0	12	12	12			
TPT	1	19	20	2			
KDP	0	8	8	6			
ATP	45	10	53	23			
KNL	1	49	50	7			
Total	52	142	194	82			

# **Discoms Response:**

Sri K. Ramakrishnam Raju, President, Vessel Contractors Welfare Association, Visakhapatnam has stated that Safety regulations are to be ensured and preventive maintenance is to be carried out in advance to rainy season. The distance between building and overhead line is not ensured and services are provided without clearance from GVMC/ plan approval authority which are leading to accidents. Services not to be provided for illegal encroachments / occupations even VUDA layouts also. IE rules are not ensured during expansions/ modifications. APEPDCL should strictly ensure and enlighten their engineers / GVMC Planners at substation level with constant vigilance. Even extended roofs / varandah roofs / mesh works protracting to very near to overhead lines which are against IE rules. Electrical safety officer of Licensee / consumers may need counseling / training /strict instructions by concerned organization. APERC may consider this suggestion and necessary instructions may be issued to all concerned for strict compliance of IE rules. Single common service is to be provided for multi portion buildings with internal sub-main services with proper DB sealed and meters provided in the building as done for flats to avoid multi services connections from service pole to Building for easy maintenance during attending complaints.

**Discoms Response:** The suggestions and the request of the objector are noted and the required safety precautions will be taken up in operation & maintenance of the equipment.

Sri B. Hume Sastri, Chief Engineer (Rtd.), Visakhapatnam has stated the following:

a) In a case of fatal non-departmental accidents, around ₹5 Lacs is paid as compensation to the family of the deceased where as in case of departmental accident nearly ₹15 lacs and above is paid. Why this discrimination? In one case EPDCL was directed to pay ₹10 lacs/ by consumer court and in another case nearly ₹ 1 cr. compensation was ordered by judicial court in New Delhi. If higher compensation is demanded in case of accidents, EPDCL will be penalized by several Crores of Rupees. Hence measures initiated to reduce accidents may be informed.

**Discoms Response:** APEPDCL is taking every effort for payment of ex-gratia amount of ₹ 5 lakhs as per the APERC Order, for the cases where the accidents occurred due to mishap of nature and departmental faults. Ex-gratia is being paid immediately after receipt of the necessary documents such as post-mortem report, panchanama, legal heir certificate etc. whereas in the case of dept. fatal accidents compensation amount is paid to the employee as per the sanction received from Commissioner of Labour as per workmen compensation act. The licensee submits that the safety of all the consumers and department personnel is important and several improvement works are being taken up on a continuous basis in order to overcome the possible accidents.

b) In most distribution systems including AP (before 1970) vertical formation of distribution lines is adopted. If this system is followed accidents due to conductor snapping can be eliminated thus saving hundreds of precious lives. Reasons may be enlightened as to why this system is not being implemented to L.T. lines.

**Discoms Response:** "V" Formation is standard form of distribution System for 11 kV and 33 kV for prevention of induction and corrosion. Hence Horizontal distribution of LT network is the standard formation whereas vertical formation is done only at narrow streets, which is not recommended at every location.

c) It is statutory obligation to provide guarding between the lines of different potential resting on the same supports. But in AP the system is given up. Reasons for the same may be enlightened. There are several cases where accidents are taking place due to lower potential conductor attaining higher potential on account

of snapping of the higher potential conductor and lakhs of rupees worth appliances in consumers' premises are damaged and utility refuses to compensate the damages. In recent past it was reported in the newspapers that one 11 kV line touched L.T. lines causing damage to consumer appliances worth of lakhs of rupees and in another case a 33kV line snapped across a street and several vehicles were destroyed. The reputation of the utility (APEPDCL) was damaged by these incidents.

**Discoms Response:** To avoid snapping of 11 kV conductors in EPDCL network, all old aged ACSR conductors have been replaced with 100/55 mm2 AAA Conductor. Guarding is being provided wherever necessary.

Sri K. Rajendra Reddy, P. Kothakota, Chittoor Districthas stated thatin page 109 of APSPDCL ARR, ex-gratiais paid to humans and animals in accident cases. During 2016-17, 163 human victims were paid a sum of ₹ 34,68,000 which workouts to an average of ₹ 21,276 per victim and 43 animal victims were paid ₹8,50,00,000, that is ex-gratia per animal works out to ₹ 1,97,674. During 2017-18, 23 animal victims were paid ₹ 51,00,000 that is ₹ 2,21,739 were paid for each animal and in the same year 59 humans victims were paid ₹ 12,80,000 that works to ₹ 21,694 per human victims. It is not understandable on what basis the compensation is being paid. Compensation should be paid on the basis of guidelines laid down in proceedings no. APERC/SECY/EAS/S-101177/2013 dt.13.08.2013 but the licenseehas taken law into its own hands and paid composition as it liked. This requires an explanation and investigation regarding irregular payments.

Ex-gratia Paid								
Circle	2016-17				2017-18 (upto Sep. 2017)			
	Animal (Nos.)	Amount (₹)	Human (Nos.)	Amount (₹)	Animal (Nos.)	Amount (₹)	Human (Nos.)	Amount (₹)
Vijayawada	60	1200000	14	2700000	43	860000	15	2900000
Guntur	64	1200000	6	1200000	2	40000	2	490000
Ongole	2	104000	0	0	8	260000	0	0
Nellore	20	400000	5	1000000	6	120000	1	200000
Tirupati	0	0	2	400000	0	0	1	200000
Kadapa	6	264000	11	2200000	0	0	3	900000
Anantapur	7	140000	4	800000	0	0	1	500000
Kurnool	4	80000	1	200000	0	0	0	0
APSPDCL	163	3468000	43	8500000	59	1280000	23	5100000

**Discoms Response:** There was a typographical error in the ARR filing. The corrected table is as follows:

Sri Nachhukuru Muniratnam Reddy, Ganugapenta, Chittoor Dist. has stated that Compensation shall be paid as per the M.V. Act for the people who died in electrical accidents.

Sri Jalagam Kumara Swamy, Bharathiya Kissan Sangh, Vijayawada congratulating the Commission for enhancing exgratia to 5 Lakh for those deceased in electrical accidents has stated that ex-gratia to be enhanced to > 5 lakhs as per Supreme Court judgment.

Sri J.T. Rama Rao, APJAC, Visakhapatnam has stated that ex- gratia shall be enhanced to ₹20 Lakhs as in Vizag Steel Plant.

Smt. P. Bharathi, Eguvapalakuru, Chittoor Dist. has stated that compensation to fatal accident victims shall be paid humanly avoiding procedural delays.

Sri B. Venkatesh, President; Sri S. Khadarvalli, Secretary, United Electricity Contract Workers Union (CITU), Tirupati have stated that compensation of ₹20 lakhs shall be paid to the families of workers died in electrical accidents.

#### **Discoms Response:**

SPDCL: Compensation is being paid as per the regulation no. 2 of 2017 issued by the Commission.

APEPDCL: Ex-gratia of ₹5 Lakhs is being paid to all deceased persons as per APERC direction. Enhancement of ex gratia is in the purview of the APERC.

Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Viskhapatnam has stated that Compensation shall be paid to the kith & kin of the deceased within one month of occurrence of accident.

Smt. Jakkampudi Vijayalakshmi, Co-ordinator, YSRCP Rajanagaram Constituency has stated that accidents compensation is not being paid in time as per rules. Immediate action shall be taken.

**Discoms Response:** Instructions will be issued to the field officers to speed up the process.

Sri Hemanth Kumar, Andhra University Students Union Leader has stated that proper safety measures shall be taken to avoid electrical fatal accidents.

Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam has stated that Safety appliances are to be provided to the workers to eradicate accidents.

**Discoms Response:** All safety materials were made available in respective District Stores. Field officers. Will be instructed once again to follow safety measures.

Sri Potluri Ravi, Jangamgudem, Krishna Dist. has stated that purchase of safety tools shall not be permitted from the reserve fund meant for paying compensation to victims of fatal electrical accidents.

#### **Commission's View:**

(a) The Andhra Pradesh Electricity Regulatory Commission Compensation to Victims of Electrical Accidents Regulation, 2 of 2017 clearly stated in Clause 15 that the right of any person to claim compensation under the Regulation cannot affect the right of any such person to recover the compensation payable under the Workmen's Compensation Act or any other Law for the time being in force. Similarly, under Clause 16, the right of any person to otherwise claim compensation under any contract or scheme providing for payment of compensation for death or personal injury or damage to property or any sum payable under any policy of insurance shall remain unaffected by any payment under this Regulation. Hence, the compensation provided by this Regulation is in addition to and not in derogation of any other Law or Rules or Regulations or Scheme or Contract for the time being in force. Hence, if a person is otherwise entitled to departmental compensation or compensation through a Consumer Forum or a Court of Law, the same remains unaffected. The Regulation is thus intended only to provide an additional prompt and adequate relief for immediate support without prejudice to any compensation to which the victim or his dependents are otherwise already entitled under law. Hence the question of any discrimination or deprivation does not arise.

(b) The preamble to Regulation 2 of 2017 referred to various Statutory provisions, Rules and Regulations governing the safety standards eliminating or reducing the risks of any loss of human or animal life or any injury to human being or animal or property. The specified and prescribed safety measures and standards of performance are bound to be observed and complied with by the licensees and if the various deficiencies pointed out by the objectors are true, the licensees shall take immediate remedial measures to rectify such defects and deficiencies. During the presentation during the

public hearings the Chairman & Managing Director of APSPDCL made a request for permission to invest on purchase of equipments for prevention of electrical accidents from the reserve fund created under Clause 28 of Regulation 2 of 2017 and it was stated by him that substantial amount is available in the fund for the purpose. The lack of the required safety equipments and their use has also been highlighted by a number of stakeholders during public hearings. The licensees are hence directed to maintain the required stock of safety equipments and make them available to the operational staff to ensure that no worker or employee is dead or injured due to lack of such equipments. For the purpose, the distribution licensees are permitted to meet the expenses for procuring such equipments from the reserve fund created under Clause 28 of Regulation 2 of 2017 upto a maximum of 10% of such reserve fund and any further requirement of amounts for the purpose shall be met by the licensees from their other resources.

(c)The licensees shall organize awareness programs on safety measures and avoidance of accidents both for the operational staff and the consumers / end users at regular intervals and also widely distribute their safety manuals / literature to the staff and the consumers.

(d) The CEA (Measures relating to Safety and Electrical Supply) Regulation, 2010 and all further measures and requirements specified by the Central Electricity Authority under Section 53 (a) and (b), Section 73 (c) and Section 177 (2) (b) of the Electricity Act, 2003 and the Standards of Performance Regulations of APERC and its Orders and Practice Directions in this regard shall be strictly complied with by the licensees including the transmission licensee. Any non-compliance brought to the notice of the Commission will invite corrective action under Section 142 and 146 of the Electricity Act, 2003.

(e) Specific time limits were fixed in Clauses 16 to 22 of Regulation 2 of 2017 to enable prompt payment of compensation to the victim or dependents and they shall be invariably observed by the licensees. Any deviation will be viewed as violation of the Regulation inviting consequential corrective action.

## **Maintenance of LT Service connections**

156 Sri K. Ramakrishnam Raju, President, Vessel Contractors Welfare Association, Visakhapatnam has stated that LT Service connections/ Replacements In serviceable / defective service connections shall be replaced by APEPDCL and may be charged to consumers instead of replacing by consumers as per the electricity act and rules in vogue. This will help quality and income to Licensee and to avoid inconvenience submitted not complied para 168 on page 150 of APERC order on Tariff for FY2016-17 in true spirit at substation level. APEPDCL may be directed to implement and the decision / rule to be dissimulated to AE/ Inspector / Lineman Level for Strict Compliance.

**Discoms Response:** As per the procedures in vogue LT Service wire has to be procured by the respective consumer. The DISCOM staff would render free service in rectifying the defective service wires.

**Commission's view:** The DISCOMs shall ensure the maintenance of the required quality in maintenance of the LT service connections.

## **Control theft of Power**

157 Sri K. Rajendra Reddy, P. Kothakota, Chittoor Districtstated that APSPDCL has not contradicted the statement of Sri P. Umapathi, Joint Managing Director of Transco regarding large scale theft of power in the area of the licensee, metered sales not being up to the mark and not to victimize the farmers regarding line loss. It is sufficient proof of the fact that is licensee is trying to make the agricultural consumers solely responsible for all deficiencies of un accounted power.

**Discoms Response:** All the efforts are being made to control theft of power by conducting raids through DPE wing.

Er. A. Punna Rao, Vijayawada has stated that the realized amounts from the power pilferage for the year 2017-18 are EPDCL - ₹25 Cr., SPDCL - ₹5.9 Cr., Total realized - ₹30.9 Cr. The conservative estimate of pilferage in AP is around 5% of 50,000MU power consumed 50,000MU, i.e. 2500MU (₹1500 Cr.), whereas the DISCOMs collected only ₹30.9 Cr. The DISCOMs may state estimation of power theft in AP. DISCOMs are requested to give the number of services given to the aqua ponds and the number of theft cases filed against them and the amount collected from them.

**Discoms Response:** The assumption of 5% pilferage is hypothetical. Discoms have been continuously reducing the losses and putting their best efforts to eliminate theft of energy.

APEPDCL: The loss reduction trajectory & the percentage of metered sales for the past five years in respect of APEPDCL are given below for reference.

Financial Year	Metered Sales (%)	Losses (%)
FY2013-14	81.28%	6.33%
FY2014-15	79.56%	6.32%
FY2015-16	81.67%	5.48%
FY2016-17	81.87%	4.99%
FY2017-18	86.91%	5.10%

Existing no. of services in Aquaculture & Animal husbandry in EPDCL as on 31<sup>st</sup> March 2017 are LT - 15,880 & HT - 11 and the number of services released during the current financial year till November 2017 is LT -18,277 & HT - 17.

APSPDCL: Existing no. of services in Aquaculture & Animal husbandry in APSPDCL as on 31st March 2017 are LT-26045 Nos. & HT -48 Nos. and the number of services released during the current financial year till December 2017 are LT -2955 Nos. & HT- 2 Nos. No. of cases booked-1262 Nos. & Amount assessed is ₹4.51 Cr. as on December 2017.

**Commission's View:** The need for controlling theft and pilferage of power cannot be understated and both the distribution licensees assert that they are sincerely attempting to tackle the menace. The progressive reduction of losses bears testimony to such efforts.

# **Theft of Energy**

158 Sri Ramaswami Reddy, Retd. S.E. (APSEB), Kadapa has stated that theft of energy is rampant in Cuddapah Dist. There is gap between units sent and units sold. The gap covers the following items (1) Metered energy from domestic, Non-domestic, industrial and HT Consumers (2) Unmetered energy in agricultural public sector (3) Line losses (4) Theft of energy. The main trouble is with unmetered energy with agricultural consumption. The consumption is assessed. Actual consumption comes with the provision of meters for all agricultural services. It is a difficult task. The only

way out is completion of HDVS on war footing. Moreover, by completing the said work line losses will be largely reduced. Coming to theft of energy there is separate department for detection of pilferage of energy. Frequent checks, especially in the early hours, where unworthy consumers theft energy by providing hooks direct to the phase lines. Number of cases in theft of energy will be increased. Every 3 Phase 4 wire distribution transformer may be provided with a meter from which units sent and units sold can be known. The gap mainly consists unmetered agricultural consumption. Adding we may get nearer to actual agricultural consumption. Subsidy may be paid by the Govt. based on the figures obtained.

**Discoms Response:** 90% of the HVDS works in Kadapa district are completed. Balance works are under progress.

**Commission's View:** The experienced advice may guide the DISCOMs in taking the necessary action.

### Give up too many categories.

**159** Sri P. Kodanda Ramaiah, Chief Engineer (Rtd.), Visakhapatnam has stated thatso many categories and sub-categories do not make any sense. They are based on a fertile imagination and this should be stopped.

**Discoms Response:** Matter is in the purview of APERC.

**Commission's View:** Admittedly the number of categories and sub-categories of consumers in Andhra Pradesh is large but each such category and sub-category came to be classified as such on the distinguishing features and requirements of each such group over the years and any attempt to erase the separate identity of such groups is likely to be met with much resistance. The sensitivity of the issue requires an indepth study which will be possibly attempted in the near future. However, the fact remains that there are more and more demands for separate identity and favourable treatment in the matter of tariffs from different sections of the society.

# Arrears of Local bodies and Govt. departments

160 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist., CPI(M), have stated that all arrears of local bodies and Govt. bodies shall be borne by the Government. **Discoms Response:** Government has instructed to Gram Panchayats to pay the C.C. Bills of Electricity Department from the14th Financial Commission funds.

**Commission's View:** It is the continuous endeavor of the Commission to persuade the State Government to clear all the arrears of consumption charges due from all Government departments, organizations and local bodies at the earliest. There was some success but not to the desired extent of full clearance of arrears but the efforts will continue.

### **Extend Supply to Remote Tribal villages through lines**

161 Sri Ch. Narasinga Rao, State Secretariat Member, CPI(M), Visakhapatnam has stated that power shall be extended to remote Tribal villages through Lines as Solar is not working properly. Supply is not available to 300 Nos. of ST Villages.

**Discoms Response:** Out of 300 ST Villages, supply has been given to 280 No. villages. Only for 20 Nos. supply is yet to be given and the same will be completed at the earliest. Presently Off-Grid Solar equipment is provided for electrification. Extending the DISCOM Grid to all remote, inaccessible tribal areas is being explored.

**Commission's View:** The licensees shall make every effort to keep up their promise of providing electric supply to every tribal village at the earliest and commendable progress has been made in this direction between FY2015-16 and now.

### **UDAY Progress Report**

162 Sri B. N. Prabhakar, President, Society for Water, Power & Natural resources conservation Awareness and Monitoring (SWAPNAM), Certified Energy Manager & Auditor, Vijayawada has stated that the Discoms may be instructed to provide the information on UDAY scheme with reference to the parameters (both technical and financial) of the agreement and achievement so far with due explanation for deviations.

Discoms Response: UDAY progress report is provided to the objector.

**Commission's View:** If any further information is required, the objector can take recourse to the Right to Information Act, 2005.

### Setup fast track courts for recovery of dues

**163** Sri Kandharapu Murali, State Committee Member CPI(M), Tirupati has stated that fast track courts shall be set up to recover dues from big consumers.

**Discoms Response:** In the purview of the Commission.

**Commission's View:** For recovering arrears of consumption or other charges from consumers / users, the procedure prescribed by the Andhra Pradesh Electricity Board (Recovery of Dues) Act, 1984 and the Rules of 1985 there under provide a distinct procedure as if they are arrears of land revenue not requiring the intervention of any court for that purpose.

### Presence of Govt. Representative.

164 Sri A. Bhasker Reddy, Karinapalli, Pakala Mandalam, Chittoor Dist. has stated that action shall be taken to see that Govt. representative attends hearings as some of the issues are to be resolved by Govt.

Discoms Response: It is not under the purview of Discoms.

**Commission's View:** The Principal Secretary / Energy, the Advisor, Energy and the Officer on special duty, Energy of the State Government participated in the public hearing at Vijayawada and the Principal Secretary also made a statement on behalf of the Government. Whenever a decision of the Government is required on any issue, the Commission is addressing the State Government accordingly and it is responding.

### Shifting of APERC office to Vijayawada

165 Sri Jalagam Kumara Swamy, All India Secretary, Bharatiya Kisan Sangh, Vijayawada; Sri Er. A. Punna Rao, Vijayawada; Sri Kamineni Ramesh, General Secretary, Forum of Consumers Unified Services (FOCUS), Vijayawada have stated that for better approachability for the consumers, APERC office may be shifted to Vijayawada early.

Sri Malladi Vishnu, Ex. MLA, YSR Congress Party, Vijayawada have stated that Commission is functioning from Hyderabad, away from the licensees' area, even after three and half year of its formation. All State Govt. entities have shifted to Vijayawada, except APERC. If APERC is shifted to AP geography, the Commission will get the opportunity to know about the problems of the electricity consumers. It is requested to shift APERC to Vijayawada for the benefit of the consumers.

**Discoms Response:** Under the purview of the Commission.

**Commission's View:** One of the main functions of the Andhra Pradesh Electricity Regulatory Commission (APERC) is adjudication of disputes between the licensees

(AP TRANSCO, APSPDCL and APEPDCL) and the generating companies under Section 86 of the Electricity Act, 2003 and Section 11 of the Andhra Pradesh Electricity Reform Act, 1998. As the Hon'ble High Court of Andhra Pradesh is functioning from Hyderabad with all the advocates practicing before it residing there, the APERC is continuing to function from Hyderabad to enable it to have the assistance of the advocates for effective disposal of cases on merits. Whenever consultation with the public or eliciting public opinion is required, the APERC is holding public hearings in number of places in Andhra Pradesh. As and when the Hon'ble High Court of Andhra Pradesh shifts to the State, the APERC will immediately follow suit. Thus, it is only for functional efficiency and convenience that APERC is continuing to function from Hyderabad in public interest, which is a transitional measure. All the functionaries of the Commission are freely accessible to any and every stake holder on all the working days during working hours personally and through all other means of communication to attend to any request or grievance within the scope of the functions of the Commission.

### Revenue and Tariff analysis for Electric utilities (RATE) model developed PRAYAS

166 Sri N. Sree Kumar, Prayas has stated that Discoms would suffer huge financial loss due to migration of HT consumers and even tariff rationalization would not prevent the captive open access due to falling prices of Wind and Solar power. Discoms shall have long term approach to prepare for future challenges and RATE model developed by PRAYAS and such tools are need of the hour for the Discoms to estimate different scenarios of future to take remedial measures in advance.

### **Discoms Response:** NIL

**Commission's View:** The need for developing fresh approaches to future challenges alone made the Commission associate itself with PRAYAS in developing the RATE model which will be progressively used by the Commission, which looks forward at many such innovations from PRAYAS.

### **Conduct Public hearings in bigger halls**

167 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada has stated that public hearings shall be conducted in bigger halls as smaller halls are congested and inconvenient for the people to participate. Er. A. Punna Rao, Vijayawada has stated that public hearings to be held in ground floors and bigger halls for the convenience of senior citizen objectors.

Discoms Response: In the purview of the Commission.

Commission's View: Upto FY2015-16, public hearings were held in borrowed or rented premises. From FY2016-17, it was decided to hold the public hearings in the own premises of the DISCOMs to the extent possible not only minimizing the expenditure but also as a mark of self sufficiency and self respect of the Power sector. No stake holder is denied an opportunity of interacting with the Commission due to lack of space and were accommodated in the public hearing halls themselves or in the neighboring halls in the same premises. Huge expenditure was being incurred for each public hearing earlier which formed part of the annual revenue requirement the burden of which is ultimately transferred to the shoulders of the consumers but now it is limited to nominal amounts. In addition, the Commission is taking cognizance of every view, objection and communication received by it orally or in writing till the draft tariff order is sent for print on finalization irrespective of the final dates given for communicating such views etc.

### Right of Way (ROW) Compensation

168 Sri Daadi Veerabhadra Rao, Ex. Minister and President, Anakapalle Agricuturists Association has requested the Commission to advise GoAP to increase the compensation from 10% to 200% in Rural areas and from 10% to 100% in Urban Areas for the land width of Right of Way Corridor against the existing 10% as per G.O.Rt. No.9, dt. 20.06.2017.

Sri D. Raghavulu, Sri Kaza Nagaraju, Sri K. Yedukondalu, MPTC, Sri Tirupati Guravaiah, Sri D. Balaraju, Sri Y. Sambaiah, Agiripalli, Nuziveedu, Krishna Dist. have stated that they have not been paid compensation for the 400kV passed through their fields.

Sri Karampudi Sambiva Rao, Sri N. China Koteswara Rao, Sri K. Srinivasa Rao, Sri K. Siva Reddy, Smt. B. Chandeswari, Smt. M. Padma, Sri Jamja Kommiraju, Sri M. Srinivasa Rao, Smt. J. Satyapriya, Buddavarama and Peddaavutapalli, Krishna Dist. have stated that proper compensation shall be given as per the registration value and Electricity Act, 2003 for the 132kV line of AP Transco coming up through their fields. Sri M.V. Srinivasa Rao, Gavarapalem, Anakapalli, Visakhapatnam has stated that compensation must be given for the loss of crops / lands for NTPC HT line being laid.

Sri Ch. Venugopal Rao, Federation of Farmers Association has stated that lines route shall not be changed with political interference and compensation shall be paid as per GoI. guidelines and works of licensee rules. Compensation shall be paid before laying lines.

Sri Karri Appa Rao and Sri Karri Ganesh, AP Cheraku Rythula Sangham have stated that in case of fire accidents in sugar cane farms under transmission lines, compensation is not being paid.

Sri Yellapu Suryanarayana (BKS) has stated that compensation in advance shall be paid to farmers before laying lines and towers.

Sri Bommasani Srinivasa Rao, Guntupalli, Krishna Dist. has stated that compensation has not been paid by powergrid for the corridor to the farmers of Tummalapalli and Guntuapalli Villages.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada, Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that justifiable compensation shall be paid before laying the towers and lines in the lands of farmers.

**Discoms Response:** Matter pertains to APTRANSCO as erection of Extra High Tension (EHT) is carried out by them. Same will be informed to APTRANSCO. APEPDCL is following Works of Licensee Rules.

Commission's View: The Commission made every effort to make the Works of Licensees Rules, 2006 of the Government of India and the Andhra Pradesh Works of Licensees Rules, 2007 as widely known as possible. It was instrumental in the District Collectors being designated as the competent authorities under both the Rules and the State Government accepted payment of compensation for the corridor also. APERC brought to the notice of the Central Electricity Regulatory Commission the need for ensuring payment of the prescribed compensation to persons effected by the Works of the Licensees of CERC also and the CERC in turn had conducted official meetings and gave instructions to all its licensees to comply with 2006 Central Rules. The established mindset since the Indian Telegraph Act, 1885 on not taking any consent or not paying adequate compensation to the adversely effected property owner or farmer is difficult to change overnight but the change has set in and progressively the affected property owners / farmers will receive justice to which they are entitled. The demands for better compensation are forwarded to the State Government for favour of positive consideration as the power of taking a decision on the subject exclusively lies with it.

**Re-open the closed Biomass / Bagasse Power plants** 

169 Sri Ch. Narasinga Rao, State President, CITU; Sri D. Srinadha Rao, State Vice President, CITU; Sri Ch. Ammannaayudu, Dist. Vice President, CITU, Visakhapatnam have stated that action shall be taken for reopening of the closed twenty-three (23) number of Biomass / Bagasse plants in AP on which 8000 workmen were dependent and now lost their lively hood.

Discoms Response: NIL

Commission's View: Both the distribution licensees shall gather information and details about the Biomass / Bagasse plants within their respective jurisdictions, the partculars of the running and closed units among them, the reasons for their closure, the number of employees in each plant and the possible steps that can be taken for revival of these plants and submit the same to the Commission within one month to enable the Commission to consider any action that can be taken by it within the scope of its powers, functions and jurisdiction under law or the advise that can be given by it to the State Government or the licensees in this regard.

### Appointment of Managing body for Anakapalle RESCO

**170** Sri A. Balakrishna, District Secretary, Andhra Pradesh Koulu Rythula Sangham, Visakhapatnam has stated that management for Anakapalle RESCO shall be appointed through democratic elections to contain the prevalent corruption.

Discoms Response: NIL

**Commission's View:** The request is communicated to the Principal Secretary, Energy Department, Government of Andhra Pradesh for taking necessary remedial action.

### **Contract Workers Issues**

171 Sri G. Koteswara Rao, District General Secretary; Sri R.K.S.V. Kumar, President, CITU, Visakhapatnam Region have stated the following.

- i) Employment protection be given.
- ii) Equal pay for equal work be given as per Supreme Court Orders.
- iii) Direct payment of wages without third party to be made.
- iv) Contract workers shall be regularized in a phased manner.
- v) Contract, outsourcing, piece rate methods for meter readers and store workers shall be dispensed with.
- vi) ₹ 20 Lakhs compensation shall be paid to the deceased workers' families.

Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada, Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that contract workers shall be regularised and equal pay for equal work shall be implemented.

### **Discoms Response: NIL**

**Commission's View**: The requests are communicated to the Principal Secretary, Energy Department, Government of Andhra Pradesh with a request to positively and sympathetically consider the same for the benefit of the contract workers who became part of the Power sector since long and whose services are very much appreciated and indispensible.

### Permission to inject surplus Power into Grid

172 Sri G. Koteswara Rao, Senior General Manager, M/s Sri Sarvaraya Sugars Ltd., Chelluru, E.G.Dist. has requested to give an opportunity to export power from Bagasse / Biomass based power plant under long term PPA with APEPDCL.

### **Discoms Response: NIL**

**Commission's View**: The request is communicated to APEPDCL for consideration on merits.

### Govt. shall bear the entire cost of Capital Region Electricity developemnt

173 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada has stated that the entire cost of electricity development works in the Capital Region shall be borne by the State Government only and consumers shall not be burdened.

**Discoms Response:** The expenditure incurred so far for the development of electricity works in the Capital Region has been paid by the Government.

Commission's View: The response of the DISCOMs satisfies the request made.

### Govt. shall bear the burden as per UDAY

174 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that Government has to bear all debts as per UDAY scheme and shall pay all arrears.

**Discoms Response**: APSPDCL: Government has taken over 75% of the working capital debts (₹ 4025 Cr.) as on 30.09.2015 and issued FRP bonds for ₹ 1005.23 Cr. Balance working capital debt of ₹ 226.15 Cr and FRP bonds for ₹ 335.05 Cr. yet to be issued. Capital debt of ₹ 3446 Cr. was not considered in the UDAY scheme.

**Commission's View**: The Government of Andhra Pradesh being bound by UDAY scheme shall have to discharge all its obligations and lialiabilities under the scheme. There is no reason to suspect that it will default in the discharge of its legal obligations under the Scheme.

### **Power connections to the Poor**

175 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that 100% electrification scheme shall be implemented. Power connections shall be given to the poor who have unregistered sites / homes, at ₹100.

**Discoms Response:** Because the cost of releasing a service connection, it is not possible to give connection at ₹ 100. No objection certificate issued by the Panchayat Secretary shall be furnished while applying for service connection.

**Commission's View**: Cent percent electrification is no more an ideal but a policy and the distribution licensees shall find all ways and means to achieve the same without taking shelter under any technicalities or surmountable obstacles.

### Implementation of citizen charter

176 Sri Ch. Babu Rao, Convenor, Capital Region Coordination Committee, CPI(M), Vijayawada; Sri Cheekati Srinivasa Rao, Member, District Organising Committee, Prakasam Dist. have stated that compensation shall be paid for damaged appliances due to voltage problems and citizen charter shall be implemented strictly.

Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that citizen charter must be implemented strictly. Action shall be taken on the officers who fail to comply with the citizen charter. A committee shall be formed by including the representatives of consumer organization to monitor the citizen charter implementation.

**Discoms Response:** Compensation is being paid as per the Regulations issued by the Commission.

**Commission's View**: Adherence to the citizens charter is an inviolable responsibility of the distribution licensees and any lapses should be strictly avoided.

### Awareness Programmes and implementation of RTI

177 Sri Kandregula Venkata Ramana, President, Consumer organizations Federation, Viakhapatnam has stated that awareness programmes shall be conducted on consumer rights and responsibilities involving voluntary organizations. RTI Act shall be strictly implemented in the Power utilities for transparency, accountability and to contain corruption.

Sri M. Nageswara Rao, Chairman, Confederation of AP Consumers Organization, Ongole has stated that consumer awareness programs shall be conducted.

### **Discoms Response**: NIL

Commission's View: At the initiative of the Commission, the Hon'ble High Court of Andhra Pradesh has permitted through the Andhra Pradesh State Legal Services Authority the participation in the legal literacy camps organized by the District Legal Services Authorities and Mandal Legal Services Committees by the officers of the distribution licensees to increase consumer awareness about their rights and obligations and to know about the consumer grievances. The Consumer Grievances Redressal Forums at Tirupathi and Visakhapatnam are monitoring this activity and submitting periodical reports to the Commission about regular interaction between the officers and the consumers at such camps. This is in addition to the consumer assistance by the Commission under Regulation No. 3 of 2016 and the redressal of grievances on complaints before CGRFs and on representations before the Vidyut Ombudsman. Such consumer awareness, assistance and redressal of grievances programs are devised and practised only in Andhra Pradesh in the entire Country. The provisions of the RTI Act are faithfully complied with in the Power Sector including by the Commission. 178 Sri M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad vide letter dated 15.03.2018 has stated the following:

### Addition of more Solar Capacity than what was contracted under the bidding

Certain solar power plants were commissioned under solar biddings of 2012 and 2014 conducted by AP Discoms for which the CUF allowed was 25% and above with use of the then latest technology, for the contracted capacity. It is reliably learnt that such solar power units had added more solar PV capacity than what was contracted under the biddings, using solar cells which became relatively cheaper. Adding additional capacity contrary to the terms and conditions in the PPA is illegal. Secondly, such solar power units are selling power generated with additional capacity to the Discoms at the tariffs determined as per the bidding and imposing avoidable additional burdens on the Discoms and their consumers. It is a fraudulent exercise which is impermissible and punishable. The Commission is requested to examine the issue, call for information and explanations from the Discoms and get the matter investigated by a team of officers of the Commission, if necessary, to ascertain actual installed capacities of those solar power plants with whom the Discoms have long-term PPAs and take necessary action, including penal action, to curb such malpractices and restrict the sale of solar power to the Discoms within the limits of contracted capacities of the solar power plants concerned.

**Commission's View:** The distribution licensees shall submit detailed factual reports on the issues raised within two months to examine and consider the further action to be taken.

### Failure of GoI and GOAP in ensuring supply of natural gas and indigenous coal

The failure of Government of India to ensure supply of natural gas and indigenous coal as per allocations made to the power plants concerned with whom AP Discoms had long-term PPAs has been causing avoidable shortage of power and need for purchasing power from other sources and the market at higher tariffs. GoAP failed miserably to take up the issue with the GoI to get supplies of natural gas and indigenous coal to the power plants concerned as per allocations. The Commission is requested to give a piece of advice to the GoAP to take up the issue of supply of natural gas and indigenous coal to the power plants concerned as per allocations made.

and safeguard the interests of consumers of power and public-sector utilities like AP Genco.

**Commission's View:** The Government of Andhra Pradesh may take up the issue of supply of natural gas and indigenous coal to the power plants as per allocations with the Government of India.

# Do not include Co-gen Sugar Plants in Start Up Power Category

179 Sri P. Achuta Ramayya, President, South India Sugar Mills Association, Tanuku, WG Dist. through letter dated 19.03.2018 having explained at length the difficulties the Co-gen Sugar power plants would face if they are included in to the Start Up Power category, has requested to exclude them from the propoped separate category for start up power for Captive Generating Plants, Cogenration Plants and Renewable Generation Plants filed by the DISCOMs.

**Commission's View:** The views are duly taken into consideration while finalizing the order of the Commission on this aspect and entry or exclusion from this new category is made optional at the choice of the generator.

# **CHAPTER-IV**

# SALES, LOSSES AND POWER PURCHASE REQUIREMENT

# Introduction

180 In this Chapter, the Commission has examined the sales forecast/projections and network losses and thereafter the power purchase requirement incorporated by licensees in their respective ARR/FPT filings for FY2018-19. The Commission has, while examining the sales forecast, network losses/energy losses and power purchase requirement for FY2018-19, reckoned/considered all the views / objections / suggestions expressed by the stakeholders in writing and during public hearings, which have been elaborated in Chapter-III, to the extent they are relevant to the subject matter. The Commission has accepted the sales for both the licensees at 54391.87 MU against 54537.03 MU estimated and filed by licensees for FY2018-19 as detailed hereunder:

### Methodology Followed by Licensees

- **181** As a prelude to estimation of Aggregate Revenue Requirement (ARR)/Expenditure for the tariff year FY2018-19, licensees have computed the power purchase requirement in the following manner;
  - Forecasted/estimated the sales for FY2018-19 for different consumer categories separately for the year,
  - Aggregated the forecasted/estimated sales at different voltage levels, i.e. LT, HT-11kV, HT-33 kV and HT-132kV and above,
  - Adopted the network losses for the year from MYT Order on transmission and wheeling charges with modifications as detailed latter,
  - Grossed up the forecasted/estimated sales with the adopted network losses (both technical and commercial) applicable at each voltage level to compute the power purchase requirement for the year.

### **Sales Forecast**

182 Licensees have followed modified trend approach in forecasting /estimating the sales for different consumer categories based on historical sales volumes from FY2011-12 to FY2017-18 (for FY2017-18, actual sales for the first half along with the estimates for the second half). The time series forecast for FY2018-19 has been modified to

accommodate the likely impact of different factors such as increasing commercialization / development in certain districts / regions, load reliefs issued in the past and other macroeconomic variables. The following inputs among others have been taken to arrive at the sales estimation for FY2018-19:

- CAGR computed for historical sales for FY2011-12 to FY2017-18.
- Additional loads for Lift Irrigation Schemes, CRDA and Industrial Clusters.
- Load restrictions captured for FY2016-17 and H1 of FY2017-18.
- 183 Licensees have forecasted the sales volume at 54537.03 MU for FY2018-19 which is higher by 8.91% compared with the sales volume approved by the Commission for FY2017-18. The details are given in the table below:

<b>.</b>	<b>6</b> -4	201	7-18 appro	oved	2018	-19 projec	tions	FY2018-19 over FY2017-18			
Consu	mer Category	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
LT-I	Domestic	8460.14	5381.03	13841.17	9168.39	5512.92	14681.32	8.37%	2.45%	6.07%	
LT-II	Non-Domestic	1862.52	1029.55	2892.07	1906.11	1100.97	3007.08	2.34%	6.94%	3.98%	
LT-III	Industry	1640.75	937.78	2578.53	2303.21	1351.80	3655.01	40.38%	44.15%	41.75%	
LT-IV	Cottage Industries	40.37	2.11	42.48	42.63	2.61	45.24	5.60%	23.69%	6.50%	
LT-V	Agriculture	8741.73	2090.27	10832	9761.55	2296.43	12057.98	11.67%	9.86%	11.32%	
LT-VI	Street Lighting	645.21	211.97	857.18	771.31	257.09	1028.39	19.54%	21.28%	19.97%	
LT-VII	General	100.45	68.33	168.79	109.24	60.39	169.63	8.75%	-11.62%	0.50%	
LT-VIII	Temporary	1.25	0.9	2.15	1.63	0.67	2.29	30.12%	-25.79%	6.72%	
HT-I	Industry	8745.33	5702.19	14447.52	7436.73	6736.90	14173.63	-14.96%	18.15%	-1.90%	
HT-II	Others	860.58	726.59	1587.17	802.72	605.99	1408.70	-6.72%	-16.60%	-11.24%	
HT-III	Aviation	53.2	52.21	105.4	58.53	44.62	103.15	10.03%	-14.54%	-2.13%	
HT-IV	Lift Irrigation	489.98	254.21	744.19	1164.71	643.50	1808.21	137.70%	153.14%	142.98%	
HT-V	Railway Traction	591.46	638.3	1229.76	721.49	708.53	1430.03	21.99%	11.00%	16.29%	
HT-VI	Townships	44.61	35.79	80.41	37.24	35.64	72.87	-16.53%	-0.42%	-9.37%	
HT-VII	Green Power	0	0	0	0.00	0.00	0.00	0	0	0	
HT- VIII	Temporary	0	0.52	0.52	0.12	4.41	4.53				
HT-IX	RESCOs	343.52	324.46	667.98	500.03	388.93	888.95	45.56%	19.87%	33.08%	
Total		32621.09	17456.21	50077.3	34785.63	19751.40	54537.03	6.64%	13.15%	8.91%	

Table 6: Sales Volume Approved for FY2017-18 and Projections for FY2018-19

184 However, the forecasted sales volume for FY2018-19 is higher by 8.08% compared with the sales estimate made by licensees for FY2017-18 (based on actual for first half and estimates for second half of FY2017-18). The details are given in the table below:

		2017-	18 Estima	ites	2018	-19 Projec	ctions	Change over Estimates			
Co	nsumer Category	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total	
LT-I	Domestic	8350.18	5036.59	13386.77	9168.39	5512.92	14681.32	9.80%	9.46%	9.67%	
LT-II	Non Domestic/Commercial	1779.53	1000.23	2779.76	1906.11	1100.97	3007.08	7.11%	10.07%	8.18%	
LT-III	Industry	1987.26	1185.35	3172.61	2303.21	1351.80	3655.01	15.90%	14.04%	15.21%	
LT-IX	Cottage Industries & Agro Based Activities	40.76	2.43	43.20	42.63	2.61	45.24	4.59%	7.19%	4.73%	
LT-V	Agricultural	9536.85	2251.41	11788.25	9761.55	2296.43	12057.98	2.36%	2.00%	2.29%	
LT-VI	Street Lighting, PWS & NTR Sujala	723.78	243.06	966.84	771.31	257.09	1028.39	6.57%	5.77%	6.37%	
LT-VII	General Purpose	102.68	55.28	157.97	109.24	60.39	169.63	6.39%	9.24%	7.38%	
LT-VIII	Temporary Supply	1.58	0.63	2.21	1.63	0.67	2.29	3.03%	5.28%	3.67%	
HT-I	Industry	6730.55	6305.69	13036.24	7436.73	6736.90	14173.63	10.49%	6.84%	8.72%	
HT-II	Others	768.23	581.86	1350.09	802.72	605.99	1408.70	4.49%	4.15%	4.34%	
HT-III	Public Infrastructure and Tourism	56.83	43.07	99.90	58.53	44.62	103.15	3.00%	3.60%	3.26%	
HT-IV	Lift Irrigation and Agriculture	1052.95	439.37	1492.32	1164.71	643.50	1808.21	10.61%	46.46%	21.17%	
HT-V	Railway Traction	697.53	685.74	1383.26	721.49	708.53	1430.03	3.44%	3.32%	3.38%	
HT-VI	Town Ships and Residential Colonies	28.13	34.91	63.04	37.24	35.64	72.87	32.35%	2.10%	15.60%	
HT-VII	Green Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	
HT- VIII	Temporary	0.11	4.41	4.52	0.12	4.41	4.53	5.00%	0.00%	0.13%	
HT-IX	RESCOs	390.60	343.18	733.78	500.03	388.93	888.95	28.02%	13.33%	21.15%	
All	Total	32247.54	18213.21	50460.75	34785.63	19751.40	54537.03	7.87%	8.45%	8.08%	

Table 7: Sales Volume Estimates for FY2017-18 and Projections for FY2018-19

185 The Commission notes that the licensees' estimated sales for FY2017-18 are likely to reach the sales volume approved. However, overall decrease in sales in domestic category may be due to energy efficiency measures promoted by the licensees and use of the higher efficient domestic appliances. LT industrial sales increase is a sign of small scale industry picking up. It is a cause of concern that sales in LT agriculture increased significantly inspite of HT lift irrigation consumption getting doubled over the approval due to commissioning of several lift irrigation schemes, good monsoon and several other measures initiated by GoAP for conservation of water usage in agriculture. Substantial decrease of HT industrial and HT commercial sales is also another concern whose share is significant in total revenue of licensees. Huge number of applications are pending from all categories of consumers as per the filings and

licensees shall endeavor to release the supply to pending applicants at the earliest possible time to achieve the projected sales. The details of sales volume approved and estimated actuals for FY2017-18 are given in the table below.

Consumer Category		Tariff (	Order -FY20	17-18	Estiamteo	l Actuals - I	Y2017-18	Est. Actuals over Approvals		
SPDC			EPDCL	Total	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LT-I	Domestic	8460.14	5381.03	13841.17	8350.18	5036.59	13386.77	-1.30%	-6.40%	-3.28%
LT-II	Non-Domestic	1862.52	1029.55	2892.07	1779.53	1000.23	2779.76	-4.46%	-2.85%	-3.88%
LT-III	Industry	1640.75	937.78	2578.53	1987.26	1185.35	3172.61	21.12%	26.40%	23.04%
LT-IV	Cottage Indusries	40.37	2.11	42.48	40.76	2.43	43.20	0.97%	15.39%	1.69%
LT-V	Agriculture	8741.73	2090.27	10832	9536.85	2251.41	11788.25	9.10%	7.71%	8.83%
LT-VI	Street Ligting	645.21	211.97	857.18	723.78	243.06	966.84	12.18%	14.67%	12.79%
LT-VII	General	100.45	68.33	168.79	102.68	55.28	157.97	2.22%	-19.09%	-6.41%
LT-VIII	Tempoary	1.25	0.9	2.15	1.58	0.63	2.21	26.30%	0.00%	2.94%
HT-I	Industry	8745.33	5702.19	14447.52	6730.55	6305.69	13036.24	-23.04%	10.58%	-9.77%
HT-II	Others	860.58	726.59	1587.17	768.23	581.86	1350.09	-10.73%	-19.92%	-14.94%
HT-III	Aviation	53.2	52.21	105.4	56.83	43.07	99.90	6.82%	-17.51%	-5.22%
HT-IV	Lift Irrigation	489.98	254.21	744.19	1052.95	439.37	1492.32	114.90%	72.84%	100.53%
HT-V	Railway Traction	591.46	638.3	1229.76	697.53	685.74	1383.26	17.93%	7.43%	12.48%
HT-VI	Townships	44.61	35.79	80.41	28.13	34.91	63.04	-36.94%	-2.47%	-21.60%
HT-VII	Greeen Power	0	0	0	0.00	0.00	0.00	0.00%	0.00%	0.00%
HT-VIII	Tempoary	0	0.52	0.52	0.11	4.41	4.52			
HT-IX	RESCOs	343.52	324.46	667.98	390.60	343.18	733.78	13.71%	5.77%	9.85%
Total		32621.09	17456.21	50077.3	32247.54	18213.21	50460.75	-1.15%	4.34%	0.77%

Table 8: Sales Volume Estimates and Approvals for FY2017-18 (MU)

186 The Commission notes as in earlier orders, the trend method for forecasting the sales for end users is more appropriate for general categories of consumers (categories consist of large number of consumers with records of historical meter readings/sales). For exceptional consumer categories (where most of the consumers are not metered leading to non-availability of historical information and number of consumers are few with large capacity such as Lift Irrigation and RESCOs), an estimate in projecting the sales and not the actuals appear to be imminent. Accordingly, the Commission has, except for three exceptional consumer categories, LT-V: Agriculture, HT-IV: Lift Irrigation and RESCOs the sales of which categories are revised based on the considertaitons as given hereunder, accepted the forecasted/estimated sales by licensees for FY2018-19 as filed.

# LT-V: Agriculture

187 Most of the consumers are not metered due to historical reasons and some sort of estimation is necessary based on sampling methods. In this regard, licensees are adopting two methods for measuring the consumption of unmetered LT-V Agriculture pump sets, viz. a) DTR and HP capacity method (method-I) in which sample agriculture DTRs are metered and the sample is extrapolated on total HP capacity of agriculture pump sets and b) Robust methodology as suggested by the Indian Statistical Institute (ISI), Hyderabad (method-II) in which agriculture DTRs are metered on sample basis and extrapolate the sample results on total agriculture DTR population to arrive at total consumption on monthly basis. Validation of the AGL DTR population list, validation of the selection of DTRs for metering, validation of sampled DTR meter readings and audit procedures to check these basic aspects for authenticity was prescribed in second method. The Commission has detailed these two methods in the Tariff Order for FY2015-16.

# In the present filings;

**EPDCL:** Licensee still follows the method-1 for estimation of agricultural consumption in all five districts and requested the Commission to accept the actual agricultural consumption estimates based on this old methodology. Licensee further stated that method-II will be adopted for agricultural consumption estimate in future. The Commission notes with disquiet that despite repeated directions to follow method-II in Tariff Orders for FY2015-16, FY2016-17 and FY2017-18, the licensee is yet to implement method-II for agricultural consumption estimate. Such laxity on part of licensee cannot be accepted by the Commission forever and it directs that;

The EPDCL shall comply with the earlier directions of the Commission within four months and report compliance to the Commission. In default, initiation of necessary corrective action under sections 142 and 146 of the Electricity Act, 2003 against those responsible for the default will follow.

**SPDCL:** Licensee has stated that it is following method-II for Anantapur and Kurnool districts from April 2015, for Kadapa district from July 2016 and for the remaining districts from June 2015. For earlier periods before implementation of the method-II, licensee has followed method-I at district level. No validation data is submitted in filings with reference to method -II being followed by licensee. Therefore, the Commission directs that

Validation and audit reports as recommended in ISI method shall be submitted to the Commission for estimation of agriculture consumption by SPDCL for authenticity within two months and any default in submission of the validation and audit reports may result in initiation of necessary corrective action under sections 142 and 146 of the Electricity Act, 2003 against those responsible for the default.

Licensees have, while factoring new connections to be released during FY2018-19 (SPDCL-50,000, EPDCL-3811), estimated the consumption for this consumer category for FY2018-19 based on historical consumption data developed by them on information collected mostly following method-1 as explained above. SPDCL has estimated the consumption at 9761.55 MU which is 2.36% higher compared with the estimated consumption for the current year at 9536.85 MU. The projected sales are 11.67% higher over the approved sales 8741.73 MU for FY2017-18. Similarly, EPDCL has estimated the consumption at 2296 MU which is 2% higher compared with the estimated consumption for the current year at 2251 MU. The projected sales are 9.8% higher over the approved sales 2090.27 MU for FY2017-18.

The Commission, while finalizing the sales estimate of LT-V category for FY2018-19 has considered the following points:

- (i) Number of measures such as replacement of old pump sets with energy efficient pump sets, promotion of solar power pump sets etc. are stated to have been under taken by SPDCL for limiting the agriculture sales. In addition to the above, Agricultural demand was stated to be almost constant for the past three years due to positive climatic changes in the jurisdiction of EPDCL.
- (ii) The actual agricultural consumption details for H1 of FY2017-18 furnished in the filings are as given below:

Sl. No.	Description	SPDCL	EPDCL	Total
1	Actual Sales in H1 of FY 2017-18 (MU)	3726.97	872.12	4599.09
2	Energy Requirement approved in FY2017-18 (MU)	8741.73	2090.27	10832
3	Percentage of actual sales in total sales approved	42.63	41.72	42.40

- (iii) Many lift irrigation schemes are planned to be commissioned and steps are being taken for conservation of water usage in agriculture by Government of Andhra Pradesh in FY2018-19.
- (iv) The estimated data is not as per the directives of the Commission issued from time to time.

As such, the Commission has not accepted the sales as forecasted/estimated by licensees for FY2018-19 and accepted the sales at the level as approved in FY2017-18 without any increase.

188 However, the Licensees need to recognize that the sales volume to this consumer category shall be within the approved sales volume and in case the actual sales volume exceeds the approved quantity, per unit financial loss would be very high as it is a subsidized consumer category both by cross subsidy and external subsidy. If the actual sales volume is more than approved sales volume, gain will be minimum as most of the full cost recovery for this consumer category is made through cross subsidies. Hence, the sales volume variation risk/reward for this category could be seen as maximum and therefore licensees are directed;

To be vigilant on sales volume to this consumer category (covering only genuine consumers and preventing any unauthorized and unaccounted pilferage or theft of energy in any manner) and invoke appropriate remedial measures, under intimation to the Commission, to meet the excess cost in case the actual sales are likely to exceed the approved sales volume during the year with authenticated data in line with Commission directives.

Metering for Agriculture DTRs

**189** The Commission while appreciating the efforts of the licensees for reduction of losses and improving the metered sales, would like to mention that the lacunae in estimation of agricultural consumption by sampling method may not be justifiable for longer period and is giving scope for apprehensions of the stake holders. Moreover, the licensees will be at loss if the actual sales are more than the estimates for which the approvals may not be permissible at all times. In this regard, the Commission's view and directive in connection with agriculture consumption estimation in MYT order for distribution wheeling charges for the control period 2014-19 is extracted below.

"<sup>1</sup>The Commission is of the view that there are still significant gaps both in the usage of the ISI methodology as well as in the computation of agricultural consumption. Unless agriculture consumption is measured at least on Distribution Transformer (DTR) LV side, it is difficult to arrive at an accurate figure of LT losses and thereby providing scope to measure and monitor loss reduction.

<sup>&</sup>lt;sup>1</sup> OP No.64, 66,68 & 70 Wheeling Tariffs for Distribution Business

Commission also recognized that providing of meters to all Agriculture services feeding DTRs may need to be undertaken in a phased manner.

Licensees are directed to come up with proposals indicating schedule for installing energy meters to all Agricultural DTRs in their respective Jurisdictions by 30<sup>th</sup> June 2014 for approval of the Commission. Till all the DTRs are provided with metering, the Agricultural consumption may be estimated strictly as per ISI methodology including sample rotation and monthly meter readings."

National Tariff policy 2016 mandates all distribution companies to ensure smart meters in their electricity system throughout the chain from transformers at 132 kV level right down to distribution transformers level at 11 kV and further down to each consumer level in order to enable energy audit in the distribution system within two years.

In view of the above,

The Commission directs both licensees to take up pilot projects for one selected Division each in their respective jurisdictions for progressively providing 100 percent smart meters to all AGL DTRs as per the National Tariff Policy at least within the next two years.

In this regard, comprehensive proposals shall be submitted for approval to the Commission within a period of two months from the date of this order, covering cost details for installation of meters, remote meter reading and making available the DTR wise consumption details on the licensees' websites, as a single project for a continuous duration of 5 years.

### **HT-IV: Lift Irrigation Schemes**

**190** The estimated sales for this consumer category for FY2017-18 are 1492 MU against 744.19 MU which was approved by the Commission<sup>2</sup> after obtaining information from Irrigation Department, Government of Andhra Pradesh. However, the actual sales volume has substantially increased. The Commission has again obtained information from the Irrigation Department, Government of Andhra Pradesh regarding the details of estimated consumption for each of the Lift Irrigation projects existing and are likely to be commissioned in FY2018-19 hereafter. Accordingly, the sales estimates are revised.

<sup>&</sup>lt;sup>2</sup> See Table 8

**191** Even if the actual sales are less / more than the sales volume approved by the Commission, licensees may not incur much loss since the tariff for this consumer category is less than / equal to its cost of service.

### **Rural Electric Cooperative Societies (RESCOs)**

- **192** RESCOs in the State (Kuppam RESCO in SPDCL supply area, and Anakapalle RESCO & Cheepurupalle RESCO in EPDCL supply area) purchase electricity from respective licensees and sell the same to LT consumers in their designated supply areas. RESCOs have also filed applications with the Commission for determination of bulk supply rate for FY2018-19 at which they purchase electricity from respective licensees<sup>3</sup>. In these applications, RESCOs have estimated the power purchase requirement and the Commission has examined these filings for finalization of sales volume to RESCOs by licensees while considering the forecasted sales made by licensees in their filings.
- 193 The Commission has approved the Sales to LT Consumer categories for FY2018-19 at 12% higher for SPDCL and 9% higher for EPDCL compared with the sales approved for FY2017-18. The Commission has caused similar increase in sales volume to RESCOs for FY2018-19, which is more appropriate as RESCOs sell electricity only to LT Consumers. Accordingly, the volume of sales to RESCOs by licensees has been placed at 384.62 MU in respect of SPDCL and 353.20 MU in respect of EPDCL during FY2018-19.
- 194 The Commission has, with the above-mentioned modifications to the licensees' filings with regard to sales volume for LT-V: Agriculture, HT-IV: Lift Irrigation Schemes and RESCOs, determined the sales for both licensees at 54391.87 MU for FY2018-19, 34921.79 MU for SPDCL and 19470.09 MU for EPDCL. The details are given in the table below:

<sup>&</sup>lt;sup>3</sup> However, RESCOs sell electricity to consumers at the retail supply tariff determined by the Commission for licensees. The power purchase cost to be paid by RESCOs to licensees is derived as the difference between the revenue and non-power purchase component of their aggregate revenue requirement. The Commission issues separate order(s) determining the bulk supply rate for each RESCO on application made in this regard.

Concum	er Category	File	Filed by Licensee			roved by A	PERC	Variations over Filings		
consume	er Category	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total
LT-I	Domestic	9168.39	5512.92	14681.32	9168.39	5512.92	14681.32	0.00	0.00	0.00
LT-II	Non Domestic/Commercial	1906.11	1100.97	3007.08	1906.11	1100.97	3007.08	0.00	0.00	0.00
LT-III	Industry	2303.21	1351.80	3655.01	2303.21	1351.80	3655.01	0.00	0.00	0.00
LT-IV	Cottage Industries & Agro Based Activities	42.63	2.61	45.24	42.63	2.61	45.24	0.00	0.00	0.00
LT-V	Agricultural	9761.55	2296.43	12057.98	8741.73	2090.27	10832.00	-1019.82	-206.16	-1225.98
LT-VI	Street Lighting, PWS & NTR Sujala	771.31	257.09	1028.39	771.31	257.09	1028.39	0.00	0.00	0.00
LT-VII	General Purpose	109.24	60.39	169.63	109.24	60.39	169.63	0.00	0.00	0.00
LT-VIII	Temporary Supply	1.63	0.67	2.29	1.63	0.67	2.29	0.00	0.00	0.00
HT-I	Industry	7436.73	6736.90	14173.63	7436.73	6736.90	14173.63	0.00	0.00	0.00
HT-II	Others	802.72	605.99	1408.70	802.72	605.99	1408.70	0.00	0.00	0.00
HT-III	Public Infrastructure and Tourism	58.53	44.62	103.15	58.53	44.62	103.15	0.00	0.00	0.00
HT-IV	Lift Irrigation and Agriculture	1164.71	643.50	1808.21	2436.08	604.08	3040.16	1271.38	-39.42	1231.96
HT-V	Railway Traction	721.49	708.53	1430.03	721.49	708.53	1430.03	0.00	0.00	0.00
HT-VI	Town Ships and Residential Colonies	37.24	35.64	72.87	37.24	35.64	72.87	0.00	0.00	0.00
HT-VII	Green Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HT-VIII	Temporary	0.12	4.41	4.53	0.12	4.41	4.53	0.00	0.00	0.00
HT-IX	RESCOs	500.03	388.93	888.95	384.62	353.20	737.82	-115.41	-35.73	-151.13
All	Total	34785.63	19751.40	54537.03	34921.79	19470.09	54391.87	136.15	-281.31	-145.16

### Table 9: Sales Volume Estimates and Approvals for FY2018-19 (MU)

# **Power Purchase Requirement-Role of Network Losses**

- **195** To meet the estimated sales volume to different consumer categories, licensees need to purchase the power from different generating stations, market sources etc. As the power is to be transmitted from different origins to consumer end (over electric networks consisting of networks of different voltages), licensees need to purchase electricity in excess of sales volume to compensate the network losses (including commercial losses). In this manner, once the sales estimate is made, the power purchase requirement is computed through grossing up the sales volume with the loss levels<sup>4</sup>. As the loss levels are inversely related to voltage of transmission, the sales estimate is grossed up with appropriate loss levels to arrive at the power purchase requirement to meet the sales at each voltage level and later on, these purchase requirement (sales plus losses) for which the power procurement plan is made.
- 196 Licensees, on the proposed sales of 54537.03 MU have computed the network losses at 6505.44 MU and the power purchase requirement at 61042.47 MU for FY2018-19. The details of these computations are given in the table below:

<sup>&</sup>lt;sup>4</sup> The relevant formulae for computing the power purchase requirement is Sales/(1-%of Loss).

Item	Sales	Losses	Power purchase Requirement
(1)	(2)	(3)	(4)
SPDCL	34785.63	4459.70	39245.33
EPDCL	19751.40	2045.74	21797.14
Total	54537.03	6505.44	61042.47

Table 10: Sales Volume Estimates by the Licensees for FY2018-19

# Loss Levels for FY2018-19

- **197** The Commission has set the targets for loss reduction for transmission and distribution network in MYT Order<sup>5</sup> for each year of the third control period for the period from FY2014-15 to FY2018-19. For the computation of power purchase requirement, the loss level target set by the Commission for FY2018-19 and loss levels filed by the licensees in their ARR/FPT are relevant.
- **198** The Commission has, after considering a) existing loss levels; b) MYT target loss levels set for FY2018-19; c) loss levels adopted in the Retail tariff order for FY2017-18; d) views/objections/suggestions of various stakeholders; e) replacement of incandescent bulbs with LED bulbs; f) replacement of agricultural pump sets with solar pump sets and & energy efficient pump sets and g) various other energy conservation and loss reduction measures undertaken by the licensees, determined the transmission and distribution losses to be adopted in the Retail Tariff order for FY2018-19 as detailed in the paragraphs below:
- **199** From the filings, it is observed that the loss levels filed by the licensees for FY2018-19 are less than the target loss levels fixed by the Commission in MYT Order for FY2018-19, the loss levels adopted by the Commission for FY2017-18 (progressive reduction) and in case of 132 kV and above voltage levels, the licensees have adopted the transmission loss of 3.03% approved by the Commission for FY2017-18, for FY2018-19 also<sup>6</sup>.
- 200 In these circumstances, after careful examination, the Commission has adopted the loss levels for FY2018-19 duly considering the actual losses projected by the licensees. The loss levels filed by licensees at each voltage level are reduced further

<sup>&</sup>lt;sup>5</sup> Commission Order in O.P. No.62 of 2013.

<sup>&</sup>lt;sup>6</sup> Energy losses associated with the transmission of energy from Central Government owned generating stations to State transmission/distribution network through PGCIL network. These loss levels are not under the control of the licensees and thus not subject to loss reduction targets fixed by the Commission.

by 0.02% to reflect real progressive reduction in LT, 11 kV and 33 kV network. With reference to 132 kV and above intra-state transmission system including the PGCIL injections, the actual loss calculated for FY2016-17 by AP Transco at  $3.27\%^6$  is considered. The relevant loss level details are given in the tables below:

Network	Retail Supply Order for FY2017-18	Filed by the Licensee for FY2018-19	Loss target set for FY2018-19	Adopted by the Commission in this order
(1)	(2)	(3)	(4)	(5)
Distribution-LT	4.5%	4.42%	5.00%	4.40%
Distribution-11 kV	3.47%	3.40%	3.84%	3.38%
Distribution-33 kV	3.44%	3.37%	3.80%	3.35%
APTRANSCO	3.03%	3.03%	3.95%	3.27%
PGCIL	3.57%	3.57%	-	2.2770

Table 11: SPDCL Network Losses for FY2018-19

Table 12: EPDCL Network Losses for FY2018-19

Network	Retail Supply Order FY2017-18	Filed by the Licensee for FY2018-19	Loss target set for FY2018-19	Adopted by the Commission in this order
(1)	(2)	(3)	(4)	(5)
Distribution-LT	4.27%	4.18%	4.99%	4.16%
Distribution-11 kV	3.42%	3.35%	4.00%	3.33%
Distribution-33 kV	2.90%	2.84%	3.39%	2.82%
APTRANSCO	3.03%	3.03%	3.95%	3.27%
PGCIL	3.57%	3.57%	-	3.2770

# **Power Purchase Requirement**

201 The Commission has recomputed the power purchase requirement at 60842.78 MU on the approved sale of 54391.87 MU for FY2018-19 after factoring the losses as detailed above. The licensees have not taken into account the transmission loss due to PGCIL injections in their computations. However, Commission has considered the same to arrive at realistic requirement of Power Purchase quantity. The power purchase requirement computed in the above manner is placed at 60842.78 MU for FY 2018-19 which is lesser by about 199.69 MU compared to the power purchase requirement of 61042.47 MU filed by the Licensees for FY2018-19. The details of power purchase requirement filed by licensees and computed by the Commission are given in the tables below:

				•		19 as per filing		
	Power Pur	chase (in		_		l Voltage Wise Lo		
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
	L.T.	4.18%	L.T.	10582.88	11044.54	11427.36	11761.38	12128.89
APEPDCL	11kV	3.35%	11kV	2323.55	-	2404.08	2474.36	2551.67
AFLFDCL	33kV	2.84%	33kV	1914.97	-	-	1970.94	2032.53
	132kV	3.03%	132kV	4930.00	-	-	-	5084.05
			TOTAL 19751.40 1		11044.54	13831.44	16206.68	21797.13
			Loss up t	o said voltage	4.18%	6.69%	8.55%	9.39%
						D. Loss(MU)	138	5.28
						T. Loss(MU)	660	.45
						including PGCIL	000	.45
			Tota	al Loss(MU) & 🤊	6 Loss inclu	ding PGCIL	2045.74	9.39%
			Tota	al Power Purch	ase Require	ment (MU)	2179	7.13
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
	L.T.	4.42%	L.T.	24064.07	25175.57	26060.99	26969.87	27812.60
APSPDCL	11kV	3.40%	11kV	3426.04	-	3546.53	3670.22	3784.90
APSPUCE	33kV	3.37%	33kV	3457.55	-	-	3578.13	3689.94
	132kV	3.03%	132kV	3837.97	-	-	-	3957.90
			TOTAL	34785.63	25175.57	29607.52	34218.22	39245.33
			Loss up t	o said voltage	4.42%	7.15%	9.56%	11.36%
						D. Loss(MU)	327	0.57
						T. Loss(MU)	119	9.13
						including PGCIL	110	7.13
			Tota	al Loss(MU) & 9	6 Loss inclu	ding PGCIL	4459.70	11.36%
			Tota	al Power Purch	ase Require	ment (MU)	3924	5.33
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
	L.T.	4.34%	L.T.	34646.95	36220.11	37488.35	38731.25	39941.48
All DISCOMs	11kV	3.38%	11kV	5749.59	-	5950.62	6144.57	6336.57
All DISCOMS	33kV	3.18%	33kV	5372.51	-	-	5549.07	5722.46
	132kV	3.03%	132kV	8767.98	-	-	-	9041.95
			TOTAL	54537.03	36220.11	43438.96	50424.90	61042.47
				o said voltage	4.34%	7.00%	9.23%	10.66%
						D. Loss(MU)	465	5.85
							104	0.50
						including PGCIL	104	9.59
			Tota	al Loss(MU) & 9	6505.44	10.66%		
			Tota	al Power Purcha	ase Require	ment (MU)	6104	2.47

Table 13: Power Purchase Requirement for FY2018-19 as per filing

				•		approved by APERC		
				-		nd Voltage Wise Los		
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
	L.T.	4.16%	L.T.	10376.71	10827.12	11200.08	11525.09	11914.7
APEPDCL	11kV	3.33%	11kV	2286.33	-	2365.09	2433.72	2516.00
AFEFDEL	33kV	2.82%	33kV	1907.10	-	-	1962.44	2028.78
	Tr. Loss	3.27%	132kV	4899.94	-	-	-	5065.58
			TOTAL	19470.08	10827.12	13565.17	15921.25	21525.06
			Loss up t	o said voltage	6.65%	8.49%	9.55%	
						D. Loss(MU)	135	1.11
						including PGCIL	703	07
						Loss	/03	3.87
			To	tal Loss(MU) &	% Loss incl	uding PGCIL	2054.98	9.55%
				tal Power Purc		-		25.06
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
	L.T.	4.40%	L.T.	23044.26	24104.87	24948.12	25812.85	26685.47
	11kV	3.38%	11kV	3178.05	-	3289.22	3403.23	3518.28
APSPDCL	33kV	3.35%	33kV	3360.17	-	-	3476.63	3594.16
	Tr. Loss	3.27%	132kV	5339.32	-	-	-	5519.81
			TOTAL	34921.79	24104.87	28237.35	32692.72	39317.72
			Loss up t	o said voltage	4.40%	7.14%	9.51%	11.18%
						D. Loss(MU)	311	0.24
						T. Loss(MU)	1285.69	
						including PGCIL	120	0.09
			То	tal Loss(MU) &	% Loss incl	uding PGCIL	4395.93	11.18%
			То	tal Power Purc	hase Requi	rement (MU)	3931	7.72
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
	L.T.	4.33%	L.T.	33420.97	34931.99	36148.20	37337.94	38600.17
	11kV	3.36%	11kV	5464.38	-	5654.32	5836.96	6034.28
All DISCOMs	33kV	3.16%	33kV	5267.26	-	-	5439.07	5622.94
	Tr. Loss	3.27%	132kV	10239.25	-	-	-	10585.39
	1		TOTAL	54391.87	34931.99	41802.52	48613.97	60842.78
			Loss up t	o said voltage	4.33%	6.98%	9.18%	10.60%
					·	D. Loss(MU)		1.35
						T. Loss(MU)	100	0.57
						including PGCIL	198	9.56
			То	tal Loss(MU) &	6450.91	10.60%		
				tal Power Purc		-		2.78
					1	N /		

# Table 14: Power Purchase Requirement for FY2018-19 approved by APERC

# CHAPTER - V POWER PURCHASE COST FOR FY2018-19

# Introduction

202 In this Chapter, the Commission has determined the power purchase cost for each Licensee for FY2018-19 based on the power purchase requirement approved in Chapter-IV while keeping in view the stakeholders' views/objections/suggestions as enumerated in Chapter-III and all other related aspects. The licensees have estimated a combined total power purchase cost of ₹25756.75 Cr. by considering a total power purchase requirement of 61543.34 MU. The summary of the combined power purchase cost filed by the licensees is given in the table below:

Source	Purchase		Cost	(Rs.Cr.)		Avg
Source	(MU)	Fixed	Variable	Other	Total	Rs./unit
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Thermal (APGENCO)	18180.81	2351.85	5162.26		7514.11	4.13
Hydel (APGENCO)	2500	475.26			475.26	1.90
Interest on pension Bonds APGenco				808.28	808.28	
Income Tax APGenco				6.64	6.64	
SDSTPP	9223.23	940.77	2407.26		3348.03	3.63
CGS	13045.21	1291.25	3613.6		4904.85	3.76
APGPCL	81.41	3.62	18.03		21.64	2.66
Godavari Gas Power Plant	783.6	115.39	192.77		308.16	3.93
IPPs	1927.53	243.38	444.69		688.07	3.57
NCE	12182.91		6080.97		6080.97	4.99
Others *	6718.64	750.12	1891.67	6.72	2648.51	3.94
Sales in the Market	-3100		-1047.80		-1047.80	3.38
TOTAL	61543.34	6171.64	18763.45	821.64	25756.75	4.19
* KSK Mahanadi, Thermal Powertech,	Market etc	2.				

Table 15: Filings: Power Purchase Cost for FY2018-19

# **Energy Availability for FY2018-19**

- 203 The Licensees have estimated the energy availability from different sources for FY2018-19 at 66173.13 MU. The estimated energy availability is primarily from AP GENCO (18229.23 MU from thermal stations and 2500.00 MU from hydel stations), CGS (13168.59 MU), Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPP, 9223.23 MU); APGPCL, IPPs, NCEs and others at 23052.08 MU and from M/s Srivathsa (68.41 MU).
- **204** The Commission, while determining the energy availability from each source for each month of FY2018-19 considered the following points in general,

- a. Directions of GoAP in respect of Regulation of Power between AP and Telangana with effect from 11.06.2017 to utilize 100% capacity of the AP Genco Stations exclusively for AP,
- b. Projections by the Generators,
- c. Actual performance of the generating stations in the current financial year up to the end of December 2017,
- d. Availability projected by the Licensees in the ARR/FPT filings,
- e. Availability of gas,
- f. Commissioning of new generation projects during FY2018-19,
- g. Views/suggestions/objections received and the response of the Licensees thereon,
- h. The share of Andhra Pradesh State in CGS as per the latest MOP/GoI notification in this regard,
- i. Share of AP in other Stations.

and the following specific cases, not to affect the power planning of the licensees for FY2018-19.

- a. Availabilities from Lanco, Spectrum and GGPP were considered as filed by the licensees though power purchases from these plants were earlier permitted up to March, 2018, only restricting to the present cheaper tariffs.
- b. RTPP Stage-IV power plant availability is considered from April 2018 as the plant is expected to be commissioned by 31.03.2018, as per the filings.
- c. Availability of Solar energy from 400 MW plant in Kadapa district and 400 MW plant in Tadipatri is considered from October 2018 as these plants are expected be commissioned by September 2018, as per the filings.
- d. Availability of Wind Energy from M/s Axis Energy Ventures (762.3 MW) and M/s
   ZR Green Energy (8 MW) under various PPAs from H2 of FY2018-19 is considered subject to further specific approval by the Commission.
- e. Availability in respect of additional capacity from NTPC- Kudigi (CGS) which is expected to be available from April, 2018 is considered, as filed by the licensees.
- f. Availability from NNTPS (52.46 MW, CGS) which is expected to be commissioned by July, 2018 is considered, as filed.
- g. Availability from M/s Srivathsa is not considered since the PPA is going to expire

by 31.03.2018 and as per the subsequent information submitted by the licensees, the generator has not furnished the availabilities. Further, the capacity (17.202 MW) being meagre, inclusion / exclusion of this plant has no significant effect on the power planning of the licensees.

However, the Generating stations included in the sources of supply shown above which either have no Power Purchase Agreements or have no approval from the Commission for their Power Purchase Agreements and/or have to still have their tariff determined by the Commission, except in the cases where there is an adhoc tariff already being paid as per the Orders of the Commission, the licensees shall not receive any supply of power without prior intimation to and prior approval of the Commission.

205 After the reassessment of energy availability from each generating station/source, the Commission has revised the total energy availability upward by 2498.63 MU compared to the quantum filed by the Licensees. There is significant increase in availability of energy from APGENCO stations (2466.37 MU) due to revision of availabilities at conventionally accepted PLF levels considering actual supplies of coal upto 31<sup>st</sup> December, 2017, the details of which were subsequently obtained by the Commission, whereas the estimates of the licensees were stated to be based on the minimum contracted quantity of coal supplies, and a reasonable estimate of Hydel Generation. The availabilities of CGS stations are considered based on the data furished by the respective Stations, which were subsequently obtained by the Commission, resulting in an upward revision of 3581.29 MU. The Commission, while estimating the monthwise energy requirement vis-a-vis energy availability as detailed later in this Chapter, has observed no shortage in any month and hence the need for inclusion of provision for purchases from market and other short-term sources did not arise. The details of Station wise availability of energy as filed by the Licensees and as determined by the Commission are as per Annexure 4 & 5 respectively. However, the summary of energy availability for FY2018-19 is shown in the table below.

Source	Filed by Licensees	Approved by APERC	Difference in Availability
(1)	(2)	(3)	(4) = (3)-(2)
Thermal (APGENCO)	18229.23	19937.60	1708.37
Hydel (APGENCO)	2500.00	3258.00	758.00
SDSTPP-I & II	9223.23	9223.23	0.00
CGS	13168.59	16749.88	3581.29
APGPCL	81.41	81.41	0.00
Godavari Gas Power Plant	783.60	783.60	0.00
IPPs	1927.53	1927.53	0.00
NCE	12182.91	12622.58	439.67
KSK Mahanadi	2500.01	2500.01	0.00
Thermal Powertech	1824.98	1587.92	-237.06
Srivathsa	68.41	0.00	-68.41
Market	3683.23	0.00	-3683.23
Total	66173.13	68671.81	2498.63

 Table 16: Energy Availability (MU) for FY2018-19

### Monthly Mapping of Power Purchase Requirement and Availability

- **206** Against the total power purchase requirement of 60842.78 MU for FY2018-19 as determined by the Commission in Chapter-IV, the energy availability from different sources is determined at 68671.81 MU resulting in a surplus energy of 7829.03 MU.
- **207** After determination of energy availability and power purchase requirement for FY2018-19, the Commission has first mapped the month wise power purchase requirement to the month wise energy available for each Licensee in the merit order based on the variable cost. Then, if any licensee has been found to be energy deficit in any month, the same has been met from the surplus energy of the other Licensee (in the form of DISCOM to DISCOM purchases at average power purchase cost).

# **Energy Dispatch for FY2018-19**

208 While preparing the month wise despatches, the available energies from all Stations as per Annexure - 5 have been considered for despatch. The stations having must run status such as Renewable Energy Projects, Nuclear Power Projects and Hydel Stations have been dispatched first. Next, the energies from thermal and gas stations have been despatched in the merit order based on per unit variable costs. While doing so, the adhoc tariffs / single part tariffs being paid / proposed to be paid to certain generators are split into fixed cost and variable cost components as proposed by the licensees in

their filings but limiting the total to the adhoc tariffs permitted by the Commission, to have the low cost/cheaper power sources fully utilized first in order to keep the power purchase cost at the lowet possible level while reasonably protecting the interests of the generators.

- **209** By following the above procedure, the Commission has strived to reduce the power procurement costs of the Licensees to the extent possible while ensuring at the same time the consumers in the State are provided interruption free supply at a reasonable cost.
- **210** The summary of energy dispatches is as per the table shown below. The details of Station wise dispatches of energy approved by the Commission are as per Anexxure-7.

Source	Filed by	Approved	Diffe rence
	Licensees	by APERC	in Despatch
(1)	(2)	(3)	(4) = (3)-(2)
Thermal (AP GENCO)	18180.81	14108.42	-4072.39
Hydel (APGENCO)	2,500.00	3258.00	758.00
SDSTPP-I&II	9223.23	9223.23	0.00
CGS	13045.21	14750.04	1704.83
APGPCL	81.41	81.41	0.00
Godavari Gas Power Plant	783.6	783.60	0.00
IPPs	1927.53	1927.53	0.00
NCE	12182.91	12622.58	439.67
KSK Mahanadi	2500.01	2500.01	0.00
Thermal Powertech	1824.98	1587.92	-237.06
Srivathsa	68.41	0.00	-68.41
Market	2325.23	0.00	-2325.23
Sales	-3100	0.00	3100.00
TOTAL	61543.33	60842.78	-700.59

Table 17: Energy Despatch (MU) for FY2018-19

### **Unexpected Slippage in Generation**

211 During some months, part or full availability of energy estimated from some of the generating stations/sources may not materialize due to factors like break down of power plants, non-availability of fuel etc. leading to a gap between demand and supply. In that case, the Licensees shall approach the Commission for remedial measures to meet the shortfall in energy from alternative sources. If any shortfall is observed in any time block for various reasons, in all such cases the licensees may procure the shortfall energy through Power Exchanges, Intra-day mechanisms but with a price not exceeding the average power purchase cost

determined in this Order under simultaneous intimation to the Commission. All such details of purchases shall be furnished to the Commission fortnightly in the form of a statement for periodical ratification.

- **212** The licensees shall not procure energy from Stations/Sources other than those approved in this order unless and otherwise permitted by the Commission. Further, the Licensees are also directed not to procure energy over and above the quantum indicated against each Station/Source unless and otherwise approved by the Commission or ratified by the Commission in case of unavoidable emergencies (The licensees should be able to satisfy the Commission about the nature of the emergency). However, the licensees are at liberty to purchase energy from thermal stations listed in the merit order dispatch which have least variable cost and are placed top in the merit order, over and above the approved quantities, which helps further reduction of the power purchase cost approved in this order.
- **213** Violation of the above directions of the Commission will be viewed very seriously and appropriate action will be initiated against the officers/persons responsible for violation under the provisions of the Electricity Act, 2003, AP Electricity Reform Act, 1998, and Rules and Regulations made thereunder in accordance with the prescribed procedure.

### Sale of Surplus Energy

The Licensees have proposed to sell surplus energy of 3100 MU in the market at a price of ₹3.38 per unit out of the total surplus energy of 4629.79 MU estimated by them for FY2018-19, whereas the same is determined at 7829.03 MU by the Commission. The Commission observes here that out of the surplus energy of 12013.95 MU determined by it for FY2017-18 and out of the target of 2208.34 MU set by the licensees themselves, they have succeeded to sell only 1310.80 MU at an average rate of ₹3.94/unit till the end of February, 2018 (the details of which were subsequently obtained by the Commission) even though they were directed "*to sell any surplus power that may be available with them upto the last unit at an economically benefical price to the maximum extent possible*" vide para no. 211 (page 212) of the Retail Supply Tariff Order for FY2017-18.

215 Therefore, the Commission once again directs the Licensees to sell the surplus energy available with them up to the last unit at an economically beneficial price to the maximum extent possible by setting up a special cell working round the clock to continuously monitor the power market in order to grab all the opportunities available through mechanisms such as Unschedled Interchanges (UI), Intra-day etc. for disposing of surplus power on a daily basis. Other avenues like Day ahead, Week ahead and Month ahead contracts, bilateral contracts and Energy Swapping through Power Exchanges / National e-bidding portal of Ministry of Power, GoI shall be fully made use of to sell the surplus energy upto the last unit. In doing so, the weather forecast data for day, week and fortnight ahead available on the website of India Meteorological Department (IMD) or any other sourse providing such data shall be shrewdly taken into account for proper estimation of supply and demand variatons and thereby to arrive at the actual surplus that may be available at a particular point of time. The revenue derived on this account will be considered at the time of true-up / true-down exercise. The licensees may also examine surrendering the share of Central Generatiing Stations whose cost is higher than the average power purchase cost, after due analysis of the impact of such surrender.

#### Power Purchase: Fixed Costs for FY2018-19

216 The Licensees considered the fixed cost for APGENCO thermal stations at ₹2351.85 Cr. for FY2018-19 as per the order dated 26.03.2016 in O.P.No.3 of 2016 for the control period from FY2014-19. The Commission, taking into account the lesser availabilities projected for their thermal stations by AP Genco than the normative availability of 80% required for full fixed cost recovery as per APERC Regulation 1 of 2008, has curtailed the fixed cost in proportion of the availabilities considered. The Licensees have considered tariff for RTPP Stage IV as ₹ 4.24 per unit (FC- ₹ 1.10 per unit and VC - ₹3.14 per unit) and split into fixed and variable components. The Commission has not yet received any application for determination of tariff for this plant and therefore considered the tariff as filed by the licensees duly limiting the fixed cost to the extent of energy considered for dispatch at the fixed cost per unit filed. However, the same will not be the basis for determination of tariff for RTPP IV whenever a petition for such determination comes up before the Commission. Accordingly, the fixed cost for AP Genco thermal stations is approved

at ₹ 1986.00 Cr. The licensees considerd the fixed cost for AP Genco Hydel stations at ₹ 475.26 Cr. for FY2018-19 as per the order dated 26.03.2016 in O.P.No.3 of 2016 for the control period from FY2014-19 and the same is approved by the Commission.

- 217 The licensees have filed a two-part tariff for SDSTPP splitting the adhoc single part rate ₹3.63/Unit (FC- ₹ 1.02 per unit and VC- ₹ 2.61 per unit) permitted by the Commission and the same is considered. Accordingly, the fixed cost for SDSTPP is approved at ₹ 940.77 Cr. However, the same will not be the basis for determintation of tariff for SDSTPP the petition for which is pending before the Commission in O.P.No. 47 of 2017.
- 218 The licensees have filed fixed costs of Central Generating Stations at ₹ 1291.25 Cr. and the same is approved by the Commission. However, the per unit cost of bundled power viz. JNNSM Phase-I (₹ 3.58 per unit) and JNNSM Phase-II (₹ 3.50 per unit) filed by the licensees is split into fixed and variable components (FC-Rs.1.40 and VC- ₹ 2.18 for JNNSM Phase-I and FC- ₹ 1.00 and VC ₹ 2.50 for JNNSM Phase-II) similar to other sources as mentioned earlier, based on the sources of bundled power indicated in filings. Accordingly, the fixed cost for all Central Generating Stations is approved at ₹ 1777.32 Cr.
- 219 The licensees have filed a two-part tariff of ₹3.93 per unit (FC- ₹1.47 and VC- ₹2.46) for Godavari Gas Power Plant (GGPP, the erstwhile GVK) and estimated the fixed cost for GGPP at ₹115.39 Cr. But the Commission considered the fixed cost for GGPP at ₹61.90 Cr. considering a unit rate of ₹2.99 (FC- ₹0.79 per unit and VC-₹2.20 per unit) as permitted vide orders in I.A. No. 8 of 2017 in O.P. No. 28 & 29 of 2016 dated 29.11.2017.
- 220 The licensees have filed a two-part tariff of ₹3.32 per unit (FC ₹1.06 and VC ₹2.26) for LANCO Kondapalli and ₹4.02 per unit (FC- ₹1.63 and VC ₹2.39) for Spectrum and estimated the fixed cost for both the IPPs at ₹243.38 Cr. But the Commission considered the fixed cost for both the IPPs at ₹182.25 Cr. considering a unit rate of ₹3.29 (FC ₹0.96 per unit and VC ₹2.33 per unit) for LANCO Kondapalli and unit rate of ₹3.31 for Spectrum (offered by Spectrum itself through a memo dated 25.10.2017 filed before the Commission in I.A. 8 of 2017 in O.P.s 28 and 29 of 2016) as permitted vide orders in I.A. No. 8 of 2017 in O.P. No. 28 & 29 of 2016 dated 29.11.2017. The unit rate of ₹ 3.31 for Spectrum is split into fixed and variable

components considering the variable cost at ₹ 2.39 per unit as per the filings and the remaining ₹0.92 as fixed cost per unit.

**221** The tariffs for both Thermal Powertech and KSK Mahanadi power plants were discovered through bid-based route for which the APERC already gave approval and hence the fixed costs as filed by the licensees are considered.

### Power Purchase: Variable Costs for FY2018-19

- 222 The licensees have filed variable costs for all thermal stations considering 3% escalation over the approved variable rates in the Retail Supply Tariff Order for FY2017-18. The Managing Director / AP Genco vide letter dated 17.01.2018, interalia, stated that the increase in coal prices effected by M/s Mahanadi Coal Ltd. (Price notification dated 9.01.2018) and M/s Singareni Coallieries Company Ltd. (Price Notification no. 31.10.2017) is impacting the variable cost of thermal stations and these are to be considered in the Retail Supply Tariff Order for FY2018-19 itself. Eventhough clause 13 (b) of APERC Regulation 1 of 2008 provides for consideration of the prevailing rates for fixation of variable cost and for allowing any subsequent increase as a pass through in the form of FSA, DISCOMs are not admitting FSA claims on quarterly basis since it was changed to yearly basis. The Commission notes the fact that hike in coal prices is a pass through as per the Regulations in vogue and if not considered now, it would be a burden to the licensees and thereby to the consumers in near future in the form of interest burden on FSA claims by all generators. As such, the Commission has accepted the proposal of the licensees for 3% escalation of variable costs over the approved variable rates in the Retail Supply Tariff Order for FY2017-18.
- 223 It is pertinent to note here that subsequent information obtained by the Commission for assessing the hike of coal prices with respect to the previous notification indicated an increase in coal prices in the order of 10-15% and also revealed that the firm coal linkages are inadequate and are not corresponding to the requirement to meet the normative availability of 80% for recovery of full fixed cost as per Regulation 1 of 2008 in respect of AP Genco thermal stations. The average quantity of daily coal supplies received for each station upto 31<sup>st</sup> December, 2017 is also observed to be not sufficient to meet the requirement of 80% normative availability and to meet the need for any additional dispatch of energy if required under any emergency condition due to slippage of generation due to various reasons from other stations, if any. AP Genco

is also procuring coal through MoU route apart from the firm linkages to improve the coal supplies. In this regard, the Commission directs that the licensees shall impress upon the GoAP to pursue with GoI and its concerned ministries for resolving issues, if any, to improve the coal supplies as per the provisions of UDAY Scheme. Further, any procurement of coal on short term or medium-term basis shall be made only through competitive bidding as per the stipulated guide lines of MoP, GoI in this regard. By all means sufficient coal stocks are to be maintained at respective stations as per norms. The action taken in this regard shall be communicated to the Commission within two months from the date of issue of this order.

224 The variable rates considered for different stations in the above manner for FY2018-19 have been multiplied with corresponding energy despatches to arrive at the variable costs for different stations.

#### **Power Purchase: Incentives and Income Tax**

- 225 For AP GENCO and CGS stations since the dispatch is considered as 80% and below, payment of incentive does not arise. The licensees proposed payment of incentive at ₹6.72 Cr to M/s Thermal Power Tech Ltd. and the same is not considered as the despatch from it is curtailed. However, licensees may claim payment of incentive, if any, on account of exceeding despatch from any of the stations by over 80% / 85% as applicable in accordance with the prescribed procedure.
- 226 The licensees have proposed payment of ₹6.64 Cr. towards the claim of income tax by AP Genco and the same has been considered by the Commission.

# **DISCOM to DISCOM Sales/Purchases**

227 While mapping the respective energy requirement of the licensees with their share of energy availability from all the stations merit order wise, it was observed that there will be a short fall of 41.77 MU for EPDCL in the month of September, 2018 and 59.32 MU for SPDCL in the month of March, 2019. Such shortfall of energy of one licensee shall be met from the surplus energy of the other licensee at a provisional purchase price of ₹ 4.04/unit.

#### Meeting RPPO (Renewable Power Purchase Obligation)

**228** The Renewable Energy proposed to be purchased by the licensees is over and above the RPPO target of 11% fixed by the Commission for the FY2018-19. The excess

purchase of Renewable Energy over and above the obligation is approximately 6500 MU. After accounting for meeting the back log of RPPO, if any as per the orders dated 28.05.2016 in R.P. No. 19 of 2015 in O.P.No.19 of 2014 issued by this Commission, the licensees shall take action to obtain Renewable Energy Certificates (RECs) for the excess energy as per the CERC Regulations and to sell the same in the Market. The income earned by selling RECs shall be filed and deducted from any True-Up claim if it is made.

#### **Total Power Purchase Costs for FY2018-19**

- 229 Based on the above procedure, the Commission has computed the power purchase cost for the approved energy requirement of 60842.78 MU at ₹24565.32 Cr for FY2018-19, against the ₹25756.71 Cr. filed by the licensees. Therefore, a reduction of ₹1191.39 Cr. compared to the Licensees filings is given effect to on account of changes made by the Commission to a) sales volumes, b) energy availability, c) power purchase requirement, d) Merit order dispatch and d) fixed and variable costs and other charges of generating stations.
- 230 The power purchase costs and energy availability/despatches projected by the Commission are estimates only. The Commission is aware of the fact that actual values may differ from these projections. For some of the stations, the variations may be positive and for others, negative. The Commission has endeavored to minimize the effect of these variations projected on the purchase costs/energy availability/despatches to the extent possible. The Commission will subsequently carry out the necessary revision of these power purchase Costs as per the Relevant Regulation.
- **231** The summary of power purchase costs approved by the Commission is indicated in the tables below. The details of Station/Source wise Fixed, Variable and other Costs approved by the Commission are as per Annexures 8, 9 &10.

S.	Station	Despatch	Variable	Variable	Fixed	Fixed	Total	<b>Total Cost</b>
No.		(MU)	Cost	Cost	Cost	Cost	Cost	(Rs./ Unit)
			(Rs. Cr.)	Rs. /Unit	(Rs. Cr.)	Rs./Unit	(Rs.Cr.)	
1	Total NCE	12622.58	6108.85	4.84	0.00	0.00	6108.85	4.84
2	Total AP Genco Hydel	3258.00	0.00	0.00	475.26	1.46	475.26	1.46
3	CGS	14750.04	3577.51	2.43	1777.32	1.20	5354.82	3.63
4	Godavari Gas Power Plant							
	(Erstwhile GVK)	783.60	172.39	2.20	61.90	0.79	234.30	2.99
5	IPPs	1927.53	453.30	2.35	182.25	0.95	635.55	3.30
6	APGPCL	81.41	18.01	2.21	3.62	0.44	21.63	2.66
7	SDSTPP	9223.27	2407.27	2.61	940.77	1.02	3348.05	3.63
8	APGENCO Thermal	14108.42	3877.89	2.75	1986.00	1.41	5863.89	4.16
9	OTHERS	4087.93	961.24	2.35	746.82	1.83	1708.06	4.18
10	Additional interest on Pension							
	Bonds AP Genco				808.28		808.28	
11	Income Tax AP Genco				6.64		6.64	
12	Total	60842.78	17576.45	2.89	6988.86	1.15	24565.32	4.04

Table 18: Power Purchase Costs approved by APERC for all the Licensees for<br/>FY2018-19.

 Table 19: EPDCL - Power Purchase Costs approved by APERC for FY2018-19

S. No.	Station	Despatch (MU)	Variable Cost	Variable Cost	Fixed Cost	Fixed Cost	Total Cost	Average Cost
110.		(110)		Rs. /Unit		(Rs./Unit)		
1	NCE	4465.64	2161.20	4.84	0.00	0.00	2161.20	4.84
2	AP Genco Hydel	1152.62	0.00	0.00	162.92	1.41	162.92	1.41
3	CGS	5218.29	1265.66	2.43	609.26	1.17	1874.92	3.59
4	Godavari Gas Power Plant (Erstwhile GVK )	277.22	60.98	2.20	21.90	0.79	82.88	2.99
5	IPPs	681.92	160.37	2.35	62.48	0.92	222.85	3.27
6	APGPCL	28.80	6.37	2.21	1.24	0.43	7.61	2.64
7	SDSTPP	3263.02	851.65	2.61	332.83	1.02	1184.48	3.63
8	AP Genco Thermal	4991.30	1371.93	2.75	680.80	1.36	2052.73	4.11
9	Others	1446.24	340.07	2.35	256.01	1.77	596.08	4.12
10	Sale to SPDCL	-59.32	-23.96	4.04			-23.96	4.04
11	Purchase from SPDCL	41.78	16.88	4.04			16.88	4.04
12	Additional interest on Pension Bonds AP GENCO				277.08		277.08	
13	Income Tax AP GENCO				2.28		2.28	
14	Total	21507.52	6211.14	2.89	2406.79	1.12	8617.93	4.01

S.	Station	Despatch	Variable	Variable	Fixed	Fixed	Total	Average
No.		(MU)	Cost	Cost	Cost	Cost	Cost	Cost
			(Rs. Cr.)	Rs. /Unit	(Rs. Cr.)	(Rs./Unit)	( <b>Rs.</b> Cr.)	(Rs./Unit)
1	NCE	8156.94	3947.65	4.84	0.00	0.00	3947.65	4.84
2	AP Genco HYDEL	2105.38	0.00	0.00	312.34	1.48	312.34	1.48
3	CGS	9531.75	2311.85	2.43	1168.05	1.23	3479.90	3.65
4	Godavari Gas Power Plant							
	(Erstwhile GVK )	506.38	111.40	2.20	40.00	0.79	151.41	2.99
5	IPPs	1245.60	292.93	2.35	119.78	0.96	412.71	3.31
6	APGPCL	52.61	11.64	2.21	2.38	0.45	14.01	2.66
7	SDSTPP	5960.25	1555.62	2.61	607.95	1.02	2163.57	3.63
8	AP Genco THERMAL	9117.12	2505.96	2.75	1305.20	1.43	3811.16	4.18
9	Others	2641.70	621.17	2.35	490.81	1.86	1111.98	4.21
10	Sale to EPDCL	-41.78	-16.88	4.04			-16.88	4.04
11	Purchase from EPDCL	59.32	23.96	4.04			23.96	4.04
12	Additional interest on Pension							
	Bonds AP GENCO				531.28		531.28	
13	Income Tax AP GENCO				4.36		4.36	
14	Total	39335.27	11365.31	2.89	4582.15	1.16	15947.46	4.05

# Table 20: SPDCL - Power Purchase Cost Approved by APERC for FY2018-19

# CHAPTER - VI AGGREGATE REVENUE REQUIREMENT

# Introduction

232 In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for FY2018-19 relating to retail supply business of SPDCL and EPDCL based on their respective filings briefely stated in Chapter-I, approved sales volume and power purchase requirement as determined in Chapter-IV and power purchase cost as determined in Chapter-V and after reckoning the views/objections/suggestions relating to the aspects of ARR expressed in writing and during public hearings as summarized in Chapter-III. The Commission has approved the ARR for both licensees at ₹31982.87 Cr. which is less by ₹1481.42 Cr. compared with the projected ₹33465.85 Cr. The details of ARR as per licensees' filings are given in the table below:

ARR Items	Licensees' Filings (₹ Cr)				
	SPDC	EPDCL	STATE		
(1)	(2)	(3)	(4)		
1. Transmission Cost	931.18	485.45	1416.63		
2. SLDC Cost	26.56	13.85	40.41		
3. Distribution Cost	2,919.66	1,772.25	4,691.91		
4. PGCIL Expenses	682.28	355.72	1,038.00		
5. ULDC Charges	12.93	3.40	16.33		
6. Network and SLDC Cost (1+2+3+4+5)	4,572.61	2,630.67	7,203.28		
7. Power Purchase Cost	16,572.87	9183.88	25,756.75		
8. Interest on CSD	154.10	102.33	256.43		
9. Supply Margin in Retail Supply Business	13.05	6.16	19.21		
10. Other Costs - Energy Efficiency expenses.	116.76	113.43	230.19		
11. Supply Cost (7+8+9+10)	16,856.78	9,405.80	26,262.58		
12. Aggregate Revenue Requirement (ARR) (6+11)	21,429.39	12,036.47	33,465.85		

# Table 21: Filings: ARR for FY2018-19

# **Transmission Cost**

**233** Licensees use the transmission system owned by State transmission utility/transmission licensee, APTransco, for power evacuation/flow from generating stations to distribution network for which they need to pay the transmission charge at the rates/charges determined by the Commission. The erstwhile Commission for

undivided AP State has issued MYT Tariff Order for transmission in which the transmission charges have been determined for each year of the 3<sup>rd</sup> control period of five years from FY2014-15 to FY2018-19<sup>7</sup> ex ante. Licensees have computed the transmission cost at the transmission rate of ₹94.44 per kW determined for FY2018-19 in MYT Order on estimated transmission capacity of 15000 MW to be used by them during FY2018-19 at ₹1416.62 Cr (₹931.18 Cr by SPDCL and ₹485.45 Cr by EPDCL).

234 The Commission has verified the calculations<sup>8</sup> made by licensees with regard to transmission cost estimates and found that licensees' calculations adhere to MYT Order and thus the Commission accepted the transmission cost as filed in their ARR/FPT filings at ₹1416.62 Cr (₹931.18 Cr for SPDCL and ₹485.45 Cr for EPDCL) for FY2018-19. On pursuit by the Commission for exploration of possibilities for further reduction of ARR, the licensees have furnished the details of true down of transmission charges by AP Transco which are ₹155.95 Cr. in respect of SPDCL and ₹63.80 Cr. in respect of EPDCL and after deduction of these amounts, the net transmission cost approved for each licensee is given in the table below:

Item	Appro	Approved by APERC				
Item	SPDCL	EPDCL	Total			
1. Capacity, MW	8216.65	4283.54	5214.72			
2. Transmission Charge (₹/kW/Month)	94.44	94.44	94.44			
3. Transmission Cost (₹ Cr.) (1x2)	931.18	485.45	1416.62			
4. True down of Transmission Charges	(-)155.95	(-)63.80	(-)219.75			
5. Transmission Cost (₹ Cr.) (1x2)	775.23	421.65	1196.88			

Table 22: Transmission Cost for FY2018-19

# **SLDC Cost**

**235** Licensees utilise the services of State Load Dispatch Centre (SLDC) for scheduling the power from various sources to their networks for which, as per the existing regulatory framework, they have to pay a) annual charges and b) monthly fee on their respective capacities. The erstwhile Commission for undivided AP State has issued

<sup>&</sup>lt;sup>7</sup> OP. No. 62 of 2013

<sup>&</sup>lt;sup>8</sup> The Commission has considered the transmission capacity for FY2018-19 as mentioned in MYT Order respectively for each licensee. To account for additional districts (Anantapur and Kurnool) which have been added to SPDCL from the erstwhile CPDCL in undivided Andhra Pradesh State, 17.45 percent of the capacity mentioned for CPDCL for FY2018-19 in MYT Order has been added.

the MYT Order on SLDC charges and fees for the 3<sup>rd</sup> control period of five years from FY2014-15 to FY2018-19 ex ante in which the charges and fee have been determined for every year of the control period.

236 Licensees have computed the SLDC cost at the applicable rates and included at ₹40.41 Cr (₹26.56 Cr by SPDCL and ₹13.85 Cr by EPDCL) in their ARR/FPT filings for FY2018-19. The Commission has verified the computations made by the licensees with regard to SLDC cost and found that these calculations adhere to MYT Order and hence approves the SLDC cost as filed by licensees at ₹40.41 Cr (₹26.56 Cr for SPDCL and ₹13.85 Cr for EPDCL) for FY2018-19. The details are given in the table below:

	Approved by APERC				
Item	SPDCL	EPDCL	Total		
1. Capacity, MW	8216.65	4283.54	12500.19		
2. SLDC Annual Fee (`/MW/Year)	4214.27	4214.27	4214.27		
3. Total Fee (`Cr.)	3.46	1.81	5.27		
4. SLDC Charges, (`/MW/month)	2342.73	2342.73	2342.73		
5. Total SLDC Charges (`Cr.)	23.10	12.04	35.14		
6. Total SLDC Cost (`Cr.)	26.56	13.85	40.41		

Table 23: SLDC Cost for FY2018-19

# **Distribution Cost**

237 Licensees incur the distribution cost in retail supply business for transfer of energy from transmission/distribution network to consumers using the distribution system (33kV & below) like transmission system (132 kV and above). As per the existing regulatory framework, the distribution function is separated from retail supply function under the MYT tariff regulatory framework as per which the erstwhile Commission for undivided Andhra Pradesh State has issued MYT Order relating to distribution business for 3<sup>rd</sup> control period of 5 years from FY2014-15 to FY2018-19<sup>9</sup> in which the distribution cost for each year of the control period is determined *ex ante*. The distribution licensees have computed the distribution cost at ₹4,691.91 Cr (₹2,919.66 Cr by SPDCL and ₹1,772.25 Cr by EPDCL) for FY2018-19 and included the same in the ARR/FPT filings.

<sup>9</sup> O.P. Nos. 64, 66, 68 and 70 of 2013

238 The Commission has verified the calculations<sup>10</sup> made by licensees and found that these calculations adhere to MYT Order and hence accepts the distribution cost as filed in their ARR/FPT filings at ₹4691.91 Cr (₹2919.66 Cr by SPDCL and ₹1772.25 Cr by EPDCL) for FY2018-19. The details are given in the table below:

Itom	Approve	Approved by APERC (₹ Cr)			
Item	SPDCL	EPDCL	Total		
1. Distribution Cost	2339.30	1772.25	4111.55		
2. Additional Cost due to Two Districts	580.36	0.00	580.36		
3. Total Distribution Cost (1+2)	2919.66	1772.25	4691.91		

Table 24: Distribution Cost for FY2018-19

# **PGCIL and ULDC Cost**

239 Licensees also use the services of Power Grid Corporation of India (PGCIL) and Unified Load Despatch Centre (ULDC) that operates the PGCIL network with regard to power evacuation from the Central government owned Generating Stations (CGS). Licensees have considered the costs for these services at the rates actually paid per MW in the latest 3<sup>rd</sup> quarter of FY2017-18. The licensees have assessed the amount for these services at ₹1054.33 Cr (₹695.21 Cr for SPDCL and ₹359.12 Cr for EPDCL) for FY2018-19. The Commission has examined the details and after rectifying the calculation error, revised the amounts as given in the table below:

Table 25:PGCIL and ULDC Costs for FY2018-19

Itom	Appr	Approved by APERC (₹ Cr)				
Item	SPDCL	EPDCL	Total			
1. PGCIL Cost	635.03	331.09	966.12			
2. ULDC Charges	12.93	3.40	16.32			
3. Total	647.96	334.49	982.44			

# **Power Purchase Cost**

240 The Commission has placed the power purchase cost at ₹24565.32 Cr which is less by ₹1191.43 Cr compared with the estimates made by licensees at ₹25756.75 Cr for FY2018-19 as detailed in chapter-V of this Order. The summary of the power

<sup>&</sup>lt;sup>10</sup> The Commission has computed the distribution cost for SPDCL by adopting the approved distribution cost for SPDCL in MYT Order and adding 17.45% of the approved distribution cost for erstwhile CPDCL in the said MYT order to account for additional supply area due to addition of Anantapur and Kurnool as was done for FY2017-18<sup>10</sup>. For EPDCL, the Commission has adopted the distribution cost as approved in the MYT Order for FY2018-19.

purchase cost filed by licensees and approved by the Commission are given in the table below:

Itam	Power Pu	Power Purchase Cost (₹ Cr)				
Item	SPDCL	EPDCL	TOTAL			
01. Filed by Licensees	16,572.87	9183.88	25,756.75			
02. Approved by APERC	15947.46	8617.93	24565.32			
03. Difference (2-1)	625.41	565.95	1,191.43			

 Table 26: Power Purchase Cost for FY2018-19

# **Interest on Consumer Security Deposits**

- 241 As per the existing regulatory framework, licensees need to pay interest on security deposits held with them and such interest amount is a qualified expense item that can be included in ARR for a year. Licensees have computed the interest cost on consumer security deposits at ₹256.43 Cr (₹154.10 Cr by SPDCL and ₹102.33 Cr by EPDCL) and included the amount in ARR as expense item for FY2018-19. The interest amount has been computed on estimated average consumer security deposit amount expected to be held during FY2018-19 at the rate of interest of 6.25% by EPDCL.
- 242 The Commission has recomputed the interest amounts at the bank rate as published in RBI bulletin<sup>11</sup> at 6.25% for both licensees for FY2018-19. The Commission has approved the interest amount on consumer security deposits at ₹256.43 Cr (₹154.10 Cr for SPDCL and ₹102.33 Cr for EPDCL) during FY2018-19. The details are given in the table below:

Table 27: Approved: Interest Cost on Consumer Security Deposits for FY2018-19 (₹ Cr)

Item	SPDCL	EPDCL	TOTAL
1. Opening Balance	2331.96	1517.61	3849.57
2. Additions during the Year	468.31	313.92	782.23
3. Deductions during the Year	200.94	74.44	275.38
4. Closing Balance (1+2-3)	2599.33	1757.09	4356.42
5. Average Balance $((1+4)/2)$	2465.645	1637.35	4103.00
6. Interest @ % p.a.	6.25	6.25	6.25
7. Interest Cost (5x6)	154.10	102.33	256.43

<sup>&</sup>lt;sup>11</sup> RBI, *RBI Bulletin*. notification dated 22.12.2017

# Supply Margin

243 Licensees have computed supply margin on approved Regulated Rate Base for FY2018-19 in MYT Order at 2% and included the amount as expense item in the ARR for retail supply business for FY2018-19. The Commission has accepted the expenses computed in this manner by licensees and included the same in the respected ARR approved for them for FY2018-19. The details are given in the table below:

	Approved by APERC (₹ Cr.)				
Item	SPDCL	EPDCL	Total		
1. RRB Approved for FY 2018-19	2065.26	1231.36	3296.615		
2. Equity Portion of RRB (%)	25	25	25		
3. Underlying Equity (1x2)	516.31	307.84	824.15		
4. Retail Supply Margin (%)	2	2	2		
5. Retail Supply Margin (3x4)	10.33	6.16	16.48		
6. Margin on a/c of Anantapur & Kurnool Districts	2.73	0	2.51		
7. Total Retail Supply Margin	13.05	6.16	19.21		

# Table 28: Approved: Retail Supply Margin for FY2018-19 (₹ Cr)

Other Costs (Energy Efficiency Measures and short fall /gain in revenues of RESCOs)

244 Licensees have included ₹205.19 Cr (₹101.76 Cr by SPDCL and ₹103.43 Cr by EPDCL) towards cost of energy efficiency measures and short fall/gain in revenues of RESCOs for FY2018-19 in their respective ARR filings; Licensees proposed to incur expenses on a) replacement of incandescent bulbs with LED bulbs, replacement of fans with energy efficient fans b) replacement of agricultural pumpsets with solar pumpsets, c) replacement of agricultural pumpsets with energy efficient pumpsets and d) shortfall/gain in the revenues from the RESCOs during FY2017-18. The Commission has accepted the same for FY2018-19 and the details are given in the table below:

Item	Approved by APERC (₹ Cr)				
Item	SPDCL	EPDCL	TOTAL		
1. Payments to M/s EESL towards DELP	37.71	21.07	58.78		
2. Solar pumpsets	34.8	45.06	79.86		
3. Energy Efficient pumpsets	29.25	21.05	50.30		
4. Shortfall/gain in the revenues from the RESCOs during FY2017-18	0	16.25	16.25		
Total	101.76	103.43	205.19		

# **Relief to Victims of Electrical Accidents**

245 As per the Regulation 2 of 2017 the licensees have made a provision of ₹25 Cr. (SPDCL – ₹15 Cr and EPDCL – ₹10 Cr) towards the reserve fund meant for payment of compensation to victims of electrical accidents and the same has been accepted by the Commission.

#### **ARR for FY2018-19**

246 The Commission, in accordance with the above paragraphs, has placed the ARR at ₹31982.87 Cr. (₹20600.78 Cr for SPDCL and ₹11382.09 Cr for EPDCL) for FY2018-19. The ARR approved by the Commission is less by ₹1482.99 Cr compared with the estimate made by licensees at ₹33465.85 Cr for FY2018-19. The details of the approved ARR for FY2018-19 are given in the table below:

Table 30:Aggregate Revenue Requirement for Retail Supply Business for<br/>FY2018-19

Item	APERC Approved (`Cr)				
	SPDCL	EPDCL	STATE		
01. Transmission Cost	775.23	421.65	1196.88		
02. SLDC Cost	26.56	13.85	40.41		
03. Distribution Cost	2919.66	1772.25	4691.91		
04. PGCIL Expenses	635.03	331.09	966.12		
05. ULDC Charges	12.93	3.40	16.33		
<b>06. Network and SLDC Cost (1+2+3+4+5)</b>	4369.41	2542.24	6911.65		
07. Power Purchase / Procurement Cost	15,947.46	8617.93	24565.32		
08. Interest on Consumer Security Deposits	154.10	102.33	256.43		
09. Supply Margin in Retail Supply Business	13.06	6.16	19.21		
10. Other Costs, if any	116.76	113.43	230.19		
11. Supply Cost (7+8+9+10)	16231.38	8839.84	25071.22		
12. Aggregate Revenue Requirement (6+11)	20600.79	11382.08	31982.87		

# CHAPTER - VII COST OF SERVICE

# Introduction

247 The Commission, in this chapter, has computed the Cost of Service (CoS) for different consumer categories for each licensee based on ARR determined for FY2018-19 while considering the views/objections/suggestions of the stakeholders in this regard as explained in chapter-III.

# Licensees' Filings - Embedded Cost Method

- **248** Licensees, as in earlier years have arrived at the Cost of Service based on embedded cost method while adopting the average method (taking the average of morning peak and evening peak).
- **249** The following steps are stated to have been followed by the Licensees in arriving at the Cost of Service (CoS) for different consumer categories:

# a) Determination of Category-wise Load Curves

- Load Shapes of different categories of consumers are constructed based on the hourly demand data from feeder samples.
- Data is collected from sample feeders from all the circles for each category.
- From each sample feeder, hourly data was collected for upto 10 days per quarter.
- These samples are collected during normal working days as well as nonworking days like Sundays, Festivals and other Holidays.
- Based on the collected feeder samples, load curve for each category has been arrived.

# b) Estimation of Coincident and Non-Coincident Demand for each Category

- Demand at customer voltage level for FY2018-19 is estimated using the load curves and FY2018-19 projected sales of each category.
- Hourly demand for each category is grossed up with applicable T&D losses to arrive at the demand contributed by each category to the grid demand.

- Maximum Demand of each category is considered as Non-Coincident Demand.
- Based on the hourly demands of each category at the grid level the peak time in the morning hours (00:00 AM – 12:00 PM) and evening hours (12:00 PM – 00:00 AM) is arrived.
- Corresponding average demand contributed by each category during the peak hour in the morning hours and in the evening hours is considered as Coincident Demand.

# c) Allocation of expenditure to consumer categories

- Power Purchase Cost Allocation
  - Fixed costs of power purchase are primarily dependent on the system peak demand, hence fixed cost component of Power Purchase is considered as demand related expenditure and is allocated in proportion to the Coincident Demand of each category.
  - However, as supply is regulated for Agricultural Category to optimally supply when the capacity is idle, (i.e. when the generation capacity is not used by others), the coincident demand of agriculture is adjusted by a factor of 40% for allocation of fixed costs of power purchase.
  - Variable costs of power purchase are primarily dependent on the energy requirement, hence variable cost component of Power Purchase is considered as energy related expenditure and is allocated in proportion to the energy requirement of each category.

# • Transmission Cost Allocation

 Transmission Costs including PGCIL Costs, SLDC Costs and ULDC Charges are primarily dependent on the Non-Coincident Demand, hence these costs are considered as demand related expenditure and are allocated in proportion to the Non-Coincident Demand of each category.

# Distribution Cost Allocation

 Distribution Costs which consists primarily of Employee Expenses, Interest and Depreciation costs of Distribution Assets, are dependent on the Non-Coincident Demand, as well as on the number of customers. Hence, 80% of the Distribution Cost is considered as Demand Related Expenditure and is allocated in proportion to the Non-Coincident Demand of each category. 20% of the Distribution Cost is considered as consumer related expenditure and is allocated in proportion to the number of consumers of each category.

#### • Interest on Security Deposit

 Consumer Security Deposits (CSD) are primarily dependent on the energy consumed by each category. Hence, the interest on CSD is considered as energy related expenditure and is allocated in proportion to the energy requirement of each category.

#### • Supply Margin

 Supply Margin is linked to the Distribution Assets. Hence the Supply Margin is considered as Demand Related Expenditure and is allocated in proportion to the Non-Coincident Demand of each category.

#### • Other Costs

 Other costs are incurred on distribution assets. Hence the other costs are considered as Demand Related Expenditure and is allocated in proportion to the Non-Coincident Demand of each category.

#### d) Computation of Cost of Service

- Embedded cost for each consumer category has been computed by adding allocated demand related expenditure, energy related expenditure and consumer related expenditure as described above.
- The Cost of Service (CoS) per unit (average cost of supply) has been computed for each consumer category by dividing the allocated cost / ARR to each consumer category with the sales volume proposed for that category during FY2018-19.
- **250** The methodology being followed by the licensees hither to in arriving at the Cost of Service though theoretically appears to be more appropriate, it may not be reflecting the true cost of service due to limited sample data and data insufficiency. The

Commission recognizes the limitations of this particular Embedded Cost Model and decided to modify the method of calucation based on AT&C losses applicable for the respective category of consumers at different voltage levels so as to keep the Cost of Service at more realistic and verifiable levels and the same is as detailed hereunder:

**251** The Commission has considered the gross energy sales (MU) approved for the respective licensees at different voltage levels as shown the Table below:

Particulars SPDCL EPDCL STATE Sales at LT Level 23044.26 10376.71 33420.97 Sales at 11 kV Level 3178.05 2286.33 5464.38 Sales at 33 kV Level 5267.27 3360.17 1907.10 Sales at 132 kV Level and above 5339.32 4899.94 10239.26

 Table 31:
 Approved Energy Sales for FY2018-19 (MU)

**Total Sales** 

252 The Commission has, thereafter, grossed up the energy sales (MU) at the specific voltage levels with AT&C losses (%) as approved in this order for FY2018-19 for arriving the power purchase requirement (MU). The summary of the voltage wise losses considered are shown in the Table below:

34921.80 19470.08

54391.88

 Table 32:
 Approved AT&C Losses for FY2018-19 (%)

Particulars	SPDCL	EPDCL	STATE
AT & C Loss for LT Sales	13.64	12.91	13.42
AT & C Loss for 11 kV Sales	9.67	9.13	9.44
AT & C Loss for 33 kV Sales	6.51	6.00	6.33
AT & C Loss for 132 kV Sales	3.27	3.27	3.27

**253** Applying the above losses, the power purchase requirement / energy input (MU) for the respective voltage levels are arrived as shown in the Table below:

Table 33:Power Purchase Requirement / Energy Input for different Voltage<br/>levels for FY2018-19 (MU)

Particulars	SPDCL	EPDCL	STATE
Input for LT level	26685.47	11914.7	38600.17
Input for 11 kV level	3518.28	2516.00	6034.28
Input for 33 kV level	3594.16	2028.78	5622.94
Input for 132 kV level and above	5519.81	5065.58	10585.39
Total Input	39317.72	21525.06	60842.78

**254** The ARR determined for the year has been apportioned in proportion of the energy input at different voltage levels. The ARR cost allocated at different voltage levels is as shown in the Table below:

 Table 34: ARR allocation to different voltage levels for FY2018-19 (₹ Cr)

Particulars	SPDCL	EPDCL	STATE
For LT level	13982.03	6300.29	20282.32
For 11 kV level	1843.43	1330.42	3173.84
For 33 kV level	1883.18	1072.78	2955.97
For132 kV level and above	2892.14	2678.59	5570.73
Total Allocation	20600.78	11382.09	31982.87

255 Based on the energy sales and the apportioned ARR at the respective voltage levels, the Commission has determined Cost of Service per unit for different voltage levels for FY2018-19 as shown in the Table below:

Table 35: Cost of Service for FY2018-19 (₹/Unit)

Particulars	SPDCL	EPDCL	STATE
For LT level	6.07	6.07	6.07
For 11 kV level	5.80	5.82	5.81
For 33 kV level	5.60	5.63	5.61
For132 kV level and above	5.42	5.47	5.44
Total	5.90	5.85	5.88

**256** The comparison of the Cost of Service filed by the licensees and approved by the Commission is given in the Table below:

	SP	DCL	EPDCL	
Particulars	As per filing			As per APERC
LT Category	6.18	6.07	6.49	6.07
HT Category at 11 KV	6.52	5.80	6.05	5.82
HT Category at 33 KV	5.90	5.60	5.73	5.63
HT Category at 132 KV	5.92	5.42	5.39	5.47
Total	6.16	5.90	6.09	5.85

Table 36: Cost of Service: Filings and Approved (₹ /Unit)

**257** The ratio of Average Billing Rate (ABR) and Average Cost of Supply (ACOS) voltage wise is indicated in the Table below:

Table 37:Ratio of Average Billing Rate (ABR) and Average Cost of Supply<br/>(ACOS)

Particulars	ABR Approved for FY2018-19		ACOS		<b>ABR</b> /A (%	
	SPDCL	EPDCL	SPDCL EPDCL		SPDCL	EPDCL
For LT level	3.24	4.03	5.90	5.85	54.92	68.89
For 11 kV level	7.90	7.48	5.90	5.85	133.90	127.86
For 33 kV level	7.04	7.3	5.90 5.85		119.32	124.79
For132 kV level and above	6.12	5.82	5.90	5.85	103.73	99.49
Average for the licensee	4.47	5.21	5.90 5.85		75.76	89.06

- **258** The fact that the Cost of Service for different categories of consumers within the same voltage level varies depending upon the loadfactor, time of use and quantity of electricity consumed, power factor and contribution of their demand to peak and/or non-peak demand of the system, is not deniable. However, there being no mechanism available to measure and segregate the data to account for the effects of all the factors mentioned above, the Commission has decided to keep a uniform cost of service for different categories of consumers at the same voltage level.
- 259 However, the Commission desires that the determination of Cost of Service shall be based on more precise methods using verifiable, measurable and quantifiable data. In this regard, the licensees are directed to study the Cost of Service models and submit a report on such study for consideration of the same in future duly taking the views of stake holders.

# CHAPTER – VIII REVENUE AND REVENUE GAP

# Introduction

260 The Commission in this chapter has recomputed the revenue gap for FY2018-19 based on revised sales, ARR and total revenue from all sources, while taking the tariff as proposed by licensees for FY2018-19 as the basis. The revenue to licensees will be through a) tariff income (energy, fixed/demand, minimum and customer charges), b) non-tariff income (recoveries from theft of power or other malpractices, interest on income and other miscellaneous receipts) and c) levy of Cross Subsidy and Additional Surcharges on Open Acces consumers.

# **Revenue from Tariffs and Other Sources**

- 261 The licensees realize their revenue through retail sale of electricity and other income (non- tariff income and income through cross subsidy and additional surcharges) which is incidental to the main business and such income would not be substantial.
- 262 The licensees have computed/estimated the revenue from current tariff (consumption charges and non-tariff income) on sales forecast/estimate of 54537.03 MU made by them and the details of revenue including non-tariff income are given in the table below:

	Consumer Category	Sales in MU Revenue					
		SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	TOTAL
LT-I	Domestic	9168.39	5512.92	14681.32	3451.06	2024.72	5475.78
LT-II	Non Domestic/Commercial	1906.11	1100.97	3007.08	1924.78	1120.95	3045.73
LT-III	Industry	2303.21	1351.80	3655.01	1292.69	723.06	2015.75
LT-IV	Cottage Industries & Agro Based Activities	42.63	2.61	45.24	17.67	1.15	18.82
LT-V	Agricultural	9761.55	2296.43	12057.98	126.43	52.25	180.13
LT-VI	Street Lighting, PWS & NTR Sujala	771.31	257.09	1028.39	472.25	159.73	631.98
LT-VII	General Purpose	109.24	60.39	169.64	84.36	46.55	130.91
LT-VIII	Temporary Supply	1.63	0.67	2.29	1.73	0.72	2.45
HT-I	Industry	7436.73	6736.90	14173.63	5520.09	4569.90	10089.99
HT-II	Others	802.72	605.99	1408.70	789.73	628.62	1418.35
HT-III	Public Infrastructure and Tourism	58.53	44.62	103.15	55.27	40.06	95.33
HT-IV	Lift Irrigation and Agriculture	1164.71	643.50	1808.21	672.27	383.52	1055.79
HT-V	Railway Traction	721.49	708.53	1430.03	364.85	344.87	709.71
HT-VI	Town Ships and Residential Colonies	37.24	35.64	72.87	24.94	24.26	49.20
HT-VII	Green Power	0.00	0.00	0.00	0.00	0.00	0.00
HT-VIII	Temporary	0.12	4.41	4.53	0.11	6.68	6.79
HT-IX	RESCOs	500.03	388.93	888.95	18.23	32.99	51.23
All	Total	34785.64	19751.40	54537.03	14816.47	10160.04	24977.95

**263** The revenue requirement and revenue gap estimated by the licensees at the current tariffs is given in the table below:

Items	SPDCL	EPDCL	TOTAL
1. Aggregate Revenue Requirement	21429.39	12036.46	33465.85
2. Revenue at Current Tariff	14816.47	10161.48	24977.95
3. Tariff revision proposed	0	-1.44	-1.44
4. Revenue from CSS & Additional			
Surcharge	394.29	111.66	505.95
5. Revenue Gap (1-2-3-4)	6218.63	1764.76	7983.39

Table 39:Revenue Requirement and Revenue Gap estimated by Licensees for<br/>FY2018-19 (₹ Cr.)

264 Based on the approved sales volume of 54391.87 MU for both the licensees, the Commission has computed the revenue of the licensees at the tariff proposed by them including the revenue on account of the proposed new sub-categories, changes in Time of Day (ToD) tariff and the non-income tariff at the same level as filed by the licensees. The revenue computed by the Commission in the above manner is ₹25760.75 Cr. for FY2018-19 and these details are given in the table below:

	Category		ales in MU	IJ			
	Category	SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	TOTAL
LT-I	Domestic	9168.39	5512.92	14681.32	3451.06	2024.72	5475.78
LT-II	Non Domestic/Commercial	1906.11	1100.97	3007.08	1924.78	1120.96	3045.74
LT-III	Industry	2303.21	1351.80	3655.01	1293.34	723.06	2016.40
LT-IV	Cottage Industries & Agro Based Activitie	42.63	2.61	45.24	17.67	1.15	18.83
LT-V	Agricultural	8741.73	2090.27	10831.99	232.53	111.37	343.90
LT-VI	Street Lighting, PWS & NTR Sujala	771.31	257.09	1028.39	462.13	158.03	620.16
LT-VII	General Purpose	109.24	60.39	169.64	84.36	46.55	130.91
LT-VIII	Temporary Supply	1.63	0.67	2.29	1.73	0.72	2.45
HT-I	Industry	7425.27	6699.38	14124.65	5471.40	4474.09	9945.49
HT-II	Others	814.18	643.51	1457.68	803.91	673.12	1477.03
HT-III	Public Infrastructure and Tourism	58.53	44.62	103.15	55.27	40.06	95.33
HT-IV	Lift Irrigation and Agriculture	2436.08	604.08	3040.16	1417.89	360.57	1778.46
HT-V	Railway Traction	721.49	708.53	1430.03	364.85	344.87	709.71
HT-VI	Town Ships and Residential Colonies	37.24	35.64	72.87	24.94	24.25	49.19
HT-VII	Green Power	0.00	0.00	0.00	0.00	0.00	0.00
HT-VIII	Temporary	0.12	4.41	4.53	0.11	6.68	6.79
HT-IX	RESCOs	384.62	353.20	737.82	14.03	30.56	44.58
All	Total	34921.78	19470.08	54391.86	15619.99	10140.76	25760.75

265 Based on the ARR<sup>12</sup> approved by the Commission and revenue recomputed for FY2018-19, the revenue gap has been worked out at ₹6030.17 Cr (₹4937.00 Cr for SPDCL and ₹1093.17 Cr for EPDCL) for both licensees. The revenue requirement approved and the revenue gap arrived by the Commission are given in the table below:

Item	Licensee				
Item	SPDCL	EPDCL	TOTAL		
1. Aggregate Revenue Requirement	20600.78	11382.09	31982.87		
2. Revenue from Tariff including NTI	15619.99	10140.76	25760.75		
3. Revenue from CSS & Additional Surcharge	43.80	148.15	191.95		
4. Revenue Gap (1-2-3)	4937.00	1093.17	6030.17		

Table 41:Revenue Requirement and Revenue Gap determined by the<br/>Commission for FY2018-19 (₹ Cr).

266 To sum up, the revenue gap has been reduced by ₹1953.22 Cr. (₹1281.63 Cr for SPDCL and ₹671.59 Cr for EPDCL) as a result of determination of ARR based on revised sales, revised power purchase cost, revised transmission cost and computation of revenue on revised sales taking into account the revenue from new sub-categories, off-peak ToD tariffs etc. The details of revenue gap as filed by the licensees and as determined by the Commission are as shown in the table below.

Table 42: Revenue gap	for FY2018-19 (₹ Cr)
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Items	SPDCL	EPDCL	TOTAL
1. Revenue gap filed by the licensees	6218.63	1764.76	7983.39
2. Revenue gap determined by the Commission			
Commission	4937.00	1093.17	6030.17
3. Difference (1-2)	1281.63	671.59	1953.22

<sup>&</sup>lt;sup>12</sup>See Chapter-VI

# CHAPTER- IX REFERENCE TARIFF SCHEDULE

# Introduction

267 The Commission in this Chapter, after examination of the tariff proposed by the licensees for FY2018-19, stakeholders' views/objections/suggestions thereon and other aspects such as the revenue gap, cross subsidies and external subsidy availability, has prepared a Reference Tariff Schedule (RTS) as a prelude to determination of full cost recovery tariff in Chapter-X. In this RTS, the Commission has incorporated the rates/charges as deemed fit considering all relevant aspects for FY2018-19.

# **Proposals for FY2018-19**

268 The Commission having examined the stakeholders' views/objections/suggestions and the licensees' responses and the revenue gap of ₹6030.17 Cr for FY2018-19 as computed in Chapter-VIII, has decided to retain the existing tariff structure as well as the tariffs approved in Retail Supply Order for FY2017-18 to be applicable for FY2018-19 with the following modifications.

# **Smart Meters (Optional) for Domestic Consumers**

269 The licensees have proposed to roll out a program of installation of smart meters for domestic consumers in LT-I (C) Category whose monthly consumption is more than 500 units, making it optional to the consumers. Also, a discount of ₹ 1.00 per unit on the applicable tariff was proposed for the consumption during 10 AM -12 Noon slot to understand the response from the consumers. The cost of the smart meter with modem, as per recent bids is estimated as ₹ 2,503 per smart meter. The cost of the smart meter along with the installation cost after adjusting the grants from Central Government schemes like IPDS has to be borne by the consumer by paying EMI for a period of 24 months.

The Commission has accepted the proposal of the licensees and included this as optional for LT-I (C) sub-category domestic consumers whose monthly consumption is more than 500 units per month.

# **Electric Vehicles (EVs)**

**270** The licensees have proposed a separate sub-category for Electric Vehicles within the LT:II (C ) Non-domestic category with tariffs as detailed below:

Energy Charges		ges	
			₹ 6.95/kWh
Time	of	Day	Additional charge of ₹1.00/kWh levied for usage from 06:00 AM to
(ToD) tariff			10:00 AM and 06:00 PM to 10:00 PM
			Rebate of ₹1.00/kWh offered for usage between 10:00 PM to 06:00
			AM

- 271 In this regard, the licensees have referred the excerpts from the report on "Study on Impact of Electric Vehicles on the Grid" by Forum of Regulators (FOR) on possible business models for setting up charging infrastructure, wherein FOR observed that,
- 272 "In the context of Electricity Act, 2003 and its provisions, the following observations are made:
  - 1. As per The Act, the provision of public EV charging service to the users amounts to distribution/supply of electricity.
  - 2. Specific amendments to the Act can be made, allowing EV charging businesses to resell the electricity without specific licensing arrangements,
  - 3. As per the current legal provisions the following three business models are feasible:
    - a. **Distribution Licensee owned EV charging infrastructure**: Supply of electricity to vehicle owners would be part of the activities of the Distribution Licensee.
      - The retail supply tariff for supplying to the electric vehicle owners will be determined by the SERC.
    - b. **Distribution Licensee Franchised EV charging infrastructure:** Utility can authorize a third party (Franchisee) to install and/or operate charging stations on its behalf in its area of supply. The franchisee can also be a public private partnership (PPP).
      - Charging stations can receive electricity at a single point as bulk supply. The single point supply tariff as well as the tariff cap for retail sale will be determined by the SERC

- Franchisee can be allowed to purchase power through open access without applying Cross Subsidy Surcharge.
- c. **Privately-owned battery swapping stations:** Utility, its distribution franchisee or any other third party can aggregate the demand for batteries and set up battery swapping stations
  - Battery swapping will not amount to electricity resale and hence third parties can set up the stations with intimation to the Distribution Licensee to avail special category tariff.
  - The Charging Station can receive electricity in bulk at single point from a distribution licensee or through open access to charge the batteries, as per provisions of the Act.
  - The bulk supply tariff/single point supply tariff will be determined by the SERC"
- 273 Accordingly, the licensees have proposed to invest in building up battery charging infrastructure to help meet the requirement of electricity of the EVs. The charging infrastructure has to be developed in a phased manner to promote EV adoption across the cities. EV charging infrastructure will be set up throughout Andhra Pradesh with focus on 3 major cities viz. Vijayawada, Tirupati and Visakhapatnam during FY2018-19 at selected locations including Government offices, commercial spaces, and public buildings in the above-mentioned cities. The battery charging infrastructure will also be set up in other municipalities and National and State Highways (~ 1 per every 50 kMs.) to help encourage EV adoption in the State.
- 274 Further, the licencees have stated that they are working out the modalities for setting up the charging infrastructure including the investment estimates, bid process and vendor responsibilities etc. which would be communicated to the Commission subsequently.
- 275 The Commission at this stage is pleased to accept the proposal of the licensees for inclusion of Electric Vehicles with the tariff as proposed to extend the required regulatory support to promote electric vechicle usage in large scale by public to protect the environment and cheaper transport. But a separate subcategory is created for Electric Vehicles / Charging Stations as LT-II (E) instead of including it within LT-II (C) as proposed by the licensees and also as HT-II(E).

With regard to the licensees' proposals for setting up of EV charging infrastructure on their own or through franchisees, the Commission will examine the same on merits as and when the proposals are placed before it.

#### **Rural Horticulture Nurseries**

- 276 The licensees, stated to be as per the directions of GoAP, have proposed a separate sub-category "Rural Horticulture with Connected Load upto 5 HP" within the LT-V(C) others with energy charge of ₹1.50/kWh and Fixed/ Demand charges as applicable.
- 277 Subsequently, the Principal Secretary, Energy, I&I Department, vide letter no. 3275/Power.I/2017, dated 9.3.2018 (which is enclosed as Annexure 15 to this order) has Communicated to the Commission, the decision of Government of Andhra Pradesh to extend all the benefits to the nursery farmers on par with benefeciaries getting agriculture connections (free category). Thereafter, an Order was also issued by GoAP vide G.O.RT.No.39 dated 14.03.2018 on the matter, which is enclosed to this order as Annexure -16.

The Commission has accepted the decision of the GoAP and revised the tariff for Rural Horticulture Nurseries without any limit on connected load on par with agriculturists under free category. However, the tariff of  $\gtrless$  1.50 per unit for connected load upto 5 HP and  $\gtrless$  3.70 per unit for connected load beyond 5 HP and upto 25 HP in respect of the Rural Horticulture Nurseries as proposed by the licensees shall have to be charged, if the GoAP failed in its commitment as stated in the G.O. cited above.

Start up power for Captive Generating Plants, Co-generation Plants and Renewable Generation Plants.

278 The Commission, at Clause 17 of Regulation No. 3 of 2017 (Power evacuation from Captive Generation, Cogeneration and Renewable Energy Source Power Plants) had directed, "AP Transco / DISCOMs for extending power supply to Captive Generation Plants, Cogeneration plants and Renewable genartion plants either at Low Tension or High Tension as desired by the producer / developer for maintenance, start-up operations and lighting purpose. The tariff for these plants for FY207-18 shall be charged at the rate of ₹11.77 per unit without any fixed and minimum charges. The DISCOMs shall file tariff proposals u/s 62 of the Electricity Act, 2003 in the ARR proposal of FY2018-19, for supply of electricity to this type of power plants."

The licensees, vide an Addendum dated 26.01.2018 to the ARR and FPT proposals for FY2018-19 citing the above directions, have proposed a separate Category under HT-II (Others) as HT-II (d) - Start up power for Captive Generating Plants, Co-generation Plants and Renewable Generation Plants with following tariff irrespective of the supply voltage.

Demand Charges	Energy Charges
(₹/kVA/Month)	(₹/kVAh)
475	11.77

279 ₹1.05/kVAh Time of the Day (ToD) tariff is leviable on energy consumption during the period from 06:00 P.M. to 10.00 PM, in addition to the normal energy charges at respective Voltages.

# **Conditions:**

- Contracted maximum demand under this category is limited to percentage norm (10% in Thermal, 6% in Gas, 3% in Hydel) of the maximum capacity unit in the Generating Station.
- **ii.** Supply is to be used strictly for startup operations, maintenance, and lighting purposes only and shall not be extended for process plant.
- **iii.** Demand charges are leviable only if the monthly load factor of the consumer exceeds 10% in accordance with billing demand condition under HT-II(A).
- iv. If RMD exceeds CMD the penal charges on Demand & Energy will be applicable as per the existing conditions of HT-II(A): Others category, even if the monthly load factor is equal or below 10%.
- v. Monthly minimum charges on energy are not applicable to this category.
- vi. All other conditions applicable to HT-II(A): Others category shall also apply to this category.
- **280** The Commission has examined the proposal of the licensees and included it in the Low Tension as 'LT-II (F)' sub-category and in High Tension as 'HT-II(F)' sub-category, as provided for in the Regulation 3 of 2017. Further, the reaons for which by clause 17 of Regulation 3 of 2017 the Commission has directed the consumption charges for use of power for startup operation for plant maintenance to be without any

Fixed Charges and minimum charges for FY2017-18 continue to exist and nothing has been placed before the Commission to take a different view. The concept of fixed charge / demand charge is for a continuous and consistent supply of power to a consumer at the contracted capacity and may not be justifiably applicable to an occasional and intermiitent supply. Hence, the request of the licensees for imposing Demand Charges is not accepted.

The conditions applicable are as follows:

- Supply is to be used strictly for generator start-up operations, maintenance and lighting purposes only.
- ii) Monthly minimum charges on energy are not applicable.
- iii) Allowable Maximum Demand is to be limited to the following percentages of the maximum capacity unit in the generating station in case of generators other than Wind and Solar, and to the plant capacity in case of Wind and Solar generators.

Thermal -15%, Gas based -6%, Hydel -3%, Wind and Solar -2%, Other NCE Sources -10%

If the Maximum Demand exceeds the limits specified above, the energy charges shall be charged at 1.2 times of normal charge for the entire energy consumed.

- All other conditions applicable to LT-II and HT-II categories shall also supply to the LT-II (F) and HT-II(F) categories respectively to the extent they are not contradictory to the above.
- v) This category is also applicable to all the wind and solar plants who have PPAs with the licensees.

It is to be clarified here that the start up power category is intended for those generators who require occasional and intermiitent supply for start up operations of the generating unit(s) alone. However, the Captive and Cogeneration plants with their process plants being located in the same premises and having single connection with the grid (Transco / DISCOMs) and who continuously depend on the licensees'supply for part of their energy requirement may be given option to either continue in their present category or to be included in this new category. Without giving an opportunity to all such generators to exercise option in this regard, the category change shall not be affected.

# Change of applicability of tariffs under LT Category - VII (A): General Purpose

**281** The licensees have proposed to change the applicability of tariff under LT Category-II(A) as below:

"Applicable for supply of energy to places of Crematoriums, Government Educational Institutions and student hostels run by Government agencies, Charitable Institutions i.e. Public Charitable Trusts and Societies registered under the Societies registration Act running educational and medical institutions *rendering totally free service to the general public*, recognized service institutions and registered old age homes", in place of the exisiting applicability as extracted below:

"Applicable for supply of energy to places of Crematoriums, Government Educational Institutions and student hostels run by Government agencies, Charitable Institutions i.e. Public Charitable Trusts and Societies registered under the Societies registration Act running educational and medical institutions *on a no profit basis*, recognized service institutions and registered old age homes".

Commission has accepted the applicability for LT Category – VII (A): General Purpose, as proposed by the licensees. The change of applicability shall be effected within three months to the existing consumers who fit in the above definition. If the change of applicability is not effected within three months for various reasons, for all such consumers, change of classification shall be effected prospectively from the actual date of re-classification.

# Aqua Hatcheries and Aqua Feed Mixing Plants

282 Many of the stake holders have sought that tariff applicable to Poultry hatcheries & Poultry feed mixing plants under Category-3 shall be extended to Aqua culture hatcheries & Aqua feed mixing plants.

Aqua culture hatcheries and Aqua culture feed mixing plants were not separately specified while fixing the tariff for Aqua culture in the same manner in which such hatcheries and feed mixing plants relating to Poultry were specified in the tariff orders of FY2017-18 and FY2016-17 resulting in some ambiguity relating to them. As hatcheries and feed mixing plants relating to poultries or aqua culture are

qualitatively similar, Aqua culture hatcheries and Aqua culture feed mixing plants are also specifically included in item (iv) of LT Category-III: Industry liable for fixed charges at ₹ 75/kW/month and energy charges of ₹4.89/Unit, giving the desired relief to them. The reasonable classification of the hatchery and feed mixing activity separately from the poultry and aqua culture activity is based on intelligible criteria, with the former being more industrial/commercial in character and the latter being akin to activities like agriculture, dairy farming etc.

#### **Green Power Tariff**

283 M/s MGB Mobiles, Anantapuramu have requested the Commission to consider restoration of the Green Power Category in the tariff order for FY2018-19 and submitted that they were initially a HT Consumer (Mahindra and Mahindra Ltd. Automotive dealers, Anantapuramu) under HT-II(A) category with consumer no. ATP 460 and have established a 150 kW roof top solar plant with net metering facility in June 2016. As per the provisions of the Tariff Order for FY2016-17, they have opted for conversion of category from HT-II(A) to HT-VII - Green Power Category, to further their business and economic requirements and the same was granted by APSPDCL pursuant to their application dated 21.11.2016 and they have entered into a revised agreement on 1.03.2017 which is valid for a minimum period of two years i.e. upto 28th February, 2019. Later, in the tariff order for FY2017-18 the HT-VII category was deleted on the ground that historically there were no sales in the said category, which is not correct. Immediately after knowing about the deletion of the category, the Commission was informed by a letter dated 1.04.2017 that they have been converted to HT Green Power category on 1.03.2017 with prior permission of APSPDCL and a copy of the letter was also given to APSPDCL. While their request for reconsideration of the matter was pending before APERC, APSPDCL issued a letter on 13.04.2017 pursuant to which the agreement executed on 1.3.2017 was cancelled. They are incurring substantial losses due to minimum consumption charges and Maximum Demand charges which charges were not required to be paid under the then HT-VII - Green Power Category. Thereafter they have filed O.P. 59 of 2017 on the file of APERC and the same was not pressed reserving liberty while withdrawing the same.

After examining the issue raised by the consumer, the Commission has decided to restore the Green Power Category. If M/s MGB Mobiles falls under that category, it will be governed by the tariff prescribed for the same. The APSPDCL may take necessary action expeditiously and report to the Commission within one month from the date of issue of this order.

# Cross Subsidy Surcharge & Additional Surcharge

284 Licensees have proposed to levy cross subsidy surcharge and additional surcharge on Open Access consumers for FY2018-19. The Commission has determined the crosssubsidy surcharge based on the revised ARR and Tariffs as detailed in Chapter-XII while deferring the consideration of grant of any additional surcharge to an appropriate application adequately supported by data and material if the licensees choose to file such an application.

# **Charges for Rural Electric Cooperatives (RESCOs)**

285 The Commission has admitted the applications filed by RESCOs for determination of bulk supply rate to be paid by them to the licensees for energy drawl by them from licensees during FY2018-19. Pending finalization of the bulk supply rate by the Commission, the Commission has adopted the bulk supply rate as filed by the licensees in their filings on provisional basis for FY2018-19. Appropriate adjustments will be carried out on determination of bulk supply rate for RESCOs for FY2018-19.

# **Reference Tariff Schedule (RTS)**

286 The Commission, with the categories and rates determined as above in this Chapter, has accordingly prepared a Reference Tariff Schedule (RTS) for FY2018-19. This tariff schedule reflects the well-considered view of the Commission with regard to charges/rates for all consumer categories after considering views/ objections/ suggestions of stakeholders, licensees proposed new categories and sub-categories and GoAP's willingness to provide subsidies under section 65 of the Electricity Act, 2003. The complete RTS for FY2018-19 is given below:

# Table 43:Reference Tariff Schedule (RTS) for FY2018-19<br/>(Rates / Charges as fixed by APERC)

	Consumer Category		emand Charges er month	Energy (	Charge				
LT		₹/kVA	₹/HP/kW	Billing Unit	₹/Unit				
Ι	LT CATEGORY-I: DOMESTIC (TELES COPIC)								
	Group A: Annual Consumption <=900 Units during FY2	2017-18							
	0-50	-	-	kWh	1.45				
	51-100	-	-	kWh	2.60				
	101-200	_	-	kWh	3.60				
	Above 200	_	-	kWh	6.90				
	Group B: Annual Consumption > 900 and < =2700 units during FY2017-18								
	0-50	-	_	kWh	2.60				
	51-100	-	-	kWh	2.60				
	101-200	-	-	kWh	3.60				
	201-300	-	_	kWh	6.90				
	Above 300	-	-	kWh	7.75				
	Group C: Annual Consumption >2700 units during FY2	017-18							
	0-50	-	-	kWh	2.68				
	51-100	-	-	kWh	3.35				
	101-200	-	-	kWh	5.42				
	201-300	-	-	kWh	7.11				
	301-400	-	-	kWh	7.98				
	401-500	-	-	kWh	8.52				
	Above 500 units	-	-	kWh	9.06				
	Smart Meters (Optional for above 500 units/month):	-	-	kWh	9.06				
	Time of Day tariff (TOD) 10AM to 12 Noon	-	-	kWh	8.06				
П	LT CATEGORY-II: OTHERS			• •					
	LT-II(A): 0-50 units	_	55/kW	kWh/kVAh	5.40				
	LT-II(B): Above 50 Units/Month	11							
	0-50		75/kW	kWh/kVAh	6.90				
	51-100	_	75/kW	kWh/kVAh	7.69				
	101-300	_	75/kW	kWh/kVAh	9.06				
	301-500	_	75/kW	kWh/kVAh	9.61				
	Above 500	_	75/kW	kWh/kVAh	10.19				
	LT-II(C): Advertising Hoardings	_	75/kW	kWh/kVAh	12.28				
	LT-II(D): Function Halls/Auditoriums	_	-	kWh/kVAh	11.77				
	LT-II(E): Electric Vehicles (EVs) / Charging Stations	_	-	kWh/kVAh	6.95				
	ToD (6 AM to 10 AM & 6 PM to 10 PM)	-	-	kWh/kVAh	8.00				
	ToD (10 PM to 6 AM) off peak	-	-	kWh/kVAh	5.95				
	LT-II(F): Startup Power for Captive Generating Plants,				0.70				
	Co-generation plants and Renewable Generation Plants	-	-	kWh/kVAh	11.77				
Ш	LT CATEGORY-III: INDUSTRY	<u> </u>		I					
	(i) Industry(General)	-	75/kW	kWh/kVAh	6.71				
	(ii) Seasonal Industries (offseason)	-	75/kW	kWh/kVAh	7.45				
	(iii) Aquaculture and Animal Husbandry	-	30/kW	kWh/kVAh	3.86				
	(iv) Sugarcane crushing	-	30/kW	kWh/kVAh	3.86				
	(v) Mushroom & Rabbit Farms	-	75/kW	kWh/kVAh	5.91				
	(vi) Floriculture in Green House	-	75/kW	kWh/kVAh	5.91				
	(vii) Poultrry Hatcheries and Poultry Feed Mixing Plants,				4.00				
	Aqua Hatcheries and Aqua feed mixing plants	-	75/kW	kWh/kVAh	4.89				

	Consumer Category		emand Charges er month	Energy (	Charge
LT		₹/kVA	₹/HP/kW	Billing Unit	₹/Unit
IV	LT CATEOGRY-IV: COTTAGE INDUSTRIES & OTHERS	•	•		
	(A) Cottage Industries upto 10 HP	-	20/kW	kWh	3.75
	(B) Agro Based Activities upto 10 HP	-	20/kW	kWh	3.75
V	LT CATEGORY-V: AGRICULTURE				
	LT-V(A): Agriculture with DSM measures **				
	(i) Corporate Farmers & IT Assessees	-	-	kWh	2.50
	(ii) Wet Land Farmers (Holdings >2.5 acre)	-	525/HP/Year*	kWh	0.50
	(iii) Dry Land Farmers (Connections > 3 nos.)	-	525/HP/Year*	kWh	0.50
	(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	0	kWh	-
	(v) Dry Land Farmers (Connections <= 3 nos.)	-	0	kWh	-
	LT-V(B): Agriculture without DSM measures **				
	(i) Corporate Farmers & IT Assessees	-	-	kWh	3.50
	(ii) Wet Land Farmers (Holdings >2.5 acre)	-	1050/HP/Year*	kWh	1.00
	(iii) Dry Land Farmers (Connections > 3 nos.)	-	1050/HP/Year*	kWh	1.00
	(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	525/HP/Year*	kWh	0.50
	(v) Dry Land Farmers (Connections <= 3 nos.)	-	525/HP/Year*	kWh	0.50
	LT-V(C): Others		00 (TVD		2.50
	(i) Salt farming units with Connected Load upto 15HP	-	20/HP	kWh	3.70
	(ii) Rural Horticulture Nurseries***				
	Connected load upto 5 HP	-	20/HP	kWh	1.50
	Connected load above 5 HP and upto 25 HP	-			3.70
VI	LT CATEGORY-VI:STREET LIGHTING, PWS SCHEMES	& NTR SU	JALA PATHAK	AM	
	LT-VI(A): Street Lighting	- T	1		
	(i) Panchayats	-	75/kW	kWh	5.98
	(ii) Municipalities	-	75/kW	kWh	6.53
	(iii) Muncipal Corporations	-	75/kW	kWh	7.09
	LT-VI(B): PWS Schemes		75/100	1 3371 // 374.1	1.07
	(i) Panchayats	-	75/HP	kWh/kVAh	4.87
	(ii) Municipalities	-	75/HP	kWh/kVAh	5.98
	(iii) Muncipal Corporations LT VI(C): NTR Sujala Pathakam	-	75/HP	kWh/kVAh	6.53
VII	LT VI(C): NTK Sujata Pautakani LT CATEGORY-VII: GENERAL	-	10/HP	kWh/kVAh	4.00
νп			20/1-11	13Vb/13VAb	7.29
	LT VII(A): General Purpose LT VII(B): Religious Places	-	30/kW	kWh/kVAh	7.28
	(i) With Contracted Load ≤ 2 kW	_	30/kW	kWh	4.84
	(i) With Contracted Load >2 kW	-	30/kW	kWh	5.04
VIII	LT CATEGORY-VIII: TEMPORARY SUPPLY	-	30/kW	kWh/kVAh	10.50
HT	LI CATEGORI-VIII: TEVIFORARI SUFFLI	-	30/KW	KWII/KVAII	10.30
	HT CATEGORY-I: INDUSTRY				
1					
	H-I(A): (i) INDUSTRY GENERAL				
	11 kV	475/kVA	-	kVAh	6.33
	33 kV	475/kVA	-	kVAh	5.87
	132 kV & Above	475/kVA	-	kVAh	5.44
	Industrial Colonies				
	11 kV	-	-	kVAh	6.32
	33 kV	-	-	kVAh	6.32
	132 kV & Above	-	-	kVAh	6.32
	Time of Day tariff (TOD) peak (6 AM to 10 AM & 6 PM	to 10 PM)	1		
	11 kV	-	-	kVAh	7.38
	33 kV	-	-	kVAh	6.92
	132 kV & Above	-	-	kVAh	6.49
	Time of Day tariff (TOD ) off peak (10 PM to 6 AM)	-			
	11 kV	-	-	kVAh	5.33
	33 kV	-	-	kVAh	4.87
	132 kV & Above	-	-	kVAh	4.44

	Consumer Category		mand Charges r month	Energy (	Charge				
нт		₹/kVA	₹/HP/kW	Billing Unit	₹/Unit				
Ι	HT-I(A):(ii) Seasonal Industries (Off Season Tariff)			•					
	11 kV	475/kVA	-	kVAh	7.66				
	33 kV	475/kVA	-	kVAh	6.98				
	132 kV & Above	475/kVA	-	kVAh	6.72				
	HT-I(B): Energy Intensive Industries	-		• •					
	11 kV	-	-	kVAh	5.82				
	33 kV	-	-	kVAh	5.37				
	132 kV & Above	-	-	kVAh	4.95				
	HT-I(C): Aquaculture and Animal Husbandry								
	11 kV	30/kVA	-	kVAh	3.80				
	33 kV	30/kVA	-	kVAh	3.80				
	132 kV & Above	30/kVA	-	kVAh	3.80				
	HT-I(D): Poultry Hatcheries and Poultry Feed Mixing F Aqua Hatcheries and Aqua Feed Mixing Plants	lants,		· · · ·					
	11 kV	475/kVA	-	kVAh	4.89				
	33 kV	475/kVA	-	kVAh	4.89				
	132 kV & Above	475/kVA	-	kVAh	4.89				
П	HT CATEGORY-II			1 1					
-	HT CATEGORY-II HT-II(A): OTHERS								
	11 kV	475/kVA		kVAh	7.6				
	33 kV	475/kVA	-	kVAh	6.9				
	132 kV & Above	475/kVA	-						
	132 kV & Above         475/kVA         -         kVAh         6.7           Time of Day tariff (TOD) (6PM to 10PM)         6.7         6.7         6.7								
	11 kV			kVAh	8.7				
	33 kV	-	-	kVAh	8.0				
	132 kV & Above	-	_	kVAh	7.7				
	HT-II(B): Religious Places	-	-	KVAII	1.1				
	11 kV	30/kVA	_	kVAh	5.0				
	33 kV	30/kVA	-	kVAh	5.0				
	132 kV & Above	30/kVA	-	kVAh	5.0				
	HT-II(C):Function Halls/Auditoriums	50/ K 11		K V/ III	5.0.				
	11 kV	-	_	kVAh	11.7				
	33 kV	-	-	kVAh	11.7				
	132 kV & Above	_	_	kVAh	11.7				
	HT-II(D): Intentionally left blank			K VI III	11.7				
	HT-II(E): Electric Vehicles (EVs) / Charging Stations	_	_	kWh/kVAh	6.9				
	ToD (6 AM to 10 AM & 6 PM to 10 PM)		-	kWh/kVAh	8.0				
	ToD (10 PM to 6 AM) off peak		_	kWh/kVAh	5.9				
	HT-II(F):Startup Power for Captive Generating Plants,	Co-generati	on plants and R						
	11 kV			kVAh	11.7				
	33 kV	-	-	kVAh	11.7				
	132 kV & Above	-	-	kVAh	11.7				
Ш	HTCATEGORY-III: PUBLIC INFRASTRUCTURE AND TO	DURISM							
	11 kV	475/kVA	-	kVAh	7.3				
	33 kV	475/kVA	_	kVAh	6.6				
	132 kV & Above	475/kVA	-	kVAh	6.3				
	Public Infrastructure and Tourism, ToD peak (6PM to 10 PM)								
	Public infrastructure and fourism, fold peak (6PM to )       11 kV       33 kV	-	-	kVAh kVAh	8.3 7.74				

	Consumer Category		mand Charges r month	Energy (	Charge			
HT		₹ / kVA	₹/HP/kW	Billing Unit	₹/Unit			
IV	HT CATEGORY-IV: LIFT IRRIGATION & CPWS S	CHEMES						
	HT-IV(A):Govt. / Private Lift Irrigation and Agriculture							
	11 kV	-	-	kVAh	5.82			
	33 kV	-	-	kVAh	5.82			
	132 kV & Above	-	-	kVAh	5.82			
	HT-IV(B): Composite Protected Water Supply Schemes							
	11 kV	-	-	kVAh	4.89			
	33 kV	-	-	kVAh	4.89			
	132 kV & Above	-	-	kVAh	4.89			
V	HT CATEGORY-V: RAILWAY TRACTION	300/kVA	-	kVAh	3.55			
VI	HT CATEGORY-VI: TOWNSHIPS AND COLONIES							
	11 kV	75/kVA	-	kVAh	6.32			
	33 kV	75/kVA	-	kVAh	6.32			
	132 kV & Above	75/kVA	-	kVAh	6.32			
VII	HT CATEGORY-VII: GREEN POWER							
	11 kV	-	-	kVAh	11.32			
	33 kV	-	-	kVAh	11.32			
	132 kV & Above	-	-	kVAh	11.32			
VШ	HT CATEGORY-VIII: TEMPORARY							
	11 kV							
	33 kV	1.5 times of	f corresponding	HT consumer C	Category tariff			
	132 kV & Above							
	RESCOs****	rr		r				
	Anakapalle	-	-	kWh	-			
	Cheepurupalle	-	-	kWh	-			
	Kuppam	-	-	kWh	-			
	* Equivalent Flat Tariff							
	** The above determined rates for LT Category V(A) a the GoAP, failing which the rates contained in the 1							
	*** The licensees shall not collect this tariff irrespecti G.O.RT.No.39, dt. 14.03.2018	ve of the connecte	ed load as per th	e orders of GoA	P vide			
	****Separate Order will be issued.							

# CHAPTER – X

# FULL COST RECOVERY TARIFF DETERMINATION

# Introduction

287 At the Reference Tariff Schedule (RTS) (as determined in Chapter – IX of this Order), the licensees will not be able to recover ₹6030.17 Cr of the total approved ARR of ₹31982.87 Cr during FY2018-19. Hence, the Commission has endeavored to fix the tariff to recover the total approved ARR, i.e., the Full Cost Recovery Tariff Schedule (FCRTS) for FY2018-19 by considering the category wise revenue, revenue deficit/surplus and revising the charges/rates upwards from the charges/rates fixed in RTS to bridge the revenue gap of ₹6030.17 Cr.

# **Classification of Consumer Categories**

**288** All the consumer categories have been classified into "subsidizing" and "subsidized" as follows:

**Subsidizing:** Consumer categories for whom the revenues at RTS are more than the allocated costs during FY2018-19.

**Subsidized:** Consumer categories for whom the revenues at RTS are less than allocated costs during FY2018-19.

# **Allocation of Available Surplus**

- 289 In Stage-1, the surplus available from all subsidizing consumer categories has been used to meet the deficit of subsidized consumers in full excluding the deficit of LT-V: Agricultural Consumers.
- 290 In Stage-II, the remaining surplus has been allocated in full to LT-V: Agricultural Consumers. Even after allocation of the available surplus to LT-V: Agriculture, this consumer category has the total deficit of ₹6030.17 Cr comprising of ₹4937.00 Cr in SPDCL and ₹1093.17 Cr in EPDCL during FY2018-19.

# **Revision of Charges/Rates for LT-V: Agriculture**

291 To recover the deficit of ₹6030.17 Cr the energy charges/rates for LT-V: Agriculture have been revised uniformly for all sub categories at ₹5.80/unit in SPDCL and ₹5.50/unit in EPDCL with which the licensees will be able to recover the revenue requirement in full during FY2018-19.

- **292** These revised rates for LT-V: Agriculture have been substituted in RTS to make it as FCRTS with which the licensees will be able to recover the approved ARR in full during FY2018-19.
- **293** The FCRTS determined by the Commission for FY2018-19 is given in the table below:

Table 44:	Full Cost Recovery Tariff Schedule (FCRTS) for FY2018-19
	(Rates / Charges as determined by APERC)

	Fived / De	emand Charges	Ener	rgy Charge		
Consumer Category		r month	Billing Unit	SPDCL	EPDCL	
	₹/kVA	₹/HP/kW		₹/Unit	₹/Unit	
LT CATEGORY-I: DOMESTIC (TELES COPIC)					•	
Group A: Annual Consumption <=900 Units during FY	2017-18					
0-50	_	-	kWh	1.45	1.45	
51-100	_	_	kWh	2.60	2.60	
101-200	-	-	kWh	3.60	3.60	
Above 200	-	-	kWh	6.90	6.90	
Group B: Annual Consumption > 900 and < =2700 units	s during FY	2017-18	•	•	•	
0-50	-	-	kWh	2.60	2.60	
51-100	-	-	kWh	2.60	2.60	
101-200	-	-	kWh	3.60	3.60	
201-300	-	-	kWh	6.90	6.90	
Above 300	-	_	kWh	7.75	7.75	
Group C: Annual Consumption >2700 units during FY2	2017-18					
0-50	-	-	kWh	2.68	2.68	
51-100	-	-	kWh	3.35	3.35	
101-200	-	-	kWh	5.42	5.42	
201-300	-	-	kWh	7.11	7.11	
301-400	-	-	kWh	7.98	7.98	
401-500	-	-	kWh	8.52	8.52	
Above 500 units	-	-	kWh	9.06	9.06	
Smart Meters (Optional for above 500 units/month):	-	-	kWh	9.06	9.06	
Time of Day tariff (TOD) 10AM to 12 Noon	-	-	kWh	8.06	8.06	
LT CATEGORY-II: OTHERS			_	_	_	
LT-II(A): 0-50 units	-	55/kW	kWh/kVAh	5.40	5.40	
LT-II(B): Above 50 Units/Month			•	•		
0-50	-	75/kW	kWh/kVAh	6.90	6.90	
51-100	-	75/kW	kWh/kVAh	7.69	7.69	
101-300	-	75/kW	kWh/kVAh	9.06	9.06	
301-500	-	75/kW	kWh/kVAh	9.61	9.61	
Above 500	-	75/kW	kWh/kVAh	10.19	10.19	
LT-II(C): Advertising Hoardings	-	75/kW	kWh/kVAh	12.28	12.28	
LT-II(D): Function Halls/Auditoriums	-	-	kWh/kVAh	11.77	11.77	
LT-II(E): Electric Vehicles (EVs) / Charging stations	-	-	kWh/kVAh	6.95	6.95	
ToD (6 AM to 10 AM & 6 PM to 10 PM)	-	-	kWh/kVAh	8.00	8.00	
ToD (10 PM to 6 AM) off peak	-	-	kWh/kVAh	5.95	5.95	
LT-II(F): Startup Power for Captive Generating Plants,						
Co-generation plants and Renewable Generation Plants	-	-	kWh/kVAh	11.77	11.77	
LT CATEGORY-III: INDUSTRY						
(i) Industry(General)	-	75/kW	kWh/kVAh	6.71	6.71	
(ii) Seasonal Industries (off season)	-	75/kW	kWh/kVAh	7.45	7.45	
(iii) Aquaculture and Animal Husbandry	-	30/kW	kWh/kVAh	3.86	3.86	
(iv) Sugarcane crushing	-	30/kW	kWh/kVAh	3.86	3.86	
(v) Mushroom & Rabbit Farms	-	75/kW	kWh/kVAh	5.91	5.91	
(vi) Floriculture in Green House	-	75/kW	kWh/kVAh	5.91	5.91	
(vii) Poultry Hatcheries and Poultry Feed Mixing Plants,						
Aqua Hatcheries and Aqua feed mixing plants	-	75/kW	kWh/kVAh	4.89	4.89	

	Errod / D	emand Charges	Ener	gy Charg	e
Consumer Category		er month	Billing Unit		EPDCL
	₹/kVA	₹/HP/kW		₹/Unit	₹/Unit
LT CATEOGRY-IV: COTTAGE INDUSTRIES & OTHERS					
(a) Cottage Industries upto 10 HP	-	20/kW	kWh	3.75	3.75
(b) Agro Based Activities upto 10 HP	-	20/kW	kWh	3.75	3.75
LT CATEGORY-V: AGRICULTURE					
LT-V(A): Agriculture with DSM measures					
(i) Corporate Farmers & IT Assessees	-	-	kWh	5.80	5.50
(ii) Wet Land Farmers (Holdings >2.5 acre)	-	525/HP/Year*	kWh	5.80	5.50
(iii) Dry Land Farmers (Connections > 3 nos.)	-	525/HP/Year*	kWh	5.80	5.50
(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	0	kWh	5.80	5.50
(v) Dry Land Farmers (Connections <= 3 nos.)	-	0	kWh	5.80	5.50
LT-V(B): Agriculture without DSM measures					
(i) Corporate Farmers & IT Assessees	-	-	kWh	5.80	5.50
(ii) Wet Land Farmers (Holdings >2.5 acre)	-	1050/HP/Year*	kWh	5.80	5.50
(iii) Dry Land Farmers (Connections > 3 nos.)	-	1050/HP/Year*	kWh	5.80	5.50
(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	525/HP/Year*	kWh	5.80	5.50
(v) Dry Land Farmers (Connections <= 3 nos.)	-	525/HP/Year*	kWh	5.80	5.50
LT-V(C): Others					
(i) Salt farming units with Connected Load upto 15HP	-	20/HP	kWh	5.80	5.50
(ii) Rural Horticulture Nurseries	-	20/HP	kWh	5.80	5.50
LT CATEGORY-VI:STREET LIGHTING, PWS SCHEMES	& NTR SUJ	ALA PATHAK	4M		
LT-VI(A): Street Lighting	-	r	r	1	
(i) Panchayats	-	75/kW	kWh	5.98	5.98
(ii) Municipalities	-	75/kW	kWh	6.53	6.53
(iii) Muncipal Corporations	-	75/kW	kWh	7.09	7.09
LT-VI(B): PWS Schemes					
(i) Panchayats	-	75/HP	kWh/kVAh	4.87	4.87
(ii) Municipalities	-	75/HP	kWh/kVAh	5.98	5.98
(iii) Muncipal Corporations	-	75/HP	kWh/kVAh	6.53	6.53
LT VI(C): NTR Sujala Pathakam	-	10/HP	kWh/kVAh	4.00	4.00
LT CATEGORY-VII: GENERAL	1				
LT VII(A): General Purpose	-	30/kW	kWh/kVAh	7.28	7.28
LT VII(B): Religious Places		20/1 111	1		
(i) With Contracted Load $\leq 2 \text{ kW}$	-	30/kW	kWh	4.84	4.84
(ii) With Contracted Load >2 kW	-	30/kW	kWh	5.04	5.04
LT CATEGORY-VIII: TEMPORARY SUPPLY	-	30/kW	kWh/kVAh	10.50	10.50
HT CATEGORY-I(A): INDUSTRY					
H-I(A): (i) INDUSTRY GENERAL					
11 kV	475/kVA	-	kVAh	6.33	6.33
33 kV	475/kVA	_	kVAh	5.87	5.87
132 kV & Above	475/kVA		kVAh	5.44	5.44
Industrial Colonies		<u>I</u>		0.11	
11 kV	-	-	kVAh	6.32	6.32
33 kV	-	-	kVAh	6.32	6.32
132 kV & Above	-	-	kVAh	6.32	6.32
Time of Day tariff (TOD) (6 AM to 10 AM & 6 PM to 10	 PM	-		0.32	0.32
			1 7 7 4 1	7.00	7.20
11 kV	-	-	kVAh	7.38	7.38
33 kV	-	-	kVAh	6.92	6.92
132 kV & Above	-	-	kVAh	6.49	6.49
Time of Day tariff (TOD) (10PM to 6 AM) off peak			1	1	
11 kV	-	-	kVAh	5.33	5.33
33 kV	-	-	kVAh	4.87	4.87
132 kV & Above	-	-	kVAh	4.44	4.44

	Errod / Do	mond Changes	Energy Charge		
Consumer Category		mand Charges r month	Billing Unit	SPDCL	EPDCL
	₹/kVA	₹/HP/kW		₹/Unit	₹/Unit
(ii) Seasonal Industries	<b>ļ</b> ļ		ļ		<u></u>
11 kV	475/kVA	_	kVAh	7.66	7.66
33 kV	475/kVA	-	kVAh	6.98	6.98
132 kV & Above	475/kVA	_	kVAh	6.72	6.72
HT-I(B):Energy Intensive Industries					
11 kV	-	-	kVAh	5.82	5.82
33 kV	-	-	kVAh	5.37	5.37
132 kV & Above	-	-	kVAh	4.95	4.95
HT-I(C): Aquaculture and Animal Husbandry			-	-	
11 kV	30/kVA	-	kVAh	3.86	3.86
33 kV	30/kVA	-	kVAh	3.86	3.86
132 kV & Above	30/kVA	-	kVAh	3.86	3.86
HT-I(D): Poultry Hatcheries and Poultry Feed Mixing P	lants,				
Aqua Hatcheries and Aqua Feed Mixing Plants			-		
11 kV	475/kVA	-	kVAh	4.89	4.89
33 kV	475/kVA	-	kVAh	4.89	4.89
132 kV & Above	475/kVA	-	kVAh	4.89	4.89
HT CATEGORY-II					
HT-II(A): OTHERS					
11 kV	475/kVA	-	kVAh	7.66	7.66
33 kV	475/kVA	-	kVAh	6.98	6.98
132 kV & Above	475/kVA	-	kVAh	6.72	6.72
Time of Day tariff (TOD) (6PM to 10PM)					
11 kV	-	-	kVAh	8.71	8.71
33 kV	-	-	kVAh	8.03	8.03
132 kV & Above	-	-	kVAh	7.77	7.77
HT-II(B): Religious Places					
11 kV	30/kVA	-	kVAh	5.03	5.03
33 kV	30/kVA	-	kVAh	5.03	5.03
132 kV & Above	30/kVA	-	kVAh	5.03	5.03
HT-II(C):Function Halls/Auditoriums			1	,	<del></del>
11 kV	-	-	kVAh	11.77	-
33 kV	-	-	kVAh	11.77	11.77
132 kV & Above	-	-	kVAh	11.77	11.77
HT-II(D): Intentionally left blank			1 3 3 7 1 /1 3 7 4 1	6.05	<u> </u>
HT-II(E): Electric Vehicles (EVs) / Charging stations	-	-	kWh/kVAh	6.95	6.95
ToD (6 AM to 10 AM & 6 PM to 10 PM)	-	-	kWh/kVAh	8.00	8.00
ToD (10 PM to 6 AM) off peak		-	kWh/kVAh	5.95	5.95
HT-II(F):Startup Power for Captive Generating Plants,	Co-generatio	on plants and Re	enewable Gen	eration P	lants
11 kV	-		kVAh	11.77	11.77
33 kV	-	-	kVAh	11.77	11.77
132 kV & Above	-	-	kVAh	11.77	11.77
HTCATEGORY-III: PUBLIC INFRASTRUCTURE AND TO	URISM				
11 kV	475/kVA	-	kVAh	7.30	7.30
33 kV	475/kVA	_	kVAh	6.69	6.69
132 kV & Above	475/kVA	_	kVAh	6.38	6.38
Public Infrastructure and Tourism, ToD (6 PM to 10 PM			A VAII	0.50	0.30
	-		1-17 1-	0.25	0.25
11 kV 22 kV	-	-	kVAh	8.35	8.35
33 kV 122 kV & Above	-	-	kVAh	7.74	7.74
132 kV & Above	-	-	kVAh	7.43	7.43

	End / De	mand Changes	Energ	gy Charg	e	
Consumer Category		Fixed / Demand Charges per month		SPDCL	EPDCL	
	₹/kVA ₹/HP/kW			₹/Unit	₹/Unit	
HT CATEGORY-IV: LIFT IRRIGATION & CPWS SC	THEMES					
HT-IV(A):Govt. / Private Lift Irrigation and Agric	ulture					
11 kV	-	-	kVAh	5.82	5.82	
33 kV	-	-	kVAh	5.82	5.82	
132 kV & Above	-	-	kVAh	5.82	5.82	
HT-IV(B): Composite Protected Water Supply Sch	emes					
11 kV	-	-	kVAh	4.89	4.89	
33 kV	-	-	kVAh	4.89	4.89	
132 kV & Above	-	-	kVAh	4.89	4.89	
HT CATEGORY-V: RAILWAY TRACTION	300/kVA	-	kVAh	3.55	3.55	
HT CATEGORY-VI: TOWNSHIPS AND COLONIES	•		•			
11 kV	75/kVA	-	kVAh	6.32	6.32	
33 kV	75/kVA	-	kVAh	6.32	6.32	
132 kV & Above	75/kVA	-	kVAh	6.32	6.32	
HT CATEGORY-VII:GREEN POWER						
11 kV	-	-	kVAh	11.32	11.32	
33 kV	-	-	kVAh	11.32	11.32	
132 kV & Above	-	-	kVAh	11.32	11.32	
HT CATEGORY-VIII: TEMPORARY						
11 kV						
33 kV	1.5 times	1.5 times of corresponding HT consumer Category tariff				
132 kV & Above						
RESCOs**						
Anakapalle	-	-	kWh	-	-	
Cheepurupalle	-	-	kWh	-	-	
Kuppam	-	-	kWh	-	-	
* Equivalent Flat Tariff						
**Separate Order will be issued.						

**294** In the absence of any external subsidization u/s 65 of the Electricity Act, 2003, the licensees will have to charge the rates contained in the above FCRTS during FY2018-19 for retail sale of electricity to generate the revenue to meet the approved ARR for FY2018-19.

# CHAPTER – XI RETAIL SUPPLY TARIFF SCHEDULE

#### **Communication to Government of Andhra Pradesh**

295 The Commission has informed the Government of Andhra Pradesh (GoAP) on 20.03.2018 with regard to requirement of external subsidy of ₹6030.17 Cr for FY2018-19 towards subsidy to LT-V: Agricultural consumer category to maintain the rates as mentioned in Reference Tariff Schedule with all relevant calculations including the details of Full Cost Recovery Tariff Schedule for FY2018-19.

#### Provision of Subsidy by Government of Andhra Pradesh

296 The GoAP, in response to the letter from the Commission on 20-03-2018, has communicated its approval in Letter No. 298/Power.I/2017, dated 23-03-2018 of the Energy, Infrastructure & Investment Department (Annexure No.14) for providing a sum of ₹6030.17 Cr. towards subsidy comprising of a cash subsidy of ₹4000 Cr. payable from budgetory allocation and ₹ 2030.17 Cr. to be paid through the Andhra Pradesh Power Finance Corporation from out of the proceeds of the bonds to be issued by it for which the Government of Andhra Pradesh stands guarantee. Out of the subsidy amount of ₹6030.17 Cr. agreed to be provided by the State Government, the APSPDCL shall get ₹4937.00 Cr. and the APEPDCL shall get ₹1093.17 Cr.

# Determination of Tariff for Retail Sale of Electricity for FY2018-19

**297** The Commission, in accordance with the decisions enumerated in earlier chapters and in accordance with the approval of GoAP for providing subsidy, hereby determines the Tariff for Retail Sale of Electricity with the terms and conditions applicable with effect from 01-04-2018 to 31-03-2019 in respect of the two distribution licensees (SPDCL and EPDCL) in the State of Andhra Pradesh and three Rural Electricity Supply Co-operative Societies (RESCOs) in the State, as hereunder:

#### TARIFF FOR RETAIL SALE OF ELECTRICITY DURING FY2018-19 (Applicable with effect from 1.04.2018 to 31.03.2019 in resepect of two distribution licensees, SPDCL and EPDCL and three RESCOs in the the State of Andhra Pradesh)

	Consumer Category		emand Charges r month	Energy C	harge
LT		₹ / kVA	₹/HP/kW	Billing Unit	₹/Unit
Ι	LT CATEGORY-I: DOMESTIC (TELES COPIC)				
	Group A: Annual Consumption <=900 Units during FY2	017-18			
	0-50	-	_	kWh	1.45
	51-100	-	_	kWh	2.60
	101-200	-	-	kWh	3.60
	Above 200	-	-	kWh	6.90
	Group B: Annual Consumption > 900 and < =2700 unit	s during F	Y2017-18		
	0-50	-	-	kWh	2.60
	51-100	-	-	kWh	2.60
	101-200	-	-	kWh	3.60
	201-300	-	-	kWh	6.90
	Above 300	-	-	kWh	7.75
	Group C: Annual Consumption >2700 units during FY2	017-18			
	0-50	-	-	kWh	2.68
	51-100	-	-	kWh	3.35
	101-200	-	-	kWh	5.42
	201-300	-	-	kWh	7.11
	301-400	-	-	kWh	7.98
	401-500	-	-	kWh	8.52
	Above 500 units	-	-	kWh	9.06
	Smart Meters (Optional for above 500 units/month):	-	-	kWh	9.06
	Time of Day tariff (TOD) 10AM to 12 Noon	-	-	kWh	8.06
П	LT CATEGORY-II: OTHERS				
	LT-II(A): 0-50 units	-	55/kW	kWh/kVAh	5.40
	LT-II(B): Above 50 Units/Month				
	0-50	-	75/kW	kWh/kVAh	6.90
	51-100	-	75/kW	kWh/kVAh	7.69
	101-300	-	75/kW	kWh/kVAh	9.06
	301-500	-	75/kW	kWh/kVAh	9.61
	Above 500	-	75/kW	kWh/kVAh	10.19
	LT-II(C): Advertising Hoardings	-	75/kW	kWh/kVAh	12.28
	LT-II(D): Function Halls/Auditoriums	-	-	kWh/kVAh	11.77
	LT-II(E): Electric Vehicles (EVs) / Charging Stations	-	-	kWh/kVAh	6.95
	ToD (6 AM to 10 AM & 6 PM to 10 PM)	-	-	kWh/kVAh	8.00
	ToD (10 PM to 6 AM) off peak	-	-	kWh/kVAh	5.95
	LT-II(F): Startup Power for Captive Generating Plants,				
	Co-generation plants and Renewable Generation Plants	-	-	kWh/kVAh	11.77
-					
Ш	LT CATEGORY-III; INDUSTRY			· · · · · ·	
	(i) Industry(General)	-	75/kW	kWh/kVAh	6.71
	(ii) Seasonal Industries (offseason)	-	75/kW	kWh/kVAh	7.45
	(iii) Aquaculture and Animal Husbandry	-	30/kW	kWh/kVAh	3.86
	(iv) Sugarcane crushing	-	30/kW	kWh/kVAh	3.86
	(v) Mushroom & Rabbit Farms	-	75/kW	kWh/kVAh	5.91
	(vi) Floriculture in Green House	-	75/kW	kWh/kVAh	5.91
	(vii) Poultrry Hatcheries and Poultry Feed Mixing Plants,	_	75/kW	kWh/kVAh	4.89
	Aqua Hatcheries and Aqua feed mixing plants				

	Consumer Category		emand Charges er month	Energy C	harge		
LT		₹/kVA	₹/HP/kW	<b>Billing Unit</b>	₹/Unit		
IV	LT CATEOGRY-IV: COTTAGE INDUSTRIES & OTHERS						
	(A) Cottage Industries upto 10 HP	-	20/kW	kWh	3.75		
	(B) Agro Based Activities upto 10 HP	-	20/kW	kWh	3.75		
V	LT CATEGORY-V: AGRICULTURE						
	LT-V(A): Agriculture with DSM measures **						
	(i) Corporate Farmers & IT Assessees	-	-	kWh	2.50		
	(ii) Wet Land Farmers (Holdings >2.5 acre)	-	525/HP/Year*	kWh	0.50		
	(iii) Dry Land Farmers (Connections > 3 nos.)	-	525/HP/Year*	kWh	0.50		
	(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	0	kWh	-		
	(v) Dry Land Farmers (Connections <= 3 nos.)	-	0	kWh	-		
	LT-V(B): Agriculture without DSM measures **		1				
	(i) Corporate Farmers & IT Assessees	-	-	kWh	3.50		
	(ii) Wet Land Farmers (Holdings >2.5 acre)	-	1050/HP/Year*	kWh	1.00		
	(iii) Dry Land Farmers (Connections > 3 nos.)	-	1050/HP/Year*	kWh	1.00		
	(iv) Wet Land Farmers (Holdings <= 2.5 acre)	-	525/HP/Year*	kWh	0.50		
	(v) Dry Land Farmers (Connections <= 3 nos.)	-	525/HP/Year*	kWh	0.50		
	LT-V(C): Others		20/110	1.33.71	2 70		
	(i) Salt farming units with Connected Load upto 15HP	-	20/HP	kWh	3.70		
	(ii) Rural Horticulture Nurseries***		1				
	Connected load upto 5 HP	-	20/HP	kWh	1.50		
	Connected load above 5 HP and upto 25 HP	-			3.70		
VI	LT CATEGORY-VI:STREET LIGHTING, PWS SCHEMES	& NTR SU	JALA PATHAK	AM			
	LT-VI(A): Street Lighting						
	(i) Panchayats	-	75/kW	kWh	5.98		
	(ii) Municipalities	-	75/kW	kWh	6.53		
	(iii) Muncipal Corporations	-	75/kW	kWh	7.09		
	LT-VI(B): PWS Schemes		75/110	1.3371. /1.37.4.1.	4.07		
	(i) Panchayats	-	75/HP	kWh/kVAh	4.87		
	(ii) Municipalities	-	75/HP	kWh/kVAh	5.98		
	(iii) Muncipal Corporations	-	75/HP 10/HP	kWh/kVAh	6.53 4.00		
<b>X</b> 7 <b>TT</b>	LT VI(C): NTR Sujala Pathakam LT CATEGORY-VII: GENERAL	-	10/HP	kWh/kVAh	4.00		
VШ		1	20/1-33	kWh/kVAh	2 20		
	LT VII(A): General Purpose LT VII(B): Religious Places	-	30/kW	KWII/KVAII	7.28		
	(i) With Contracted Load $\leq 2 \text{ kW}$		30/kW	kWh	4.84		
	(i) With Contracted Load >2 kW		30/kW	kWh	5.04		
vm	LT CATEGORY-VIII: TEMPORARY SUPPLY		30/kW	kWh/kVAh	10.50		
		_	30/ K VV		10.50		
I	HT CATEGORY-I: INDUSTRY						
	H-I(A): (i) INDUSTRY GENERAL						
		175/1-374		1-VA b	6.22		
	11 kV 33 kV	475/kVA	-	kVAh	6.33 5.87		
	132 kV & Above	475/kVA 475/kVA	-	kVAh			
		4/3/KVA	-	kVAh	5.44		
	Industrial Colonies	1		1 7 7 4 1	6.00		
	11 kV	-	-	kVAh	6.32		
	33 kV	-	-	kVAh	6.32		
	132 kV & Above	-	-	kVAh	6.32		
	Time of Day tariff (TOD) peak (6 AM to 10 AM & 6 PM	to 10 PM)	1	I			
	11 kV	-	-	kVAh	7.38		
	33 kV	-	-	kVAh	6.92		
	132 kV & Above	-	-	kVAh	6.49		
	Time of Day tariff (TOD ) off peak (10 PM to 6 AM)		1				
	11 kV	-	-	kVAh	5.33		
	33 kV	-	-	kVAh	4.87		
		-		kVAh	4.44		

	Consumer Category		mand Charges r month	Energy (	Charge				
HT		₹/kVA	₹/HP/kW	Billing Unit	₹/Unit				
Ι	HT-I(A):(ii) Seasonal Industries (Off Season Tariff)								
	11 kV	475/kVA	-	kVAh	7.66				
	33 kV	475/kVA	-	kVAh	6.98				
	132 kV & Above	475/kVA	-	kVAh	6.72				
	HT-I(B): Energy Intensive Industries	- <u>+</u> +							
	11 kV	-	-	kVAh	5.82				
	33 kV	-	-	kVAh	5.37				
	132 kV & Above	-	-	kVAh	4.95				
	HT-I(C): Aquaculture and Animal Husbandry			•					
	11 kV	30/kVA	-	kVAh	3.86				
	33 kV	30/kVA	-	kVAh	3.86				
	132 kV & Above	30/kVA	-	kVAh	3.86				
	HT-I(D): Poultry Hatcheries and Poultry Feed Mixing P Aqua Hatcheries and Aqua Feed Mixing Plants	lants,		· · · · ·					
	11 kV	475/kVA	-	kVAh	4.89				
	33 kV	475/kVA	-	kVAh	4.89				
	132 kV & Above	475/kVA	_	kVAh	4.89				
Π	HT CATEGORY-II			1					
-	HT-II(A): OTHERS								
	11 kV	475/kVA		kVAh	7.66				
	33 kV	475/kVA	-	kVAh	6.98				
	132 kV & Above	475/kVA	-		6.72				
	132 kV & Above         475/kVA         -         kVAh         6.72           Time of Day tariff (TOD) (6PM to 10PM)         475/kVA         -         kVAh         6.72								
	11 kV			kVAh	8.71				
	33 kV	-	-	kVAh	8.03				
	132 kV & Above		_	kVAh	7.77				
	HT-II(B): Religious Places	-	-	KVAII	1.11				
	11 kV	30/kVA	_	kVAh	5.03				
	33 kV	30/kVA	-	kVAh	5.03				
	132 kV & Above	30/kVA		kVAh	5.03				
	132 kV & Above     30/kVA     -     kVAh     5.0       HT-II(C):Function Halls/Auditoriums								
	11 kV	-	-	kVAh	11.77				
	33 kV	-	-	kVAh	11.77				
	132 kV & Above	_	_	kVAh	11.77				
	HT-II(D): Intentionally left blank			R VI III	11.77				
	HT-II(E): Electric Vehicles (EVs) / Charging Stations		_	kWh/kVAh	6.95				
	ToD (6 AM to 10 AM & 6 PM to 10 PM)	-	-	kWh/kVAh	8.00				
	ToD (10 PM to 6 AM) off peak	-	-	kWh/kVAh	5.95				
	HT-II(F):Startup Power for Captive Generating Plants,	Co-generati	on plants and R	•					
	11 kV	-	-	kVAh	11.77				
	33 kV	-	-	kVAh	11.77				
	132 kV & Above	-	-	kVAh	11.77				
Ш	HTCATEGORY-III: PUBLIC INFRASTRUCTURE AND TOURISM								
	11 kV	475/kVA	-	kVAh	7.30				
	33 kV	475/kVA	-	kVAh	6.69				
	132 kV & Above	475/kVA	-	kVAh	6.38				
	Public Infrastructure and Tourism, ToD peak (6PM to 2		-		0.30				
				1.37.4.1	0.00				
	11 kV 33 kV	-	-	kVAh kVAh	<u>8.35</u> 7.74				

	Consumer Category		mand Charges r month	Energy (	Charge		
HT		₹ / kVA	₹/HP/kW	Billing Unit	₹/Unit		
IV	HT CATEGORY-IV: LIFT IRRIGATION & CPWS S	CHEMES					
	HT-IV(A):Govt. / Private Lift Irrigation and Agrie	culture					
	11 kV	-	-	kVAh	5.82		
	33 kV	-	-	kVAh	5.82		
	132 kV & Above	-	-	kVAh	5.82		
	HT-IV(B): Composite Protected Water Supply Sci	hemes					
	11 kV	-	-	kVAh	4.89		
	33 kV	-	-	kVAh	4.89		
	132 kV & Above	-	-	kVAh	4.89		
V	HT CATEGORY-V: RAILWAY TRACTION	300/kVA	-	kVAh	3.55		
VI	HT CATEGORY-VI: TOWNSHIPS AND COLONIES	5					
	11 kV	75/kVA	-	kVAh	6.32		
	33 kV	75/kVA	-	kVAh	6.32		
	132 kV & Above	75/kVA	-	kVAh	6.32		
VII	HT CATEGORY-VII: GREEN POWER						
	11 kV	-	-	kVAh	11.32		
	33 kV	-	-	kVAh	11.32		
	132 kV & Above	-	-	kVAh	11.32		
VШ	HT CATEGORY-VIII: TEMPORARY						
	11 kV						
	33 kV	1.5 times of	f corresponding	HT consumer C	ategory tariff		
	132 kV & Above						
	RESCOs****			1			
	Anakapalle	-	-	kWh	-		
	Cheepurupalle	-	-	kWh	-		
	Kuppam	-	-	kWh	-		
	<ul> <li>* Equivalent Flat Tariff</li> <li>** The above determined rates for LT Category V(A) the GoAP, failing which the rates contained in the</li> <li>*** The licensees shall not collect this tariff irrespecting. GO.RT.No.39, dt. 14.03.2018</li> <li>**** Separate Order will be issued.</li> </ul>	Full Cost Recovery	/ Tariff Schedule	e become operat	ive		

# **TERMS AND CONDITIONS**

# (Applicable with effect from 01-04-2018 to 31-3-2019 in respect of the two Distribution Licensees and three RESCOs in the State of A.P.)

The L.T. Tariffs determined in PART 'A' and H.T. Tariffs determined in PART 'B' below are subject to the following general conditions.

The Tariffs are exclusive of Electricity duty payable as per the provisions of AP Electricity Duty Act, 1939.

# PART 'A'

#### 1. LT TARIFFS – TERMS AND CONDITIONS

**System of Supply**: Low Tension A.C., 50 Cycles, Three Phase Supply at 415 Volts and Single-Phase supply at 240 Volts.

These tariffs are applicable for supply of Electricity to LT consumers with a contracted load of 75 kW/100 HP and below.

Whenever kVAh tariff is applicable, fixed charges shall be computed based on the recorded kVA or contracted load whichever is higher. In all such cases the tariff indicated as  $\overline{\langle kW \rangle}$  will be applied as  $\overline{\langle kVA \rangle}$ . As and when a consumer is billed on kVAh basis no capacitor surcharge shall be levied.

# 1.1 LT CATEGORY-I: DOMESTIC

#### Applicability

This tariff is applicable for supply of electricity for lights and fans and other domestic purposes in domestic premises. Domestic establishment / premises is one which is used for dwelling/residential purpose.

**Note:** For domestic category, the households having a separate kitchen will be treated as a separate establishment.

The LT Domestic consumers are divided into three groups viz., Group A, Group B and Group C. Group A shall be applicable to the consumers having consumption of 900 units and below during the previous tariff year. Group B shall be applicable to the consumers having consumption of above 900 units and up to 2700 units during the previous tariff year. Group C shall be applicable to the consumers having

consumption of above 2700 units during the previous tariff year. Energy charges shall be levied based on Telescopic method.

	Fnorm
Consumption during the previous Tariff Year	Energy Charge (₹/kWh)
CATEGORY- I: DOMESTIC (TELESCOPIC)	
Group A: Annual Consumption <=900 Units during FY2017-1	18
0-50	1.45
51-100	2.60
101-200	3.60
Above 200	6.90
Group B: Annual Consumption > 900 and <=2700 Units durin	g FY2017-18
0-50	2.60
51-100	2.60
101-200	3.60
201-300	6.90
Above 300	7.75
Group C: Annual Consumption >2700 units during FY2017-1	
0-50	2.68
51-100	3.35
101-200	5.42
201-300	7.11
301-400	7.98
401-500	8.52
Above 500 units	9.06
Smart Meters *	9.06
Time of Day (TOD) tariff 10 AM to 12 Noon	8.06
Monthly minimum charges:	
i) Single phase supply	
a) Contracted load up to 500 W	₹25/month
b) Contracted load above 500 W	₹50/month
ii) Three Phase Supply	₹150/month
* The installation of smart meters shall be <b>optional</b> only for consumption is more than 500 units per month. The cost of modem along with the installation has to be borne by the co- for a period of 24 months.	f the smart meter w

# LT CATEGORY-II: OTHERS

The LT Category-II: Other consumers are divided into six groups viz., LT-II(A), LT-II(B), LT-II(C), LT-II(D), LT-II(E) and LT-II(F).

# **1.2.1 LT CATEGORIES: II(A) and II(B)**

#### Applicability

- (1) Consumers who undertake Non-Domestic activity.
- (2) Consumers who undertake Commercial activity.
- (3) Consumers who do not fall in any other LT category i.e. LT-I, LT-II(C), LT-II(D), LT-II(E), LT-II(F), LT-III to LT-VII categories.
- (4) Consumers who avail supply of energy for lighting, fans, heating, air conditioning and power appliances in Commercial or Non-Domestic premises such as shops, business houses, offices, public buildings, hospitals, hostels, hotels, choultries, restaurants, clubs, theatres, cinema halls, bus stations, railway stations, timber depots, photo studios, printing presses etc.
- (5) Educational Institutions run by individuals, Non-Government Organisations or Private Trusts and their student hostels are also classified under this category.

LT II (A) shall be applicable to the consumers having consumption of 50 units and below per month.

LT II (B) shall be applicable to the consumers having consumption of above 50 units per month.

Consumer Category	Fixed charges (₹/kW/Month)	Energy Charge (₹/Unit) (kWh/kVAh)
LT-II: OTHERS		
LT II(A): Up to 50 Units/Month	55	5.40
LT II(B): Above 50 Units / Mo	onth	
First 50		6.90
51-100		7.69
101-300	75	9.06
301-500		9.61
Above 500		10.19
Monthly minimum charges:		
Single Phase Supply		₹65 /month
Three Phase Supply		₹ 200/month

# 1.2.2 LT CATEGORY–II(C): ADVERTISING HOARDINGS

# Applicability

Electricity supply availed through separate (independent) connections for the purpose of advertisements, hoardings and other conspicuous consumption such as external flood light, displays, neon signs at public places (roads, railway stations, airports etc.), departmental stores, commercial establishments, malls, multiplexes, theatres, clubs, hotels and other such entertainment /leisure establishments.

Consumption	Fixed charges (₹/kW/Month)	Energy Charge (₹/Unit) (kWh/kVAh)		
For all kWh or kVAh units	75	12.28		
Monthly minimum energy charges: ₹300 / month				

# **1.2.3 LT CATEGORY–II(D): FUNCTION HALLS/AUDITORIUMS**

# Applicability

This tariff is applicable to Function Halls/Auditoriums/Marriage Halls.

Consumption	Fixed charges (₹/kW/Month)	Energy Charge (₹/Unit) (kWh/kVAh)
For all kWh or kVAh units	Nil	11.77

# 1.2.4 LT CATEGORY-II(E): ELECTRIC VEHICLES (EVs) / CHARGING STATIONS

# Applicability

The tariffs are applicable for supply of electricity to Electric Vehicles and charging stations that will provide electricity for charging.

	Energy Charge
Consumption	(₹Unit)
	(kWh/kVAh)
For all kWh or kVAh units	6.95
Time of Day (ToD) tariff	₹1.05/kWh/kVAh levied additionally for usage from 06 AM to 10 AM and 06 PM to 10 PM Concession of ₹1.00/kWh/kVAh for usage between 10 PM to 06 AM

# 1.2.5 LT CATEGORY-II(F): STARTUP POWER FOR CAPTIVE GENERATING PLANTS, CO-GENERATION PLANTS AND RENEWABLE GENERATION PLANTS Applicability

The tariff is applicable for supply of electricity to startup power for Captive Generating Plants, Co-Generation Plants and Renewable Generation Plants.

This category is intended for those generators who require occasional and intermiitent supply for start up operations of the generating unit(s) alone. However, the Captive and Cogenetion plants with their process plants being located in the same premises and have single connection with the grid (APTRANSCO / DISCOMs) and who continuously depend on the licensees 'supply for part of their energy requirement may be given option to either continue in their present category or to be included in this new category. Without giving an opportunity to all such generators to exercise option in this regard, the category change shall not be affected.

Consumption	Fixed/Demand charges (₹/kWh/kVA/Month)	Energy Charge (₹/Unit) (kWh/kVAh)
For all kWh or kVAh units	NIL	11.77

The conditions applicable are as follows:

- (1) Supply is to be used strictly for generator start-up operations, maintenance and lighting purposes only.
- (2) Monthly minimum charges on energy are not applicable.
- (3) Allowable Maximum Demand shall be limited to the percentage (as given below) of the maximum capacity unit in the generating station in case of generators other than Wind and Solar, and of the plant capacity in case of Wind and Solar generator.

Thermal -15%, Gas based – 6%, Hydel – 3%, NCE Sources – 10%, Wind and Solar – 2%

(4) If the Maximum Demand exceeds the limits specified above, the energy charges shall be charged at 1.2 times of normal charge for the entire energy consumed.

- (5) All other conditions applicable to LT-II category shall also supply to the LT-II (F) category to the extent they are not contradictory to the above.
- (6) This category is also applicable to all the Wind and solar plants who have PPAs with the licensees.

#### 1.3 LT CATEGORY-III: INDUSTRY

#### Applicability

The tariffs are applicable for supply of electricity to Low Tension industrial consumers with a Contracted load of 75kW/100 HP and below. Industrial purpose shall mean, supply for purpose of manufacturing, processing and/or preserving goods for sale, but shall not include shops, business houses, offices, public buildings, hospitals, hotels, hostels, choultries, restaurants, clubs, theatres, cinemas, bus stations, railway stations and other similar premises, notwithstanding any manufacturing, processing or preserving goods for sale.

This tariff will also apply to:

- (1) Water Works & Sewerage Pumping Stations operated by Government Departments or Co-operative Societies and pump sets of Railways, pumping of water by industries as subsidiary function and sewerage pumping stations operated by local bodies.
- (2) Workshops, flour mills, oil mills, saw mills, coffee grinders and wet grinders, ice candy units with or without sale outlets, grass cutting and fodder cutting units.
- (3) The Information Technology (IT) units identified and approved by the Consultative Committee on IT Industry (CCITI) constituted by GoAP.
- (4) News paper printing units.
- (5) Poultry Hatcheries and Poultry Feed Mixing Plants, Acqua hatcheries & Acqua Feed mixing plants.
- (6) Mushroom production units, Rabbit Farms other than those coming under LT Category-IV.
- (7) Floriculture in Green Houses.
- (8) Sugar cane crushing.

(9) Aqua culture and Animal husbandry, such as Poultry Farms, Pisiculture, Prawn Culture and Dairy Farms etc.

Description	Fixed charges (₹/kW/Month)	Energy Charge (₹/Unit) (kWh/kVAh)
(i) Industry(General)	75.00	6.71
(ii) Seasonal Industries	75.00	6.71*
(iii) Aqua Culture and Animal Husbandry	30.00	3.86
(iv) Sugarcane crushing	30.00	3.86
(v) Mushroom & Rabbit Farms	75.00	5.91
(vi) Floriculture in Green Houses	75.00	5.91
(vii) Poultry Hatcheries & Poultry Feed Mixing Plants,	75.00	4.89
Acqua Hatcheries & Acqua Feed mixing plants		
Notes: a) $1 \text{ HP} = 0.75 \text{ kW}$		
<ul> <li>b) For the purpose of billing, 1 kVA shall be treated as being equal to 1 kW.</li> <li>c) If the metering is on HT side, 1% of total energy consumed shall be deducted from recorded energy for the purpose of billing.</li> <li>d) No manufacturing / production certification shall be required if the poultry farm has</li> </ul>		
no in-house manufacturing activity such as feed mills. Poultry farms are exempted		

# LT CATEGORY-III: INDUSTRY

from general condition of 5 kW minimum load for releasing the three-phase supply.

No monthly minimum energy charges

# ii. SEASONAL INDUSTRIES (Off Season)

Where a consumer avails supply of energy under LT Category – III for manufacture of sugar or ice or salt, decorticating, seed processing, fruit processing, ginning and pressing, cotton seed oil mills, tobacco processing and re-drying and for such other industries or processes as may be approved by the Commission from time to time principally during certain seasons or limited periods in a year and his main plant is regularly closed down during certain months in a year, he shall be charged for the months during which the plant is shut down (which period shall be referred to as the off-season period) as follows:

Fixed charges on 30% of Contracted Load or Recorded Demand, whichever is higher (₹/kW/Month)	Energy Charge For all kWh or kVAh units (₹/kWh/kVAh)
75	7.45
No monthly minimum energy charges	

\*During seasonal period, the consumer shall be billed under LT-III Industry (General) category. If the metering is on HT side, 1% of total energy consumed shall be deducted from recorded energy for the purpose of billing.

# 1.4 LT CATEGORY-IV: COTTAGE INDUSTRIES & OTHERS

#### **1.4.1 LT CATEGORY – IV(A): COTTAGE INDUSTRIES**

#### Applicability

Applicable for supply of energy to Dhobighats & bonafide (as certified by D.E.(Operations)) Small Cottage Industries specifically power looms, Carpentry, Blacksmithy, Kanchari, Goldsmithy, Shilpi, Pottery, Mochy, Phenoyl production units, Agarbathi production units, Wax Candle making units, Papads Manufacturing units, Leather (Chappals) making, Soap Industry, Plaster of Paris units, Laque toy making units, Pop Toys, Wood carving/toy making units, Pickles Manufacturing, Mango jelly units, Adda leaf plate industry having connected load not exceeding 10 HP including incidental lighting in the premises.

Fixed charges (₹/kW/Month)	Energy Charge For all kWh units (₹/kWh)
₹20/- per month per kW of contracted load subject to a minimum of ₹30/- per month	3.75
Note: i) Units which exceed a connected load of 10 HP shall be billed at tariff specified for	
<ul><li>LT- III Industry (General) Category.</li><li>ii) No monthly minimum Energy charges.</li></ul>	

# 1.4.2 LT CATEGORY – IV (B): AGRO BASED ACTIVITIES

#### Applicability

This tariff is applicable to bonafide (as certified by DE/Operations) small agro based industrial units covering Sisal fiber extraction co-operative units, Vermiculture, Sericulture, Mushroom growing, Rabbit farming, Sheep rearing, Emu birds farming, Apiculture (honey making), Chaff-cutting and Dairy farming activities with connected load upto 10 HP (including incidental lighting load).

Fixed charges (₹/kW/Month)	Energy Charge For all kWh units (₹/kWh)
₹20/- per month per kW of contracted load subject to a minimum of ₹30/- per month	3.75
Note: i) Units which exceed a connected load of 10	HP shall be billed at tariff specified for

LT – III Industry (General) Category.

ii) No monthly minimum energy charges.

# **1.5. LT CATEGORY-V: AGRICULTURE**

# 1.5.1 LT CATEGORY-V(A): AGRICULTURE WITH DSM MEASURES

Category	Purpose	Fixed charges	Energy Charge ₹/kWh
	(i) Corporate Farmers & IT Assessee	0	2.50
With	(ii) Wet Land Farmers (Holdings>2.5	₹ 525/HP/Year*	0.50
DSM	(iii) Dry Land Farmers	₹ 525/HP/Year*	0.50
Measures	(iv) Wet Land Farmers	0	0
	(v) Dry Land Farmers	0	0
No monthly minimum energy charges.			
* Equivalent flat rate tariff			

# 1.5.2 LT CATEGORY-V(B): AGRICULTURE WITHOUT DSM MEASURES

Category	Purpose	Fixed charges	Energy Charge ₹/kWh
	(i) Corporate Farmers & IT Assessee	0	3.50
Without	(ii) Wet Land Farmers (Holdings >2.5	*₹1050/HP/Year	1.00
DSM	(iii) Dry Land Farmers (Connections>3	*₹ 1050/HP/Year	1.00
Measures	(iv) Wet Land Farmers (Holdings<=2.5	*₹525/HP/Year	0.50
	(v) Dry Land Farmers (Connections<=3 nos.)	*₹525/HP/Year	0.50
No monthly minimum energy charges.			
* Equivalent flat rate tariff			

#### Note:

**1.5.2 (a)** In case of LT Lift Irrigation schemes which are under-paying category, the DISCOMs shall extend free power supply upto 1200 units per HP per annum on annual basis and shall issue bills for payment of additional units

consumed over and above 1200 units per HP per annum at the rate of ₹ 5.30/ unit. (*Reference order: Letter no. E-229/DD(Dist)/2015, Dated: 24-10-2016. Cost of Service determined in this order for LT Categories is* ₹ 6.07 *per unit whereas the licensees have estimated the cost of service for LT-V category at* ₹ 5.43 *per unit in respect of SPDCL and* ₹ 5.30 *per unit in respect of EPDCL. The lowest out of the three being* ₹ 5.30, *the same is decided to be applied to this category of consumers in order to pass the benefit of lower tariff as they are more or less similarly situated as Agriculturists entitled to subsidized supply of Power*)

1.5.2(b) Power supply to agricultural consumers under urban feeders: In case of agricultural consumers who are under urban feeders, the DISCOMs shall extend power supply by providing three phase meters and supply free power upto 1200 units per HP per annum on annual basis and issue bills for the consumption above 1200 units per HP per annum and charge at the rate of ₹5.30/unit. (Reference order: Letter No. E-229/DD-Dist/2015, Dated 05-02-2016. Cost of Service determined in this order for LT Categories is ₹6.07 per unit whereas the licensees have estimated the cost of service for LT-V category is ₹5.43 per unit in respect of SPDCL and ₹5.30 per unit in respect of EPDCL. The lowest out of the three being ₹ 5.30, the same is decided to be applied to this category of consumers in order to pass the benefit of lower tariff as they are more or less similarly situated as Agriculturists entitled to subsidized supply of Power)

Description	Fixed charges (₹/Month)	Energy Charge (₹/kWh)
(i) Salt farming units with Connected Load upto 15 HP*	20/HP	3.70
(ii) Rural Horticulture Nurseries***		
- Connected Load upto 5 HP	20/11D	1.50
- Connected Load above 5HP and upto 25 HP**	20/HP	3.70
<ul> <li>* - Units with connected load more than 15 HP shall be billed under LT Category III – Industry (General) tariff.</li> <li>** - Units with connected load more than 25 HP shall be billed under LT Category III – Industry (General) tariff.</li> <li>*** - The licensees shall not collect this tariff irrespective of the connected load as per the orders of GoAP vide G.O.RT.No.39, dt. 14.03.2018</li> </ul>		
No monthly minimum energy charges.		

# **1.5.3 LT CATEGORY–V(C) : OTHERS**

# 1.6 LT CATEGORY-VI: STREET LIGHTING, PWS SCHEMES & NTR SUJALA PADHAKAM

#### Applicability

Applicable for supply of energy for lighting on public roads, streets, through fare including parks, markets, cart-stands, taxi stands, bridges, PWS schemes in the Local Bodies viz., Panchayats/Municipalities/Municipal Corporations and NTR SujalaPadhakam (Drinking water schemes notified by the Government of AP and/or concerned statutory authority). Metering is compulsory irrespective of tariff structure. The Composite Water Supply Schemes (CWSS) operated and/or maintained by local bodies (Panchayats, Municipalities and Corporations) shall be billed at LT-VI(B): PWS scheme tariff.

# 1.6.1 LT CATEGORY-VI(A): STREET LIGHTING

Category	Fixed Charges ₹/month	Energy Charges ₹/kWh
(i) Panchayats		5.98
(ii) Municipalities	75/kW	6.53
(iii) Municipal Corporations		7.09

# 1.6.2 LT CATEGORY-VI(B): PWS SCHEMES

Category	Fixed Charge (₹/Month)	Energy Charge (₹/kWh or kVAh)
(i) Panchayats	75/HP	4.87
(ii) Municipalities	75/HP	5.98
(iii) Municipal Corporations	75/HP	6.53
No minimum energy charges.		

# **1.6.3 LTCATEGORY–VI(C): NTR SUJALA PADHAKAM**

Energy Unit	Fixed Charge (₹/Month)	Energy Charge (₹/kWh or kVAh)
kWh/kVAh	10/HP	4.00
No minimum energy charges.		

# 1.7 LT CATEGORY-VII: GENERAL

# 1.7.1 LT CATEGORY–VII (A): GENERAL PURPOSE

#### Applicability

Applicable for supply of energy to places of Crematoriums, Government Educational Institutions and Student Hostels run by Government agencies, Charitable Institutions i.e., Public charitable trusts and societies registered under the Societies Registration Act running educational and medical institutions *rendering totally free service* to the general public, recognized service institutions and registered old age homes.

Fixed Charges ₹/kW/month	Energy Charges ₹/ kWh or kVAh	
30.00	7.28	
Monthly Minimum Energy	charges:	
Single Phase Supply	50 per month	
Three Phase Supply	150 per month	
Note: Tri vector meters shall be provided for all 10 kW and above services. Energy		
charges shall be billed on kVAh for all 10 kW & above services. For loads below 10		
kW, energy charges shall be billed on kWh basis.		

#### Note:

The change of applicability shall be effected within three months from the date of issue of this order to the existing consumers who fit in the above definition. If the change of applicability is not effected within three months for any valid reason for all such consumers, change of classification shall be effected prospectively from the actual date of re-classification.

# 1.7.2 LT CATEGORY-VII (B) : RELIGIOUS PLACES

# Applicability

Applicable for supply of energy to places of worship such as Temples, Churches, Mosques and Gurudwaras and Goshalas.

Description	Fixed charges (₹/kW/Month)	Energy Charge (₹/Unit) (kWh/kVAh)
(i) Upto 2 kW contracted load	30.00	4.84
(ii) Above 2 kW contracted load	30.00	5.04
No monthly minimum energy charges.		

# 1.8 LTCATEGORY-VIII: TEMPORARY SUPPLY

Fixed Charges ₹/kW/month	Energy Charges ₹/ kWh or kVAh
30.00	10.50
Minimum energy charges	₹125 per kW or part thereof of contracted load for first 30 days or part thereof and ₹75 per kW or part thereof of contracted load for every subsequent period of 15 days or part thereof.

#### Note:

a) Trivector meters shall be provided for all 10 kW and above services.

b) Energy charges shall be billed on kVAh for all 10 kW & above services.

c) For loads below 10 kW, energy charges shall be billed on kWh basis.

# 2. LT SUPPLY - GENERAL CONDITIONS

# 2.1 General Conditions of LT Supply

- (1) Upto 5 kW of Contracted Load, supply shall be extended on single phase only.
- (2) The Licensees shall have the right to classify or re-classify the category of supply of energy to any premises under an appropriate category of LT Tariff.

# 2.2 Additional Charges for delayed payment

- (1) The C.C. bills shall be paid by the consumers within the due date mentioned in the bill, i.e. 15 days from date of the bill.
- (2) In case of LT-I (all sub-groups), LT-II(A) and LT-IV, if payment is made after due date, the consumers are liable to pay Delayed Payment Surcharge (DPS) per month at the rates given in the table below.

LT-I (Group -A)	₹ 10/month
LT-I (Group - B), LT I (Group -C),	
LT-II(A) & LT-IV	₹25/month

- (3) In case of LT-II(B), LT-II(C), LT-II (D), LT-II(E), LT-II(F), LT-III, LT-VI and LT-VII, the Licensees shall levy Delayed Payment Surcharge (DPS) on monthly consumption charges only at the rate of 5 paise /₹ 100/day calculated from the due date mentioned on the bill up to the date of payment or ₹ 150 whichever is higher. In case of grant of installments, the Licensees shall levy interest at the rate of 18% per annum on the outstanding amounts compounded annually and both (DPS and Interest) shall not be levied at the same time.
- (4) If the C.C. bills amount is not paid within 15 days from the due date, the power supply is liable for disconnection.
- (5) For re-connection of power supply after disconnection, the consumer has to pay reconnection charges. The re-connection charges shall not be collected without actual disconnection.

# **3** LT TARIFF – CATEGORYWISE SPECIFIC CONDITIONS

#### **3.1 LT CATEGORY – I: DOMESTIC**

 If electricity supplied in domestic premises is required to be used for non-domestic or commercial purposes, a separate connection should be taken for such loads under

LT Category-II, failing which the entire supply shall be charged under LT Category-II tariff, apart from liability for penal charges as per the General Terms and Conditions of Supply.

- (2) For common services like Water supply, common lights in corridors and supply for lifts in multistoried buildings, consumes shall be billed electricity charges as follows:
  - i. At L.T. Category- LT-I (Group-B) / LT-I (Group-C), if the plinth area occupied by the domestic consumers is 50% or more of the total plinth area.
  - ii. At L.T. Category- II (B), if the plinth area occupied by the domestic consumers is less than 50% of the total plinth area.
- (3) Single Point LT services released to residential complexes of State Government/Central Government Departments under specific orders of Licensees with Contracted Load/Connected Load in excess of 56 kW / 75HP shall be billed under LT-I Domestic tariff slab rate applicable based on the average monthly

energy consumption per each authorized dwelling i.e., total energy consumption in the month divided by the number of such dwelling units, in the respective residential complexes.

The above orders are subject to the following conditions, namely:

- i) Orders are applicable to Police Quarters and other State/Central Government residential complexes specifically sanctioned by the Licensees.
- ii) Provided that, it is at the request of the designated officer, who shall give an unconditional undertaking that he will pay the bill for C.C. charges to the Licensees irrespective of collection from the individual occupants.
- iii) The consumers shall be billed at the appropriate slab rate in tariff based on the average monthly consumption per dwelling unit in the complex.
- iv) Meter reading shall be taken monthly in all such cases.
- v) Customer charges calculated at corresponding rate applicable, slab-wise per month for each dwelling unit shall be billed.
- (4) Where an individual consumer seeks to avail supply for domestic purpose with a connected load of above 56 kW/75 HP, such consumers may be given supply under this category subject to the following conditions.
  - i) The metering shall be provided by the DISCOMs on HT side of the distribution transformer.
  - ii) Meter reading shall be done monthly and the energy recorded in the HT metering shall be billed at tariff rates under LT I (Group-C) Domestic.

# 3.2 LT CATEGORY-II: OTHERS

- (1) For loads 10 kW and above, LT tri-vector meter shall be provided and energy charges shall be billed on kVAh.
- (2) For loads below 10 kW, the billing shall be based on kWh. The connected load shall not exceed the contracted load specified in the agreement as per sanction accorded for the service.
- (3) The fixed charges shall be computed based on contracted load or actual Recorded Demand whichever is higher.

- (4) For the purpose of billing, 1 kVA shall be treated as being equal to 1 kW.
- (5) In respect of the complexes having connected load of more than 56kW/75HP released under specific orders of Licensees for Single Point Bulk supply, where such complex is under the control of a specified organization/agency taking responsibility to pay monthly current consumption bills regularly and abide by the General Terms and Conditions of Supply, the billing shall be done at the highest slab tariff rate under LT-II (B). The energy shall be measured on the High-Tension side of the transformer. In case, where energy measured on LT side of the transformer, 3% of the recorded energy during the month shall be added to arrive at the consumption on High Tension side of the transformer.

#### **3.3 LT CATEGORY-III: INDUSTRY**

(1) The connected load shall not exceed the contracted load specified in the agreement as per sanction accorded for the service. The fixed charges shall be computed based on contracted Load or actual Recorded Demand whichever is higher. For the purpose of billing, 1kVA shall be treated as being equal to 1 kW.

#### (2) Sugar Cane Crushing

Sugar cane crushing operations will be allowed under existing agricultural connections with the specific permission from concerned DE (Operation).

# (3) Metering and Load Conditions

- i. LT Trivector meter shall be provided for the consumers with contracted load of 15 kW/20 HP to 37.5 kW/50 HP.
- ii. For loads above 37.5 kW/50 HP to 75 kW/100 HP, the metering shall be provided on HT side of the Distribution Transformer.
- iii.Energy charges shall be billed on kVAh basis for all consumers with contracted load of 15 kW/20HP and above. For loads below 15 kW/20 HP, billing shall be done based on kWh.
- iv. If the recorded demand of any service connection under this category exceeds the 75 kVA (1 kVA = 1 kW), such excess demand shall be billed at the demand charges prescribed under HT Category-I (11 kV supply).

v. In cases where metering is provided on LT side of transformer (due to space constraints), 3% of the recorded energy during the month shall be added to arrive at the consumption on High Tension side of the transformer.

# 3.4 LT CATEGORY-III: SEASONAL INDUSTRIES

- (1) Consumers, classified as seasonal load consumers who are desirous of availing the seasonal benefits shall specifically declare their season at the time of entering into agreement that their loads should be classified as seasonal loads.
- (2) The period of season shall not be less than 3 (three) continuous months. However, consumer can declare longer seasonal period as per actuals.
- (3) Existing eligible consumers who have not opted earlier for availing of seasonal tariffs will also be permitted to opt for seasonal tariff on the basis of application to the concerned Divisional Engineer of the Licensees.
- (4) Consumer, who desires to have a change in the period classified as "season" declared by him, shall file a declaration at least a month before commencement of the season already declared by him. Change of season will be allowed once in a year only.
- (5) The off-season tariff is not available to composite units having seasonal and other categories of loads.
- (6) Development charges as applicable to regular LT consumers shall be paid by the consumers for availing supply under the above said category with seasonal benefits. Consumers who have paid the development charges already as regular consumers need not pay the development charges.
- (7) Energy charges shall be billed on kVAh for all 15 kW & above services. For all loads below 15 kW, energy charges shall be billed on kWh.

# 3.5 LT CATEGORY-V: AGRICULTURE

- Agricultural consumers are permitted to use one lamp of 15 watts or three lamps of 5 watts each, near the main switch as pilot lamps.
- (2) Supply to the L.T Agricultural services will be suitably regulated as notified by Licensees from time to time.
- (3) The farmers eligible for free supply under Dry Land as well as Wet Land have to comply with the Demand Side Management Measures (DSM) stated below as applicable for their pumping system viz., submersible or surface pump sets failing which they will not be eligible for free supply.

- DSM measures include frictionless foot valve, capacitor of adequate rating, HDPE or RPVC piping at suction and/or delivery and ISI marked mono-block or submersible pump-sets.
- (5) Farmers in dry land areas will not be eligible for free supply if they grow Paddy in second crop.
- (6) All new connections shall be given only with DSM measures implemented and with meters.

# 3.6 LTCATEGORY-VI: STREET LIGHTING & PWS SCHEMES

#### LT CATEGORY-VI(A): Street Lighting

- (1) The cost of fittings shall be borne or paid for by Local bodies. The responsibility for maintenance including renewals and replacements rests with the Local bodies viz., Panchayats, Municipalities, Municipal Corporations.
- (2) Where the cost of fittings is borne by the Licensees, the first supply of filament lamps, fluorescent tubes, mercury vapour lamps including special type lamps along with their fittings will be made by the Licensees at thier cost. In such cases, consumer (Local bodies) will have to pay fixed charges as in column (3) below. However, where the cost of fittings is borne by the consumer but maintenance is done by the Licensees, the consumer will have to pay fixed charges as in Column (4) below:

		Fixed charges	Fixed charges per
		per month	month where the cost of
S1.		where the	fittings is borne by the
No.	Fittings for	cost of	Local Body but
INO.		fittings is	maintenance by
		borne by	Licensee
		Licensee (₹)	(₹)
(1)	(2)	(3)	(4)
1	Ordinary Filament Lamp	2	1
2	Fluorescent Lamp 40 W Single	7	4
	Fixture		
3	Fluorescent Lamp 40 W Double	8	4
	Fixture		
4	M.V. Lamps 80 W Fixture	12	6
5	M.V. Lamps 125 W Fixture	15	8
6	M.V Lamps 250 W Fixture	45	23
7	M.V. Lamps 400 W Fixture	50	25

- (3) The replacement of filament lamps, fluorescent tubes, mercury vapour and other special type of lamps will be done by the Local Body at its cost. However, in urban areas till such time the Municipalities and Corporations make their own arrangements for such replacements, the Licensees may, if the consumer so desires, carry out the replacement provided the Local Body supplies the lamps and tubes. The consumer will in such cases be billed labour charges at the rate of ₹2 per replacement. However, in rural areas, such replacement of bulbs supplied by the Local Body will be made by the Licensees without collecting labour charges. For this purpose, the area coming under Gram Panchayat shall constitute 'Rural Area'.
- (4) Additional charges: Every local body shall pay an additional charge equivalent to any tax or fee levied by it under the provisions of any law including the Corporation Act, Municipalities Act or Gram Panchayat Act on the poles, Lines, Transformers and other installations erected in its area.

# 3.7 LT CATEGORY-VIII: TEMPORARY SUPPLY

- (1) Request for temporary supply of energy cannot normally be considered unless there is a clear notice of at least one week in the case of domestic and three months in case of other types of supply. If supply is required at a short notice, in addition to the charges mentioned below, an urgency charge, as specified in 4 (V) (h) is also to be paid.
- (2) Estimated cost of the works means the cost of works for making necessary arrangements for supplying energy including the cost of distribution lines, switchgear, metering equipment etc., as may be worked out on the basis of standards and norms prescribed by the Licensees from time to time plus cost of dismantling the lines and other works when the supply is no more required less the cost of retrievable material.
- (3) (a) Estimated cost of the works as mentioned in para (2) above shall be paid by the consumer in advance. After the works are dismantled and retrievable materials returned to stores, a bill for the actual amount payable by the consumer shall be prepared and the difference would be collected from or refunded to the consumer, as the case may be. No development charge shall be collected for temporary supply.

(b) In addition to the aforesaid charges payable by consumers availing temporary supply, they shall pay hire charges at 2% on cost of retrievable material per month or part thereof, for the duration of temporary supply. These charges will be claimed along with the consumption bills.

(4) (a) The consumer requiring supply on temporary basis shall be required to deposit in advance, in addition to the estimated cost of works mentioned in 3(a), the estimated consumption charges at the rate stipulated in Tariff Order for Temporary supply, and worked out on the basis for use of electricity by the consumer for 6 hours per day for a period of 2 months in case the supply is required for more than 10 days. If the period of temporary supply is for 10 days or less, the advance consumption charges for the actual period requisitioned shall be paid.

(b) The bill for electricity consumed in any month shall be prepared at the tariff applicable plus hire charges as mentioned in 3(b) above. The consumers have to pay monthly CC charges regularly during the period of availing temporary supply and the estimated energy consumption deposit shall be adjusted with the last month consumption bill and the balance, if any, shall be refunded.

(c) In the case of consumers requiring temporary supply for the purposes of Cinema, the estimated energy charges for a minimum period of 3 months shall have to be deposited by the consumers subject to the condition that the consumer shall pay every month energy and other miscellaneous charges for the preceding month and the amount deposited by them in advance shall be adjusted with the last month consumption bill and the balance amount shall be refunded.

(d) In the event of estimated energy charges deposited by the consumer having been found insufficient, the consumer shall deposit such additional amount, as may be demanded by the Licensees failing which the Licensees may discontinue the supply of electricity.

(5) Estimated Cost of Works and Estimated energy charges:

These charges shall be paid in advance by the consumer in accordance with the procedure prescribed above.

# (6) Regular consumers requiring temporary additional supply:

In case where consumers availing regular supply of energy require additional supply for temporary period, the additional supply shall be given as a temporary service under a separate connection and charged as such in accordance with the above procedure.

# 4 LT SUPPLY- OTHER CHARGES

# I. Service Connection Charges

The service connection charges shall be collected as per the Regulations issued by the Commission from time to time.

#### **II. Reconnections**

(a) Low Tension Services.	
LT-I (Group-A) (Overhead)	₹50
Other LT Services (Overhead)	₹100
Services with Under Ground cable	₹300

# **III.** Testing

(a) Installations	
The first test and inspection of a new installation or of an	Nil
extension to an existing installation	
Charges payable by the consumer in advance for each	
subsequent test and / or inspection if found necessary	₹20
owing to any fault in the installation or to non-compliance	
of the conditions of supply	
(b) Meters	
A.C. Single Phase Energy meter	₹200
A.C. Three Phase Energy meter	₹500
LT Tri Vector meter	₹2500

# **IV. Service calls**

(a) Charges for attendance of Fuse man for Low Tension Consumers		
i) Replacing of Licensees' cut out fuses	Nil	
ii) Replacing of consumer's fuses	₹ 5/-	
(b) Charges for attendance of Fuse man/Wireman at the consumer's premises during any function or temporary illumination provided a Fuse man / Wireman can be	₹100/- for each day or part thereof.	
spared for such work	thereof.	
<ul> <li>(c) Charges for infructuous visit of Licensee employees to the consumer's premises</li> </ul>	₹25/- for each visit when there is no defect in Licensee's equipment	

# V. Miscellaneous Charges

(a) Application Registration Fees:	
(i) For LT Agricultural & Domestic	₹ 50
(ii) For all other LT Categories	₹100
(b) Revision of estimates	₹ 50
(c) Fee for re-rating of consumer's installation at the request	Same as Application
of the consumer. (This does not include the additional	<b>Registration Fee</b>
charges payable by the consumer for increasing his	
connected load in excess of the contracted load, as	
provided in General Terms and Conditions of Supply).	
(d) Resealing of	
(i) LT whole current meter	₹ 25
(ii) CT operated meters and other apparatus in the consumer's premises for all other LT categories.	₹100
The aforesaid charges do not include the additional charges	
payable by the consumer for breaking the seals	
(e) For changing meter only at the request of the consumer	₹ 50 for Single phase
(where it is not necessitated by increase in demand	meter
permanently)	₹100 for Three phase
	meter
(f) For changing or moving a meter board	Actual cost of material
	and labour plus 25%
	supervision charges on
	cost of materials and
	labour
(g) Customer Charges:	
Consumer Category:	₹ / month
LT-I Domestic (Units / month)	
LT-I Group (A): Consumption $\leq$ 900 units	
0 - 50	25
51 - 100	30
101 - 200	35
Above 200	40
LT-I Group (B): Consumption $> 900$ and $\le 2700$ units	
0-50	35
51 - 100	40
101 - 200	45
201-300	50
Above 300	55
LT-I Group (C): Consumption > 2700 units	
0-50	35
51 - 100	40
101 - 200	45
201-300	50
Above 300	55
LT-II Others:	
LT-II (A): 0-50 units	30

LT-II (B): Above 50 units per month:	
Upto 100 units	40
Above 100 units	45
LT-II (C) Advertising Hoardings	50
LT-II (D) Function Halls / Auditoriums	50
LT-II (E) Electric Vehicles / Charging Stations	250
LT-II (F) Start up power	500
LT-III Industry upto 20 HP	63
LT-III Industry 21 – 50 HP	250
LT-III Industry 51 – 100 HP	938
LT-VI (A) & (B) Street Lights & PWS	35
LT-VI (C) NTR SujalaPathakam	30
LT-VII General Purpose	45
LT-VIII Temporary Supply	50
All other LT Categories	30
(h) Urgency charges for temporary supply at short notice	200
(i) Special rates chargeable for theft/pilferage and malpractice ca	ses: As per the General
Terms and Conditions of Supply (GTCS) approved by the Con	mmission from time to
time.	
(j)Supervision/Inspection & checking Charges for all LT	100
categories.	

#### VI. Miscellaneous works in LT

The charges for any work which the Licensee may be required to undertake for the consumer and which is not included in the foregoing schedule, shall be the actual cost of labour and material plus 25% on cost of labour and material to cover overhead charges. The aforesaid charges shall be paid by the consumer in advance.

#### VII. Power factor apparatus and capacitor surcharge for LT

- (1) Every LT consumer not provided with trivector meters, except LT-I Domestic, using induction motors and/or welding transformers shall install shunt capacitors of the rating specified by the Licensees in the General Terms and Conditions of Supply (GTCS) approved by the Commission from time to time. In case the rated capacity of the induction motor or welding transformer fails in between the steps of the stipulated ratings, the capacitors suitable for the next higher step shall be installed by the consumer.
- (2) The failure on part of the consumer with the above requirement shall be treated as violation of the General Terms and Conditions of Supply and the Licensees can terminate the contract and collect the sum equivalent to the minimum charges for the balance initial period of agreement, apart from disconnection of supply as provided in the General Terms and Conditions of Supply.

- (3) In the case of LT consumers (except LT Domestic, LT-IV, LT-V, LT-VI (A), LT-VII (B)) not covered by kVAh billing, if during inspection, no capacitor is found, or the capacitors already installed are found damaged or having defect or ceased to function, such consumer shall be liable to pay capacitor surcharge @25% of the monthly bill amount, as per the terms and conditions of supply notified by the Licensees.
- (4) LT consumers, except LT-I Domestic and LT-V Agriculture, who are provided with metering capable of measuring active and reactive power under the orders of the Commission, shall maintain their power factor preferably in between 0.95 lag and 0.95 lead in the interest of the system security. The consumers should not maintain the power factor on leading side less than 0.95. If any consumer maintains the power factor less than 0.95 lead for a period of 2 consecutive months, it must be brought back in the range of (+) or (-) 0.95 within a period of 3 months failing which without prejudice to such other rights as having accrued to the Licensees or any other right of the Licensees, the supply to the consumer may be discontinued. However, for the purpose of billing leading kVArh shall be blocked.

#### PART 'B'

#### 5 HT TARIFFS – TERMS AND CONDITIONS

These tariffs are applicable for supply of electricity to H.T. consumers having loads with a contracted demand of 70 kVA and above and/or having a contracted load exceeding 56 kW/75 HP.

#### 5.1 HT CATEGORY – I: INDUSTRY

#### Applicability

This tariff is applicable for supply to all H.T. consumers using electricity for industrial purpose. Industrial purpose shall mean manufacturing, processing and/or preserving goods for sale, but shall not include shops, Business Houses, Offices, Public Buildings, Hospitals, Hotels, Hostels, Choultries, Restaurants, Clubs, Theatres, Cinemas, Printing Presses, Photo Studios, Research & Development Institutions, Airports, Bus Stations, Railway Stations and other similar premises (The enumeration above is illustrative but not exhaustive) notwithstanding any manufacturing, processing or preserving goods for sale.

This tariff will also apply to:

- (1) Water Works & Sewerage Pumping Stations operated by Government Departments or Co-operative Societies and pump sets of Railways, pumping of water by industries as subsidiary function and sewerage pumping stations operated by local bodies.
- (2) Workshops, flour mills, oil mills, saw mills, ice candy, ice manufacturing units with or without sale outlets.
- (3) The Information Technology (IT) units identified and approved by the Consultative Committee on IT industry (CCITI) constituted by GoAP.
- (4) Newspaper printing units.
- (5) Poultry Hatcheries and Poultry Feed Mixing plants, Aqua hatcheries and Aqua Feed mixing plants.
- (6) Aqua Culture and Animal Husbandry, such as Poultry Farms, Pisi Culture and Prawn Culture.

# 5.1.1 HT CATEGORY-I (A): INDUSTRY GENERAL

# Applicability

HT Category-I (A): (i) Industry General & Industrial Colonies and (ii) Seasonal Industries

#### 5.1.2 HT CATEGORY- I (A) (i) INDUSTRY GENERAL & INDUSTRIAL COLONIES

Industry General			
Voltage of Supply	Demand Charges ₹/ kVA/month of Billing Demand	Energy Charges ₹/kVAh *	
132 kV & Above	475	5.44	
33 kV	475	5.87	
11 kV	475	6.33	
	Industrial Colonies		
All Voltages	NIL	6.32	
* ₹ 1.05/ kVAh Time of Day Tariff is leviable on energy consumption during the period from 06 AM to 10 AM and 06 PM to 10 PM in addition to the normal energy charges at respective voltages. Concession of ₹1/ kVAh Time of Day Tariff is extended on energy consumption during the period from 10 PM to 6 AM, on the normal energy charges at respective voltages.			

- (1) The consumption of energy exclusively for the residential colony/township in a month, separately metered with meters installed by the consumer and tested and sealed by the Licensee shall be billed at ₹6.32/kVAh.
- (2) In case segregation of colony consumption has not been done, 15% of the total energy consumption shall be billed at ₹6.32/kVAh and the balance kVAh shall be charged at the corresponding energy tariff under HT Category-I.
- (3) Wherever possible, colonies of industry shall be given a separate HT service under HT Category-VI: Townships and Residential Colonies.

# 5.1.3 HT CATEGORY- I (A) (ii) SEASONAL INDUSTRIES (Off Season Tariff)

Where a consumer avails supply of energy for manufacture of sugar or ice or salt, decorticating, ginning and pressing, cotton seed oil mills, seed processing, fruit processing, tobacco processing and re-drying and for such other industries or processes as may be approved by the Commission from time to time principally during certain seasons or limited periods in a year and his main plant is regularly closed down during

certain months, he shall be charged for the months during which the plant is shut down (which period shall be referred to as the off-season period) as follows:

Voltage of Supply	Demand Charges ₹/ kVA/month of Billing	Energy Charges ₹/kVAh
	Demand*	
132 kV and above	475	6.72
33 kV	475	6.98
11 kV	475	7.66
* Based on the Recorded Maximum Demand or 30% of the Contracted Demand whichever is higher.		
• No minimum energy charges		

During season period, billing shall be done as per HT-I (A) Industry - General tariffs.

# 5.1.4 HT CATEGORY-I (B): ENERGY INTENSIVE INDUSTRIES

#### Applicability

This tariff is applicable to Ferro Alloy Industries, PV ingots and cell manufacturing units, Poly Silicon Industry and Aluminum Industry.

Voltage of Supply	Demand Charges ₹/ kVA/month	Energy Charges ₹/kVAh
132 kV and above	Nil	4.95
33 kV	Nil	5.37
11 kV	Nil	5.82

# 5.1.5 HT CATEGORY- I(C): AQUA CULTURE & ANIMAL HUSBANDRY

#### Applicability

This tariff is applicable to Aqua Culture and Animal Husbandry, such as Poultry Farms, Pisci Culture, Prawn Culture and Dairy Farms etc.,

Voltage of Supply	Demand Charges ₹/kVA/month	Energy Charges ₹ /kVAh
All Voltages	30	3.86

# 5.1.6 HT CATEGORY- I(D): POULTRY HATCHERIES & POULTRY FEED MIXING PLANTS AQUA HATCHERIES & AQUA FEED MIXING PLANTS

# Applicability

This tariff is applicable to Poultry Hatcheries and Poultry Feed Mixing Plants, Aqua Hatcheries and Aqua Feed Mixing Plants

Voltage of Supply	Demand Charges ₹ /kVA/month	Energy Charges ₹/kVAh
All Voltages	475	4.89

# 5.2 HT CATEGORY - II

# 5.2.1 HT CATEGORY-II (A): OTHERS

#### Applicability

This tariff is applicable to all HT consumers other than those covered under HT Categories I, II (B) to II(F) and HT-III to HT-VII:

₹/kVAh *			
6.72			
6.98			
7.66			
* ₹1.05/ kVAh Time of Day Tariff is leviable on energy consumption during the period from 06 PM to 10 PM, in addition to the normal energy charges at respective voltages.			

#### Note:

In respect of Government controlled Auditoriums and Theatres run by Public Charitable Institutions for purpose of propagation of art and culture which are not let out with a profit motive and in respect of other Public Charitable Institutions rendering totally free service to the general public, the overall kVAh rate (including customer charges) may be limited to the tariff rates under LT Category-VII (A) General purpose, in specific cases as decided by the Licensees.

# 5.2.2 HT CATEGORY-II (B): RELIGIOUS PLACES

# Applicability

This tariff is applicable for supply of energy to places of worship such as Temples, Churches, Mosques, Gurudwaras and Goshalas.

Voltage of Supply	Demand Charges ₹/kVA/month	Energy Charges ₹/kVAh
All Voltages	30.00	5.03

#### 5.2.3 HT CATEGORY-II (C): FUNCTION HALLS / AUDITORIUMS

#### Applicability

This tariff is applicable to Function Halls/Auditoriums/Marriage Halls.

Voltage of Supply	Demand Charges ₹/kVA/month	Energy Charges ₹ / kVAh
All Voltages	NIL	11.77

#### 5.2.4 HT CATEGORY-II (D): Intentionally left blank

#### 5.2.5 HT CATEGORY-II(E): ELECTRIC VEHICLES (EVs) / CHARGING STATIONS

#### Applicability

The tariffs are applicable for supply of electricity to Electric Vehicles and charging stations that will provide electricity for charging.

	Energy Charge
Consumption	(₹/Unit)
	(kWh/kVAh)
For all kWh or kVAh units	6.95
Time of Day (ToD) tariff	₹1.05/kWh/kVAh levied additionally for usage from 06 AM to 10 AM and 06 PM to 10 PM Concession of ₹1.00/kWh/kVAh for usage between 10 PM to 06 AM

# 5.2.6 HT CATEGORY-II(F): STARTUP POWER FOR CAPTIVE GENERATING PLANTS, CO-GENERATION PLANTS AND RENEWABLE GENERATION PLANTS

#### Applicability

The tariff is applicable for supply of electricity to startup power for Captive Generating Plants, Co-Generation Plants and Renewable Generation Plants.

This category is intended for those generators who require occasional and intermiitent supply for start up operations of the generating unit(s) alone. However, the Captive and Cogenetion plants with their process plants being located in the same

premises and have single connection with the grid (APTRANSCO / DISCOMs) and who continuously depend on the licensees' supply for part of their energy requirement may be given option to either continue in their present category or to be included in this new category. Without giving an opportunity to all such generators to exercise option in this regard, the category change shall not be affected.

Consumption	Fixed/Demand charges (₹/kWh/kVA/Month)	Energy Charge (₹/Unit) (kWh/kVAh)
For all kWh or kVAh units	NIL	11.77

The conditions applicable are as follows:

- (1) Supply is to be used strictly for generstart-up operations, maintenance and lighting purposes only.
- (2) Monthly minimum charges on energy are not applicable.
- (3) Allowable Maximum Demand shall be limited to the percentage (as given below) of the maximum capacity unit in the generating station in case of generators other than Wind and Solar, and of the plant capacity in case of Wind and Solar generator.

Thermal -15%, Gas based -6%, Hydel -3%, NCE Sources -10%, Wind and Solar -2%

- (4) If the Maximum Demand exceeds the limits specified above, the energy charges shall be charged at 1.2 times of normal charge for the entire energy consumed.
- (5) All other conditions applicable to HT-II category shall also supply to the HT-II(F) category to the extent they are not contradictory to the above.
- (6) This category is also applicable to all the wind and solar plants who have PPAs with the licensees.

# 5.3 HT CATEGORY-III: PUBLIC INFRASTRUCTURE AND TOURISM Applicability

This tariff is applicable to Airports, Railway Stations, Bus Stations, Hotels (3 star or above category), Resorts (3 star or above category), Heritage Hotels (Heritage basic, Heritage Classic, Heritage Grand), Amusement Parks, MICE Centers, Golf Courses,

Botanical Gardens, Urban/Rural Haats, Tourism and Hospitality Training Institutes, Wayside Amenities, Spiritual/Wellness centers and Museums.

Voltage of Supply	ge of Supply Demand Charges ₹ / kVA/month of Billing Demand	
132 kV and above	475	6.38
33 kV	475	6.69
11 kV	475	7.30
* ₹1.05/ kVAh Time of Da	y (ToD) Tariff is leviable on ener	rgy consumption during the

period from 06 PM to 10 PM, in addition to the normal energy charges at respective voltages.

#### 5.4 HT CATEGORY-IV: LIFT IRRIGATION & CPWS

# 5.4.1 HT CATEGORY-IV (A): LIFT IRRIGATION (GOVT. / PRIVATE) AND AGRICULTURE

#### Applicability

This tariff is applicable to Lift Irrigation Schemes managed by Government of A.P. and for consumers availing HT supply for irrigation and agricultural purposes.

Voltage of Supply	Demand Charges ₹/kVA/month	Energy Charges ₹/kVAh		
All Voltages	NIL	5.82		
No minimum energy charges				

# 5.4.2 HT CATEGORY-IV (B): COMPOSITE PROTECTED WATER SUPPLY SCHEMES

#### Applicability

The tariff is applicable to energy consumption by H.T. services pertaining to Composite Protected Water Supply (PWS) Schemes in rural areas. The composite PWS schemes shall be as defined and modified by the Commission from time to time.

Voltage of Supply	Demand Charges ₹/kVA/month	Energy Charges ₹/kVAh
All Voltages	NIL	4.89
Minimum energy charges:	₹300/kVA/Year	

#### 5.5 HT CATEGORY-V: RAILWAY TRACTION

#### Applicability

This tariff is applicable to all H.T. Railway Traction Loads.

Demand Charges	Energy Charges
₹/kVA/month	₹ /kVAh
300	3.55

# 5.6 HT CATEGORY-VI: TOWNSHIPS AND RESIDENTIAL COLONIES Applicability

This tariff is applicable exclusively for

- (1) Townships and Residential Colonies of Cooperative Group Housing Societies, who own the premises and avail supply at single point for making electricity available to the members of such Society residing in the same premises at HT.
- (2) Any person who avails supply at single point at HT for making electricity available to his employees residing in contiguous premises, the supply in all cases being only for domestic purposes, such as lighting, fans, heating etc., provided that the connected load for common facilities such as non-domestic purpose in residential area, street lighting and water supply etc., shall be within the limits specified hereunder:

Water Supply & Sewerage and Street Light put together	10% of total connected load			
Non-domestic/Commercial General purpose put together	10% of total connected load			

Voltage of Supply	Demand Charges ₹ / kVA/month	Energy Charges ₹/kVAh
All voltages	75.00	6.32

#### 5.7 HT CATEGORY-VII: GREEN POWER

#### Applicability

Green Power Tariff is applicable to all consumers other than those covered under HT-II(F) Category and who wish to avail power from Non-conventional sources of energy voluntarily and show their support to an environmental cause.

Voltage of Supply	Demand Charges ₹/kVA/month	Energy Charges ₹/kVAh
All voltages	NIL	11.32

#### Note:

- (1) The Tariff shall be optional and can be extended to any consumer without reference to end use purpose.
- (2) A consumer shall be entitleed to Renewable Energy Certificates (RECs) as may be admissible.
- (3) No monthly minimum energy charges shall be levied under this category.

#### 5.7 HT CATEGORY- VIII: TEMPORARY

Voltage of Supply	Demand Charges			Energy Charges				
		₹ / kVA/month				₹/kVA	h	
	1.5	Times	of	the	1.5	Times	of	the
All Voltages	corre	corresponding HT			corre	sponding		HT
	cons	consumer category			consu	umer catego	ory	

#### 5.8 RURAL ELECTRIC CO-OPERATIVE SOCIETIES

Voltage of Supply	Demand Charges	Energy Charges
	₹ / kVA/month	₹/kWh
Anakapalli		
Cheepurupalli	burupalli Tariff order for Rural Electric Co-Operative Societies be issued separately.	
Kuppam		
i) Rescos, being Licensees, shall, as far as possible maintain a power factor		e maintain a power factor of
$\pm 0.95$ at their drawal points.		
ii) No penal charges shall be made applicable.		

iii) Customer charge are not applicable.

#### 6. HT SUPPLY- GENERAL CONDITIONS

#### 6.1 Voltage of Supply

The voltage at which supply has to be availed by:

(1) HT consumers, seeking to avail supply on common feeders shall be:

For Total Contracted Demand with the Licensee and all other sources:	
Upto 1500 kVA	11 kV or 33 kV
1501 kVA to 5000 kVA	33 kV
Above 5000 kV A	132 kV or 220 kV as may be
Above 5000 kVA	decided by the licensees

(2) HT consumers seeking to avail supply through independent (dedicated) feeders from the substations where transformation to required voltage takes place shall be:

For Total Contracted Demand with the Licensee and all other sources:		
Capacity	Supply Voltage	
Upto 3000 kVA	11 kV or 33 kV	
3001 kVA to 5000 kVA	33 kV	
5001 kVA to 20,000 kVA	33 kV or above	
Above 20,000 kVA	132 or 220 kV as may be decided by Company	

The relaxations are subject to the fulfillment of following conditions:

- i) The consumer shall pay full cost of the service line including take off arrangements at substation.
- ii) In case of HT-I, HT-II and HT-III consumer categories, for whom the voltage wise tariff is applicable, the Licensee shall levy the tariff as per the actual supply voltage.

Provided that the DISCOMs shall have the right to convert an existing independent feeder into an "express feeder" and in such cases, the DISCOMs shall also compensate to the existing consumer who had paid the entire cost of line including take off arrangement in the sub-station, subject to fulfillment of following conditions:

- (i) If independent feeder's age is more than 10 years, no compensation is required to be paid to the existing consumer and no service line charges shall be collected against existing feeder.
- (ii) If the line age is less than or equal to 10 years, the prospective consumer shall pay 50% of estimated cost of line including take off arrangement upto the tapping point.
- (iii) The amount paid by the new consumer shall be adjusted against the future bills of existing consumer who has earlier paid for the cost of feeder including take off arrangement.
- (iv) Once the feeder is converted into express feeder, no compensatory charges shall be collected from the subsequent consumers to avail power supply from that express feeder.
- (3) HT consumers intending to avail supply through express feeder from the substation where transformation to required voltage takes place shall be:

For total contarcted demand with the licensees and all other sources

Description	Capacity	Supply Voltage
Total demand of all consumers	Upto 3000 kVA	11 kV
Total demand of all consumers	3001 kVA to 2000 kVA	33 kV

Note: The sum total of invidual contracted demands shall not exceed 3000 kVA in case of 11 kV consumers and 20000 kVA in case of 33 kV consumers

#### 6.2 Voltage Surcharge

H.T. consumers who are now getting supply at voltage different from the declared voltages and who want to continue taking supply at the same voltage will be charged as per the rates indicated below:

S.	Contracted Demand with	Voltage at which supply	Voltage at which	Rates % ex the norm	
No.	Licensee	should be availed (in kV)	consumer is availing	Demand Charges	Energy Charges
			supply (in	<b>9</b>	
			kV)		
(A) HT consumers availing supply through common feeders:					
1.	Above 1501 kVA to 5000 kVA	33	11	12%	10%
2.	Above 5000 kVA	132 or 220	33 or below	12%	10%
(B) HT Consumers availing supply through independent feeders:					
1.	3001 to 20000 kVA	33 or Above	11	12%	10%

2. Above 20000 132 or 220 kVA	33	12%	10%
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Note:

- i) In case of consumers who are having supply arrangements from more than one source, CMD with the Licensee or RMD, whichever is higher shall be the basis for levying voltage surcharge.
- ii) The Voltage Surcharge is applicable to only existing services and licensees shall not release new services at less than specified voltage corresponding to contracted demand.

#### 6.3 Maximum Demand

The maximum demand of supply of electricity to a consumer during a month shall be twice the largest number of kilo-volt-ampere hours (kVAh) delivered at the point of supply to the consumer during any consecutive 30 minutes in the month. However, for the consumers having contracted demand above 4000 kVA the maximum demand shall be four times the largest number of kilo-volt-ampere-hours (kVAh) delivered at the point of supply to the consumer during any consecutive 15 minutes in the month.

#### 6.4 Billing Demand

The Billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher, except HT-VI category i.e. Townships & Residential Colonies. For HT-VI category the minimum billing condition of 80% of the contracted demand shall not be applicable.

#### 6.5 Monthly Minimum Charges

Every consumer whether he consumes energy or not shall pay monthly minimum charges calculated on the billing demand plus energy charges specified for each category in this part to cover the cost of a part of the fixed charges of the Licensee.

#### 6.6 Additional Charges for Maximum Demand in excess of the Contracted Demand:

If in any month the Recorded Maximum Demand (RMD) of the consumer exceeds his Contracted Maximum Demand (CMD) with Licensee, the consumer will pay the following charges on excess demand and energy.

RMD	Demand Charges on Excess Demand	Energy Charges on full Energy
100 to 120% of CMD	2 times of normal charge	Normal
Above 120% and up to 200%	2 times of normal charge	1.15 times of normal charge
of CMD	_	_

More than 200% of CMD	2 times of normal charge	1.20 times of normal charge

In case of Category-HT-V (Railway Traction), the energy charges shall be computed at 1.05 times of normal charges on the entire consumption if RMD exceeds 120% of Contracted Demand.

#### 6.7 Additional Charges for delayed payment

The Licensees shall charge the Delayed Payment Surcharge (DPS) per month on monthly consumption charges only at the rate of 5 paise/ $\gtrless$ 100/day or  $\gtrless$ 550 whichever is higher. In case of grant of installments, the Licensees shall levy interest at the rate of 18% per annum on the outstanding amounts, compounded annually and both shall not be levied at the same time.

#### 6.8 Customer charges

Every HT Consumer shall pay customer charges as applicable to them, in addition to demand and energy charges billed.

#### 6.9 Maintenance of Power Factor at consumer end

HT consumers, who are provided with metering capable of measuring active and reactive power under the orders of the Commission, shall maintain their power factor preferably in between 0.95 lag and 0.95 lead in the interest of the system security. The consumers should not maintain the power factor leading side less than 0.95. If any consumer maintains the power factor less than 0.95 lead for a period of 2 consecutive months, it must be brought back in the range of  $\pm$  0.95 within a period of 3 months failing which without prejudice to such other rights as having accrued to the licensees or any other right of the licensees the supply to the consumer maybe discontinued. However, for the purpose of billing, leading kVArh shall be blocked.

#### 7. HT SUPPLY - SPECIFIC CONDITIONS

#### 7.1 HT Category-I (A): (i) Industry General

- The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher.
- (2) Energy charges will be billed on the basis of actual energy consumption or 50 kVAh per kVA of billing demand, whichever is higher.

#### 7.2 HT Category-I (A): (ii) Seasonal Industries

- (1) Consumers, classified as seasonal load consumers, who are desirous of availing the seasonal benefits shall specifically declare their season at the time of entering into agreement that their loads should be classified as seasonal loads.
- (2) The period of season shall not be less than 3 (three) continuous months. However, consumer can declare longer seasonal period as per their actual requirement.
- (3) Consumer, who desires to have a change in the period classified as "season" declared by him, shall file a revised declaration at least a month before commencement of already declared season period. Change of season period will be allowed once in a year only.
- (4) Existing eligible consumers who have not opted earlier for seasonal tariffs will also be permitted to opt for seasonal tariff on the basis of application to the concerned Divisional Engineer of the Licensee.
- (5) The off-season tariff is not available to composite units having seasonal and other categories of loads.
- (6) The off-season tariff is also not available for such of those units who have captive generation exclusively for process during season and who avail supply of Licensee for miscellaneous loads and other non-process loads.
- (7) Development charges as applicable to regular HT consumers shall be paid by the consumers for availing supply under the above said category with seasonal benefits. Consumers who have paid the development charges already as regular consumers need not pay the development charges.

#### 7.3 HT Category-I (B): Energy Intensive Industries

Energy charges will be billed on the basis of actual energy consumption or 50 kVAh / kVA/month of contracted demand, whichever is higher.

#### 7.4 HT Category-I (C): Aqua Culture & Animal Husbandry

Energy charges will be billed on the basis of actual energy consumption or 40 kVAh/ kVA per Month of Contracted Demand, whichever is higher.

# 7.5 HT Category-I (D): Poultry Hatcheries & Poultry Feed mixing plants, Aqua Hatcheries & Aqua Feed mixing plants

Energy charges will be billed on the basis of actual energy consumption or 40 kVAh/ kVA per Month of Contracted Demand, whichever is higher.

#### 7.6 HT Categories-II(A) & II(B)

- The billing demand shall be the Maximum Demand Recorded during the month or 80% of the contracted demand, whichever is higher.
- (2) Energy charges will be billed on the basis of actual Energy consumption or 25 kVAh per kVA of Billing Demand, whichever is higher.

#### 7.7 HT Category-III: Public Infrastructure and Tourism

- The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher.
- (2) Energy charges will be billed on the basis of actual energy consumption or 50 kVAh per kVA of billing demand whichever is higher.

#### 7.8 HT Category-IV: Lift Irrigation and CPWS

Metering is mandatory for categories HT-IV (A) & HT-IV (B)

#### 7.9 HT Category-V: Railway Traction

- The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher.
- (2) Energy charges will be billed on the basis of actual energy Consumption or 32 kVAh per kVA per month of Contracted Demand whichever is higher.

#### 7.10 HT Category-VI: Townships and Residential Colonies

- (1) The billing demand shall be the recorded maximum demand during the month.
- (2) Energy Charges will be billed on the basis of actual consumption or 25 kVAh per kVA of Contracted Demand, whichever is higher.
- (3) The above provisions shall not in any way affect the right of a person residing in the housing unit sold or leased by such Cooperative Group Housing Society, to demand supply of electricity directly from the distribution licensee of the area.

#### 7.11 HT Category-VIII: Temporary Supply

- (a) Requests for temporary supply of energy cannot normally be considered unless there is a clear notice of three months.
- (b) Estimated cost of the works means the cost of works for making necessary arrangements for supplying energy including the cost of distribution lines, switchgear, metering equipment, etc. as may be worked out on the basis of standards and norms prescribed by the Licensees from time to time plus cost of dismantling the lines and other works when the supply is no more required less the cost of retrievable material.
- (c) (i) Estimated cost of the works as mentioned in para (b) above shall be paid by the consumer in advance. After the works are dismantled and retrievable materials returned to stores, a bill for the actual amount payable by the consumer shall be prepared and the difference would be collected from or refunded to the consumer, as the case may be. No development charges shall be collected for temporary supply.

(ii) In addition to the aforesaid charges payable by consumers availing temporary supply, they shall pay hire charges at 2% on cost of retrievable material per month or part thereof, for the duration of temporary supply. These charges will be claimed along with the consumption bills.

(d) (i) The consumer requiring supply on temporary basis shall be required to deposit in advance, in addition to the estimated cost of works mentioned in para (c) (i) the estimated consumption charges at the rate stipulated in Tariff Order for Temporary supply, and worked out on the basis for use of electricity by the consumer for 6 hours per day for a period of 2 months in case the supply is required for more than 10 days. If the period of temporary supply is for 10 days or less, the advance consumption charges for the actual period requisitioned shall be paid.

(ii) The bill for electricity consumed in any month shall be prepared at the tariff applicable plus hire charges as mentioned in para (c) (ii) above. The consumers have to pay monthly CC charges regularly during the period of availing temporary supply and the estimated energy consumption deposit shall be adjusted with the last month consumption bill and the balance if any shall be refunded. (iii) In the case of consumers requiring temporary supply for the purposes of Cinema, the estimated energy charges for a minimum period of 3 months shall have to be deposited by the consumer subject to the condition that the consumer shall pay every month energy and other miscellaneous charges for the preceding month and the amount deposited by him in advance shall be adjusted with the last month consumption bill and the balance amount shall be refunded.

(iv) In the event of estimated energy charges deposited by the consumer having been found insufficient, the consumer shall deposit such additional amount, as may be demanded by the Licensees failing which the Licensees may discontinue the supply of electricity.

(e) <u>For new connections:</u> Temporary supply at High Tension may be made available by the Licensees to a consumer, on his request subject to the conditions set out herein.

Temporary supply shall not ordinarily be given for a period exceeding 6 (six) months. In case of construction projects, temporary supply can be extended for a period of 3 years. The electricity supplied to such consumers shall be charged at the rates of HT Temporary Category.

- (f) Existing consumers requiring temporary supply or temporary increase in supply: If any consumer availing regular supply of electricity at High Tension requires an additional supply of electricity at the same point for a temporary period, the temporary additional supply shall be treated as a separate service and charged at the rates of HT Temporary Category, subject to the following conditions.
  - i) The contracted demand of the temporary supply shall be the billing demand for that service. The recorded demand for the regular service shall be arrived at by deducting the billing demand for the temporary supply from the maximum demand recorded in the month.
  - ii) The total energy consumed in a month including that relating to temporary additional supply, shall be apportioned between the regular and temporary supply in proportion to the respective billing demands.

### 8 HT SUPPLY - OTHER CHARGES

#### 8.1 Service Connection Charges

The service connection charges shall be collected as per the Regulations issued by the Commission from time to time.

#### 8.2 Reconnection

High Tension Services	Charges
11 kV	₹2000
33 kV	₹4000
132/220 kV	₹6000

#### 8.3 Testing

(a) Installations:	Charges
The first test and inspection of a new installation or of an extension	Nil
to an existing installation.	
Charges payable by the consumer in advance for each subsequent	
test and/or inspection if found necessary owing to any fault in the	₹ 300
installation or to non-compliance of the conditions of supply	
(b) HT Meters	₹5000
(c) Transformer Oils:	
First sample of oil	₹200
Additional sample of oil of the same equipment received at the	₹300
same time	

# 8.4 Miscellaneous Charges

(a) Application Registration Fees	₹500
(b) For changing meter only at the request of the consumer (where it is not necessitated by increase in Demand permanently)	
(c) For changing or moving a meter board	Actual cost of material and labour plus 25% supervision charges on cost of materials and labour.
(d) Customer Charges:	
HT Consumer categories -11 kV	₹1406/month
HT Consumer categories - 33 kV & above	₹2813/month
(e) Urgency charges for temporary supply at short notice	₹1000
(f) Special rates chargeable for theft/pilferage and malpractice cases	As per the General Terms and conditions of Supply (GTCS) approved by the Commission from time to time

#### 8.5 Miscellaneous works in HT

The charges for any work which the Licensee may be required to undertake for the consumer and which is not included in the foregoing schedule, shall be the actual cost of labour and material plus 25% on cost of labour and material to cover overhead charges. The aforesaid charges shall be paid by the consumer in advance.

- **298** The payment of subsidy amounts indicated in the beginning of this chapter must be made by the Government of Andhra Pradesh to the Licensees in monthly installments, in advance.
- **299** The above determined rates for LT-V: Agriculture category are contingent on payment of subsidy as agreed by the GoAP, failing which, the rates contained in the full cost recovery tariff schedule will become operative.
- **300** The rates indicated in the Retail Supply Tariff Schedule for FY2018-19, together with the terms and conditions prescribed there under shall be applicable in the areas of operation of 2 (two) Distribution Companies viz. Eastern Power Distribution Company of A.P. Limited (APEPDCL) and Southern Power Distribution Company of A.P. Limited (APSPDCL) and three RESCOs w.e.f.01-04-2018 to 31-03-2019.

#### CHAPTER - XII

### **CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE**

#### Introduction

- **301** Sections 39(2) (d) (ii) and 40(c) (ii) of the Electricity Act, 2003 (hereinafter referred to as 'the Act') provide for payment of a Surcharge (hereinafter also referred to as 'the Cross Subsidy Surcharge') when a transmission system is used for open access for supply of electricity to a consumer and Section 42(2) of the Act provides for payment of the surcharge in addition to the wheeling charges as determined by the State Commission. As per these provisions, the Cross-Subsidy Surcharge has to be levied on the consumers who opt for open access to be utilized to meet the requirements of current level of cross subsidy.
- **302** Section 42(4) of the Act provides that a consumer permitted to receive supply of electricity from a person other than the Distribution Licensee of the area in which such consumer is located, shall be liable to pay an Additional Surcharge to meet the fixed costs of the distribution licensee arising out of his obligation to supply.
- 303 The distribution licensees, Southern Power Distribution Company of A.P. Ltd. (APSPDCL) and Eastern Power Distribution Company of A.P. Ltd (APEPDCL) have included the proposals for determination of CSS (Cross Subsidy Surcharge) and Additional Surcharge for open access transactions along with ARR/FPT filings for determination of tariff for retail sale of electricity for FY2018-19 based on the formula specified (for CSS) in the National Tariff Policy, 2016. The details of the CSS filed by the Licensees are as per Annexure-11 &12.
- 304 Therefore, the Commission, in exercise of the powers conferred by Sections 39, 40 and 42 of the Act and all other powers enabling it in that behalf and after examination of the licensees' filings for determination of the Cross Subsidy Surcharge& Additional Surcharge for FY2018-19 and after taking cognizance of all the stakeholders'views/objections/suggestions on these filings obtained as part of the public consultation process, hereby determines the Cross Subsidy Surcharge/Additional Surcharge applicable for different categories of consumers availing open access for the FY2018-19, as described hereinafter in this Chapter.

#### **Determination of CSS**

**305** For determination of CSS for FY2018-19, the Commission has decided to follow the same methodology that was followed for FY2017-18 which was based on the formula specified in the revised National Tariff Policy issued on 28.01.16. As per the said Tariff Policy, the Surcharge is to be computed as per the following formula;

#### S = T - [C/(1-L/100) + D + R]

Where, 'S' in  $\overline{\mathbf{x}}$ /unit is the Cross Subsidy Surcharge , 'T' is the tariff payable by the relevant category of consumers in  $\overline{\mathbf{x}}$  /unit, including reflecting the Renewable Purchase Obligation, 'C' is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation in  $\overline{\mathbf{x}}$ /unit , 'D' is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level in  $\overline{\mathbf{x}}$ /unit and 'L' in percentage is the aggregate of transmission, distribution and commercial losses, applicable to the relevant voltage level and 'R' is the cost of carrying regulatory assets in  $\overline{\mathbf{x}}$ /unit. Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access

- **306** The values of 'T', 'C', 'L', 'D' and 'R' in the above formula have been arrived at by the Commission as follows. The values of 'T', 'C' and 'L' have been computed/adopted from this Order (Retail Supply Tariff Order for FY2018-19) and the value of 'D' has been computed from MYT Orders for Transmission and Distribution businesses for the control period FY2014-19 which includes PGCIL losses also. The value of 'R' is taken as zero as there are no Regulatory assets created by the Commission.
- **307** The CSS computations done by the Commission for FY2018-19 as per the above para are indicated below:

1 abic +3, AI SI DCL - Closs Subsidy Sulcharges for F1 2010-17	Table 45:	<b>APSPDCL</b> -	Cross Subsidy Surcharges for FY 2018-19
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Categories	Average Realization (Excluding Customer Charges, Minimum Charges, NTI, DPS) (Rs./unit)	Per unit Weighted Average cost of Power Purchase (Rs./unit)	Transmission, Distribution and Wheeling Charges (Rs./unit)	Applicable Loss%	Carrying Cost of Regulatory Asset (Rs./unit)	Cross Subsidy Surcharge (Rs./unit)	20% of Average Realization	CSS as per APERC (Rs/unit)
	т	С	D	L	R	S=T-[C/(1- L/100)+D+R]	A=0.2*T	CSS=Lesser of S and A
HIGH TENSION								
HT Category at 11 kV	1	1		1	1	1		
HT I (A): General	8.84	4.05	0.73	9.67%	0	3.63	1.77	1.77
HT I (B): Energy Intensive Industries	5.82	4.05	0.76	9.67%	0	0.58	1.16	0.58
HT I (C): Aquaculture and Animal Husbandry	4.10	4.05	0.76	9.67%	0	0.00	0.82	0.00
HT I (D): Poultry Hatcheries abd Poultry Feed Mixing Plants	6.88	4.05	0.76	9.67%	0	1.64	1.38	1.38
HT II: Others	10.18	4.05	0.76	9.67%	0	4.94	2.04	2.04
HT II (B): Religious Places	5.16	4.05	0.76	9.67%	0	0.00	1.03	0.00
HT II (C): Function Halls/Auditoriums	11.77	4.05	0.76	9.67%	0	6.53	2.35	2.35
HT III: Public Infrastructure and Tourism	9.18	4.05	0.76	9.67%	0	3.93	1.84	1.84
HT IV: Government LIS	5.82	4.05	0.76	9.67%	0	0.58	1.16	0.58
HT IV: Private Irrigation and Agriculture	0.00	4.05	0.76	9.67%	0	0.00	0.00	0.00
HT IV: CPWS	4.89	4.05	0.76	9.67%	0	0.00	0.98	0.00
HT VI: Townships & Residential Colonies	6.55	4.05	0.76	9.67%	0	1.31	1.31	1.31
HT VIII: Temporary	9.50	4.05	0.76	9.67%	0	4.25	1.90	1.90
HT Category at 33 kV								
HT I (A): General	7.12	4.05	0.37	6.51%	0	2.41	1.42	1.42
HT I (B): Energy Intensive Industries	5.37	4.05	0.37	6.51%	0	0.66	1.07	0.66
HT I (C): Aquaculture and Animal Husbandry	3.86	4.05	0.37	6.51%	0	0.00	0.77	0.00
HT I (D): Poultry Hatcheries abd Poultry Feed Mixing Plants	7.50	4.05	0.37	6.51%	0	2.79	1.50	1.50
HT II: Others	9.08	4.05	0.37	6.51%	0	4.37	1.82	1.82
HT II (B): Religious Places	5.36	4.05	0.37	6.51%	0	0.66	1.07	0.66
HT II (C): Function Halls/Auditoriums	11.77	4.05	0.37	6.51%	0	7.06	2.35	2.35
HT II(F):Startup Power for Captive Generating Plants, Co-generation								
plants and Renewable Generation Plants	11.77	4.05	0.37	6.51%	0	7.06	2.35	2.35
HT III: Public Infrastructure and Tourism	10.49	4.05	0.37	6.51%	0	5.79	2.10	2.10
HT IV: Private Irrigation and Agriculture	5.82		0.37	6.51%	0	1.11	1.16	1.11
HT IV: CPWS	4.89	4.05	0.37	6.51%	0	0.18	0.98	0.18
HT VI: Townships & Residential Colonies	6.75	4.05	0.37	6.51%	0	2.04	1.35	1.35
HT Category at 132 kV								
HT I (A): General	6.77	4.05	0.36	3.27%	0	2.23	1.35	1.35
HT I (B): Energy Intensive Industries	4.95	4.05	0.36	3.27%	0	0.41	0.99	0.41
HT II: Others	8.22	4.05	0.36	3.27%	0	3.68	1.64	1.64
HT IV: Private Irrigation and Agriculture	5.82	4.05	0.36	3.27%	0	1.28	1.16	1.16
HT V: Railway Traction	5.01	4.05	0.36	3.27%	0	0.47	1.00	0.47

Categories	Average Realization (Excluding Customer Charges, Minimum Charges, NTI, DPS) (Rs./unit)	Per unit Weighted Average cost of Power Purchase (Rs./unit)	Transmission, Distribution and Wheeling Charges (Rs./unit)	Applicable Loss%	Carrying Cost of Regulatory Asset (Rs./unit)	Cross Subsidy Surcharge (Rs./unit)	20% of Average Realization	CSS as per APERC (Rs/unit)
	т	с	D	L	R	S=T-[C/(1- L/100)+D+R]	A=0.2*T	CSS=Lesser of S and A
HIGH TENSION								
HT Category at 11 kV								
HT I (A): General	8.04	4.01	0.81	9.13%	0	2.82	1.61	1.61
HT I (C): Aquaculture and Animal Husbandry	4.02	4.01	0.81	9.13%	0	0.00	0.80	0.00
HT I (D): Poultry Hatcheries abd Poultry Feed Mixing Plants	6.46	4.01	0.81	9.13%	0	1.23	1.29	1.23
HT II: Others	10.40	4.01	0.81	9.13%	0	5.17	2.08	2.08
HT II (B): Religious Places	5.25	4.01	0.81	9.13%	0	0.02	1.05	0.02
HT II (C): Function Halls/Auditoriums	11.77	4.01	0.81	9.13%	0	6.54	2.35	2.35
HT III: Public Infrastructure and Tourism	9.21	4.01	0.81	9.13%	0	3.98	1.84	1.84
HT IV Government LIS	5.82	4.01	0.81	9.13%	0	0.59	1.16	0.59
HT IV CPWS	4.89	4.01	0.81	9.13%	0	0.00	0.98	0.00
HT VI: Townships & Residential Colonies	6.65	4.01	0.81	9.13%	0	1.42	1.33	1.33
HT VIII: Temporary	18.35	4.01	0.81	9.13%	0	13.12	3.67	3.67
Category: RESCOs	0.68	4.01	0.81	9.13%	0	0.00	0.14	0.00
HT Category at 33 kV			•					
HT I (A): General	7.21	4.01	0.36	6.00%	0	2.58	1.44	1.44
HT I (B): Energy Intensive Industries	5.37	4.01	0.36	6.00%	0	0.75	1.07	0.75
HT II: Others	10.05		0.36	6.00%	0	5.43	2.01	2.01
Startup Power for Captive Generating Plants, Co-generation plants and Renewable Generation Plants								
HT III: Public Infrastructure and Tourism	7.78	4.01	0.36	6.00%	0	3.16	1.56	1.56
HT IV Government LIS	5.82	4.01	0.36	6.00%	0	1.20	1.16	1.16
HT VI: Townships & Residential Colonies	6.57	4.01	0.36	6.00%	0	1.94	1.31	1.31
HT VIII: Temporary	9.92		0.36	6.00%	0	5.29	1.98	1.98
HT Category at 132 kV								
HT I (A): General	7.04	4.01	0.34	3.27%	0	2.55	1.41	1.41
HT I (B): Energy Intensive Industries	4.95	4.01	0.34	3.27%	0	0.46	0.99	0.46
HT II: Others	9.01	4.01	0.34	3.27%	0	4.53	1.80	1.80
HT IV Government LIS	5.82	4.01	0.34	3.27%	0	1.33	1.16	1.16
HT V: Railway Traction	4.70	4.01	0.34	3.27%	0	0.21	0.94	0.21

#### Table 46: APEPDCL - Cross Subsidy Surcharges for FY2018-19

# **Determination of Additional Surcharge**

308 The Licensees proposed an Additional Surcharge of ₹ 0.95 paise per unit. As per Clause 8.5.4 of the National Tariff Policy-2016, "*The additional surcharge for* 

obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract."

But, the Licensees have not been able to demonstrate the above conclusively, as the parameters for grant of additional surcharge prescribed by section 42(4) read with clause 8.5.4 of the National Tariff Policy, 2016 are not satisfactorily established to exist to sustain such a claim. Therefore, the Commission is not rendering any decision on the eligibility or otherwise of the licensees to collect such additional surcharge from a consumer or any class of consumers for FY2018-19 in the present consideration. However, the licensees are at liberty to move an appropriate application for the purpose in accordance with law sufficiently supported by the relevant data and material which may be considered on merits.

#### **EPILOGUE**

The Commission has entrusted the task of the tariff exercise for Retail Sale of Electricity during FY2018-19 exclusively to three younger executives of the Commission, Sri D. Ramanaiah Setty, Deputy Director / Tariff Engineering, Sri M.S. Vidyasagar, Deputy Director / Planning & Power Procurement and Smt. P.V. Padmaja, Private Secretary. This is a sequel to the near crisis situation which the Commission faced during the finalization of the Order on Tariff for Retail Sale of Electricity during FY2017-18 due to the sad and sudden demise of Dr. P. Rama Rao, in-charge Director / Tariff of the Commission on 24-03-2017, while the Order had to be made before 01-04-2017. The Commission was suddenly made to open its eyes by an act of God to the inevitable necessity of having alternative reserves of expertise and experience to deal with such matters and the dangers of having only a single line of defence with only a vacuum beyond. Hence was the decision for a change of guard in performing this task with, of-course, the guidance and advice of senior officers of the Commission being always available at hand. The belief of the Commission in the devotion and commitment of the three youngsters is happily found to be not an act of misplaced zeal but a positive step of training the next generation for the future. Sri D. Ramanaiah Setty, Deputy Director / Tariff Engineering, Sri M.S. Vidyasagar, Deputy Director / Planning & Power Procurement and Smt. P.V. Padmaja, Private Secretary have worked 24 x 7 and produced a refreshing result, proving themselves to be very much worthy of the confidence the Commission has reposed in them. While thanking every member of the Commission family from the Director to the outsourced employee for their involvement in the work of the Commission, the Commission places on record its deep sense of appreciation for the untiring services rendered by the three youngsters.

Every member of the two distribution licensees from their Chairmen and Managing Directors to the humblest employee extended all cooperation and affection in the exercise from placing the tariff proposals before the Commission and furnishing all necessary data and information from time to time till the organization of the public hearings. Similarly, individual and representative participants from all categories of consumers and stakeholders took part in the process wholeheartedly through written and oral presentation of their views / suggestions / objections. The State Government and its Energy Department were prompt and helpful, more particularly in readily accepting the quantum of subsidy to be provided under Section 65 of the Electricity Act, 2003. The valuable guidance received from the members of

the State Advisory Committee and the State Coordination Forum is thankfully acknowledged by the Commission. The representatives of the audio, visual and print media are a source of strength which they always have been. We take this opportunity to thank each and every one of them. The orderly conduct of public hearings and the constructive manner in which even a very strong dissent was expressed in a democratic and dignified manner gave the confidence to the Commission in performing its duty to the best of its ability, competence and judgment as it always attempts to do.

Hopefully this tariff order, which is the result of a very strenuous study and evaluation of every conceivable relevant factor concerning the power sector, will receive a welcome acceptance, more so, in the absence of any tariff hike for any consumer and with some positive concessions here and there like a lower tariff for industry in off-peak hours. The gradual reduction of the percentage of Power Purchase Cost in the ARRs from 82.74% in FY2014-15 to 76.81% in FY2018-19 (projected) is a morale booster for the confidence of the Commission in its attempts to inculcate better discipline in the functioning of the power sector.

The Andhra Pradesh Electricity Regulatory Commission takes this opportunity to rededicate itself to the service of every consumer of electricity and every utility of power sector in the State of Andhra Pradesh.

This order is signed on this the 27<sup>th</sup> day of March, 2018

Sd/-(P. RAMA MOHAN) MEMBER

Sd/-(Dr. P. RAGHU) MEMBER Sd/-(JUSTICE G. BHAVANI PRASAD) CHAIRMAN

# **ANNEXURE - 01**

# Public Notice of ARR & FPT for FY 2018-19

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<ol> <li>2.68 F(C) (eQ)</li> <li>3.569 III IC risks</li> </ol>			prA is Bis gi	nderte i Ka Sity	in he i we to	bell ini iloriptia	and the second	itinerfer No 34 cu	en mat <sup>i</sup> Spatista	RW1						1.00		
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ອັນກໍອິດະ	atia 100- 048543 (tool 4 00)	यी ताल्याने अर्थ वर्ष जन्मे लोजी	teut rfa		కాస్ట్ ఇద్ మెట్రకటన్	12525 (0r./	29% eE devide 35der	82525 16h/	3640		etid 1005 3.4550 100-0 5.20	రర్ చులుత్ శార్త్ ఆఫ్	ร้องกี ราฐ์เล	දේසයේ අති	Westud	62525 (Q4.)	20% 00 arsis 12%	N53 154
	ope le file				and	±=66)		dis-3d			of a cost of	200 200			100	යාගේ)	angent	325.27
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મંત્રિ છે. સપ્લુપુર્વ કરતે પરંતને જેવુનારે	4.02	4.18	0.24	0.00%	00.0	-	0.80		912 IV. at 644 a	2.02.02.0	4.0	4.89	0.78	10.24%			3.02	+
te-Ed. 1(d.) : drig te-class	8.48	4.18	0.34	915%	6.00	0.98	1.28	0.99	1000100000	0.024000	6.83	4.19	0.79	10.24%	0.00	1.42	1.32	1.38
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tente a l'allante	10.40	4,18	0.84	985%	00.2	4.93	2.08	2.88	2-55 3 - 66KG 2-55 9(5) - 53	NW NO.	10.18	110	0.70	10.24%		4,72	2.04	2.04
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te ato unt de l'attrave	11.77	4.18	0.04	9.55%	00.0	6.36	2.55	2.35	प्रदेश । अही बहेबू इन्द्रेश व स्टब्सू केव	the mill and a	8.8	A 10	0.79	10.24%		3.72	184	1,84
at a sit of a bit the Alt : i b	5.21	4.18	0.84	0.65%	0.00	3.74	1.84	1.84				4 B9	0.79	10.14%		0.94	116	0.34
The A rice and course	5.87	4.18	0.24	955%	0.00	0.34	115	0.35	2720 4 (200 alita)	26.65 257.64		4.10	8.79	10.24%		1.36	1.16	0.38
All a tablage sills	4.89	4.18	0.84	9.65%	and the second sec		0.88		1906 4 76 602		4,03	4.10	0.70	10.24%		1	2.96	100
788 6 : O'AL & 2013 Public		4.18	0.84	965%	and of the same	1.18	1.33	1.18	523 6 2025 1250 8 : 0-0-01		8.53	2.86	8.79 8.79	10.24%		1.39	131	100
bill in anombilo	16.36	4.18	0.84	9864	6.00	12.88	3.87	3.67	ANA I PLAN LOD			4.19	11.7.0	10,4%		4.94	106	.ev
ביט אדע ענט אינט אינט אינט אינט אינט אינט אינט אי	2.68	4.18	0.84	9359	C10	10.00	0.14	-2.97	1-58 2615 15									
-54 5400 88 55 55	1.00		0.04	0.000	Car		6.14	-	2:00 1(0) : 50	760	7.19	4.19	0.39	7.09%		2.29	14	1,44
SZE 1(2) + Brokin	3.58	4.18	0.37	8679	1.00	2.61	1.47	1.47	2-66 100 : 556 0 561 101 - 826-1 s	ပတ္သင့္ ကေဒီလ	5.3/	4.19 7.16	0.38		0.00	0,67	1.07	\$.47
756 HEI : 255 2005 5 200 25	5.37	4.18	0.37	652%		0.63	1.07	0.53	Des Hot appears	the brack Parameter	7.55	4.19	0.38	7.08%		2.50	3.77 1.50	1.50
	10.05	4.18	0.17	and the second second	in the second second	62		and the second second	56.5 Pt 10	Shall Date	1.90	4.18	0.08	1.06.9	0.00	6.30	1.0/	1.00
>56 2 : milition			10.53	6.52%			2.01	2.91	1050 (0) 1000 00 00 00 000 0000 0 000	100	6.08	4.90	0.35	7.58%	0.00	4.16	1.82	1.82
လိပ် 8 : ခန့် ဆီခွင့်ရုံစီ သင် တပ်သ	1.78	4.18	0.37	652%	00.0	2.94	1.55	1.50	202 2(2): 34	6070	5.75	4.19	0.39	7.05%	0.00	1.45	1.07	0.46
หรือ 4 กล่องสมบั วยันสลัง	5.82	4,18	0.37	6.52%	0.00	80.0	1.18	0.95	246 131 : 665 3	e i estrucion	11.77	6.19	0.38	7.08%		0.37	2.35	2.38
rid 4 : d'é lidy à taré robe	8.67	4.18	0.87	6 524		1.73	3.31	1.38	521 5 CLI 1195		5.82	4 10	8,33	7.05%		5.39	2.10	2.10
768 A : 1773060	9.92	4.18	0.37	652%	00.0	5.08	1.98	1.90	2-50 4 : 5(60-6 2-50 4 16/500	35	4.83	4.10	0.38	7.08%		4.92	2.06	4.88
256 3010 193 35 55									246 0. 2522	7385 2550	6.75	1.15	0.38	7.00%		1.35	132	1.00
788 1(3) : Arrón	1.21	4.58	0.35	3.79%		2.62	1.44	1.44	256 3663 38	100.50	742.5							
विद्रिया हर्ड्यमा होई। अग्रे	4.95	4,18	0.35	3754		0.26	0.99	0.16	10-20 1650 : 24	p-Gm	8.88	4.10	0.37		0.00	2.16	135	1,28
266 I : 035600	9.01	4.18	0.35	376%	00.3	4.32	1.00	1.60	0-30 MD1 : 200 a		4.95	4.10	0.37	3.85%		123	3.90	6.25
258 ( Kiczia di 2627)	\$ 82	4.18	0.36	3 79%		1.13	1.18	1,13	2-52 2 : u.KG5 2-52 4 5,5270		8.22	4.19	0.37	3.83%		3.50	164	1,64
२६६ ४। हेन्द्र (म्राइट	4.70	4.18	0.35	375%	01.0	0.01	0.94	0.94	1-50 5 20 40		2.01	4.10	0.37	3.55%		0.29	1.00	0.26
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BEFORE THE HON	OUR	ABLE	AND	HRA PRADESH EL	ECTR	ICITY	REC	GULATORY COMMISS	ION	(APEI	RCL
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Anothin a horizing given to all that the Da (APEPOGUL feeting Clisticitum and R Anothin Practicals Electricity Regulatory and Filing for Proposed Tariff (FPT) for taken on record to the Horizing Canonic	etal Suppl	ly License N	AG 12/DOOC	A new on 01 12 2017 food balave me				ha Distribution Licenseek, Southain, Power Die ma ithead Supply License No. 15/2000, Pasis			
taken on record by the Hairble Comiss	RECORDED SO	upply Bases PNo. 60 of	Eng for the	FY2018-18 These blogs have timen	Anuthria Disa Lideng tan Pr	opeant Tarre	Hy Piliping	dory Commission (APPIRC) the Appropriate Re- the Retail Ecopy Rusinges for the E-12018-10		Statement of the	ADDING TO A POST
Copies of the horge and available in the Eastern Power Distribution Company 530013 and all Superintending Engli Scikakulam, Vizianagaram, Visakhapa	The friend in the	Diff Chief G infliers at PA	AT Colony	inager (Planning, PPA & RA) of the 2. C	ore opening to Original of #	ses filtraga airo	irvalabra	were of O IP NS, 61 of 2017 In the Office of the Child General Menager 4 refers at 18-13-66/A, Vidyut Mileyam, Show	RAC) M	the Boullins	in Promo
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Visakhanatriani). Also a summary of Al-	IN and FPT	m English o	H Thiugu ca	an be separately utiliained on teaching	ou havinen	COFFER 10020	11-9 W289-11	en foirste, can be obtained from the above of antrois permits / D. D. drawns in taken if if the Ass (R. and E.F.T. in brights) or failage ours be seen	CARPLAGE 12	IT: WITCH AL	
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be duly segreet and should carry full ris	tive well bis	stel address	of the po-	and an example the second seco				acts are or particle (0.12, 2017 by 117M. A coary of at the actions mentioned above. The viewhol			
I should be so mentioned. If the objects accordingly. The values objections accordingly				, a may also be specifically mentioner	bir bil ministe	citand. If the on	white manufactures and	an the address address of the personned to service of the and postal address of the personned to service of the menths or behavior of any organization or any or an weath to be heated to person, it may also fee ad	ampory	ST CAREAUTORE	
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The ARR and FPT schedule for Retail 5 After percently the viewal objections sugge				Icenses for FY2018-18 is given below 4. T	he Alts an	OPPT in the state	the fire from		1	(Yes-140)	
such person, as it considers appropriate Date : 08.12.2017	and conduct	t instituide ou	GRIMPH TO TH	e nonnest by the Communities on	such person	t, 65 ff contaide	tyrections/	and supply Dualness proposed by the Licensee Rightenisms is acceld in response to the reduce the fittle and exceduce treamings on dates to be reduced	Hory One	Company on Grow	nery unpit
Place Visakhapatnam	E/	ABTERN PC	WER DIS		Date 108.1 Place Tire			CHAIRMAN & MANA BOUTHERN POWER DISTRIBUT		DETTOR	ARLT
St. Particulars	2010	DULE OF A	PEPDCL	2018-10	1	Stray Pr.		ARR SCHEDULE OF APSPDCL	ION CO		
Transmission Cost	· projec	Crs) No.		Particinars projections No		Part	leutara	2010-10 Bil projectionnale Partic	ulain		2018-5 projecto (Fin. Co
SLDC Cost Distribution Cost	3 3	13.85 11 54	ther Costs apply Cost	(7+B+0+10) 113.43 1	Trainsmis	nion Cont		103. 031 931.18 10 Other Costs, 8 any			110
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a Interest on Consumer Security Depo Supply Margin in Retail Supply Busi	mits. R			m Additional Sercharge 33.51 B	Power Py	archase / Pro	curement	Cost 16572 87 16 Revenue from Gross	mathicky mathian	Burcharde Parde	255.0
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	Energy	Rates for the		oposed tariffs for all consumer	categor	ion are as	snow	h below :		Rates for the	FY 2018.
Consumer Category	Unit	Fixed / Demund Charge	Energy Charge	Consumer Category	Energy	Rates for the F Fixed / Demand Charge	Energy	Consumer Category	Enerus	Fised / Deseared Giterry (Do. / Mcseth)	Citary
T Category J: DOMESTIC (Telescopic) rough Amail Comunition -900 Units during FY2017-18		(Ra.) Month)	(Rs./Unit)	LT Category-IV - COTTAGE INDUSTRIES & OTHERS	Unit	(Rs./ Month)	(Ra./Uriti)	11.6v	KVAD	4/5/KVA	7.0
1-100	kivih kivih		1.45	a) Cottage Industries Upto 10 HI <sup>1</sup> (2) b) Agro Based Activity upto 10 HIP (2)	kWh kWh	20/kw 20/kw	3.78 3.75	33 Kv 132 kV & Above	kVAH		
01-200 biove 200	kWh kWh		2.60 3.60 6.90	LY Category-V: AGRICULTURE LT Category-V(A): AGRICULTURE WITH DSM MESURES	kuun		2.50	HT Category I (B): ENERGY INTENSIVE INDUSTRIE 11 KV	kVAh		6.8
Foup B: Annual Consumption > 900 and = 2700 units during FY2017-18			0.90	Corporate Farmers & IT Assesses Wet Land Farmers (Holdings >2 Sacre) Dry Land Farmers (Connections >3 nos.)	kWh kWh	525/HP/Year* 525/HP/Year*	0.50	33 Kv 132 kV & Above	kVAh kVAh	30/kVA	4.9
1-100	kWh kWh		2.60	Uny Land Farmers (Connections <= 2.5 Acre) Wet land Farmers (Holdings <= 2.5 Acre) Dry Land Farmers (Connections <= 3 nos.)	kWh kWh	OR OUT WY TERM	0.00	HT Category-I (C): AQUA CULTURE AND ANIMAL HUSBANDRY	kVAB		4.8
01-200	kWh kWh		3.60	LT Category-V (B): AGRICULTURE WITHOUT DSM MEASURES	Arti		0.00	HT Category J(D): POULTRY HATCHERIES AND POULTRY FEED MIXING PLANTS	kVAh	475/kVA	4.0
Above 300 Group C: Annual Consumption >2700	kWh		7.75	Corporate Farmers & IT Assesses Wet Land Farmers (Holdings >2 Sacre)	kWh kWh	1050/HP/Year	3.50	HT Category-II HT Category-II (A): Others			-
units during FY2017-18 D-50	kWh		2.68	Dry Land Farmers (Connections > 3 nos.) Wet land Farmers (Holdings < = 2.5 Acre)	kWh kWh	1050/HP/Year* 525/HP/Year*	1.00	11 Kv 33 Kv	kVAh kVAh	475/kVA 475/kVA	7.60
51-100	kWh kWh	-	3.35 5.42	Dry Land Farmers (Connections <= 3 nos.) LT Category-V (C): OTHERS	kWh	525/HP/Year*	0.50	132 kV & Above TIME OF DAY TARIFFS (6 PM to 10 PM)	kVAh	476/kVA	6.72
201-300	kWh kWh		7.11 7.98	Salt Farming units upto 15 HP \$ Rural Horticulture Nurseries upto 5 HP	kWh kWh	20/HP 20/HP	3.70 1.50	11 Kv 33 Kv 132 kV & Above	kVAh kVAh		8.71
hove 500 units TA (C) - Optional - Smart Meters with TOD	kWh		8.52 9.06	Puzal Hortzullure Nurserles above 5 HP & upto 25 HP # LT Category-VI: STREET LIGHTING AND PWS	KWh	20/112	3.70	HT II (B) Religious Places HT II (C) Function Halls/Auditoriums	kVAh kVAh	307KVA	7.77
IA (C) – Optional – Smart Meters with TOD iscount for domestic consumers whose onsumption is > 500 units/month. Meter cost shall	Rs.1.00/	ount or inc	10 AM to	LT Category-VI (A): STREET LIGHTING Panchayats	kWh	75/kw	5.98	HT Category-III: PUBLIC	kVAh	Nil	11.7
e borne by the consumers in 24 installments. LT Category-II: OTHERS	12:00 PM	A Slot (two	Hours)	Municipalities Municipal Corporations	kWh kWh	75/kw 75/kw	6.53 7.09	INFRASTRUCTURE AND TOURISM 11 Kv 33 Kv	kVAh	475/kVA	7.30
LT Category-II: OTHERS LT Category - II (A): Upto 50 Units/Month LT Category-II (B): Above 50 Units/Month	kWh/kVAh	55/kw	5,40	LT Category-VI(B): PWS SCHEMES Panchayats	kwh/kVAt		4.87	33 Kv 132 kV & Above TIME OF DAY TARIFFS (8 PM to 10 PM)	kVAh kVAh	475/kVA 475/kVA	6.69 6.38
CI Category- II (B): Above so Unitsimon(h 0-50 51-100	kWh/kVAh		6.90	Municipalities Municipal Corporations	kWh/kVAt kWh/kVAt	75/HP	5.98 6.53	11 Kv 33 Kv	kVAn		8.35
101-300 301-500	kWh/kVAh kWh/kVAh	75/kw	7.69 9.06 9.61	LT Category-VI(C) NTR Sujala Padhakam LT Category-VII GENERAL	kWh/kVAt	10/HP	4.00	132 kV & Above HT Category-IV: Govt., LIFT IRRIGATION,	kVAh kVAh		7.74
Above 500 LT Category- II (C) :	kWh/kVAh		10.19	LT Category-VII(A) GENERAL PURPOSE LT Category-VII(B): RELIGIOUS PLACES	3		7.28	AGRICULTURE AND CPWS	kVAh	0	5.82
ADVERTISEMENT HOARDINGS Electric Vehicles	kWh/kVAh kWh		12.28	(I) RELIGIOUS PLACES (CL <= 2 kW) (II) RELIGIOUS PLACES (CL > 2 kW) LT Category-VIII: TEMPORARY SUPPLY	kWh kWh	30/kw 30/kw	4.84	Composite Water Supply Schemes (CPWS) HT Category-V: RAILWAY TRACTION	kVAh kVAh	0 300/kVA	4.89
Time of Day (Tod) tariff	Addition kWh lev	al charge of ied for usua to 10:00 AM	Rs. 1.00/ ge from	HT Category-VIII: TEMPORARY SUPPLY HT Category-I: INDUSTRY HT Category-I(A): INDUSTRY GENERAL	kWh/kVAI	h 30/kw	10,50	HT Category-VI: TOWNSHIPS AND RESIDENTIAL COLONIES	kVAh	75/kVA	6.32
	PM to 10	:00 PM. Reb.	ite of Rs. 1	11.Kv 33.Kv	kVAh kVAh	475/kVA 475/kVA	6.33 5.87	HT Category-VIII: TEMPORARY SUPPLY RURAL ELECTIRC CO-OPERATIVES	1.5 tin	HT Categor	panding y
LT Category-II(D): Function Halls/ Auditoriums		h offered fo 10:00 PM to to Nil	06:00 AM. 11.77	132 kV & Above INDUSTRIAL COLONIES	kVAh	475/kVA	5.44	Anakapalli Cheepurupalli	kWh	Tariff as det	
LT Category-III: INDUSTRY Industry (General)	kWh/kVAh	75/kw	6.71	11 Kv 33 Kv	kVAh kVAh		6.32 6.32	Kuppam	kWh kWh	by the H APER	202
Seasonal Industries (off season) Aquaculture and Animal Husbandry	kWh/kVAh kWh/kVAh	1 30/kw	7.45 3.86	132 kV & Above TIME OF DAY TARIFFS (6 PM to 10 PM)	kVAh		6.32	Onits which exceed 10 HP connected load a     LT-III Industrial category     *- Equivalent flat rate of tariff	shall be bi	lled at tariff sp	ecified fo
Sugarcane crushing Mushroom & Rabbit Farms	kWh/kVAh kWh/kVAh	n 30/kw n 75/kw	3.86 5.91	11 Kv 33 Kv	kVAh kVAh	1	7.38	<ul> <li>Equivalent flat rate of tariff.</li> <li>S - Units with connected load more than 15 HP si General tariff.</li> </ul>	all be bill	ed under LT-II	Industri
Floriculture in Green House Poultry Hatchenes & Poultry Feed mixing plants	kWh/kVAh kWh/kVAh	n 75/kw	5.91 4.89	132 kV & Above SEASONAL INDUSTRIES (off season Tariff	kVAh		6.49	# Units with connected load more than 25 HP s III -Industrial general tariff.			
						-	-	IT in mananum Ballatan rajun			

Categories	Average Revenue Realization (Only Demand & Energy Charges)	Per Unit Cost of Power Purchase	Wheeling Charges	Applicable Loss	Cost of Regulatory Asset	CSS (Rs./ Unit	20 % of Average Revenue Realization	CSS (Rs./ Unit	The Cross Subsidy Surchar Categories	Average Revenue Realization (Only Demand & Energy Charges)	Per Unit		Applicable	Cost of Regulatory Asset	CSS (Rs.J Unit	20 % of Average Revenue Realization	CSS (Rs./ Unit
High Tension				1000 100			1.2.3		High Tension		-					-	
HT Category at 11 kV				125 193			1.11		HT Category at 11 kv							-	-
HT I (A): General	8.23	4.18	0.84	9.65%	0.00	2.76	1.65	1.65	HT I (A): General	8.82	4 19	0.79	10.2400	0.00		1.00	4 110
HT I (C) Aquaculture and	4.02	4.18	0.84	9.65%	0.00		0.80	-	HT I (B): Energy Intensive Industrie		4.19	0.79	10.24%	0.00	3,36	1.76	1.76
Animal Husbandry								ile .	HT I (C) Aquaculture and Animal Husbandr	4.10	4.19	0.79	10.24%	0.00	0,36	1.16	0.36
HT I (D): Poultry Hatcher	es 6.46	4 18	0.84	9.65%	0.00	0.99	1.29	0.99	HT I (D) Poultry Hatcheries an	d 6.88	4.19	0.79	10.24%	0.00		0.82	
and Poultry Feed Mixing Pla	nts								Poultry Feed Mixing Plants		4,10	0.10	10.24%	0 00	1.42	1.38	1.38
HT II: Others	10.40	4.18	0.84	9.65%	0.00	4.93	2.08	2.08	HT II: Others	10.18	4.19	0.79	10.24%	0.00	1.770	0.04	-
HT II (B): Religious Place	5.25	4.18	0.84	9.65%	0.00		1.05	1	HT II (B): Religious Places	5.16	4.19	0.79	10.24%	0.00	4,72	2.04	2.04
HT II (C): Function Halls/	11.77	4.18	0.84	9.65%	0.00	6 30	2.35	2.35	HT II (C): Function Halls/Auditoriums	1177	4.19	0.79	10.24%	0.00	-	1.03	-
Auditoriums									HT III: Public Infrastructure and Tourish		4 19	0.79	10.24%	0.00	6.31	2.35	2.35
HT III: Public Infrastructur	e 9.21	4 18	0.84	9.65%	0.00	374	1.84	1.84	HT IV Government LIS	5.82	4 19	0.79			3.72	1.84	1.84
and Tourism					1000			1.4.5	HT IV Private Imgation and Agricultur		4.19	0.79	10 24%	0.00	0.36	1.16	0.36
HT IV Government LIS	5.82	4.18	0.84	9.65%	0.00	0.35	1.16	0.35	HT IV CPWS	4 89	4.19	0.79	10 24%	0.00	0.36	1,16	0.36
TIV CPWS	4.89	4.18	0.84	9.65%	0.00	-	0.98		HT VI: Townships & Residential Colonie		4.19	0.79	10.24%	0.00		0.98	
HT VI : Townships &	6.65	4 18	0.84	9.65%	0.00	1.18	1.33	1.18	HT VIII: Temporary	9.50	4.19	0.79	10.24%	0.00	1.09	1.31	1.09
Residential Colonies					0.01			1.10	Category: RESCOs	0.32	4.18	0.79	10.24%	000	4.04	1 90	1.90
HT VIII : Temporary	18.35	4.18	0.84	9.65%	0.00	12.88	3.67	3.67	Category. ALSOUS	VISE	4.18	0.79	10.24%	0.00		0.06	
Category: RESCOs	0.68	4.18	0.84	9.65%	0.00		0.14		HT Category at 33 kv		-		-	-		1	
		1000						1	HT I (A): General	7 19	4 19	0.00	7 0.00		-		-
HT Category at 33 kV		100	THE R			TOP-ST		-	HT I (B): Energy Intensive Industrie		4 19	0.39	7.08%	000	2.29	1.44	1.44
HT I (A) General	7.35	4.18	0.37	6.52%	0.00	2.51	1.47	1.47	HT I (C) Aquaculture and Animal Husband	v 3.86	4.19	0.39	7.08%	0.00	0.47	1.07	0.47
HTI(B) Energy Intensive Industr		4.18	0.37	6.52%	0.00	0.53	1.07	0.53	HT I (D) Poultry Hatcherie	s 750	4.19	0.39	7.08%	0.00	-	0,77	1
HT II Others	10.05	4.18	0.37	6.52%	0.00	5.21	2.01	2.01	and Poultry Feed Mixing Plant		4.19	0.39	7.08%	0.00	2.60	1.50	1.50
HT III: Public Infrastructur		4.18	0.37	6.52%	0.00	2.94	1.56	1.56	HT II: Others	9.08	4.19	0.39	7.000/	0.00	1		1
and Tourism					the set			1.00	HT II (B): Religious Places	5.36	4.19	0.39	7.08%	0.00	4.18	1.82	1.82
HT IV : Government LIS	5.82	4.18	0.37	6.52%	0.00	0.98	1.16	0.98	HT II (C): Function Halls / Auditorium		4.19	0.39	7.08%	0.00	0.46	1.07	0.46
HT VI: Townships &	6.57	4.18	0.37	6.52%	0.00	173	1.31	1.31	HT III: Public Infrastructure and Tourist	n 10.49	4.19	0.39	7.08%	0 00	6.87	2 35	2,3
Residential Colonies				0.02.10		110	1.01	1.01	HT IV Agriculture	5.82	4.19	0.39	7.08%	0.00	5.59	2.10	2.10
HT VIII : Temporary	9.92	4.18	0.37	6.52%	0.00	5.08	1.98	1.98	HT IV CPWS	4.89	4.19	0.39	7.08%	0.00	0.92	1.16	0.92
				0.02.10		0.00	1,00	1.00	HT VI: Townships & Residential Colonie		4.19		7.08%	0.00		0.98	
HT Category at 132 kV	-	1	1000	-			20100	1000	Int VI. Iowinships & Residendal Colonia	5 0.10	4,19	0.39	7.08%	0.00	1.85	1.35	1.3
HT I (A) General	7.21	4.18	0.35	3.79%	0.00	2.52	1.44	1.44	UT Catagoria at 4001		-	-		-		-	-
HT I (B) Energy Intensive	4.95	4.18	0.35	3.79%	0.00	0.26	0.99	0.26	HT Category at 132 kv	6 88	110	0.07		-	-	1	
Industries				01010	0.00	0.20	0.00	0.20	HT I (A): General		4.19	0.37	3.83%	0.00	2.16	1.38	1.38
HT II: Others	9.01	4 18	0.35	3.79%	0.00	4.32	1,80	1.80	HTI(B) Energy Intensive Industrie	4.95	4.19	0.37	3.83%	0.00	0 23	0.99	0.23
HT IV : Government LIS	5.82	4.18	0.35	3.79%	0.00	1 13	1.16		HT II: Others	8.22	4.19	0.37	3.83%	0.00	3.50	1.64	1.84
HT V: Railway Traction	470	4.18	0.35	3.79%	0.00	0.01	0.94	0.01	HT IV Agriculture	5.82	4.19	0.37	3.83%	0.00	1.10	1.16	1.10
		1.10	0.00	3.1.378	.0.00	0.01	0.94	0.01	HT V. Railway Traction	5.01	4,19	0.37	3.83%	0.00	0.29	1.00	0.29
		Addition	nal Surch	arge	and the second	Sales and					Ad	ditional S	urchame	122	- 18		7
SI. No.		articular		Les I	Unit	Val	ue		SI. No.			culars	T. S. C. Be		nit	Value	-
1 Fu	ed cost of stra	inded car	pacity		Rs. Cr	275	the state of the s			ixed cost o				Rs.	and the second	275.06	-
2 0/	Sales (During	Off-Pea	k Months		MU	1,81			2	DA Sales (C	a strande	Degt M	( )	M		1.812.94	-
3 Ac	ditional Surch	arge	They will	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Rs /Unit	1.01			2	Additional S	uning Of	-Peak Mo	niuis)				-
4 Pr	ofit Margin (fro	m sale of	surplus F	ower)	Rs./Unit	0.1							alue Deve	Rs./		1.52	-
5 Ne	tAdditional Su	Ircharge			Rs./Unit	0.				Profit Margi Net Addition			nus Powe	r) Rs/		0.56	-
Note: All other c	a second s		and in case of the local division in which the local division in the local division in the local division in the	and the second s					5	Ver ADUIIION	a Surch	BULE		RSI	UNIL	0.80	

#### ANNEXURE - 02

#### Public Notice on Hearing Schedule

#### గౌరవసీయ ఆంధ్రప్రదేశ్ బిద్యుత్ నియంత్రణా మండలి వారి సమక్షములో డోర్ నెం. : 11-4-660, 4వ అంతస్తు, సింగరేణి భవస్, రెడ్హోల్స్, హైదరాబాద్ - 500004

#### ఓ.పి.నెం.60 మరియు 61/2017 లకు సంబంధించి బహిరంగ ప్రకటన

ఇందుమూలముగా అంధ్రప్రదేశ్ పరిధిలోని యావస్తంచికి తెలియజేయునది ఏమనగా అంధ్రప్రదేశ్ ఎల్మక్రినీలీ రెగ్యులేటరీ కమీషన్ వారు విద్యుత్ చట్టం - 2003 లోని సెక్షన్ 62 ను అనుసరించి సదరన్ పవర్ డిస్ట్రిబ్యూషన్ కంపెని ఆఫ్ అంధ్రప్రదేశ్ లిమిటెడ్ (ఒ.షి.సెం.61/2017) మరియు ఈస్ట్రన్ పవర్ డిస్ట్రిబ్యూషన్ కంపెని ఆఫ్ అంధ్రప్రదేశ్ లిమిటెడ్ (ఒ.షి.సెం.60/2017) వారు ఆర్ధిక సంగ 2018–19కు గాను ప్రతిపాదించి, సమర్పించిన వార్షిక అదాయ అవసరాలు వివిధ తరగతుల వినియోగదాయలకు కూస్ సబ్బిడి సర్ ఛార్జీలు, అదనపు సర్ ఛార్జీలతో కూడిన విద్యుత్ ధిటైల్ అమ్మకం ధరలకు సంబంధించి త్రింది పర్యాన్న ప్రదేశాలలో బహిరంగ విచారణను ఏర్పాటు చేయదమైనది.

చ. సంఖ్య	తేది మరియు వారము	స్థలము	చిరునామా
1	05-02-2018 (సోమవారం)	విశాఖపట్నం	కాన్ఫరెన్స్ హాల్, ఎటిసి భవనం, కార్పొరేటి కార్యాలయం, ఎపిఇపిడిసిఎల్, పి&టి కాలనీ, సీతమ్మధార, విశాఖపట్నం – 530013.
2	06-02-2018 (మంగళవారం)	రాజమహేంద్రవరం	సూపరింటెందింగ్ ఇంజనీర్ వారి కార్యాలయం, ఆపరేషన్ సర్మిల్, ఏపిఐపిదిసిఎల్, విద్యుత్ భవన్, ఉల్లితోట వీధి, గోదావరి గట్టు, రాజమహేంద్రవరం–533101
3	07-02-2018 (బుధవారం)	విజయవాద	సూపరింబెందింగ్ ఇంజనీర్ వారి కార్యాలయం, అపరేషన్, విజయవాడ, ఏపిఎస్పెడిసిఎల్, పిడబ్ల్యూడి (గౌండ్ ఎదురుగా, సిఎమ్ క్యాంప్ అఫీస్ (ప్రక్యన, విజయవాడ
4	08-02-2018 (గురువారం)	ఒంగోలు	పాత జిల్లా పరిషత్ ఆఫీస్ థవనం, సౌత్ బైపాస్ రోద్ద. మిని స్టేడియం దగ్గర, ఒంగోలు, ప్రకాశం (జిల్లా)
5	09-02-2018 (శుక్రవారం)	తిరుపతి	కాన్చరెన్స్ హాల్, కార్పొరేట్ కార్యాలయం (విద్యుత్ నిలయం), ఎపిఎస్పిడిసిఎల్, డి.నెం.19–13–65/ఎ, శ్రీనివాస కళ్యాణ మందపముల వెసుక, శ్రీనివాసపురం, తిరుకానూరు రోడ్డ, తిరుపతి.
6	14-02-2018 (బుధవారం)	హైదరాబాద్	కోర్తు హాల్, ఏపిఇంరిసి, 4వ అంతన్ను, # డి.నెం.11-4-660, సింగరేజి భవనం, రెడ్ హిల్స్, హైదరాబాద్-500004.

స్టువ పర్శాన్లై కెంకర్ బహింగ పోరింద జడుభ సమయం : ఆగ 10-00 గంగల మంద మగ 1-00 గంట వరకు మరియు మగ 2-00 గం.ల నుండి ఆసక్తిగల వృత్తలు మరియు వారు సూచించిన వృత్తల అభ్యంతరాల వ్యక్తీకరణ పూర్తి అయ్యేంతచరకు. అద్దిక సంగ 2018-19కు గాను అంద్రప్రదేశ్ డిన్యమ్లు నమర్పించిన వార్నిక ఆదాయ అవసరాలు వివిధ తరగతుల వినియోగదారులకు క్రాస్ సబ్సిడి సర్ ధార్జీలు, అదనపు సర్ ధార్జీలతో కూడిన విద్యుత్ రిటైల్ అమ్మకం ధరల ప్రతిపాదనల మీద ఆసక్తి గల వ్యక్తులు / సంఘాలు / వాటాదారులు / అభ్యంతరదారులు వారు నేరుగా గాని లేదా వారు సూచించిన వ్యక్తులు గాని పైన పేర్కొన్న తేదీలలో గౌరవ కమీషన్ ముందు హాజరయి వారి అభ్యిపాయాలు / అభ్యంతరాలు / సూచనలు తెలియజేయవలసినదిగా కోరుతున్నాము.

డిస్సమ్ల యొక్క విద్యుత్ రిటైల్ భరలు, జ్రాస్ సబ్సిడీ సర్ ఛార్జీలు మరియు అదనపు సర్ ఛార్జీలు నిర్ణయించుటకు గాను తేది.14–02–2018 సా. 5–00 గం.ల వరకు సమర్పించబడిన అభిప్రాయములు / అభ్యంతరములు / సూచనలు పరిగణనలోనికి తీసుకోబడతాయి.

(కమీషన్ వారి ఉత్తర్వుల మేరకు)

సం/– కమీషన్ సెక్రటరీ (జ/సి)

తేది : 12-01-2018 (పదేశం : హైదరాబాదు

# **BEFORE THE ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION** D.NO. 11-4-660, 4TH FLOOR, SINGARENI BHAVAN, RED HILLS, HYDERABAD-500 004

# PUBLIC NOTICE in O.P. Nos. 60 & 61 of 2017

Notice is hereby given to all that the Commission will conduct public hearing on ARR / Tariff proposals, including Cross Subsidy Surcharge (CSS) and Additional Surcharge for various consumer categories for FY 2018-19 and the determination of tariff for retail sale of electricity under Section 62 of the Electricity Act, 2003, of the Southern Power Distribution Company of A.P. Ltd. (O.P. No. 61 of 2017) and Eastern Power Distribution Company of A.P. Ltd. (O.P. No. 61 of 2017). The details of public hearings are as follows:

	•		,
S. No.	Date and Day	Place	Venue
1	05-02-2018 (Monday)	Visakhapatnam	Conference Hall, ATC Building, Corporate Office, APEPDCL, P&T Colony, Seethammadhara, Visakhapatnam-530013.
2	06-02-2018 (Tuesday)	Rajamahendravaram	Office of the Superintending Engineer Operation Circle, APEPDCL, Vidyut Bhavan, Ullithota Street, Godavari Bund, Rajamahendravaram-533101
3	07-02-2018 (Wednesday)	Vijayawada	O/o Superintending Engineer, Operation, Vijyayawada, APSPDCL, Opp : PWD Ground, Beside CM Camp Office, Vijayawada
4	08-02-2018 (Thursday)	Ongole	Old Zilla Parishad Office Building, South bypass road, Near mini stadium, Ongole, Prakasam (Dt.)
5	09-02-2018 (Friday)	Tirupati	Conference Hall, Corporate Office (Vidyut Nilayam), APSPDCL, D.No.19-13-65/A, Behind Srinivasa Kalyana Mandapams, Sreenivasapuram, Tiruchanoor Road, Tirupati
6	14-02-2018 (Wednesday)	Hyderabad	Court Hall, APERC, 4th Floor, # 11-4-660, Singareni Bhavan, Red Hills, Hyderabad - 500 004

\* Timings 10.00 AM to 1.00 PM and from 02.00 PM till all the interested persons who desire to be heard in person or through their authorised representatives are exhausted.

All the interested persons / associations / stakeholders / objectors who want to be heard in person / through authorized representatives may appear before the Commission on the said dates of hearing on the above mentioned dates and submit their views / objections / suggestions in respect of the above mentioned ARR / Tariff proposals of APDISCOMs including CSS for FY 2018-19.

The views / objections / suggestions submitted up to 5 PM on 14-02-2018 will also be considered while determining the Retail Tariff including Cross Subsidy Surcharge and Additional Surcharge of the Distribution Companies for FY 2018-19.

## (BY ORDER OF THE COMMISSION)

Date : 12-01-2018	Sd/-
Place: Hyderabad.	COMMISSION SECRETARY (I/C)

# ANNEXURE - 03

# List of persons who submitted views / Objections / Suggestions

S.No	Sri / Smt. / Kumari	Objection related to
1	V. Poyyamozhi, Director-Operations, Srikalahasthi Pipes Limited, Rachagunneri - 517 641, Srikalahasthi Mandal, Chittoor Dist. AP.	SPDCL
2	Kakarla Guruswamy Naidu, S/o. K. Ramaiah Naidu, 2-33/1, Surinenivaripalli, Pakala Mandal- 517 112, Chittoor (Dist)	SPDCL
3	N. Muni Rathnam Reddy, S/o. N. Anna Reddy, Ganuga Penta, Peddarama Puram(B.O), Pakala Mandal, Chittoor Dist., A.P.	SPDCL
4	S. Saravana, S.M.Samandham Modharial, D.No.7/88, R.K.Mandhir Street, Pakala Mandal, Chittoor Dist., A.P.	SPDCL
5	K. Munaswamy Naidu, S/o. K. Venkatappa Naidu, D.No.16-33, Kundetivari Palle, Pakala Post-517 112, Chittoor Dist., A.P.	SPDCL
6	P.Subramanayam Yadhav, S/o. P. Chengiah Yadhav, D.No.48-16, Surinenivaripalli, Pakala Mandal- 517 112, Chittoor (Dist)	SPDCL
7	N. Ravindranadha Reddy, S/o N. Narayana Reddy, 7-75/1, R.K. Mandhir Street, Pakala (P.O), Chittoor Dist517 112	SPDCL
8	D. Narasimhulu Naidu, S/o Dora Swamy Naidu, Sreenivasa Puram, Adanapalli, Sankanpalli (P), Pakala (P.O), Chittoor Dist	SPDCL
9	K. Bala Krishna Chari, S/o K. Papaiah Achari, 20-26, Chenugari Pelli, Pakala Post - 517 112 Chittoor Dist, AP	SPDCL
10	The Director, NSL Textiles Limited, 4th Floor, 8-2-684/2/A, Road No.12, Banjara Hills, Hyderabad - 500 034	APSPDCL & APEPDCL
11	M. Vesweswara Rao, Vice President, The Barytes Pulverising Mill Owners Association, 7/629, Surya Nagar, Rly. Kodur - 516 101, YSR Kadapa Dist. A.P.	SPDCL
12	Er. A. Punna Rao, 59-2-1, I <sup>st</sup> lane, Ashok Nagar, Vijayawada - 520 010	APSPDCL & APEPDCL
13	P. Narendranath Chowdary, Managing Director, The Andhra Sugars Limited, Kovvur - 534 350, West Godavari Dist., AP	EPDCL
14	GMR Vemagiri Power Generation Limited, Building No.302, Ground Floor, New Sakthi Bhawan, Terminal-3, Opp. ATS Complex, International Terminal, Indira Gandhi International Airport, New Delhi - 110 037	EPDCL
15	GMR Vemagiri Power Generation Limited, Building No.302, Ground Floor, New Sakthi Bhawan, Terminal-3, Opp. ATS Complex, International Terminal, Indira Gandhi International Airport, New Delhi - 110 037	SPDCL
16	M. Venugopala Rao, Senior Journalist and Convener, Centre for Power Studies, H.No.7-1-408 to 413, F 203, Sri Sai Darsan Residency, Balkampet Road, Ameerpet, Hyderabad	APSPDCL & APEPDCL
17	Dr. Uppuganti Bhaskar Rao, Ex - Agriculture Officer, Bharatiya Kishan Sangh, S/o Buchchi Raju, Bandarlanka, Amalapuram, East Godavari Dist	EPDCL
18	Yallapu Surya Narayana, S/o Veera Swami, Bharatiya Kishan Sangh, Chinnam Pet, Kaleswara Rao Road, Governor pet, Vijayawada-520003.	SPDCL
19	C.V.Mohan Rao, Secretary, Repalle Pattanabhivrudhi Sangham, Repalle - 522 265, Guntur Dist., AP	SPDCL
20	Rasam Setti Raja, S/o Krishna, Pathipadu, Bharatiya Kishan Sangh, Kaleswara rao road, Governorpet, Vijayawada - 52003, AP	SPDCL
21	D. Nageswara Rao, S/o Sree Ramulu, Bharatiya Kishan Sangh, Ambajipeta, Ambajipeta Mandal, East Godavari District.	SPDCL

S.No	Name and address of the objector Sri / Smt. / Kumari	Objection related to
22	Adbala Rajamohan, Pulleedukurru, Bharatiya Kishan Sangh, Kaleswara rao road, Governorpet, Vijayawada - 52003, AP	SPDCL
23	Mutyala Jamil, S/o Pullayya Naidu, Bharatiya Kishan Sangh, Ambajipeta, Ambajipeta Mandal, East Godavari District.	SPDCL
24	D. Ramaswami Reddy, Retd S.E. (APSEB), 21/72, Trunk Road, Opp. Collector's Office, Cuddapah – 516001	SPDCL
25	K.Reddappa Reddy, S/o K. Anna Reddy, Maddinayana palli (post), Pakala Mandalam, Chittoor Dist, AP	SPDCL
26	S. Surya Prakasa Rao, Former Director(Commercial), APCPDCL, 105, Ashok Chandra Enclave, Red Hills, Hyderabad - 500 004	APSPDCL & APEPDCL
27	R. Subhachandra, Teamec Chlorates Ltd, APIIC Growth Centre in Gundlapalli (V), Maddipadu(M), Prakasam (Dt), Ongole-523 211	SPDCL
28	GV Mallikarjuna Rao, Chief Electrical Distribution Engineer, South Central Railway, Headquarters Office, Electrical Department, 4th Floor, "C" Block, Rail Nilayam, Secunderabad	APSPDCL & APEPDCL
29	K. Ramakrishnam Raju, President, Resident Welfare Association, D.No.65-1-126/4, Srinivasa Nagar (West), Near Coromandel Gate, 46th Ward, Visakhapatnam-530 011	EPDCL
30	K. Pathi Raju, Bharatiya Kishan Sangh, Kettavaram (Post), Jangareddy Gudem(Mandal), W.G.Dist, AP – 534312	SPDCL
31	Shri Girija Alloy & Power (I) Private Limited, Works & Admin Office, Survey No.162 & 153, A.D.B. Road, Peddapuram - 533 437, East Godavari (Dist), Andhra Pradesh, India	EPDCL
32	Medasani Vijaya Bhaskar, Bharatiya Kishan Sangh, Kaleswara Rao Road, Governorpet, Vijayawada	SPDCL
33	P. Vijay Gopal Reddy, AP Ferro Alloys Producers' Association, Flat No.101, Sai Brundavan Apartments, Dwarakapuri Colony, Punjagutta, Hyderabad – 82	APSPDCL & APEPDCL
34	K. Karunakar Rao, Executive Director - Fin & Comml, TGV SRAAC Limited, Sree Rayalaseema Alkalies and Allied Chemicals Ltd., 40-304, 2 <sup>nd</sup> Floor, Krishna Jyothsna Complex, Bhagyanagar, Kurnool- 518 004	SPDCL
35	Gowra Srinivas, President, FTAPCCI, The Federation of Telangana and Andhra Pradesh, Chambers of Commerce and Industry, Red Hills, Hyderabad 500 004	APSPDCL & APEPDCL
36	Federation of Farmers Associations, H.No.1-191, Railway Wagon Work Shop Road, Guntupalli - 521 241.	SPDCL
37	Chief General Manager, Plot No.29, Road No.1, Andhra Loyola College Road, Central Excise Colony, Vijayawada - 520 008	APSPDCL & APEPDCL
38	Chemikela Madhava Reddy, S/o. C. Chenna Reddy, Bharatiya Kishan Sangh, Housing Board Colony, D.No.9-144, Prodduturu Mandalam, Cuddapah District.	SPDCL
39	T.S. Appa Rao, Secretary General, FTAPCCI, Red Hills, Hyderabad-500 004	APSPDCL & APEPDCL
40	The Chief Engineer (Commercial), APGENCO, Vidyut Soudha, Gunadala, Vijayawada	APSPDCL & APEPDCL
41	Gadagottu Sree Rambabu, S/o Kotayya, Paturu post, Bharatiya Kishan Sangh, Yaddanapudi Mandal, Prakasam Dist - 523171.	SPDCL
42	Seernam Venugopala Reddy, S/o Satyanarana Reddy, Bharatiya Kishan Sangh, Chatrai Post, Chatrai Mandalam, Krishna Dist.	SPDCL
43	Mandapati Vidyadhara Reddy, S/o Venkata Reddy, Bharatiya Kishan Sangh, Narsimharao Palem, Chatrai Mandalam, Krishna Dist- 521 214.	SPDCL

S.No	Name and address of the objector Sri / Smt. / Kumari	Objection related to
44	Dr. V. Sundar Naidu, President, Andhra Pradesh Poultry Federation, #8-103A, Enikepadu - 521 106, Vijayawada Rural, Krishna District	APSPDCL & APEPDCL
45	P.V.Raghavvlu, S/o Subba Rao, Bharatiya Kishan Sangh, Narayanapuram, Unguturu Mandalam, West Godavari Dist - 534 406	EPDCL
46	Chintapalli Narayana Reddy, S/o Manga Reddy, Bharatiya Kishan Sangh, Rachooru post, Ungutooru Mandalam, West Godavari Dist - 534 406	EPDCL
47	Penumalli Madhu, S/o P. Dasarada Rami Reddy, State Secretary, Communist Party of India(Marxist), Andhra Pradesh State Committee [CPI(M)], H.No.27-28-12, Yamalavari Street, Governorpet, Vijayawada-2	APSPDCL & APEPDCL
48	Bendi Tulasidas, S/o Sri Rama Murty Naidu, H.No.S4, Devi Towers, Sambamurty Road, Duragapuram, Vijayawada - 520 003	APSPDCL & APEPDCL
49	Prabhakar B.N., President, Society for Water, Power & Natural Resources conservation Awareness and Monitoring (Swapnam), Flat - C3, Kay Pee Apartment, No-5 Road, Opposite LEPL Mall, Near Benz Circle, Vijayawada - 520 008	APSPDCL & APEPDCL
50	Addagada Satish Kumar, S/o Venkatrao, Bharatiya Kishan Sangh, Nagula palem post, Parchooru Mandalam, Prakasam Dist.	SPDCL
51	OL Kantha Rao, Secretary, AP Spinning Mills Association, "Sai Plaza", 1st Floor, Above Bank of India, 1st Line, Chandramouli Nagar, Guntur - 522 007, AP, India	APSPDCL & APEPDCL
52	Katuri Hari Kishore Kumar Reddy, S/o Rama Krishna Reddy, Bharatiya Kishan Sangh, Paturu Post, Kovvuru Mandalam, SPSR Nellore Dist – 524137	SPDCL
53	K. Rajendra Reddy, P. Kothakota P.O., Pakala S.O., Chittoor District - 517 112	APSPDCL & APEPDCL
54	Ch. Narasingarao, State Secretariat Member, NPR Bhavan, H.No.28-6-8, Yallammathota, Jagadamba Jn., Visakhapatnam - 530 020	APSPDCL & APEPDCL
55	S.De Sarkar, Business Head, Abhijeet Ferrotech Limited, Plot No.50 & 51, APSEZ, Atchuthapuram, Visakhapatnam – 531011	EPDCL
56	A. Bhaskar Reddy, S/o A. Chinna Bontha Reddy, Karinapalle, P. Kothakota(Post), Pakala, Chitoor Dist-517 112	SPDCL
57	Garla Sreenivas, S/o G. Narayana Chetty, Flat No.102, Sai Residency, 2-2-647-103, Central Excise Colony, Bagh Amberpet, Hyderabad - 500 013.	APSPDCL & APEPDCL
58	Kandharapu Murali, S/o K. Siddaiah, CPM State Committee Member, M.B.Bhavan, CPI(M) Office, Yasoda Nagar, Tirupati	APSPDCL & APEPDCL
59	P. Ram Mohan Reddy, S/o P. Penchala Reddy, Penuballi post, Buchireddy palem, SPSR Nellore Dist	SPDCL
60	Vemi Reddy Hanuma Reddy, S/o Sundar Rami Reddy, Bharatiya Kishan Sangh, Booranpur (village), Chemudugunta (Post), Venkatachalem (Mandalam), Nellore Dist	SPDCL
61	K. Sunil Kumar Reddy, KV Ramana Reddy, Bharatiya Kishan Sangh, Maanegunta paadu post, Kodavalooru Mandalam, Nellore Dist.	SPDCL
62	I. Venkata Ramana Reddy, S/o I Sankar Reddy, Bharatiya Kishan Sangh, Vavveru Post, Buchireddy palem (Mandal), SPSR Nelloor Dist.	SPDCL
63	M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation, 139, Kakatiya Nagar, Hyderabad - 500 008	APSPDCL & APEPDCL
64	Rajendra Vohra, President, Sarada Metals & Alloys Ltd, D.No.50-96-4/1, Floor II & III, Sri Gowri Nilayam, Seethammadhara NE, Visakhapatnam - 530 013	EPDCL
65	M. Krishna Murty, Chief Engineer(Retd.,), 20-23-6, Plot -72, Padmavatinagar,	EPDCL

S.No	Name and address of the objector Sri / Smt. / Kumari	Objection related to
	Vizianagaram - 535 002.	
66	G. Venkateswara Rao, Quarter No.A1, Officers Colony, KCP Sugar & Ind. Corp Ltd., Vuyyuru, Krishna District, Andhra Pradesh	APSPDCL & APEPDCL
67	Y. Siddhayya Naidu, S/o Varadayya Naidu, Diguvamadam, Thavanam palli Mandalam, Chittoor Dist – 517 129	SPDCL
68	Shruti Bhatia, Vice President (Regulatory Affairs & Communications) Indian Energy Exchange (IEX), Unit No.3,4,5 & 6, Plot No.7, Fourth Floor, TDI Centre, District Centre, Jasola, New Delhi - 110 025	APSPDCL & APEPDCL
69	M. Prabhakar Rao, President, Federation of Indian Chambers of Commerce and Industry, 38-2-601/P-13, 4th Floor, NNR Arcade, Road No.10, Banjara Hills, Hyderabad - 500 034	APSPDCL & APEPDCL
70	Adabala Rajamohan, S/o Venkata Ratnam, Bharatiya Kishan Sangh, Pulleetikurru, Ambajipeta Mandal, East Godavari District.	EPDCL
71	G. Nagesh Babu, President, Small Hydro Power Developers Association, 6-3-347/17/5, Dwarakapuri Colony, Punjagutta, Hyderabad	APSPDCL & APEPDCL
72	M.M.Hemachandran, Chief Financial Officer, Synergies Castings Limited, #3, Visakhapatnam Special Economic Zone (VSEZ), Duvvada, Visakhapatnam - 530 049.	EPDCL
73	YGV Srikanth, ITC Limited, Agri Business Division - ILTD, Post Box No.1, Chirala - 523 157, Prakasam District, A.P. India.	APSPDCL & APEPDCL
74	Yadlapati Padmaja, Director, RPP Limited, Plot No.35, Road NO.70, Huda Layout, Nandagiri Hills, Jubilee Hills, Hyderabad - 500 033	APSPDCL & APEPDCL
75	G.V.Sivaharayana, Group Head - Commercial Management, Tata Power Renewable Energy Limited, Corporate Centre, A Block, 34, Sant Tukaram Road, Carnac Bunder, Mumbai - 400009	EPDCL
76	Parag Sharma, COD, ReNew Power Ventures Pvt. Ltd., 10th Floor, DLF Square, M Block, Jacaranda Marg, DLF City, Phase II, Gurgaon - 122 002.	APSPDCL & APEPDCL
77	G. Koteswara Rao, Sr. General Manager, Sri Sarvaraya Sugars Ltd., Ehelluru-533 261, Rayavaram Taluka, East Godavari District, AP.	EPDCL
78	A.P.Lenka, AGM(DNW), Rashtriya Ispat Nigam Limited, Visakhapatnam Steel Plant, Visakhapatnam - 530 031.	EPDCL
79	P.H.Janaki Ram, Company Secretary, APSEB Engineers' Association, (APSPDCL Unit), D.No.19-10-99/K1, New Indira Nagar, Near SGS Arts College, Tirupati.	SPDCL
80	Arpan Parekh, Plant Head, JSW Cement Limited., Bilakagudur, Gadivemula, Kurnool Dist. 518 508, AP	SPDCL
81	E. Ramakrishna, Managing Director, Sudha Agro Oil & Chemical Indistries Limited, Post Box No.9, Samalkot - 533 440, East Godavari Dist., AP	EPDCL
82	Sidhartha Mohapatra, Orange Renewable Power Private Limited, 301B, 3rd Floor D-21, Corporate Park, Sector-21, Dwarka, Near Dwarka Sector-8, Metro Station New Delhi - 110 075	APSPDCL & APEPDCL
83	Sandeep Kumar Rai, Head of Regulatory Affairs, Ostro Energy Pvt. Ltd., Unit No.G-0, Ground Floor, Mira Corporate Suites, 1&2 Ishwar Industrial Estate, Mathura Road, New Delhi-110 065.	APSPDCL & APEPDCL
84	Jayant Malik, Head of Organisation, Statkraft Markets Private Limited, 403, 4th Floor, Salcon rasvilas Building, Saket District Centre, New Delhi - 110 017, India	APSPDCL & APEPDCL
85	S. Prathap, Technical Secretary, Regd. No.1185 of 1977, APSEB Assistant Engineers' Association, Vijayawada	SPDCL
86	MR Samantaray, General Manager, DNW Department, Rashtriya Ispat Nigam Limited, Visakhapatnam Steel Plant, Visakhapatnam - 530 031.	EPDCL

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87	Dr. S. Chandra Mouli, President, APSEB Engineers' Association, H.No.6-3-663, Somajiguda, Hyderabad - 500 082	APSPDCL & APEPDCL
88	A. Venkat Rao, Vice President - Finance, TGV SRAAC Limited, 6-2-1012, 2nd Floor, TGV Mansion, Opp. Institution of Engineers, Khairatabad, Hyderabad	APSPDCL & APEPDCL
89	A. Sreekanth, M/s. KSK Mahanadi Power Company Limited, 8-2-293/82/A/431/A, Road No.22, Jubilee Hills, Hyderabad - 500 033	APSPDCL & APEPDCL
90	M. Sree Ramulu, Satyaspandana Samajika Seva Samstha, 18-01-46, H/8, Prasanth Nagar, Tirupathi	
91	B. Brahmananda Reddy, S/o Sankar Reddy, Gudibandivari Palli Post, Kollipara Mandalam, Gunturu Dt.	APSPDCL & APEPDCL
92	Vanga Sambi Reddy, S/o Veera Reddy, Gudibandi varipalem post, Kollipara Mandalam, Guntur Dt.	APSPDCL & APEPDCL
93	A. Venkateswara Reddy, S/o Venkata Subba Reddy, Tumulooru Post, Kollapara Mandalam, Guntur Dist.	APSPDCL & APEPDCL
94	B. Hume Sastri, I RA, JK Modern Home, Maharani Peta, Visakhapatnam.	APSPDCL & APEPDCL
95	Girija Alloys & Power (I) Pvt. Ltd., Works & Admin Office, Survey No.162 & 153, A.D.B. Road, Peddapuram, East Godavai (Dist), - 533 437	APSPDCL & APEPDCL
96	T. Gopal, 6-20-23, East Point Colony, Vizag - 530 017	APSPDCL & APEPDCL
97	N. Janardhana Reddy, S/o N. Venkata Subba Reddy, Y.M.Palli Post, Kadapa Mandal, YSR Kadapa Dist.	APSPDCL & APEPDCL
98	B. Obula Reddy, S/o. Obula Reddy, Pathagiriyapalli Post, Pendlimarri Mandal, YSR Kadapa Dt.	APSPDCL & APEPDCL
99	A. Gangi Reddy, S/o Venkata Reddy, Pagadala Palli, Pendly Marri Post & Mandal, YSR Kadapa Dt.	APSPDCL & APEPDCL
100	G. Srinivas, Senior Manager, HNPCL, Flat No.102, Sai Residency, Bagh Amberpet, Hyderabad	APSPDCL & APEPDCL
101	N. Sreekumar, Prayas, 403, Divya Enclave, Tarnaka, Secunderabad - 500 017	APSPDCL & APEPDCL
102	V. Chandra Sekhar Reddy, C/o Manihome Power Project Limited, G-2 Priti Nandita Residency, D.No.8-2-289/86, Shanti Nagar, Masab Tank, Hyderabad	APSPDCL & APEPDCL
103	D. Ganeshnaga Kumar, RPP Limited, Plot No.35, Road NO.70, Huda Layout, Nandagiri Hills, Jubilee Hills, Hyderabad - 500 033	APSPDCL & APEPDCL
104	K. Bagaria, Lanco Kondapalli Power Limited, Softsol Building, Plot No.4, Hyderabad - 500 081	APSPDCL & APEPDCL

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105	Thermal Powertech Corporation India Limited, (A Sembcorp Gayatri Company), 6-3-1090, Block A, Level 5, TSR Towers, Rajbhavan Road, Somajiguda, Hyderabad - 500 082	APSPDCL & APEPDCL
106	S. Yanadayya, President, A.P. Nayi Brahmana Seva Sangam, 185, Gandhi Road, Krishna puram, Tana Centre, Tirupati.	SPDCL
107	B. Shankaraiah, General Manager, Grindwell Norton Limited, Silicon Carbide Business, Karakambadi, Kadapa Road, Renigunta - 517 520	SPDCL
108	V. Madhusudhana Rao, Mallappagari palli, Damalcheruvu Village, Pakala Mandalam, Chittoor District.	SPDCL
109	M.G.Joy, Indian Oil Corporation Limited, Southern Region Pipelines, Chittoor, Gudiyatham Road Yadamari - 517 422	SPDCL
110	N. Subrahmanyam, AAW Colony, Narayanavanam Mandalam, Chittoor Dist.	SPDCL
111	E. Hemadri, Chenchugudi Village, Tirumalayya palli Panchant, Veduru Kuppam Mandalam, Chittoor Dist	SPDCL
112	S. Jaya Chandra, Secretary, AIAWU, 23-8-66/6, Arjun Electrical Complex, 2nd Floor, Rayala cheruvu Road, Tirupati	SPDCL
113	S. Samebandan, 7/88, R.K.Madir Street, Pakala - 517112	SPDCL
114	P.E.Sandya, Sandhya Flor Mill, Pudupet, Nagari	SPDCL
115	United Electricity Contract Workers Union (CITU), D.No.18-8-3/2, CITU Office, Madhura Nagar, Tirupati	SPDCL
116	T.Adhi kesavula Reddy, District Secretary, YSR Congress Party Raithu Section, 13-10-445, Kotakommala Veedhi, Tirupati	SPDCL
117	Vandavasi Nagaraju, District President, Andhra Pradesh Vyavasaya Karmika Sangam AIAWU 23-8-66/6, Arjun Electrical Complex, 2nd Floor, Rayala Cheruvu Road, Tirupati	SPDCL
118	M. Narayana Babu, Andhra Pradesh Vyavasaya Karmika Sangam AIAWU, 23-8-66/6, Arjun Electrical Complex, 2nd Floor, Rayala Cheruvu Road, Tirupati	SPDCL
119	M.Sreenivasulu, Kula Vivakshya Porata Sangam (KVPS), M.B.Bhavan, Yasoda Nagar, Tirupati	SPDCL
120	Kothapalli Subramanyam, Kula Vivakshya Porata Sangam (KVPS), M.B.Bhavan, Yasoda Nagar, Tirupati	SPDCL
121	T.G.Venkatesh, Member of Parliament (Rajya Sabha), 6-2-102, 2nd Floor, T.G.V. Mansion, Opp: Institute of Engineers, Khairatabad, Hyderabad	APSPDCL & APEPDCL
122	Ch Babu Rao, CPI (Marxist), A.P. Committee, H.No.27-28-12, CPI (M), State Committee Office, Yamalavari Street, Goveernor Pet, Vijayawada-2.	SPDCL
123	Bommasani Sreenivasa Rao, D.No.2-126, Guntupalli, Krishna Dt.	SPDCL
124	Cherikuri Venugopal, Federation of Farmers Associations, H.No.1-191, Railway Wagon Work Shop Road, Guntupalli - 521 241.	SPDCL
125	Rajasekhar, Vice president, A.P.State Off set Printers Association, D.No.26-20-6, 2nd Floor, Swamy Street, Gandhi Nagar, Vijayawada	SPDCL
126	Sri Newtech Print Needs, #24-14-61, Kundetivari Street, Durgapuram, Vijayawada	SPDCL
127	S.Rajasekhar, Managing Director, Arunodaya Notebook Manufacturers Pvt. Ltd. 33-5-9, Papaiah Street, Seetharamapuram, Vijayawada	SPDCL
128	M. Venkateswara Rao, MP (Loksabha), Maganti Nilayam, D.No.23-4-91, R.R.Peta, Eluru	SPDCL
129	Lakshmi Narasimha Spinning Mills, Vippalavari Palem, Addanki Mandal, Prakasam Dt.	SPDCL
130	Secretary & Correspondent, Mothers Memorial Society of Charities, Near Poleramma Temple, Balajirao Pet, Ongole	SPDCL
131	B.Surya Narayana, President, Acharya Nagarjuna Univeristy Pvt. Colleges Management Welfare Association (ANUPCMWA), D-139/1, Opp : Acharya Nagarjuna University, Nagarjuna Nagar, Ongole	SPDCL
132	G.Pratap Reddy, President, Nellore Printers Association, Upstairs Modern Dresses, Opp : Co-operative Bank, Trunk Road, Nellore	SPDCL

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133	Cheekati Srinivasa Rao, District Secretary, Bharatiya Communist Party (Matrix), Sundarayya Bhavan, Ongole	SPDCL
134	Sree Satyanarayana Spinning Mills Ltd., Venkatatarayapuram, Tanuku	EPDCL
135	Steel Exchange India Ltd., Sreeramapuram Village, L.Kota Mandal, Vizayanagaram Dt.	EPDCL
136	Parupally Kodanda Ramaiah, IFA House, 54, Naval Park, Scindia Junction, Vizag	EPDCL
137	Dadi Veerabhadra Rao, Anakapalli Agriculturists Association, V.V.Ramana Raithu Bharathi, Anakapalli, Vizag Dt.	EPDCL
138	A.Balakrishna, Andhra Pradesh Koulu Raithu Sangam, Doddi ramanaidu Bhavan, Opp: RTC Complex. Anakapalli -531001	EPDCL
139	R.K.S.V Kumar, Secretary, United Electricity Contract Workers Union (CITU), N.P.R.Bhavan, Yallamma Thota Junction, Visakapatnam	EPDCL
140	K.Appa Rao, Andhra Pradesh Raithu Sangam, Doddi ramanaidu Bhavan, Opp: RTC Complex. Anakapalli -531001	EPDCL
141	Kandregula Venkataramana, # 14-23-15/3, Near Sri Satyamma Thalli Temple, Anakapalli	EPDCL
142	M.V.Srinivasa Rao, D.No.15-5-17 (A), B.P.N.Street, Gourava palem, Anakapalli	EPDCL
143	V.Uma Maheswara Rao, Registrar, Andhra University, Visakhapatnam	EPDCL
144	Dadi Mastya Raju, Madugula Mandal, K.J.P (SO), Veeranarayanam Village, Vizag	EPDCL
145	M/s Vishnu Educational Society, Plot No.153, Sitha Nilayam, Dwarakapuri Colony, Punjagutta, Hyderabad	EPDCL
146	Yallapu Suryanarayana, State General Secretary, Bharatiya Kisan Sangh, 26-16-1, Vuyyuru Zamindar Street, Beside Raj Theatre, Gandhinagar, Vijayawada	EPDCL
147	Valluri Surya Prakasa Rao, President, Upland Area Rice Millers Association, D.No.21-1-67/4B, RJY ADB Road, Peddapuram, E.G.Dist.	EPDCL
148	M/s Sri Venkateswara Rice Industry, D.No.21-1-67/4B, RJY ADB Road, Peddapuram, E.G.Dist.	EPDCL
149	M/s Sameera Agro Industries, Narendra Puram, Rajanagaram Mandal, E.G. Dist.	EPDCL
150	Sri Lakshmi Srinivasa Modern Rice Mill, Vedisaleru, Rangampeta Mandal, E.G.Dist.	EPDCL
151	Sri Venkateswara Rice Industry, Gandepalli, Gandepalli Mandal, E.G.Dist	EPDCL
152	G.Koteswara Rao, Sr. General Manager, Sri Sarvaraya Sugars Limited, Chelluru, Rayavaram Taluka, E.G.Dist.	EPDCL
153	M/s Suryodaya Publications, D.No.29-8-3/1, Distribution-2, Rajamahendravaram	EPDCL
154	Udaya Bhaskara Reddy, M/s Eswar Graphi Printers, D.No.29-8-3, Distribution-2, Rajamahendravaram	EPDCL
155	M/s Master Printers Association, Rajamahendravaram, E.G.Dist.	EPDCL
156	Padala Sudha Reddy, President, Anaparthy Region Poulty Farmers Welfare Society, 4-318, Near Railway Station, Anaparthy, E.G.Dist.	EPDCL
157	Dwarampudi Bapi Reddy, Proprietor, M/s Kumari Offset Printers, Rayavaram-533346, E.G.Dist.	EPDCL
158	K.V.Subba Rao, Andhra Pradesh Poultry Federation, N.H-5, Peravali Road, A.M.C, Near Check Post, Tanuku, W.G.Dist	EPDCL
159	Balaji Prasad pandi, D.No.9-8-4, Upstairs, Pentapati vari lane, Chandu Satram vari street, Rajahmundry	EPDCL
160	Dwarampudi Ratna Sirisha, Proprietor, M/s Kumari Offset Printers, Rayavaram-533346, E.G.Dist.	EPDCL
161	Pulla Satyanarayana, President, Sir Arthur Cotton Nursery Farmers Association Kadiyam, 8-83, Kadiyapulanka, Kadiyam Mandal, E.G.Dist.	EPDCL
162	Adhitya Machani, CEO, M.G.B Mobiles, 1-374, Sy.No.241/2C, 242 & 243, N.H-44, Bangalore Road, Kakkapapalli (V), Anantapuram-515002	SPDCL
163	M.Arogya Dass, APSPDCL Districts Stores Mutta Workers Union,	SPDCL
164	A.Raja Naidu, Dhamalacheruvu	SPDCL
165	G.Uday Kumar & Others, Nimmana Palli Mandal,	SPDCL
166	Vada Gangaraju, CITU, Chittor District Committee	SPDCL

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167	K.Siva Reddy & Others, Pedda avutipalli Village, Buddavaram and Vunguturu and Gannavaram Mandal, Krishna Dt.	SPDCL
168	Malladi Vishnu, Ex-MLA, Working President, YSRCP, Vijayawada City	SPDCL
169	Dorli Raghavulu & Others, Agiripalli Mandal, Nekkalamgolla Gudem Village	SPDCL
170	Printers Welfare Association, Ongole	SPDCL
171	R.Mohan, Akhila Bharata Raithu Kooli Sangam	SPDCL
172	Karri Apparao, Andhra Pradesh Cheraku Raithu Sangam, Vijayawada	EPDCL
173	Ch Amman Naidu, CITU District vice President, Vizag	EPDCL
174	Hemanth Kumar, All Students Leader, Visakapatnam	EPDCL
175	Kandula Durnesh & Others, YSRCP, Rajanagaram	EPDCL
176	Jonnada Satya Narayana, The Rajamahendra Varam, Area Rice Millers Association, Rajamahendravaram	EPDCL
177	B.Vekat Rao, Kadiyam Mandal Nursery Raithu	EPDCL
178	Arjun Rao, Kadiyam Mandal Nursery Raithu	EPDCL
179	Srinivasa Babu, Kadiyam Mandal Nursery Raithu	EPDCL
180	Kadiyam Narayana Rao, Kadiyam Mandal Nursery Raithu	EPDCL
181	Reddy Gani Raju, Kadiyam Mandal Nursery Raithu	EPDCL
182	S.R.J.R. Veera Raju, Kadiyam Mandal Nursery Raithu	EPDCL
183	B.Venkata rayudu, Kadiyam Mandal Nursery Raithu	EPDCL
184	K.L.Rayudu, Kadiyam Mandal Nursery Raithu	EPDCL
185	K.Veera Venkaiah, Kadiyam Mandal Nursery Raithu	EPDCL
186	K.Nageswara Rao, Kadiyam Mandal Nursery Raithu	EPDCL
187	P.Srirangam, Kadiyam Mandal Nursery Raithu	EPDCL
188	G.S.N.Murthy, Kadiyam Mandal Nursery Raithu	EPDCL
189	V.R.Rao, Kadiyam Mandal Nursery Raithu	EPDCL
190	S.V.S.Rao, Kadiyam Mandal Nursery Raithu	EPDCL
191	Naga Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
192	Vijayalakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
193	V.Kanaka Raju, Kadiyam Mandal Nursery Raithu	EPDCL
194	K.Krishna Rao, Kadiyam Mandal Nursery Raithu	EPDCL
195	Durga Rao, Kadiyam Mandal Nursery Raithu	EPDCL
196	Surya Chandra Rao, Kadiyam Mandal Nursery Raithu	EPDCL
197	Jalli Lazer, Kadiyam Mandal Nursery Raithu	EPDCL
198	Narayanamma, Kadiyam Mandal Nursery Raithu	EPDCL
199	Mudragada Bhima Raju, Kadiyam Mandal Nursery Raithu	EPDCL
200	Satyanarayana Murthy, Kadiyam Mandal Nursery Raithu	EPDCL
201	Koteswara Rao, Kadiyam Mandal Nursery Raithu	EPDCL
201	Manyam Rama Krishna Rao, Kadiyam Mandal Nursery Raithu	EPDCL
202	M. Sivaji, Kadiyam Mandal Nursery Raithu	EPDCL
204	S.Chinna Satyam, Kadiyam Mandal Nursery Raithu	EPDCL

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205	Mudragada Subba Raju, Kadiyam Mandal Nursery Raithu	EPDCL
206	Darmasam Sivaji, Kadiyam Mandal Nursery Raithu	EPDCL
207	S.Varalakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
208	G.M.Rao, Kadiyam Mandal Nursery Raithu	EPDCL
209	Bathula Subba Rao, Kadiyam Mandal Nursery Raithu	EPDCL
210	Adimulam Satyam, Kadiyam Mandal Nursery Raithu	EPDCL
211	E.Brahmamma, Kadiyam Mandal Nursery Raithu	EPDCL
212	Mudragada Rama Rao, Kadiyam Mandal Nursery Raithu	EPDCL
213	K.Ratnam, Kadiyam Mandal Nursery Raithu	EPDCL
214	B.Venkata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
215	B.Krishna Murthy, Kadiyam Mandal Nursery Raithu	EPDCL
216	Ramella Andallamma, Kadiyam Mandal Nursery Raithu	EPDCL
217	Venkata Ratnam, Kadiyam Mandal Nursery Raithu	EPDCL
218	Ratnam Sreenivas, Kadiyam Mandal Nursery Raithu	EPDCL
219	Sreenu Babu, Kadiyam Mandal Nursery Raithu	EPDCL
220	A. Rama Krishna, Kadiyam Mandal Nursery Raithu	EPDCL
221	A. Chandra Rao, Kadiyam Mandal Nursery Raithu	EPDCL
222	Parvathi, Kadiyam Mandal Nursery Raithu	EPDCL
223	Veera Nagamani, Kadiyam Mandal Nursery Raithu	EPDCL
224	N. Anantha Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
225	S.M.Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
226	J. Chinna Surya Rao, Kadiyam Mandal Nursery Raithu	EPDCL
227	Satyanarayana, Kadiyam Mandal Nursery Raithu	EPDCL
228	Nageswara Rao, Kadiyam Mandal Nursery Raithu	EPDCL
229	Chalapati Rao, Kadiyam Mandal Nursery Raithu	EPDCL
230	Anjaeyulu, Kadiyam Mandal Nursery Raithu	EPDCL
231	Akula Chandra Rao, Kadiyam Mandal Nursery Raithu	EPDCL
232	G. Subba Rao, Kadiyam Mandal Nursery Raithu	EPDCL
233	Adapa Santhosh Kumar, Kadiyam Mandal Nursery Raithu	EPDCL
234	Patamsetti Thrimurthulu, Kadiyam Mandal Nursery Raithu	EPDCL
235	Gatti Nageswara Rao, Kadiyam Mandal Nursery Raithu	EPDCL
236	Patamsetti Venkatrao, Kadiyam Mandal Nursery Raithu	EPDCL
237	D.Rama Krishna, Kadiyam Mandal Nursery Raithu	EPDCL
238	K.Surya Rao, Kadiyam Mandal Nursery Raithu	EPDCL
239	R.V.R. Linga Rao, Kadiyam Mandal Nursery Raithu	EPDCL
240	M.Suryabharathamma, Kadiyam Mandal Nursery Raithu	EPDCL
241	Dontamsetti Satya Narayana, Kadiyam Mandal Nursery Raithu	EPDCL
242	Kuppala Chakravarthi, Kadiyam Mandal Nursery Raithu	EPDCL

S.No	Name and address of the objector Sri / Smt. / Kumari	Objection related to
243	R.Chinna Rao, Kadiyam Mandal Nursery Raithu	EPDCL
244	Adimulam Sesha Ratnam, Kadiyam Mandal Nursery Raithu	EPDCL
245	A. Sree Rama Ratnam, Kadiyam Mandal Nursery Raithu	EPDCL
246	A. Veeraraju, Kadiyam Mandal Nursery Raithu	EPDCL
247	R.V.R.Prasada Rao, Kadiyam Mandal Nursery Raithu	EPDCL
248	Kamireddi Maha Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
249	Sarojini, Kadiyam Mandal Nursery Raithu	EPDCL
250	Ramella Venkata Ramanayya, Kadiyam Mandal Nursery Raithu	EPDCL
251	Adimulam Surya Chandra Rao, Kadiyam Mandal Nursery Raithu	EPDCL
252	G.V.Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
253	Krishna Veni, Kadiyam Mandal Nursery Raithu	EPDCL
254	Kothapalli Yesaiah, Kadiyam Mandal Nursery Raithu	EPDCL
255	M.Venkata Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
256	E.Someswara Rao, Kadiyam Mandal Nursery Raithu	EPDCL
257	Annamdevula Konda Ramudu, Kadiyam Mandal Nursery Raithu	EPDCL
258	A. Manayya, Kadiyam Mandal Nursery Raithu	EPDCL
259	Kothapalli Sarvarayudu, Kadiyam Mandal Nursery Raithu	EPDCL
260	A. Surya Prasad, Kadiyam Mandal Nursery Raithu	EPDCL
261	D. Surya, Kadiyam Mandal Nursery Raithu	EPDCL
262	D. Veera Prasad, Kadiyam Mandal Nursery Raithu	EPDCL
263	K.Baby, Kadiyam Mandal Nursery Raithu	EPDCL
264	K.L. Narasimha Rao, Kadiyam Mandal Nursery Raithu	EPDCL
265	Putta Venkata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
266	Raju, Kadiyam Mandal Nursery Raithu	EPDCL
267	P. Sreerangam, Kadiyam Mandal Nursery Raithu	EPDCL
268	K. Kondaiah, Kadiyam Mandal Nursery Raithu	EPDCL
269	T. Polaiah, Kadiyam Mandal Nursery Raithu	EPDCL
270	Sreenivasa Rao, Kadiyam Mandal Nursery Raithu	EPDCL
271	Thulasamma, Kadiyam Mandal Nursery Raithu	EPDCL
272	T. Kondaiah, Kadiyam Mandal Nursery Raithu	EPDCL
273	B. Pullaiah, Kadiyam Mandal Nursery Raithu	EPDCL
274	Satyavathi, Kadiyam Mandal Nursery Raithu	EPDCL
275	T.S. Raju, Kadiyam Mandal Nursery Raithu	EPDCL
276	R. Ramanna, Kadiyam Mandal Nursery Raithu	EPDCL
277	Pulla Rao, Kadiyam Mandal Nursery Raithu	EPDCL
278	A. Subba Rao, Kadiyam Mandal Nursery Raithu	EPDCL
279	V. Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
280	P. Rama Rao, Kadiyam Mandal Nursery Raithu	EPDCL

S.No	Name and address of the objector Sri / Smt. / Kumari	Objection related to
281	A.V. Rao, Kadiyam Mandal Nursery Raithu	EPDCL
282	K. Veera Raju, Kadiyam Mandal Nursery Raithu	EPDCL
283	Y. Durga Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
284	M.V.V. Satya Narayana, Kadiyam Mandal Nursery Raithu	EPDCL
285	K. Srinivasa Rao, Kadiyam Mandal Nursery Raithu	EPDCL
286	T. Ganga Raju, Kadiyam Mandal Nursery Raithu	EPDCL
287	S. Surya Raju, Kadiyam Mandal Nursery Raithu	EPDCL
288	P.T.S. Devi, Kadiyam Mandal Nursery Raithu	EPDCL
289	P. Sreenu, Kadiyam Mandal Nursery Raithu	EPDCL
290	R. Satyam, Kadiyam Mandal Nursery Raithu	EPDCL
291	Pulla Nagalakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
292	T. Dharma Raju, Kadiyam Mandal Nursery Raithu	EPDCL
293	R. Venkata Ramaiah, Kadiyam Mandal Nursery Raithu	EPDCL
294	Devanagamani, Kadiyam Mandal Nursery Raithu	EPDCL
295	Torati Subhadra, Kadiyam Mandal Nursery Raithu	EPDCL
296	Dontamsetti Veera Bhadraya, Kadiyam Mandal Nursery Raithu	EPDCL
297	G. Pullaiah, Kadiyam Mandal Nursery Raithu	EPDCL
298	A. Thirupati Rao, Kadiyam Mandal Nursery Raithu	EPDCL
299	Ch. Venkata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
300	S. Rama Rao, Kadiyam Mandal Nursery Raithu	EPDCL
301	B. Tata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
302	Garapati Satyanarayana, Kadiyam Mandal Nursery Raithu	EPDCL
303	Thorathi Nageswara Rao, Kadiyam Mandal Nursery Raithu	EPDCL
304	V. Rama Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
305	Borsu Veera Swamy, Kadiyam Mandal Nursery Raithu	EPDCL
306	M. Sri Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
307	G. Gopala Krishna, Kadiyam Mandal Nursery Raithu	EPDCL
308	K. Papa Rao, Kadiyam Mandal Nursery Raithu	EPDCL
309	Allampalli Satyavathi, Kadiyam Mandal Nursery Raithu	EPDCL
310	E. Bramarambha, Kadiyam Mandal Nursery Raithu	EPDCL
311	Annamdevula Muniyya, Kadiyam Mandal Nursery Raithu	EPDCL
312	A. Satya Narayana, Kadiyam Mandal Nursery Raithu	EPDCL
313	Ramdla Venkata Ramaiah, Kadiyam Mandal Nursery Raithu	EPDCL
314	K. Veerayamma, Kadiyam Mandal Nursery Raithu	EPDCL
315	Gatti Chandrayya, Kadiyam Mandal Nursery Raithu	EPDCL
316	Alla Raghavamma, Kadiyam Mandal Nursery Raithu	EPDCL
317	Mogalappa Pullaiah, Kadiyam Mandal Nursery Raithu	EPDCL
318	Tirupati Anjaneyulu, Kadiyam Mandal Nursery Raithu	EPDCL

S.No	Name and address of the objector Sri / Smt. / Kumari	Objection related to
319	Kalidhinidi Chandra Rao, Kadiyam Mandal Nursery Raithu	EPDCL
320	Sunkara Satyam, Kadiyam Mandal Nursery Raithu	EPDCL
321	V. Sarojini, Kadiyam Mandal Nursery Raithu	EPDCL
322	Tadala Durga Rao, Kadiyam Mandal Nursery Raithu	EPDCL
323	S. Ramayamma, Kadiyam Mandal Nursery Raithu	EPDCL
324	Kandipudi Kondaiah, Kadiyam Mandal Nursery Raithu	EPDCL
325	Ramella Venkata Ramaiah, Kadiyam Mandal Nursery Raithu	EPDCL
326	B. Suramma, Kadiyam Mandal Nursery Raithu	EPDCL
327	D. Papa Rao, Kadiyam Mandal Nursery Raithu	EPDCL
328	E.S.K Narayana Murthi, Kadiyam Mandal Nursery Raithu	EPDCL
329	G. Sriniyappa, Kadiyam Mandal Nursery Raithu	EPDCL
330	R.P.S. Venkata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
331	E. Thirupati Rayudu, Kadiyam Mandal Nursery Raithu	EPDCL
332	B.V. Venkata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
333	T. Veera Swamy, Kadiyam Mandal Nursery Raithu	EPDCL
334	V. Govinda, Kadiyam Mandal Nursery Raithu	EPDCL
335	P.V.V. Satya Narayana, Kadiyam Mandal Nursery Raithu	EPDCL
336	P. Ramamurthy, Kadiyam Mandal Nursery Raithu	EPDCL
337	D. Rajarao, Kadiyam Mandal Nursery Raithu	EPDCL
338	Kesava Swamy, Kadiyam Mandal Nursery Raithu	EPDCL
339	SVVR Manikyam, Kadiyam Mandal Nursery Raithu	EPDCL
340	Mudragada Bheema Raju, Kadiyam Mandal Nursery Raithu	EPDCL
341	Pilla Subba Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
342	Bala Krishna, Kadiyam Mandal Nursery Raithu	EPDCL
343	K. Veera Venkata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
344	Surya Kumari, Kadiyam Mandal Nursery Raithu	EPDCL
345	Nagamani, Kadiyam Mandal Nursery Raithu	EPDCL
346	K. Banthi Raju, Kadiyam Mandal Nursery Raithu	EPDCL
347	A. Dharma Rao, Kadiyam Mandal Nursery Raithu	EPDCL
348	B. Surya Rao, Kadiyam Mandal Nursery Raithu	EPDCL
349	Kami Reddy Ramulu, Kadiyam Mandal Nursery Raithu	EPDCL
350	Annamdeevula Satyavathi, Kadiyam Mandal Nursery Raithu	EPDCL
351	Pantham venkata Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
352	Kaasi Devi, Kadiyam Mandal Nursery Raithu	EPDCL
353	Masreenu Rao, Kadiyam Mandal Nursery Raithu	EPDCL
354	P. Manjula Devi, Kadiyam Mandal Nursery Raithu	EPDCL
355	C. Eeswara Rao, Kadiyam Mandal Nursery Raithu	EPDCL
356	M. Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL

S.No	Name and address of the objector Sri / Smt. / Kumari	Objection related to
357	P. Rajeswari, Kadiyam Mandal Nursery Raithu	EPDCL
358	P. Veera Vathi, Kadiyam Mandal Nursery Raithu	EPDCL
359	G. Adhi Narayana, Kadiyam Mandal Nursery Raithu	EPDCL
360	D. Babu, Kadiyam Mandal Nursery Raithu	EPDCL
361	G. Sundaram, Kadiyam Mandal Nursery Raithu	EPDCL
362	P. Thata Rao, Kadiyam Mandal Nursery Raithu	EPDCL
363	B. Satyam, Kadiyam Mandal Nursery Raithu	EPDCL
364	T. Subba Rao, Kadiyam Mandal Nursery Raithu	EPDCL
365	M. Savitri, Kadiyam Mandal Nursery Raithu	EPDCL
366	Ch. Venkanna, Kadiyam Mandal Nursery Raithu	EPDCL
367	VN Ratnam, Kadiyam Mandal Nursery Raithu	EPDCL
368	T. Ramanna, Kadiyam Mandal Nursery Raithu	EPDCL
369	Pulla Satyanarayana, Kadiyam Mandal Nursery Raithu	EPDCL
370	Gopala Krishna, Kadiyam Mandal Nursery Raithu	EPDCL
371	M. Veeranna, Kadiyam Mandal Nursery Raithu	EPDCL
372	G. Satyam, Kadiyam Mandal Nursery Raithu	EPDCL
373	T. Sesha Ratnam, Kadiyam Mandal Nursery Raithu	EPDCL
374	A. Bhupathi Raju, Kadiyam Mandal Nursery Raithu	EPDCL
375	P. Varalakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
376	M. Bhanumurthy, Kadiyam Mandal Nursery Raithu	EPDCL
377	B. Dharma Raju, Kadiyam Mandal Nursery Raithu	EPDCL
378	Y. Rama Prasad, Kadiyam Mandal Nursery Raithu	EPDCL
379	Sekha Giri Rao, Kadiyam Mandal Nursery Raithu	EPDCL
380	Anantha Lakshmi, Kadiyam Mandal Nursery Raithu	EPDCL
381	Subba Rao, Kadiyam Mandal Nursery Raithu	EPDCL
382	K.Venkatrao, Kadiyam Mandal Nursery Raithu	EPDCL
383	K. Satyanarayana Murthy, Kadiyam Mandal Nursery Raithu	EPDCL
384	Ch. Easwarudu, Kadiyam Mandal Nursery Raithu	EPDCL
385	K. Boorayya, Kadiyam Mandal Nursery Raithu	EPDCL
386	N. Yesayya, Kadiyam Mandal Nursery Raithu	EPDCL
387	K. Satyanarayana, Kadiyam Mandal Nursery Raithu	EPDCL
388	Rama krishna, Kadiyam Mandal Nursery Raithu	EPDCL
389	Y. Venkatra rao, Kadiyam Mandal Nursery Raithu	EPDCL
390	K. Ramulu, Kadiyam Mandal Nursery Raithu	EPDCL

# Station wise, Month wise availability of Energy (MU) for FY 2018-19 as per DISCOMs Filing

	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
					APG	ENCO						1	
Thermal													
VTPS I	188.84	195.14	188.84	195.14	147.99	188.84	160.47	173.08	195.14	195.14	176.25	195.14	2200.00
VTPS II	212.62	219.71	162.26	219.71	219.71	100.71	145.10	212.62	219.71	219.71	198.44	219.71	2350.00
VTPS III	201.43	208.14	151.07	157.79	208.14	201.43	208.14	201.43	208.14	208.14	188.00	208.14	2350.00
VTPS IV	260.57	269.26	260.57	138.97	269.26	260.57	269.26	260.57	269.26	269.26	243.20	269.26	3040.00
RTPP I	200.95	207.65	150.71	207.65	207.65	200.95	157.41	200.95	207.65	207.65	187.55	207.65	2344.40
RTPP Stage-II	208.68	215.63	208.68	165.40	215.63	100.47	179.57	208.68	215.63	215.63	194.77	215.63	2344.40
RTPP Stage-III	100.47	103.82	100.47	103.82	53.59	100.47	103.82	100.47	103.82	103.82	93.78	103.82	1172.20
Damodaram Sanjeevaiah Thermal power plant – I	393.15	406.25	393.15	194.78	450.77	393.15	400.69	398.53	406.25	400.69	366.94	411.82	4616.18
Damodaram Sanjeevaiah Thermal power plant – II	393.15	406.25	398.53	445.21	194.78	393.15	400.69	393.15	406.25	400.69	368.95	406.25	4607.06
RTPP Stage-IV	119.88	123.88	119.88	123.88	123.88	119.88	289.04	279.72	289.04	289.04	261.07	289.04	2428.24
Total Thermal	2279.74	2355.73	2134.17	1952.33	2091.40	2059.63	2314.19	2429.20	2520.90	2509.77	2278.95	2526.46	27452.46
Hydro													
MACHKUND PH AP Share	24.75	27.72	27.72	27.72	29.70	27.72	27.72	27.72	27.72	25.74	23.76	27.72	325.71
TUNGBHADRA PH AP Share	3.54	0.62	0.04	5.52	9.90	11.88	11.88	7.92	7.92	5.94	5.94	3.96	75.07
Upper Sileru Power House (AP)	19.80	9.90	9.90	19.80	29.70	17.82	29.70	23.76	23.76	32.67	54.45	71.28	342.54
Lower Sileru Power House (AP)	89.10	24.75	19.80	49.50	79.20	59.40	69.30	69.30	79.20	108.90	108.90	108.90	866.25
DONKARAYI (AP)	1.98	0.99	0.99	0.99	5.94	5.94	8.91	8.91	8.91	8.91	5.94	7.92	66.33
Srisailam Right Bank Power House (AP)	7.92	0.00	0.00	0.00	118.80	138.60	158.40	19.80	19.80	59.40	89.10	19.80	631.62
Nagarjunasagar Right Bank Power House (AP)	1.98	0.00	0.00	0.00	3.96	9.90	19.80	19.80	11.88	7.92	3.96	2.97	82.17
Penna Ahobilam (AP)	0.03	0.04	0.08	0.09	1.10	1.10	1.19	0.73	0.59	0.38	0.20	0.20	5.72
MINI HYDEL(Chettipeta)-AP	0.13	0.00	0.07	0.38	0.30	0.33	0.07	0.05	0.28	0.39	0.28	0.37	2.62
Nagarjunasagar Tail Pond Dam Power House	0.99	0.99	0.99	4.95	8.91	14.85	14.85	17.82	17.82	9.90	4.95	4.95	101.97
Total HYDRO	150.22	65.01	59.59	108.95	287.51	287.54	341.82	195.81	197.88	260.14	297.48	248.06	2500.00
Total APGENCO	2429.96	2420.74	2193.76	2061.28	2378.90	2347.17	2656.01	2625.02	2718.78	2769.91	2576.42	2774.53	29952.47

	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
				Centra	l Generati		G (CGS)						
					NT NTPO	PC							
NTPC (SR)-Ramagundam					NIPC	) (SK)							
Stage1&2	110.78	116.36	110.78	119.88	119.98	105.30	103.54	117.05	108.43	127.03	114.70	116.16	1370.00
NTPC (SR)-Ramagundam Stage 3	31.25	32.38	28.48	16.19	10.35	28.48	29.51	28.48	29.51	29.51	26.64	29.51	320.27
Total NTPC(SR)	142.03	148.74	139.26	136.07	130.33	133.78	133.05	145.53	137.94	156.53	141.33	145.67	1690.27
					NTPC	C (ER)							
Talcher Stage 2	88.53	87.72	65.54	71.36	74.23	88.19	92.07	89.13	92.07	92.07	83.18	92.07	1016.15
Total NTPC(ER)	88.53	87.72	65.54	71.36	74.23	88.19	92.07	89.13	92.07	92.07	83.18	92.07	1016.15
Total NTPC	230.56	236.46	204.81	207.43	204.56	221.98	225.11	234.66	230.01	248.60	224.52	237.74	2706.42
NLC TS-II													
Stage-I         18.20         18.68         17.43         12.79         18.44         13.15         16.12         11.60         17.13         18.56         16.84         18.50         197.													
Stage-II	34.64	35.61	25.52	33.27	26.40	29.80	24.79	31.25	24.47	35.45	31.90	35.37	368.45
Total NLC	52.84	54.29	42.95	46.06	44.85	42.94	40.91	42.85	41.60	54.01	48.73	53.87	565.89
	0.02	4.00	c 15	0.11		<u>PC</u>	0.11	0.02	0.11	0.11	0.14	0.11	100.05
NPC-MAPS	8.82	4.29	6.45	9.11	9.11	8.82	9.11	8.82	9.11	9.11	8.16	9.11	100.05
NPC-Kaiga unit Iⅈ	31.25	32.02	31.25	16.14	24.14	31.25	32.02	31.25	32.02	32.02	29.22	32.02	354.60
NPC-Kaiga unit III&IV	32.24	33.05	32.24	33.05	33.05	32.24	33.05	32.24	16.52	24.79	30.34	33.05	365.85
Total NPC	72.31	69.35	69.94	58.30	66.30	72.31	74.18	72.31	57.66	65.92	67.72	74.18	820.49
					NTPC –								
NTPC Simhadri Stage I	220.53	226.52	156.50	116.82	228.02	220.53	228.02	220.53	228.02	228.02	206.30	228.02	2507.82
NTPC Simhadri Stage II	83.84	87.58	83.84	86.69	76.21	58.84	86.69	83.84	86.69	87.28	78.75	88.33	988.58
Total NTPC- Simhadri	304.37	314.10	240.35	203.50	304.22	279.37	314.70	304.37	314.70	315.30	285.05	316.35	3496.40
Bundled power under JVNSM	21.59	22.35	20.64	20.98	CGS - 20.29	- New 20.03	21.49	21.84	22.01	23.51	19.94	22.15	256.81
Vallur Thermal Power Plant	57.04	58.94	40.70	54.41	58.94	55.14	46.88	39.97	58.33	59.61	53.86	59.61	643.42
Kudigi	57.71	59.64	57.71	59.64	59.64	57.71	59.64	57.71	61.62	64.61	46.47	57.88	699.99
Tuticorin	45.08	52.41	52.19	61.79	60.16	60.16	61.79	60.16	61.79	61.79	56.10	61.79	695.21
JNNSM Phase-II	269.54	278.89	259.17	264.09	256.64	252.60	269.55	272.17	275.19	291.53	249.25	276.75	3215.37
NNTPS	0.00	0.00	0.00	2.39	6.77	8.42	8.68	8.42	8.68	8.68	7.86	8.68	68.59
Total CGS New	450.97	472.23	430.42	463.30	462.43	454.07	468.02	460.27	487.61	509.72	433.47	486.87	5579.39
Total CGS	1111.06	1146.43	988.46	978.59	1082.36	1070.67	1122.93	1114.46	1131.58	1193.56	1059.49	1169.01	13168.59

	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
	1	1				PCL	1						
APGPCL I - Allocated capacity	1.60	1.66	1.60	1.66	1.60	1.60	1.65	1.60	1.66	1.60	1.55	1.66	19.44
APGPCL II - Allocated capacity	5.11	5.28	5.11	5.28	5.11	5.11	5.28	5.11	5.28	5.08	4.94	5.28	61.97
Total APGPCL	6.71	6.94	6.71	6.94	6.71	6.71	6.93	6.71	6.94	6.68	6.49	6.94	81.41
	1	1			IP	PS	1						
GVK	69.30	71.70	69.30	71.70	71.70	69.30	71.70	69.30	71.70	71.70	64.50	11.70	783.60
Spectrum	57.32	59.23	57.32	59.23	59.23	57.32	59.23	57.32	59.23	59.23	53.50	59.23	697.41
Kondapalli (Gas)	101.11	104.48	101.11	104.48	104.48	101.11	104.48	101.11	104.48	104.48	94.37	104.48	1230.12
Total IPPS	227.73	235.41	227.73	235.41	235.41	227.73	235.41	227.73	235.41	235.41	212.37	175.41	2711.13
					N	CE							
NCE - Bio-Mass	29.36	32.73	29.86	31.66	20.96	16.29	29.88	24.85	30.83	33.25	32.75	37.57	350.00
NCE - Bagasse	0.08	0.00	2.97	0.00	0.00	0.00	2.00	8.95	19.07	17.58	16.17	8.30	75.13
NCE - Industrial Waste based power project	1.68	1.72	3.01	3.23	1.63	2.27	2.00	0.49	3.64	4.15	3.65	2.98	30.45
NCE - Wind Power	434.45	654.05	1186.77	1451.98	1120.96	571.97	455.37	318.15	336.04	403.84	441.88	433.10	7808.58
NCE - Mini Hydel	3.45	2.16	6.72	6.48	2.19	4.57	16.11	15.63	14.77	14.49	10.16	8.30	105.05
NCE - NCL Energy Ltd	0.00	0.00	0.00	0.80	0.80	2.80	2.80	2.80	2.80	0.80	0.00	0.00	13.60
NCE - Solar Projects (SPD)	34.38	33.03	27.20	28.14	26.78	27.12	31.42	29.22	29.64	31.23	33.35	33.09	364.60
NCE- Solar Parks	257.43	260.37	235.59	242.25	183.06	220.06	341.79	329.28	336.93	340.63	321.97	350.42	3419.78
NVVNL Bundled Power -SOLAR	2.05	1.23	0.65	0.65	0.12	0.39	0.76	1.52	0.82	0.40	1.41	2.50	12.47
NTPC Ramagundam Solar Power	0.28	0.31	0.24	0.23	0.19	0.25	0.29	0.29	0.29	0.29	0.28	0.32	3.26
Total NCE	763.15	985.60	1493.01	1765.44	1356.70	845.71	882.42	731.18	774.83	846.66	861.62	876.59	12182.91
	I				r	IERS							
Srivathsa (Exclusive EPDCL)	5.62	5.81	5.62	5.81	5.81	5.62	5.81	5.62	5.81	5.81	5.25	5.81	68.41
KSK Mahanadi (MT)	205.48	212.33	205.48	212.33	212.33	205.48	212.33	205.48	212.33	212.33	191.78	212.33	2500.01
Thermal Power Tech	152.82	157.91	152.82	157.91	157.91	152.82	157.91	152.82	123.61	157.91	142.63	157.91	1824.98
Total Others	363.92	376.05	363.92	376.05	376.05	363.92	376.05	363.92	341.75	376.05	339.66	376.05	4393.40
	0.00	0.00	00.00	00.00		RKET	150.00	100.00	0.00	0.00	0.00	0.00	010.00
PTC (Power Exchanges)	0.00 45.85	0.00	90.00 86.73	90.00 74.62	120.00 5.36	180.00 17.55	150.00 45.85	180.00 100.50	0.00 86.73	0.00 74.62	0.00 5.36	0.00	810.00 661.23
Of Other Short Term Sources	43.83	0.00	0.00	0.00	0.00	0.00	250.00	150.00	0.00	0.00	0.00	0.00	400.00
Bi-lateral Purchases	360.00	372.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	372.00	336.00	372.00	1812.00
Total Market	405.85	472.50	176.73	164.62	125.36	197.55	445.85	430.50	86.73	446.62	341.36	389.55	3683.23
TOTAL (From All Sources)	5308.38	5643.68	5450.31	5588.32	5561.50	5059.46	5725.60	5499.52	5296.02	5874.88	5397.41	5768.07	66173.14

# Station wise, Month wise availability of Energy (MU) for FY 2018-19 as per APERC

S. No.	Station	Capacity (MW)	AP Share (MW)	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
	AP Genco-Thermal															
1															2517.95	
2	Dr.NTTPS Stage - II	420	420	227.81	235.41	173.86	235.41	235.41	107.91	155.47	227.81	235.41	235.41	212.63	235.41	2517.95
3	Dr.NTTPS Stage - III	420	420	215.82	223.02	161.87	169.06	223.02	215.82	223.02	215.82	223.02	223.02	201.44	223.02	2517.95
4	Dr.NTTPS Stage - IV	500	500	260.45	269.14	260.45	138.91	269.14	260.45	269.14	260.45	269.14	269.14	243.09	269.14	3038.63
5	RTPP Stage-I	420	420	215.82	223.02	161.87	223.02	223.02	215.82	169.06	215.82	223.02	223.02	201.44	223.02	2517.95
6	RTPP Stage-II	420	420	209.18	216.16	209.18	165.80	216.16	100.72	180.00	209.18	216.16	216.16	195.24	216.16	2350.09
7	RTPP Stage-III	210	210	100.72	104.08	100.72	104.08	53.72	100.72	104.08	100.72	104.08	104.08	94.00	104.08	1175.04
8	RTPP Stage-IV	600	600	259.74	268.40	259.74	268.40	268.40	259.74	289.04	279.72	289.04	289.04	261.07	309.69	3302.03
	Total AP Genco-Thermal	3410	3410	1705.69	1762.55	1543.82	1528.01	1658.23	1477.32	1573.47	1707.64	1783.20	1783.20	1610.63	1803.84	19937.60
	AP Genco-Hydel		<u>.</u>												· · · · · ·	
9	Machkund PH AP Share	84	84	24	28	28	28	30	28	28	28	28	26	24	28	328
10	Tungabhadra PH AP Share	57.6	57.6	4	3	3	10	23	22	20	17	12	8	4	4	130
11	Upper Sileru Power House	240	240	20	20	30	45	45	45	45	45	45	30	30	30	430
12	Lower Sileru Power House	460	460	60	60	80	105	105	100	100	100	100	90	90	90	1080
13	Donkarayi	25	25	5	5	10	12	12	10	10	10	10	6	6	4	100
14	Srisailam Right Bank Power House	770	770	1	1	30	180	180	180	150	150	30	30	30	30	992
15	Nagarjunasagar Right Bank Power House	90	90	1	1	1	1	4	10	20	20	12	8	4	3	85
16	Penna Ahobilam	20	20	0.05	0.05	0.15	0.5	1.25	1.25	1.25	1.1	0.6	0.4	0.2	0.2	7
17	Mini Hydel(Chettipeta)	1	1	0.15	0.1	0.1	0.4	0.3	0.35	0.35	0.35	0.3	0.3	0.15	0.15	3
18	Nagarjunasagar Tail Pond Dam Power House	50	50	1	1	1	5	9	15	15	18	18	10	5	5	103
	Total AP Genco-Hydel	1797.6	1797.6	116.2	119.15	183.25	386.9	409.55	411.6	389.6	389.45	255.9	208.7	193.35	194.35	3258
	Total AP GENCO	5207.6	5207.6	1821.89	1881.70	1727.07	1914.91	2067.78	1888.92	1963.07	2097.09	2039.10	1991.90	1803.98	1998.19	23195.60

S. No.	Station	Capacity (MW)	AP Share (MW)	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
	APPDCL															
19	SDSTPP - I	800	800	395.28	408.46	395.28	210.82	408.46	395.28	408.46	395.28	408.46	408.46	368.93	408.46	4611.64
20	SDSTPP - II	800	800	395.28	408.46	395.28	408.46	210.82	395.28	408.46	395.28	408.46	408.46	368.93	408.46	4611.64
	Total APPDCL	1600	1600	790.57	816.92	790.57	619.28	619.28	790.57	816.92	790.57	816.92	816.92	737.86	816.92	9223.27
	Central Generating Stations	(CGS)		1					1							
	NTPC     VTPC															
21	Ramagundam Stage - I & II         2100         252.84         136.29         143.16         136.29         147.49         147.61         129.55         127.38         144.00         133.40         156.28         141.11         142.91         1685.48															1685.48
22	Ramagundam Stage-III	500	63	38.43	39.82	35.03	19.91	12.73	35.03	36.29	35.03	36.29	36.29	32.76	36.29	393.88
23	Talcher Stage II	2000	164.4	108.92	107.93	80.64	87.79	91.32	108.50	113.27	109.65	113.27	113.27	102.34	113.27	1250.18
24	Simhadri Stage I	1000	461.1	271.59	278.97	192.74	143.86	280.81	271.59	280.81	271.59	280.81	280.81	254.07	280.81	3088.45
25	Simhadri Stage II	1000	184.4	103.26	107.87	103.26	106.77	93.86	72.47	106.77	103.26	106.77	107.51	96.99	108.80	1217.59
	Total NTPC	6600	1125.74	658.49	677.74	547.96	505.82	626.33	617.14	664.52	663.53	670.54	694.15	627.27	682.08	7635.58
	NLC															
26	Stage-I	630	46.116	22.40	22.98	21.45	15.74	22.69	16.18	19.84	14.27	21.08	22.84	20.72	22.77	242.95
27	Stage-II	840	83.412	42.60	43.79	31.38	40.91	32.47	36.64	30.49	38.43	30.09	43.59	39.22	43.49	453.11
	Total NLC	1470	129.53	65.00	66.78	52.83	56.65	55.16	52.82	50.32	52.70	51.17	66.43	59.94	66.26	696.06
	NPC															
28	MAPS	440	18.30	8.82	4.28	6.45	9.11	9.11	8.82	9.11	8.82	9.11	9.11	8.15	9.11	100.01
29	Kaiga Unit-I & II	440	55.92	31.27	32.03	31.27	16.14	24.15	31.27	32.03	31.27	32.03	32.03	29.23	32.03	354.74
30	Kaiga Unit-III & IV	440	59.62	32.25	33.06	32.25	33.06	33.06	32.25	33.06	32.25	16.53	24.80	30.35	33.06	365.99
	Total NPC	1320	133.85	72.33	69.38	69.96	58.31	66.32	72.33	74.20	72.33	57.67	65.94	67.74	74.20	820.73
21	CGS Others / NEW	2400	211.2	95.00	00.07	95.00	00.07	00.07	95.00	00.04	95.00	01.02	06.06	(0.24	96.95	1042.00
31 32	Kudigi Valluru	2400 1500	211.2 112.95	85.99 70.18	88.86 72.51	85.99 50.07	88.86 66.94	88.86 72.51	85.99 67.85	88.86 57.68	<u>85.99</u> 49.17	91.82 71.76	96.26 73.34	69.24 66.26	86.25 73.34	<u>1042.99</u> 791.63
33	Tuticoron	1000	139.1	62.87	72.65	72.65	86.62	83.83	83.83	86.62	83.83	86.62	86.62	78.24	86.62	971.01
34	NNTPS	1000	52.4	0.00	0.00	0.00	2.39	6.77	8.42	8.68	8.42	8.68	8.68	7.86	8.68	68.59
35	JNNSM Phase-I	2000	39.19	28.22	29.16	28.22	29.16	29.16	28.22	29.16	28.22	29.16	29.16	26.34	29.16	343.30
36	JNNSM Phase-II		500	360.00	372.00	360.00	372.00	372.00	360.00	372.00	360.00	372.00	372.00	336.00	372.00	4380.00
	Total CGS Others / New		1054.84	607.26	635.18	<b>596.94</b>	645.98	653.13	634.31	643.00	615.63	660.04	666.07	583.94	656.05	7597.52
	Total CGS			1403.0838					1376.601					1338.884		16749.885

S. No.	Station	Capacity (MW)	AP Share (MW)	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
	APGPCL															
37	APGPCL-I		9.33	1.6	1.66	1.6	1.66	1.6	1.6	1.65	1.6	1.66	1.6	1.55	1.66	19.44
38	APGPCL-II		24.9572	5.11	5.28	5.11	5.28	5.11	5.11	5.28	5.11	5.28	5.08	4.94	5.28	61.97
	Total APGPCL		34.2872	6.71	6.94	6.71	6.94	6.71	6.71	6.93	6.71	6.94	6.68	6.49	6.94	81.41
]	IPPs															
39															783.60	
40	Spectrum		205.19	57.32	59.23	57.32	59.23	59.23	57.32	59.23	57.32	59.23	59.23	53.50	59.23	697.41
41	Kondapalli (Gas)		361.92	101.11	104.48	101.11	104.48	104.48	101.11	104.48	101.11	104.48	104.48	94.37	104.48	1230.12
	Total IPPs		783.93	227.73	235.41	227.73	235.41	235.41	227.73	235.41	227.73	235.41	235.41	212.37	175.41	2711.13
]	NCE															
42	NCE - Bio-Mass	144.5	144.5	29.36	32.73	29.86	31.66	20.96	16.29	29.88	24.85	30.83	33.25	32.75	37.57	350.00
43	NCE - Bagasse	105.2	105.2	0.00	0.00	0.00	0.00	0.00	0.00	2.09	9.33	19.86	18.31	16.85	8.64	75.08
44	NCE - Industrial Waste based power project	21.66	21.66	1.68	1.72	3.01	3.23	1.63	2.27	2.00	0.49	3.64	4.15	3.65	2.98	30.45
45	NCE - Wind Power	4810.55	4810.55	434.45	654.05	1186.77	1451.98	1120.96	571.97	455.37	318.15	336.04	403.84	441.88	433.10	7808.58
46	NCE - Mini Hydel	46.1	46.1	3.45	2.16	6.72	6.48	2.19	4.57	16.11	15.63	14.77	14.49	10.16	8.30	105.05
47	NCE - NCL Energy Ltd	8.25	8.25	0.00	0.00	0.00	0.80	0.80	2.80	2.80	2.80	2.80	0.80	0.00	0.00	13.60
48	NCE - Solar Projects (SPD)	556	556	80.06	82.73	80.06	82.73	82.73	80.06	82.73	80.06	82.73	82.73	74.73	82.73	974.11
49	NCE- Solar Parks	2050	2050	202.50	209.25	202.50	209.25	209.25	202.50	343.17	332.10	343.17	343.17	309.96	343.17	3249.99
50	NVVNL Bundled Power - SOLAR	85	85	2.05	1.23	0.65	0.65	0.12	0.39	0.76	1.52	0.82	0.40	1.41	2.50	12.47
51	NTPC Ramagundam Solar Power	10		0.28	0.31	0.24	0.23	0.19	0.25	0.29	0.29	0.29	0.29	0.28	0.32	3.26
	Total NCE	7837.26	7837.26	753.82	984.18	1509.81	1787.03	1438.84	881.09	935.20	785.22	834.96	901.43	891.66	919.33	12622.58
	OTHERS															
52	KSK Mahanadi (MT)		400	205.48	212.33	205.48	212.33	212.33	205.48	212.33	205.48	212.33	212.33	191.78	212.33	2500.01
53	Thermal Power Tech	500	230.55	132.33	136.74	132.33	136.74	136.74	132.33	136.74	132.33	114.68	136.74	123.51	136.74	1587.92
	Total OTHERS		630.55	337.81	349.07	337.81	349.07	349.07	337.81	349.07	337.81	327.01	349.07	315.29	349.07	4087.93
	From All Sources		18537.58	5341.61	5723.29	5867.39	6179.39	6118.03	5509.43	5738.64	5649.32	5699.76	5793.99	5306.53	5744.45	68671.81

# Energy (MU) Despatch for FY 2018-19 as per DISCOMs Filing

	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
	-				APG	ENCO							
Thermal													
VTPS I	188.84	195.14	188.84	195.14	147.99	188.84	160.47	173.08	195.14	195.14	176.25	195.14	2200.00
VTPS II	212.62	219.71	162.26	219.71	219.71	100.71	145.10	212.62	219.71	219.71	198.44	219.71	2350.00
VTPS III	201.43	208.14	151.07	157.79	208.14	201.43	208.14	201.43	208.14	208.14	188.00	208.14	2350.00
VTPS IV	260.57	269.26	260.57	138.97	269.26	260.57	269.26	260.57	269.26	269.26	243.20	269.26	3040.00
RTPP I	200.95	207.65	150.71	207.65	207.65	200.95	157.41	200.95	207.65	207.65	187.55	207.65	2344.40
RTPP Stage-II	208.68	215.63	208.68	165.40	215.63	100.47	179.57	208.68	215.63	215.63	146.35	215.63	2295.98
RTPP Stage-III	100.47	103.82	100.47	103.82	53.59	100.47	103.82	100.47	103.82	103.82	93.78	103.82	1172.20
Damodaram Sanjeevaiah													
Thermal power plant - I	393.15	406.25	393.15	194.78	450.77	393.15	400.69	398.53	406.25	400.69	366.94	411.82	4616.18
Damodaram Sanjeevaiah Thermal power plant - II	393.15	406.25	398.53	445.21	194.78	393.15	400.69	393.15	406.25	400.69	368.95	406.25	4607.06
RTPP Stage-IV	119.88	123.88	119.88	123.88	123.88	119.88	289.04	279.72	289.04	289.04	261.07	289.04	2428.24
Total Thermal	2279.74	2355.73	<b>2134.17</b>	123.88 1952.33	2091.40	2059.63	2314.19	2429.20	<b>2520.90</b>	<b>2509.77</b>	201.07	<b>2526.46</b>	27404.04
Hvdro	2217.14	2000.10	2134.17	1752.55	2071.40	2057.05	2314,17	242).20	2520.70	2507.11	2230.33	2520.40	27404.04
MACHKUND PH AP Share	24.75	27.72	27.72	27.72	29.70	27.72	27.72	27.72	27.72	25.74	23.76	27.72	325.71
TUNGBHADRA PH AP Share	3.54	0.62	0.04	5.52	9.90	11.88	11.88	7.92	7.92	5.94	5.94	3.96	75.07
Upper Sileru Power House (AP)	19.80	9.90	9.90	19.80	29.70	17.82	29.70	23.76	23.76	32.67	54.45	71.28	342.54
Lower Sileru Power House	17.00	2.20	7.70	17.00	29.10	17.02	29.10	23.10	23.10	52.07	54.45	/1.20	0-12:0-1
(AP)	89.10	24.75	19.80	49.50	79.20	59.40	69.30	69.30	79.20	108.90	108.90	108.90	866.25
DONKARAYI (AP)	3.28	0.99	0.99	0.99	5.94	5.94	8.91	8.91	8.91	8.91	5.94	7.92	67.63
Srisailam Right Bank Power House (AP)	7.92	0.00	0.00	0.00	118.80	138.60	158.40	19.80	19.80	59.40	89.10	19.80	631.62
Nagarjunasagar Right Bank Power House (AP)	1.09	0.00	0.00	0.00	3.96	0.00	10.90	10.80	11.00	7.02	2.00	2.07	92 17
Power House (AP) Penna Ahobilam (AP)	1.98 0.03	0.00	0.00	0.00	1.10	9.90	<u>19.80</u> 1.19	19.80 0.73	11.88 0.59	7.92 0.38	3.96 0.20	2.97 0.20	82.17 5.72
		0.04				1.10							5.72
MINI HYDEL(Chettipeta)-AP Nagarjunasagar Tail Pond Dam	0.13	0.00	0.07	0.38	0.30	0.33	0.07	0.05	0.28	0.39	0.28	0.37	2.62
Power House	0.99	0.99	0.99	4.95	8.91	14.85	14.85	17.82	17.82	9.90	4.95	4.95	101.97
Total HYDRO	151.52	65.01	59.59	108.95	287.51	287.54	341.82	195.81	197.88	260.14	297.48	248.06	2501.31
Total APGENCO	2431.26	2420.74	2193.76	2061.28	2378.90	2347.17	2656.01	2625.02	2718.78	2769.91	2528.01	2774.53	29905.35
				Centra	al Generati	ing Stations	s (CGS)						

	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
						<b>TPC</b>							
					NTP	C (SR)		[					
NTPC (SR)-Ramagundam Stage1&2	110.78	116.36	110.78	119.88	119.98	105.30	103.54	117.05	108.43	127.03	114.70	116.16	1370.00
NTPC (SR)-Ramagundam Stage 3	31.25	32.38	28.48	16.19	10.35	28.48	29.51	28.48	29.51	29.51	26.64	29.51	320.27
Total NTPC(SR)	142.03	148.74	139.26	136.07	130.33	133.78	133.05	145.53	137.94	156.53	141.33	145.67	1690.27
					NTP	C (ER)							
Talcher Stage 2	88.53	87.72	65.54	71.36	74.23	88.19	92.07	89.13	92.07	92.07	83.18	92.07	1016.15
Total NTPC(ER)	88.53	87.72	65.54	71.36	74.23	88.19	92.07	89.13	92.07	92.07	83.18	92.07	1016.15
Total NTPC	230.56	236.46	204.81	207.43	204.56	221.98	225.11	234.66	230.01	248.60	224.52	237.74	2706.42
					NL	C TS-II							
Stage-I	18.20	18.68	17.43	12.79	18.44	13.15	16.12	11.60	17.13	18.56	16.84	18.50	197.44
Stage-II	34.64	35.61	25.52	33.27	26.40	29.80	24.79	31.25	24.47	35.45	31.90	35.37	368.45
Total NLC	52.84	54.29	42.95	46.06	44.85	42.94	40.91	42.85	41.60	54.01	48.73	53.87	565.89
	1	1				РС							
NPC-MAPS	8.82	4.29	6.45	9.11	9.11	8.82	9.11	8.82	9.11	9.11	8.16	9.11	100.05
NPC-Kaiga unit Iⅈ	31.25	32.02	31.25	16.14	24.14	31.25	32.02	31.25	32.02	32.02	29.22	32.02	354.60
NPC-Kaiga unit III&IV	32.24	33.05	32.24	33.05	33.05	32.24	33.05	32.24	16.52	24.79	30.34	33.05	365.85
Total NPC	72.31	69.35	69.94	58.30	66.30	72.31	74.18	72.31	57.66	65.92	67.72	74.18	820.49
					NTPC -	Simhadri							
NTPC Simhadri Stage I	220.53	226.52	156.50	116.82	228.02	220.53	228.02	220.53	228.02	228.02	206.30	228.02	2507.82
NTPC Simhadri Stage II	83.84	87.58	83.84	86.69	76.21	58.84	86.69	83.84	86.69	87.28	78.75	88.33	988.58
Total NTPC- Simhadri	304.37	314.10	240.35	203.50	304.22	279.37	314.70	304.37	314.70	315.30	285.05	316.35	3496.40
	1					– New							
Bundled power under JVNSM	21.59	22.35	20.64	20.98	20.29	20.03	21.49	21.84	22.01	23.51	19.94	22.15	256.81
Vallur Thermal Power Plant	57.04	58.94	40.70	54.41	58.94	55.14	46.88	39.97	58.33	59.61	53.86	59.61	643.42
Kudigi	57.71	5.42	57.71	59.64	59.64	57.71	59.64	57.71	38.93	64.61	0.00	57.88	576.61
Tuticorin	45.08	52.41	52.19	61.79	60.16	60.16	61.79	60.16	61.79	61.79	56.10	61.79	695.21
JNNSM Phase-II	269.54	278.89	259.17	264.09	256.64	252.60	269.55	272.17	275.19	291.53	249.25	276.75	3215.37
NNTPS	0.00	0.00	0.00	2.39	6.77	8.42	8.68	8.42	8.68	8.68	7.86	8.68	68.59
Total CGS New	450.97	418.01	430.42	463.30	462.43	454.07	468.02	460.27	464.92	509.72	387.00	486.87	5456.01
Total CGS	1111.06	1092.21	988.46	978.59	1082.36	1070.67	1122.93	1114.46	1108.89	1193.56	1013.02	1169.01	13045.21
	1111.00	1072.21	700.40	710.07		GPCL	1144,75	1117,70	1100.07	1175.50	1013.02	1107.01	13073.21
APGPCL I - Allocated capacity	1.60	1.66	1.60	1.66	1.60	1.60	1.65	1.60	1.66	1.60	1.55	1.66	19.44

	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
APGPCL II - Allocated													
capacity	5.11	5.28	5.11	5.28	5.11	5.11	5.28	5.11	5.28	5.08	4.94	5.28	61.97
Total APGPCL	6.71	6.94	6.71	6.94	6.71	6.71	6.93	6.71	6.94	6.68	6.49	6.94	81.41
					IF	PPS							
GVK	69.30	71.70	69.30	71.70	71.70	69.30	71.70	69.30	71.70	71.70	64.50	11.70	783.60
Spectrum	57.32	59.23	57.32	59.23	59.23	57.32	59.23	57.32	59.23	59.23	53.50	59.23	697.41
Kondapalli (Gas)	101.11	104.48	101.11	104.48	104.48	101.11	104.48	101.11	104.48	104.48	94.37	104.48	1230.12
Total IPPS	227.73	235.41	227.73	235.41	235.41	227.73	235.41	227.73	235.41	235.41	212.37	175.41	2711.13
					Ν	CE							
NCE - Bio-Mass	29.36	32.73	29.86	31.66	20.96	16.29	29.88	24.85	30.83	33.25	32.75	37.57	350.00
NCE - Bagasse	0.08	0.00	2.97	0.00	0.00	0.00	2.00	8.95	19.07	17.58	16.17	8.30	75.13
NCE - Industrial Waste based													
power project	1.68	1.72	3.01	3.23	1.63	2.27	2.00	0.49	3.64	4.15	3.65	2.98	30.45
NCE - Wind Power	434.45	654.05	1186.77	1451.98	1120.96	571.97	455.37	318.15	336.04	403.84	441.88	433.10	7808.58
NCE - Mini Hydel	3.45	2.16	6.72	6.48	2.19	4.57	16.11	15.63	14.77	14.49	10.16	8.30	105.05
NCE - NCL Energy Ltd	0.00	0.00	0.00	0.80	0.80	2.80	2.80	2.80	2.80	0.80	0.00	0.00	13.60
NCE - Solar Projects (SPD)	34.38	33.03	27.20	28.14	26.78	27.12	31.42	29.22	29.64	31.23	33.35	33.09	364.60
NCE- Solar Parks	257.43	260.37	235.59	242.25	183.06	220.06	341.79	329.28	336.93	340.63	321.97	350.42	3419.78
NVVNL Bundled Power -													
SOLAR	2.05	1.23	0.65	0.65	0.12	0.39	0.76	1.52	0.82	0.40	1.41	2.50	12.47
NTPC Ramagundam Solar													
Power	0.28	0.31	0.24	0.23	0.19	0.25	0.29	0.29	0.29	0.29	0.28	0.32	3.26
Total NCE	763.15	985.60	1493.01	1765.44	1356.70	845.71	882.42	731.18	774.83	846.66	861.62	876.59	12182.91
						IERS							
Srivathsa (Exclusive EPDCL)	5.62	5.81	5.62	5.81	5.81	5.62	5.81	5.62	5.81	5.81	5.25	5.81	68.41
KSK Mahanadi (MT)	205.48	212.33	205.48	212.33	212.33	205.48	212.33	205.48	212.33	212.33	191.78	212.33	2500.01
Thermal Power Tech	152.82	157.91	152.82	157.91	157.91	152.82	157.91	152.82	123.61	157.91	142.63	157.91	1824.98
Total Others	363.92	376.05	363.92	376.05	376.05	363.92	376.05	363.92	341.75	376.05	339.66	376.05	4393.40
					MAI	RKET				r			
PTC (Power Exchanges)	0.00	0.00	15.54	42.77	116.06	164.59	150.00	180.00	0.00	0.00	0.00	0.00	668.96
UI	45.85	100.50	86.73	74.62	5.36	17.55	45.85	100.50	86.73	74.62	5.36	17.55	661.23
Other Short Term Sources	0.00	0.00	0.00	0.00	0.00	0.00	234.55	126.42	0.00	0.00	0.00	0.00	360.97
Bi-lateral Purchases*	246.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.68	0.00	369.00	634.07
D-D Purchases / Sales	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200.00
Bilateral Sales	0.00	0.00	-800.00	-800.00	-700.00	-200.00	0.00	0.00	-400.00	-400.00	0.00	0.00	-3300.00
Total Market	292.25	100.50	-597.73	-582.62	-578.57	-17.86	430.40	406.92	-313.27	-306.70	5.36	386.55	-774.77
TOTAL (From All Sources)	5196.08	5217.46	4675.86	4841.09	4857.56	4844.05	5710.15	5475.94	4873.33	5121.56	4966.52	5765.06	61544.64

# Energy (MU) Despatch for FY2018-19 as per APERC

S. No.	Station	Variable Cost Rs./kWh	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
1	NCE - NCL Energy Ltd	1.81	0.00	0.00	0.00	0.80	0.80	2.80	2.80	2.80	2.80	0.80	0.00	0.00	13.60
2	NCE - Mini Hydel	2.72	3.45	2.16	6.72	6.48	2.19	4.57	16.11	15.63	14.77	14.49	10.16	8.30	105.05
3	NCE - Wind Power	4.64	434.45	654.05	1186.77	1451.98	1120.96	571.97	455.37	318.15	336.04	403.84	441.88	433.10	7808.58
4	NCE- Solar Parks	4.79	202.50	209.25	202.50	209.25	209.25	202.50	343.17	332.10	343.17	343.17	309.96	343.17	3249.99
5	NCE – Bagasse	4.81	0.00	0.00	0.00	0.00	0.00	0.00	2.09	9.33	19.86	18.31	16.85	8.64	75.08
6	NCE - Solar Projects (SPD)	5.95	80.06	82.73	80.06	82.73	82.73	80.06	82.73	80.06	82.73	82.73	74.73	82.73	974.11
7	NCE - Industrial Waste based power projects	6.85	1.68	1.72	3.01	3.23	1.63	2.27	2.00	0.49	3.64	4.15	3.65	2.98	30.45
8	NCE - Bio-Mass	7.00	29.36	32.73	29.86	31.66	20.96	16.29	29.88	24.85	30.83	33.25	32.75	37.57	350.00
9	NTPC Ramagundam Solar Power	9.35	0.28	0.31	0.24	0.23	0.19	0.25	0.29	0.29	0.29	0.29	0.28	0.32	3.26
10	NVVNL Bundled Power -SOLAR	10.65	2.05	1.23	0.65	0.65	0.12	0.39	0.76	1.52	0.82	0.40	1.41	2.50	12.47
11	Machkund PH AP Share	0	24	28	28	28	30	28	28	28	28	26	24	28	328.00
12	Tungabhadra PH AP Share	0	4	3	3	10	23	22	20	17	12	8	4	4	130.00
13	Upper Sileru Power House	0	20	20	30	45	45	45	45	45	45	30	30	30	430.00
14	Lower Sileru Power House	0	60	60	80	105	105	100	100	100	100	90	90	90	1080.00
15	Donkarai	0	5	5	10	12	12	10	10	10	10	6	6	4	100.00
16	Srisailam Right Bank Power House	0	1	1	30	180	180	180	150	150	30	30	30	30	992.00
17	Nagarjunasagar Right Bank Power House	0	1	1	1	1	4	10	20	20	12	8	4	3	85.00
18	Penna Ahobilam	0	0.05	0.05	0.15	0.5	1.25	1.25	1.25	1.1	0.6	0.4	0.2	0.2	7.00
19	Mini Hydel (Chettipeta)	0	0.15	0.1	0.1	0.4	0.3	0.35	0.35	0.35	0.3	0.3	0.15	0.15	3.00
20	Nagarjunasagar Tail Pond Dam Power House	0	1	1	1	5	9	15	15	18	18	10	5	5	103.00
21	MAPS (single part tariff)	2.23	8.82	4.28	6.45	9.11	9.11	8.82	9.11	8.82	9.11	9.11	8.15	9.11	100.01
22	Kaiga Unit-I & II	3.22	31.27	32.03	31.27	16.14	24.15	31.27	32.03	31.27	32.03	32.03	29.23	32.03	354.74
23	Kaiga Unit-III & IV	3.22	32.25	33.06	32.25	33.06	33.06	32.25	33.06	32.25	16.53	24.80	30.35	33.06	365.99
24	Talcher Stage II	1.39	108.92	107.93	80.64	87.79	91.32	108.50	113.27	109.65	113.27	113.27	102.34	113.27	1250.18
25	Thermal Power Tech	1.96	132.33	136.74	132.33	136.74	136.74	132.33	136.74	132.33	114.68	136.74	123.51	136.74	1587.92
26	Ramagundam Stage-III	2.15	38.43	39.82	35.03	19.91	12.73	35.03	36.29	35.03	36.29	36.29	32.76	36.29	393.88

S. No.	Station	Variable Cost Rs./kWh	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
27	APGPCL-II	2.15	5.11	5.28	5.11	5.28	5.11	5.11	5.28	5.11	5.28	5.08	4.94	5.28	61.97
28	Ramagundam Stage - I & II	2.18	136.29	143.16	136.29	147.49	147.61	129.55	127.38	144.00	133.40	156.28	141.11	142.91	1685.48
29	JNNSM Phase-I	2.18	28.22	29.16	28.22	29.16	29.16	28.22	29.16	28.22	29.16	29.16	26.34	29.16	343.30
30	Valluru	2.20	70.18	72.51	50.07	66.94	72.51	67.85	57.68	49.17	71.76	73.34	66.26	73.34	791.63
31	Godavari Gas Power Plant (Erstwhile GVK)	2.20	69.30	71.70	69.30	71.70	71.70	69.30	71.70	69.30	71.70	71.70	64.50	11.70	783.60
32	Lanco Kondapalli (Gas)	2.33	101.11	104.48	101.11	104.48	104.48	101.11	104.48	101.11	104.48	104.48	94.37	104.48	1230.12
33	Tuticoron	2.39	62.87	72.65	72.65	86.62	83.83	83.83	86.62	83.83	86.62	86.62	78.24	86.62	971.01
34	Spectrum (Gas)	2.39	57.32	59.23	57.32	59.23	59.23	57.32	59.23	57.32	59.23	59.23	53.50	59.23	697.41
35	Dr.NTTPS Stage - IV	2.41	260.45	269.14	260.45	138.91	269.14	260.45	269.14	260.45	269.14	269.14	243.09	269.14	3038.63
36	APGPCL-I	2.41	1.6	1.66	1.6	1.66	1.6	1.6	1.65	1.6	1.66	1.6	1.55	1.66	19.44
37	NNTPS	2.49	0.00	0.00	0.00	2.39	6.77	8.42	8.68	8.42	8.68	8.68	7.86	8.68	68.59
38	JNNSM Phase-II	2.50	360.00	372.00	360.00	372.00	372.00	360.00	372.00	360.00	372.00	372.00	336.00	372.00	4380.00
39	KSK Mahanadi (MT)	2.60	205.48	212.33	205.48	212.33	212.33	205.48	212.33	205.48	212.33	212.33	191.78	212.33	2500.01
40	SDSTPP - I	2.61	395.28	408.46	395.28	210.82	408.46	395.28	408.46	395.28	408.46	408.46	368.93	408.46	4611.64
41	SDSTPP - II	2.61	395.28	408.46	395.28	408.46	210.82	395.28	408.46	395.28	408.46	408.46	368.93	408.46	4611.64
42	Dr.NTTPS Stage - I	2.67	216.13	223.34	216.13	223.34	169.38	216.13	183.66	198.10	223.34	223.34	201.72	223.34	2517.95
43	Dr.NTTPS Stage - II	2.67	227.81	235.41	173.86	25.71	235.41	107.91	155.47	227.81	235.41	235.41	212.63	235.41	2308.25
44	Dr.NTTPS Stage - III	2.67	215.82	223.02	15.22	0.00	223.02	215.82	223.02	215.82	223.02	223.02	201.44	223.02	2202.24
45	Simhadri Stage I	2.68	271.59	278.97	0.00	0.00	25.32	271.59	280.81	271.59	280.81	280.81	254.07	280.81	2496.35
46	Simhadri Stage II	2.68	103.26	107.87	0.00	0.00	0.00	72.47	106.77	103.26	106.77	107.51	96.99	108.80	913.70
47	NLC Stage-I	2.88	22.40	22.98	0.00	0.00	0.00	16.18	19.84	14.27	21.08	22.84	20.72	22.77	183.07
48	NLC Stage-II	2.88	42.60	43.79	0.00	0.00	0.00	36.64	30.49	38.43	30.09	43.59	39.22	43.49	348.34
49	RTPP Stage-I	3.14	215.82	204.35	0.00	0.00	0.00	215.82	169.06	215.82	75.21	193.92	201.44	223.02	1714.47
50	RTPP Stage-II	3.14	209.18	0.00	0.00	0.00	0.00	55.58	180.00	209.18	0.00	0.00	195.24	216.16	1065.34
51	RTPP Stage-III	3.14	67.88	0.00	0.00	0.00	0.00	0.00	104.08	100.72	0.00	0.00	58.41	104.08	435.16
52	RTPP Stage-IV	3.14	0.00	0.00	0.00	0.00	0.00	0.00	289.04	227.64	0.00	0.00	0.00	309.69	826.37
53	Kudigi	3.58	0.00	0.00	0.00	0.00	0.00	0.00	23.34	0.00	0.00	0.00	0.00	80.43	103.77
	Total		4963.04	5027.13	4554.40	4643.19	4863.37	5017.84	5673.11	5511.25	4850.85	5059.35	4940.62	5738.63	60842.78

# Approved Station / Source wise power purchase cost for FY2018-19 - APSPDCL

S. No.	Station	Capacity (MW)	Despatch (MU)	Variable Cost (Rs. Cr.)	Variable Cost Rs. /Unit	Fixed Cost (Rs. Cr.)	Fixed Cost (Rs./Unit)	Total Cost (Rs. Cr.)	Average Cost (Rs./Unit)
1	NCE - NCL Energy Ltd	8.25	8.79	1.59	1.81	0.00	0.00	1.59	1.81
2	NCE - Mini Hydel	46.1	67.89	18.46	2.72	0.00	0.00	18.46	2.72
3	NCE - Wind Power	4810.55	5046.05	2341.37	4.64	0.00	0.00	2341.37	4.64
4	NCE- Solar Parks	2050	2100.20	1006.00	4.79	0.00	0.00	1006.00	4.79
5	NCE – Bagasse	105.2	48.52	23.34	4.81	0.00	0.00	23.34	4.81
6	NCE - Solar Projects (SPD)	556	629.49	374.55	5.95	0.00	0.00	374.55	5.95
7	NCE - Industrial Waste based power project	21.66	19.67	13.48	6.85	0.00	0.00	13.48	6.85
8	NCE - Bio-Mass	144.5	226.18	158.32	7.00	0.00	0.00	158.32	7.00
9	NTPC Ramagundam Solar Power	10	2.10	1.97	9.35	0.00	0.00	1.97	9.35
10	NVVNL Bundled Power -SOLAR	85	8.06	8.58	10.65	0.00	0.00	8.58	10.65
11	Machkund PH AP Share	84	211.96	0.00	0.00	20.96	0.99	20.96	0.99
12	Tungabhadra PH AP Share	57.6	84.01	0.00	0.00	14.37	1.71	14.37	1.71
13	Upper Sileru Power House	240	277.87	0.00	0.00	37.76	1.36	37.76	1.36
14	Lower Sileru Power House	460	697.92	0.00	0.00	72.36	1.04	72.36	1.04
15	Donkarayi	25	64.62	0.00	0.00	3.93	0.61	3.93	0.61
16	Srisailam Right Bank Power House	770	641.05	0.00	0.00	112.07	1.75	112.07	1.75
17	Nagarjunasagar Right Bank Power House	90	54.93	0.00	0.00	11.73	2.14	11.73	2.14
18	Penna Ahobilam	20	4.52	0.00	0.00	6.93	15.33	6.93	15.33
19	Mini Hydel (Chettipeta)	1	1.94	0.00	0.00	0.51	2.64	0.51	2.64
20	Nagarjunasagar Tail Pond Dam Power House	50	66.56	0.00	0.00	31.72	4.77	31.72	4.77
21	MAPS	18.304	64.63	14.41	2.23	0.00	0.00	14.41	2.23
22	Kaiga Unit-I & II	55.92	229.24	73.81	3.22	0.00	0.00	73.81	3.22
23	Kaiga Unit-III & IV	59.62	236.51	76.16	3.22	0.00	0.00	76.16	3.22
24	Talcher Stage II	164.4	807.89	112.30	1.39	54.73	0.68	167.02	2.07
25	Thermal Power Tech	230.55	1026.15	201.12	1.96	197.20	1.92	398.32	3.88
26	Ramagundam Stage-III	63	254.53	54.72	2.15	22.57	0.89	77.29	3.04
27	APGPCL-II	24.9572	40.05	8.61	2.15	1.75	0.44	10.36	2.59
28	Ramagundam Stage - I & II	252.84	1089.19	237.44	2.18	84.54	0.78	321.98	2.96
29	JNNSM Phase-I	39.19	221.85	48.36	2.18	31.59	1.42	79.95	3.60
30	Valluru	112.95	511.57	112.54	2.20	92.56	1.81	205.10	4.01
31	Godavari Gas Power Plant (Erstwhile GVK )	216.82	506.38	111.40	2.20	40.00	0.79	151.41	2.99

S. No.	Station	Capacity (MW)	Despatch (MU)	Variable Cost (Rs. Cr.)	Variable Cost Rs. /Unit	Fixed Cost (Rs. Cr.)	Fixed Cost (Rs./Unit)	Total Cost (Rs. Cr.)	Average Cost (Rs./Unit)
32	Lanco Kondapalli (Gas)	361.92	794.93	185.22	2.33	77.61	0.98	262.83	3.31
33	Tuticoron	139.1	627.48	149.97	2.39	100.50	1.60	250.47	3.99
34	Spectrum (Gas)	205.19	450.68	107.71	2.39	42.17	0.94	149.88	3.33
35	Dr.NTTPS Stage - IV	500	1963.62	473.23	2.41	272.85	1.39	746.08	3.80
36	APGPCL-I	9.33	12.56	3.03	2.41	0.63	0.50	3.65	2.91
37	NNTPS	52.4	44.32	11.04	2.49	9.83	2.22	20.86	4.71
38	JNNSM Phase-II	500	2830.44	707.61	2.50	287.85	1.02	995.46	3.52
39	KSK Mahanadi (MT)	400	1615.55	420.04	2.60	293.61	1.82	713.65	4.42
40	SDSTPP - I	800	2980.12	777.81	2.61	303.97	1.02	1081.78	3.63
41	SDSTPP - II	800	2980.12	777.81	2.61	303.97	1.02	1081.78	3.63
42	Dr.NTTPS Stage - I	420	1627.15	434.45	2.67	142.25	0.87	576.70	3.54
43	Dr.NTTPS Stage - II	420	1491.64	398.27	2.67	142.25	0.95	540.52	3.62
44	Dr.NTTPS Stage - III	420	1423.13	379.98	2.67	142.25	1.00	522.23	3.67
45	Simhadri Stage I	461.1	1613.19	432.34	2.68	203.39	1.26	635.73	3.94
46	Simhadri Stage II	184.4	590.45	158.24	2.68	132.68	2.25	290.92	4.93
47	NLC Stage-I	46.116	118.31	34.07	2.88	14.42	1.22	48.49	4.10
48	NLC Stage-II	83.412	225.11	64.83	2.88	27.04	1.20	91.87	4.08
49	RTPP Stage-I	420	1107.92	347.89	3.14	158.55	1.43	506.44	4.57
50	RTPP Stage-II	420	688.44	216.17	3.14	232.46	3.38	448.64	6.52
51	RTPP Stage-III	210	281.21	88.30	3.14	154.84	5.51	243.14	8.65
52	RTPP Stage-IV	600	534.02	167.68	3.14	59.74	1.12	227.42	4.26
53	Kudigi	211.2	67.06	24.01	3.58	106.36	15.86	130.37	19.44
	Sale to EPDCL		-41.7756	-16.88				-16.88	4.04
	Purchase from EPDCL		59.3169	23.96				23.96	4.04
	Additional interest on Pension Bonds AP GENCO					531.28		531.28	
	Income Tax					4.36		4.36	
	Total	18537.6	39335.27	11365.31		4582.15		15947.46	4.05

# Approved Station / Source wise power purchase cost for FY2018-19 - APEPDCL

S. No.	Station	Capacity (MW)	Despatch (MU)	Variable Cost (₹ Cr)	Variable Cost ₹/Unit	Fixed Cost (₹ Cr)	Fixed Cost (₹/Unit)	Total Cost (₹ Cr.)	Average Cost (₹/Unit)
1	NCE - NCL Energy Ltd	8.25	4.81	0.87	1.81	0.00	0.00	0.87	1.81
2	NCE - Mini Hydel	46.1	37.16	10.11	2.72	0.00	0.00	10.11	2.72
3	NCE - Wind Power	4810.55	2762.53	1281.81	4.64	0.00	0.00	1281.81	4.64
4	NCE- Solar Parks	2050	1149.79	550.75	4.79	0.00	0.00	550.75	4.79
5	NCE - Bagasse	105.2	26.56	12.78	4.81	0.00	0.00	12.78	4.81
6	NCE - Solar Projects (SPD)	556	344.62	205.05	5.95	0.00	0.00	205.05	5.95
7	NCE - Industrial Waste based power project	21.66	10.77	7.38	6.85	0.00	0.00	7.38	6.85
8	NCE - Bio-Mass	144.5	123.82	86.68	7.00	0.00	0.00	86.68	7.00
9	NTPC Ramagundam Solar Power	10	1.15	1.08	9.35	0.00	0.00	1.08	9.35
10	NVVNL Bundled Power -SOLAR	85	4.41	4.70	10.65	0.00	0.00	4.70	10.65
11	Machkund PH AP Share	84	116.04	0.00	0.00	10.93	0.94	10.93	0.94
12	Tungabhadra PH AP Share	57.6	45.99	0.00	0.00	7.50	1.63	7.50	1.63
13	Upper Sileru Power House	240	152.13	0.00	0.00	19.69	1.29	19.69	1.29
13	Lower Sileru Power House	460	382.08	0.00	0.00	37.75	0.99	37.75	0.99
15	Donkarayi	25	35.38	0.00	0.00	2.05	0.58	2.05	0.58
16	Srisailam Right Bank Power House	770	350.95	0.00	0.00	58.45	1.67	58.45	1.67
10	Nagarjunasagar Right Bank Power House	90	30.07	0.00	0.00	6.12	2.03	6.12	2.03
18	Penna Ahobilam	20	2.48	0.00	0.00	3.62	14.60	3.62	14.60
19	Mini Hydel (Chettipeta)	20	1.06	0.00	0.00	0.27	2.52	0.27	2.52
1)	Nagarjunasagar Tail Pond Dam Power	1	1.00	0.00	0.00	0.27	2.52	0.27	2.52
20	House	50	36.44	0.00	0.00	16.54	4.54	16.54	4.54
21	MAPS	18.304	35.38	7.89	2.23	0.00	0.00	7.89	2.23
22	Kaiga Unit-I & II	55.92	125.50	40.41	3.22	0.00	0.00	40.41	3.22
23	Kaiga Unit-III & IV	59.62	129.48	41.69	3.22	0.00	0.00	41.69	3.22
24	Talcher Stage II	164.4	442.29	61.48	1.39	28.54	0.65	90.02	2.04
25	Thermal Power Tech	230.55	561.78	110.11	1.96	102.86	1.83	212.97	3.79
26	Ramagundam Stage-III	63	139.35	29.96	2.15	11.77	0.84	41.73	2.99
27	APGPCL-II	24.9572	21.92	4.71	2.15	0.91	0.42	5.63	2.57
28	Ramagundam Stage - I & II	252.84	596.29	129.99	2.18	44.09	0.74	174.09	2.92
29	JNNSM Phase-I	39.19	121.45	26.48	2.18	16.48	1.36	42.95	3.54
30	Valluru	112.95	280.06	61.61	2.20	48.28	1.72	109.89	3.92
31	Godavari Gas Power Plant (Erstwhile GVK )	216.82	277.22	60.99	2.20	21.90	0.79	82.89	2.99
32	Lanco Kondapalli (Gas)	361.92	435.19	101.40	2.33	40.48	0.93	141.88	
33	Tuticoron	139.1	343.52	82.10	2.39	52.42	1.53	134.52	3.92
34	Spectrum (Gas)	205.19	246.73		2.39	21.99	0.89	80.96	
35	Dr.NTTPS Stage - IV	500	1075.01	259.08	2.41	142.32	1.32	401.40	3.73
36	APGPCL-I	9.33	6.88	1.66	2.41	0.33	0.47	1.98	2.88
37	NNTPS	52.4	24.27	6.04	2.49	5.13	2.11	11.17	4.60
38	JNNSM Phase-II	500	1549.56	387.39	2.50	150.15	0.97	537.54	3.47
39	KSK Mahanadi (MT)	400	884.46	229.96	2.60	153.15	1.73	383.11	4.33
40	SDSTPP - I	800	1631.51	425.82	2.61	166.41	1.02	592.24	3.63
41	SDSTIP - II	800	1631.51	425.82	2.61	166.41	1.02	592.24	3.63
42	Dr.NTTPS Stage - I	420	890.81	237.85	2.67	74.20	0.83	312.04	3.50
43	Dr.NTTPS Stage - II	420	816.62	218.04	2.67	74.20	0.03	292.24	3.58

S. No.	Station	Capacity (MW)	Despatch (MU)	Variable Cost (₹ Cr)	Variable Cost ₹/Unit	Fixed Cost (₹ Cr)	Fixed Cost (₹/Unit)	Total Cost (₹ Cr.)	Average Cost (₹/Unit)
44	Dr.NTTPS Stage - III	420	779.11	208.02	2.67	74.20	0.95	282.22	3.62
45	Simhadri Stage I	461.1	883.16	236.69	2.68	106.09	1.20	342.78	3.88
46	Simhadri Stage II	184.4	323.25	86.63	2.68	69.21	2.14	155.84	4.82
47	NLC Stage-I	46.116	64.77	18.65	2.88	7.52	1.16	26.17	4.04
48	NLC Stage-II	83.412	123.24	35.49	2.88	14.11	1.14	49.60	4.02
49	RTPP Stage-I	420	606.55	190.46	3.14	82.70	1.36	273.16	4.50
50	RTPP Stage-II	420	376.90	118.35	3.14	121.25	3.22	239.60	6.36
51	RTPP Stage-III	210	153.95	48.34	3.14	80.76	5.25	129.11	8.39
52	RTPP Stage-IV	600	292.36	91.80	3.14	31.16	1.07	122.96	4.21
53	Kudigi	211.2	36.71	13.14	3.58	55.48	15.11	68.62	18.69
	Sale to SPDCL		-59.3169	-23.96				-23.96	4.04
	Purchase from SPDCL		41.7756	16.88				16.88	4.04
	Additional interest on Pension Bonds AP GENCO					277.08		277.08	
	Income Tax					2.28		2.28	
	Total		21507.52	6211.15	2.89	2406.79	1.12	8617.94	4.01

# Approved Station / Source wise Power Purchase Cost for FY2018-19 – All DISCOMs

	Approved Station / Source w								
S.No.	Station	Capacity (MW)	Despatch (MU)	Variable Cost ₹/Unit	Total Variable Cost (₹ Cr)	FC Considered w.r.t. Availability	Fixed Cost ₹/Unit	Total Cost (₹ Cr)	Total Cost (₹/ Unit)
1	NCE - NCL Energy Ltd	8.25	13.60	1.81	2.46	0	0	2.46	1.81
2	NCE - Mini Hydel	46.1	105.05	2.72	28.57	0	0	28.57	2.72
3	NCE - Wind Power	4810.55	7808.58	4.64	3623.18	0	0	3623.18	4.64
4	NCE- Solar Parks	2050	3249.99	4.79	1556.75	0	0	1556.75	4.79
5	NCE – Bagasse	105.2	75.08	4.81	36.11	0	0	36.11	4.81
6	NCE - Solar Projects (SPD)	556	974.11	5.95	579.60	0	0	579.60	5.95
7	NCE - Industrial Waste based power project	21.66	30.45	6.85	20.85	0	0	20.85	6.85
8	NCE - Bio-Mass	144.5	350.00	7.00	245.00	0	0	245.00	7.00
9	NTPC Ramagundam Solar Power	10	3.26	9.35	3.04	0	0	3.04	9.35
10	NVVNL Bundled Power –SOLAR	85	12.47	10.65	13.28	0	0	13.28	10.65
11	Machkund PH AP Share	84	328.00	0.00	0.00	31.89	0.97	31.89	0.97
12	Tungabhadra PH AP Share	57.6	130.00	0.00	0.00	21.87	1.68	21.87	1.68
13	Upper Sileru Power House	240	430.00	0.00	0.00	57.45	1.34	57.45	1.34
14	Lower Sileru Power House	460	1080.00	0.00	0.00	110.11	1.02	110.11	1.02
15	DONKARAYI	25	100.00	0.00	0.00	5.98	0.60		0.60
16	Srisailam Right Bank Power House	770	992.00	0.00	0.00	170.52	1.72		1.72
17	Nagarjunasagar Right Bank Power House	90	85.00	0.00	0.00	17.85	2.10		2.10
	Penna Ahobilam	20	7.00	0.00	0.00	10.55	15.07		15.07
19	Mini Hydel (Chettipeta)	1	3.00	0.00	0.00	0.78	2.60		2.60
20	Nagarjunasagar Tail Pond Dam Power House	50	103.00	0.00	0.00	48.26	4.69		
	MAPS	18.304	100.01	2.23	22.30		0		
22	Kaiga Unit-I & II	55.92	354.74	3.22	114.23	0	0		3.22
	Kaiga Unit-III & IV	59.62	365.99	3.22	117.85	0	0		
24	Talcher Stage II	164.4	1250.18	1.39	173.77	83.27	0.67	257.04	2.06
25	Thermal Power Tech	230.55	1587.92	1.96	311.23	300.06	1.89		3.85
26	Ramagundam Stage-III	63	393.88	2.15	84.68	34.34	0.87	119.02	3.02
27	APGPCL-II	24.9572	61.97	2.15	13.32	2.66	0.43		
28	Ramagundam Stage - I & II	252.84	1685.48	2.18	367.43	128.63	0.76		
29	JNNSM Phase-I	39.19	343.30		74.84	48.06	1.40		
30	Valluru	112.95	791.63	2.20	174.16		1.78		
31	Godavari Gas Power Plant (Erstwhile GVK)	216.82	783.60		172.39	61.90	0.79		
	Lanco Kondapalli (Gas)	361.92			286.62	118.09	0.96		
33	Tuticoron	139.1	971.01	2.39	232.07	152.92	1.57		
	Spectrum (Gas)	205.19	697.41	2.39	166.68	64.16	0.92		3.31
	Dr.NTTPS Stage - IV	500			732.31	415.17	1.37		
36	APGPCL-I	9.33	19.44	2.41	4.69	0.95	0.49		2.90
37	NNTPS	52.4	68.59		17.08	14.95	2.18		
38	JNNSM Phase-II	500	4380.00		1095.00	438.00	1.00		
39	KSK Mahanadi (MT)	400	2500.01	2.60	650.00	446.76	1.79		
	SDSTPP - I	800		2.61	1203.64	470.39	1.02		
	SDSTPP - II	800		2.61	1203.64	470.39	1.02		
	Dr.NTTPS Stage - I	420		2.67	672.29	216.45	0.86		3.53
	Dr.NTTPS Stage - II	420	2308.25	2.67	616.30	216.45	0.94		
-	Dr.NTTPS Stage - III	420	2202.24	2.67	588.00	216.45	0.98		
	Simhadri Stage I	461.1	2496.35		669.02	309.48	1.24		
			2.70.55	2.00	567.02	202.40	1.27	270.00	5.72

S.No.	Station	Capacity (MW)	Despatch (MU)	Variable Cost ₹/Unit	Total Variable Cost (₹ Cr)	FC Considered w.r.t. Availability	Fixed Cost ₹/Unit	Total Cost (₹ Cr)	Total Cost (₹/ Unit)
46	Simhadri Stage II	184.4	913.70	2.68	244.87	201.89	2.21	446.76	4.89
47	NLC Stage-I	46.116	183.07	2.88	52.73	21.94	1.20	74.67	4.08
48	NLC Stage-II	83.412	348.34	2.88	100.32	41.15	1.18	141.47	4.06
49	RTPP Stage-I	420	1714.47	3.14	538.34	241.26	1.41	779.60	4.55
50	RTPP Stage-II	420	1065.34	3.14	334.52	353.72	3.32	688.24	6.46
51	RTPP Stage-III	210	435.16	3.14	136.64	235.60	5.41	372.24	8.55
52	RTPP Stage-IV	600	826.37	3.14	259.48	90.90	1.10	350.38	4.24
53	Kudigi	211.2	103.77	3.58	37.15	161.84	15.60	198.99	19.18
	Additional interest on Pension Bonds AP Genco					808.28		808.28	
	Income Tax					6.64		6.64	
	Total	18537.58	60842.78		17576.45	6988.86		24565.32	4.04

## Cross Subsdidy Surcharge (CSS) filed by APSPDCL for FY2018-19

Cross Subsuldy S	0		icu og 1				- 	
Category	Average Revenue Realization (Only Demand & Energy Charges)	Per Unit Cost of Power Purchase	Wheeling Charges	Applicable Loss	Cost of Regulatory Asset	CSS (₹/Unit)	20 % of Average Revenue Realization	CSS (₹/Unit)
High Tension								
HT Category at 11 kv								
HT I (A): General	8.82	4.19	0.79	10.24%	0.00	3.36	1.76	1.76
HT I (B): Energy Intensive Industries	5.82	4.19	0.79	10.24%	0.00	0.36	1.16	0.36
HT I (C): Aquaculture and Animal Husbandry	4.10	4.19	0.79	10.24%	0.00	-	0.82	-
HT I (D): Poultry Hatcheries abd Poultry Feed Mixing Plants	6.88	4.19	0.79	10.24%	0.00	1.42	1.38	1.38
HT II: Others	10.18	4.19	0.79	10.24%	0.00	4.72	2.04	2.04
HT II (B): Religious Places	5.16	4.19	0.79	10.24%	0.00	-	1.03	-
HT II (C): Function								
Halls/Auditoriums	11.77	4.19	0.79	10.24%	0.00	6.31	2.35	2.35
HT III: Public Infrastructure and Tourism	9.18	4.19	0.79	10.24%	0.00	3.72	1.84	1.84
HT IV Government LIS	5.82	4.19	0.79	10.24%	0.00	0.36	1.16	0.36
HT IV Private Irrigation and Agriculture	5.82	4.19	0.79	10.24%	0.00	0.36	1.16	0.36
HT IV CPWS	4.80	4.10	0.70	10.240/	0.00		0.09	
HTVCPWS HTVI: Townships & Residential	4.89	4.19	0.79	10.24%	0.00	-	0.98	-
Colonies	6.55	4.19	0.79	10.24%	0.00	1.09	1.31	1.09
HT VIII: Temporary	9.50	4.19	0.79	10.24%	0.00	4.04	1.90	1.90
Category: RESCOs	0.32	4.19	0.79	10.24%	0.00	-	0.06	-
HT Category at 33 kv								
HT I (A): General	7.19	4.19	0.39	7.08%	0.00	2.29	1.44	1.44
HT I (B): Energy Intensive Industries	5.37	4.19	0.39	7.08%	0.00	0.47	1.07	0.47
HT I (C) : Aquaculture and Animal Husbandry	3.86	4.19	0.39	7.08%	0.00	-	0.77	-
HT I (D) : Poultry Hatcheries and Poultry Feed Mixing Plants	7.50	4.19	0.39	7.08%	0.00	2.60	1.50	1.50
HT II: Others	9.08	4.19	0.39	7.08%	0.00	4.18	1.82	1.82
HT II (B): Religious Places	5.36	4.19	0.39	7.08%	0.00	0.46	1.02	0.46
HT II (C) : Function Halls / Auditoriums	11.77	4.19	0.39	7.08%	0.00	6.87	2.35	2.35
HT III: Public Infrastructure and Tourism	10.49	4.19	0.39	7.08%	0.00	5.59	2.10	2.10
HT IV Agriculture	5.82	4.19	0.39	7.08%	0.00	0.92	1.16	0.92
HT IV CPWS	4.89	4.19	0.39	7.08%	0.00	-	0.98	-
HT VI: Townships & Residential Colonies	6.75	4.19	0.39	7.08%	0.00	1.85	1.35	1.35
HT Category at 132 kv								
HT I (A): General	6.88	4.19	0.37	3.83%	0.00	2.16	1.38	1.38
HT I (B): Energy Intensive Industries	4.95	4.19	0.37	3.83%	0.00	0.23	0.99	0.23
HT II: Others	8.22	4.19	0.37	3.83%	0.00	3.50	1.64	1.64
HT IV Agriculture	5.82	4.19	0.37	3.83%	0.00	1.10	1.16	1.10
HT V: Railway Traction	5.01	4.19	0.37	3.83%	0.00	0.29	1.00	0.29

# Cross Subsdidy Surcharge (CSS) filed by APEPDCL for FY2018-19

Category	Average Revenue Realization (Only Demand & Energy Charges)	Per Unit Cost of Power Purchase	Wheeling Charges	Applicable Loss	Cost of Regulatory Asset	CSS (₹/Unit)	20 % of Average Revenue Realization	CSS (₹/Unit)
High Tension								
HT Category at 11 kV								
HT I (A): General	8.23	4.18	0.84	9.65%	0.00	2.76	1.65	1.65
HT I (C): Aquaculture and Animal Husbandry	4.02	4.18	0.84	9.65%	0.00	-	0.80	-
HT I (D): Poultry Hatcheries abd Poultry Feed Mixing Plants	6.46	4.18	0.84	9.65%	0.00	0.99	1.29	0.99
HT II: Others	10.40	4.18	0.84	9.65%	0.00	4.93	2.08	2.08
HT II (B): Religious Places	5.25	4.18	0.84	9.65%	0.00	-	1.05	-
HT II (C): Function Halls/Auditoriums	11.77	4.18	0.84	9.65%	0.00	6.30	2.35	2.35
HT III: Public Infrastructure and Tourism	9.21	4.18	0.84	9.65%	0.00	3.74	1.84	1.84
HT IV Government LIS	5.82	4.18	0.84	9.65%	0.00	0.35	1.16	0.35
HT IV CPWS	4.89	4.18	0.84	9.65%	0.00	-	0.98	-
HT VI: Townships & Residential Colonies	6.65	4.18	0.84	9.65%	0.00	1.18	1.33	1.18
HT VIII: Temporary	18.35	4.18	0.84	9.65%	0.00	12.88	3.67	3.67
Category: RESCOs	0.68	4.18	0.84	9.65%	0.00	-	0.14	-
HT Category at 33 Kv								
HT I (A): General	7.35	4.18	0.37	6.52%	0.00	2.51	1.47	1.47
HT I (B): Energy Intensive Industries	5.37	4.18	0.37	6.52%	0.00	0.53	1.07	0.53
HT II: Others	10.05	4.18	0.37	6.52%	0.00	5.21	2.01	2.01
HT III: Public Infrastructure and Tourism	7.78	4.18	0.37	6.52%	0.00	2.94	1.56	1.56
HT IV Government LIS	5.82	4.18	0.37	6.52%	0.00	0.98	1.16	0.98
HT VI: Townships & Residential Colonies	6.57	4.18	0.37	6.52%	0.00	1.73	1.31	1.31
HT VIII: Temporary	9.92	4.18	0.37	6.52%	0.00	5.08	1.98	1.98
HT Category at 132 kV								
HT I (A): General	7.21	4.18	0.35	3.79%	0.00	2.52	1.44	1.44
HT I (B): Energy Intensive Industries	4.95	4.18	0.35	3.79%	0.00	0.26	0.99	0.26
HT II: Others	9.01	4.18	0.35	3.79%	0.00	4.32	1.80	1.80
HT IV Government LIS	5.82	4.18	0.35	3.79%	0.00	1.13	1.16	1.13
HT V: Railway Traction	4.70	4.18	0.35	3.79%	0.00	0.01	0.94	0.01

### Minutes of Joint meeting of State Advisory Committee

Minutes of Joint meeting of State Advisory Committee (11<sup>th</sup>) and State Co-ordination Forum (6<sup>th</sup>) held on 08.01.2018 in the Conference Hall, 3<sup>rd</sup> Floor, SLDC Building, Vidyuth Soudha, Vijayawada.

The Joint meeting of State Advisory Committee (11<sup>th</sup>) and State Co-ordination Forum (6<sup>th</sup>) was convened on 08.01.2018. The list of members who have attended to the meeting is enclosed as Annexure.

- 1. Sri Justice G. Bhavani Prasad, Chairman, APERC, welcomed all participants on behalf of the Hon'ble Andhra Pradesh Electricity Regulatory Commission, gave an introductory message on the importance of State Advisory Committee and State Co-ordination Forum and requested CMD/APTRANSCO to commence the proceedings.
- 2. Sri K. Vijayanand, Chairman and Managing Director (FAC), APTRANSCO and CMDs/APDISCOMs offered floral welcome to Honourable Chairman and Members of the Commission and welcomed all the participants to the meeting.
- **3.** Sri. P. Dinesh, JMD/Fin., Comml., IPC, HRD & IT, APTRANSCO has welcomed all the Members of the State Advisory Committee (SAC) and State Coordination Forum (SCF) for the joint meeting of 11<sup>th</sup> SAC & 6<sup>th</sup> SCF. JMD has informed the Members that, the APDISCOMs have filed ARR & FPT for FY 2018-19 without proposing any tariff increase.
- 4. The Hon'ble Chairman/APERC in his opening remarks informed the meeting about the sudden demise of Sri R. Saibaba, Member SAC in the recent past and the participants of the joint meeting have observed silence for two minutes paying respects to the departed member.
- 5. Sri. N. Sree Kumar, Member, assisted by Sri Srihari and Ms. Manabika, Prayas Energy Group has made a detailed presentation on Revenue & Tariff Analysis for Electrical Utilities (RATE) Model developed by them. PRAYAS group explained about features and possibilities with RATE i.e. Power Procurement and Distribution under different scenarios such as baseline, high RE, Sales Migration, no sharing of Power between AP and TS and

combination of these. They have elaborated the structure of the model with different scenarios, key variables and assumptions related to Power Procurement, Sales, sales migration, cost escalation and tariffs. The results with the assumed figures were explained in respect of Powerprocurement costs under various scenarios, Impact of surplus management strategies with High RE capacity, strategies to eliminate revenue gap and Tariff design to manage sales migration.

- CMD/APTRANSCO indicated that fuel scarcity, fuel transportation is a major challenge in AP Power Sector as the major portion of coal utilized for thermal power plants in AP is tied up from the Mahanadi Coal Fields and there is a dearth of Rakes for transportation and traffic congestion along the Rail route. Fuel security has become a major concern in AP Power sector and the RATE model should be able to accommodate these variables as well.
- CMD/APTRANSCO also informed that, GoAP has also initiated steps for reduction of Distribution and transmission cost in addition to PP Cost.
- JMD/Fin., Comml., IPC, HRD & IT/APTRANSCO requested Prayas for checking the accuracy of the data and invited Prayas group to discuss the model with the DISCOMs in detail based on comments received and a decision may be taken on the model.
- CMD/APSPDCL requested Prayas to check the accuracy of the data.
- The Hon'ble Chairman has thanked the PRAYAS group for their sincere efforts in developing the RATE model for AP Power sector and opined that a working group among the officers of the Utilities and PRAYAS may be formed to further customize the model to suit AP conditions for better utilization.
- 6. Sri. P. Dinesh, JMD/Fin., Comml., IPC, HRD & IT, APTRANSCO on behalf of the APDISCOMs has made an elaborate presentation on the Aggregate Revenue Requirement (ARR) & Retail Supply Tariff (RST) proposals for FY 2018-19 made before the Hon'ble APERC. The highlights of the presentation were
  - The surplus power availability quoted is not actual surplus and is only the potential available to generate surplus energy during the FY 2018-19.

- Continuous efforts are being made to reduce the power purchase cost which is the major cost item in the ARR, since the bifurcation of the State.
- The power purchase cost has been reduced from Rs 4.32/KWH in FY 2014-15 to Rs 4.10 in FY 2017-18.
- Initiatives were taken up for reduction of power purchase cost, day to day prudent management of Load, committed generation sources and market procurement have helped in achieving decreasing trend in Power purchase cost which made APDISCOMs (APEPDCL & APSPDCL) to stand 1<sup>st</sup> and 2<sup>nd</sup> in implementation of UDAY Scheme.
- The Hon'ble Chairman has opined that the efforts made by the AP Power sector in this regard are appreciable on behalf of the SAC & SCF.
- 7. The other Committee Members gave their views and suggestions regarding the agenda items.

### <u>Sri. K. Subba Rao, FAPSIA</u>

- The projections of DISCOMs on Industrial consumption for the past 3 to 4 years are on higher side and the actual sales are observed to be lower.
- Eventhough energy charges are low, the existing demand charges being high are not beneficial to small and medium industries. The fixation of demand and energy charges may be reviewed and an affordable tariff for the small entrepreneurs shall be designed as there is no growth of MSMEs in the State at the level envisaged by the government.
- Thanked APDISCOMs for not proposing any increase in tariffs for FY 2018-2019.

### Prof. G. Sudharshan Rao, Andhra University

• DISCOMs current proposal of no tariff hike will benefit consumers, but DISCOMs have not presented any initiatives/ measures for filling the huge ARR Gap of Rs. 8000Crs.

• The gap is almost 25% of the ARR and how could the DISCOMs work on Commercial lines as per the provisions of the Electricity Act 2003, with this huge gap and without any proposal for tariff increase.

### <u>Sri K. Hari Kishore Kumar Reddy</u>

- Free Agriculture supply is to be extended to all consumers covered in LT-V category except Corporate Farmers & IT Assesses as is being given in Telangana from last year.
- The expected revenue from charges in LT-V Agriculture category is only around Rs. 40 Crs. and the move will benefit several lakhs of agricultural Consumers.
- Further requested that in similar lines of proposing concessional power to Rural horticulture nurseries up to 5 HP, the horticulture services up to 15 HP in upland areas shall be given concessional rates, since farmers in upland areas require bigger capacity pumps in view of deeper bore wells.
- Power should not be purchased from the plants which are not having PPAs as a result the PP cost may reduce further.

### Sri Vijay Gopal Reddy, FTAPPCI

- Time of the Day (TOD) levied during power shortage period in 2012-13 is to be rolled back in view of the present surplus situation.
- Delayed Payment Surcharge (DPS) is to be reduced in view of falling interest rates, incentivize electronic payments and advance payments, accept consumption deposit in the form of bank guarantee (BG) to reduce the working capital burden on the Industry.
- Demand charges for industrial consumers of AP are highest in the country and therefore the Commission should consider to lower it considerably.
- Cross subsidy is to be eliminated as envisaged in Electricity Act, 2003. The government may collect GST and use the revenue to completely eliminate cross subsidy.

- Load factor incentive should be made applicable for consumers of the state as many other states of the country are already doing the same.
- The benefits of UDAY i.e. reduced interest rates, should be passed on to the consumers.
- The tariff for 132 kV and 33 kV is having a difference of 43 paise whereas the difference in cost of service is 5 to 10 paise only. This should be rationalized.

### Sri R. Shiva Kumar, AP Spinning Mills Association

- In view of the large capacity additions in Renewable Sector, there is lot of generation when compared to load resulting in huge surplus.
- Efforts are to be made to increase / develop the load and certain initiatives like encouragement for more usage by Load Factor incentive etc. may be considered.
- Open access is to be encouraged, Cross Subsidy is to be progressively reduced in the interest of the Industry.
- ARR is an accounting exercise and 5 years Business Plan should be prepared for estimation of future position.
- Excel sheets of the ARR data uploaded in the website are not clearly visible and hence requested to upload the clear excel sheets.
- CERC mandates for considering 85% PLF whereas the State GENCO has considered 65 % PLF leading to underutilization of state assets.
- The industry may be consulted to arrive at a workable tariff.
- 8. On re-introduction of quarterly Fuel Cost Adjustment (FCA) or Fuel Surcharge Adjustment (FSA) as proposed by APGENCO and as per the UDAY mandate specified by the Govt. of India, JMD has stated that, the DISCOMs are willing to enter into a new regime of quarterly FCA/FSA without any adverse impact on the consumers and DISCOMs.
  - After elaborate discussions, the Hon'ble Chairman has suggested the DISCOMs to submit a detailed proposal for introduction of quarterly FCA/FSA to the

Commission and decision will be taken on the matter after due consultation with all the stake holders.

- **9.** Hon'ble Chairman, APERC informed that the Members can provide their views in writing or during the Public Hearings which shall be duly heard and addressed.
- **10.** JMD/Fin., Comml., IPC, HRD & IT/APTRANSCO, on behalf of APDISCOMS reiterated that the licensees are open for suggestions on the tariff proposals and that they would study and incorporate the suggestions received from the members in the meeting as well as those during the Public Hearings.
- 11. The Hon'ble Commission and the Management of AP Power Utilities have felicitated the Members of the 11th SAC who are completing their term, for rendering invaluable services and contributed for the betterment of the power sector.
- 12. The meeting ended with the vote of thanks by JMD/Fin., Comml., IPC, HRD & IT, APTRANSCO.

## Joint Meeting of SAC (11<sup>th</sup>) and State Co-ordination Forum (6<sup>th</sup>) Meeting on 08.01.2018

### LIST OF MEMBERS ATTENDED

#### **State Advisory Committee:**

- 1. Sri Justice G. Bhavani Prasad, Hon'ble Chairman/APERC.
- 2. Dr. P. Raghu, Hon'ble Member/APERC.
- 3. Sri P.Vijayagopala Reddy (Representing Sri Ravindra Modi, Vice- President, FTAPPCI)
- 4. Sri N. Sreekumar, Member, PRAYAS Group.
- 5. Sri K. Subba Rao, FAPSIA.
- 6. Sri Y. Venkateswara Rao, Ritunestham
- 7. Sri S. Murali, Secretary, Indian Wind Power Association.
- 8. Prof. G.Sudarsana Rao, Dept. of Commerce and Management Studies
- 9. Sri G. Venkatewara Rao, KCP Sugar and Industries
- 10. Sri K. Rajendra Reddy, President, Rashtriya Raithu Seva Samithi.
- 11. Sri Sivakumar, (Representing Sri P. Dharmateja, Chairman, AP Spinning Mills Association).
- 12. Sri. K. Hari Kishore Kumar Reddy, Vice President, Bharateeya Kisan Sangh

### **Invitees:**

- 1. Sri K. Vijayanand, IAS, Chairman & Managing Director /APTRANSCO (FAC)
- 2. Sri K. Vijayanand, IAS, MD/APGENCO.
- 3. Sri H.Y.Dora, Chairman & Managing Director /APEPDCL.
- 4. Sri M.M. Nayak, IAS, Chairman & Managing Director, APSPDCL.
- 5. Sri. Kamalakar Babu, VC & MD/NREDCAP.
- 6. Sri. M. Venu Gopal Reddy, OSD, Energy, I & I (Representing Principal Secretary to Govt., Energy, I & I, CRDA Department)

### **APERC Staff:**

1. Sri M.S. Vidyasagar, Deputy Director (P&PP)/APERC

# Joint Meeting of SAC (11<sup>th</sup>) and State Co-ordination Forum (6<sup>th</sup>) Meeting on 08.01.2018

### LIST OF MEMBERS ATTENDED

### **State Co-ordination Forum:**

1.	Justice G.Bhavani Prasad, Chairman, APERC	Chairman
2.	Dr. Pervela Raghu, Member, APERC	Member
3.	Sri. K. Vijayanand, IAS, CMD/APTRANSCO	Convenor
4.	Sri. K. Vijayanand, IAS, MD/APGENCO	Member
5.	Sri. M.M.Naik, IAS, CMD/APSPDCL	Member
6.	Sri. H.Y.Dora, CMD/APEPDCL	Member
7.	Sri. S.Sundaramoorthy, Vice President (Representing LANCO Industries)	Member

### List of Special Invitees attended

1.	Sri. M. Venu Gopal Reddy, OSD, Energy, I & I (Representing Principal Secretary to Govt., Energy, I & I, CRDA Department)
2.	Sri. Kamalakar Babu, VC & MD/NREDCAP
3.	Sri. P. Umapathi, IPS, JMD/Vigilance & Security/APTRANSCO
4.	Sri. P. Dinesh, IRS, JMD/Finance, Commercial, IPC, HRD & IT/APTRANSCO
5.	Sri. S. Subramanyam, Director/Grid, Transmission & Management (FAC)/APTRANSCO
6.	Sri. G. Adiseshu, MD, APSPCL
7.	Sri. R. Janaki Rao, Admn officer (Representing Anakapalli RESCO)
8.	Sri. C.B.Jagannadh, ADE (Representing Cheepurapalli RESCO)

#### ANNEXURE – 14

#### GOVERNMENT OF ANDHRAPRADESH ENERGY, INFRASTRUCTURE & INVESTMENT (POWER-I) DEPARTMENT

Lr.No.3275/Power.I/2017

Dated:09.03.2018

From

The Prl.Secretary to Government, Energy, I&I Department, A.P.Secretariat, Velagapudi, Guntur District.

To The Secretary, AP Electricity Regularity Commission, Hyderabad – 500004.

Sir,

. 1

Sub:Energy, I&I Dept. – Providing free power to Horticultural Nurseries - Reg.

Ref: Lr.No.14/Minister (Energy)/2018, dated. 07.02.2018.

\*\*\*\*

The Government after careful consideration and to extend helping hand as an encouragement to the Nursery Formers in the state, hereby decided to extend all the benefits to the nursery formers on par with beneficiaries getting agriculture connections (free category) and for this an amount of Rs.3.76 crores is required for the year 2018-19 and an amount of Rs.3.2 crores is to be paid additionally to the Discoms for waiver of all the pending dues payable towards power supply made to the Nurseries. The Department is adjusting this within the allocation made in the budjet.

2. The Secretary, APERC, Hyderabad shall take necessary action accordingly.

Yours faithfully

ch. Endorbara Rag

for PRINCIPAL SECRETARY TO GOVERNMENT



### **ANNEXURE – 15**

#### **GOVERNMENT OF ANDHRA PRADESH** ABSTRACT

Energy, I&I Department - Providing of free power to Horticultural Nurseries - Orders - Issued.

ENERGY, INFRASTRUCTURE & INVESTMENT (POWER.I) DEPARTMENT

G.O.RT.No. 39

Dated: 14-03-2018 Read:

#### Letter No.14/Minister (Energy)/2018, dated 07.02.2018.

@@@@@@

ORDER:

Nursery farmers Association have represented (1) for waiver of all pending dues payable towards power supply made to the Nurseries and (2) Extending all the benefits to the nursery farmers on par with beneficiaries getting Agriculture connections (Free category).

The Government after careful consideration decided to extend all the benefits 2) to the nursery farmers on par with agriculture connections (free category) to extend helping hand and as an encouragement to the Nursery farmers in the state.

Government has also decided for waiver of all the pending dues payable 3) towards power supply by the nurseries.

4) The Department shall adjust the above expenditure within the allocation made in the budget. This has got the approval of Finance Department vide Fin. U.O. No.45027/62/FMU-Rev, I&C & Energy/2018, dated 05.03.2018.

The CMD, APTRANSCO, CMD/APEPDCL and CMD/APSPDCL shall take 5) necessary action accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

#### AJAY JAIN PRINCIPAL SECRETARY TO GOVERNMENT

To

1) The Chairman & Managing Director, APTRANSCO, Vijayawada.

The Chairman & Managing Director, APSPDCL, Tirupati.
 The Chairman & Managing Director, APSPDCL, Visakhapatnam.

4) The Secretary, APERC, Hyderabad.

Copy to:

The P.S., to Hon'ble Minister for Energy The P.S., to Prl. Secretary, Energy, 1&I Dept.

// Forwarded:: By Order //

abortonce NA SECTION OFFICER



#### GOVERNMENT OF ANDHRA PRADESH ENERGY, INFRASTRUCTURE & INVESTMENT DEPARTMENT

Lr.No.298/Power.I/2017

Dated 23.03.2018

From The Prl. Secretary to Government, Energy, I&I Department, A.P. Secretariat, Velagapudi, AP.

To The Secretary, APERC, #11-4-660, 4<sup>th</sup> Floor, Singareni Bhavan, RedHills, HYDERABAD.

Sir,

Sub: Energy, I&I Department – ARR/Tariff proposals submitted by Distribution Licensees for Retail Supply Business for FY 2018-19 – Commission Determined Tariff – Communicated – Reg.

Ref; Your letter No.APERC/Secy./Tariff/D.No.222, dt.20.03.2018.

#### 00000

With reference to your letter cited above, this is to communicate the approval of Government of Andhra Pradesh for providing a sum of Rs.6030.17 Crores as subsidy to licensees under section 65 of the Electricity Act, 2003 for the FY2018-19. Out of the said subsidy, a sum of Rs.4000 Crores will be released as Cash Subsidy from the budgetary allocation. The remaining sum of Rs. 2030.17 Crores will be paid by A.P.P.F.C (Andhra Pradesh Power Finance Corporation) to the two Distribution Licensees from out of the proceeds of the bonds to be issued by A.P.P.F.C (Andhra Pradesh Power Finance Corporation) for Which the State Government stands guarantee.

It is requested to take further necessary action for release of tariff order for FY 2018-19 as requested.

Yours truly,

(Ajay Jain)

### ACRONYMS

Agl	Agriculture/Agricultural	
AP	Andhra Pradesh	
APEPDCL/EPDCL	Eastern Power Distribution Company of Andhra Pradesh Limited	
APERC	Andhra Pradesh Electricity Regulatory Commission	
APGENCO	Andhra Pradesh Power Generation Corporation Limited	
APGPCL	Andhra Pradesh Gas Power Corporation Limited	
APPCC	Andhra Pradesh Power Coordination Committee	
APSPDCL/SPDCL	Southern Power Distribution Company of Andhra Pradesh Limited	
APTRANSCO/TRANSCO	Transmission Corporation of Andhra Pradesh Limited	
ARR	Aggregate Revenue Requirement	
ATE/APTEL	Appellate Tribunal for Electricity	
BPL	Below the Poverty Line	
BST	Bulk Supply Tariff	
CAG	Comptroller and Auditor General of India	
CC	Current Consumption	
CCITI	Consultative Committee on Information Technology Industry	
CERC	Central Electricity Regulatory Commission	
CGRF	Consumer Grievance Redressal Forum	
CGS	Central Generating Station	
CL	Connected Load/Contracted Load	
CMD	Contracted Maximum Load/Chairman & Managing Director	
CoD	Commercial Operation Date	
CoS	Cost of Service /Cost of Supply	
CPWS	Composite Protected Water Supply	
Cr	Crore	
CSC	Customer Service Centre	
CWSS	Composite Water Supply Schemes	
D-D	Discom to Discom	
DISCOMs	Distribution Companies, Distribution Licensees, Licensees	

DPS	Delayed Payment Surcharge
DSM	Demand Side Management
DSTPP	Damodar Sanjeevaiah Thermal Power Project
DTR	Distribution Transformer
EHT	Extra High Tension
ERC	Expected Revenue from Charges
FAPCCI	The Federation of Telangana & Andhra Pradesh Chamber of Commerce and Industry (Formerly the Federation of Andhra Pradesh Chamber of Commerce and Industry)
FCRTS	Full Cost Recovery Tariff Schedule
FPT	Filing for Proposed Tariff
FRP	Financial Restructuring Plan
FSA	Fuel Surcharge Adjustment
FY	Financial Year
GCV	Gross Calorific Value
GoAP	Government of Andhra Pradesh
GOI	Government of India
GTCS	General Terms & Conditions of Supply
HDPE	High-Density Polyethylene
HG	Horn Gap
HNPCL	Hinduja National Power Corporation Limited
HP	Horse Power
HT/HV	High Tension/High Voltage
HVDS	High Voltage Distribution System
IPPs	Independent Power Producers
ISI	Indian Standards Institute / Indian Statistical Institute
IT	Information Technology
KG	Krishna Godavari
Kg	Kilogram
kV	Kilo Volt
kVAh	Kilo-Volt-Ampere-hour

kWh	Kilo Watt hour
LED	Light-Emitting Diode
LI	Lift Irrigation
LT/LV	Low Tension/Low Voltage
LR	Load Relief
MMBTU	Million Metric British Thermal Unit
MoP	Ministry of Power
MOU	Memorandum of Understanding
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NCE	Non Conventional Energy
NEW	North-East-West
NGOs	Non-Government Organisations
NTP	National Tariff Policy
NTPC	National Thermal Power Corporation Limited
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PPA	Power Purchase Agreement
PSC	Production Sharing Contract
PWS	Protected Water Supply
R&C	Restriction and Control
REC	Renewable Energy Certificate/Rural Electrification Corporation Limited
RESCOs	Rural Electricity Cooperative Societies
RIL	Reliance Industries Limited
RMD	Recorded Maximum Demand
RTC	Round the Clock
RTPP	Rayalaseema Thermal Power Project
SAC	State Advisory Committee
SAO	Senior Accounts Officer

SLDC	State Load Despatch Centre
SOP	Standards of Performance
T&D	Transmission and Distribution
ToD	Time of the Day
ULDC	Unified Load Despatch Centre
UMPP	Ultra Mega Power Project
VTPS	Vijayawada Thermal Power Station.