

Retail Supply Tariffs

2020-21



ORDER

on

Tariff for Retail Sale of Electricity

during FY2020-21

10th February, 2020

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



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10th February, 2020

***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)***

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**ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION
HYDERABAD**

Present
Sri Justice C.V. Nagarjuna Reddy, Chairman
Dr. P. Raghu, Member
Sri P. Rama Mohan, Member

MONDAY, THE TENTH DAY OF FEBRUARY, TWO THOUSAND AND TWENTY

In the matter of

**TARIFF DETERMINATION FOR RETAIL SALE OF ELECTRICITY
DURING FY2020-21**

in

O.P.No.68 of 2019

**Southern Power Distribution Company of Andhra Pradesh Limited
(APSPDCL)**

and

O.P.No.69 of 2019

**Eastern Power Distribution Company of Andhra Pradesh Limited
(APEPDCL)**

The Aggregate Revenue Requirement (ARR) and Filing for Proposed Tariff (FPT) filed by Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL or SPDCL) vide O.P.No.68 of 2019, and Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL or EPDCL) vide O.P.No.69 of 2019 in respect of their individual Retail Supply businesses for various consumer categories for FY2020-21 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 tariff determination order.

COMMON ORDER
CHAPTER – I
INTRODUCTION

1. Consequent on 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 constituting the Andhra Pradesh Electricity Regulatory Commission (hereinafter referred to as 'The Commission').

APERC (Adaptation) Regulation, 2014

2. In exercise of the powers 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 A.P. Reorganization Act, 2014, 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.

Statutory Provisions

3. Section 64(3) read with Section 62 (d) of the Electricity Act, 2003 stipulates that the Commission shall determine tariff for retail sale of electricity for the Distribution Licensees.
4. 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 4th Control Period covers five years from FY2019-20 to FY2023-24.

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. Hence, SPDCL and EPDCL (hereinafter jointly referred to as the 'Distribution Companies' or 'DISCOMs' or 'Licensees'), had to file their Aggregate Revenue Requirement (ARR) and Filings for Proposed Tariff (FPT) before 30.11.2019 as per Regulation No.4 of 2005.

6. By letter dated 24.08.2019, APEPDCL on its behalf and on behalf of APSPDCL has requested the Commission to permit them to file ARR and Tariff petition for Retail Supply Business for FY2020-21 on annual basis as was being done since FY2009-10 instead of the balance period in the 4th Control Period, stating the following reasons:
 - i) Projection of power to be purchased from APGENCO stations, CGS Stations and other stations would be difficult beyond one year in view of the uncertainties in fuel/ coal availability and logistics;
 - ii) Higher percentage of RE sources (Wind and Solar) in the power purchase portfolio is hindering the process of projection / forecasting for more than a year;
 - iii) There have been deviations from the scheduled commissioning of both thermal and hydro plants. Given the high quantum of power likely to be purchased from the plants that are going to be commissioned during FY2020-21, any deviations in the power procurement schedule from these plants will have a material impact on the power purchase;
 - iv) Sharp fall observed in energy dispatched from cheaper hydel sources over the years due to uncertain rain fall and constraints due to irrigation requirements;
 - v) Uncertainty in energy availability from Gas based IPPs over the years; and
 - vi) The retail tariffs depend on the level of subsidy support from the Government and cross subsidy levels across consumer categories which are beyond the control of the licensees.
7. In consideration of the reasons submitted by the licensees, this Commission, in its Proceedings No.T-83/2019, dt.28.08.2019 permitted the licensees to file ARR and Tariff Petitions relating to their retail supply businesses on annual basis for FY2020-21, which is the second year of the 4th Control Period, as permitted in earlier years.
8. This Commission, vide its letter dated 15.11.2019, brought to the notice of the licensees that they are required to file the ARRs and FPTs for Retail Supply Business for FY2020-21 by 30.11.2019 in accordance with the provisions of the Electricity Act, 2003 and the regulations made thereunder by this Commission and failure to do so will lead to initiation of *suo-moto* proceedings for tariff determination in accordance with Section 64 of the Electricity Act, 2003 and as per the order dated 11.11.2011 in O.P.No. 1 of 2011 of the Hon'ble Appellate Tribunal for Electricity.

ARR & FPT Filings for FY2020-21, Public Notice and information to GoAP

9. The licensees, through e-mail on 02.12.2019 and in-person on 04.12.2019, have filed separate petitions seeking approval of their Aggregate Revenue Requirement (ARR) and

Filing for Tariff Proposals (FPT) for FY2020-21 along with Cross Subsidy Surcharge (CSS) proposals. The licensees, in the filings, have submitted provisional True up for FY2019-20 also along with ARR projections. APSPDCL has requested the Commission to determine a methodology for determination of Additional Surcharge and submitted that supplementary filings would be made based on such methodology. APEPDCL has stated that they will file Additional Surcharge proposals in supplementary filings in accordance with the directions issued by this Commission in the Retail Supply Tariff order for FY2019-20. The ARRs & FPTs along with Cross Subsidy Surcharge proposals for FY2020-21 filed by the licensees are taken on record by the Commission and have been assigned O.P. Nos.68 of 2019 (APSPDCL) and 69 of 2019 (APEPDCL).

10. The filings made by the licensees are uploaded on the Commission's website and by its letter dated 4.12.2019, the Commission directed the licensees to issue a public notice in Telugu language in two Telugu daily newspapers and in English language in two English daily newspapers incorporating the ARRs & FPT Schedules submitted to the Commission, 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 26.12.2019 by 5 PM and to upload the filings of ARRs & FPTs in their websites and to make available the copies of their filings at their respective corporate offices and also at circle offices. Further, the Commission also directed the licensees to publish in the public notice, the details of the venues and the dates and timings of public hearings at five (5) different places in the State of Andhra Pradesh (at the headquarters of APEPDCL and APSPDCL and in the Capital region of the State of Andhra Pradesh and also at two other places one each in the jurisdictions of APSPDCL and APEPDCL) on ARR & Tariff Proposals, including Cross Subsidy Surcharge (CSS) proposals for various consumer categories for FY2020-21.
11. In compliance with the directions of the Commission, the licensees caused publication of public notices in their respective areas of operation, in Telugu Language in two (2) Telugu daily newspapers (on 5.12.2019 in 'Saakshi' and on 6.12.2019 in 'Eenaadu') and in English Language in two (2) English daily newspapers (on 6.12.2019 in 'The HINDU' and 'The New Indian Express') - (Annexure-01) incorporating their ARR & FPT Schedules along with other details as directed, inviting views/objections/suggestions in respect of ARRs, FPTs and CSS proposal for various consumer categories for FY2020-21 and also informed that all the interested persons / associations / stakeholders/objectors who want to be heard in person/through authorized representatives may appear before the Commission during the public hearings. The filings were also uploaded on the websites of the licensees.
12. The Commission vide its letter dated 9.12.2019, while communicating the dates and places of public hearings to the Government of Andhra Pradesh in its Energy, I&I Department, informed that the Secretary, Energy, GoAP shall be present on each of the dates at the places of public hearings to make a statement before the Commission on the

proposals of the licensees in respect of Retail Supply Tariffs, CSS and on any subsidies the Government of Andhra Pradesh intended to provide under Section 65 of the Electricity Act, 2003 for various consumer categories for FY2020-21.

Response to the Public Notice

- 13.** In response to the public notice, 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 conducted public hearings at the following places as published in the public notices and as informed to the licensees and the Government of Andhra Pradesh, 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 for various consumer categories for FY2020-21.

S. 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.	07-01-2020 (Tuesday)
2	APEPDCL	Godavari Hall, Collector office premises, Eluru, West Godavari District	08-01-2020 (Wednesday)
3	APSPDCL	O/o. SE/Opeation/Vijayawada, APSPDCL, Opp. PWD Ground, Beside CM camp office, Vijayawada.	09-01-2020 (Thursday)
4	APSPDCL	Z.P. Meeting Hall, Kadapa	10-01-2020 (Friday)
5	APSPDCL	Conference Hall, Corporate Office, (Vidyuth Nilayam), APSPDCL, Behind Srinivasa Kalyanamandapams, Sreenivasapuram, Tiruchanoor Road, Tirupati.	11-01-2020 (Saturday)

- 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. The Secretary, Energy, GoAP also presented the Government's response on proposals of the licensees and on public views.

- 16.** After the public hearings, meeting of the State Advisory Committee was held on 13.01.2020 in the Meeting Hall, Corporate Office, APSPDCL, Tirupati, wherein the views of the members were ascertained on the ARR, FPTs and CSS proposals of the licensees.
- 17.** The views/objections/suggestions expressed by the stakeholders and/or their representatives (Annexure-02), 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 07.01.2020 to 11.01.2020 in respect of ARR & FPT filings of the licensees & CSS proposals for FY2020-21 and the views of the members of the State Advisory Committee (SAC) expressed in the meetings (Annexure-17) have been appropriately considered in arriving at the appropriate conclusions in this Order, in so far as the determination of ARR, tariff for retail sale of electricity & CSS for FY2020-21 is concerned.

Summary of Filings

Sales and Power Purchase Requirement

- 18.** The licensees have forecasted/estimated the sales volume to different consumer categories during FY2020-21 at 62687.29 MU for the entire State, comprising 38793.83 MU in respect of SPDCL and 23893.46 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 projected voltage wise by APSPDCL and APEPDCL for FY2020-21 are as follows:

Voltage Level	APSPDCL	APEPDCL
33 kV	3.25%	2.78%
11 kV	3.30%	3.15%
LT	4.28%	3.99%

b) Transmission losses: The transmission loss percentage of APTRANSCO as approved in the Retail Supply Tariff order for FY2019-20 has been adopted for intra-state. The same loss percentage as considered by the Commission in the Retail Tariff order for FY2019-20 has been adopted for the purchases from outside the State, by APSPDCL. Whereas APEPDCL has not considered PGCIL loss percentage for bilateral / interstate purchases due to consideration of average landed power purchase cost at AP Transco periphery.

The power purchase requirement for FY2020-21 was computed by grossing up the sales volume forecast with applicable loss levels is 69978.61 MU comprising 43620.07 MU in respect of SPDCL and 26358.54 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:

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

Item	Sales (MU)	Losses (MU)	Power purchase requirement (MU)
(1)	(2)	(3)	(4) = (2) + (3)
SPDCL	38793.83	4826.24	43620.07
EPDCL	23893.46	2465.08	26358.54
Total	62687.29	7291.32	69978.61

Energy availability and Surplus / Deficit

19. Based on pre-arranged supply sources, the licensees have estimated the available energy during FY2020-21 at 66359.38 MU for the entire State, comprising 43644.53 MU in respect of SPDCL and 22714.85 MU in respect of EPDCL. With the analysis of month wise power purchase requirement and availability, the licensees' computations have led to deficit of availability at 3619.23 MU for the entire State during FY2020-21, comprising 24.46 MU surplus in respect of SPDCL and 3643.69 MU deficit in respect of EPDCL. The summary of power purchase requirement, availability and surplus / deficit for each licensee and for the entire State as per filings is given in the table below:

Table 2 : Filings: Energy availability and Surplus / Deficit (MU)

Item	SPDCL	EPDCL	TOTAL
(1)	(2)	(3)	(4)
Availability	43644.53	22714.85	66359.38
Power Purchase Requirement	43620.07	26358.54	69978.61
Surplus/Deficit (-)	24.46	(-) 3643.69	(-) 3619.23

Aggregate Revenue Requirement Items

20. The licensees have computed/estimated the power purchase cost during FY2020-21 at ₹33870.24 Cr. for the entire State comprising ₹21430.91 Cr. in respect of SPDCL and ₹12439.33 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 FY2020-21.
21. The licensees have computed/estimated the transmission cost, stated to be as per the order dated 08.03.2019 of the Commission on Transmission Tariffs, at ₹1984.70 Cr for the entire State during FY2020-21, comprising ₹1304.58 Cr in respect of SPDCL and ₹680.12 Cr in respect of EPDCL, payable to AP Transco.

- 22.** The licensees have computed/estimated the State Load Dispatch Centre (SLDC) cost, stated to be as per the order dated 8.03.2019 of the Commission on SLDC Fees and Operating Charges, at ₹41.83 Cr. for the entire State during FY2020-21 comprising ₹21.56 Cr. in respect of SPDCL and ₹20.27 Cr. in respect of EPDCL, payable to APSLDC.
- 23.** The licensees have proposed the distribution cost, stated to be as per the order dated 15.04.2019 of the Commission on Wheeling Tariffs for distribution business, at ₹6269 Cr. for the entire State during FY2020-21, comprising ₹4178 Cr. in respect of SPDCL and ₹2091 Cr. in respect of EPDCL, for their Distribution Business.
- 24.** The licensees have computed/estimated the costs associated with usage of PGCIL network, stated to be based on the rates in the 2nd quarter of FY2019-20 as approved by CERC to evacuate the power from Central / Inter State Generating Stations, at ₹1774.28 Cr for the entire State during FY2020-21, comprising ₹1166.31 Cr in respect of SPDCL and ₹ 607.97 Cr in respect of EPDCL.
- 25.** The licensees have computed/estimated the costs towards services of ULDC, stated to be based on the rates in the 2nd quarter of FY2019-20 as approved by CERC, towards the operating charges for evacuating the power from Central / Inter State Generating Stations at ₹4.54 Cr for the entire State during FY2020-21, comprising ₹2.94 Cr. in respect of SPDCL and ₹1.6 Cr in respect of EPDCL.
- 26.** The Licensees have computed the interest cost on consumers' security deposits held with them at ₹300.10 Cr for the entire State during FY2020-21, comprising ₹184.56 Cr in respect of SPDCL and ₹115.54 Cr in respect of EPDCL. The licensees have computed these amounts applying the interest rates of 6.20% (SPDCL) and 5.75% (EPDCL) on average of projected opening and closing balances of consumer security deposits likely to be held with them during FY2020-21.
- 27.** The licensees have computed the supply margin for retail supply business at ₹130.16 Cr. for entire State during FY2020-21, comprising ₹77.59 Cr. in respect of SPDCL and ₹52.57 Cr. in respect of EPDCL. These amounts have been computed at the rate of 2 paise per unit of Sale proposing to deviate from the earlier practice of 2% return on approved Regulated Rate Base (RRB)] with the request to the Commission to approve the same.
- 28.** The licensees have provided towards other costs an amount of ₹466.12 Cr. in the ARR and FPT filings for FY2020-21. This amount comprises ₹182.07 Cr. for SPDCL and ₹284.05 Cr. for EPDCL. The other costs are stated to be provided for amounts payable towards agricultural solar pumpsets, energy efficient pumpsets, expenses for safety measures as approved in FY2019-20, expenses for grants to APSEEDCO as per the orders of the Commission in the Tariff Order for FY2019-20 and amounts payable towards pension fund in case of APEPDCL. In case of APSPDCL, the others costs are stated to be towards amounts payable to M/s EESL for DELP programme, Solar

pumpsets, Energy efficient pumpsets, relief to victims of electrical accidents and grants to APSEEDCO.

29. With these ARR line items, as detailed above, the licensees have computed/estimated the ARR at ₹44840.97 Cr. for the entire State for FY2020-21, comprising ₹28548.52 Cr. in respect of SPDCL and ₹16292.45 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:

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

ARR Items	SPDCL	EPDCL	TOTAL
(1)	(2)	(3)	(4)
1. Transmission Cost	1304.58	680.12	1984.70
2. SLDC Cost	21.56	20.27	41.83
3. Distribution Cost	4178.00	2091.00	6269.00
4. PGCIL Expenses	1166.31	607.97	1774.28
5. ULDC Charges	2.94	1.6	4.54
6. Network and SLDC Cost (1+2+3+4+5)	6673.39	3400.96	10074.35
7. Power Purchase Cost	21430.91	12439.33	33870.24
8. Interest on CSD	184.56	115.54	300.10
9. Supply Margin in Retail Supply Business	77.59	52.57	130.16
10. Other Costs, if any	182.07	284.05	466.12
11. Supply Cost (7+8+9+10)	21875.13	12891.49	34766.62
12. Aggregate Revenue Requirement (ARR) (6+11)	28548.52	16292.45	44840.97

Expected Revenue from Charges (ERC)

30. The licensees have computed the Expected Revenue from Charges (ERC) in case they levy the existing /current tariff for retail sale of electricity during FY2020-21 on the forecast sales volume to different consumer categories in their respective areas of supply. The ERC (including Cross Subsidy Surcharge and Non-tariff Income) computed in this manner is at ₹30491.90 Cr. for the entire State, comprising ₹18339.51 Cr. in respect of SPDCL area of supply and ₹12152.39 Cr. in respect of EPDCL area of supply.
31. The Revenue Gap (RG) i.e. the ARR in excess of ERC for FY2020-21 has been computed by licensees at ₹14349.07 Cr. for the entire State comprising ₹10209.01 Cr. RG in respect of SPDCL and ₹4140.06 Cr RG in respect of EPDCL. In short, the licensees in the State will incur a total financial loss of ₹14349.07 Cr. during FY2020-21 in the event of supplying the forecast sales volume of 62687.29 MU without any external resources or tariff revision during FY2020-21. The licensees have proposed tariff hike for certain categories of consumers and estimated additional revenue of ₹843.06 Cr. in respect of SPDCL and ₹551.91 Cr. in respect of EPDCL on account of tariff hike. The summary of ARR, ERC (current tariffs), ERC (proposed tariffs) and RG with and without tariff hike for each licensee during FY2020-21 is given in the table below:

Table 4 : Filings: ARR, ERC and RG for FY2020-21 (₹ Cr)

ARR Item	SPDCL	EPDCL	TOTAL
(1)	(2)	(3)	(4)
1. Aggregate Revenue Requirement	28548.52	16292.45	44840.97
2. Revenue from Sale of Energy (including CSS & NTI at current tariffs)	18339.51	12152.39	30491.90
3. Revenue Gap (1) – (2)	10209.01	4140.06	14349.07
4. Estimated additional revenue due to proposed tariff hike	843.06	551.91	1394.97
5. Net Revenue Gap (3) – (4)	9365.96	3588.15	12954.11

- 32.** However, the licensees in their filings, have not stated the ways and means as to how they expect to meet the estimated net revenue gap. Much after completion of public hearings, the Chief General Manager, RAC, APSPDCL sent a letter no. CGM/RAC /SPDCL /TPT /GM /RAC/F:ARR 2020-21/D.No.122/20, dated 24.01.2020 requesting to take on record as part of proceedings of ARR and FPT for FY2020-21, stated that they are expecting a subsidy of ₹7816.48 Cr. from the State Government, comprising power supply to agriculture of ₹7462.80 Cr. and power supply to aquaculture and others of ₹353.68 Cr.

Modifications in sub-categories and tariff hike proposals

- 33.** The licensees propose modifications in certain sub-categories and slabs in the existing tariff structure and also proposed tariff hike to certain categories of consumers for FY2020-21 as detailed in subsequent paragraphs.
- 34.** Licensees propose to continue with the same five (5) categories as approved by the Commission in FY2019-20.

Category-I: Domestic

- 35. Category-I(A): LT Domestic:** The licensees propose to dispense with the categorization of consumers based on consumption during the previous financial year and to levy energy charges based on consumption of current month with the following proposed slabs and tariffs.

Sub-Category	Slab	Energy Charges (₹/kWh)
A: ≤ 75 Units per month	0-50	1.45
	51-75	2.60
B: >75-225 Units per month	0-50	2.60
	51-100	2.60
	101-200	3.60
	201-225	6.90
C: >225 Units per month	0-50	2.65
	51-100	3.35
	101-200	5.40
	201-300	7.10
	301-400	7.95
	401-500	8.50
	>500	9.95

- 36. Category-I (B): HT – Townships and Colonies** - The licensees propose to rename the existing sub-category of 'Townships and Colonies' as 'Gated communities, Bungalows & Villas' and proposed to increase the energy charges from ₹6.30 per unit to ₹7.00 per unit

Category-II: Commercial & Others:

- 37. Category-II(A): LT Commercial** - The licensees propose to divide the existing sub-category 'Category-II(A): LT Commercial' into two (2) sub-categories i.e. 'Category-II(A): LT Commercial' for consumption less than or equal to 50 units per month and 'Category-II(B): LT Commercial' for consumption greater than 50 units per month, without change in the tariffs.
- 38. Category-II(C) & II(D): LT** - The licensees propose to merge the existing sub-categories of 'Category-II(C): LT Advertising Hoardings' and 'Category-II(D): LT Function Halls / Auditoria, Startup power and E.V. Charging Stations' into a single sub-category and to name it as 'Category-II(C): LT General', proposing to apply the existing energy charges of ₹12.25 per unit applicable for 'Category-II(C): LT Advertising Hoardings' and to increase the Fixed Charges from ₹75 per kW/month to ₹100 per kW/month. Additionally, the Railway stations and Bus stations for whom the 'Category-II(A): LT Commercial' is applicable now, are proposed to be brought under the applicability of 'Category-II (C): LT General'.
- 39. Category-II(B) & II(E): HT** - The licensees propose to merge the existing 'Category-II(B): HT Public Infrastructure and Tourism' and 'Category-II(E): HT EV Charging Stations' into the existing 'Category-II(A): HT Commercial' and to rename it as 'Category-II(A): HT General'. The existing and proposed tariffs are as given in the table below:

Category	11 kV	33 kV	132 kV and above
Existing Sub-categories & Tariff (₹/Unit):			
Category-II(A): HT Commercial	7.65	6.95	6.70
TOD peak (6PM to 10PM)	8.65	7.95	7.70
Category-II(B): HT Public Infrastructure and Tourism	7.30	6.65	6.35
TOD peak (6PM to 10PM)	8.30	7.65	7.35
Category-II(E): HT EV Charging Stations	5.00	5.00	5.00
Proposed Sub-category & Tariff (₹/Unit):			
Category-II(A): HT General	7.65	7.50	7.35
TOD peak (6PM to 10PM)	8.65	8.50	8.35

- 40. Category - II(D) & II (F): HT** - The licensees propose to merge the existing 'Category-II(D): HT Function Halls/Auditoria, Startup power' & 'Category-II(F): HT Green power'

into single sub-category and to name it as 'Category-II(B) : HT Occasional'. The existing and proposed tariffs are as given in the table below:

Voltage level	11 kV	33 kV	132 kV and above
Existing Sub-categories & Tariff (₹/Unit) :			
Category-II(D): HT Function Halls / Auditoria, Startup power	11.75	11.75	11.75
Category-II(F): HT Green power	11.30	11.30	11.30
Proposed Sub-category & Tariff (₹/Unit):			
Category-II(B): HT Occasional	12.25	12.25	12.25

Category-III: Industry

- 41. Category-III (A): HT Industry General** - The licensees propose to increase energy charges from ₹ 6.30 / unit to ₹ 7.00/ unit for industrial colonies consumption and also proposed to withdraw the load factor incentive for Category III(A): HT Industry General.
- 42. Category-III (C): HT Energy Intensive Industries** – The licensees propose the following additional condition under specific conditions applicable to Energy Intensive industries:
- “If the monthly consumption of Energy Intensive Industries falls below 85% Load utilization factor during any billing month, the consumer shall be billed in Category-III (A): HT Industry General in the billing month”.

Category-IV: Institutional

- 43. Category-IV (A), (B) and (C): LT** - The licensees propose to merge the existing sub-categories of 'Category-IV(A): LT Street lighting', 'Category-IV(B): LT CPWS/PWS schemes' and 'Category-IV(C): LT NTR Sujala Pathakam' into one subcategory as 'Category-IV(A): LT Utilities'. The existing sub-categories & tariffs and proposed sub-category & tariffs are as given in the table below:

Category	Fixed Charges per month (₹/HP or KW)	Energy Charges (₹/Unit)
Existing:		
Category-IV(A): LT Street lighting		
(i) Panchayats	75	5.95
(ii) Municipalities	75	6.50
(iii)Municipal Corporations	75	7.05
Category-IV(B): LT CPWS/PWS schemes		
(i) Panchayats	75	4.85
(ii) Municipalities	75	5.95
(iii)Municipal Corporations	75	6.50
Category-IV(C): LT NTR Sujala Pathakam	10	4.00
Proposed:		
Category-IV(A): LT Utilities		
Panchayats	75	7.00
Urban Local bodies	75	7.00

- 44. Category-IV (B): HT** - The licensees propose to rename the existing 'Category-IV(B): HT CPWS/PWS Schemes', as 'Category-IV(A): HT Utilities'. The existing sub-category & tariffs and proposed sub-category & tariffs are as given in the table below:

Category	Demand Charges (₹/kVA)	Energy Charges (₹/Unit)		
		11 kV	33 kV	132 kV and above
Existing:				
Category-IV(B): HT CPWS/ PWS Schemes	475	4.85	4.85	4.85
Proposed:				
Category-IV(A): HT Utilities	475	7.95	7.25	7.00

- 45. Category-IV (D): LT General Purpose** - The licensees propose to rename this category as 'Category-IV (B): LT General' and also propose to include Government offices under this category. The existing sub-category & tariffs and propose sub-category & tariff are as given in the table below:

Category	Fixed Charges per month (₹/HP or kW)	Energy Charges (₹/Unit)
Existing:		
Category-IV (D): LT General Purpose	30	7.25
Proposed:		
Category-IV (B): LT General	75	7.00

- 46. Category-IV (D): HT General Purpose** – At present applicability is not defined in HT Supply for this category. The licensees propose to bring Govt. offices, Govt. educational institutions / Hostels, Govt. Hospitals & Charitable institutions (for whom Category-II (A): HT Commercial is applicable hitherto) now under this category and to rename it as 'Category-IV (B): HT General'. The existing and the proposed tariff are as given below:

Applicability	Fixed Charges per month (₹/HP or kW)	Energy Charges (₹ / Unit)
Existing - Category-II (A): HT Commercial		
11 kV	475	7.65
33 kV	475	6.95
132 kV	475	6.70
Proposed - Category-IV (B): HT General		
11 kV	475	7.95
33 kV	475	7.25
132 kV	475	7.00

- 47. Category-IV (F): HT Railway traction** - The licensees propose to rename this category as 'Category-IV (D): HT Railway traction' and to increase the energy charges from ₹3.75 to ₹6.50 per unit without any change in Demand Charges.

Category-V: Agriculture and related

- 48. Category-V(A): LT** - The licensees propose a flat rate Tariff of ₹200/HP/month in place of energy charges of ₹2.50 per unit in respect of corporate farmers and also to make the DSM measures mandatory.
- 49. Category-V(B): LT** - The licensees propose to make the DSM measures mandatory in respect of non-corporate farmers.
- 50. Category-V(D): LT** - Poultry hatcheries & Poultry feed mixing plants, Aqua hatcheries & Aqua feed mixing plants, Floriculture in green houses - The licensees propose to increase the Energy Charges from ₹3.85 to ₹4.50 per unit without any change in Fixed Charges.
- 51. Category-V(D): HT** - Poultry hatcheries & Poultry feed mixing plants, Aqua hatcheries & Aqua feed mixing plants, Floriculture in green houses - The licensees propose to increase the Energy Charges from ₹4.85 to ₹5.25 per unit without any change in Demand Charges.
- 52. Category-V(F): HT** - Govt. / Private lift irrigation schemes - The licensees propose to increase the energy charges from ₹5.80 to ₹7.15 per unit.
- 53. RESCOs:** The licensees stated that the activities of RESCOs are similar to those of the licensees in implementing similar tariffs as approved by the Commission. RESCOs draw power from licensees at the rate approved by the Commission. In order to encourage competitive spirit on par with DISCOMs, the licensees propose a tariff of ₹3.50 per unit for the RESCOs.

Other submissions

- 54.** The licensees also submitted Cross Subsidy Surcharge (CSS) proposals for FY2020-21 for different categories of consumers along with the ARRs & FPTs.
- 55.** APSPDCL, referring to their filings on Additional Surcharge made along with the ARRs & FPTs for FY2018-19 and to the observation of the Commission made while disallowing the same, requested the Commission to determine the methodology for determination of the Additional Surcharge and stated that based on the methodology, they would file the Additional Surcharge proposals in supplementary filings. Whereas APEPDCL stated that they would file the Additional Surcharge proposals in supplementary filings as per the directions of the Commission in the Tariff Order for FY2019-20.
- 56.** APEPDCL has requested the Commission to issue necessary permission to impose a condition for the short-term open access consumers to go for only day-long block bidding (procuring power for entire day without intermittent usage of grid power) instead of the existing intra-day availment and to give prior intimation to the territorial DISCOM to enable planning for the day ahead procurement.

Provisional True-up for FY2019-20

57. The licensees have claimed provisional true up of power purchase cost for FY2019-20 as given below:

Details	Approved by APERC (₹ Cr.)	Present Estimate (₹ Cr.)	Difference (₹ Cr.)
APSPDCL	16805.80	20404.12	3598.32
APEPDCL	9624.57	11402.65	1778.08
Total	26430.37	31806.77	5376.40

The above true-up projected is in addition to the revenue gap projected by the DISCOMS.

Variable Renewable Energy (VRE) subsidy / Must Run Incentive (MRI)

58. The licensees have submitted the following in respect of VRE subsidy:

- (i) The highest technical authority in the Country i.e. the Central Electricity Authority (CEA) has identified the VRE integration cost implications on RE rich States such as A.P. in backing down the conventional generation for accommodating the Renewable Energy.
- (ii) Utilisation of VRE in place of dispatchable conventional energy will entail the following subsidy.

	FY 2019-20 H2 (₹ Cr.)	FY 2020-21 (₹ Cr.)
Minimum	1062.62	2324.66
Maximum	1592.70	3498.90

- (iii) The Must Run Incentive (MRI) can be estimated as the price difference between VRE tariff determined/discovered u/s 62 or 63 of Electricity Act, 2003 and the weighted average thermal variable cost. A balancing cost component that would arise on account of frequent start-up, ramp-up and ramp-down of thermal generating stations that results in increase in variable costs, wear & tear which may affect the life of the plant, is to be added.
- (iv) The minimum scenario is calculated based on weighted average thermal variable cost of ₹3.20/Unit for H2 of FY2019-20 & ₹3.54/Unit for FY2020-21.
- (v) The maximum scenario is calculated based on the weighted average thermal variable cost ₹2.65/unit as estimated by the APERC in its tariff order for FY2019-20.
- (vi) The State government has notified Wind/Solar Policies, 2015. Under these policies, bilateral agreements to the extent of 6500 MW are entered between State Government (or its nominee NREDCAP) and the project developers.
- (vii) The State Government directed the DISCOMs to enter into high cost VRE Power Purchase Agreements subsequently. The bilateral agreements between Government

and Project developers is the basis for all the PPAs entered into by DISCOMs. The bilateral agreements include a Must Run Incentive (MRI) obligation by State Government to the Wind/Solar developers.

- (viii) Ultimately the per unit MRI Subsidy = $\text{Tariff determined/Discovered} - (\text{weighted average Thermal variable Cost} + \text{Balancing cost})$
- (ix) The tariff payable by the DISCOMs to VRE developers = $\text{Weighted average Thermal variable Cost} - \text{balancing cost}$.
- (x) Must Run Incentive (MRI) is the subsidy payable by State Government to the developer. This MRI amount will be paid directly by the State Government to the developers as per the bilateral agreements between State government and the developers. The same is therefore not supposed to be included in the power purchase cost in ARR.
- (xi) Out of the VRE tariff, tariff payable by DISCOM is paid to developer by DISCOM under the PPA, and the MRI is paid to developer by State Govt. as per the bilateral agreements.

59. Views/Objections/Suggestions related to general aspects on filings

Non-adherence to MYT Regulations

- a) Sri O. L. Kantha Rao, Secretary, A.P. Textile Mills Association, Guntur and Smt. P. Vydehi, Secretary (i/c), FAPCCI have stated that the Commission has been permitting DISCOMs to file ARR and Tariff applications on yearly basis as against the multi-year basis envisaged in its Regulations since 2009-10, that despite the fact that the Commission has powers to relax any provision of the Tariff Regulations, the very purpose of introducing the Multi Year Tariff Regulatory Framework is to bring certainty and predictability as stated in the Tariff Policy, that it is also pertinent to mention that in absence of truing up of the past years, it is very difficult to comment on the veracity of numbers claimed by the DISCOMs, and that the following may also be noted in this regard:
 - Non-finalization of true up/true down amounts of past years and absence of rationale in making the instant projections, render the exercise merely an academic one.
 - As appears from the true-up petitions filed by the DISCOMs, the Petitioner appears to have a conspicuous interest in deferring the costs and proposing it in the form of tariff hikes in future.

That the deferment in issuance of Orders of truing up exercise has enabled the DISCOMs to retain the possible revenue surplus condition for the past years. Even considering such issues are improbable, true-up exercises are extremely important towards definite closure of the tariff determination scheme and therefore must be

completed on time. Even when the true-up application for 2015-16 was filed, the Commission was compelled to make strong observations which are produced below:

“The filings are devoid of verifiable information to satisfactorily determine the permissibility or impermissibility of the various amounts and purchases claimed. The bald information, without support of any details of the purchases and costs being in conformity with the detailed Tariff Order issued by this Commission for FY2015-16 cannot provide any satisfactory basis for any comprehensive adjudication of the claim and even stakeholders are disabled from expressing any concrete views/objections on such inadequate material.”

In view of the aforementioned facts, the instant Petitions are opposed to the Tariff Regulations, the principal guidelines of Tariff Policy and therefore liable to be rejected, in limine.

- b) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has stated that the present filings are not in accordance to "Multi Year Tariff Regulations" for the reason that the DISCOMs are filing their ARR filings annually.
- c) Sri Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that DISCOMS proposed the ARR for the 2020-21 by ignoring Multy year Tariff proposal with the consent of the Commission. HT consumers are losing opportunity to arrive further costing of power and unable to consider the diversifications and consolidation of their activities. Filings may be made based on MYT principles at least for the remaining control period.
- d) Sri K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that ARR submission is only for one year instead of multi-year tariff upto 2024 for which DISCOMs are getting regular exemption from submitting filings for multi-year tariff.

DISCOMs' Response: In view of difficulties in making realistic projections on Power Purchase costs and sales on a multi-year term of 5 years, the DISCOMs have sought the permission of the Commission to submit the RST filings on annual basis. For FY2020-21, the Commission has accorded permission vide its Proceedings No. T-83/2019, Dt 28.08.2019 to file the Retail Supply Filings on Annual basis.

Commission's view: The objectors may take note of the difficulties expressed by the DISCOMs. The Commission noted the objections and will take appropriate decision for the future years after eliciting the views of the DISCOMs.

Incongruities in the ARR filings

- e) Sri M. Venugopala Rao, Senior Journalist and Convener of Centre for Power Studies, Hyderabad, Sri Bendi Tulasidas Vijayawada, Sri Penumalli Madhu, State Secretary, Communist Party of India (Marxist), Vijayawada, Sri Ch. Narasingarao, CPI (M), A.P.

State Secretariat Member, Visakhapatnam, Sri Kandharapu Murali, CPM Secretariat Member, Tirupati have stated that the Commission should have directed the DISCOMs for the year 2020-21 to rectify incongruities such as ARR and FPT not taking into account NCE available for projecting total availability of power and surplus power, and to re-work the cost of power purchase, revenue requirement, revenue gap etc. and then issue the public notice, calling for objections and suggestions, that the time of only three weeks given is inadequate to study, prepare and file submissions, that the shorter time gaps would overstrain the interested public to file their submissions, that tariff order can be released on or before 23rd March to meet the requirement of notifying the new tariff schedule in seven days before the new tariffs come into force, as has been the practice over the years, and that due to lack of adequate time, some other issues figured in the subject proposals could not be studied and analysed.

DISCOMs' Response: All the time lines with regard to submission of public objections, furnishing of replies by the DISCOMs, conducting of public hearings have been notified by the Commission, and the DISCOMs have no say in this process. The DISCOMs are complying with the directions of the Commission. In respect of any incongruities as being claimed as observed by the objector, if the Commission issues any directions, the DISCOMs will obey.

Commission's view: With respect to the objection that adequate time for submission of objections was not granted, the Commission notes that as per Regulation No.2 of 1999, the Commission has been conferred with the discretion to specify the time for filing objections. However, it has been the long-standing practice that 3 weeks' time is granted to the objectors for filing their objections. Following this practice, the Commission has granted 3 weeks' time for filing objections against the ARR and FPT filings for the year 2020-21 also. This apart, the Commission is also allowing the objectors to submit their objections / representations during the hearings and also considering the objections received till the Tariff Order has been finalized. Hence, the Commission does not find any merit in the grievance of the objectors. As regards the objection that the Commission should have directed the DISCOMs to rectify the incongruities such as ARR and FPT not taking into account Non-Conventional Energy for projecting total availability of power and surplus power and issued public notice calling for objections and suggestions on the re-working out of the cost of power purchase, revenue requirement, revenue gap, the Commission is of the opinion that it was not necessary to issue fresh public notice as the lacuna, if any, in ARR and FPT filings could well be considered and proper directions can be given by the Commission in the Tariff Order after considering the objections / suggestions from various stakeholders.

Expected subsidy must have been projected

- f) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that APSPDCL projected revenue deficit for FY 2020-21 as ₹9365.94 Cr. The licensee has not taken into consideration the expected subsidy from GoAP. The licensee based on its own assumption of consumption volume and cost of service of LT-V and other subsidy categories should have calculated the subsidy anticipated and deducted the same from revenue deficit of ₹9365.94 Cr.

APSPDCL Response: It is expected that, the GoAP will provide subsidy to the extent of revenue gap to be determined by the Commission.

Commission's view: Though in the original filings APSPDCL has not indicated the quantum of expected subsidy, in his letter dated 24.01.2020, the Chief General Manager, RAC, APSPDCL has informed that they are expecting a subsidy of ₹7816.48 Cr. from the State Government, comprising power supply to agriculture of ₹7462.80 Cr. and power supply to aquaculture and others of ₹353.68 Cr.

Conclusion

- 60.** The Commission has decided to consider the ARR, FPT and CSS filings 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

- 61.** Government recognises that power sector is critical for rapid industrialisation of the State and towards that is committed to providing 24X7 quality power to Industry, domestic, commercial at lowest cost and 9 hours day time free power supply to agriculture.
- 62.** The Electricity utilities are passing through a difficult phase with more than ₹16000 Cr power purchase dues to be paid to generators, about ₹29000 Cr losses, more than ₹8000 Cr opex loans, high VRE costs etc. The Transmission and Distribution (T&D) losses of A.P. DISCOMs are one of the lowest in the Country. The State Government has so far released more than ₹12000 Cr dues this financial year to support the DISCOMs under financial distress.
- 63.** Government is committed to provide quality 9 hours day time free supply to agriculture, subsidised power to consumer categories such as aqua farmers, SC/ST households, rolled gold industry etc., as already declared through Government orders.
- 64.** The Government would ensure that all necessary steps are taken for reducing power purchase costs, increase low cost power generation capacity, encouraging low cost renewable energy, undertaking energy efficiency measures, customer centric initiatives, reduction of Aggregate Technical & Commercial losses, bridging gap between Average Cost of Supply (ACS) & Average Revenue Realisation (ARR) and following good governance practices in implementation of all Central and State Government Schemes.
- 65.** The Government will support the Commission in fair and transparent fixation of power purchase costs keeping the consumer interest as well as financial sustainability of DISCOMs in mind.
- 66.** Government has signed bi-partite agreements with various renewable energy developers in the past promising Must Run Incentive. Government will release these incentive payments, as determined by APERC, directly to various renewable energy developers.
- 67.** Government is committed to provide necessary funds for meeting the subsidy of the categories already declared under various Government orders in accordance with the provisions of Electricity Act, 2003.

CHAPTER - III

SALES, LOSSES AND POWER PURCHASE REQUIREMENT

Introduction

68. In this Chapter, the Commission has examined the sales projections, network losses and the power purchase requirement estimated by the licensees in their respective ARR&FPT filings for FY2020-21. The Commission has, while examining the same, reckoned/considered all the views / objections / suggestions expressed by the stakeholders in writing and during public hearings to the extent they are relevant to the subject matter. The Commission has accepted the sales for both the licensees at 61818.61MU against 62687.29MU estimated and filed by licensees for FY2020-21 as detailed hereunder:

Methodology followed by the licensees

69. As a prelude to estimation of Aggregate Revenue Requirement (ARR) for the tariff year FY2020-21, the licensees have computed the power purchase requirement in the following manner;

- Forecasted the sales for FY2020-21 for different consumer categories separately for the year,
- Aggregated the forecasted 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 FY2020-21 as per the Commission's Order dated 15.04.2019 on Wheeling tariffs for Distribution business for the 4th Control Period.
- Grossed up the forecasted sales with the adopted network losses applicable at each voltage level to compute the power purchase requirement for the year.

Sales Forecast

70. Licensees have followed modified trend approach in forecasting /estimating the sales for different consumer categories based on historical sales volumes from FY2014-15 to FY2019-20 (for FY2019-20, actual sales for the first half along with the estimates for the second half). The additional loads of existing and upcoming Lift irrigation schemes, CRDA and Industrial clusters etc. among others have been taken into consideration to arrive at the sales estimation for FY2020-21.

71. The Licensees have forecasted the sales volume at 62687.29 MU for FY2020-21 which is higher by 5.96% compared with the sales volume approved by the Commission for FY2019-20. The details are given in the table below:

Table 5 : Sales volume approved for FY2019-20 and projections for FY2020-21 (MU)

Consumer Category		2019-20 Approved (as per TO)			2020-21 Filing			FY2020-21 over FY2019-20		
		SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	Total
LT-Supply										
I	Domestic	9116.81	5670.71	14787.53	10445.84	6551.52	16997.36	14.58%	15.53%	14.94%
II	Commercial & Other	1993.47	1124.09	3117.56	2223.30	1249.02	3472.32	11.53%	11.11%	11.38%
III	Industry	1090.38	422.63	1513.01	1073.35	398.57	1471.92	-1.56%	-5.69%	-2.72%
IV	Institutional	839.74	306.68	1146.42	956.63	343.87	1300.50	13.92%	12.13%	13.44%
V	Agricultural & Related	11054.06	3486.98	14541.04	11744.73	4730.56	16475.30	6.25%	35.66%	13.30%
	Temporary	1.24	0.81	2.04	0.73	0.00	0.73	-41.11%	-100.00%	-64.38%
HT-Supply										
I	Domestic	30.14	26.68	56.82	23.67	31.70	55.37	-21.47%	18.80%	-2.56%
II	Commercial & Other	886.60	717.88	1604.48	1206.34	855.95	2062.29	36.06%	19.23%	28.53%
III	Industry	7716.22	7668.09	15384.31	7633.38	7332.05	14965.43	-1.07%	-4.38%	-2.72%
IV	Institutional	974.96	737.10	1712.06	1016.66	936.65	1953.31	4.28%	27.07%	14.09%
V	Agricultural & Related	3045.84	1441.80	4487.64	1955.83	992.48	2948.30	-35.79%	-31.16%	-34.30%
	Temporary	1.89	10.82	12.71	1.10	0	1.10	-41.96%	-100.00%	-91.37%
	RESCOs	415.36	381.30	796.66	512.27	471.10	983.37	23.33%	23.55%	23.44%
	Total	37166.71	21995.58	59162.29	38793.83	23893.46	62687.29	4.38%	8.63%	5.96%

72. The forecasted sales volume for FY2020-21 is higher by 7.27% compared with the sales estimate made by the licensees for FY2019-20 (based on actuals for first half and estimates for second half of FY2019-20). The details are given in the table below:

Table 6 : Sales Volume Estimates for FY2019-20 and Projections for FY2020-21 (MU)

Consumer Category		2019-20 Estimates			2020-21 Projection			Change over Estimates		
		SPDCL	EPDCL	Total	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total
LT-Supply										
I	Domestic	9733.91	5987.29	15721.20	10445.84	6551.52	16997.36	7.31%	9.42%	8.12%
II	Commercial & Other	2067.07	1147.97	3215.04	2223.30	1249.02	3472.32	7.56%	8.80%	8.00%
III	Industry	1060.73	391.14	1451.87	1073.35	398.57	1471.92	1.19%	1.90%	1.38%
IV	Institutional	908.29	323.61	1231.90	956.63	343.87	1300.50	5.32%	6.26%	5.57%
V	Agricultural & Related	11104.8	4266.69	15371.49	11744.73	4730.56	16475.30	5.76%	10.87%	7.18%
	Temporary	0.66	0.00	0.66	0.73	0.00	0.73	10.36%	0.00%	10.36%
HT-Supply										
I	Domestic	23.43	30.75	54.18	23.67	31.70	55.37	1.02%	3.08%	2.19%
II	Commercial & Other	1176.24	792.60	1968.84	1206.34	855.95	2062.29	2.56%	7.99%	4.75%
III	Industry	7425.04	7054.48	14479.52	7633.38	7332.05	14965.43	2.81%	3.93%	3.36%
IV	Institutional	968.05	889.46	1857.51	1016.66	936.65	1953.31	5.02%	5.31%	5.16%
V	Agricultural & Related	1832.95	378.38	2211.33	1955.83	992.48	2948.30	6.70%	162.30%	33.33%
	Temporary	1.00	0.00	1.00	1.10	0	1.10	9.73%	0.00%	9.73%
	RESCOs	459.85	413.36	873.21	512.27	471.10	983.37	11.40%	13.97%	12.62%
	Total	36762.02	21675.71	58437.73	38793.83	23893.46	62687.29	5.53%	10.23%	7.27%

73. The actual sales volume from FY2015-16 to FY2018-19 and the estimates for FY2019-20 for the State are compared with the approved sales volume by the Commission for the respective years. The range of percentage variations of total actual sales volume over approvals during the said period is (-)7.82 to 0.30 whereas the variation during FY2017-18 to FY2019-20 is in the range of (-)1.22 to 0.30 only. The

abnormal variations in some individual categories may be due to various reasons which could not be reasonably anticipated. The details are given in the table below:

Table 7 : Sales volume actual (estimates for FY2019-20) and approvals for Y2015-16 to FY2019-20 (MU)

Category	Sales in MU										% of Change over approvals				
	Approved					Actuals				Proj.					
	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
LT-Supply															
I Domestic	11102.38	12719.61	13841.17	14681.32	14787.52	11373.64	12205.90	13197.77	14013.71	15721.20	2.44%	-4.04%	-4.65%	-4.55%	6.31%
II Commercial	2181.90	2637.84	2892.07	3007.08	3117.56	2381.80	2553.99	2729.10	2948.17	3215.04	9.16%	-3.18%	-5.64%	-1.96%	3.13%
III Industrial	2265.60	2695.26	2621.01	3700.25	4461.03	2275.03	2619.04	3363.86	2730.56	1451.87	0.42%	-2.83%	28.34%	-26.21%	-67.45%
IV Institutional	901.27	920.89	1025.96	1198.03	1146.42	908.14	998.06	1081.28	1145.33	1231.90	0.76%	8.38%	5.39%	-4.40%	7.46%
V Irrigation and Agriculture	9956.49	10673.86	10832.00	10832.00	11593.03	10631.82	11668.91	10828.48	13187.60	15371.49	6.78%	9.32%	-0.03%	21.75%	32.59%
Temporary Supply	1.78	16.77	2.15	2.29	2.04	2.45	1.92	1.90	1.32	0.66	-	-	-	-	-
LT Total	26409.42	29664.23	31214.36	33420.97	35107.60	27572.87	30047.83	31202.39	34026.70	36992.16	4.41%	1.29%	-0.04%	1.81%	5.37%
HT-Supply															
I Townships and Colonies	80.86	73.49	80.40	72.87	56.82	74.36	66.92	56.42	55.18	54.18	-8.04%	-8.94%	-29.83%	-24.28%	-4.65%
II Commercial & Others	1416.41	1485.05	1692.58	1511.86	1639.95	1372.59	1357.34	1463.09	1608.30	1968.84	-3.09%	-8.60%	-13.56%	6.38%	20.05%
III Industrial	16909.35	14870.97	14447.52	14173.63	15618.74	12277.22	12171.47	13351.75	14438.28	14479.52	-27.39%	-18.15%	-7.58%	1.87%	-7.29%
IV Institutional	1562.56	1509.41	1229.76	1430.03	1560.34	1345.17	1284.01	1413.38	1626.30	1857.51	-13.91%	-14.93%	14.93%	13.73%	19.04%
V Agricultural & Related	405.29	1756.58	744.19	3040.16	4369.47	447.50	1271.84	1490.62	1982.83	2211.33	10.41%	-27.60%	100.30%	-34.78%	-49.39%
RESCOs	586.11	631.52	667.98	737.82	796.66	592.10	703.43	699.49	817.31	873.21	1.02%	11.39%	4.72%	10.77%	9.61%
Temporary Supply	16.62	0.00	0.52	4.53	12.71	0.00	5.35	8.68	2.33	1.00	-	-	-	-	-
HT Total	20977.19	20327.02	18862.95	20970.90	24054.69	16108.94	16860.36	18483.43	20530.53	21445.57	-23.21%	-17.05%	-2.01%	-2.10%	-10.85%
LT + HT Total	47386.61	49991.25	50077.30	54391.87	59162.29	43681.81	46908.18	49685.82	54557.23	58437.73	-7.82%	-6.17%	-0.78%	0.30%	-1.22%

- 74.** The Commission notes that the licensees' estimated sales for FY2019-20 may not likely reach the sales volume approved. The decrease in industrial sales in LT and HT indicates recession in the economy of the State. The decrease in sales in respect of HT Agriculture & related is due to decrease in consumption of HT Lift Irrigation Schemes which may be due to non-commissioning of the anticipated in these schemes. However, increase in HT and LT Commercial sales is a relief to the licensees which has positive impact on the total revenue. A number of applications are pending from all categories of consumers as per the filings and the licensees shall endeavor to release the supply to pending applicants at the earliest possible time to achieve the projected sales. Also, it is observed that there are substantial number of stuck up meters to be replaced which need to be attended on top priority to improve the sales. The details of sales volume approved and estimated actuals for FY2019-20 are given in the table below.

Table 8 : Sales volume estimates and approvals for FY2019-20 (MU)

Consumer Category	2019-20 Approved (as per TO)			2019-20 Estimates			Change over approvals		
	SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	Total
LT-Supply									
I Domestic	9116.81	5670.71	14787.53	9733.91	5987.29	15721.20	6.77%	5.58%	6.31%
II Commercial & Other	1993.47	1124.09	3117.56	2067.07	1147.97	3215.04	3.69%	2.12%	3.13%
III Industry	1090.38	422.63	1513.01	1060.73	391.14	1451.87	-2.72%	-7.45%	-4.04%
IV Institutional	839.74	306.68	1146.42	908.29	323.61	1231.90	8.16%	5.52%	7.46%
V Agricultural & Related	11054.06	3486.98	14541.04	11104.80	4266.69	15371.49	0.46%	22.36%	5.71%
Temporary	1.24	0.81	2.04	0.66	0.00	0.66	-46.64%	-100.00%	-67.72%
HT-Supply									
I Domestic	30.14	26.68	56.82	23.43	30.75	54.18	-22.26%	15.25%	-4.65%
II Commercial & Other	886.60	717.88	1604.48	1176.24	792.60	1968.84	32.67%	10.41%	22.71%
III Industry	7716.22	7668.09	15384.31	7425.04	7054.48	14479.52	-3.77%	-8.00%	-5.88%
IV Institutional	974.96	737.10	1712.06	968.05	889.46	1857.51	-0.71%	20.67%	8.50%
V Agricultural & Related	3045.84	1441.80	4487.64	1832.95	378.38	2211.33	-39.82%	-73.76%	-50.72%
Temporary	1.89	10.82	12.71	1.00	0	1.00	-47.11%	-100.00%	-92.13%
RESCOs	415.36	381.30	796.66	459.85	413.36	873.21	10.71%	8.41%	9.61%
Total	37166.71	21995.58	59162.29	36762.02	21675.71	58437.73	-1.09%	-1.45%	-1.22%

75. Views/objections/suggestions relating to overall sales estimations

- a) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad, Dr. K. Kranthi Kumar Reddy and Sri Jetty Gurunadha Rao, West Godavari District & Ch. Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada have stated that the estimated power consumption is 10.69% higher than APDISCOMs' revised power consumption estimate for the FY2019-20, that the past experience shows that APDISCOMs usually overestimate power consumption during their filings and that this experience demands thorough examination of APDISCOMs' claims on estimated power consumption during the ensuing year 2020-21.
- b) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao, Sri Kandharapu Murali have stated that over the estimated growth of sales for the year 2019-20, EPDCL has proposed a growth rate of 10.23% and SPDCL a growth rate of 5.53% for the year 2020-21, that in view of the reported slowdown of economy, it is reported that demand for power in the country has come down during the last four months compared to the demand during the corresponding period of 2018-19, that with no signs of any spurt in economy in the country and in Andhra Pradesh and likely persistence of slowdown during the next financial year, the growth rates in sales for the next financial year projected by the DISCOMs do not seem realistic and that needless to say, non-realization of growth rate in projected sales, especially to cross-subsidizing consumers, would lead to loss of revenue and increase in revenue gap of the DISCOMs.

DISCOMs' Response:

APSPDCL: The sales, input & power purchase figures of APSPDCL for the years FY2018-19 & FY 2019-20 (forecasted) are given below:

S.No	Year	Sales Forecast in MU			Input in MU			Power Purchase in MU		
		ARR filings	T.O	Actuals	ARR filings	T.O	Actuals	ARR filings	T.O	Actuals
1	2018-19	34785.63	34921.79	34888.91	38056.20	38032.04	38030.06	39566.29	39335.27	40343.39
2	2019-20	38051.30	37166.70	36762.01*	41366.58	40285.81	40032.11*	43107.62	41604.68	41342.66*

* Revised forecast

As seen from the above, the variation in sales & power purchase requirement is less and not to the extent stated by the objector. Therefore, the DISCOM has forecasted growth for FY2020-21 on realistic basis. The Growth rate of 5.53% considered is reasonable which is based on historical growth.

APEPDCL: With regard to the DISCOM-wise energy requirement / input figures for FY2018-19, FY2019-20 and annual growth rates, the objector is requested to note the following:

DISCOM	2018-19	2019-20	Growth Rate (%)	2020-21	Growth Rate (%)
EPDCL	21136.94	23943.93	13.28%	26358.53	10.08%
SPDCL	40540.74	41342.68	1.98%	43618.72	5.51%
Total	61677.68	65286.61	5.85%	69977.25	7.18%

The Growth rate of 10.23% considered is reasonable which is based on historical growth and due to expected sales of 426 MU from upcoming Lift Irrigation Schemes.

- c) Sri P.H. Janaki Ram, Company Secretary, APSEB Engineers' Association, Tirupati has stated that there is a considerable difference in the sales forecast and the actuals since beginning and the variation ranges from - 17.34% to 14.31 % during the last 10 years, that the sales forecast is the basis on which the entire ARR preparations will depend. As submitted previously, the CAGR methodology being adopted for sales forecast is not a scientific statistical tool, that there are standard forecasting tools available. The AP Electricity sector business compulsorily require usage of standard statistical forecasting tools so that the estimations will be nearer to the actuals. He has requested to consult reputed institutes like Indian Statistical Institute Calcutta etc. to finalize the methodology for sales forecasting.

Commission's View: The Commission has taken note of the objections vis-à-vis the stand of the APDISCOMs as noted above and after thorough scrutiny, it has arrived at the figures of the sales and energy requirement which are discussed herein below.

As regards the suggestion to consult reputed institutes for methodology for sales forecasting, the objector may note that the percentage variation between actuals and approvals in respect of sales for the years from FY2017-18 to FY2019-20 is (-)1.22 to 0.30 only. The Commission's estimations are at reasonable levels obviating the need for consulting any external agency.

- d) Sri A. Punna Rao, Vijayawada has stated that the DISCOMs have adopted realistic growth rates for projection of sales in the ARR filings for FY2020-21.

DISCOMs' Response: DISCOMs have been adopting realistic growth rates for projection of sales based on historical data and trend.

- 76.** The Commission notes, as in earlier orders, that the 'trend method' for forecasting the sales for end users is more appropriate for general categories of consumers (categories consisting 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 appears to be imminent. However, the licensees stated to have estimated the sales in respect of Lift Irrigation schemes based on the information obtained from APTransco. Therefore, the Commission has, except for two exceptional consumers i.e. Category-V(A): Agriculture - LT and RESCOs, the sales of whom are revised based on the considerations as given hereunder, accepted the sales forecasted by the licensees for FY2020-21 as filed.

Sales estimation for Category-V(A): Agriculture - LT

- 77.** 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, APSPDCL is stated to have adopted methodology as suggested by the Indian Statistical Institute (ISI), Hyderabad / sampling for estimation of the agricultural consumption. Distribution Transformers (DTRs) are metered on sample basis and extrapolated the sample results on total agricultural DTR population to arrive at total consumption on monthly basis. In case of APEPDCL, it is stated that sample meters are provided to Agricultural DTRs at Mandal level. Based on the sample meter readings, the specific consumption per HP is estimated and the same is extrapolated to other agricultural pump sets in the Mandal.
- 78.** The licensees, based on historical consumption and factoring the number of connections released during FY2019-20 & new connections to be released during FY2020-21, and providing 9 hours supply per day to agriculturists as per the Government of Andhra Pradesh directions, have estimated the consumption for agriculture category for FY2020-21.

79. Views/objections/suggestions

Sales estimation

- a) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad, Dr. K. Kranthi Kumar Reddy and Sri Jetti Gurunadha Rao, West Godavari District and Sri Ch. Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada have stated that both the DISCOMs claimed that they are following the methodology stipulated by the Commission in calculating consumption of power in agriculture sector and that they did not provide detailed calculations to verify the same and stated only the conclusions without any corresponding calculations / information.

That for the year 2020-21, EPDCL projected 5% increase in power consumption to 2905.71 MU by agricultural services compared to the previous year, that LT agricultural services will be accounting for 11% of the power to be procured for

FY2020-21, that while FY2018-19 registered negative growth in power consumption by agriculture services, FY2019-20 was shown to have experienced 26.95% increase in power consumption by agriculture services, from 2206.51 MU in FY2018-19 to 2767.34 MU in FY2019-20, that this is attributed to increase in number of hours of power supply from 7 hours to 9 hours with effect from 15.02.2019 and that the question is whether power consumption by agricultural services really increased so much with the increase in hours of power supply.

That in the case of SPDCL, the number of agriculture pump sets will be increasing by 3.35% during FY2020-21, that if the Energy Efficiency interventions are taken into account, power consumption increase in agriculture sector shall be less than 3% but not 5.76% as projected by SPDCL.

- b) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao, Sri Kandharapu Murali have stated that despite the claimed efficiency improvement and energy conservation measures, percentage of metered sales of both the DISCOMs for the years 2018-19 and 2019-20 is less than the Commission determined sales and distribution losses are higher than the Commission determined targets, that despite huge expenditures permitted by the Commission in the MYT for distribution business of the DISCOMS to strengthen and expand distribution network, reduction of percentage of distribution losses is not up to the mark, that it has become a standard practice for the DISCOMs to project inflated agricultural demand and for the Commission to reduce the same and for the DISCOMs to show revised estimates of higher consumption for agriculture, that genuine criticism is being voiced every year that a part of transmission and distribution losses is being included in supply of power to LT Agriculture, that SPDCL has projected revised sales of 9656.87 MU for the year 2019-20 against 9502.76 MU permitted by the Commission and supply of 10,139.72 MU during 2020-21 and similarly, EPDCL has projected revised sales of 2767.34 MU against 2090.27 MU permitted by the Commission for the year 2019-20 and supply of 2905.71 MU during 2020-21 for LT Agricultural connections and that if the Commission reduces the projected sale of power to LT agricultural services during FY2020-21, the projected revenue requirement and revenue gap would vary.
- c) Sri Kandregula Venkata Ramana, Anakapalli (V), Visakhapatnam has suggested that DISCOMs have been showing their losses in the agriculture sales and they are claiming subsidy.

DISCOMs' Response:

APSPDCL: The agricultural consumption was calculated based on ISI Methodology. Sample DTR readings were taken every month for arriving the consumption for all sample DTRs capacity. Per DTR consumption of sample capacity was extrapolated capacity wise to all the Agricultural DTRs. The sum of consumption of all the

Agricultural DTRs was taken as total agricultural consumption in the Circle/District. For better explanation, Agriculture consumption estimated based on ISI methodology in Operation circle, Kurnool for the month of Nov-2019 is given below:

1. Total No. of Agricultural DTRs – 56298 Nos.
2. No of Sample Agricultural DTRs – 328 Nos.

Calculation of Sample DTRs' consumption:

Description	Formulae	Capacity wise No. of Agl. Sample DTRs Existing (KVA)							Total	
	A	16	25	30	40	45	50	63	100	
No. of Sample DTRs existing	B	18	107	5	1	5	2	68	122	328
Total No. of Sample DTRs	C	18	107	5	1	5	2	68	122	328
Consumption of Total Sample DTRs in KWH	D	11046	160143	2419	1531	13204	8084	94792	195341	486560
Total KVA of Sample DTRs	$E = C \times A$	288	2675	150	40	225	100	4284	12200	19962
Consumption per KVA of Sample DTRs	$F = D / E$	38.35	59.87	16.13	38.28	58.68	80.84	22.13	16.01	24.37
Consumption Per DTR of Sample DTRs	$G = D / C$	613.67	1496.66	483.80	1531.00	2640.80	4042.00	1394.00	1601.16	1483.41

Calculation of Circle consumption:

Total Agl. DTRs existing	H	7177	45297	547	63	617	101	1310	1186	56298
Total KVA in the Circle	$I = H \times A$	114832	1132425	16410	2520	27765	5050	82530	118600	1500132
Total Circle Consumption	$J = H \times G$	4404286	67794369	264639	96453	1629374	408242	1826140	1898971	78322472

Total Circle Consumption in MU: 78.32 MU

As explained above, Circle wise Agriculture sales were estimated for the month of November-2019 as given below:

Circle Name	Agriculture Sales (MU)
Vijayawada	39.85
Guntur	48.26
Ongole	72.44
Nellore	39.61
Tirupati	104.69
Kadapa	63.82
Ananatapur	141.79
Kurnool	78.32

Considering the GoAP Policy of releasing new agricultural connection in the FY2020-21, about 50,000 Nos. connections are anticipated for release. This constitutes about 3% increase on the existing no. of services. There is widespread rainfall in the area of APSPDCL during FY2019-20. The ground water would improve due to which there will be increase in the usage of bore wells in the ensuing year. Due to the above factors, a realistic growth rate of 5% is projected in agricultural consumption.

APEPDCL Response: The procedure in arriving agriculture consumption has been explained along with details in the filings.

The Agricultural consumption in APEPDCL in FY2018-19 was arrived with 7 hours supply at growth of (-) 0.39% due to favourable climatic conditions. Later in H1 of FY2019-20, no. of hours of supply was increased from 7 hours to 9 hours as per Government orders and the supply with 9 hours is estimated for FY2019-20. Thus, the growth rate from FY2018-19 to FY2019-20 is estimated at 27% and for FY2020-21 over FY2019-20, the growth rate is 5%. This was arrived considering GoAP policy of releasing new agriculture connections in the year FY2020-21. About 12,113 Nos. new connections are anticipated to be released based on the actuals and estimations of FY2019-20. Thus, a reasonable growth rate of 5% is adopted for FY2020-21.

Commission's view: The projections of the DISCOMs are thoroughly scrutinized vis-à-vis the views expressed by the objectors and the probable increase in agricultural consumption over the previous year approvals is reasonably estimated duly keeping in view the Government's decision to increase free power supply to agricultural consumers from 7 hours to 9 hours.

Agriculture metering

- d) Sri Katuru Hari Kishore Kumar Reddy, Sri Yellapu Suryanarayana, Sri Rasamsetty Raja Babu, Sri Balle Nageswara Rao, Sri Karisetty Ganga Prasad, Sri Kavuluri Pathi Raju, Sri Gandham Gopala Krishna, Sri Thirumulasetty Murali Nagendra Babu, Sri Kanumuri Seetharamaraju, Sri Ramisetty Sathibabu, Sri Sarnala Rathnam, Sri Ghanta Naga Raju, Sri Cheti Venkata Swamy, Sri Cheti Nagasrinu, Sri Polyreddy Rammohan Reddy, Sri Pundla Srinivasulu Reddy, Sri Chintapalli Narayana Reddy, Sri Alturu Hari Sarvotham Reddy, Sri Thunduru Srinivasa Rao, Sri Maddipati Kasi Viswanadham, Sri Ravuri Raja Rao, Sri Parimi Venkata Raghavulu, Sri R. Rama Rao, Sri Eedu Gangadhara Rao, Sri Mullapudi Subbarao, Smt. Katuru Sobha Rani, Sri Jalagam Kumara Swamy, Sri Medasani Vijay Bhaskar, Sri G. Sri Krishna Kumar, Sri V. Asha Kiran, Sri Kakanuru Venkata Maheswara Reddy, Sri Bogalu Sri Hari Reddy, Sri Kanda Gopala Krishna, Sri Addagada Satish Kumar, Sri Tammanaboyina Nageswara Rao, Sri Bathina Perraju, Sri Gopu Narayana Murthy, Sri Gadagottu Srirambabu, Sri Vadlapudi Nageswara Rao, Sri D. Gangadhara Rao, Sri Kandru Venkata Ratnam, Sri Vemareddy Surendranath Reddy, Sri Indukuru Uday Kumar Reddy, Sri Dandu Abhilash Reddy of Bharatiya Kisan Sangh, Sri U. Bhaskara Rao,

Sri M. Jameel, Sri T. Gopala Krishna and Sri D. Nageswara Rao from East Godavari District have stated that as per UDAY scheme, 100% agriculture DTR metering should have been completed by 30th September, 2017, that readings shall be taken every six months and accordingly the subsidy shall be paid by the Government to the DISCOMs which help the Government know how much subsidy is to be paid towards agriculture which is easy since HVDS is already implemented and that this may be strictly implemented.

- e) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that meters should be provided to all agriculture services for accurate consumption calculations.
- f) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad, Dr. K. Kranthi Kumar Reddy and Sri Jetty Gurunadha Rao, West Godavari District & Ch. Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada have stated that the estimate of electricity consumption by LT agriculture services continues to be a contentious issue, that under UDAY to which both the DISCOMs are signatories along with GoAP, all the DTRs including those serving exclusively agriculture connections are supposed to be metered by 30th September, 2017, that as all the DTRs serving agriculture connections are expected be metered the present method of sampling needs to be given up in favour of reading meters of all DTRs serving agriculture connections, that this will help to obtain dependable estimate of electricity consumption in agriculture sector. They requested information on the number of DTRs serving exclusively agriculture connections and DTRs serving agriculture along with domestic and commercial consumers in rural areas and out of these how many DTRs are metered, and when are the remaining DTRs are going to be metered. That both the DISCOMs have spent thousands of Rupees of Crores on HVDS DTRs and it is not sure whether they have met the objectives and that the expenditure on metering will be a small fraction of the amount spent on these HVDS DTRs.

DISCOMs' Response:

APSPDCL: Out of 4,36,241 Nos. agricultural DTRs, 4026 Nos. & 2,24,070 Nos. DTRs are provided with 3 Phase and single-phase meters respectively.

APEPDCL: Exclusive agricultural DTRs in APEPDCL are 96,056 Nos. out of which 20,551 DTRs are metered. Action is being taken for fixing the meters to the balance 75,505 Nos. DTRs in due course.

Duration of Agriculture supply and DSM measures

- g) Sri D. Nageswara Rao, Gangalakurru Agraharam (V), Sri. M. Jamilu, Machavaram (V) Ambajipeta (M), Sri, Dr. Uppuganti Bhaskara Rao, Bandarulanka (V), Sri Thikkireddy Gopala Krishna, Batlapalem (V) Amalapuram (M) East Godavari Dist. have stated the following:

- (i) As Andhra Pradesh has surplus electricity for 2019-2020, 24 hours free supply to agriculture sector as being provided to the farmers in Telangana may also be provided in A.P.

APEPDCL Response: As per the directions of the Government, DISCOMs are extending free electricity for 9 hours a day to agriculture. The issue of providing free electricity for 24 hours a day to agricultural is not in the purview of DISCOM.

- (ii) Implementation of DSM measures is not being taken seriously by DISCOMs and providing of new pump sets in place of old pump sets was also ignored.

APEPDCL Response: In the 5 Districts of APEPDCL 18,273 energy efficient pump sets were replaced with regular pump sets as on 30.06.2019.

Commission's decision: The estimation of agricultural consumption is always a contentious issue. Providing 100% metering to all the agricultural services or providing meters to all agricultural DTRs is only the way out to arrive at the correct consumption. The National Tariff Policy, 2016 also envisages providing meters to all DTRs. This Commission also gave directions in various orders to provide meters at least to the DTRs for arriving the agricultural consumption correctly. The action taken by the DISCOMs so far in this regard is not satisfactory. In the absence of metering, the Commission is reasonably estimating the sales for agriculture based on historical sales, losses and taking other factors into consideration.

With regard to the aspect of number of hours of supply for agriculture, this supply is being 100% subsidized by the Government. Hence, any decision on the number of hours of supply to this sector is in the purview of GoAP.

As regards the Energy Efficiency measures, the Commission is granting approvals for all the energy conservation and energy efficiency projects proposed to be taken up by the licensees, particularly in agriculture.

- 80.** The Commission, while finalizing the sales estimate of agricultural consumption in LT supply for FY2020-21 has considered the following points based on the submissions in the filings:

- (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 undertaken by both the licensees for conserving the agricultural consumption.
- (ii) The details of year-wise actual agricultural consumption against the Commission's approval in respect of APEPDCL are as given below:

Year	Actuals	As per the Tariff Order
2012-13	1528.41	1714.02
2013-14	1752.45	1714.02
2014-15	2,166.92	1714.02
2015-16	2149.49	1936.33
2016-17	2399.41	2281.16
2017-18	2188.29	2090.27
2018-19	2179.85	2090.27
2019-20 (Estimations)	2767.35	2090.27
2020-21 (Projections)	2905.71	

(iii) The details of year-wise actual agricultural consumption against the Commission's approval in respect of APSPDCL are as given below:

Year	Actuals	As per the Tariff Order
2018-19	9832.49	8741.73
2019-20 (Estimations)	9656.87	9502.76
2020-21 (Projections)	10139.72	

(iv) The actual agricultural consumption details for first half (H1) of FY2019-20 furnished in the filings are as given below:

S. No.	Description	SPDCL	EPDCL	Total
1	Actual Sales in H1 of FY2019-20 (MU)	4197.37	1054.44	5251.81
2	Energy Requirement approved in FY2019-20 (MU)	9502.76	2090.27	11593.03
3	Percentage of actual sales in total sales approved	44.17	50.45	44.17

- (v) No. of lift irrigation schemes are planned to be commissioned in FY2020-21 and steps are being taken for conservation of water usage in agriculture by Government of Andhra Pradesh.
- (vi) The decision of the Government of Andhra Pradesh for increasing the 7 hours of free power supply to 9 hours for the farming community.
- (vii) Licensees are not reporting in the filings, the number of services which are not using supply due to dried bore wells and other reasons.
- (viii) The estimated agricultural consumption for the second half (H2) of FY2019-20 is 30.07% and 62.45%, over and above the first half (H1) of FY2019-20 by the SPDCL & EPDCL respectively.

81. In view of the above, the Commission has not accepted the sales as forecasted by licensees for FY2020-21 and instead adopted the sales as per the actuals for FY2018-19 which is highest so far, as the basis in respect of APSPDCL; and at actuals for

FY2016-17 in respect of APEPDCL (which is the highest during the years FY2012-13 to FY2017-18) keeping in view nine (9) hours supply to the agriculturists.

- 82.** 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 100% subsidized consumer category. 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 subsidy by the Government. Hence, the sales volume variation risk/reward for this category could be seen as maximum and therefore the 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's directives.

- 83.** In light of the above discussion, the Commission estimates and approves the sales volume for agricultural consumption as given in the Table below:

Approved: Agricultural sales for FY2020-21 (MU)

S. No.	Description	SPDCL	EPDCL	Total
1	Agricultural Sales for FY2020-21	9832.49	2399.41	12231.90

Rural Electric Cooperative Societies (RESCOs)

- 84.** 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 FY2020-21 at which they purchase electricity from respective licensees¹. In these applications, RESCOs have estimated the power purchase requirement. The Commission has made a comparative study as given in the Table below for approving the sales volume to RESCOs.

¹ 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.

RESCO	Approvals during FY2019-20 (MU)	Estimation for FY2020-21 based on DISCOMs' LT Sales growth rates (MU)	Sales estimated by the licensees (MU)	Sales filed by the RESCOs (MU)
Anakapalle	381.30	459.61	471.10	416.00
Cheepurupalle				
Kuppam	415.36	455.85	512.27	559.85

85. Accordingly, the Commission, after examining the filings of RESCOs and the licensees and on comparing with its own estimation for FY2020-21 based on DISCOMs' LT sales growth rates (as indicated in the Table above), has approved the sales at the lowest among the filings in respect of Anakapalle and Cheepurupalle RESCOs at 416 MU. In respect of Kuppam, the estimation of licensee i.e. APSPDCL at 512.27 MU is taken which is in between the values of RESCOs filings and that estimated by the Commission.
86. The Commission has, with the above-mentioned modifications to the licensees' filings with regard to sales volume for Agricultural category and RESCOs, determines the sales for both the licensees at 61818.61 MU for FY2020-21, 38486.59 MU for SPDCL and 23332.02 MU for EPDCL. The sales approved by the Commission for FY2020-21 is 4.49 percent higher over the sales approved for the FY2019-20 compared to 5.96 percent filed by the licensees. The details are given in the table below:

Table 9 : Sales Volume Estimates and Approvals for FY2020-21 (MU)

Consumer Category		Filed by Licensee			Approved by APERC			Variations over Filings		
LT-Supply		SPDCL	EPDCL	Total	SPDCL	EPDCL	Total	SPDCL	EPDCL	Total
I	Domestic	10445.84	6551.52	16997.36	10445.84	6551.52	16997.36	0.00	0.00	0.00
II	Commercial & Other	2224.03	1249.02	3473.05	2003.39	1144.23	3147.62	-220.64	-104.79	-325.43
III	Industry	1073.35	398.57	1471.92	1074.08	398.57	1472.65	0.73	0.00	0.73
IV	Institutional	956.63	343.87	1300.50	1176.53	448.63	1625.16	219.90	104.76	324.66
V	Agricultural & Related [(i)+(ii)]	11744.73	4730.56	16475.30	11437.49	4224.26	15661.75	-307.24	-506.30	-813.54
	(i) Non-Corporate Farmers	10139.27	2899.47	13038.74	9828.76	2392.71	12221.47	---	---	---
	(ii) Others	1605.46	1831.10	3436.56	1608.73	1831.56	3440.29	---	---	---
HT-Supply										
I	Domestic	23.67	31.70	55.37	23.67	31.70	55.37	0.00	0.00	0.00
II	Commercial & Other	1207.44	855.95	2063.39	1031.67	754.84	1786.51	-175.77	-101.11	-276.88
III	Industry	7633.38	7332.05	14965.43	7634.48	7332.05	14966.53	1.10	0.00	1.10
IV	Institutional	1016.66	936.65	1953.31	1191.34	1037.75	2229.09	174.68	101.10	275.78
V	Agricultural & Related	1955.83	992.48	2948.30	1955.83	992.48	2948.30	0.00	0.00	0.00
	RESCOs	512.27	471.10	983.37	512.27	416.00	928.27	0.00	-55.10	-55.10
	Total	38793.83	23893.46	62687.29	38486.59	23332.02	61818.61	-307.24	-561.44	-868.68

Power Purchase Requirement-Role of Network Losses

- 87.** 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 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 by grossing up the sales volume with the loss levels². 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 requirements at different voltages are aggregated to arrive at the gross power purchase requirement (sales plus losses) for which the power procurement plan is to be made.
- 88.** The licensees, on the proposed sales of 62687.29 MU have computed the network losses at 7291.32MU and the power purchase requirement at 69978.61 MU for FY2020-21. The details of these computations are given in the table below:

Table 10 : Power Purchase requirement estimates by the Licensees for FY2020-21

Licensee	Sales in MU	% of all Losses	Losses in MU	Power purchase requirement in MU
(1)	(2)	(3)	(4)	(5) = (2) + (4)
SPDCL	38793.83	11.06	4826.24	43620.07
EPDCL	23893.46	9.35	2465.08	26358.54
Total	62687.29	10.42	7291.32	69978.61

Fixation of Loss Levels for FY2020-21**89. Views/objections/suggestions**

Sri M. Thimma Reddy, Dr. K. Kranthi Kumar Reddy, Sri Jetti Gurunadha Rao, and Sri Ch. Diwakara Babu have stated that APEPDCL and APSPDCL shown higher T&D losses during FY2020-21 than they have achieved in the previous years, that during FY2019-20 T&D losses of APEPDCL accounted for 6.51 % of the power procured and during the ensuing year (2020-21) these losses are estimated to be 9.35%, that similarly, in the case of APSPDCL during FY2019-20 T&D losses stood at 8.17% and during the ensuing year (2020-21) these losses are estimated to be 11.06%, that over the period in fact these losses shall come down whenever ARRs for the ensuing year present an opposite picture and that by bringing down T&D loss levels total power procurement in the State during the ensuing year FY2020-21 can be reduced by about 3 percent.

² The relevant formula for computing the power purchase requirement is $\text{Sales}/(1-\% \text{ Loss}/100)$.

DISCOMs' Response:

APSPDCL: The T&D losses of 8.17% for FY2019-20 are at DISCOM level. Whereas the objector has computed losses including the transmission network for FY2020-21 and hence the same are not comparable.

APEPDCL: The quantum of power procurement would be reduced to the extent of losses brought down, but simultaneously the power procurement increases with the increase of load growth.

The Commission's decision:

- 90.** The Commission, after considering a) existing loss levels; b) loss levels adopted in the Retail tariff order for FY2019-20; c) Loss levels adopted by the licensees in their filings; and d) views/objections/suggestions of various stakeholders, adopts the transmission and distribution losses for FY2020-21 as detailed in the paragraphs below:
- 91.** The T&D losses projected by the DISCOMs are revised to be in consonance with the MYT Orders issued for Transmission and Distribution business for the 4th Control Period.
- 92.** From the filings, it is observed that while APSPDCL has considered the loss levels different from those approved by the Commission in its order dated 15.04.2019 on Wheeling Tariffs for distribution business for the 4th Control Period, APEPDCL has adopted the loss levels as approved. In case of 132 kV and above voltage levels, the licensees have adopted the transmission loss of 3.17% as approved by Commission in the Retail Supply Tariff order for FY2019-20.
- 93.** After careful examination, the Commission adopts the loss levels for upto and including 33 kV as approved for FY2020-21 in its order dated 15.04.2019 on Wheeling Tariffs for distribution business for the 4th Control Period. With regard to 132 kV and above intra-state transmission system including the PGCIL injections, the loss level approved by the Commission for FY2019-20 is approved, as filed by the licensees. The relevant details regarding losses are given in the tables below:

Table 11 : SPDCL Network Losses for FY2020-21

Network	Retail Supply Order for FY2019-20	Filed by the Licensee for FY2020-21	As fixed by the Commission
(1)	(2)	(3)	(4)
Distribution-LT	4.26%	4.28%	4.23%
Distribution-11 kV	3.27%	3.30%	3.22%
Distribution-33 kV	3.20%	3.25%	3.15%
APTRANSCO including PGCIL	3.17%	3.17%	3.17%

Table 12: EPDCL Network Losses for FY2020-21

Network	Retail Supply Order for FY2019-20	Filed by the Licensee for FY2020-21	As fixed by the Commission
(1)	(2)	(3)	(4)
Distribution-LT	4.01%	3.99%	3.99%
Distribution-11 Kv	3.20%	3.15%	3.15%
Distribution-33 Kv	2.79%	2.78%	2.78%
APTRANSCO including PGCIL	3.17%	3.17%	3.17%

Power Purchase Requirement

- 94.** Commission has recomputed the power purchase requirement at 68901.60 MU on the approved sales of 61818.61 MU for FY2020-21 after factoring the losses as detailed above. The power purchase requirement so arrived at is lesser by about 1077.01 MU compared to the power purchase requirement of 69978.61 MU filed by the Licensees for FY2020-21. The details of power purchase requirement filed by licensees and computed by the Commission are given in the tables below:

Table 13 : Power Purchase Requirement for FY2020-21 as per filing

Power Purchase (in MU), Voltage-wise sales (in MU) and Voltage-wise Loss (%)										
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV		
APEPDCL	L.T.	3.99%	L.T.	13273.54	13825.17	14274.83	14683.01	15163.70		
	11kV	3.15%	11kV	2591.01	-	2675.28	2751.78	2841.87		
	33kV	2.78%	33kV	2072.76	-	-	2132.03	2201.83		
	132kV	3.17%	132kV	5956.14	-	-	-	6151.14		
			TOTAL	23893.46	13825.17	16950.11	19566.83	26358.54		
			Loss up to said voltage	3.99%	6.40%	8.33%	9.35%			
						D. Loss(MU)	1629.51			
						T. Loss(MU) including PGCIL Loss	835.57			
			Total Loss(MU) & % Loss including PGCIL						2465.08	9.35%
			Total Power Purchase Requirement (MU)						26358.54	
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV		
APSPDCL	L.T.	4.28%	L.T.	26444.58	27627.33	28570.44	29530.78	30497.55		
	11kV	3.30%	11kV	3191.86	-	3300.82	3411.77	3523.46		
	33kV	3.25%	33kV	4086.69	-	-	4224.06	4362.35		
	132kV	3.17%	132kV	5070.70	-	-	-	5236.71		
			TOTAL	38793.83	27627.33	31871.26	37166.61	43620.07		
			Loss up to said voltage	4.28%	7.01%	9.26%	11.06%			
						D. Loss(MU)	3443.48			
						including PGCIL Loss	1382.76			
			Total Loss(MU) & % Loss including PGCIL						4826.24	11.06%
			Total Power Purchase Requirement (MU)						43620.07	
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV		
All DISCOMs	L.T.	4.18%	L.T.	39718.12	41452.50	42845.27	44213.79	45661.26		
	11kV	3.23%	11kV	5782.87	-	5976.10	6163.55	6365.33		
	33kV	3.09%	33kV	6159.45	-	-	6356.09	6564.18		
	132kV	3.03%	132kV	11026.85	-	-	-	11387.84		
			TOTAL	62687.29	41452.50	48821.37	56733.44	69978.61		
			Loss up to said voltage	4.18%	6.80%	8.94%	10.42%			
						D. Loss(MU)	5072.99			
						including PGCIL Loss	2218.32			
			Total Loss(MU) & % Loss including PGCIL						7291.31	10.42%
			Total Power Purchase Requirement (MU)						69978.61	

Table 14 : Power Purchase Requirement for FY2020-21 approved by APERC

Power Purchase Requirement (MU), Voltage-wise sales (MU) and Voltage-wise Loss (%)								
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
APEPDCL	L.T.	3.99%	L.T.	12767.21	13297.79	13730.29	14122.91	14585.26
	11kV	3.15%	11kV	2535.91	-	2618.39	2693.26	2781.43
	33kV	2.78%	33kV	2072.76	-	-	2132.03	2201.83
	132kV	3.17%	132kV	5956.15	-	-	-	6151.14
				TOTAL	23332.02	13297.79	16348.68	18948.20
				Loss up to said voltage		3.99%	6.40%	8.30%
							D. Loss(MU)	1572.33
							T. Loss(MU) including PGCIL Loss	815.31
				Total Loss(MU) & % Loss including PGCIL			2387.64	9.28%
				Total Power Purchase Requirement (MU)			25719.66	
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
APSPDCL	L.T.	4.23%	L.T.	26137.33	27291.77	28199.81	29116.99	30070.22
	11kV	3.22%	11kV	3204.66	-	3311.28	3418.98	3530.91
	33kV	3.15%	33kV	4073.89	-	-	4206.40	4344.10
	132kV	3.17%	132kV	5070.70	-	-	-	5236.71
				TOTAL	38486.59	27291.77	31511.09	36742.37
				Loss up to said voltage		4.23%	6.88%	9.05%
							D. Loss(MU)	3326.48
							T. Loss(MU) including PGCIL Loss	1368.87
				Total Loss(MU) & % Loss including PGCIL			4695.35	10.87%
				Total Power Purchase Requirement (MU)			43181.94	
DISCOM	Voltage	Loss	Voltage	Sales	LT	11kV	33kV	132kV
All DISCOMs	L.T.	4.15%	L.T.	38904.54	40589.56	41930.10	43239.90	44655.48
	11kV	3.19%	11kV	5740.57	-	5929.67	6112.24	6312.34
	33kV	3.03%	33kV	6146.65	-	-	6338.43	6545.93
	132kV	3.03%	132kV	11026.85	-	-	-	11387.84
				TOTAL	61818.61	40589.56	47859.77	55690.57
				Loss up to said voltage		4.15%	6.72%	8.80%
							D. Loss(MU)	4898.81
							including PGCIL Loss	2184.18
				Total Loss(MU) & % Loss including PGCIL			7082.99	10.28%
				Total Power Purchase Requirement (MU)			68901.60	

CHAPTER - IV

POWER PURCHASE COST

Introduction

95. In this Chapter, the Commission has determined the power purchase cost for each Licensee for FY2020-21 based on the power purchase requirement approved in Chapter-III while keeping in view the stakeholders' views/objections/suggestions and all other related aspects. The Power Purchase cost for FY2020-21 estimated by the licensees from different sources to meet their power purchase requirement on estimated sales is as given in the table below:

Table 15: Filings: Power Purchase Cost for FY 2020-21

S. No.	Source	Despatch (MU)	Total Variable Cost (Rs.Cr.)	Variable Cost (Rs. / Unit)	Total Fixed Cost (Rs.Cr.)	Fixed Cost (Rs./Unit)	Total PP Cost (Rs.Cr.)	Average PP Cost (Rs./Unit)
	(1)	(2)	(3)	(4) = (3)/(2)*10	(5)	(6) = (5)/(2)*10	(7) = (3) +(5)	(8) = (7) /(2)*10
1	APGENCO Thermal*	17089.52	6540.92	3.83	1661.51	0.97	8202.43	4.80
2	RTTP Stage-IV	3952.51	1525.67	3.86	1101.73	2.79	2627.40	6.65
3	NTTPS V Stage	2232.54	703.25	3.15	608.81	2.73	1312.06	5.88
	APGENCO Thermal TOTAL	23274.57	8769.84	3.77	3372.05	1.45	12141.89	5.22
4	APGENCO Hydel	3137.50	0.00	0.00	601.41	1.92	601.41	1.92
5	SDSTPP - I	10489.53	3293.71	3.14	2002.18	1.91	5295.89	5.05
6	SDSTPP - II	2466.60	774.51	3.14	471.12	1.91	1245.64	5.05
7	CGS	13745.16	4816.86	3.50	1649.34	1.20	6466.20	4.70
8	JNNSM Phase-I Thermal	279.69	109.92	3.93	28.80	1.03	138.72	4.96
9	JNNSM Phase-II Thermal	4334.02	1317.35	3.04	665.33	1.54	1982.68	4.57
10	GGPP	795.48	225.92	2.84	32.61	0.41	258.53	3.25
11	APGPCL	86.78	24.73	2.85	18.36	2.12	43.09	4.97
12	KSK Mahanandi	2978.40	881.61	2.96	446.73	1.50	1328.34	4.46
13	Sembcorp(TPTCL)	1916.54	465.72	2.43	280.31	1.46	746.03	3.89
14	Other RE	338.03	174.71	5.17	0.00	0.00	174.71	5.17
15	Additional Interest on Pension Bonds	--	--	--	921.50	--	921.50	--
16	Spectrum (SPGL)	1185.59	283.36	2.39	109.07	0.92	392.43	3.31
17	Market	4949.36	2133.17	4.31	0.00	0.00	2133.17	4.31
	TOTAL	69977.25	23271.41	3.33	10598.82	1.51	33870.23	4.84

*Excluding S.Nos.2 and 3 in the Table above

Energy Availability for FY2020-21

96. The Licensees have estimated the gross energy availability for the State from different sources for FY2020-21 as shown in the Table below. The station-wise availability filed by the Licensees are shown in Annexures – 03(A), 03(B) & 03(C).

Table 16: Filings: Energy Availbilty (MU)

S. No.	Source	Energy Availability in MU
1	APGENCO-Thermal	37114.68
2	APGENCO-Hydel	3137.5
3	Central Generating Stations	18806.38
4	APGPCL	86.78
5	IPPs	1981.07
6	Other RE	338.02
7	KSK Mahanadi and Sembcorp India	4894.94
Total		66359.37

97. The licensees have estimated availability from certain stations and included in the respective heads as detailed hereunder:

- Energy availability from Godavari Gas Power Plant (GGPP) and Spectrum Power Generation Limited (SPGL) is included under the head “IPPs”,
- Energy availability from Non-conventional energy sources other than Wind and Solar sources is included under “Other RE”,
- Energy availability from Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) Stage-I & II is included under the head “APGENCO – Thermal” along with the thermal power stations of AP Genco,
- Bundled Power from thermal stations in respect of Solar plants under JNNSM Phase – I & II is included along with thermal power stations of Central Generating Stations.

98. Estimating the energy availability as shown above against their monthwise power purchase requirement, the licensees have projected the monthwise deficit / surplus for FY2020-21 as shown in the table below:

Table 17: Filings: Monthwise deficit (-) / surplus (MU)

S. No.	Month	Power Purchase Requirement (MU)	Energy Availability (MU)	Deficit (-)/ Surplus (MU)
1	Apr-20	5807.64	5213.36	-594.28
2	May-20	6200.52	5323.05	-877.47
3	Jun-20	5887.76	4751.28	-1136.48
4	Jul-20	5606.65	4826.58	-780.07
5	Aug-20	5503.31	5324.97	-178.34
6	Sep-20	5402.08	5295.57	-106.51
7	Oct-20	6399.38	5810.50	-588.88
8	Nov-20	5939.30	5306.47	-632.83
9	Dec-20	5532.28	5567.99	35.71
10	Jan-21	5496.11	6296.75	800.64
11	Feb-21	5494.72	5885.56	390.84
12	Mar-21	6707.43	6419.28	-288.15
Total		69977.18	66021.35	-3955.83

99. The licensees propose to bridge the monthly deficit through procurement from Market viz. Energy Exchanges / DEEP e-bidding portal / other competitive means. While estimating the availabilities the licensees have not included energy availabilities from the contracted capacities of Wind and Solar sources as shown below:

Table 18: Filings: Capacity of Wind and Solar not included (MW)

S. No.	Source	Capacity (MW)
1	Wind Power Projects	3928.25
2	Solar Parks	3800.00
3	Solar Power Projects	665.00
4	NVVNL Bundled Power -SOLAR	39.20
Total		8432.45

100. The licensees have stated the following for non-inclusion of the energy availability from the Solar and Wind sources:

“In view of variable nature of generation with a character of non-dispatchability, the availability from VRE sources has not been considered for Power Purchase Cost calculations. The energy from VRE sources cannot be scheduled for day ahead or week ahead planning. The generation from these sources is considered as inadvertent / infirm in nature. As such the generation from VRE sources will be used subject to its availability as per grid code”.

101. Views/Objections/Suggestions

Non-inclusion of availability from Wind and Solar sources

- a) Sri M. Thimma Reddy, Dr. K. Kranthi Kumar Reddy, Sri Jetty Gurunadha Rao, and Sri Ch. Diwakara Babu have stated that APDISCOMs did not include power available from wind and solar units even when the available VRE capacity is 8,432.45 MW and the available energy is 13,193.67 MU which is about 18.85% of the proposed energy procurement during the ensuing year, that there are issues relating to power purchase/procurement cost from VRE sources and the way power purchase cost is fixed in the case of VRE plants, that during various public hearings held by the Commission, members of the public drew attention to the non-transparent manner in which the power purchase costs from these units were fixed, that it needs no reiteration that VRE power procurement costs are high and are in need of revision downwards and that the present opportunity has to be utilized to set the tariffs for these units right, but it is not advisable to totally jettison these sources.

They have further stated that renewable energy is being promoted in the context of climate change and global warming, that according to Section 86 (1) (e) of the Electricity Act, 2003 one of the functions of the State Commission is to "promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of distribution licensee", that accordingly, the Commission had issued Regulations on Renewable Power Purchase Obligations (RPPO) according to which APDISCOMs need to procure 15% of the power to be supplied during the year FY2020-21 from renewable sources including VRE sources. That if RE power is not procured according to the RPPO, to that extent renewable energy certificates (REC) need to be purchased and this will become additional expenditure over and above the PPA obligations, that present DISCOMs proposals are in complete violation of RPPO Regulations meant to promote renewable energy, and that high cost power from these sources which is over and above the RPPO threshold may be set aside to bring down power purchase cost burden.

- b) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that though the DISCOMs have projected "probable availability" of variable renewable energy of 13193.67 MU, they have not included it in the total availability of power, resulting in artificial decrease of availability of power, surplus power, cost of power purchase and revenue gap, that the contention of the DISCOMs that, in view of variable nature of generation with a character of non-dispatchability, the availability from VRE sources has not been considered for power purchase cost calculations is untenable, that the approved Capacity Utilisation Factor (CUF), as incorporated in the respective PPAs of each unit of renewable energy should be taken into account for working out availability of power per annum, as has been the standard practice over the years, that variable nature of generation of power is applicable not only to renewable energy, but also to thermal power, that while the solar and wind power depend upon radiation of the Sun and Wind velocity respectively, the thermal power stations depend upon the availability of quantum of fuel required for generation of power, that in view of the must-run status given to units of renewable energy, the DISCOMs have to purchase the same that the question of backing down renewable energy units arises only after thermal power plants are backed down to their technical limits in a year subject to merit order dispatch, as incorporated in the respective PPAs, to maintain required the grid frequency as per applicable grid code. That therefore, the DISCOMs have to take into account availability of renewable power as per the PPAs already approved by the Commission to project availability of total power and surplus power in a year and that as such, the contention of the DISCOMs that generation from renewable

power units is inadvertent or infirm in nature has not been, and will not be a valid ground for not taking availability of power from those units into account.

- c) Sri M. Venugopala Rao and others have further stated that the contention of the DISCOMs that energy from VRE sources cannot be scheduled for day-ahead or week-ahead planning is untenable as it is not the DISCOMs that are scheduling wind and solar power, that the objective of APERC Regulation No.4 of 2017 i.e. APERC (Forecasting, Scheduling and Deviation Settlement of Solar and Wind Generation) Regulation, 2017 is to facilitate large-scale grid integration of solar and wind generating stations while maintaining grid stability and security as envisaged under the State Grid Code through forecasting, scheduling and deviation settlement of these generators. That the regulation says: Forecasting shall be done by every wind and solar generator connected to the Grid, either by itself or by a QCA (qualified coordinating agency) on its behalf. That the SLDC shall also undertake forecasting of wind and solar power that is expected to be injected into the Grid with the objective of ensuring secure Grid operation by planning for the requisite balancing resources, that the forecast by a wind or solar generator or the QCA, as the case may be, shall be provided separately for each Pooling station, that the wind or solar generator or QCA will have the option of accepting the SLDC's forecast for preparing its schedule or provide the SLDC with a schedule based on its own forecast, and that each QCA shall coordinate the aggregation of schedules of all its generators connected to a pooling station and communicate the same to the SLDC.

They have further stated that the Regulation stipulates that "Every wind and solar generator or a QCA shall submit a day-ahead and week-ahead schedule for each generating station or each pooling station, as the case may be. Day-ahead schedule shall contain wind or solar energy generation schedule at intervals of fifteen (15) minutes time-block for the next day, starting from 00:00 hours of the day, and prepared for all ninety-six (96) time-blocks. Week-ahead schedule shall contain the same information for the next seven days:" That therefore, the contention of the DISCOMs that energy from VRE sources cannot be scheduled for day ahead or week ahead planning, as if it were their responsibility, does not hold water in technical, regulatory and practical terms.

- d) Sri M. Venugopala Rao has also stated that both the AP DISCOMs have projected availability of 66,359.38 MU and energy dispatch of 69,977.18 MU and a deficit of 3955.91 MU, that contrary to the standard practice followed over the years, the DISCOMs have not taken availability of renewable energy into account for working out total availability of power, that they have shown "probable availability" of "variable renewable energy" to the tune of 8432.45 MW and 13,193.67 MU only, that for the year 2019-20, the Commission approved availability of non-conventional energy (NCE) to the tune of 16,318.73 MU, while the DISCOMs projected availability

of 16,769.36 MU, that even if availability of 338.03 MU projected by the DISCOMs under “other renewable energy sources,” is considered, total availability of NCE works out to 13,531.70 MU only for the year 2020-21. That the total energy availability projected by the DISCOMs includes 338.03 MU of “other renewable energy sources” only; and that the DISCOMs have not included even the “probable availability” of 13,193.67 MU of “variable renewable energy” in the total availability of energy for the year 2020-21 and that the basis, as well as purpose, for reduced projection of availability of NCE to 13,531.70 MU for 2020-21 against 16,769.36 MU projected by the DISCOMs and 16,318.73 MU approved by the Commission is not explained by the DISCOMs.

He has further stated that in its order dated 5.10.2019, the Commission approved procurement of solar power to the tune of 1000 MW from National Thermal Power Corporation (NTPC) and 750 MW from Solar Energy Corporation of India Limited (SECI), contrary to its order dated 15.4.2019 on load forecasts and resource plans for the 4th and 5th control periods wherein the Commission held that no NCE capacity need be added till the end of the 4th control period i.e. 2023-24. That since the DISCOMs have projected capacity share of 8432.45 MW from VRE projects for the second half of 2019-20 and for the year 2020-21, it is obvious that they have not taken the additional availability of solar power from the 1750 MW approved by the Commission in the said order dated 5.10.2019, nor they have explained the reasons for not taking the 1750 MW into account, that even if this capacity also is taken into account, availability of power would increase further. That even if O.P. Nos. 66 and 67 of 2019 filed by the DISCOMs requesting the Commission to reduce tariff for wind and solar power under the PPAs with developers mentioned therein and term of the PPAs to 5 to 10 years, the quantum of availability of capacity and energy from NCE units to the DISCOMs would not change for the year 2020-21.

- e) Sri Ashwin Gambhir, Ann Josey and Sri Sreekumar Nhalur, Prayas (Energy Group), Pune have stated that the wind and solar generation has been mandated to be forecast and scheduled on a day-ahead basis along with revisions on a 1.5-hour basis and appropriate penalties for deviation settlement also are in place, as per the Commission’ Regulation 4 of 2017.

That in fact, APERC is the first Commission in India to introduce a framework to ensure forecasting and scheduling of wind and solar resources, that many States have since notified similar regulations based on the model regulations notified by the Forum of Regulators, that the regulations have also been implemented in Andhra Pradesh with compliance from wind and solar generators and that therefore, the contention that it is not possible to schedule renewable energy power raised by the DISCOMs is not tenable.

That further, on an annual basis, the projections for NCE and Renewable energy approved by the Commission based on the DISCOMs' estimates have varied only between -5% to 1% from the actuals for the years FY17, FY18 and FY19, that in sharp contrast, the variations between the approved estimates and the actuals for State and Privately owned thermal and hydropower plants are much higher as shown in the Table below:

Source of Power Purchase	FY17	FY18	FY19
Andhra Pradesh Power Generation Corporation Limited (Thermal)	-32%	65%	13%
Andhra Pradesh Power Development Company Limited	-22%	-32%	-35%
Andhra Pradesh Power Generation Corporation Limited (Hydro)	-32%	-16%	-17%
Central Sector Generating Stations	-2%	5%	-12%
Andhra Pradesh Gas Power Corporation Limited	-25%	16%	78%
Gas based Independent Power Producers	30%	546%	31%
Other Independent Power Producers	-61%	-16%	-20%
Non-Conventional Energy	-5%	-5%	1%

Source: True-up petitions by the DISCOMs for FY17, FY18 and FY19.

That despite variations, costs estimations of thermal and hydropower plants are considered in the ARR, as power purchase accounts for majority of the costs incurred by the DISCOMs. That it is vital that a similar treatment be given to renewable energy which seems easier to project than other sources.

That as per the true-up filings of the DISCOMs for FY19, about 21% of the power purchase comprises non-conventional energy (NCE) sources, predominantly renewable energy sources, that the share of NCE in previous years was also substantial at 17% of total energy purchased in FY18 and 9% in FY17, that given the commitment to increasing RE adoption and keeping in mind the RPO targets of the DISCOMs, purchase from renewable energy sources will continue to increase. That not accounting for this power along with its costs would severely underestimate power procurement costs and consequently causes revenue gaps, that these costs would eventually be incurred during the year when must-run renewable energy power is used, that the incurred costs would be then recovered from consumers subsequently in the form of higher revenue gaps during true-ups along with avoidable carrying cost burden and that to ensure that this does not occur, the Commission should insist that projections for purchase from RE sources are accounted for in the current as well as in future tariff processes.

- f) Sri S. Suryaprakash Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad has stated that the filings reveal abnormal increase in

cost of supply by about ₹1/unit, which appears to be mainly due to increase in power purchase cost attributable to (i) Purchase of power from market treating wind/solar sources as non-dispatchable (ii) Huge jump in the power cost of APGENCO thermal stations from ₹4.22 to ₹5.41/unit, that treatment of wind/solar energy as non-dispatchable is misconceived and is against the provisions of Regulation No.4 of 2017 wherein the procedure for scheduling wind and solar energy is specified by this Commission. That the DISCOMs cannot treat the wind and solar energy as non-dispatchable when a robust regulatory framework is already in place for Forecasting & Scheduling of wind and solar energy providing for treatment of variations in actual generation w.r.t. scheduled energy, that further, the wind season is well defined, i.e. May to September during which the wind projects operate at high Capacity Utilization Factor (CUF). That the filings show an expense of over ₹2000 Cr. towards purchase of power from market, which is clearly avoidable, that the concept of non-dispatchability of variable RE is not correct and is liable to be rejected outright by the Hon'ble Commission, which may take into consideration the energy available from all wind and solar projects during 2020-21 for scheduling in terms of Regulation No.4 of 2017.

He has further stated that the concept of non-dispatchability of RE is contrary to the Objective of the Electricity Act, 2003 and the National Policies framed thereunder and is also against the recommendations of MoP Committee Report on Optimal Energy Mix and CEA Technical Committee Report on RE Integration which were referred by DISCOMs in the context of variable RE cost.

That these committees recommend integration of the RE along with the other measures to be taken to achieve the object as reflected in the 1st para of Executive Summary of MoP Committee Report of Jan 2018, which is extracted here under:

"Government of India is committed to achieve Energy Autonomy and to provide Clean, Affordable, Reliable and Sustainable Power for all. Government of India has made international commitment (INDC) to have about 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by the year 2030 and to reduce the emissions intensity of its GDP by 33% to 35% by the year 2030 from year 2005 level."

The Committee concluded as follows on the aspect of balancing:

"To accommodate the variability and uncertainty of generation from RES, the conventional generating plants need to be flexible in order to provide balancing and ramping requirement of Grid. With the proposed capacity addition, the ramping requirement of 400 MW/min can be achieved if generating stations exploit their inherent ramping capability and are flexible to operate. As per

POSOCO, the system is being managed successfully with present energy mix. Similar Studies undertaken by POSOCO has also shown that power system balancing with 175 GW Renewable Energy is achievable at 15-minute operational timescales with minimal RE curtailment.”

That the CEA Technical Committee Report on RE integration of Dec 2017 contains valuable information how the wind rich States Tamilnadu (TN) & Gujarat were able to utilize the wind power to meet their power requirement in spite of problems with variability, that some interesting details of power system on a maximum wind generation day in TN and on a maximum wind variation day Gujarat as provided in the report, are summarized here under:

TN: On the Max wind generation day of 2017 season (22-08-2017), wind power contributed 4758 MW out of 12000 MW during day time, i.e. about 40%. The graph in page 9 of the Report shows almost constant generation throughout the day.

Gujarat: On the Max wind variation day of 2017 season (22-05-2017), Gujarat demand varies from a minimum of 11029 MW at 03:00hrs to a maximum of 14621 MW at 17:00 hrs. Wind generation peaked at 17:00hrs (2507 MW out of an installed capacity of about 5400 MW) and was minimum at 57 MW at 08:00 hrs. The renewable penetration of Gujarat in energy terms on that day was 12%.

That after detailed analysis of the Generation of wind-rich states TN and Gujarat, and considering the Technical methods for optimum balancing of RE, the Committee opinioned as follows:

"The Report finds that even after including the financial implication on account of variable Renewable generation, it would still be cheaper in the future to set up renewable generation capacity, as compared to coal-based capacity. The health costs have been excluded."

That thus, the purpose of the MOP & CEA committees is to suggest appropriate measures for smooth integration of RE with the aid of emerging technologies at a least cost, but not for dispensing with dispatch of wind / solar energy altogether as proposed by DISCOMs, that in any case, the DISCOMs are required to schedule the energy from wind and solar projects in terms of Regulation No. 4 of 2017 notified by the Commission.

- g) Sri Kapil Sharma, M/s AXIS Wind Farms (Anantapur) Pvt. Ltd., M/s AXIS Wind Farms (Rayalaseema) Pvt., Ltd., Sri V. Sailendra, Co-ordinator, AP State Council, IWPA, Hyderabad have strongly objected to the non-inclusion of wind and solar energy in the applications filed by APSPDCL and APEPDCL. They stated that at present the variable nature of wind and solar power is very much predictable and

that various regulations on forecasting and scheduling are made by CERC & APERC, that as per the Commission forecasting scheduling and deviation settlement of solar and wind generation regulation 2017, the renewable energy plants are required to submit day ahead schedules to the SLDC, that moreover, renewable energy plants have been accorded 'MUST RUN' status due to which the grid code permits 100% evacuation of power produced from these plants and that the energy available in a particular year from the wind and solar projects can be predicted with high accuracy and the same is now committed in the PPAs of SECI / NTPC by the generators.

They have further stated that the probable energy availability (MU) from the wind power projects for FY2020-21 is estimated by the DISCOMs only at 8033.66 MU with 3928.25 MW of wind power PPAs in the State, as against the estimated quantum of 9206.42 MU corresponding to 3700 MW in the Retail Supply Tariff order for FY2019-20 and that since there has been no reduction in the available capacity, the availability for wind power should be considered for the same capacity as in the FY2019-20.

They have also stated that the DISCOMs have not given out plant-wise NCE Generation and Cost details for the FY2020-21 in their filings, and that the Commission may approve the same power purchase cost of ₹4262.57 Cr. as was approved for FY2019-20 for FY2020-21 also.

- h) Sri Deepak Gupta, ReNew Power Pvt., Delhi objecting to the statement made in the petition filed by APSPDCL regarding non-dispatchability of RE power, stated that CERC and APERC have published regulations which mandate wind and solar generators to provide generation schedules, non-compliance of which will lead to levy of penalties. That, there are relaxations provided by respective regulations in terms of deviations to limits linked to degree of RE penetration, that the energy available in any particular year from the wind and solar projects can be calculated with fair amount of accuracy and same is also now committed in PPAs signed by SECI / NTPC with the generators and that the energy available from the installed wind and solar generators shall be taken into consideration in the ARR.
- i) Sri K. Mahesh Kumar, Mytrah Energy (India) Private Limited, Hyderabad has stated that it is the very nature of wind and solar power to be variable and seasonal as they are natural resources and are beyond human control. That in order to accommodate the wind and solar power into the grid by informed forecast, APERC has issued forecasting, scheduling and deviation settlement of Solar and Wind generation Regulations 2017 effective from 01.07.2018, that all the wind and solar generators through their respective QCAs are submitting forecasting and scheduling to APSLDC as per the said regulations and are also paying penalties on account of deviations, that therefore, the submission of AP DISCOMs that "the energy from VRE sources cannot be scheduled for day ahead or week ahead planning", is incorrect. That

further, the very purpose of wind policy, 2008 is to promote non-polluting sources of energy and to accelerate harnessing of the wind power potential of the State. That based on the policy guidelines and relevant Tariff Orders, developers have set up the projects by investing huge capital in the State of Andhra Pradesh and that the year-wise wind capacity addition is as follows:

S. No.	Financial Year	Installed Capacity in MW	Cumulative Installed Capacity in Mw
1	Till 2010	191.50	191.50
2	2010-2011	54.10	245.60
3	2011-2012	202.20	447.80
4	2012-2013	298.50	746.30
5	2013-2014	166.30	912.60
6	2014-2015	242.40	1155.00
7	2015-2016	937.5	2092.50
8	2016-2017	1742.25	3834.75
9	2017-2018	132.25	3967.00
10	2018-2019	123.5	4090.50

That the capacity of 8432.45 MW shown in the ARR filings is separately categorized as VRE projects and has not been included in the availability for H2 of FY2019-20 & FY2020-21 which is in clear violation of clause 12.1 of Regulation 4 of 2005.

That further, as per clause 12.2 of Regulation 4 of 2005, "the Commission shall adopt the Sales Forecast, the Distribution loss trajectory and the Power Procurement Plan approved as part of the Resource Plan for the purpose of determining the Power Purchase Requirement of the Distribution Licensee for the Control Period'

That in this regard the Commission vide its Order dated 15th April, 2019 has approved the Resource Plan wherein the energy availability from wind power projects has been considered for FY2019 to FY2024 which is as follows:

Projected Energy Generation for 4 th Control Period (MU)						
Energy Availability	FY19	FY20	FY21	FY22	FY23	FY24
NCE-Wind Power	8429	9223	9245	9237	9115	8987

That the above availability is considered on the following assumption:

For Wind and solar plants, actual observed hourly PLF is calculated for the representative year FY2016-17 using hourly energy availability from each plant (MU)

and the available plant capacity (MW) for that hour. That this observed PLF is assumed for all the future years in 4th and 5th Control Periods.

That it is evident that Resource plan for the 4th Control period (FY 19 to FY 24) has been approved by Commission wherein the availability from NCE-Wind has been considered and now APDISCOMs are violating the provision of Regulation 4 of 2005 in filing ARR for FY2020-21 by showing the discrepancy to Thermal & Renewable generators in consideration for its energy availability and power purchase cost.

- j) Sri Sukomal Satyen, Deputy Manager, Legal, M/S Vayu Urja Bharat Private Limited & M/S Waaneep Solar Private Limited has stated that if the alleged VRE Projects are not accounted for in the energy availability calculated by APSPDCL and any deficit of electricity thereafter is proposed to be procured by APSPDCL from energy exchanges, bidding, or other competitive sources, then there is no scope left for APSPDCL to actually procure electricity from the alleged VRE Projects, thereby, under the garb of alleged variability of the alleged VRE projects APSPDCL is avoiding procurement of electricity from the said VRE projects, despite having entered into valid and binding PPAs with them and that such projects having must-run status as granted under IEGC read with AP Code of Technical Interface (APCTI) and the wind power policies issued by GoAP, such brazen conduct of APSPDCL is misleading, unlawful and ought to be rejected by the Commission. That further, the actions of APSPDCL are also contrary to the judgment of the High Court of Andhra Pradesh dated 24.09.2019 in W.P. No. 9869 of 2019 and batch and W.P. No. 9876 of 2019 and batch matters, wherein the High Court had expressly directed APSPDCL to not take any coercive action against VUBPL and WSPL and other similarly placed generators.
- k) Sri S. Prathap, Technical Secretary, APSEB Assistant Executive Engineers' Association, Tirupati has stated that to decrease power procurement cost, without market purchases the energy availability will be 79553.05MU including VRE. That the energy requirement being 69977.26 MU, base load plants will be backed down by 9575.79MU and then also the net power procurement cost will be ₹32343.63 Cr. as against ₹33870.23 Cr. projected by the DISCOMs. That DISCOMs can save nearly ₹1500 Cr. at a unit cost of ₹4.62/kWh. ₹By adopting the above measures the DISCOMs can bringdown the unit cost to ₹4.55/kWh and thereby they can save ₹2000 Cr. He has suggested to restrict huge VRE into the grid to the extent of RPP obligations set by the Commission to minimize revenue gap and that Grid stability and continuous supply to the consumer should be achieved by flexing the state-owned thermal power with VRE.
- l) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that non-consideration of power from Renewable sources will create a burden on consumers as the Licensees have to

procure power from short term sources in order to meet the energy gap arising out of the absence of renewable plants' availability.

DISCOMs' Response: The comment with regard to the need of revision of VRE tariff downwards is welcome. DISCOMs' proposals indicate availability from VRE Sources (Wind & Solar) as probable. In view of the variable nature of generation with a character of non-dispatchability, the availability from VRE sources has not been considered for Power Purchase Cost calculations. The energy from VRE sources cannot be scheduled for day- ahead or week-ahead planning. The generation from these sources is considered as inadvertent / infirm in nature. As such the generation from VRE sources will be used subject to its availability as per grid code.

The DISCOMs have no role in preparing the highly unreliable and vague predictions made by the VRE generators or their nominee i.e. QCA. In many instances DISCOMs have noticed that there is a direct correlation between the erroneous over-estimation of VRE generation by the generator/ QCA and the price of power in the power exchange. When the VRE generation is falling short of the excess prediction by the VRE Generators, DISCOMs are forced to purchase from power exchanges at higher prices. There is no mechanism to check the collusion between the VRE generators and the power exchanges. DISCOMs can over draw from the grid any shortfall. But the maximum deviation allowed for over drawl from Inter-State Transmission System (ISTS) network as per CERC regulations is only 250 MW. In a short notice SLDC cannot also ask a reserve generator to start a coal power plant in a matter of 10 minutes and as a result the DISCOM will be forced to buy about 1900 MW from the market. The price in market during intra-day purchases sometimes goes upto ₹ 8 per unit. There is no guarantee that the VRE generators have not colluded with the power exchange owner and artificially over-estimated the VRE generation – this results in sudden spikes in demand at particular times of the day. The variable energy generation in each time block of the 8760 timeblocks for FY2020-21 cannot be predicted on a year-ahead basis; and week-ahead or day-ahead schedules are highly variable vague numbers which cannot be relied upon while planning for a 24 x 7 power supply to the consumers.

The installed Solar Capacity under Solar parks category as on 30th September 2019 is 2250 MW. Another 1750 MW as consented by the Commission is expected to be commissioned by March 2020. Hence, 3800 MW capacity of Solar Parks is considered while estimating the probable energy of 13193.97 MU for FY2020-21.

DISCOMs believe that the expected probable energy from RE sources has no role in assessment of various expenditure items (including power purchase cost) in the ARR filings. The VRE power is also absorbed after backing down conventional generation and hence cannot be treated as standalone additional power.

- m) Sri M. Venugopala Rao submitting his comments on the responses of the DISCOMs stated that during the current financial year upto November, the DISCOMs are stated to have purchased variable renewable energy to the extent of around 8500 MU, that going by this trend, by the end of the financial year, purchase of VRE may reach 14,000 MU and that when such is the case, the DISCOMs cannot avoid taking availability of VRE during 2020-21 into account.

That the DISCOMs have replied that they have taken 1750 MW of solar power from NTPC and SECI into ARR account as their stations are expected to be commissioned by March 2020, that when the Commission has approved availability of NCE to the tune of 16,318.73 MU against 16,769.36 MU projected by the DISCOMs for the year 2019-20, with the addition of 1750 MW of solar power afresh, availability of NCE must exceed 16,318.73 MU for the year 2020-21, that therefore, it is evident that projection of “probable availability” of 13,193.67 MU of NCE for the year 2020-21 made by the DISCOMs in their ARR submissions is deflated artificially, unless considerable number of PPAs with NCE units expire during the current and next financial years and that since there is no response from the CMDs of both the DISCOMs on this point during the public hearings, he has requested to take all relevant factors into consideration and assess availability of NCE during FY2020-21, realistically.

That the DISCOMs are stated to have noticed a direct correlation between the erroneous over-estimation of VRE generation by the generator / QCA and the price of power in the power exchange, that the DISCOMs have contended that when the VRE generation is falling short of the excess prediction by the VRE generators, the DISCOMs are forced to purchase from power exchanges at higher prices, that there is no mechanism to check the collusion between the VRE generators and the power exchanges and there is no guarantee that the VRE generators have not colluded with the power exchange owner and artificially over-estimated the VRE generation which results in sudden spikes in demand at particular times of the day, they have argued. That if the VRE generators generate and supply power to the DISCOMs, they would get profits and it would not benefit them, if they do not generate when the conditions are favourable for generation, that nevertheless, the probable collusion between VRE generators and power exchanges, as pointed out by the DISCOMs, need to be examined. That as per the DISCOMs, the deviation charges payable by the VRE generators for excess or shortfall in generation is minute or very small compared to the actual cost incurred by the DISCOMs and that the regulation is ineffective in compensating the DISCOMs and that in view of the same, he has requested to re-examine the regulation and amend it, providing for a stringent condition imposing substantial higher deviation charges to curb manipulations of VRE developers in colluding with power exchange, as contended by the DISCOMs.

- n) Further, the Chief General Manager, RAC, APSPDCL and the Chief General Manager, PPA & RA, APEPDCL, vide their letters even dated 17.01.2020 have submitted reasons for considering VRE Curtailment & VRE as probable Energy as follows:

- I. 24 x 7 regime: The State of A.P has been declared to be under 24 x 7 power supply regime by Government of India. In a regime of 24x7, imposing power cuts is not acceptable either to the domestic, commercial, or industry categories. The Gross State Domestic Product of the State is affected due to power cuts.

Considering the inconsistent nature of VRE i.e. wind and solar, the system operator can never depend upon the vague, uncertain and highly unreliable forecasts given by VRE generators to implement 24 x 7 power supply. The DISCOMs necessarily shall have to depend on dispatchable / schedulable energy.

- II. Grid safety: In Grid operations, frequency is one of the main parameters for operation among others. Rated frequency of Indian power system is 50Hz. If the system is running at a frequency greater than 50Hz, it means more generation is injected into the system. If the system is running at a frequency less than 50Hz, it means less generation is injected into the system. India has one Grid with one frequency. Variation of generation from any corner of India will impact the frequency. Therefore, frequency is a dynamic and system dependent parameter. As per Indian Electricity Grid Code (IEGC) provisions, the Grid is to be operated between 49.90 to 50.05Hz frequency band.

Apart from frequency regulation, there are other parameters such as drawl of power from central Grid, maintaining load generation balance, voltage profiles in the system, and line loadings which are also to be regulated in real time operations by State Load Dispatch Center (SLDC).

It is the statutory responsibility of SLDC to take corrective steps and restrict draws from grid as per 5.4.2(a) of Indian Electricity Grid code. Any inaction on the part of SLDC under above circumstances would vitiate the Grid stability, and lead to far reaching consequences of grid disturbance. There were such incidents of grid events earlier on 30th and 31st of July 2012 in Northern region where total blackout had taken place. Restoration of supply after blackout will take considerable time and has a lot of bearing on the country's image, country's economy and interest of consumers.

The considerations which weigh in ensuring the 24 x 7 supply and grid safety are given below.

III. Supply side constraints:

- (i) Demand side uncertainty and Supply side uncertainty: There are two sides of the electric grid – demand side and supply side. On demand side are the domestic/ commercial/ industry/ agriculture demands and on the supply side the power generators. Long term/ medium demand forecasting is done for 10 years, 5 years and 1 year. Based on these long/ medium term demand forecasts, long term dispatchable energy contracts are entered into by the DISCOMs. Short term demand forecasting is done on month-ahead, week-ahead and day-ahead basis. Based on the short term demand forecasting, the thermal units are either shut down/ operated and market purchases are made.

Even though there is uncertainty on the supply side, since the dispatchable energy offers certainty on the supply side the grid is run smoothly.

There are several parameters which are likely to vary during the course of grid operation. There could be demand variation due to change in weather conditions or generation variations due to outage of units at APGENCO/ Central Generating Stations(CGS) / Independent Power Producers (IPP's), and Variable Renewable Energy (VRE) i.e. Wind and Solar Photo Voltaic (PV) generation. The variation in APGENCO/ CGS/ IPP stations is predictable as they produce constant rate power output whereas the generation of VRE is fully uncertain as its power output is not under human control.

Large scale integration of 7300 MW of VRE into the AP Grid has brought-in uncertainty both on the demand side and supply side leading to frequent disruptions/ extreme difficulties in running the power system.

- (ii) VRE Forecast errors: Currently the Forecast error pertaining to the wind generation is upto 95%. Shift operators in the SLDC Control room assess the availability and demand for 96 blocks, i.e. 24 hours and plans the schedule accordingly to meet the power demand of consumers without Load Relief (LR) i.e. power cuts. However good the planning may be in terms of demand and availability of conventional resources, the whole planning goes wrong with the wind and solar generation as they come intermittently and the forecast is uncertain. Because of change in weather conditions and cloud cover, solar generation too falls sharply. AP System has experienced upto 800 MW drop in solar generation in some time blocks which resulted in shortfall leading to either power cuts or overdrawl from the grid at low frequencies beyond the 250 MW allowed by

CERC. These sudden variations result in power cuts if the demand is planned relying heavily on VRE.

- (iii) Base load operations: APSLDC follows Base load operation concept to achieve reliability and efficiency in view of 7300 MW VRE integration to AP control area which is having only 6000 MW average demand. Base load power is central to ensuring uninterrupted 24X7 power supply, and reliability of electricity Grid. Accordingly, base load power plants are identified from the existing list of power plants considering their reliability and efficiency. These base load power plants should be run at constant rate with maximum efficiency continuously.

In order to implement 24 x 7 uninterrupted supply to consumers, APSLDC relies on base load operations in order to run the system smoothly. Wind and Solar Power being variable (infirm/ intermittent) in nature does not qualify as base load. VRE can only be absorbed in the intermediate or peak load range.

SLDC, in a day, depending on the necessity would first back down the peak load plants and thereafter intermediate load plants. The peak/ intermediate load power plants are backed down up to the technical minimum without affecting the base load supply generation plants. Lastly the VRE power will be backed down.

IV. Balancing:

- (i) Balancing power: VRE is converted into dispatchable energy by integrating it with reverse pumping projects/ gas plants. In order to absorb high quantities of VRE, reverse pumping hydro projects or gas plants are required. For example, Karnataka has 4000 MW round the clock hydel energy and as a result is able to integrate about 30% of VRE in its consumption. A.P. unfortunately does not have the required round the clock hydel capacity or sufficient APM gas for running the gas based plants to balance its 7300 MW of VRE.
- (ii) Thermal plant limitations: Thermal plants are not suitable for use as balancing energy for VRE because of the following reasons.

Slow ramp up/ ramp down rates: Conventional generation has its limitations in ramping up the generation to the desired level. In fact 0.67% ramp up or ramp down is the capability of conventional generation. With these slow ramp up/down rates sudden fall/rise of solar or wind generation can not be compensated, as it takes around 1 hour to bridge the deficit power despite keeping the coal plants operating at technical minimum.

Long time taken for cold start/ warm start: It takes anywhere between 18 hours to 36 hours to start a unit after shutting down.

Design and age: Design and age of APGENCO coal plants are not suitable for frequent and fast ramp up/ ramp down operations. The frequent backing down operations is leading to increased maintenance of the plants.

Super critical technology: The super critical units of APGENCO are designed for maximum power output and continuous operations.

When forecast is accurate, after backing down of all conventional generation up to the extent possible, VRE generation is backed down. However, in certain critical situations like changeover, gate closure before four (4) time blocks for Central Generating stations (CGS), weather changes etc., VRE backing down may happen even prior to backing down of conventional generation.

In the minimum load condition of 5300 MW, night times/rainy season/ winter season it is necessary for frequent back down of available excess Solar and wind generation. Shutting down of any conventional generating station will take 18 hours (sub-critical unit) to 36 hours (super-critical unit) for restarting. During this period if the demand-supply gap arises due to sudden fall of VRE, there will be power cut. Since AP is under 24x7 regime power cuts are not allowed.

- (iii) Technical Minimum: Every conventional plant has a technical minimum generation below which it cannot be run. Each power plant has a technical minimum which is part of the power purchase agreement. Any ramp down/ backing down can happen only upto the technical minimum of the plant. VRE generation cannot be absorbed into the system beyond the technical minimum of the thermal plants.

APSLDC has to manage, plan optimally, and operate the grid based on these technical constraints. It can be managed only with available generation and existing demand. Grid can neither generate nor store the power. Actual technical minimum details for the thermal or gas plants with whom DISCOMs have agreements are submitted as below.

S. No.	Plant name	Allocated capacity (MW)	Technical minimum as per PPA (%)	Technical minimum to be maintained as per PPA(MW)
1	NTTPS Stage I, II, II	1260	71.4	900
2	NTTPS Stage IV	500	71.4	357
3	RTPP stage I, II, III	1050	71.4	750
4	RTPP stage IV	600	71.4	428
5	SDSTPS stage-I&II (Krishnapatnam)	1600	71.4	1142
6	Hinduja (one unit considered)	520	55	286
7	Other Thermal IPPs	630	70	441
8	Gas	780	50-80%	475
9	CGS (Allocation)	2300	55	1265
Total		7830		6044

(iv) Hydel generation: From August, 2019 to November, 2019 most of the time Srisailem Project was spilling over. This situation prevailed for the first time after 2009. Hydel power is also under Must Run status. Backing down of VRE during some periods occur in order to absorb the Hydel generation and to avoid wastage of water flow.

V. Demand – Supply Gap Management

(i) Gap management: SLDC forecasts the demand and calculates the generation on a week-ahead and also on day-ahead basis to help DISCOMs to secure any power needed to avoid power cuts. The conventional plants are also shut down if there is no demand for the coming week. SLDC also forecasts demand on a real time basis for the next few hours and takes decisions to surrender surplus power. SLDC turns down generation resources at APGENCO/ CGS/ thermal IPPs in low demand conditions or higher frequencies. In low demand conditions, the availability becomes high which results in more than permissible injection of power into the grid at a frequency which could be low or high. SLDC is obligated to respond to these changes in a rapid manner to correct the grid parameters, in order to secure the interconnected grid. Sometimes injection of power into the grid at low frequency also is not permitted as there could be violation in the corridor of Extra High Tension (EHT) lines of both State and Central corridor. Injection of power into the grid at high frequency is not permissible since it would be in violation of Grid code.

- (ii) Erroneous VRE forecasts: Day Ahead Wind Forecast being given by the wind developers association had been erroneous and it has been creating shortfall or surplus conditions in the system. For example, from 29/09/2019 and 30/09/2019, wind forecast was given around 800 MW from 18:00 Hrs to 21:00 Hrs, but the actual generation fell down to 50 MW. This has resulted in shortfall and DISCOMS could not tie up power immediately as there was neither power available in the power exchange nor time to start the thermal power units. Power cuts were imposed during above said period which resulted in uproar in the public and loss of state gross domestic product.
- (iii) Allowable deviation 250 MW: A.P. being a renewable rich State, is allowed to over inject or under inject only upto 250 MW into the grid. Even though A.P. experiences variations up to 2000 MW in VRE, it is permitted over injection/ over drawl only up to 250 MW within the frequency band specified by CERC. This poses serious limitations on the absorption of the VRE into the grid. Any deviation beyond + 250 MW (over injection) will lead to penalties levied on A.P. Any deviation beyond – 250 MW (under injection) is not allowed to be over drawn from the grid; as a result, A.P. has to either purchase power from the market at exorbitant rates or give a power cut.
- (iv) Beyond small grid capacity: AP State average grid demand during September-2019 to November-2019 was 6700 MW ranging between 5000 MW to 8600 MW. VRE capacity of 7300 MW is integrated into the A.P. grid. This is 110% of the average grid demand. These 7300 MW Wind and Solar generators in the recent past have witnessed large variations in generation in the range of 150 MW to 3500 MW.

In comparison, the National grid has an average demand of 175 GW out of which only 82 GW is VRE. This is hardly 47% of the average national demand.

- (v) SCADA (Supervisory Control and Data Acquisition System): SCADA is the communication system which communicates real time data from sub stations, transmission elements, generators etc. to the State Load dispatch center (SLDC). Real time Data is visible in SLDC monitoring room to operate the system through SCADA up to 132 kV Substation level. Below 132 kV level data is not visible at SLDC Control room.
- The Power system being operated by SLDC is at the level of 220 kV and 132 kV. Above 220 kV level, operations are being done under the control of Southern Regional Load Dispatch Center (SRLDC). Below 132 kV level, operations are done under the control of DISCOMs.

- SCADA visibility from State Load Dispatch Center (SLDC) is also limited. SLDC operator cannot see Two hundred and sixty individual Wind and Solar generation data station wise. Most of these generators are connected below 132 kV level. Generation is visible to SLDC only on a large scale such as parks, major pooling stations etc. It's visible neither PPA wise nor unit wise in respect of wind and solar generators. Around two hundred and sixty PPAs are executed by and between A.P DISCOMs and Wind and Solar generators. Communication from SLDC to individual generators is indirect. SLDC can communicate to Transco substations only. In turn they will communicate to the individual generators. Messages have to be communicated to 24 substations from State Load Dispatch Center (SLDC), and then they in turn have to communicate to all the individual generators. In some of the Substations, Open Access generators also exist, which are to be exempted from Back down. Therefore, back down instructions do not reach to all Wind and Solar generators in time and a time gap exists. During this time gap if the grid parameters change, counter action like increasing generation may also necessary. Due to this insufficient infrastructure, System operators may or may not provide equal rotation of back down for all individual generators.

Ministry of New and Renewable Energy, Government of India is establishing Renewable Energy Management Centres (REMC) in view of the expected increase in RE generation in RE rich States. REMC is a primary requirement for grid integration of large-scale RE. REMC for AP is still under implementation by Govt. of India. This REMC will facilitate communication with variable Renewable energy (VRE) individual generators. However advanced features are required to be commissioned to give direct dispatch instructions to Wind and Solar generators from State load dispatch centers.

- Suitable infrastructure is still not developed to overcome variations of Wind and Solar power generation. A.P. does not have either hydel pumped storage or gas to operate gas-based power stations to absorb the VRE. Spinning reserve and Automatic Generation control are not available in the State Grid. No Scientific Wind and Solar generation with reliable forecast mechanism is available at the national level.
- “USAID” an international agency, studied the aspect of VRE integration in India and in its report “Greening the Grid” has come out with findings that curtailment to VRE generation would rise to sixteen percent in southern region which reflects the present prevailing

situation in the A.P. State. In a similar study done by Central electricity Authority (CEA) brought out a draft report in which several scenarios considered and made observations that VRE generation curtailment would be required at high penetration of these resources in the Grid.

VI. Other factors:

- (i) VRE generators aware of business risk: After 2015, the wind and solar power generators have added their capacity into grid on a large extent. At that time the VRE generators were aware of the fact that A.P. is a low demand state with a small grid capacity, and does not have the capacity to absorb huge VRE power capacity additions. VRE generators have agreed to sell power to DISCOMs having had knowledge of calculated business risk. A power purchase agreement never guarantees a fixed return on investment like a fixed deposit in a bank.
- (ii) 25% VRE consumption this year: DISCOMs have planned and are exporting swap power up to 40MU per day in high Wind generation season for accommodating Wind and Solar generation. It is pertinent to state that Reserve shut down of thermal plants as and when possible is being implemented for accommodating Wind and Solar generation. SLDC dispatches Wind and Solar power to the extent possible.
- (iii) Must Run is conditional: Power generated by VRE generators can never be guaranteed to be dispatched in full even if there is must run status under the IEGC as well APERC regulations. Must run status is provided to wind and solar generators in IEGC or Regulation 1 of 2105 of APERC. This status is subject to the responsibility of DISCOMs supplying 24 x 7 power, the grid operator ensuring grid safety and other factors stated above.

Apart from must run clause, 5.2(m), 5.4.2(a) clauses of Indian Electricity Grid Code (IEGC) and clause 7.1 in Deviation Settlement Mechanism (DSM) Regulations are to be complied for grid security in Real time system operation. These clauses are produced below:

- *“Must run” IEGC Clause 5.2(U): Special Requirements for wind/ solar generators: System operator shall make all efforts to evacuate the available solar wind power and treat as a must-run station. However, system operator may instruct wind/solar generator to back down generation on consideration of Grid security or safety of any equipment or personnel is endangered and solar or wind generator shall comply with the same.*

- *IEGC clause 5.2.(m): all SEBs, SLDCs, RLDCs and NLDC shall take all possible measures to ensure that Grid frequency remains within (49.90Hz-50.05Hz) the band.*
- *IEGC clause 5.4.2(a): SLDC/SEB/Discom shall initiate action to restrict the drawl of its control area, from the Grid within the drawl schedule.*
- *Deviation Settlement Mechanism (DSM) Regulations clause 7.1: The over drawl/Under drawl by any buyer shall not exceed 250MW for renewable rich state.*

Commission's view: The Commission would like to preface its views with the caveat that it is conscious of the fact that certain PPAs entered between the APDISCOMs and some solar & wind energy developers are subject matter of legal disputes pending before this Commission and various Courts. Expression of views in this order is confined to determination of ARR proposals only and they shall be without prejudice to the stands taken by the respective parties to the disputes pertaining to the PPAs in the pending cases before this Commission and other courts.

The importance of Renewable Energy cannot be ignored in view of its environmental friendliness, International commitments of Government of India and its National policies to promote the same in accordance with the Electricity Act, 2003. Gradual fall of prices of renewable energy particularly Wind and Solar sources over the years has made these sources more attractive and economical to increase their share in the total energy portfolio. In the Indian context, the promotion of Renewable Energy is not only in the interest of environment and commitments, but also from the point of view of energy security since the oil, gas and coal reserves are limited, fast depleting and stability of price of energy from sources based on these fuels is in increasing trend in general. Most importantly the reserves of oil and gas being minimal in the country, they are being imported and such dependency is a threat to the energy security of the Country.

In so far as the State of Andhra Pradesh is concerned, all the thermal stations are non-pit head stations as there is no coal production present in the State so far. Encouragement of renewable energy is always a desirable step but for the concern of the price which has become a contentious issue pending before various fora.

The main points raised by the DISCOMs for treating the energy from Wind and Solar sources as probable energy and non-consideration in the energy availability and despatch for FY2020-21 are:

- Variability of the generation.
- Installed capacity of the VRE sources being in excess of the average demand during some months of the year.

- (iii) Obligation of DISCOMs to provide 24 X 7 power supply and
- (iv) Technical limitations of thermal power generations.

The views of the Commission on the above points are as below:

The Commission issued Regulation 4 of 2017 with the objective of large-scale grid integration of wind and solar sources while maintaining grid stability and security, which is effective from 01.07.2018. All the reports received so far by the Commission on the implementation of the Regulation indicate a fair degree of compliance and either the licensees or the State Load Despatch Centre (SLDC) have not reported any difficulty or problem with respect to the despatch from the Wind and Solar sources or grid stability and security during the last two years. In this context, reference to the details of energy supplied by the wind & solar developer is not out of place. These details are as hereunder:

S. No.	Year	Energy from Wind & Solar Plants			
		Filed by DISCOMs	Approved by APERC	Actuals	Actuals over approval
1	FY2016-17	4374.39	4374.39	4124.33	-6%
2	FY2017-18	7026.07	9734.25	9425.64	-3%
3	FY2018-19	11592.96	12032.68	12434.18	3%
4	FY2019-20	16030.14	15188.05	--	--

The above table shows that the percentage of variation between the approved availability and the power actually supplied is in the range of -6% to 3% which cannot be termed as unpredictable and unreliable. In fact, it is worthwhile to note that the actual energy from Wind and Solar sources is 3% more than the Commission's approved quantity in FY2018-19.

The energy despatched from Wind and Solar sources during FY2017-18 and FY2018-19 is far beyond the RPPO targets set by this Commission and even beyond the targets of the RPO trajectory set by the Ministry of Power, GoI in accordance with the National Tariff Policy, 2016. The DISCOMs have also obtained Renewable Energy Certificates for the excess energy purchased for FY2017-18 and FY2018-19. Even during FY2019-20, out of the 15186 MU despatch approved by the Commission from the Wind and Solar energy sources, more than 50% of the energy has already been despatched. The increase in capacity of these sources (7455.20 MW) approved by the Commission in the Retail Supply Tariff Order for FY2018-19 to that of the current year filings (8432.45 MW) is 977.25 MW and no other changes are expected in FY2020-21. And increase of sales and demand compared to the previous years always help to despatch the extra capacity.

A few instances quoted by the DISCOMs in their letters about the variability and grid stability problems cannot be the sole basis for non-consideration of power procurement from these sources unless and until a satisfactory, verifiable time stamped data in support of backing down of thermal generation and trippings of loads to maintain the generation and load balance during instances of high variance w.r.t. the forecast by the Wind and Solar Generators is available. Further, APSLDC has not placed before this Commission any material to prove that these sources are causing grid instability and security problems during the last two years.

With regard to the contents of the letter referred in para (n) supra, this aspect is *subjudice* before this Commission and also before the High Court of Andhra Pradesh in the context of the power developers complaining of curtailment of generation preventing injection of power into the grid and the developers claiming must-run status. Any expression of views at this stage is likely to prejudice interests of either party in the pending litigation. Though this Commission has definite views on the stand of the DISCOMs in this regard, for the above-mentioned reasons, the Commission has chosen to refrain from expressing its views on the aforementioned stand of the DISCOMs.

Further, the DISCOMs are bound by the RPPO regulation issued by the Commission according to which they have to procure a minimum of 15% of Renewable Energy i.e. about 9000 MU, out of the total consumption of about 60,000 MU projected for FY2020-21. The probable energy from the Wind and Solar sources projected by the DISCOMs themselves is about 13,200 MU and they have stated that it will be despatched as per the Grid code. Having said so, surprisingly the DISCOMs have not considered the power from these sources in the availability and despatch. Despatch from other Renewable Energy sources was projected to be only 320 MU and it is not mentioned how they would meet the RPP Obligation of the balance of about 8700 MU for FY2020-21, fixed by this Commission.

The RPP Obligation set by ministry of Power for FY2020-21 is 19% which works out to 11400 MU. The probable energy projected by the DISCOMs being 13,200 MU, the excess probable energy over and above the MOP target of RPPO eligible for obtaining RECs as per the present Regulations in vogue is 1800 MU which translates into a minimum of ₹180 Cr. at floor price. If the present trading value is considered for the certificates, it would translate into a revenue of ₹360 Cr. The option before the DISCOMs is whether to despatch the Wind and Solar energy upto the RPPO to comply with the Regulations in vogue or to buy the RECs to the extent of 8700 MU by not dispatching the contracted Wind and Solar energy and also purchasing the shortfall power at a price of ₹4.31 as projected, arising due to non-utilisation of Wind and Solar power.

If the DISCOMs depend only on market which is always dynamic, ignoring the available Wind and Solar sources which are covered by legally binding contracts with the DISCOMs, the net power purchase cost for the projected purchase from the market at the price proposed would be ₹ 4.31 + ₹ 1 (Floor price of REC) = ₹5.31 per unit or if the present trend is considered it would be ₹ 4.31 + ₹ 2 = ₹6.31 per unit. In any case, in the interest of the DISCOMs, a minimum of 8700 MU has to be despatched from the sources having binding contracts or else RECs will have to be purchased at a huge cost to comply with the RPP obligations. Such a course would not be wise as it will badly affect the financial health of the DISCOMs.

It is also pertinent to note that the DISCOMs are parties to the PPAs entered by the RE developers. These PPAs are the subject matter of legal litigation arising out of proposed review of tariff by the Government / DISCOMs. In a batch of cases filed assailing the proposed review by the developers, a learned single judge of AP High Court relegated the parties to this Commission for adjudication of the disputes. While doing so the learned judge while fixing ad-hoc tariff directed the DISCOMs to act in accordance with the terms of PPA. In this connection, the Court vide its order dated 24-09-2019 in W.P.No.9844 and batch, made certain strong observations which included the following:

“As a party to the contract, the DISCOMs are bound to discharge their functions as per the contract that is entered into till the same is varied, modified or set aside. A party to a contract cannot state that he will not follow the term of the contract. He is bound by the same”.

Though, the said order is the subject matter of a batch of writ appeals, the above quoted part of the order of the learned single judge is still operative to the extent of the obligation of the DISCOMs to receive power supply from and payment of interim tariff to the RE developers. In this indisputable scenario, there is not only a legal obligation on the DISCOMs to comply with the judicial order by receiving power from these developers but also on this Commission to act in aid of such judicial order. If this energy is not included in the availability and dispatch, the DISCOMs will badly get exposed to the risk of suffering consequences of non-compliance with the judicial order of a constitutional court. Being the apex regulatory institution for electricity industry in the State, this Commission cannot allow such an unseemly situation to arise by accepting the self-defeating plea of the DISCOMs.

Further, as per the Orders of the Commission dated 15.04.2019 on Load Forecasts and Resource plans for the 4th Control Period, based on the DISCOMs' proposals which include the capacities of Wind and Solar Sources in their power procurement plan, the Commission approved a capacity of about 2700 MW of Solar and about 3880 MW Wind to be available for the FY2020-21.

Moreover, as projected by the DISCOMs, there will be shortage to the extent of 5000 MU, if the wind and solar sources are not considered. The DISCOMs will have to meet this shortage either from sources which have the binding agreements or from the market. Therefore as discussed above, the purchase from market is neither prudent nor does it make any economic sense when the dispatch of wind and solar power over and above the target set by the ministry of power has a potential to reduce the overall power purchase cost as more and more energy is procured from the wind and solar sources. It is therefore, in the overall interest of the all the stakeholders that the energy from wind and solar sources has to be availed to the extent required.

Further, vide the minutes of the conference of the Power Ministers of States and UTs held on 10th and 11th October, 2019 at Tent City, Narmada, Gujarat, Secretary, MNRE, (at Para 7) while highlighting the status and issues of RE Sector, inter-alia, has mentioned that the *Ministry is proposing to incentivize procurement of RE beyond RPO limits* and the Union Power Minister has directed the Power Ministers of States that, *States may ensure must-run status of Renewable Energy Plants and Curtailment of Renewable Energy is resorted to only for Grid security reasons and that too through transparent process. Renewable Power curtailed due to reasons, other than Grid security, should be treated as deemed generation and compensated at the contracted tariff.*

In view of the above discussion, in the considered opinion of the Commission, non-inclusion of energy from wind and solar sources in the power purchase estimates would not only be unwise and imprudent but also legally unsustainable. Therefore, the Commission has decided to include Wind and Solar energy in the availability and despatch as per its own estimates based on the data furnished by the DISCOMs and power purchase cost calculations for FY2020-21 are done accordingly.

Power purchases from Spectrum, GGPP and LANCO

- o) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao, Sri Kandharapu Murali have stated that while proposing to purchase power from Godavari Gas Power Plant (GGPP) and Spectrum Power Generation Limited (SPGL) for the next financial year also, the DISCOMs have requested the Commission to permit gas price in the variable cost as pass through. Since PPA with SPGL expired on 18.4.2016, and as substantial surplus power will continue to be available during 2020-21 also, they have requested not to allow procurement of power from the project for the year 2020-21. With regard to the claim of the DISCOMs, that they have sent the PPA with SPGL for renewal to the Governemnt for a further period of 15 years, the previous government has not accepted the proposal for renewal and the present government has also not so far accepted the proposal. That with respect to LANCO, in the light of the DISCOMs filing

a petition before the Commission seeking permission to withdraw the PPA, the submission of the DISCOMs that “pending permission from GoAP,” they propose to purchase power from SPGL during 2020-21 also lacks credibility. That after getting approval of the Commission to purchase power from SPGL during 2020-21, “permission” of GoAP would be immaterial. That obviously, the tongue-in-cheek submission of the DISCOMs that they have made the proposal “pending permission from GoAP” is intended to cover up the double standards adopted by the present Government in similar cases of Lanco and SPGL. That therefore, the inescapable conclusion that can be drawn is that the DISCOMs have proposed to procure power from SPGL for the year 2020-21 at the behest of the present Government. Procurement of power is on short-term basis, fluctuations in variable costs should not be allowed as pass through. They have requested not to approve procurement of power from SPGL by the DISCOMs for the year 2020-21 and put an end to the earlier unhealthy practice of allowing purchase of power on short-term basis, without competitive bidding, from the developers whose PPAs have expired and continue to permit such purchases repeatedly every year in the respective annual tariff orders, thereby making such purchases virtually and practically as long-term purchases, without PPAs, but with the veil of short-term purchases.

They have further stated that as for procurement of power from GGPP, which is owned by the DISCOMs, since the proposal of the DISCOMs to hand over the project to AP Genco was approved by GoAP in its letter dated 4.5.2018, there is no justification in seeking approval of the Commission to procure power from the plant for 2020-21 also on short-term basis, without filing necessary petition for determination of permissible capital cost and tariff by the Commission. The failure of the DISCOMs to complete the process of handing over GGPP to AP Genco and sign a PPA with it even after 20 months after the GoAP gave its approval is inexplicable. They have requested to direct the DISCOMs to complete formalities of signing PPA with AP Genco and submit it along with the required information relating to capital cost and proposed tariff, for consideration. Subject to the order to be given by the Commission in such an eventuality, procurement of power for the year 2020-21 from GGPP may be permitted.

- p) Sri M. Venugopala Rao has further stated that the DISCOMs have rightly filed a petition before the Commission, seeking its permission to withdraw the draft renewed PPA they had signed with Lanco. Lanco and Spectrum projects, whose PPAs already expired, stand on the same footing. Surprisingly, the DISCOMs have included proposal for purchasing power from Spectrum during the year 2020-21 also and sought the permission of the Commission. The DISCOMs have not given any explanation, much less any justification, for proposing to purchase power from Spectrum during 2020-21 also. In view of availability of abnormal quantum of surplus power and the attendant avoidable burdens on consumers of power in the

form of paying fixed charges for backing down and need for enhanced subsidy from the Government, options need to be explored for reducing cost of power purchase. One option is to get rid of purchasing power from projects with whom the DISCOMs have no PPAs approved by the Commission and binding obligations to purchase power. Second option is not to enter into any fresh PPAs with developers for purchasing unwarranted power vis-a-vis growing demand and continuance of availability of substantial surplus power under the PPAs in force. The Government should avoid repetition of costly blunders committed during the period of the previous Government and direct the DISCOMs to move ahead in a prudent manner.

- q) Sri K. Satyanarayana, Company Secretary, LANCO, Hyderabad & Sri S. Sundaramorthy, Sri A. Achutha Rao, Sri M. Ramachandra Rao, Sri Y. Venkateswara Rao, Sri K. Jagan Mohan Rao, Sri V. Nageswara Rao, Sri P. Sankara Rao, Sri S.S. Nagendra Prasad, Sri Ch. Ramnjaneyulu, Sr T. Srinivasa Rao, Sri K. Tirupati Rao, Sri Md. Shariff, Sri T. Nagendra Kumar, Sri K. Simhachalam, Sri S. Prabhakar Rao, Sri Syed Jainabi, Employees Of LANCO Kondapalli Power Limited, Vijayawada have stated that several meetings were held between the representatives of AP DISCOMs and LANCO and both parties have agreed for the terms and conditions to renew the Original PPA for a term of 10 years with a levelled fixed cost (Capacity Charges) of ₹ 0.71 per unit of Cumulative Available Energy. The terms and conditions agreed by the parties are more favourable to the APDISCOMs and they are well within the Tariff Regulations of the Commission and that of Central Electricity Regulatory Commission. Accordingly, a power purchase agreement was executed by the parties on 28.04.2017.

That thereafter, DISCOMs have approached the Commission by filing O.P. No. 8 of 2018 praying for approval of the said Renewed PPA. That DISCOMs have been purchasing electricity from the plant pending approval of the Renewed PPA by the Commission. The reasons for purchasing electricity from LANCO by DISCOMs are that they are obligated to purchase the same in terms of the Renewed PPA and also the fact that the cost of procurement is cheaper and below their average procurement cost. Currently, the plant stands first among all the gas-based power generating stations operating in the State and also stands at 12th position in the overall Merit Order Dispatch list. LANCO has gas allocation from the Government of India and in pursuance of the same it has entered into gas supply and transportation agreement with GAIL (India) Limited which is in force. The current validity of the said agreement is valid up to 05.07.2021 and the same is renewable automatically for five years thereafter consecutively.

The variable cost payable to gas based generating stations viz. GGPP and SPGL has been shown as ₹2.84 and ₹2.39 per Unit respectively with a request for pass through of gas price in the variable cost. In order to arrive at the said variable cost DISCOMs

have considered the prevailing gas price of \$ 3.23/MMBTU for H2 of FY2019-20. At the said gas price, the variable cost of LANCO is ₹2.33 per Unit. Therefore, it is abundantly clear that the variable cost of the plant is cheaper than GGPP and SPGL. DISCOMs have not included the power from LANCO in spite of the fact that they are under obligation to purchase the same and also it is cheaper than other gas based generating stations. Further, both LANCO and M/s Spectrum Power Generation Limited as well are seeking directions to DISCOMs to pay the variable cost as pass through and the said applications are pending before the Commission.

DISCOMs, in the matter of Tariff determination for Retail Sale of Electricity during FY2018-19 in response to the objections, have submitted as under: Gas power stations are essential in the energy portfolio of APDISCOMs as they are (i) clean energy, (ii) cheaper compared to any other conventional sources, (in) cheaper compared to other renewable sources like solar and wind on RTC basis, and (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 DISCOMs are losing revenue from its industrial consumers. Because of these advantages, DISCOMs have requested GoAP for its approval to renew the PPA with IPP M/s Spectrum Power Generation Limited (SPGL) for a 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 have projected for procurement for power from LANCO for the FY2018-19.

Even according to the present ARR for tariff year 2020-21, AP DISCOMs have indicated a short fall of 4949 Million Units and to source the said shortfall from open market at the rate of ₹4.31 per Unit. The said price is much higher than the procurement cost from the Objector. LANCO submitted availability-forecast for the tariff year 2020-21 to APPCC. Exclusion of capacity of LANCO in ARR for FY2020-21 may result in unavoidable hardships to the key stakeholders i.e. APDISCOMs, GoAP, and Lenders including the employment that Company is providing. DISCOMs will forego one of the cheapest and cleanest sources of power and will lose access to a dual fuel capability plant. That the Ministry of Petroleum & Natural Gas, Government of India may divert the gas to other priority sector customers i.e. Fertilizers and City Gas Distribution (CGD) etc. They have therefore prayed to direct the DISCOMs to include the capacity of LANCO or in the alternative, the Commission to include the capacity of LANCO in the final retail tariff order for the tariff year 2020-21.

- r) Sri S. Sundaramorthy, Sri A. Achutha Rao, Sri M. Ramachandra Rao, Sri Y. Venkateswara Rao, Sri K. Jagan Mohan Rao, Sri V. Nageswara Rao, Sri P. Sankara

Rao, Sri S.S. Nagendra Prasad, Sri Ch. Ramnjaneyulu, Sr T. Srinivasa Rao, Sri K. Tirupati Rao, Sri Md. Shariff, Sri T. Nagendra Kumar, Sri K. Simhachalam, Sri S. Prabhakar Rao, Sri Syed Jainabi, Employees Of LANCO Kondapalli Power Limited (LKPL), Vijayawada have further stated that there are about 42 employees working in LKPL in respect of the subject generating unit. Further there are about 220 employees engaged by the plant operator who is operating the plant. The families of all these employees are depending on the employment of the employees. LKPL is presently under the supervision and administration of the interim resolution professional appointed by the National Company Tribunal. The employees who have been associated with LKPL have always been operating the generating station in accordance with the instructions of DISCOMs. In the event of DISCOMs not purchasing power from LKPL, the ultimate sufferers are its employees. Purchase of power from LKPL is not only beneficial to DISCOMs and public at large and it also saves the lives of more than 260 employees and their families. They have therefore requested to direct the DISCOMs to include the source of LANCO Kondapalli Power Limited in their respective ARR and direct them to purchase power from the said source.

DISCOMs' Response: Presently gas is supplied to the extent of 1.8 MMSCMD to the existing four gas plants (GGPP, Spectrum, Lanco, APGPCL) only. With this the present plants are operating at around 40 percent PLF. APDISCOMs have acquired M/s GVK gas power plant upon expiry of the PPA and renamed it as Godavari Gas Power Plant (GGPP). DISCOMs are pursuing with GoI for allocation of more gas supplies to GGPP so that DISCOMs would get low cost advantage of APM gas. GoAP also requested MoP for re-allocation of APM gas from Lanco & Spectrum plants to the State owned GGPP to operate the plant at full capacity. It was further requested that surplus gas available, if any, after required allocation to GGPP, may be used on short term basis with available cheaper gas generator with suitable small size gas turbine. APDISCOMs are awaiting a positive reply from MoP, GoI on re-allocation of APM gas and would like to continue procurement of power on short term basis from Lanco & Spectrum plants during FY2020-21 until receipt of response from MoP, Govt. of India.

That the formality of taking over of GGPP in full shape through registration process is at advanced stage of completion. Once registration is completed, other steps in true compliance of regulatory prudence will be initiated.

That the DISCOMs have not considered purchase of power from M/s Lanco in the ARR Filings for FY2020-21 as the size of each unit of M/s Lanco is almost 3 times of the size of the Gas Turbine Units in M/s Spectrum. Keeping in view the flexibility of operation, minimum Gas requirement to run the unit at technical minimum, intention of the DISCOMs is to operate GGPP at a higher PLF.

- s) In response to the above, Sri M. Venugopala Rao has stated that even after filing a petition before the Commission seeking its permission to withdraw the PPA they had with Lanco, the mutually contradictory stances of the DISCOMs, as quoted above, indicate their dilly-dallying on the issue of purchase of power from Lanco project. If the DISCOMs do not take power from Lanco and Spectrum, then the GoI will be constrained to re-allocate that gas to GGPP to run it at threshold level of PLF and to GMR Vemagiri plant which has offered to sell their power at cheaper price than what Spectrum and Lanco have proposed, that too without the clause for payment of fixed charges under deemed generation. There is no justification in the DISCOMs ignoring the offer of Vemagiri. Since the DISCOMs have proposed to purchase power from Spectrum for the year 2020-21 also, he has requested not to give its approval to the same.

That having paid a hefty sum of about ₹300 Cr. to GVK for taking over its unit under buy-out long time back, the Discoms could not provide any justification for the inordinate delay in completing the process of registration in favour of AP Genco except saying that the process is at advanced stage of completion and that, once registration is completed, other steps in true compliance of regulatory prudence will be initiated. He has requested to fix a time limit for this process in view of their seeking permission of the Commission to continue to purchase power from GGPP on short-term basis for the year 2020-21 also.

Commission's view: The Commission has carefully considered the respective stands of the objectors and the DISCOMs. It needs to be noted that in the ARR filings, the DISCOMs have not proposed purchase of power from LANCO. However, in their response dated 04.01.2020 to the objections of Sri M. Venugopal Rao & others for the ARR filings of FY2020-21, both the DISCOMs came out that they are not considering the LANCO power for FY2020-21. Interestingly APSPDCL later changed its stand as evident from their separate response dated 07.01.2020, given to the same objector wherein they have stated that they will procure power from LANCO. Further, the Chief General Manager, APSPDCL has addressed a letter vide No. APSPDCL/RAC/CGM/GM(RA)/DE(RA)F: ARR2020-21/D.No.152/20, dt. 4.02.2020, informing that the DISCOMs would like to procure power from LANCO as they have proposed in the tariff filings for FY2019-20. The Commission observes that the DISCOMs have been maintaining varying stands at different times in this regard.

It is relevant to note that after entering into a PPA, the DISCOMs have filed an application for approval of the same. But however later they filed an application for withdrawal of their earlier application filed for approval of the PPA. These applications are being heard by the Commission. It is relevant to extract the reasons mentioned in the withdrawal application herein below:

- “2. Subsequent to expiry of PPA, during the course of time, with due permission of GoAP, the APDISCOMs have decided to renew the PPA for ten years and the draft PPA was agreed by both parties was submitted for approval.
3. During further course of time it was noticed that if the gas being supplied to LANCO and the Spectrum Power Ltd. is diverted to GMR Vemagiri Power Project, it would be cheaper than to procure from the respondent. Therefore, in the hearings at O.P.No. 8 of 2018 the DISCOMs through their counsel orally reported to the Hon’ble Commission about their intension of not procuring power under long term from respondent.
4. Now the GoAP has decided and directed the DISCOMs to withdraw O.P.No.8 of 2018 together with draft PPA.”

Having thus taken a specific stand against procurement of power from LANCO, the DISCOMs altogether varied their stand. While in the withdrawal application, the Chief General Manager, APSPDCL, Tirupati stated that the GoAP has decided and directed the DISCOMs to withdraw O.P.No.8 together with the draft PPA, in his letter dated 4.02.2020 the Chief General Manager, APSPDCL has not indicated whether they have obtained the permission of the State government to procure power from LANCO. Be that as it may, the main reason for the DISCOMs to propose purchase of power from LANCO and Spectrum is the purported shortage of power to the tune of about 5183.02 MU. However, on a realistic estimate by the Commission, the energy availability against the power purchase requirement /despatch and surplus for FY2020-21 are as given in the Table below:

Table 19: Availability, Despatch and Surplus (MU) as per APERC for FY2020-21

Month	Availability (M U)	Despatch (M U)	Surplus (M U)
Apr'20	5931.10	5684.09	247.01
May'20	6076.98	6059.24	17.74
Jun'20	6393.43	5715.11	678.32
Jul'20	7068.23	5492.24	1575.99
Aug'20	7418.92	5449.02	1969.90
Sept'20	6228.75	5349.27	879.48
Oct'20	6517.90	6407.27	110.62
Nov'20	6271.40	5884.81	386.59
Dec'20	6262.24	5488.47	773.77
Jan'21	6763.96	5428.10	1335.86
Feb'21	6553.42	5346.99	1206.43
Mar'21	6919.54	6596.99	322.55
Total	78405.87	68901.60	9504.27

From the above table it is clear that there is surplus availability of power. In this scenario, the Commission needs to consider the desirability of procurement of power from SPECTUM & LANCO plants.

As regards SPECTRUM, so far, no application for approval of PPA is filed. Moreover, with the DISCOMs conceding payment of variable charges as pass through, the per unit variable cost has gone upto ₹2.80 making the total cost of ₹3.72 per unit.

When there is availability of surplus power, it is not in the interest of DISCOMs also that of public to purchase power from LANCO & SPECTRUM in the absence of a regular PPA at a high cost.

It is also significant to note that these plants are not considered in the power procurement plan for FY2020-21 vide the Commission's order dated 15.04.2019 on Load Forecasts and Resource Plans for the 4th Control Period.

In view of the above discussion, the Commission is of the view that procurement of energy from Spectrum and Lanco on a short-term basis from year to year without approved PPAs is not in public interest. Therefore, the Commission is not inclined to include power purchases from these two generators in the present Tariff order. It is however made clear that this order is subject to the approval of PPAs if any, in favour of both the power companies in future.

The Commission takes notice of the fact that the process of ownership transfer of GGPP from APDISCOMs to APGENCO is hanging fire for a substantially long time, and feels that any further delay in this regard is not desirable. The APDISCOMs are therefore directed to complete the transfer process as expeditiously as possible and not later than six (6) months.

Power from HNPCL and Simhapuri plants

- t) Sri M. Venugopala Rao has stated that the DISCOMs have been taking power from HNPCL with the interim order given by APTEL continuing in force and as per the observations of the Commission in its order on Retail Supply Tariff for FY2019-20. If availability of power from HNCPL (1040 MW) and Simhapuri (400 MW) is taken into account, total availability of power for the year 2020-21 would increase substantially.

He has also stated that in view of the factual position of DISCOMs' obligation to avail power from HNPCL and Simhapuri, there will be surplus power to the tune of about 20,000 MU during 2020-21. Therefore, the projection of deficit of energy for the next financial year made by the DISCOMs is without any basis and the same is a complete distortion of factual position.

He has further stated that a realistic assessment of availability of power and surplus power for the year 2020-21 is imperative and that it will change all the projections and calculations of the DISCOMs relating to availability of power and surplus power, cost of power purchase, revenue requirement, revenue gap, etc. made for the year 2020-21. He therefore requested to direct the DISCOMs to take all relevant factors into account and submit revised projections in a realistic manner.

- u) Sri Sidhartha Das, Vice President - Commercial, HNPCL, Hyderabad has stated that APTEL, in its order dt.31-05-2018, ordered APERC to split the interim tariff into Fixed Cost (FC) and Variable Cost (VC) to permit procurers to verify HNPCL VC in the Merit Order Dispatch (MoD). Accordingly, the Commission vide its order dated 14-06-2018 approved a two-part tariff in consonance with APTEL's order dt.31-05-2018. APDISCOMs thereafter have scheduled power from HNPCL commencing from 15-06-18, as HNPCL was high in the MoD. APEPDCL and APSPDCL have not considered procurement of power from HNPCL in the ARR submitted to APERC without ascribing any reason thereof or giving an opportunity to HNPCL to submit its case. APEPDCL and APSPDCL have not complied with the spirit of the Hon'ble APTEL order dt.31-05-2018 and APERC order dt.14-06-2018 by excluding power procurement from HNPCL in the ARR submitted to APERC despite its ability to produce quality uninterrupted power since attaining COD of the units / plant. Even after the clarification by the Commission in the Retail Supply Tariff Order for FY2019-20, APDISCOMs have not considered procurement of power from HNPCL nor have given any specific reason for such non-inclusion nor have given any opportunity to HNPCL to be heard. Currently, the power is being scheduled from HNPCL on the basis of availability declared by HNPCL. More so the power from HNPCL is competitive in the merit order dispatch. This is a complete disregard to the orders of Hon'ble APTEL and APERC and is not in the interest of State of Andhra Pradesh and its people. Therefore, HNPCL pleaded appropriate direction from the Commission to APEPDCL and APSPDCL to include HNPCL plant capacity of 1040 MW in the ARR and Tariff Proposal for Retail Supply Business for H2 of FY2019-20 and FY2020-21.
- v) Sri Sidhartha Das has further submitted that the Appellate Tribunal in allowing the Appeal No. 41 of 2018 filed by HNPCL, has set aside the order of the Commission passed on 31-1-2018 in I.A. No.1 of 2018 in O.P. 19 of 2016 and I.A. No. 2 of O.P. 21 of 2018 and directed the Commission to dispose of O.P. No. 21 of 2015 filed for determination of capital cost and O.P. No. 19 of 2016 for approval of amended and restated PPA (Continuation Agreement) on merits as expeditiously as possible but not later than three months. Meanwhile, AP DISCOMS shall continue to pay ₹3.82 per unit for the power supplied from the Appellant's plant. In the above background, they have requested to consider and include HNPCL in the ARR for 2020-21 for its normative availability of 6778 MUs.

DISCOMs' Response: Hinduja project was not considered for FY2020-21 as the DISCOMs are availing power supplies based on interim orders passed by APTEL against the appeal filed by M/s Hinduja on the orders of the Commission. However, DISCOMs will continue to avail power supplies for FY2020-21 also as per the interim directions of the Tribunal.

In respect of M/s Simhapuri, as per the observations of the Commission, negotiations were conducted with M/s Simhapuri for reduction of tariff in the interests of APDISCOMs. The developer has not come forward and accordingly was not considered for ARR Filings for FY2020-21.

That there is no such surplus power to the tune of 20000 MU as claimed by the objector. VRE is generated only when the Wind blows and Sun shines. When the Wind stops blowing and the Sun stops shining when weather is cloudy/night there is no generation. Whenever the wind/solar PV energy is generated conventional intermediate/peak load plants will be backed down and the VRE under must-run is absorbed. Since the VRE generation is uncertain in nature and cannot be relied upon it cannot be considered for running 24 X 7 power supply regime in the State. In view of the above, the total availability of energy from all dispatchable stations for FY2020-21 is only 66021.35 MU.

That the DISCOMs have done realistic assessment of dispatchable energy availability from all dispatchable stations and are of the opinion that no further reassessment is necessary as claimed by the objector. DISCOMs will however oblige any further directions of the Commission in this regard.

In response to the above, Sri M. Venugopala Rao has stated that with a threshold level of PLF of 80%, about 8000 MU would be available from the 1040 MW thermal project of Hinduja. This power also should be taken into account for the purpose of determining availability of power for 2020-21. If availability of power and surplus power is underestimated artificially for the year 2020-21, it will prepare the ground in advance for making true-up claims of thousands of Crores of Rupees later, showing power purchase costs much higher than what the Commission determines in the tariff order for the same year. Such tricks should not be permitted and realistic assessment of availability of power and power purchase costs need to be made, irrespective of the subsidy GoAP agrees to pay finally.

Commission's view:

M/s HNPCL: DISCOMs have filed applications for determination of capital cost and approval of PPA vide O.P.No.21 of 2015 & O.P.No.19 of 2016. Later, DISCOMs have sought withdrawal of the said O.P.No.19 of 2016. The Commission, by its order dated 31-01-2018, allowed the said application. M/s HNPCL filed appeal No.41 of 2018 before Hon'ble APTEL assailing the order of this Commission permitting the DISCOMs to withdraw O.P.No.19. The Hon'ble APTEL has granted interim order dated 31-05-2018 directing the DISCOMs to procure power pending the appeal. In the light of the said order, this Commission in its Retail Supply Tariff order for FY2019-20 made the following order:

"Though any scheduling of power from HNPCL to either DISCOM is not specifically included in this Tariff Order, it shall be deemed to have been so included to the extent

of faithful compliance with the interim order of Hon'ble APTEL dated 31.05.2018 in E.P.No.3 of 2018 in I.A.No.211 of 2018 in Appeal No.41 of 2018 and to have been permitted by this Commission accordingly subject to any further or future Order/judgement /direction of the Hon'ble APTEL. This Commission shall be kept informed by both the DISCOMs promptly from time to time about scheduling and receiving any power from HNPCL under the above stated circumstances."

The appeal No.41 of 2018 has been allowed by the Hon'ble APTEL by its order dated 07-01-2020 whereby while setting aside the order of this Commission, the Hon'ble APTEL has directed this Commission to decide the O.P.No.21 of 2015 & O.P.No.19 of 2016 on merits by determining the capital cost and to examine whether the procurement of power is in consumers' interest / public interest.

The Hon'ble APTEL also directed that the DISCOMs shall pay @ ₹3.82 per unit "for the power supplied by the developer". The Commission however does not find any direction in the final order of the Hon'ble APTEL to the DISCOMs to continue to procure power pending determination by this Commission. Therefore, DISCOMs are not under legal obligation to procure power from M/s HNPCL pending disposal O.P.No.21 of 2015 & O.P.No.19 of 2016. In the absence of an approved PPA and in the face of the fact that the DISCOMs have surplus power at their disposal, this Commission is of the earnest view that procurement of power in excess of the requirement of the DISCOMs from M/s HNPCL is against public interest.

However, in case of shortage of power, the DISCOMs may consider procurement of power to the extent of their requirement from M/s HNPCL strictly based on merit order at the interim tariff @ ₹3.82 per unit as directed by the Hon'ble APTEL.

M/s Simhapuri: In light of the response of DISCOMs as extracted herein before categorically stating that as the developer failed to come for negotiations for finalization of tariff as per the earlier orders of this Commission, they have not proposed purchase of power from the said developer. Therefore, the question of DISCOMs procuring the power from SIMHAPURI plant does not arise.

Power from Gas based IPPs (GVK extension, GMR Vemagiri, Gautami and Konaseema)

- w) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that as per the DISCOMs' submissions, gas-based power plants of GVK extension (220 MW), GMR Vemagiri (370 MW), Gautami (464 MW) and Konaseema (444.08 MW) with whom they have long-term power purchase agreements are stranded due to unavailability of gas and hence not considered for future calculations. That the DISCOMs could not provide any substantiation or justification for the presumed continuance of unavailability of natural gas to these plants in future that as and when supply of natural gas to these

plants re-commences, the DISCOMs will get their share of 46.11% (690 MW) and 4835.52 MU per annum from these plants at 80 percent PLF and that it will add to availability of total power and surplus power.

DISCOMs Response: As of now there is no official communication from MoP & NG, GoI about supply of natural gas as per allocations to the said stranded projects in near future. Gas supply to the four stranded gas plants is not expected to be resumed in a short period of one year. Hence, APDISCOMs haven't considered any availability from the four stranded gas plants for FY 2020-21.

Commission's view: The Commission's view as stated in Para 83 at Page 60 of the Order on Tariff for Retail Sale of Electricity during FY2018-19, as reiterated in the Tariff order for FY2019-20, holds good and is reiterated and reproduced below:

"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 FY2020-21, 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."

Full dispatch from AP Genco and CGS will help to bring down deficit

- x) Sri M. Thimma Reddy, Dr. K. Kranthi Kumar Reddy, Sri Jetty Gurunadha Rao, and Sri Ch. Diwakara Babu have stated in their written objections that according to APDISCOMs' ARR filings, while energy requirement during the ensuing year stands at 69,977.26 MU, energy availability would be 66,359.37 MU indicating a deficit of 3,617.89 MU and that at the same time energy dispatch is 1,332 MU less than availability from APGENCO (884 MU) and CGS (448 MU). Full dispatch from these stations will help to bring down deficit.

Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that Genco PLF was projected high when compared with the actuals of the Genco plants. Hence DISCOMs have to reveal methodologies followed for such projection.

- y) Sri S. Prathap, Technical Secretary, APSEB Assistant Executive Engineers' Association, Tirupati has stated that State owned thermal power shall be utilized to the maximum availability. CGS share should be in the range of allocated capacity only without purchasing any extra by keeping State owned thermal power at backdown/ reserve standby.

DISCOMs' Response: Variations in monthly energy requirement in different DISCOMs due to their load mix and monthly aggregate energy generation from different plants (based on type of generation & source of fuel) cause deviations. Even though the total energy availability in a day from all dispatchable sources is sufficient

to meet the day's energy consumption on an average, during peak times the generation from all dispatchable sources may not be able to meet the peak demand; as a result, deficit situations arise. e.g. If average consumption during a day is 165 MU the average demand will be 6875 MW. There are no limits on the minimum and maximum demands during the day – the minimum could be 5400 MW and maximum could be 8400 MW. If the dispatchable generating units running during that day have a capacity of 6875 MW, there will be a deficit of 1525 MW (8400-6875) for the duration for which the peak demand persists. This will result in purchase of additional power even though the averages show that the energy generation is sufficient. Similarly, during minimum demand times of 5400 MW, the generating units will be backed down up to 1475 MW (6875-5400) giving an impression that surplus power or generation potential is being wasted.

That on annual basis, it is not possible to utilize the entire available energy from a particular source due to the dynamic nature of Load/Generation balance in real time. This is the reason why the dispatch from AP Genco & CGS Stations is lesser by 1332 MU than the available energy from these sources.

The following Table depicts monthly energy requirement & available energy from all dispatchable stations (excluding Variable Renewable Energy & Other Renewable Energy) for the ensuing year FY 2020-21 as per the ARR write-up.

Month	Grid Energy Requirement (MU)	Availability from all Dispatchable Stations (MU)	Deficit/ (Surplus)
Apr-20	5807.64	5213.36	-594.28
May-20	6200.52	5323.05	-877.47
Jun-20	5887.76	4751.28	-1136.48
Jul-20	5606.65	4826.58	-780.07
Aug-20	5503.31	5324.97	-178.34
Sep-20	5402.08	5295.57	-106.51
Oct-20	6399.38	5810.50	-588.88
Nov-20	5939.3	5306.47	-632.83
Dec-20	5532.28	5567.99	35.71
Jan-21	5496.11	6296.75	800.64
Feb-21	5494.72	5885.56	390.84
Mar-21	6707.43	6419.28	-288.15
Total	69977.18	66021.35	-3955.83

Commission's view: Despatch, based on merit order at the variable costs approved in this order to meet the estimated month-wise energy requirement, is considered from APGENCO and CGS plants based on the availabilities furnished by the respective generators. The Commission therefore agrees with the version of the DISCOMs and the version of the objectors does not merit acceptance.

- z) Sri Kandregula Venkata Ramana, Anakapalle (V), Visakhapatnam has stated that the DISCOMs' power procurement plan has not shown the power from NTPC and SECI's 1975 MW, Hinduja, GVK, GMR Vemagiri, Solar and Wind Plants though there are PPAs with them.

Commission's view: Commission's views are already expressed supra on the points raised by the objector.

Set aside high cost AP Genco thermal units

- aa) Sri M. Thimma Reddy, Dr. K. Kranthi Kumar Reddy, Sri Jetti Gurunadha Rao, and Sri Ch. Diwakara Babu have stated that according to the current ARR filings, power from APGENCO thermal power plants costs ₹5.41 per unit. It is as high as and in case of some of the units higher than the renewable energy units whose PPAs are sought to be set aside on the grounds of high cost power. While unit cost of power from RTPP-III is expected to be ₹5.93 that of RTPP-IV is expected to be ₹ 6.65. On the same grounds of high cost of power, power procurement from high cost APGENCO thermal units needs to be set aside. Unit cost of power from APGENCO thermal units is 15.60% higher than the CGS units and 38.72% higher than SembCorp unit.

That high cost of power from APGENCO units casts a shadow on the working of these units. Earlier these units were shown as examples of low cost and efficient functioning. The increasing cost of power from these units demands critical re-examination of power procurement from these units.

- bb) Sri T.V. Surya Prakash, DISCOM Secretary, APSEB Engineers' Association, Visakhapatnam has stated that the cost of ₹5.41 per unit proposed to be purchased from A.P. Genco Thermal Stations is also on a very high side when compared to other sources including open access. As DISCOM is purchasing more than 50% of its requirements from A.P. Thermal Stations, he has requested for considerable reduction in power purchase from A.P. Genco Thermal Stations.

DISCOMs' Response: Per unit costs quoted by the objector are the total Unit costs including fixed Costs. Base Load power plants such as AP Genco Thermal, CGS and other thermal power plants are necessary to meet the minimum Demand requirement on the Grid that is incidental persistently throughout the year. Generally, Unit costs are paid in two parts a) Fixed Costs and b) variable Costs. All dispatchable stations would have two-part tariff structure and irrespective of dispatch, the fixed charges ought to be paid based on declared availability of the plant. Plants are operated based on Merit Order Dispatch (MOD) principles that are drawn on per unit variable cost. Per Unit variable costs of all dispatchable plants (other than VRE) are taken into consideration while calculating monthly dispatchable energy and corresponding power purchase costs. Variable Costs of AP Genco Units are increasing year by year due to increase in base cost of Coal and transportation costs.

Commission's view: The Commission is of the view that as the base load from the thermal generating stations is essential to maintain grid stability, irrespective of the tariff the subsisting PPAs cannot be ignored. However, in respect of the units of APGENCO and APPDCL for which PPAs have not been approved, the Commission would take an informed decision whether to permit procurement of power from these units at appropriate time. All the other Generators who have subsisting agreements under long /medium/short-term with APDISCOMs are considered for availability and despatch in this order based on the merit order principles.

Reject proposal of Market Purchases

- cc) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that the DISCOMs have proposed to “bridge the monthly deficit whenever it is incidental” through procurement from market such as from energy exchanges or through DEEP-E bidding portal or “through any other competitive means” with “a weighted average single part price of ₹4.32/unit.” Since abnormal quantum of surplus power would be available in the year 2020-21 also, they have requested to reject the proposal of the DISCOMs to purchase power from the market. On the contrary, the DISCOMs have to be directed by the Commission to make all possible efforts to sell the surplus power at remunerative prices in the market.
- dd) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that Commission shall be prudent in allowing the cost of market purchases, as the actual cost of power purchase in market is significantly less than the approved cost in 2019-20 order.
- ee) Sri S. Prathap, Technical Secretary, APSEB Assistant Executive Engineers' Association, Tirupati has stated that market purchases shall be avoided to the maximum extent.

DISCOMs Response: Variations in monthly energy requirement in different DISCOMs due to their load mix and monthly aggregate energy generation from different plants (based on type of generation & source of fuel) cause deviations. Even though the total energy availability in a day from all dispatchable sources is sufficient to meet the day's energy consumption on an average, during peak times the generation from all dispatchable sources may not be able to meet the peak demand, as a result, deficit situations arise.

On annual basis, it is not possible to utilize the entire available energy from a particular source due to the dynamic nature of Load/Generation balance in real time. This is the reason why, the dispatch from AP Genco & CGS Stations is lesser by 1332 MU than the available energy from these sources.

The surplus available to the extent of 1227 MU is incidental in the lean demand months of December to February. The DISCOMs will put their best efforts to sell this available surplus in the market at a competitive price to recover the costs. In case prices are not competitive in these lean demand months, the available generation needs to be backed down. The DISCOMs have proposed to “bridge the monthly deficit whenever it is incidental” through procurement from market such as from energy exchanges or through DEEP-e-bidding portal or “through any other competitive means” with “a weighted average single part price of ₹4.31/unit.”

- ff) In response to the above, Sri M. Venugopala Rao has stated that the clarifications given by the Discoms about their load mix and variations in demand curve are valid. However, they cannot hide or justify availability of abnormal quantum of surplus power due to their entering into long-term PPAs with power projects, especially with wind and solar power projects, to purchase unwarranted power on long-term basis and at higher costs and the resultant backing down of thermal projects and paying fixed costs therefor. This aberration is imposing dual burdens on the consumers – in the form of paying higher tariffs for purchasing NCE, on the one hand, and backing down thermal capacities in order to purchase high-cost NCE and paying fixed charges for such backing down, on the other. As per merit order dispatch, power stations other than hydel and NCE have to be backed down, starting with the station with highest variable cost. As incorporated in the respective PPAs, there are technical limitations for backing down - the percentage of capacity to be backed down and the number of orders to be issued by the SLDC for backing down each station in a year. After such limits are exhausted, then the turn of NCE units comes for backing down to maintain required grid frequency and grid safety as per State Grid code. The situation of backing down must-run NCE units confirms availability of abnormal quantum of surplus power and the resultant heavy burdens on the consumers. Moreover, the projection of need for purchasing power in the market, even in the face of availability of abnormal quantum of surplus power, obviously, to meet peak demand, confirms that solar and wind power cannot meet peak demand and as such, purchases from wind and solar units, when power is available from base-load thermal units, are unwarranted. In other words, for meeting peak deficit, if any, instead of opting for purchases in the market and short-term purchases through competitive biddings, the Discoms, at the behest of GoAP, continued to bungle by entering into long-term PPAs with power projects, especially with wind and solar power projects, for purchasing unwarranted and high-cost power which cannot meet peak demand. There is not even a single instance of rejecting consent to any PPA on the valid grounds that power is not required, its cost is not competitive, relatively cheaper power is available from other sources and the DISCOMS have already far exceeded their obligations to purchase NCE under renewable power purchase obligation order issued by the Commission during the last six years. The disastrous

consequences are an outcome of the imprudent decisions taken by GoAP, the long-term PPAs entered into by the DISCOMS for purchase of unwarranted and high-cost power and the consents given to the same.

Commission's view: No market purchases are necessitated as per the estimations of the Commission. Therefore, no further discussion in this regard is required.

Commission's decision on Energy Availability and Procurement

RTPP-IV, Dr. NTTPS-V and SDSTPS-II

- 102.** The Commission notes that the matters of approval of Power Purchase Agreement and determination of capital cost in respect of RTPP Stage-IV are pending for approval before it and are under public consultation process. Further, there are no PPAs submitted to this Commission in respect of Dr. NTTPS Stage-V and SDSTPS Stage-II. However, the Commission considers the energy availability and power procurement from these sources as proposed by the licensees, as they are essentially base load stations, subject to further specific approvals by the Commission in the respective matters. It is also to be noted that power procurement from these sources has been projected by the licensees and approved by the Commission for FY2020-21 in its order dated 15.04.2019 on Load Forecasts and Resource Plans for the 4th Control Period.

M/s HNPCL, M/s Simhapuri and Gas based IPPs

- 103.** With reference to the availability and dispatch from M/s HNPCL, M/s Simhapuri and Gas based IPPs (GVK extension, GMR Vemagiri, Gautami and Konaseema), the licensees shall act as per the views expressed by the Commission earlier in this Chapter while dealing with the views/ objections / suggestions relating to these plants.

Spectrum and Lanco

- 104.** The Commission has not considered energy availability from M/s Spectrum Power Generation Ltd. (SPGL) and M/s Lanco Kondapalli power Ltd. for the reasons mentioned supra while dealing with the views/objections/suggestions related to these plants. The Commission also notes that these plants are not considered in the power procurement plan for FY2020-21 vide its order dated 15.04.2019 on Load Forecasts and Resource Plans for the 4th Control Period.

Wind and Solar Sources

- 105.** The Commission considered the energy availability (as per its estimations based on the data furnished by the licensees for FY2018-19 and H1 of FY2019-20) from Wind and Solar sources for the contracted capacity as furnished in their filings by the licensees in accordance with its views expressed supra while dealing with the views / objections / suggestions related to this aspect. The Commission also notes that a capacity of 6616.06 MW in respect of the Wind and Solar sources (Solar- 2728.89 MW and Wind-3887.17 MW) is considered in the power procurement plan for FY2020-21 vide its order dated 15.04.2019 on Load Forecasts and Resource Plans for the 4th Control Period. While

estimating the energy availability from these sources, the Commission has considered the decision of the Government vide G.O.Rt.No.116 dated 1.10.2019 and the amendment proposed to the Power Sale Agreement dated 8.01.2016 entered between APEPDCL and NTPC to replace APSPDCL in the place of APEPDCL. The amendments proposed are before the Commission for approval. Pending approval of the Commission to the said amendment, the total energy from Wind and Solar sources is considered on geographical basis for both the licensees.

- 106.** In view of the foregoing decisions, the Commission is inclined to accept the estimates of energy availability made by the DISCOMs with the variations as indicated in the following table. In doing so, the Commission has excluded energy from Spectrum Power Generation Limited for the reasons discussed in foregoing. In addition, availability from Wind and Solar sources is also considered. Accordingly, the availabilities projected by the licensees and that estimated by the Commission from different sources are given in the table below:

Table 20: Energy Availability (MU) for FY2020-21

S. No.	Source	Capacity (MW)	Filed by licensees (MU)	Approved by APERC (MU)	Difference (MU)
	(1)	(2)	(3)	(4)	(5) = (4) - (3)
1	APGENCO Thermal*	2810	17973.49	18013.19	39.69
2	RTPP Stage-IV	600	3952.512	3889.44	-63.07
3	NTTPS V Stage	800	2232.54	2232.54	0.00
	APGENCO Thermal TOTAL	4210	24158.54	24135.17	-23.38
4	APGENCO Hydel	1797.60	3137.50	3169.19	31.69
5	SDSTPP - I	1600	10489.53	10483.97	-5.57
6	SDSTPP - II	800	2466.60	2466.60	0.00
7	CGS	1987.93	14091.18	13913.35	-177.83
8	JNNSM Phase-I Thermal	39.27	279.69	269.95	-9.74
9	JNNSM Phase-II Thermal	625	4435.52	4304.72	-130.80
10	GGPP	216.824	795.48	795.49	0.01
11	SPECTRUM	205.187	1185.59	0.00	-1185.59
12	APGPCL	34.29	86.78	86.78	0.00
13	KSK Mahannadi	400	2978.40	2783.84	-194.56
14	Sembcorp (TPTCL)	230.55	1916.54	1604.85	-311.69
15	NCE	8756	338.03	14391.97	14053.94
	TOTAL	20902.65	66359.38	78405.87	12046.49

*Excluding S.Nos.2 and 3 in the Table above

- 107.** The availabilities approved by the Commission, station-wise are shown in Annexures-04A, 04B & 04C.

- 108.** However, the licensees are directed to note that in respect of power from 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, if any, as per the Orders of the Commission, the licensees shall not receive such supplies without prior intimation to and approval of the Commission.

Monthly Mapping of Power Purchase Requirement and Availability

- 109.** Against the total power purchase requirement of 68901.60 MU for FY2020-21 as determined by the Commission in Chapter-III, the energy availability from different sources is determined at 78405.87 MU resulting in a probable surplus energy of 9504.27 MU.
- 110.** After determination of energy availability and power purchase requirement for FY2020-21, 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 FY2020-21

- 111.** While preparing the month wise despatches, the available energies from all Stations 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 energy from thermal and gas stations has been despatched in the merit order based on per unit variable costs. While doing so, the tariffs for RTPP-IV, Dr.NTTPS-V and SDSTPS-II are considered at comparable levels with the other similarly placed generators of APGENCO / CGS in order to keep the power purchase cost at the lowest possible level while reasonably protecting the interests of the generators.
- 112.** By following the above procedure, the Commission has strived to reduce the power procurement cost of the Licensees to the extent possible while at the same time ensuring that the consumers in the State are provided interruption free supply at a reasonable cost.
- 113.** The summary of energy dispatches is as per the table shown below. The details of Station- wise dispatches of energy filed by the licensees and approved by the Commission are as per Annexure -05A,05B & 05C and Annexure-06A,06B & 06C respectively.

Table 21: Energy Despatch (MU) for FY2020-21

S. No	Source	Filed by licensees	Approved by APERC	Difference
	(1)	(2)	(3)	(4) = (3) - (2)
1	APGENCO Thermal*	17089.52	13251.29	-3838.23
2	RTPP Stage-IV	3952.512	2350.914	-1601.60
3	NTTPS V Stage	2232.54	2232.54	0.00
	APGENCO Thermal Total	23274.57	17834.75	-5439.83
4	APGENCO Hydel	3137.50	3169.19	31.69
5	SDSTPP – I	10489.53	10158.05	-331.48
6	SDSTPP – II	2466.60	2466.60	0.00
7	CGS	13745.16	11198.98	-2546.19
8	JNNSM Phase-I Thermal	279.69	106.39	-173.30
9	JNNSM Phase-II Thermal	4334.02	4304.72	-29.30
10	GGPP	795.48	795.49	0.01
11	SPECTRUM	1185.59	0.00	-1185.59
12	APGPCL	86.78	86.78	0.00
13	KSK Mahannadi	2978.40	2783.84	-194.56
14	Sembcorp (TPTCL)	1916.54	1604.85	-311.69
15	NCE	338.03	14391.97	14053.94
16	Market	4949.36	0.00	-4949.36
	TOTAL	69977.25	68901.61	-1075.65

Excluding S.Nos. 2 and 3 in the Table above

Unexpected Slippage in Generation

- 114.** 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.**
- 115.** Further, the licensees shall not procure energy from Stations / Sources other than those approved in this order without the prior approval of 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 it 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. While operating intraday merit order dispatch, the least cost source shall be dispatched to the full extent in order to achieve lower power purchase cost at the end.

- 116.** 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

- 117.** The Commission has determined the surplus energy at 9504.27 MU as against the deficit of 3955.83 MU assessed by the licensees. The Commission observes here that out of the surplus energy of 2739.98 MU determined by it for FY2019-20, the licensees have miserably failed to sell the surplus energy even though they were directed ***“to sell any surplus power that may be available with them upto the last unit at an economically beneficial price to the maximum extent possible by all possible means as described”*** at para no. 302 (pages 201 & 202) of the Retail Supply Tariff Order for FY2019-20.
- 118.** Therefore, the Commission 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. The details of efforts made by the licensees to sell the surplus energy in all possible ways and the details of sale of surplus energy in a month shall be intimated to the Commission by 15th of succeeding month during FY2020-21.

Power Purchase Cost for FY2020-21

Fixed Cost

- 119.** The Licensees proposed the fixed cost for APGENCO thermal stations as per the cost approved by the Commission in its order dated 29.04.2019 on APGENCO Generating Stations' Tariffs for the 4th Control period. In respect of RTPP-IV the licensees have proposed a variable cost of ₹ 3.86 per unit and fixed cost of ₹ 2.79 per unit; and in respect of Dr. NTTPS-V, the licensees have proposed a variable cost of ₹ 3.15 per unit and fixed cost of ₹2.73 per unit; and in respect of SDSTPS-II, the licensees have proposed a variable cost of ₹3.14 per unit and fixed cost of ₹1.91 per unit. Accordingly, the fixed cost in respect of AP GENCO Thermal and Hydel Stations and SDSTPS proposed by the licensees is as given in the table below:

Table 22: Filings: Fixed Cost – APGENCO and SDSTPS (₹ Cr.)

S. No.	Station	Fixed Cost	S. No.	Station	Fixed Cost
Thermal			Hydel		
1	Dr NTPPS-I, II, III	679.47	1	MACHKUND PH AP Share	35.01
2	Dr NTPPS-IV	282.92	2	TUNGBHADRA PH AP Share	24.00
3	RTPP-I	259.43	3	Upper Sileru HES	76.55
4	RTPP-II	252.73	4	Lower Sileru HES	146.72
5	RTPP-III	186.96	5	Donkarayi Canal PH	7.97
6	RTPP-IV	1101.73	6	SSLM (Right Bank) PH	219.76
7	SDSTPS- Stage I	2002.18	7	Nagarjunasagar Right canal PH	25.19
8	SDSTPS-Stage-II	471.12	8	PABR	13.07
9	Dr.NTPPS-V	608.81	9	Mini Hydel (Chettipeta)	1.70
10	Interest on Pension Bonds	921.50	10	Nagarjunasagar Tail Pond PH	51.44
Total		6766.85	Total		601.41

- 120.** In respect of Central Generating Stations, the charges are stated to be considered as per the relevant orders of CERC for the respective stations. In respect of other IPPs, the charges are stated to be considered as per the respective agreements and as furnished by the generators. Accordingly, the fixed cost in respect of CGS and other Stations proposed by the licensees is as given in the table below:

Table 23: Filings: Fixed Cost – CGS and Other Stations (₹ Cr.)

S. No.	Station	Fixed Cost	S. No.	Station	Fixed Cost
1	NTPC-(SR) Ramagundam-I & II	142.72	14	Sembcorp	277.04
2	NTPC-(SR) Ramagundam- III	38.50	15	KSK Mahanadi	446.73
3	NTPC-Talcher-II	87.51	16	APGPCL -I	1.72
4	NTPC Simhadri Stage-I	309.46	17	APGPCL -II	16.63
5	NTPC Simhadri Stage-II	204.55	18	GGPP	32.61
6	NLC TS II Stage-I	23.62	19	SPGL	109.07
7	NLC TS II Stage-II	44.01			
8	Vallur (JV) NTPC with TANGEDCO	125.46			
9	NLC-TNPL Tuticorin	138.66			
10	NTPC-Kudigi	332.24			
11	NTPC JNN SM Phase I	28.80			
12	NTPC JNN SM Phase II	665.33			
13	NNTPS	77.68			
Total		2218.54	Total		883.80

Variable Cost for FY2020-21

- 121.** As per the filings for the variable cost in respect of Dr NTTPS-I, II, III & IV and RTPP -I, II, III, the variable rates for FY2020-21 are proposed with 10% hike on FY2019-20 H2 which are as per the AP Genco Tariff Order for the 4th Control period dated 29-04-2019 issued by the Commission. For SDSTPS-I, & SDSTPS-II (yet to be commissioned), the variable rate as furnished by APPDCL is proposed by the licensees. For Dr. NTTPS-V, the fixed rate as furnished by APGENCO is proposed by the licensees.
- 122.** In respect of the Central Generating Stations, the variable rates for FY2020-21 are proposed by enhancing the September 2019 month's actual variable cost by 10%.
- 123.** In respect of other stations, the variable rates are stated to have been proposed as furnished by the generators according to their agreements as given in the table below:

Table 24: Filings: Variable Cost – APGENCO, IPPs and CGS (₹ /Unit)

S. No.	Station	₹ Ps.	S. No.	Station	₹ Ps.
1	Dr. NTTPS-I, II, III	3.67	16	NTPC-(SR) Ramagundam I & II	3.05
2	Dr. NTTPS-IV	3.46	17	NTPC-(SR) Ramagundam- III	3.01
3	Dr. NTTPS-V	3.15	18	NTPC-Talcher-II	2.63
4	RTPP-I	4.25	19	NTPC Simhadri Stage-I	3.72
5	RTPP-II	4.25	20	NTPC Simhadri Stage-II	3.67
6	RTPP-III	4.25	21	NLC TS II Stage-I	2.91
7	RTPP-IV	3.86	22	NLC TS II Stage-II	2.91
8	SDSTPS- Stage-I	3.14	23	Vallur (JV) NTPC with TANGEDCO	4.15
9	SDSTPS-Stage-II	3.14	24	NLC-TNPL Tuticorin	3.48
10	Sembcorp Energy India Limited	2.43	25	NTPC-Kudigi	4.38
11	KSK Mahanadi Power Corporation Limited	2.96	26	NTPC JNN SM Phase I	3.93
12	APGPCL Stage-I	2.85	27	NTPC JNN SM Phase II	3.04
13	APGPCL Stage-II	2.85	28	NNTPS	2.54
14	GGPP	2.84			
15	SPGL	2.39			

- 124.** Accordingly, the licensees have estimated the total power purchase cost at ₹33,870.23 Cr. (₹ 21430.91 Cr. – APSPDCL and ₹ 12439.32 Cr. – APEPDCL) including the market purchases of 4949.36 MU at a rate of ₹ 4.31 per unit. The details of powerpurchase cost filed by the licensees for various sources are shown in the tables below.

Table 25: Filings: Power Purchase Cost – APSPDCL

S. No.	Source	Despatch (MU)	Total Variable Cost (Rs.Cr.)	Variable Cost (Rs./Unit)	Total Fixed Cost (Rs.Cr.)	Fixed Cost (Rs./Unit)	Total Cost (Rs. Cr.)	Average Cost (Rs./Unit)
	(1)	(2)	(3)	(4) = (3)/(2)*10	(5)	(6) = (5)/(2)*10	(7)=(3)+(5)	(8) = (7) / (2)*10
1	APGENCO Thermal*	11232.94	4299.35	3.83	1092.11	0.97	5391.46	4.80
2	RTPP Stage-IV	2597.99	1002.82	3.86	724.17	2.79	1726.99	6.65
3	NTTPS V Stage	1467.45	462.25	3.15	400.17	2.73	862.42	5.88
	APGENCO Thermal TOTAL	15298.38	5764.42	3.77	2216.45	1.45	7980.87	5.22
4	APGENCO Hydel	2062.28	0.00	0.00	395.31	1.92	395.31	1.92
5	SDSTPP - I	6894.77	2164.96	3.14	1316.03	1.91	3480.99	5.05
6	SDSTPP - II	1621.30	509.09	3.14	309.67	1.91	818.76	5.05
7	CGS	9034.70	3166.12	3.50	1083.00	1.20	4249.12	4.70
8	JNNSM Phase-I Thermal	183.84	72.25	3.93	18.93	1.03	91.18	4.96
9	JNNSM Phase-II Thermal	2848.75	865.89	3.04	437.32	1.54	1303.21	4.57
10	GGPP	522.87	148.49	2.84	21.44	0.41	169.93	3.25
11	APGPCL	57.04	16.26	2.85	12.07	2.12	28.32	4.97
12	KSK Mahannadi	1957.70	579.48	2.96	293.64	1.50	873.12	4.46
13	Sembcorp(TPTCL)	1259.74	306.12	2.43	185.37	1.47	491.49	3.90
14	NCE	248.70	133.80	5.38	0.00	0.00	133.80	5.38
15	Additional Interest on Pension Bonds				605.70		605.70	
16	Spectrum	779.29	186.25	2.39	71.69	0.92	257.94	3.31
17	Market	3253.21	1402.13	4.31	0.00	0.00	1402.13	4.31
19	D to D Transaction	-2403.84	-850.96	3.54		0.00	-850.96	3.54
	TOTAL	43618.72	14464.30	3.32	6966.61	1.60	21430.91	4.91

*Excluding S.Nos. 2 and 3 in the Table above

Table 26: Filings: Power Purchase Cost – APEPDCL

S. No.	Source	Despatch (MU)	Total Variable Cost (Rs.Cr.)	Variable Cost (Rs./Unit)	Total Fixed Cost (Rs.Cr.)	Fixed Cost (Rs./Unit)	Total Cost (Rs. Cr.)	Average Cost (Rs./Unit)
	(1)	(2)	(3)	(4) = (3)/(2)*10	(5)	(6) = (5)/(2)*10	(7) = (3) + (5)	(8) = (7)/(2)*10
1	APGENCO Thermal*	5856.58	2241.57	3.83	569.40	0.97	2810.97	4.80
2	RTPP Stage-IV	1354.53	522.85	3.86	377.56	2.79	900.41	6.65
3	NTTPS V Stage	765.09	241.00	3.15	208.64	2.73	449.64	5.88
	APGENCO Thermal TOTAL	7976.20	3005.42	3.77	1155.60	1.45	4161.03	5.22
4	APGENCO Hydel	1075.22	0.00	0.00	206.10	1.92	206.10	1.92
5	SDSTPP - I	3594.76	1128.76	3.14	686.15	1.91	1814.90	5.05
6	SDSTPP - II	845.31	265.43	3.14	161.45	1.91	426.88	5.05
7	CGS	4710.47	1650.74	3.50	564.64	1.20	2215.38	4.70
8	JNNSM Phase-I Thermal	95.85	37.67	3.93	9.87	1.03	47.54	4.96
9	JNNSM Phase-II Thermal	1485.27	451.46	3.04	228.01	1.54	679.46	4.57
10	GGPP	272.61	77.42	2.84	11.18	0.41	88.60	3.25
11	APGPCL	29.74	8.48	2.85	6.29	2.12	14.77	4.97
12	KSK Mahanandi	1020.70	302.13	2.96	153.09	1.50	455.22	4.46
13	Sembcorp(TPTCL)	656.80	159.60	2.43	96.64	1.47	256.24	3.90
14	NCE	89.33	40.91	4.58	0.00	0.00	40.91	4.58
15	Additional Interest on Pension Bonds				315.80		315.80	
16	Spectrum	406.30	97.11	2.39	37.38	0.92	134.49	3.31
17	Market	1696.14	731.04	4.31	0.00	0.00	731.04	4.31
19	D to D Transaction	2403.84	850.96	3.54	0.00	0.00	850.96	3.54
	TOTAL	26358.53	8807.11	3.34	3632.21	1.38	12439.32	4.72

*Excluding S.Nos. 2 and 3 in the Table above

125. Views/Objections/Suggestions

Cost of power from SDSTPS is higher than Sembcorp

gg) Sri M. Thimma Reddy, Dr. K. Kranthi Kumar Reddy, Sri Jetty Gurunadha Rao, and Sri Ch. Diwakara Babu have stated that SDSTPS and Sembcorp units are located in the same geographical region, in Nellore district. But there is considerable difference in cost of power generated from these units. Cost of power from SDSTPS is 29.49% higher than cost of power from Sembcorp unit. Even variable cost of SDSTPS (₹ 3.14 per unit) is 28.16% higher than variable cost of Sembcorp Unit (₹2.45 per unit)

hh) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that though SDSTPS stage- II and NTPPS Stage-V are not yet commissioned they are included in the DISCOMs' filings.

DISCOMs' Response: The PPAs between M/s Sembcorp (Thermal Power Tech) and APPDCL (SDSTPS) are on different footings. M/s Sembcorp is based on competitive bidding and APPDCL is through Cost plus determination by the Commission. There is an additional transmission cost to the extent of Rs 0.6/unit in respect of power procurement from M/s Sembcorp since the plant is connected to PowerGrid (CTU) network, whereas SDSTPS is connected to AP Transco network. In view of the cost structure difference and connectivity differences, power procurement price from M/s Sembcorp & M/s SDSTPS cannot be compared.

Commission's view: The tariff application of M/s APPDCL in respect of SDSTPS-I for FY2019-20 to FY2023-24 is before the Commission, which on proper examination fixed reasonable adhoc tariffs pending determination of final tariff. Therefore, inclusion of these two projects in the tariff proposals cannot be said to be improper. As regards the disparity in tariffs between the two developers, the Commission will examine same while determining the tariffs in the pending application.

Power purchase cost from APGPCL needs to be scrutinised

ii) Sri M. Thimma Reddy and others have stated that the ARR filings show that fixed cost of APGPCL Stage-II will be increasing from ₹2.14 Cr. during FY2019-20 H2 to ₹16.63 Cr. during FY2020-21. Energy availability from this plant will be 30.44 MU during 2019-20 H2 and 66.06 MU during FY2020-21. While the expected energy availability during FY2020-21 is twice that of FY2019-20 H2 indicating full year being taken into account, fixed cost is expected to increase nearly eight times and if full year is taken into account it will be increasing by four times. There is no explanation for such increase in fixed cost of APGPCL Stage-II unit.

While during FY2019-20 H2 power from APGPCL is 22.12% costlier than IPP Gas units during FY2020-21 power from APGPCL will be 51 % costlier than IPP Gas units.

As source of fuel is the same for all these units, high power purchase cost from APGPCL units needs to be scrutinized.

- jj) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that DISCOMs have submitted that they are availing power from the two stages of AP Gas Power Corporation Limited (APGPCL) to the extent of AP Transco's equity share in the project, i.e. 34.29 MW. For the second stage of APGPCL, the DISCOMs have submitted that the fixed costs projected for the second half of 2019-20 and for 2020-21 are based on the information on projections as furnished by APGPCL. While the fixed cost for the second stage of APGPCL is shown as ₹2.14 Cr., for the second half of 2020-21, it is abnormally enhanced to ₹16.63 Cr. for 2020-21. The DISCOMs have not given any explanation as to why such abnormal increase in fixed cost is projected. Normally, with payment of depreciation charges, fixed costs of power plants come down every year. They have requested to direct the DISCOMs to submit the reasons and justification, if any, for this abnormal increase in fixed costs for the second stage of APGPCL for the year 2020-21, examine the same and determine what is permissible.

DISCOMs' Response: In respect of APGPCL, the fixed cost component is understated in the ARR filings of FY2019-20 and accordingly approved as it is. For FY2020-21 actual power purchase cost from M/s APGPCL upto September, 2019 has been considered for projections. APGPCL has proposed a major capital overhaul to its equipment vide their projections of cost/energy for FY2020-21 and the same has been taken into account for ARR filings by the DISCOMs. Hence, the fixed cost from APGPCL is higher when compared to the previous years.

- kk) In response to the above, Sri M. Venugopala Rao has stated that regarding higher fixed charges proposed for the second unit of APGPCL for the year 2020-21, the claim of the DISCOMs that the fixed cost component was understated in the ARR filings for 2019-20 needs to be verified. Secondly, simply because APGPCL has proposed a major capital overhaul to its equipment, the proposed cost cannot be taken for granted. Unless and until such a major capital overhaul actually takes place and the Commission gives its approval to the same for the purpose of determining permissible fixed cost, the higher fixed charges, as proposed by the Discoms, should not be taken into account.

Commission's view: The DISCOMs shall obtain the audited reports for FY2019-20 after completion of financial year for the expenditure claimed by M/s APGPCL and shall submit to the Commission with scrutiny and comments by the audit wing of DISCOMs. The fixed cost of APGPCL for FY2020-21 is restricted to the estimated cost for H2 of FY2019-20 proposed by the licensees. However, if and when a true-up application is filed, the Commission will determine the fixed cost based on the actual expenditure incurred by APGPCL.

10% hike in variable cost and increase in per unit power purchase cost

- ll) Sri M. Thimma Reddy and others have stated that while unit variable cost of power from thermal plants is projected to increase by about 10% over the variable cost approved by the Commission for FY2019-20 total power purchase cost per unit is projected to increase by more than 20%. From the present filings it is not clear what factors contributed to the remaining more than 10% increase in power purchase cost per unit compared to the one approved by the Commission for FY2019-20.

DISCOMs' Response: Total Power Purchase cost of FY2019-20 is Rs 31806.77 Cr. @ ₹ 4.87/Unit. Total PP cost of FY2020-21 is ₹33870.23 Cr. @ ₹ 4.84/Unit. The increase in expenditure towards power procurement is ₹2063.46 Cr. and 6.49% and is not around 20% as claimed by the objector. There is no increase in PP cost unit rate. The increase in quantum is due to additional procurement of energy for FY2020-21 to meet the increase in sales.

- mm) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that for power to be procured from thermal projects of AP Genco and Central Generating Stations, the DISCOMs have proposed a 10% hike in variable cost for the year 2020-21 over the variable cost of second half of 2019-20, without any justification. This is impermissible. During earlier years, the Commission did not allow such premature proposals without any basis and justification. After the Commission gives its tariff order for retail supply business of the DISCOMs for the year 2020-21, whatever fluctuations in variable costs that may take place can be claimed under true-up/true-down, as has been the practice over the years. Without any hike in variable costs of thermal projects actually taking place, the DISCOMs are not entitled to collect higher variable costs from their consumers in advance, simply based on presumptions. Therefore, they have requested not to allow the 10% hike in variable costs for the year 2020-21 proposed by the DISCOMs. If the proposal of the DISCOMs is disallowed, the projected revenue requirement would vary.

DISCOMs' Response: DISCOMs have considered 10% escalation factor on the actual thermal variable costs as on September 19, for evaluating thermal variable costs for FY 2020-21. As per the latest CERC Tariff regulations and MYT Order for AP Genco for the period 2019-24, escalation in thermal variable costs are allowed to the extent of 20% on the base energy charges as an automatic pass through, subjected to final verification. In view of this, APDISCOMs have adopted at least half that allowable escalation factor for estimating the power purchase costs for FY2020-21, and request the Commission to accord approval.

Commission's view: The proposal of the DISCOMs for 10% increase in variable cost being without any basis, is not accepted by the Commission. With respect to the increase in per unit cost, the Commission has taken into consideration the escalation

of fixed cost from the previous year and appropriately allowed increase to the required extent as per the Commission's order dated 29.04.2019 on APGENCO Generating Stations' Tariffs for the 4th Control period.

Fixed charges of RTPP Stage-IV, Dr. NTTPS Stage-V & SDSTPS-I

- nn) Sri M. Venugopala Rao and others have stated that the DISCOMs have submitted that for RTPP stage-IV and Dr. NTTPS stage-V, the fixed charges as furnished by AP Genco and for SDSPTS-I and II as furnished by APPDCL were considered. Since the fixed charges for these projects are not determined by the Commission, inclusion of the same in the proposals of DISCOMs is arbitrary and impermissible. After the Commission determines the permissible capital costs of these projects, the fixed charges can be worked out as per applicable parameters. With delay in execution of the projects and inflated and impermissible capital costs, the fixed costs as proposed by AP Genco and APPDCL and taken into account by the DISCOMs cannot and should not be taken into account, even if the Commission approves proposed procurement of power from these plants. He has requested not to approve the fixed charges for these plants as proposed by the DISCOMs.
- oo) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that the DISCOMs have claimed an excess of ₹288.75 Cr. for fixed cost recovery in the case of Dr. NTTPS-I, II, III, IV and RTTP- I, II, III plants. Due diligence of Commission is needed while assessing the fixed cost claims of DISCOMs, as they had inflated the plant availability.

DISCOMs' Response: The unit rates towards fixed costs for the new power projects that are going to be commissioned in the 2nd Half of current financial year or the ensuing year are proposed as per the information received from the concerned Generators, since tariff determination is yet to be undertaken. The costs considered are tentative and are subject to the directions/decisions of the Commission.

Commission's view: The proposals of the DISCOMs have been considered with reference to the objections of the objectors and an interim tariff rate is arrived at in this tariff order. The reasons forming basis for arriving at this tariff could be found at Commission decision in this regard infra.

Consider Power Purchase Cost of Wind and Solar

- pp) Sri Sukomal Satyen, Deputy Manager, Legal, M/s Vayu Urja Bharat Private Limited & M/s Waaneep Solar Private Limited has requested to direct APSPDCL to consider power purchase cost of wind and solar generators.

Commission's view: Wind and Solar sources are considered in power purchase estimations.

Scrutinize Power purchase costs

- qq) Sri M. Thimma Reddy and others have stated that power purchase costs account for 75.53% of the ARR in the State. The filings also show that power purchase costs will be increasing by 18.59% (in the case of EPDCL) to 21.53% (in the case of SPDCL) over the approved power purchase costs of FY2019-20. Given the high proportion of power purchase costs in the revenue requirement of DISCOMs and its proposed increase during the ensuing FY2020-21, the power purchase costs filed by DISOMs needs to be closely scrutinized.

Commission's View: The Commission would approve the power purchase costs after thorough scrutiny of the proposal filed by the DISCOMs.

Fixed cost of CGS are projected high

- rr) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that DISCOMs have increased the fixed cost of CGS stations than approved in the tariff order for 2019-20.

Commission's view: The Costs are considered after scrutiny.

Reduce Power Purchase Cost

- ss) Sri Katuru Hari Kishore Kumar Reddy and batch of Bharatiya Kisan Sangh have stated the average power purchase cost which was ₹3.72 per unit in FY2016-17 has increased to ₹ 4.91 per unit in FY2020-21. The reason may be explained. Increase of power purchase cost is unbearable burden to the consumers and profit to the generators. Consumer interest shall be kept in view and the Power Purchase cost shall be reduced.

DISCOMs' Response: The average power purchase cost for FY2020-21 is estimated as ₹4.84 per unit. There is an increase of ₹1.12 per unit compared to FY2016-17. This is mainly due to increase of prices of coal and its transportation. Due to high capital cost of new thermal power stations, fixed cost also increased. Krishnapatnam-II (800 MW) and NTPS-V (800 MW) will be commissioned in the ensuing financial year. Their fixed costs are also included in the average power purchase cost of FY2020-21.

Further the obligation to implement CERC, CEA Regulations also contributed to increase in average PP cost.

Commission's view: The Costs are considered as per the orders of the Commission and CERC as applicable in respect of Fixed costs and variable costs are adopted as per the norms.

Procure cheaper power from exchanges

- tt) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that DISCOMs need to procure sufficient power through exchanges during night times for the irrigation

projects and heavy industries of the State, as the unit rate in the exchange in early hours of the day in any season is below ₹1.19/-.

APSPDCL Response: Suggestion is noted.

Commission's view: The noted suggestion may be kept in view by the licensee.

Commission's decision

Fixed and Other Costs

- 126.** In respect of the fixed costs of the generating stations of APGENCO governed by approved PPAs, the Commission has approved the figures as per its earlier dated 29.04.2019 on APGENCO Generating Stations Tariffs for the 4th Control Period
- 127.** In respect of SDSTPS-I, the licensees stated that they propose the fixed cost at ₹1.91 per unit based on the claim of APPDCL. In this connection the Commission noticed that APPDCL, vide O.P.No. 53 of 2019 has filed an application for determination of tariff for the period from FY2019-20 to FY2023-24 before it. The Commission has examined the proposed price with reference to the tariff claimed in the application made by APPDCL and found that it is as per the claim made for FY2020-21. Therefore, the Commission applies the proposed price of ₹1.91 per unit subject however to the final determination of the tariff in the application pending before it.
- 128.** The fixed cost in respect of RTPP-IV, Dr. NTPPS-V and SDSTPS-II is approved at an interim rate of ₹ 1.80 per unit on par with similarly placed stations to keep the power purchase cost at reasonable limits duly protecting the interest of the generators.
- 129.** The APGPCL fixed costs filed by the licensees for FY2020-21 are revised and placed at the costs filed for FY2019-20 H2.
- 130.** In respect of Central Generating Stations (CGS) other than Nuclear Power Plants, the licensees stated that they have proposed the fixed costs based on relevant orders of CERC. But, as per the information obtained subsequently, it is observed that the relevant orders of CERC pertain to the period upto FY2018-19 and the orders for the tariffs for the subsequent years are yet to be issued by the CERC. Therefore, the fixed costs of CGS as proposed by the licensees are tentatively applied by the Commission subject however to the final determination of the tariffs by the CERC.
- 131.** In respect of other IPPs, the Commission applies the fixed costs as proposed by the licensees as the same are stated to be as per the respective agreements, subject to final verification at the time of true-up.

Variable Costs

- 132.** The licensees propose 10% hike over the current year variable rates for all thermal stations in their estimation of the variable costs of these stations for FY2020-21. As no satisfactory reasons are assigned for this proposal, the Commission rejects the same and the costs at current year level are applied.

- 133.** In respect of Nuclear Power Plants (MAPS and Kaiga), the licensees stated that the variable costs are as per the information provided by the Department of Atomic Energy but the costs are not shown in the filings. The Commission applies the rates of these stations at the level approved in the Retail Supply Tariff order for FY2019-20.
- 134.** In respect of Wind and Solar Plants, the tariffs as approved by the Commission in the Retail Supply Order for FY2019-20 are applied for estimation of Power Purchase Cost in this Order as the licensees have not proposed the cost of power from these sources. Application of these tariff rates cannot however be understood as a mandate to the licensees to pay the Wind and Solar developers at that rate as the payments for the present are governed by the judgement of the Hon'ble High Court of Andhra Pradesh. It is however made clear that the liability of the licensees in this regard shall be subject to the outcome of the pending litigation.
- 135.** Accordingly, Summary of the Power Purchase Cost estimated by the Commission licensee-wise and total Power Purchase Cost (State) are given in the Table below:

Table 27: Approved: Total (State) Power Purchase Cost

S. No.	Source	Despatch (MU)	Total Variable Cost (Rs. Cr.)	Variable Cost (Rs./Unit)	Total Fixed Cost (Rs. Cr.)	Fixed Cost (Rs./Unit)	Total Cost (Rs. Cr.)	Average Cost (Rs./Unit)
	(1)	(2)	(3)	(4) = (3)/(2)*10	(5)	(6) = (5)/(2)*10	(7) = (3) + (5)	(8) = (7) / (2)*10
1	APGENCO Thermal*	13251.29	4558.49	3.44	1661.51	1.25	6220.00	4.69
2	RTPP Stage-IV	2350.91	860.43	3.66	423.16	1.80	1283.60	5.46
3	NTTPS V Stage	2232.54	701.02	3.14	401.86	1.80	1102.87	4.94
	APGENCO Thermal TOTAL	17834.75	6119.94	3.43	2486.53	1.39	8606.47	4.83
4	APGENCO HydeI	3169.19	0.00	0.00	601.41	1.90	601.41	1.90
5	SDSTPP - I	10158.05	3189.63	3.14	2002.18	1.97	5191.81	5.11
6	SDSTPP - II	2466.60	774.51	3.14	443.99	1.80	1218.50	4.94
7	CGS	11198.98	3430.15	3.06	1524.41	1.36	4954.56	4.42
8	JNNM Phase-I Thermal	106.39	41.81	3.93	17.98	1.69	59.79	5.62
9	JNNM Phase-II Thermal	4304.72	1308.63	3.04	727.50	1.69	2036.13	4.73
10	GGPP	795.49	175.01	2.20	62.84	0.79	237.85	2.99
11	APGPCL	86.78	19.20	2.21	8.58	0.99	27.78	3.20
12	KSK Mahannadi	2783.84	771.12	2.77	417.58	1.50	1188.70	4.27
13	Sembcorp(TPTCL)	1604.85	361.09	2.25	264.80	1.65	625.89	3.90
14	NCE	14391.97	6597.15	4.58	0.00	0.00	6597.15	4.58
15	Additional Interest on Pension Bonds	0.00	0.00		921.50		921.50	
18	EPDCL Purchase from SPDCL	3572.90		0.00		0.00	-1682.84	4.71
19	SPDCL Sale to EPDCL	-3572.90		0.00		0.00	1682.84	4.71
TOTAL		68901.61	22788.26	3.31	9479.30	1.38	32267.55	4.68

***Excluding S.Nos. 2 and 3 in the Table above**

Table 28: Approved: Power Purchase Cost – SPDCL

S. No.	Source	Despatch (MU)	Total Variable Cost (Rs.Cr.)	Variable Cost (Rs./Unit)	Total Fixed Cost (Rs.Cr.)	Fixed Cost (Rs./Unit)	Total Cost (Rs. Cr.)	Average Cost (Rs./Unit)
	(1)	(2)	(3)	(4) = (3)/(2)*10	(5)	(6) = (5)/(2)*10	(7) = (3) +(5)	(8) = (7) /(2)*10
1	APGENCO Thermal*	7104.50	2408.30	3.39	1092.11	1.54	3500.41	4.93
2	RTPP Stage-IV	1018.00	372.59	3.66	183.24	1.80	555.83	5.46
3	NTTPS V Stage	1467.45	460.78	3.14	264.14	1.80	724.92	4.94
	APGENCO Thermal TOTAL	9589.95	3241.67	3.38	1539.49	1.61	4781.16	4.99
4	APGENCO Hydel	2083.11	0.00	0.00	395.31	1.90	395.31	1.90
5	SDSTPP - I	6565.20	2061.47	3.14	1316.03	2.00	3377.50	5.14
6	SDSTPP - II	1621.30	509.09	3.14	291.83	1.80	800.92	4.94
7	CGS	6482.19	1936.30	2.99	1001.99	1.55	2938.29	4.53
8	JNNSM Phase-I Thermal	21.74	8.54	3.93	3.67	1.69	12.22	5.62
9	JNNSM Phase-II Thermal	2829.49	860.17	3.04	478.18	1.69	1338.35	4.73
10	GGPP	522.88	115.03	2.20	41.31	0.79	156.34	2.99
11	APGPCL	57.04	12.62	2.21	5.64	0.99	18.26	3.20
12	KSK Mahannadi	1829.82	506.86	2.77	274.47	1.50	781.33	4.27
13	Sembcorp(TPTCL)	1054.87	237.35	2.25	174.05	1.65	411.40	3.90
14	NCE	14097.21	6419.73	4.55	0.00	0.00	6419.73	4.55
15	Additional Interest on Pension Bonds				605.70		605.70	
16	Sale to EPDCL	-3572.90	-1682.84				-1682.84	
TOTAL		43181.89	14225.99	3.29	6127.69	1.42	20353.68	4.71

*Excluding S.Nos. 2 and 3 in the Table above

Table 29: Approved: Power Purchase Cost – EPDCL

S. No	Source	Despatch (MU)	Total Variable Cost (Rs. Cr.)	Variable Cost (Rs. / Unit)	Total Fixed Cost (Rs. Cr.)	Fixed Cost (Rs. / Unit)	Total Cost (Rs. Cr.)	Average Cost (Rs./Unit)
	(1)	(2)	(3)	(4)= (3)/(2)*10	(5)	(6)= (5)/(2)*10	(7)= (3) +(5)	(8)= (7) /(2)*10
1	APGENCO Thermal*	6146.74	2150.19	3.50	569.40	0.93	2719.59	4.42
2	RTPP Stage-IV	1332.91	487.85	3.66	239.92	1.80	727.77	5.46
3	NTTPS V Stage	765.09	240.24	3.14	137.72	1.80	377.96	4.94
	APGENCO Thermal TOTAL	8244.74	2878.27	3.49	947.04	1.15	3825.31	4.64
4	APGENCO Hydel	1086.08	0.00	0.00	206.10	1.90	206.10	1.90
5	SDSTPP - I	3592.86	1128.16	3.14	686.15	1.91	1814.31	5.05
6	SDSTPP - II	845.30	265.43	3.14	152.15	1.80	417.58	4.94
7	CGS	4716.79	1493.84	3.17	522.42	1.11	2016.26	4.27
8	JNNSM Phase-I Thermal	84.65	33.27	3.93	14.31	1.69	47.58	5.62
9	JNNSM Phase-II Thermal	1475.23	448.47	3.04	249.31	1.69	697.78	4.73
10	GGPP	272.61	59.98	2.20	21.54	0.79	81.51	2.99
11	APGPCL	29.74	6.58	2.21	2.94	0.99	9.52	3.20
12	KSK Mahannadi	954.02	264.26	2.77	143.10	1.50	407.37	4.27
13	Sembcorp(TPTCL)	549.98	123.75	2.25	90.75	1.65	214.49	3.90
14	NCE	294.75	177.42	6.02	0.00	0.00	177.42	6.02
15	Additional Interest on Pension Bonds				315.80		315.80	
16	Purchase from SPDCL	3572.90	1682.84			0.00	1682.84	4.71
TOTAL		25719.67	8562.26	3.33	3351.61	1.30	11913.87	4.63

*Excluding S.Nos. 2 and 3 in the Table above

- 136.** The total Power Purchase cost filed by the licensees and approved by the Commission and the difference are given in the table below:

Table 30: Filings Vs. Approvals: Total (State) Power Purchase Cost

S. No	Source	Despatch (MU)			Total Cost (Rs. Cr.)		
		Filed	Approved	Difference	Filed	Approved	Difference
1	APGENCO Thermal*	17089.52	13251.29	3838.23	8202.43	6220.00	1982.43
2	RTPP Stage-IV	3952.51	2350.91	1601.60	2627.40	1283.60	1343.80
3	NTTPS V Stage	2232.54	2232.54	0.00	1312.06	1102.87	209.19
	APGENCO Thermal TOTAL	23274.57	17834.75	5439.83	12141.89	8606.47	3535.42
4	APGENCO Hydrel	3137.50	3169.19	-31.69	601.41	601.41	0.00
5	SDSTPP - I	10489.53	10158.05	331.48	5295.89	5191.81	104.08
6	SDSTPP - II	2466.60	2466.60	0.00	1245.64	1218.50	27.14
7	CGS	13745.16	11198.98	2546.19	6464.50	4954.56	1509.94
8	JNNSM Phase-I Thermal	279.69	106.39	173.30	138.72	59.79	78.93
9	JNNSM Phase-II Thermal	4334.02	4304.72	29.30	1982.68	2036.13	-53.45
10	GGPP	795.48	795.49	-0.01	258.53	237.85	20.68
11	APGPCL	86.78	86.78	0.00	43.09	27.78	15.31
12	KSK Mahanandi	2978.40	2783.84	194.56	1328.34	1188.70	139.64
13	Sembcorp(TPTCL)	1916.54	1604.85	311.69	747.73	625.89	121.84
14	NCE	338.03	14391.97	-14053.94	174.71	6597.15	-6422.44
15	Additional Interest on Pension Bonds				921.50	921.50	0.00
16	Spectrum	1185.59	0.00	1185.59	392.43	0.00	392.43
17	Market	4949.36	0.00	4949.36	2133.17	0.00	2133.17
	TOTAL	69977.25	68901.61	1075.65	33870.23	32267.55	1602.68

*Excluding S.Nos. 2 and 3 in the Table above

- 137.** The details of station-wise despatch, power purchase cost are given in the Annexure-07

DISCOM to DISCOM Sales/Purchases

- 138.** While mapping the respective energy requirement of the licensees with their share of energy availability from all the stations merit order wise, it is observed that there will be a total short fall of 3572.90 MU for EPDCL. This shortfall of energy is met from the surplus energy of SPDCL at the purchase price of ₹4.71/unit, as determined in this tariff order.

Renewable Energy Certificates

- 139.** The Renewable Energy estimated by the Commission to be purchased by the licensees is over and above the RPPO target of 15% fixed by the Commission for the FY2020-21 and over and above the target of 19% set by the Ministry of Power, GoI. Thus, for the expected excess energy, Renewable Energy Certificates (RECs) can be obtained by the licensees.

The estimated income from sale of RECs in respect of APSPDCL is given in the table below:

Table 31: Income from sale of RECs

S. No.	Description	Details
1	Sales	38486.59 MU
2	Hydel Despatch	2083.11 MU
3	Net Sales (1) - (2)	36403.48 MU
4	MoP Target	19%
5	RPPO (3) * (4)	6916.66 MU
6	RE procurement estimated	14097.21 MU
7	Excess over RPPO (6)-(5)	7180.55 MU
8	Income from Sale of RECs at Floor price [(7)* (₹1000/REC)]	₹718.06 Cr.

- 140.** In view of G.O.No.116, dated 1.10.2019 excluding APEPDCL from the scheme of allocation of Wind and Solar energy generated in the State, APEPDCL will fall short of RPP Obligation. In this regard, it may be noted that the 2nd proviso to clause 3.1 of APERC Regulation No. 1 of 2017 envisages that the purchase of renewable power, by a distribution licensee from other distribution licensees in the State of Andhra Pradesh shall also be reckoned for computing the fulfillment of RPPO by such a licensee. Therefore, on mutual agreement with regard to price, the sale of energy from APSPDCL to APEPDCL may be considered as Renewable Energy for fulfillment of APEPDCL's RPPO for FY2020-21.
- 141.** 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, they may be negative. The Commission has endeavored to minimize the effect of these variations on the projected purchase costs / energy availability / despatches to the extent possible. The Commission may in future carry out the necessary revision of these power purchase costs as per the relevant Regulation, in the event such necessity arises.

Variable Renewable Energy (VRE) subsidy / Must Run Incentive (MRI)

- 142.** The licensees, in their filings, have stated the following under the head "VRE Subsidy".
- That the highest technical authority in the Country i.e. the Central Electricity Authority (CEA) has identified the VRE integration cost by the RE rich States such as AP for accommodating the Renewable Energy duly backing down the conventional generation. That the consumption of this VRE in place of dispatchable energy will entail the following subsidy.

VRE Subsidy	FY2019-20H2 (₹ Cr.)	FY2020-21 (₹ Cr.)
Minimum	1062.62	2324.66
Maximum	1592.70	3498.90

That the minimum scenario is calculated based on weighted average thermal variable cost of ₹ 3.20/Unit for H2 of FY2019-20 & ₹ 3.54/Unit for FY2020-21.

That the maximum scenario is calculated based on the weighted average thermal variable cost (Rs 2.65/unit) as estimated by the Commission in its tariff order for FY2019-20.

The DISCOMs further stated as under:

- The State government has notified Wind/Solar Policies 2015. Under these policies bilateral agreements to the extent of 6500 MW are entered into between State Government (or its nominee NREDCAP) and the project developers.
- The State Government directed the DISCOM to enter into high cost VRE Power Purchase Agreements subsequently. This bilateral agreement between Government and Project developers is the basis for all the PPAs entered into by DISCOM. These bilateral government agreements include a Must Run Incentive (MRI) obligation by State Government to the Wind/Solar developers.
- The MRI can be estimated as the price differential between VRE tariff determined/discovered u/s 62 or 63 of EA -2003 and the weighted average Thermal variable Cost. To this a balancing cost component that would arise on account of frequent start ups, ramp ups and ramp down of thermal generating stations that results in increase in variable costs, wear & tear which may affect the life of the plant, is to be added.

That ultimately the per unit MRI Subsidy = Tariff determined/Discovered - weighted average Thermal variable Cost + Balancing cost.

The tariff payable by the DISCOMs to VRE developers = weighted average Thermal variable Cost - balancing cost

Ex. If the Tariff determined /discovered is Rs 5/Unit, weighted average thermal variable cost is Rs 3.5/Unit and the balancing cost is Rs 0.5/Unit:

The Tariff payable by the DISCOM=3.5-0.5 = Rs 3/Unit.

The MRI subsidy payable by the State Govt. = 5-3.5+0.5 = Rs 2.0/Unit.

- This MRI is the subsidy payable by State Government to the developers. This MRI subsidy amount will be paid directly by the State Government to the developers

under the bilateral agreement between state government and the developers. The same is therefore not supposed to be included in the power purchase cost in ARR.

- Out of the VRE tariff, Tariff payable by DISCOM is paid to the developers by the DISCOMs under the PPAs, and the MRI subsidy is paid to the developers by the State Govt. under the bilateral agreement”.

143. Views / Objections/ Suggestions

- uu) Sri M. Thimma Reddy, Dr. K. Kranthi Kumar Reddy, Sri Jetty Gurunadha Rao, and Sri Ch. Diwakara Babu have stated that the Commission in its Order dated 15th April, 2019 on Load Forecasts and Resource Plans for the 4th Control Period (FY2019-20 to FY2023-24) considered 3,892 MW to 3,757 MW of wind capacity and 2,728 MW of solar capacity across the 4th Control period.

If the State Government or DISCOMs have any objection to the high Power Purchase costs, they can raise the same as an issue in the ARR filings and that instead of doing so they have been claiming costs from the State Government towards VRE Subsidy, diverting attention from the main issue.

That the approach of DISCOMs discourages promotion of VRE in the context of climate change and that it is worth bearing costs on this account as an alternative to the costs involved in accessing coal based thermal power.

That significantly, DISCOMs for the first-time demanded that the State Government pay towards VRE subsidy. According to para 3.6.3 of APSPDCL's ARR filing "the consumption of VRE in place of dispatchable energy will entail" VRE subsidy minimum of ₹2,324.66 Cr. An important issue in this context is how far VRE integration costs / subsidy mentioned are correct. Transmission costs are one part of this cost and these costs are already approved by the Commission for the 4th Control period and by not buying VRE power, the DISCOMs may not do away with these costs. That another part of this cost is the costs involved in backing down coal based thermal power plants to facilitate VRE, that the difference between VRE cost and variable cost of thermal plants is taken into account and that in other words, they are comparing thermal variable costs with VRE costs. That this comparison may be relevant only in the context of backing down of thermal plants and that otherwise total costs (fixed + variable) of the thermal plants have to be compared with VRE costs. In this context hard facts need to be examined - In how many cases thermal plants were backed down to facilitate VRE sources. DISCOMs' ARR filings show that all the available energy from APGENCO thermal power plants is being despatched. If despatch was low from plants like SDSTPS it was attributed to logistical issues or non-availability of fuel. At the same time there are also instances of backing down of VRE plants in the name of safe operation of thermal plants and grid safety.

DISCOMs also refer to this as Must Run Incentive. Until now/all these years in the ARR's total power purchase cost of VRE units was included but not on the lines mentioned by the DISCOMs in the ARR's now. Does it mean that all these years consumers are paying more than necessary towards power from VRE sources and/or that the State Government is escaping from its obligation to meet VRE integration/MRI subsidy?

That it is relevant to mention here that the Wind Power Policy of the GoAP neither refers to any bilateral agreements between developers and GoAP nor Must Run Incentive. According to Section 8 (i) of Andhra Pradesh wind Power Policy, 2015 (G.O. MS. No. 9 dated 13.02.2015), under Must run status, "Injection from wind power projects shall be considered to be deemed scheduled subject to prevailing regulations /grid code of appropriate Commission."

And that in the background of improved weather forecasting and the Commission Forecasting, Scheduling and Deviation Settlement of Solar and Wind Generation Regulation, 2017 (Regulation 4 of 2017) VRE integration costs are less relevant.

- vv) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that as per the DISCOMs' submissions on adequacy cost, balancing cost and grid integration cost, though they have claimed that AP Transco's charges are not included in the network expenditure, they will be claimed by Transco in its MYT claims, that by implication, the DISCOMs are now agreeing that purchase of high-cost solar and wind power is imposing avoidable hefty burdens on consumers of power.

They have further stated that as per the DISCOMs' submissions, the bilateral agreement between the Government and the developers is the basis for all the PPAs the DISCOMs entered into. That knowing full well the kind of avoidable additional burdens that are being imposed on consumers of power for purchasing high-cost renewable energy and the fact that solar and wind power cannot meet peak requirement, did APPCC or the DISCOMs submit such disadvantages and imprudence which impose avoidable hefty burdens on consumers to the GoAP, when the latter directed them to enter into high-cost VRE power purchase agreements? If so, what was the response of GoAP? Who are the authorities, political and bureaucratic, who directed the DISCOMs to enter into such questionable PPAs with VRE units? For these disastrous consequences imposing avoidable burdens to the tune of about ₹5000 Cr. per annum on a long-term basis, who should be held responsible and accountable and what action should be taken against them? That needless to say, imposing such avoidable hefty burdens on consumers of power on long-term basis would tantamount to penalising them for no fault on their part and for the manipulated deals struck at the behest of the GoAP and consents given by

the Commission to those PPAs and that in this manner, the very purpose of regulatory process is getting defeated in protecting larger consumer interest.

- ww) Sri Ashwin Gambhir, Ann Josey and Sri Sreekumar Nhalur, Prayas (Energy Group), Pune have stated that procurement of renewable energy capacity is expected as per the mandate under the Electricity Act (2003), the Commission's RPPO regulations and the State Wind and Solar Policies. That the Regulator has allowed cost pass through for all prudent expenses and this includes costs due to RE procurement. Therefore, treatment of such costs with respect to revenue recovery through tariffs, subsidies and regulatory assets should be the same as other costs passed through by the ERC. That the CEA report quoted by the DISCOMs also states that "even after including the financial implication on account of variable renewable generation, it would still be cheaper in the future to set up renewable generation capacity, as compared to coal-based capacity" and that therefore, the relevance of quantifying such transient opportunity costs is unclear, especially when new wind and solar capacity is available at less than ₹ 3 per unit. That the DISCOMs, in order to optimize power procurement, can take proactive steps to sell surplus power (VRE and thermal) using medium-term and short-term options as applicable and that therefore, there is no requirement for additional dispensation in the name of adequacy costs. That there are certain methodological issues with estimation of adequacy costs as described in the petitions, that the term 'adequacy cost' is not defined in the petition, and that even if one were to interpret this as the higher cost due to backing down cheaper coal with lower variable cost and dispatching higher cost must run renewables, there are several methodological issues with the proposed calculation. First, one would have to establish that there was spare available coal generation capacity which was backed down specifically to integrate VRE, that backing down can take place due to a variety of reasons including expected changes in diurnal and seasonal load and unexpected changes in load (due to sales migration, change in consumption patterns), weather etc., that one would also have to establish that such coal capacity procurement was justified for reasonable load growth expectations based on scientific demand assessments, Second, the highest variable cost coal generation at the margin (as per MoD) would be backed down first and hence instead of using the 'weighted average thermal variable cost', one would have to consider VC of the actual unit being backed down and that the calculation considers the actual pooled variable cost. That however, as per the DISCOMs' submission in the current petition, there are various plants with higher VC for FY2020-21 and that therefore, using the weighted average variable cost of capacity whose backing down is attributable to VRE generation would be methodologically not correct.

That the DISCOMs state that the balancing cost is due to increase in specific coal consumption and increased oil consumption while operating in ramped down condition; and reduced coal plant life etc. due to frequent ramp up/ramp down or start/stop operations. Firstly, the calculation of 0.53/kWh as the balancing cost is not explained in the petition. There is certainly a valid increase in cost for coal generation due to part load operation which needs to be accounted for and compensated promptly. The fourth amendment to the IEGC by CERC in 2016 has already put in place a comprehensive mechanism for CGS and ISGS plants to compensate them for higher heat rates, higher auxiliary consumption and higher oil consumption. Specifically, as per 6.3 B (3) where the CGS or ISGS, whose tariff is either determined or adopted by the Commission, is directed by the concerned RLDC to operate below normative plant availability factor but at or above technical minimum, the CGS or ISGS may be compensated depending on the average unit loading duly taking into account the forced outages, planned outages, PLF, generation at generator terminal, energy sent out ex-bus, number of start-stop, secondary fuel oil consumption and auxiliary energy consumption, in due consideration of actual and normative operating parameters of station heat rate, auxiliary energy consumption and secondary fuel oil consumption etc. on monthly basis duly supported by relevant data verified by RLDC or SLDC, as the case may be and that in line with the CERC framework, APERC should make amendments in their grid code to adequately compensate State coal generators for this purpose.

That the methodology and assumptions used for the calculation of 0.41/kWh as the grid integration cost is not explained in the petition. While it is certainly true that Capacity Utilisation Factors (CUFs) for wind and solar plants are much lower than coal power plants, the proposed calculation is too simplistic in its formulation. Firstly, transmission is built for reliability (under N-1, N-2) conditions and hence is always underutilised to some extent and its usage is never 100%. A significant number of ISTS lines have very low loading in the range of 30-40%. Also, the 25% CUF applied for wind and solar plants is valid only for the last mile dedicated connectivity to the pooling sub-station after which it is impossible to attribute usage of transmission lines specifically to any generation plants or loads without load flow studies. Hence, while this is a valid point, detailed load flow studies need to be carried out to actually find the true incremental cost of wind and solar power and that therefore, before such costs are levied, the Commission should direct such studies in the Andhra Pradesh context.

That the must-run status provided to the renewable energy generators follows the economic principle of merit order dispatch as these generators have no variable costs. Therefore, there is no requirement for a must-run incentive. Naming this proposed subsidy on renewable energy tariffs a 'must-run incentive' is therefore misleading. With regulatory approval, the methodology, the principle and the mechanism for the

levy will come into question and given the current ambiguity in the estimation and attribution of costs could also lead to complex legal tussles increasing the regulatory uncertainty in the sector, that given methodological issues, lack of clarity in operationalising such subsidy provision and uncertain impacts of such a dispensation in the future, such a request of the DISCOMs does not deserve approval. If the State government wants to provide a subsidy, it can operationalize this through a government order.

That the DISCOMs while calculating the total integration costs, (adequacy, balancing and grid integration costs) implicitly assumed to fully apply to all 13,193 MU of wind and solar power being considered and that this would mean that for each instance of wind and solar generation, there was spare and cheaper (VC) coal generation available which was backed down and that coal was operating at part load with higher heat rate, oil consumption and auxiliary consumption for every instance of wind and solar generation and that this is highly unlikely and has not been demonstrated through any serious and comprehensive modelling exercise.

That in addition, principles used for levy of adequacy cost and balancing cost are valid not only for RE but also for backing down and part load operation of coal for other reasons including load shapes, low demand, sales migration etc. and that it also needs to be clarified if such costs would be calculated and attributed for such instances.

- xx) Sri Kapil Sharma and Sri V. Sailendra have stated that the DISCOMs have proposed in the application filed by APSPDCL and APEPDCL that VRE subsidy shall be paid directly to the developers by GoAP. That in terms of Section 65 of the Electricity Act, 2003, the amount of compensation shall be paid to the person affected by the grant of subsidy and that such subsidy shall be payable in the manner directed by the State Commission, since the VRE subsidy as and when allowed will be implemented by APSPDCL and APEPDCL, as the case may be and that the affected parties as per Section 65 of the Electricity Act, 2003 being the APDISCOMs i.e. APSPDCL and APEPDCL, as the case may be, the VRE subsidy may be claimed by them directly but not as a pass through to the developers as there is no mechanism for the payment of the same. That moreover, since the renewable power is being procured under power purchase agreements executed with the developers, which has a fixed tariff, the developers may be reimbursed the entire cost of the power as per the tariff fixed by the Commission in the power purchase agreement and no deductions be made from the same towards the proposed VRE subsidy. That the proposal of APSPDCL and APEPDCL with respect to the VRE subsidy should not be considered in the manner proposed. Rather the developers should be paid for the power sold under the PPAs at the tariff fixed in the PPAs, without any deductions towards VRE subsidy,

and that the VRE subsidy if any implanted by the APSPDCL and APEPDCL at the instructions of GoAP may be directly claimed by the said entities from the GoAP.

- yy) Sri Deepak Gupta, Re New Power Pvt., Delhi has stated that, “the remuneration which is to be made to any generators emanates out of the Power Purchase Agreement executed with DISCOM. As per the PPA entered with project developers, DISCOMs are liable to pay the entire tariff determined / approved by the Commission. Neither the Electricity Act, 2003 nor any containing regulations give provision for such subsidy to be directly paid by the State Government to the generators. Further the cost against which the subsidies are sought are incurred directly by the DISCOMs and arises due to performance of obligations as mandated under governing legislation. Power producers have nothing to do with. The quantum of subsidy requirement will always be dependent upon over all power procurement scheme of the DISCOMs, over which power producers have no control. Allowing such a provision will be unjust as it will expose power producers to such actions which are not taken by them and might be questioned at any point in time. Further, even if there is any requirement of subsidy to the DISCOMs from GoAP, same should be bilaterally managed between them and shall be approved accordance with Section 65 of Electricity Act 2003. Under all cases, the entire quantum of approved PPA tariff shall be paid directly by the DISCOM to the generator / developer.”
- zz) Sri K. Mahesh Kumar, Mytrah Energy (India) Private Limited, Hyderabad has stated that, “the submission of AP DISCOMs in respect of VRE subsidy / MRI incentive is in clear violation of terms of PPA and Must run status accorded to Renewable generation as per the provisions of IEGC and CTI in unequivocal terms in addition to the provisions under AP Wind Power Policy, 2015 and the Regulation 1 of 2015. The PPAs were entered between AP DISCOMS and Wind developers, but not with GoAP directly. AP DISCOMS being the representatives of GoAP and bonafide distribution agencies, should follow the provisions of wind power policy and regulations of IEGC/CTI which has accorded Must-Run status to renewable generation. As per the Article-2 of PPA, AP DISCOMs are bound to purchase the wind energy and shall pay tariff. The tariff under the PPAs was duly approved by the Commission and now that non-consideration of the energy availability and power purchase is a clear violation of terms of PPA. Further, VRE cost and MRI subsidy to be paid by State Govt. as submitted in the ARR is in clear violation to the terms of PPA. Therefore, AP DISCOMs should honor the terms of PPA and shall pay the tariff to wind developers which is being followed till date and GoAP should not be made responsible for payment of tariff.”
- aaa) Sri Sukomal Satyen has stated that, “the submissions of APSPDCL on VRE Subsidy are in direct contravention of its legal, valid, and binding obligations under the PPAs. Further, the agreements between developers and NREDCAP do not provide for any

payments from Government to developers nor do they talk of any MRI incentive or subsidy. Such concepts are wishful on part of APSPDCL. The obligation to make payment is only cast on the DISCOMs such as APSPDCL in the PPAs. The Supreme Court has in the case of PTC India Ltd. vs. CERC held that a contract between two parties cannot be amended by way of an order passed by a State Electricity Regulatory Commission. Furthermore, the Supreme Court has in a catena of judgments held that "any unilateral addition or alteration of a contract by the government can never be foisted upon an unwilling party, nor can a party to the agreement be liable to perform a bargain not entered into with the other party". In any case, such conduct of APSPDCL, if allowed, would be expressly contrary to the principles of privity of contract enshrined in the Indian Contract Act, 1872 as well as amount of piercing the corporate veil, which cannot be permitted in law. It is also pertinent to highlight that APSPDCL has sought reduction of tariff determined by the Commission vide the tariff order dated 26.03.2016 by way of O.P.No.17 of 2019 filed before the Commission. Further, the Commission was pleased to adjourn O.P.No.17 of 2019 sine die vide its order dated 07.12.2019, pending adjudication of the jurisdiction of the Commission to entertain the said petition before the Division Bench of the Hon'ble High Court of Andhra Pradesh in Writ Appeal No. 394 of 2019 and batch. Therefore, as APSPDCL is unable to seek reduction of tariff under the PPAs directly (due to stay of the said proceedings), APSPDCL is attempting to do the same indirectly. APSPDCL has sought reduction of tariff adopted by the Commission vide the tariff order dated 21.02.2015 by way of O.P. No. 67 of 2019 filed before the Commission. The Division Bench of the Hon'ble High Court of Andhra Pradesh was pleased to grant stay of said O.P. No. 67 of 2019, pending adjudication of writ appeal no 433 of 2019 filed by Waneep Solar Pvt. Ltd. (WSPL) vide its order dated 28.11.2019. Therefore, WSPL apprehends that as APSPDCL is unable to seek reduction of tariff under the PPAs directly (due to stay of the said proceedings), APSPDCL is attempting to do the same indirectly. In any case, APSPDCL has made vague and baseless submissions in the petition regarding Variable Renewable Energy Subsidy, including grid integration cost, balancing costs etc. without providing any supporting basis, documentation or calculations, or proof for the same. APSPDCL has failed to discharge its burden of proof in this regard and thus, ought to be put to the strictest proof for the same. APSPDCL while calculating the alleged total grid integration costs, has implicitly assumed that it is applicable to all 13,193 MU of wind and solar generation. In doing so, APSPDCL has also assumed that there would be spare and cheaper coal generation available, which is backed down and that coal was operating at part load with higher heat rate, oil consumption and auxiliary consumptions for every instance of wind and solar generation. This has not been substantiated and is highly unlikely to occur in light of the extensive curtailment instructions being issued to the alleged VRE Projects and not to thermal power

projects by the APSLDC. Further, APSPDCL's reliance upon the Central Electricity Authority's report dated 01.01.2018 is entirely misplaced and misleading. APSPDCL has cherry picked portions of the aforesaid Report out of their context in order to further its otherwise baseless allegations regarding the adverse impact on it, on account of the integration costs allegedly incurred by APSPDCL for Variable Renewable Energy. The said Report itself provides that "even after including the financial implication on account of variable renewable generation, it would still be cheaper in the future to set up renewable generation capacity, as compared to coal-based capacity". As regards balancing costs, it is submitted that the same do not survive due to the reason that the IEGC which takes precedence over the APCTI. It is also relevant to mention that the MRI sought by APSPDCL cannot be provided under the ARR and FTP. In any case, the grant of subsidy is stipulated in Section 65 of the Electricity Act to be provided to the affected party i.e. APDISCOMs and it is settled law that when a statute provides something to be done in a particular manner, it has to be done in that manner alone and no other. Therefore, any subsidy from the State Government can only be provided for in the manner envisaged under Section 65 of the Electricity Act and not otherwise. The Commission may be graciously pleased to strike down the entire paragraph 3.6 of the ARR Petition and other related provisions dealing with variable renewable energy subsidy as the same has no basis in law or regulations. Any such provisions will only prove a death knell for renewable energy projects."

- bbb) Sri S. Suryaprakasa Rao has questioned whether the proposal that GoAP has to pay 'Must Run Incentive' subsidy to developers of wind and solar projects as per the MOU entered by with the developers is permissible under the provisions of the EA 2003, and whether it has the approval of the Commission.
- ccc) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that there is no G.O. on the DISCOMs' claim that VRE Subsidy would be given by the GoAP to the RE developers. Instead, any such subsidy should be given by GoAP to the DISCOMs while they pay their dues to the RE projects.

DISCOMs' Response: "Total cost (fixed + variable) for thermal plants cannot be compared with cost of VRE Power. The fixed cost of thermal plants is payable even when there is no dispatch from the plant owing to low grid demand. The fixed cost is meant for keeping the plant ready to generate or making the plant available at request of DISCOMs at any point of time and the procurers are obliged to pay such waiting charges/ fixed charges to the plant. Adequacy cost and balancing costs are being incurred by the APDISCOMs for absorbing VRE power into the Grid, apart from paying hefty price to VRE generators on single part tariff basis. If the availability of the plant is lesser than the normative availability due to shortage of fuel or

operational issues, the fixed cost would be reduced proportionately. The DISCOMs are seeking the support of the Govt. in accommodating the VRE burden.

Purchasing of VRE power is imposing additional burden on APDISCOMs in the form of VRE integration cost comprising of adequacy cost, balancing cost and grid integration cost. This VRE integration cost is payable by Government directly to the developers under the agreements that are signed between the developers and Government. DISCOM is not liable to pay this VRE integration cost.

The stand of DISCOM is already laid down. DISCOM is not aware of the circumstances leading to the signing of agreement between Government and the Developers.

The procedure for calculation of balancing cost as 0.53/kWh is briefed under:

Item	@ Full Capacity	@ back down capacity	Loss
Specific Coal Consumption (kg/unit)	0.75	0.85	0.10
Cost of Coal (₹/unit)	3.15	3.57	0.42
Secondary Oil Consumption (ml/unit)	0.50	1.00	0.50
Cost of secondary Oil (₹/unit)	0.03	0.06	0.03
Wear and Tear and reduction in life of unit (₹/unit)	0.30	0.38	0.08
Total VRE Balancing Cost (₹/unit)			0.53

The parameters are taken as per the latest weighted average variable costs of AP Genco Thermal Stations. Further, part load operation of the CGS Thermal Generators are being compensated through additional Tariff payable by the beneficiaries and similar line State Gencos are also compensated by payment of actual variable cost. But the additional cost on account of part load operation that is caused due to backing down to accommodate RE is an additional burden to the consumers. DISCOMs are seeking proper support for this purpose.

Grid integration cost is estimated based on the actual investment incurred in evacuating the Renewable energy Sources which are far away from Load centers and marginal cost of usage of such Transmission Assets duly considering Financial & Technical parameters as per CERC regulation over a period of 35 Years. The per unit levelized tariff for Transmission Assets that are created which can be attributable to RE evacuation, upstream system strengthening are considered for the purpose of calculations.

The statement that there would be backing down and part load operation of coal stations for other reasons including load shapes, low demand, sales migration etc. is noted. But in so far as AP Power system is concerned almost 90% to 95% of backing down of thermal stations is happening due to absorption of RE power.

The highest technical authority in the Country i.e. the Central Electricity Authority (CEA) has identified the VRE integration cost by the RE rich States such as AP for

accommodating the Renewable Energy duly backing down the conventional generation.

The State Government directed the DISCOM to enter into high cost VRE Power Purchase Agreements subsequently. The bilateral agreement between Government and Project developers is the basis for all the PPAs entered into by DISCOM. These bilateral government agreements include a Must Run Incentive (MRI) obligation by State Government to the Wind/Solar developers.

The MRI can be estimated as the price difference between VRE tariff determined/discovered u/s 62 or 63 of EA -2003 and the weighted average Thermal variable Cost. To this a balancing cost component that would arise on account of frequent startups, ram ups and ramp down of thermal generating stations that results in increase in variable costs, wear & tear which may affect the life of the plant, is to be added. Thus, DISCOMs have accordingly filed the ARR & Tariff filings before the Commission besides seeking the support of GoAP.

As stated already in the ARR writeup, the State Government directed the DISCOM to enter into high cost VRE Power Purchase Agreements consequent to the notification of policy in 2015, and MOU between M/s NREDCAP & project developers. This bilateral agreement between Government and Project developers is the basis for all the PPAs entered into by DISCOM. These bilateral government agreements include a Must Run Incentive (MRI) obligation by State Government to the Wind/Solar developers.

Accordingly, APDISCOMs have proposed that this MRI is the subsidy payable by State Government to the developer. This MRI subsidy amount will be paid directly by the State Government to the developers under the bilateral agreement between state government and the developers. The same is therefore not supposed to be included in the power purchase cost in ARR.

In response to the above, Sri M. Venugopala Rao has stated that as pointed out by him in the public hearings, there is no mention whatsoever of grid integration cost either in the MoU dated 4th December, 2015 signed by Suzlon Energy Limited and Axis Energy Ventures India Private Limited and GoAP, or in the project implementation agreement dated 11.01.2016 between them, or in the project agreement dated 3.2.2016 signed between New and Renewable Energy Development Corporation of A.P. Limited and the said two companies, or in the Wind and Solar power policies of 2015 and 2018 of GoAP, leave aside paying the same cost by GoAP directly to the developers. There is no response during the public hearings from the DISCOMs when it was sought to know the basis of their claim that GoAP pays grid integration costs directly to the developers of wind and solar plants. When DISCOMs are paying fixed charges for backing down thermal power projects, they would cover expenditure relating to all the components of fixed charges. Barring that, other

incidental costs shown under grid integration costs might be extra as explained by the DISCOMS. However, it is to be noted that costs for backing down thermal projects in order to purchase VRE and costs to be borne when VRE generation and supply are lower than what they should be as per the terms and conditions in the respective PPPs are diametrically opposite situations; they need to be considered separately.”

Commission’s view:

From the statement of the licensees in their filings as extracted supra, it is evident that the sole basis for VRE subsidy/must run incentive (MRI) is the so-called bilateral agreement between the Government and the power developers. On a careful perusal of Memorandum of Understanding which is evidently termed as bilateral agreement, the Commission does not find any term therein providing for payment of VRE subsidy or must run incentive. These phrases appear to have been coined by the DISCOMs from their own imagination. Therefore, we perceive this proposal as wholly misconceived. When a statute or contract does not impose any obligation on the executive government, it is neither legal nor proper to fasten the Government with a non-existent obligation. We may however hasten to add that if the State Government is prepared to subsidize the DISCOMs any part of the tariff as held out by the energy secretary in the statement sent in the name of Government of Andhra Pradesh to this Commission on 21-01-2020, it shall be free to do so without the Commission’s intervention. The Commission therefore holds that the claim of the DISCOMs to exclude the purported component of VRE subsidy from the power purchase cost towards procurement of Wind and Soalr energy is without any basis and the same is accordingly rejected.

CHAPTER - V

AGGREGATE REVENUE REQUIREMENT

Introduction

144. In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for FY2020-21 relating to retail supply business of SPDCL and EPDCL based on their respective filings briefly stated in Chapter-I, approved sales volume and power purchase requirement as determined in Chapter-III and power purchase cost as determined in Chapter-IV and after reckoning the views / objections / suggestions relating to the aspects of ARR expressed in writing and during public hearings and the views expressed by the members in the State Advisory Committee meeting. The details of ARR as filed by the licensees are given in the table below:

Table 32: Filings: ARR for FY202-21 (₹ Cr.)

S. No.	Item	SPDCL	EPDCL	TOTAL
1	Transmission Cost	1304.58	680.12	1984.71
2	SLDC Cost	21.56	20.27	41.83
3	Distribution Cost	4178.00	2091.00	6269.00
4	PGCIL Expenses	1166.31	607.97	1774.28
5	ULDC Charges	2.94	1.60	4.54
6	Network and SLDC Cost (1+2+3+4+5)	6673.39	3400.96	10074.35
7	Power Purchase Cost	21430.91	12439.33	33870.23
8	Interest on consumer security deposits	184.56	115.54	300.10
9	Supply Margin in Retail Supply Business	77.59	52.57	130.15
10	Other Costs, if any	182.07	284.05	466.12
11	Supply Cost (7+8+9+10)	21875.12	12891.48	34766.61
12	Aggregate Revenue Requirement (6+11)	28548.51	16292.45	44840.96

Transmission Cost

145. 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 details of the transmission cost stated to be as per the Transmission Tariff Order for the 4th Control Period of the Commission, as filed by the licensees are given below.

Table 33: Transmission Cost for FY2020-21

S. No.	Item	SPDCL	EPDCL	Total
1	Capacity, MW	7828.00	4081.00	11909.00
2	Transmission Charge (₹/kW/Month)	138.88	138.88	138.88
3	Transmission Cost (₹ Cr) (1x2)	1304.58	680.12	1984.71

- 146.** The Commission has verified the computations made by licensees and found that the transmission cost filed by the licensees are in line with the Transmission Tariff Order of the Commission for the 4th Control Period and therefore the same is approved.

SLDC Cost

- 147.** Licensees utilize the services of State Load Despatch 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 details of the SLDC Cost, stated to be as per the order of the Commission on SLDC Annual Fees and Operating Charges for the 4th Control Period, as filed by the licensees are given below.

Table 34: SLDC Cost for FY2020-21

S. No.	Item	SPDCL	EPDCL	Total
1	Capacity, MW	7828.00	4081.00	11909.00
2	SLDC Annual Fee (₹/MW/Year)	2838.01	2838.01	2838.01
3	SLDC Annual Fee (in ₹ Cr.)	2.22	1.16	3.38
4	SLDC Charges, (₹/MW/month)	2058.18	2058.18	2058.18
5	SLDC Charges (in ₹ Cr.)	19.33	10.08	29.41
6	SLDC Charges due to expected additional capacities in wind and solar	0.00	9.03	9.03
7	Total SLDC Cost (in ₹ Cr.)	21.56	20.27	41.83

- 148.** The Commission has verified the computations made by licensees and found that the SLDC cost filed by the licensees is less than that approved for FY2020-21 in the order on SLDC Annual Fees and Operating Charges for the 4th Control Period. The licensees have claimed SLDC Cost based on the demand considered for transmission capacity but not on the installed capacities on which SLDC charges are determined by the Commission. Therefore, if the licensees pay the SLDC Costs over and above the filings, the same may be claimed in the ARR for FY2021-22. However, the Commission approves the SLDC Costs as filed by the licensees in this order.

Distribution Cost

- 149.** Licensees incur the distribution cost in retail supply business for transfer of energy from transmission/distribution network to the consumers using the distribution system (33kV & below) like transmission system (132 kV and above). The details of the Distribution Cost, stated to be as per the order of the Commission on Wheeling Tariffs for Distribution business for the 4th Control Period filed by the licensees are given below:

Table 35: Distribution Cost for FY2020-21

S. No.	Item	SPDCL	EPDCL	Total
1	Distribution Cost in ₹ Cr.	4178.00	2091.00	6269.00

- 150.** The Commission has verified and found that the distribution cost filed by the licensees is in line with the order of the Commission on Wheeling Tariffs for Distribution business for the 4th Control Period and therefore the same is approved.

PGCIL and ULDC Cost

- 151.** 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). The Licensees stated to have estimated the costs for these services for FY2020-21 considering 5% hike over the Point of Connection (PoC) rates approved by CERC for the 2nd quarter of FY2019-20.

Table 36: Filings: PGCIL and ULDC Charges (₹ Cr.)

S. No.	Item	SPDCL	EPDCL	Total
1	PGCIL Expenses	1166.31	609.97	1776.28
2	ULDC Charges	2.94	1.60	4.54

152. Views/objections/Suggestions**Do not allow enhancement of PoC charges**

Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that, “DISCOMs have submitted that the POC rate approved by CERC for the latest quarter i.e. second quarter of 2019-20 is ₹4.99 Lakhs/MW which includes POC slab rate, reliability support charges rate and HVDC charges rate. That the DISCOMs have pointed out apart from the main POC bill, PGCIL raises supplementary bills also from time to time and that the transmission assets pertaining to CTU (Central Transmission Network) get added to the network regularly which would increase the PoC charges in future and that to account for the above, the

PoC rate of ₹4.99 lakhs/MW has been enhanced by 5% to arrive at a value of ₹5.24 lakhs/MW. From the PGCIL charges proposed by the DISCOMs for 2020-21, it is obvious that the irrational methodology of POC is continuing, that did the DISCOMs challenge the irrational methodology and the POC rates being approved by CERC in APTEL?". They have requested not to approve the enhancement of POC rate by 5% for FY2020-21 proposed by the DISCOMs based on presumptions.

Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that due diligence of Commission is needed while considering the cost of PGCIL charges.

Sri S. Prathap, Technical Secretary, APSEB Assistant Executive Engineers' Association, Tirupati has stated that POC charges, CTU and PGCIL charges shall be minimized.

DISCOMs' Response: "Assessment of PoC charges for the ensuing financial year 2020-21 has been carried out based on the latest PoC slab rate with a nominal escalation of 5%. DISCOMs have been voicing their concerns at various forums like SRPC, MoP meetings on irrationality of the existing PoC mechanism and on how it is causing unwarranted financial burden to DISCOMs. Responding to the concerns expressed by various states including AP, the CERC has come out with a revised draft PoC Regulation based on two main factors a) sharing of approved transmission charges based on LTA & MTA quanta and b) actual usage of network. The new PoC mechanism is expected to be made operational from FY2020-21. The Inter State Transmission (ISTS) Charges are payable as per the bills raised by PGCIL in accordance with the CERC regulations, after thorough scrutiny."

Commission's Decision:

The Commission has examined the computations made by the licensees and found that they have computed these charges at the rates approved by CERC for the 2nd quarter of FY2019-20. These charges vary from quarter to quarter based on the utilization of PGCIL network. The CERC has also issued a draft Regulation to revise the methodology for computation of PoC charges. Pending revision of the PoC methodology, the Commission is not inclined to accept the 5% hike factored by the licensees in respect of PGCIL charges and it approves the ULDC charges as filed. Accordingly, the PGCIL and ULDC Charges estimated by the Commission are as given below:

Table 37: Approved: PGCIL and ULDC Charges (₹ Cr.)

S. No.	Item	SPDCL	EPDCL	Total
1	PGCIL Expenses	1110.57	579.03	1689.60
2	ULDC Charges	2.94	1.60	4.54

Power Purchase Cost

- 153.** The Commission has placed the power purchase cost at ₹32267.55 Cr which is less by ₹1602.68 Cr than the estimates made by licensees at ₹33870.23 Cr for FY2020-21 as detailed in Chapter-IV of this Order. The summary of the power purchase cost filed by licensees and approved by the Commission is given in the table below:

Table 38: Power Purchase Cost for FY2020-21

S. No.	Item	Power Purchase Cost (₹ Cr)		
		SPDCL	EPDCL	TOTAL
1	Filed by Licensees	21430.91	12439.33	33870.24
2	Approved by APERC	20353.68	11913.87	32267.55
3	Difference (2-1)	(-)1,077.23	(-)525.46	(-)1,602.68

Interest on Consumer Security Deposits (ICSD)

- 154.** 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. The particulars of Interests on Consumer Security Deposits as filed by the licensees are given below:

Table 39: Filings: Interest Cost on Consumer Security Deposits for FY2020-21 (₹ Cr)

S. No.	Particulars	SPDCL	EPDCL	TOTAL
1	Opening Balance	2831.82	1911.57	4743.39
2	Additions during the Year	1702.57	253.18	1955.75
3	Deductions during the Year	1415.94	57.50	1473.44
4	Closing Balance (1+2-3)	3118.45	2107.25	5225.70
5	Average Balance ((1+4)/2)	2975.13	2009.41	4984.54
6	Interest @ % p.a.	6.20%	5.75%	
7	Interest Cost (5x6)	184.56	115.54	300.10

- 155.** As per Clause 7.1 of APERC (Security Deposit Code) Regulation, 2004 (Regulation No. 6 of 2004), the licensees shall pay interest on security deposit of the consumers, at the bank rate notified by Reserve Bank of India provided that the Commission may specify a higher rate of interest from time to time by notification in official gazette. Accordingly, the Commission has recomputed the ICSD amounts at the interest rate of 6.25% as published in RBI bulletin dated 11.01.2020, for both the licensees for FY2020-21. The estimations of the Commission are given below:

Table 40: Approved: Interest Cost on Consumer Security Deposits for FY2020-21 (₹ Cr)

S. No.	Approved by APERC	SPDCL	EPDCL	TOTAL
1	Opening Balance	2782.00	1883.51	4665.51
2	Additions during the Year	1702.57	253.18	1955.75
3	Deductions during the Year	1415.94	57.50	1473.44
4	Closing Balance (1+2-3)	3068.63	2079.19	5147.82
5	Average Balance ((1+4)/2)	2925.31	1981.35	4906.66
6	Interest @ % p.a.	6.25%	6.25%	6.25%
7	Interest Cost (5x6)	182.83	123.83	306.67

Supply Margin on Retail Supply Business

156. The Licensees have computed the supply margin at 2 paise per unit on their total estimated sales for FY2020-21 in deviation from the earlier practice of computing the same on 25% equity portion of approved Regulated Rate Base (RRB). Accordingly, the licensees have estimated the supply margin at ₹130.15 Cr. (₹77.59 Cr. for SPDCL and ₹52.57 Cr. for EPDCL).

157. Views/Objections/Suggestions

- a) Sri M. Venugopala Rao, Senior Journalist and Convener of Centre for Power Studies, Hyderabad, Sri BendiTulasidas Vijayawada, Sri Penumalli Madhu, State Secretary, Communist Party of India (Marxist), Vijayawada, Sri Ch. Narasingarao, CPI (M), A.P. State Secretariat Member, Visakhapatnam, Sri Kandharapu Murali, CPM Secretariat Member, Tirupati, have stated that, “as submitted by the licensees that as per the present practice, the Commission has been allowing Retail Supply Margin (RSM) on the basis of 2% additional return on the equity portion of approved Regulated Rate Base (RRB) and that in this methodology there is no direct linkage to the sales/turnover which is directly identifiable parameter in their power supply business to earn regulated return, as it is linked to the network business. The Discoms have proposed the RSM supposed to be in similar lines of trading margin available to the trading licensees whose activity is supposed to be analogues to the supply activity of the Discoms. The Discoms have requested the Commission to approve their proposal for a 2 paise per sale unit as the RSM from the next financial year onwards. The Discoms are distribution licensees who sell power to consumers. While trading licensees get trading margin as allowed by the CERC for inter-State trading licensees. The Discoms claim all their expenditure as a part and parcel of the tariffs they propose and the Commission approves all permissible expenditure, in addition to RSM. Whereas trading licensees get trading margin, not their expenditure. The Discoms have to get return on their equity share only and not on loan component or other borrowings. Therefore, the present arrangement of allowing RSM to the Discoms is

fair. The new methodology proposed by the Discoms would ensure undue benefit to them at the cost of consumers of power. It is evident from the submissions of the Discoms that they would get much higher RSM under the new methodology proposed by them.” Therefore, they have requested not to allow the new methodology proposed by the DISCOMs for getting RSM.

- b) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that the supply margin claimed by the DISCOMs is exorbitant, as the claimed margin is against the relevant regulation.

DISCOMs’ Response: The proposal of the licensees is not to earn profits by burdening the consumers but only to earn a reasonable return on the Retail Supply activity (i.e. Purchase of power and undertaking Retail Sales in similar lines of a Trader) being carried out by licensees. The proposed RSM is only 1/3rd of the total Trading margin allowed by the CERC.

Commission’s Decision:

- 158.** As per the provisions of APERC Regulation 4 of 2005, the licensees are eligible to claim a return of 16% on equity portion in the annual RRB approved for Distribution and Retail Supply business. The Commission, while approving the distribution cost, has already allowed 14% return on equity portion in the annual RRB vide its Order on Wheeling Tariffs for Distribution business for the 4th Control Period. Thus, the licensees are entitled to claim the balance of 2% return on equity portion in the annual RRB approved. Therefore, the Commission is not inclined to accept the proposal of the licensees and instead estimates the Retail Supply margin as per the earlier practice as given below:

Table 41: Approved: Retail Supply margin for FY2020-21 (₹ Cr.)

S. No.	Item	SPDCL	EPDCL	Total
1	RRB Approved for FY2020-21	7303.00	2973.00	10276.00
2	Equity portion of RRB(%)	25	25	25
3	Underlying Equity (1 X 2)	1825.75	743.25	2569.00
4	Retail Supply Margin (%)	2	2	2
5	Retail Supply Margin (3 X 4)	36.52	14.87	51.38

Other Costs

- 159.** The licensees have included other costs in the ARR for FY2020-21 as per the details given below:

Table 42: Filings: Other Costs for FY2020-21 (₹ Cr)

S. No.	Particulars	SPDCL	EPDCL	TOTAL
1	Payments to M/s EESL towards DELP	22.89	0	22.89
2	Solar pumpsets	110.42	43.79	154.21
3	Energy Efficient pumpsets	28.76	30.33	59.09
4	Grants to APSEEDCO	2.00	1.00	3.00
5	Expenses for electrical accidents compensation	18.00	0	18.00
6	Difference of distribution cost as approved in MYT order for the fourth control period for FY 19-20 to the cost as approved in Tariff Order for FY 2019-20 as per para No.330 Pg No.209 of Tariff Order FY 2019-20.	0	13.93	13.93
7	Safety Measures	0	10	10.00
8	Pension fund	0	185	185.00
9	Total	182.07	284.05	466.12

160. Views/Objections/Suggestions**Energy Conservation & Energy Efficiency costs need to be borne by intended consumers**

- a) Sri M. Venugopala Rao, Sri BendiTulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that, “AGL solar pump sets, energy efficient pump sets, DELP and promotion of energy conservation and efficiency are intended for select consumers with contribution from the Government, the consumers concerned and the DISCOMs. It is unfair to impose a part of the expenditure being incurred for implementing these schemes on other consumers. Since these schemes are intended for energy conservation and efficiency improvement, the DISCOMs can sell the power saved to cross-subsidising consumers and earn cross-subsidy and profits. Since the consumers to whom these schemes are intended are subsidised consumers, the Government can reduce the subsidy to be borne by it to the extent power is saved. The DISCOMs have submitted that the power purchase costs saved by these schemes have already been factored in the power purchase calculations. Even if power is saved due to implementation of the schemes, the question of saving power purchase cost does not arise, because the DISCOMs are obligated to purchase power under the PPAs in force. Since availability of substantial surplus power is being determined every year, the power saved on account of these schemes if cannot be sold to other consumers or in the market, it will add to availability of surplus power, leading to payment of fixed charges for the power backed down. When power is being supplied free of cost to agriculture, contributing their share for purchasing solar pump sets etc. would not be attractive to the farmers concerned.

Commission had given permission to the DISCOMs to collect a substantial part of the expenditure being incurred for implementation of these schemes from all the consumers. Permitting imposition of a part of the expenditure being incurred for implementing these schemes on other consumers is one of the irrational arrangements proposed by the DISCOMs and facilitated by the Commission.” Therefore, they have requested to re-examine the issue and put an end to this irrational arrangement of imposing substantial burden on other consumers for whom these schemes are not intended.

DISCOMs’ Response: DELP and replacement of conventional pump sets with Energy Efficient Pump-sets Programs are implemented by DISCOMs as a part of Energy conservation and to reduce burden on the System demand. More over, implementation of these programs is beneficial to large sector of consumers.

Commission’s view: The Commission is approving all the Energy Conservation and Energy Efficiency projects taken up by the DISCOMs after conducting public hearings. The benefits derived from implementation of the Energy Conservation and Energy Efficiency programs are indirectly shared by all the consumers and therefore attributing the costs of these programs only to the intended consumers / areas may not be appropriate. Hence, the Commission finds no merit in these objections.

Periodical Reports on progress of Energy efficiency and conservation initiatives

- b) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad & Dr. K. Kranthi Kumar Reddy, Sri JettiGurunadha Rao, West Godavari District, Sri CH. Diwakara Babu, Secretary, Consumers’ Guidance Society, Vijayawada & Dr. Narasimha Reddy Donthi, Hyderabad have stated that no reports are forthcoming from APDISCOMs on the savings of Energy efficiency and conservation initiatives and that even after repeated directions issued by the Commission, there is no sign of reports from DISCOMs on savings achieved due to these interventions. Therefore, they have requested to direct the DISCOMs to file reports on progress in implementation of these programs and savings achieved.

They have further stated that both EPDCL and SPDCL have shown substantial increase in agricultural consumption even in the presence of programs related to energy efficient irrigation pump sets and solar irrigation pump sets. The Commission has directed the DISCOMs to file periodical reports on implementation of energy efficient pump sets. But the DISCOMs have not placed these reports on their websites.

DISCOMs’ Response:

APSPDCL: APSPDCL has implemented DELP and AgDSM programs. (Furnished a detailed reply)

APEPDCL: EPDCL is taking necessary action to comply with the directions of the Commission.

Commission's View: The licensees shall place on their respective websites the details of projects and the savings accrued on account of implementation of Energy Efficiency and Energy Conservation projects.

Grants to APSEEDCO

- c) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad & Dr. K. Kranthi Kumar Reddy, Sri Jetti Gurunadha Rao, West Godavari District, Sri CH.Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada & Dr. Narasimha Reddy Donthi, Hyderabad have stated that in the Tariff Order for FY2019-20, the Commission has allowed ₹ 3 Cr. as grants to APSEEDCO for promotion of energy conservation and efficiency and that in the ARR for FY2020-21 also APDISCOMs claimed similar amount to support APSEEDCO. As New and Renewable Energy Development Corporation of AP (NREDCAP) is already functioning as a nodal agency in the State for promotion of energy conservation and efficiency there is no need for another body to discharge similar functions. They have requested to see that no expenditure is allowed under this as a part of ARR for FY2020-21.

DISCOMs' Response: It is under the purview of the Commission

Commission's view: The provision of grants of ₹3 Cr. to APSEEDCO in the ARR of the DISCOMs was made by this Commission pursuant to the request of the GoAP and acceptance of the DISCOMs for the same as explained at Paras 339 to 341 of Retail Supply Tariff Order for FY2019-20. Accordingly, the Commission is allowing grants to APSEEDCO in the present financial year also.

Measures for prevention of electrical accidents

- d) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad & Dr. K. Kranthi Kumar Reddy, Sri Jetti Gurunadha Rao, West Godavari District, Sri CH.Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada & Dr. Donthi Narasimha Reddy, Hyderabad have stated that the Commission has allowed ₹19 Cr. to be spent by APDISCOMs during FY2019-20 on measures for prevention of electrical accidents. But this seems to have no impact on the ground and in fact there is increase in electrical accidents over the time. DISCOMs should take steps to provide proper platforms and fencing for Distribution Transformers (DTs); earthing should be improved and regular maintainance should be done at DT locations since many accidents have occurred in case of HVDS transformers; regular safety audits should be conducted in rural areas to rectify low hanging wires, loose joints, leaning poles etc. DISCOMs should train their field staff on safety aspects and work to increase awareness in general public.

DISCOMs' Response:

APEPDCL: During the year FY2019-20, an amount of ₹0.762 Cr. towards safety tools and an amount of ₹30.285 Cr. towards rectification Works (LT, HT & DTR) were spent in EPDCL. The Executive Engineer, Technical of concerned circle was designated as safety officers as per the Central Electricity Authority (Measures relating to Safety and

Electric Supply) Regulations, 2010. The safety Officers i.e. the Executive Engineers, Technical were instructed to conduct safety audits regularly and to send such audit reports and action taken by the licensee on the points raised in the safety audit reports to the Commission. EPDCL has taken up rectification of 33/11 kV sub-stations, 33 kV & 11 kV feeders, DTR structures including maintenance of AB switches, raising of DTR plinth height wherever required and providing of fencing, restringing of LT lines, providing of intermediate poles, replacement of damaged/worn-out conductor and replacement of bottom rusted poles etc. Special drive was conducted from 17th to 19th Dec'19 in all sections for inspection of DTRs and spot rectification of defects if any.

APSPDCL: Instructions were already issued to the field for the following:

1. Replacement of the DTRs where ever necessary in the place of over loaded existing DTRs.
2. New earth pipes are provided in place of damaged ones to improve earthing.
3. Safety measures are followed. Also, preventive maintenance is carried out in advance before rainy season and pre monsoon inspections for 33 kV, 11 kV & LT lines are carried out and the defects identified were attended to avoid accidents.
4. Pre monsoon inspection is done once in ever year and scheduled maintenance for every month wherein all the defective lines, low hanging lines, old conductor to be replaced, damaged poles, defective AB switches, damaged insulators etc., are identified and rectified the same in every year
5. Instructions are already issued to the field officers to maintain all the safety measures, issued safety kits to all O&M staff, conducting safety weeks and awareness program to the public and staff
6. Safety week is conducted in the first week of May every year wherein awareness on safety to the consumers and displaying banners on safety and distributing pamphlets to the public on electrical safety and awareness.

Commission's Response: Needless to observe, the licensees shall take all possible steps to prevent electrical accidents by adhering to all safety standards in accordance with the CEA Safety Regulations. The Commission proposes to monitor the performance of the DISCOMs on implementation of safety measures for reducing the number of electrical accidents and issue instructions in this regard from time to time in future.

Payment of ex-gratia to Victims of electrical accidents

- e) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad & Dr. K. Kranthi Kumar Reddy, Sri Jetti Gurunadha Rao, West Godavari District, Sri CH. Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada & Dr. Donthi Narasimha Reddy, Hyderabad have stated that, "even in the matters of payment of ex-gratia there is no improvement. APERC through its new Regulation has removed burden of payment from DISCOMs.

Until then compensation to the victims of electrocution was paid from internal resources DISCOMs. According to Para 28 of APERC Compensation to Victims of Electrical Accidents Regulation, 2017 (Regulation 2 of 2017) "The payment of compensation ordered under this Regulation shall be from the reserve fund provided in the Aggregate Revenue Requirement for the Retail Supply business of the distribution licensees in the Order on tariff determination for retail sale of electricity for that financial year by the relevant orders of the Andhra Pradesh Electricity Regulatory Commission:" It is a matter of concern that during FY 2018-19 only 52% of victims' families under SPDCL and 22% of victims' families under EPDCL received ex-gratia."

DISCOMs' Response: During FY2019-20, ex-gratia was sanctioned for an amount of ₹4.29 Cr. towards 87 fatal accidents.

Commission's view: The licensees shall strictly comply with Regulation 2 of 2017 in paying compensation to the victims of electrical accidents. The Commission has been considering the grievances of the victims / their families received through correspondence and issuing instructions to the licensees for settling compensation claims without any loss of time and shall continue this exercise in future also.

The Commission's decision on "other costs"

- 161.** Out of the costs of ₹110.42 Cr. shown by SPDCL towards Solar pump-sets, an amount of ₹87.31 Cr. is projected towards true-up on account of variation of actual costs from the approved from FY2015-16 to FY2019-20. The Commission has subsequently sought proof of expenditure in this regard from APSPDCL, but audited information is not furnished by APSPDCL and therefore, the Commission has not approved the same in this order. However, as all these projects are taken up by SPDCL as per the Orders of the Commission, any expenditure incurred over and above the approved amounts in the Tariff Orders of the respective years may be claimed in the ARR for FY2021-22 duly furnishing the audited certificate in respect of this expenditure.
- 162.** In conformity with the Commission's view stated supra, it has decided to continue the provision of grant of ₹3 Cr. (₹2 Cr. – SPDCL, ₹1 Cr. – EPDCL) to APSEEDCO. Further, in the State Advisory Committee meeting held on 13.01.2020 at Tirupati, the Managing Director, APSEEDCO has brought to the notice of this Commission that the grants approved by the Commission for FY2019-20 to APSEEDCO were not released by the licensees. In this regard, the licensees are directed to comply with the directions of this Commission and release the grants as provided to APSEEDCO and report compliance within one month from the date of notification of this order.

Provision towards Reserve fund

- 163.** After examination of the funds available in the Reserve Funds of the licensees meant for payment of compensation to victims of electrical accidents, as per the details furnished by the licensees, the Commission approves an amount of ₹10 Cr. towards reserve fund

for APSPDCL to maintain the same at ₹15 Cr. In respect of APEPDCL it is observed that their reserve fund balance available with them is more than ₹10 Cr. and as such, no further amounts are approved.

Difference of distribution costs

- 164.** APEPDCL has made a provision for ₹13.93 Cr. towards difference of distribution cost between the approved distribution costs in the Commission's order on Wheeling Tariffs for distribution business for the 4th Control Period and the distribution costs considered in the Retail Supply Tariff Order for FY2019-20. The Commission has adjusted this difference under separate head in this order.

Pension Fund

- 165.** APEPDCL has made a provision for ₹185 Cr. towards pension fund stated to be as per the decision in APPCC meeting dated 23.09.2019 that the DISCOMs have to get the actuarial values done for providing the pension liability towards erstwhile APSEB employees from December 2029 onwards in place of Master Trust by factoring the liability in a phased manner.
- 166.** Commission has approved the additional interest on pension bonds towards pension liability of the employees in its order on AP GENCO Generating Stations Tariffs for the 4th Control Period. A new provision for pension liabilities needs comprehensive examination by this Commission for which the licensee has not placed any material before it. Therefore, the claim for pension fund is not accepted. However, the licensee may approach the Commission in appropriate manner for examination of the issue on merits and as per law.
- 167.** In the above manner, Commission approves the Other Costs as shown in the table below.

Table 43: Approved: Other Costs (₹ Cr)

S. No.	Particulars	SPDCL	EPDCL	TOTAL
1	Payments to M/s EESL towards DELP	22.89	0	22.89
2	Solar pumpsets	23.11	43.79	66.90
3	Energy Efficient pumpsets	28.76	30.33	59.09
4	Grants to APSEEDCO	2.00	1.00	3.00
5	Expenses for electrical accidents compensation	11.00	0	11.00
	Total	87.76	75.12	162.88

Costs of FY2019-20 adjusted

- 168.** The Commission while approving the Retail Supply Order for FY2019-20 has considered the network and AP GENCO fixed costs for FY2019-20 tentatively pending finalization of its orders on Multi Year Tariffs for Transmission, Distribution and Generating Stations and subject to adjustment of these costs with reference to the respective costs approved in MYT orders for FY2019-20. Accordingly, the difference of these costs to be adjusted in the ARR for FY2020-21 has been worked out as shown in the Table below:

Table 44 : Approved: Costs of FY2019-20 adjusted (₹ Cr)

S. No.	Details	RST FY2019-20			MYT 4th CP			DIFFERENCE		
		SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	TOTAL	SPDCL	EPDCL	TOTAL
		(1)	(2)	(3)	(4)	(5)	(6)	(7)=(1)-(4)	(8)=(2)-(5)	(9)=(6)-(3)
1	APGENCO									
	(i) Fixed Costs	1688.45	880.31	2568.76	1536.22	800.94	2337.16	152.23	79.37	231.60
	(ii) Addl. Interest on Pension Bonds	566.56	295.39	861.95	583.88	304.42	888.30	-17.32	-9.03	-26.35
2	Transmission Cost	1057.89	551.51	1609.40	1041.20	542.86	1584.06	16.69	8.65	25.34
3	Distribution Cost	3682.44	1801.07	5483.51	3622.00	1815.00	5437.00	60.44	-13.93	46.51
4	SLDC Cost	40.42	21.07	61.49	35.47	18.50	53.97	4.95	2.57	7.52
5	Total	7035.76	3549.35	10585.11	6818.77	3481.72	10300.49	216.98	67.64	284.62

Provisional True-up for FY2019-20

169. The licensees have claimed provisional true-up of power purchase cost for FY2019-20 as given below:

S. No.	DISCOM	Approved by APERC	Present Estimate	Difference
1	SPDCL	16805.80	20404.12	3598.32
2	EPDCL	9624.57	11402.65	1778.08
Total		26430.37	31806.77	5376.40

170. The above true-up projected is in addition to the revenue gap projected by the DISCOMS.

171. Views/Objections/Suggestions**Provisional True-up for FY2019-20**

- a) Sri M. Venugopala Rao, Sri Bendi Tulasidas, Sri Penumalli Madhu, Sri Ch. Narasingarao and Sri Kandharapu Murali have stated that both the DISCOMs have shown a total additional revenue gap of ₹5376.402 Cr. for the year 2019-20 under provisional true-up i.e. seeking approval of the Commission to collect the hefty amount from consumers of power. This additional revenue gap does not include the additional subsidy to be provided by the Government for the claimed additional supply of power to agriculture during 2019-20.
- b) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad & Dr. K. Kranthi Kumar Reddy, Sri JettiGurunadha Rao, West Godavari District, Sri Ch. Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada & Dr. Narasimha Reddy Donthi, Hyderabad have stated that DISCOMs claim ₹5,376 Cr. towards true-up during FY2019-20. The main issue is the growing financial losses of the DISCOMs. According to Section 1.2 i) of the UDAY MoU GoAP shall take over 50% of loss during

FY2019-20. DISCOMs did not provide details on true-up claim for the FY2019-20. They have requested to direct the DISCOMs to file a detailed petition on the same and conduct a separate public hearing on it.

- c) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that the true-up claims made by the DISCOMs shall be settled early by the Commission.

DISCOMs' Response: The true-up for FY2019-20 as claimed by the DISCOMs in the ARR & FPT filings is provisional /tentative based on half year actuals and remaining half year projections. The final true-up claim will be subjected to completion of the financial year and statutory audit of accounts and will be filed accordingly. The additional agricultural subsidy for additional sales more than the approved sales, if any, for FY2019-20 will be sought from GoAP, without burdening the consumers.

Commission's view: Since the additional information sought from the DISCOMs is not received, the provisional true-up claim is not considered by the Commission in this order.

ARR for FY2020-21

- 172.** The Commission, as discussed in the paragraphs supra, approves the ARR at ₹42,493.55 Cr. (₹27061.47 Cr for SPDCL and ₹15432.07 Cr for EPDCL) for FY2020-21. The ARR approved by the Commission is less by ₹2347.41 Cr than the ARR estimated by the licensees. The details of the ARR approved against licensees' filings for FY2020-21 are given in the table below:

Table 45: Summary-ARR Filings by Licensees & Approvals by APERC for FY2020-21 (₹ Cr.)

S. No.	ARR Item	SPDCL			EPDCL			TOTAL		
		Filed	Apprvd	Diff.	Filed	Apprvd	Diff.	Filed	Apprvd	Diff.
1	Transmission Cost	1304.58	1304.58	0.00	680.12	680.12	0.00	1984.71	1984.71	0.00
2	SLDC Cost	21.56	21.56	0.00	20.27	20.27	0.00	41.83	41.83	0.00
3	Distribution Cost	4178.00	4178.00	0.00	2091.00	2091.00	0.00	6269.00	6269.00	0.00
4	PGCIL Expenses	1166.31	1110.57	55.74	607.97	579.03	28.94	1774.28	1689.6	84.68
5	ULDC Charges	2.94	2.94	0.00	1.60	1.60	0.00	4.54	4.54	0.00
6	Network and SLDC Cost (1+2+3+4+5)	6673.39	6617.65	55.73	3400.96	3372.02	28.95	10074.35	9989.68	84.67
7	Power Purchase Cost	21430.91	20353.68	1077.23	12439.33	11913.87	525.46	33870.23	32267.55	1602.68
8	Interest on Consumer Security Deposits	184.56	182.83	1.73	115.54	123.83	-8.29	300.10	306.67	-6.57
9	Supply Margin in Retail Supply Business	77.59	36.52	41.07	52.57	14.87	37.70	130.15	51.39	78.76
10	Other Costs, if any	182.07	87.76	94.31	284.05	75.12	208.93	466.12	162.88	303.24
11	Supply Cost (7+8+9+10)	21875.12	20660.79	1214.33	12891.48	12127.69	763.79	34766.61	32788.49	1978.12
12	Costs of FY2019-20 adjusted	0.00	216.98	-216.98	0.00	67.64	-67.64	0.00	284.62	-284.62
13	Aggregate Revenue Requirement (6+11-12)	28548.51	27061.47	1487.05	16292.45	15432.07	860.37	44840.96	42493.55	2347.41

CHAPTER - VI

COST OF SERVICE

Introduction

173. The Commission, in this chapter, has computed the Cost of Service (CoS) for different-consumer categories for each licensee based on the ARR determined for FY2020-21 while considering the views/objections/suggestions of the stakeholders in this regard.

Licensees' Filings

174. In conformity with the Commission's methodology for estimating the Cost of Service for FY2019-20, the licensees have estimated the Cost of Service at different voltages as given below:

Table 46 : Filings – Cost of Service for FY2020-21 (₹ /Unit)

S. No.	Category	SPDCL	EPDCL	Total
1	LT	7.55	7.06	7.39
2	HT - 11 kV	7.22	6.78	6.78
3	HT - 33 kV	6.99	6.57	6.84
4	HT - 132 kV and above	6.76	6.38	6.56
Total		7.36	6.82	7.15

175. Views/Objections/Suggestions

- a) Sri O.L. Kantha Rao, Secretary, A.P. Textile Mills Association, Guntur, Sri R. Shivkumar, A.P. Spinning Mills Association and Smt. P. Vydehi, FAPCCI have stated that the revised Tariff Policy envisages that the tariff should progressively reflect the efficient and prudent cost of supply of electricity and the tariffs for all categories of consumers except the consumers below poverty line should be within $\pm 20\%$ of the average cost of supply. More importantly even for BPL categories for consumption up to a prescribed level (i.e. 30 units per month) the prescribed tariff ought to be at least 50% of the average cost of supply. Thus, the Tariff Policy recognizes the fact that one of the objectives is that the tariff should reflect the cost of supply and for achieving that objective, the State Commission should notify roadmap to ensure that the tariffs are within $\pm 20\%$ of average cost of supply (overall average cost of supply). However, nowhere, the Tariff Policy suggests that the cross subsidy has to be calculated based on average cost of supply. On the other hand, it provides that the tariff progressively should reflect cost of supply. As opposed to the earlier filings the Licensees have in the current Petition, not even worked out the category-wise CoS of consumers. Rather, it has merely depicted the CoS at broad level for LT, HT-11 kV, HT-33 kV and HT-132 kV class. These numbers do not serve any purpose and will not help either in fixation of tariff or in laying down a roadmap for reduction in cross subsidy.

APSPDCL has markedly deviated from the claim of trying to design tariff within the $\pm 20\%$ range of the average cost of supply. The non-domestic (commercial) and HT tariffs are significantly over 120% 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 penalized, for making good the cost, to be recovered from the subsidised category beyond the permissible $\pm 20\%$ of the average cost of supply. Any benefit which the Licensee wants to confer on 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 subsidizing consumers. In a catena of judgments, the Hon'ble APTEL has held that eventually, the State Commission shall gradually move from the principle of average cost of supply towards cost of supply for each consumer category. The incidence of cross subsidy is even higher when category wise cost of service is considered. In view of the above, the current tariffs for industrial consumers need more rationalization to adhere with the mandate of the Electricity Act and Tariff Policy.

Commission's view: As regards the objection that category-wise Cost of Service (CoS) for arriving at cross subsidy is not projected in the ARR filings, no specific formula is fixed by any statutory provision or executive instructions of any regulator in the country. Added to this, 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 for FY2020-21. Therefore, this Commission is following the practice of voltage-wise CoS for the past two years. As could be seen from the Table - "Ratio of Average Billing Rate (ABR) and Average Cost of Service (ACoS) per unit" given infra, the Average Billing Rate for HT consumers is well within the permissible ceiling of +20% over Average Cost of Supply except in case of HT – 11 kV consumers for SPDCL only. Even in respect of this category, the ABR marginally exceeded the permissible limit by 1.09%. Only in case of LT consumers the ABR does not conform to the ACoS norm. However, the Commission expects the gap in excess of -20% to be subsidized by the State Government, failing which the licensees are directed to make Full Cost Recovery as determined in the Full Cost Recovery Tariff Schedule in this order.

Commission's Decision:

- 176.** As the licensees have not proposed any new methodology for arriving at the Cost of Service for FY2020-21 and adopted the methodology followed by the Commission for the last two years, the Commission has decided to continue the same methodology for arriving at the Cost of Service for FY2020-21 also and the same is detailed hereunder:

177. The Commission has considered the gross energy sales (MU) approved for the respective licensees at different voltage levels as shown in the Table below:

Table 47: Approved Energy Sales for FY2020-21 (MU)

S. No.	Category	SPDCL	EPDCL	Total
1	LT	26137.33	12767.21	38904.54
2	HT - 11 kV	3204.66	2535.91	5740.57
3	HT - 33 kV	4073.89	2072.76	6146.66
4	HT - 132 kV and above	5070.70	5956.14	11026.85
Total		38486.59	23332.02	61818.61

178. The Commission has, thereafter, grossed up the energy sales (MU) at the specific voltage levels with losses (%) as approved in this order for FY2020-21 for arriving at the power purchase requirement (MU). The summary of the losses is shown in the Table below:

Table 48 : Approved Losses for FY2020-21

S. No.	Category	SPDCL	EPDCL	Total
1	LT	13.08%	12.47%	12.88%
2	HT - 11 kV	9.24%	8.83%	9.06%
3	HT - 33 kV	6.22%	5.86%	6.10%
4	HT - 132 kV and above	3.17%	3.17%	3.17%
5	Aggregate losses	10.87%	9.28%	10.28%

179. Applying the above losses, the power purchase requirement / energy input (MU) for the respective voltage levels is arrived at as shown in the Table below:

Table 49: Power Purchase / Energy Input requirement for different Voltage levels for FY2020-21 (MU)

S. No.	Category	SPDCL	EPDCL	Total
1	LT	30070.22	14585.26	44655.48
2	HT - 11 kV	3530.91	2781.43	6312.34
3	HT - 33 kV	4344.10	2201.83	6545.93
4	HT - 132 kV and above	5236.71	6151.14	11387.84
Total		43181.94	25719.66	68901.60

180. The ARR determined for the year has been apportioned in proportion to the energy input at different voltage levels. The ARR cost allocated at different voltage levels is as shown in the Table below:

Table 50 : ARR allocation to different voltage levels for FY2020-21 (₹ Cr)

S. No.	Category	SPDCL	EPDCL	Total
1	LT	18844.55	8751.31	27595.87
2	HT - 11 kV	2212.77	1668.89	3881.66
3	HT - 33 kV	2722.38	1321.12	4043.50
4	HT - 132 kV and above	3281.76	3690.75	6972.51
Total		27061.47	15432.07	42493.54

- 181.** 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 FY2020-21 as shown in the Table below:

Table 51: Cost of Service for FY2020-21 (₹/Unit)

S. No.	Category	SPDCL	EPDCL	Total
1	LT	7.21	6.85	7.09
2	HT - 11 Kv	6.90	6.58	6.76
3	HT - 33 Kv	6.68	6.37	6.58
4	HT - 132 kV and above	6.47	6.20	6.32
Total		7.03	6.61	6.87

- 182.** The comparison of the Cost of Service filed by the licensees and approved by the Commission is given in the Table below:

Table 52 : Cost of Service: Filing and Approved for FY2020-21 (₹/Unit)

S. No.	Category	SPDCL		EPDCL		Total	
		Filing	Approved	Filing	Approved	Filing	Approved
1	LT	7.55	7.21	7.06	6.85	7.39	7.09
2	HT - 11 kV	7.22	6.9	6.78	6.58	7.03	6.76
3	HT - 33 kV	6.99	6.68	6.57	6.37	6.84	6.58
4	HT - 132 kV and above	6.76	6.47	6.38	6.2	6.56	6.32
Total		7.36	7.03	6.82	6.61	7.15	6.87

- 183.** The ratio of Average Billing Rate (ABR) and Average Cost of Supply (ACoS) voltage wise is indicated in the Table below:

Table 53 : Ratio of Average Billing Rate (ABR) and Average Cost of Supply (ACoS) per Unit

S. No.	Category	ABR Approved for FY2020-21		ACoS		ABR/ACoS	
		SPDCL	EPDCL	SPDCL	EPDCL	SPDCL	EPDCL
1	LT	3.64	4.18	7.03	6.61	51.75%	63.13%
2	HT - 11kV	8.51	7.79	7.03	6.61	121.09%	117.82%
3	HT - 33 kV	7.70	7.44	7.03	6.61	109.51%	112.53%
4	HT - 132 kV and above	7.15	6.24	7.03	6.61	101.72%	94.33%
Average		4.94	5.39	7.03	6.61	70.23%	81.43%

- 184.** The short fall for 100% revenue recovery of ACoS is met from the subsidy provided under Section 65 of the Electricity Act, 2003 by the Government of Andhra Pradesh to the “Category-I: Domestic – LT” and “Category V (A): Agriculture - LT” and other income like CSS, Revenue from sale of RECs etc.

CHAPTER – VII

REVENUE AND REVENUE GAP

Introduction

185. The Commission in this chapter has recomputed the revenue gap for FY2020-21 based on revised sales, ARR and total revenue from all sources, while taking the tariffs as arrived at on merits by the Commission for FY2020-21 as the basis. The revenue to licensees will be through a) tariff income (energy, fixed/demand, minimum and customer charges), b) non-tariff income (delayed payment surcharge, 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 Access consumers, and d) sale of Renewable Energy Certificates.

Revenue from Tariffs and Other Sources

186. The licensees realize their revenue through retail sale of electricity and other income [non- tariff income, income through cross subsidy (if any, determined by the Commission) and sale of Renewable Energy Certificates] which is incidental to the main business and such income would not be substantial.

187. The licensees have computed/estimated the revenue (consumption charges and non-tariff income), considering revision of grouping and slabs for domestic consumers, and tariffs to certain categories of consumers, on sales forecast/estimate of 62687.29 MU made by them. The details of revenue including non-tariff income are given in the table below:

Table 54 : Sales and Revenue estimated by the Licensees for FY2020-21

Category		Sales in MU			Revenue in ₹ Cr.		
		SPDCL	EPDCL	Total	SPDCL	EPDCL	Total
I	Domestic - LT	10445.84	6551.52	16997.36	4421.81	2525.95	6947.77
II	Commercial & Other -LT	2224.03	1249.02	3473.05	2087.23	1172.69	3259.92
III	Industry - LT	1073.35	398.57	1471.92	854.44	310.76	1165.20
IV	Institutional -LT	956.63	343.87	1300.50	923.73	345.59	1269.32
V	Agricultural & Related - LT	11744.73	4730.56	16475.30	1040.53	830.71	1871.24
	(i) Non-Corporate Farmers	10139.27	2899.47	13038.74	315.20	60.97	376.17
	(ii) Others	1605.46	1831.10	3436.56	725.34	769.73	1495.07
I	Domestic -HT	23.67	31.70	55.37	18.17	24.04	42.20
II	Commercial & Other -HT	1207.44	855.95	2063.39	1142.63	882.90	2025.53
III	Industry - HT	7633.38	7332.05	14965.43	5907.73	4886.88	10794.60
IV	Institutional - HT	1016.66	936.65	1953.31	1045.61	783.58	1829.19
V	Agricultural & Related -HT	1955.83	992.48	2948.30	1456.13	715.15	2171.28
	RESCOs	512.27	471.10	983.37	192.38	173.39	365.77
Total		38793.83	23893.46	62687.29	19090.38	12651.63	31742.01

188. The revenue requirement and revenue gap estimated by the licensees for FY2020-21 are given in the table below:

Table 55 : Revenue Requirement and Revenue Gap estimated by Licensees for FY2020-21 (₹ Cr.)

S. No.	ARR Item	SPDCL	EPDCL	TOTAL
1	Aggregate Revenue Requirement	28548.51	16292.45	44840.96
2	Income from Tariffs	18099.77	12220.52	30320.29
3	Non-tariff Income (NTI)	990.62	431.11	1421.73
4	Income from Cross Subsidy Surcharge (CSS)	92.18	52.67	144.85
5	Income from Sale of RECs	0.00	0.00	0.00
6	Total Revenue (2)+(3)+(4)+(5)	19182.57	12704.30	31886.87
7	Revenue Gap (1) - (6)	9365.94	3588.15	12954.09

189. Views/Objections/Suggestions

REC income not shown

- a) Sri Kapil Sharma, M/s AXIS Wind Farms (Anantapur) Pvt. Ltd., M/s AXIS Wind Farms (Rayalaseema) Pvt. Ltd., Sri V. Sailendra, Coordinator, AP State Council, IWPA, Hyderabad have stated that in Form-9 attached to the filings 'Revenue from REC' has been left blank. It is objected to the same as under the present mechanism, RECs accrue to the respective distribution company under the power purchase agreements executed with various developers. In such a scenario it would be incorrect not to project the revenue that may accrue to APSPDCL and APEPDCL from the sale of such REC. Therefore, it is suggested that APEPDCL and APSPDCL should take into consideration the proposed RECs that would accrue to them for the RE power purchased over and above RPO requirements. It may be noted that a similar provisioning was made in the ARR filed for FY2019-20.

APSPDCL Response: Since sale of RECs is dependent on the market and there is no guaranteed income, the DISCOMs have not considered any revenue out of sale of RE certificates that could accrue for the RE power purchased over and above RPPO.

Commission's view: The Commission agrees with the stand of the objector. As the DISCOMs have the details of the RPO achieved by them, it would not have been difficult for them to make a broad assessment of the revenue expected from the sale of RECs and include the same in the expected revenues. The Commission has however assessed the expected revenue with reasonable approximation in this Order. **The Commission hereby direct the DISCOMs to indicate the likely revenue through sales of RECs in future.**

Revenue gap is deflated

- b) Sri M. Venugopala Rao, Senior Journalist and Convener, Centre for Power Studies, Hyderabad, Sri Bendi Tulasidas, Vijayawada, Sri Penumalli Madhu, State Secretary, Communist Party of India (Marxist), Vijayawada, Sri Ch. Narasingarao, CPI (M), A.P. State Secretariat Member, Visakhapatnam, Sri Kandharapu Murali, CPM Secretariat Member, Tirupati, have stated that the DISCOMs have projected a total revenue gap of ₹12,954.09 Cr. This revenue gap is shown after taking into account additional revenue of ₹1494.98 Cr. due to proposed hike in tariffs for the categories of consumers concerned. The revenue requirement and revenue gap projected by the DISCOMs for the year 2020-21 are deflated artificially. If this is permitted by the Commission, it would lead to imposition of unjust burdens on the consumers on the one hand and hefty true-up claims later on the other. The implied intention in such a questionable exercise of the DISCOMS is to artificially reduce the revenue gap, need for tariff hike and subsidy from the Government for FY2020-21.

DISCOMs' Response: The proposals are worked out in more realistic manner by the licensees and expecting GoAP support without burdening the consumers.

Commission's view: The DISCOMs have made their proposals based on their own estimates of revenue and expenditure. It is for this Commission to consider whether these proposals are realistic or not based on the objections of the Objectors. The Commission estimated the ARR, Revenue and Revenue Gap with reference to its regulations, approvals and the relevant orders.

Non-inclusion of dues to RE generators

- c) Sri Deepak Gupta, ReNew Power Pvt., Delhi has stated that as per report submitted by CEA, the APDISCOMs dues towards RE developers was ₹2591 Cr. as on 31-07-2019. Considering that it is only partial information for RE generators, and also does not cover dues towards conventional generators, the number of dues is much higher. Some estimates suggest such dues to be more than ₹10,000 Cr. APSPDCL and APEPDCL have failed to include in their petitions such amount and associated late payment surcharges that they will have to pay to generators for delay in making payments. Non-inclusion of these amounts could further aggravate the current delayed payment situation of APDISCOMs.

APSPDCL Response: ARR & FPT proposals indicate projections of various expenditure items, Revenue items and Revenue gap for the ensuing financial year 2020-21. Proposals don't include payables for the energy procured from different generators for the historical period or current financial year.

Commission's view: As the dues pertain to the previous years which are already covered by the Tariff Orders, the Commission agrees with the stand of the APSPDCL that they need not be shown in the ARR for the future years.

Delayed payment surcharge

- d) Sri M.S.S. Sarma and Sri P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association have stated that presently Delayed Payment penalty @ 18% is levied on consumers for delay in Payment of CC bills or ACD dues. This may be brought down to 12% when Instalments are granted by DISCOMS to facilitate Consumers facing hardships in tune with the falling interest rates all over. It may also be noted that while the Electricity Act, 2003 provides for levy of penal interest rate @ 16% on the consumers who commit theft of energy, DISCOMs are collecting 18% from bonafide consumers for delayed payments and sanctioned instalments. Hence, they have requested to fix up the delayed Payment Charges at not more than 12% per annum and provide relief to stressed consumers.
- e) Sri C.V. Atchut Rao and Sri Bhushan Rastogi, Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI), Vijayawada have stated that Interest on Delayed Payments and installments granted for Payment of CC bills or ACD 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 installments to make it easier for the consumer already in distress in line with the commitment of the Governments to 'Ease of Doing Business'.
- f) Sri Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that many industries are struggling hard for the payment of CC charges due various different marketing strategies of different countries. Whenever payment is delayed Penal interest is collected at 18% and in some cases SLDC is collecting 24% for the delayed payments. This is to be reduced to 15%, just above the bank interest rate.
- g) Sri K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that rate of interest being collected @ 18% for the CC Bills and ACD for the delayed payments. It is to be brought down to 12% which is quite rational.

DISCOMs' Response: The Delay Payment Surcharge (DPS) is being collected as specified by the Commission in the relevant regulations. In fact, the licensees are actually at loss, as the payments are being made to the generators through loans, even before the realization of the revenue from delayed payment surcharge from the consumer. Further, in view of the revenue deficit situation arising out of delays in receipt of payments from certain consumers, the licensees are encountering delayed payment of around ₹300 Cr./ month to the Generators. Surcharge is also payable to the generator up to 15% - 18% for delayed payments.

In addition to the above prevailing difficulties of the Licensees, as per recent developments, the Licensees shall open Letter of Credit in respect of payments to the Central Generators, thereby leaving no scope to the Licensees other than to arrange LCs at any cost in advance, failing which supply from CGS stations would be stopped

and even legal issues may have to be faced in these matters. Thus, 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 would in turn help licensees to promptly pay the generators without penalty.

In view of the above, the request of the objector may not be considered.

Commission's view: While accepting the view of the DISCOMs, the Commission is of the view that in order to discourage the consumers to resort to delayed payments, it is necessary to prescribe delayed payment charges at higher than market rate of interest. Indeed, the delayed payment charges which stood at 24% per annum at one point of time, have been reduced to reasonable level of 18% per annum. Hence, further reduction is not warranted.

Withdraw bank guarantee for installments

- h) Sri M.S.S. Sarma and Sri P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association have stated that DISCOMs were granting Instalment facility with interest. However, in view of the Bank Guarantee clause imposed by the Commission recently, the DISCOMs are seeking Bank Guarantee for providing Instalments. For the industries who are already in financial distress, obtaining Bank Guarantee facilities additionally is very difficult in the present situation in the Banking Sector. Hence, they have requested to withdraw the bank guarantee clause and to allow DISCOMs to provide instalments in case of necessity along with interest.

DISCOMs' Response: Consumer is billed every month in respect of one-month consumption and 15 days' time (due date) is allowed for payment from the date of bill without delayed payment surcharge. Further, 15 additional days are allowed from the due date without being disconnected. The average revenue collection period is 2 months. The consumer is given 2 months' time to avail the services from the licensee without being disconnected. Thus, the consumer is having ample time to pay the bill, whereas the Licensees are obligated to pay the Central Generating Stations through LCs paying the State Generators with penalties quite often. Further, the DISCOMs are allowing the consumer to pay bill in installments with a good will to support consumer at risk even though DISCOMs are obligated to pay the Generators in time. The Bank Guarantee will provide certain risk coverage to DISCOMs under extreme conditions but anticipating payments as per installment due date. Thus, DISCOMs are taking lot of risks to serve its consumers.

Commission's view: The Commission doesn't find any reason to review the bank guarantee clause.

Interest on advance payments

- i) Sri B. Hume Sastry, Visakhapatnam has stated that tens of crores of rupees are spent by DISCOMs for collecting current bills. If consumers are permitted to deposit 1-year consumption in advance by paying interest on such deposit as is being done by BSNL

authorities and some other distribution companies, the amounts spent on collecting monthly bills is avoided. This system is not being implemented in spite of frequent representations. Anyhow distribution companies are paying 6% interest on consumers/security deposit. If this system is adopted it will be beneficial to both consumers as well as DISCOMs.

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 DISCOMs to adjust the amount against bills that may be raised by the DISCOMs from time to time. Such advance payments do not attract any interest.

Commission's view: Nothing further to add.

Do not include non-collectable delayed payment surcharge (DPS) in regular demands

- j) Sri T.V. Surya Prakash, DISCOM Secretary, APSEB Engineers' Association, Visakhapatnam has stated that for the non-tariff income proposals for the FY2020-21 the income towards delayed payment surcharge is shown as ₹278 Cr. but in reality, most of the above amount is not being realised. The reason is most of the above amount is being accumulated as arrears pending towards street lights, SC/ ST subsidiary amounts, Government services arrears etc. Every month crores of rupees of demand is being raised under delayed surcharge payment on Panchayat Arrears which are pending since long back and other government arrears, SC/ ST subsidiary amounts etc. Due to raising of this demand which is not collectable, DISCOM Engineers at field level are facing much difficulty in achieving 100% revenue collections and the AT&C loss to the DISCOM are increasing. The ranking of the DISCOM under UDAY is falling. He has requested to consider the above and pass appropriate orders for not including such uncollectable amounts in regular demands.

Commission's view: DISCOMs shall follow the accounting practices.

Provide the details of income through sale of scrapped meters

- k) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that there are huge piles of meters accumulated due to replacement of struck-up and burnt meters, in every sub-division. Are such damaged meters treated as scrap? Is there any annual audit of such meters? If so in which head of account such income is credited? The details may be provided in the ARR.

APSPDCL Response: Department is disposing off the scrap meters through auction and the income is accounted in annual reports.

Commission's view: DISCOMs may take note of the suggestion.

- l) Sri Kandregula Venkata Ramana, Anakapalli (V), Visakhapatnam has suggested that Government should bear the revenue gap of the ARR filings of DISCOMs, the true-up claims of DISCOMs of ₹24980 Cr., shall have to be borne by the Government.

Commission's view: Govt. shall take a view.

Commission's Decision:

- 190.** Based on the approved sales volume of 61818.61 MU for both the licensees, the Commission has computed the revenue of the licensees at the tariffs approved by the Commission keeping the non-tariff income, the income from cross subsidy surcharge at the same level as filed by the licensees and also taking into account the probable income from sale of Renewable Energy Certificates. The revenue computed by the Commission at the approved charges is ₹32432.92 Cr. for FY2020-21.
- 191.** The revenue estimated by the Commission including non-tariff income at the tariffs approved by the Commission for FY2020-21 is given below:

Table 56: Sales and Revenue computed by the Commission for FY2020-21 (₹ Cr)

LT-Supply	Consumer Category	Sales (MU)			Revenue (₹ Cr.)		
		SPDCL	EPDCL	Total	SPDCL	EPDCL	Total
I	Domestic	10445.84	6551.52	16997.36	4593.53	2670.42	7263.95
II	Commercial & Other	2003.39	1144.23	3147.62	2086.06	1172.67	3258.73
III	Industry	1074.08	398.56	1472.64	855.30	310.76	1166.06
IV	Institutional	1176.53	448.63	1625.16	936.17	347.40	1283.57
V	Agricultural & Related	11437.49	4224.26	15661.75	1040.47	829.61	1870.07
	(i) Non-Corporate Farmers	9828.76	2392.71	12221.47	315.09	60.92	376.00
	(ii) Others	1608.73	1831.56	3440.29	725.38	768.69	1494.07
HT-Supply							
I	Domestic	23.67	31.70	55.37	18.25	24.04	42.29
II	Commercial & Other	1031.67	754.84	1786.50	1115.35	794.93	1910.27
III	Industry	7634.48	7332.05	14966.53	5912.09	4886.88	10798.96
IV	Institutional	1191.34	1037.75	2229.09	958.22	765.81	1724.03
V	Agricultural & Related	1955.83	992.49	2948.31	1455.02	715.17	2170.19
	RESCOs	512.27	416.00	928.27	33.57	48.28	81.85
	Total	38486.59	23332.02	61818.61	19004.03	12565.96	31569.99

- 192.** Based on the ARR approved by the Commission and the revenue computed for FY2020-21 from all the sources, the revenue gap has been worked out at ₹10,060.63 Cr. (₹7247.18 Cr for SPDCL and ₹2813.44 Cr for EPDCL) for both the licensees. The details of ARR and Revenue gap filed by the licensees and approved by the Commission are given in the table below:

Table 57: Revenue Requirement and Revenue Gap determined by the Commission for FY2020-21 (₹ Cr).

S. No.	ARR Item	SPDCL			EPDCL			TOTAL		
		Filed	Apprvd	Diff	Filed	Apprvd	Diff	Filed	Apprvd	Diff
1	Aggregate Revenue Requirement	28548.51	27061.48	1487.03	16292.44	15432.07	860.37	44840.95	42493.55	2347.40
2	Income from Tariffs	18099.77	18013.44	86.33	12220.52	12134.85	85.67	30320.29	30148.29	172.00
3	Non-tariff Income (NTI)	990.62	990.62	0	431.11	431.11	0	1421.73	1421.73	0.00
4	Income from Cross Subsidy Surcharge (CSS)	92.18	92.18	0	52.67	52.67	0	144.85	144.85	0.00
5	Income from Sale of RECs	0	718.05	-718.05	0	0	0	0	718.05	-718.05
6	Total Revenue (2)+(3)+(4)+(5)	19182.6	19814.29	-631.72	12704.30	12618.63	85.67	31886.87	32432.92	-546.05
7	Revenue Gap (1)-(6)	9365.94	7247.19	2118.75	3588.14	2813.44	774.70	12954.08	10060.63	2893.45

- 193.** To sum up, the revenue gap has been reduced by ₹2893.46 Cr. (₹2118.76 Cr for SPDCL and ₹744.71 Cr. for EPDCL) as a result of determination of ARR based on revised sales, revised power purchase cost; revenue on revised sales and income from sale of Renewable Energy Certificates. The details of revenue gap as filed by the licensees and as determined by the Commission are as shown in the table below.

Table 58: Revenue gap for FY2020-21 (₹ Cr)

S. No.	Items	SPDCL	EPDCL	TOTAL
1	Revenue gap filed by the licensees at proposed tariffs	9365.94	3588.15	12954.09
2	Revenue gap determined by the Commission	7247.18	2813.44	10,060.63
3	Difference (1-2)	2118.76	744.71	2893.46

CHAPTER- VIII

REFERENCE TARIFF SCHEDULE

Introduction

194. The Commission in this Chapter, after examination of the tariff proposals submitted by the licensees for FY2020-21, stakeholders' views/objections/suggestions thereon and other aspects such as the revenue gap, cross subsidies, concessions to certain categories of consumers and external subsidy availability, has prepared a Reference Tariff Schedule (RTS) as a prelude to determination of Full Cost Recovery Tariff in Chapter-IX. In this Reference Tariff Schedule, the Commission has incorporated the rates/charges as deemed fit considering all relevant aspects for FY2020-21.

Licensees' Proposals, Objections and Commission's Decisions

195. Licensees propose to continue with the same 5 Main categories in LT as well as 5 Main categories in HT as approved by the Commission for FY2019-20.

196. In this regard, it is relevant to note that the Commission approved only five (5) categories for FY2019-20 and each category along with the associated sub-categories as applicable, has classification for LT Supply and HT Supply based on the voltage level and Connected Load. The Commission approves the same structure with the same five Categories, for FY2020-21 also.

197. Further, the nomenclature of categories shall be "Category – I: Domestic – LT" or "Category – I: Domestic – HT", etc. and the sub-categories shall also be read accordingly, e.g. "Category – III (A): Industry (General)– LT" or "Category – III (A): Industry (General)– HT".

198. The licensees are directed to make note of the nomenclatures and to strictly follow the same while making the proposals in future.

199. The changes proposed by the licensees, the views/objections/suggestions on the proposal and the Commission's decisions thereon are detailed hereunder.

200. CATEGORY-I: DOMESTIC

Proposals

- (i) **Category-I(A): LT Domestic:** The licensees propose to dispense with the categorization of consumers based on consumption during the previous financial year and to levy energy charges based on consumption of current month with the following proposed slabs and tariffs.

Sub-Category	Slab	Energy Charges (₹/kWh)
A: ≤ 75 Units per month	0-50	1.45
	51-75	2.60
B: >75-225 Units Per month	0-50	2.60
	51-100	2.60
	101-200	3.60
	201-225	6.90
C: >225 Units Per month	0-50	2.65
	51-100	3.35
	101-200	5.40
	201-300	7.10
	301-400	7.95
	401-500	8.50
	>500	9.95

Views / Objections / Suggestions

Domestic grouping

- Sri Penumalli Madhu, State Secretary, Communist Party of India (Marxist), Vijayawada, Sri Ch. Narasingarao, CPI (M), A.P. State Secretariat Member, Visakhapatnam, Sri Kandharapu Murali, CPM Secretariat Member, Tirupati, Sri M. Venugopala Rao, Senior Journalist and Convener of Centre for Power Studies, Hyderabad have stated that the proposal of the DISCOMs to dispense with the categorization of consumers based on consumption during the previous financial year and levy of energy charges based on consumption of current month is welcome. They have requested to approve the proposal.
- Sri Bendi Tulasidas, Vijayawada has suggested that the categorisation of LT Domestic groups be redefined as here under:

Group-A: Annual consumption <1200 kWh (present <900)

Group-B: Annual consumption >1200 and <3600 kWh (present >900 and <2700)

Group-C: Annual consumption >3600 kWh (present >2700)

That the per capita consumption of electricity is growing year by year. As per the CEA reports, the national per capita in FY2015-16 was 1075 kWh and it became 1181 kWh in FY2018-19. It has further increased in this year. Energy Statistics of MOSP, GOI, CAGR of the total electricity consumed between 2007-08 and 2015-16 was 7.82 percent while that of Domestic sector was 7.93 percent. Four years have elapsed since approval of this categorization in 2016-17 by the Commission and the same may be revised for 2020-21. The Govt. of AP, under “Jagjivan Jyoti”, is providing free domestic power of 200 kWh per month to all SC/ST families. As per the GoAP’s recent guidelines for BPL card eligibility, the upper limit of monthly power consumption is 300 kWh in urban areas. The income limits for BPL and for Non creamy layer of OBCs etc. have

been revised from time to time by the respective Governments. Therefore, he has requested to revise the limits of consumption.

- c) Sri K. Ramakrishnam Raju, President, Resident Welfare Association, Visakhapatnam has suggested that A, B & C groups in L.T. Domestic shall be clubbed as telescopic single category maintaining slab rates 0 to 50 - ₹1.45 per kWh, 51 to 75 ₹2.60 per kWh, 76 to 100 - ₹2.60 kWh, 101 to 200 units - ₹3.60 kWh, 201 to 225 - ₹6.90 per kWh, 226 to 300 - ₹7.10 per kWh, 301 to 400 - ₹7.95, 401 to 500 - ₹8.50 per kWh. This will help equal justice to all domestic consumers and to ensure energy conservation in true spirit without any discrimination.
- d) Sri Kandregula Venkata Ramana, Anakapalle (v), Visakhapatnam has stated that the sub-groups and slabs of domestic category are improper. As the per-capita income of the country has increased and even the benefits of white card are extended to the consumers whose consumption is ≤ 300 units, the sub-groups may be classified as Group-A ≤ 100 , Group-B ≤ 300 units, Group-C > 300 units.
- e) Sri K. Guruswamy Naidu, Sri Nandhyalam Satyanarayana Setty, Sri Palakuru Subramanyam, Sri Nachukuru Muniratnam Reddy, Pakala, Chittoor District have stated that the existing slab of 0-50 units ought to be changed to 0-100 units and there is a need to remove the slab of 50-75 units, as majority of below poverty line consumers are present in this category.
- f) Sri J. Durga Prasad, Vijayawada has stated that categorizing the domestic consumers into 3 groups is against the Article 14 of the Indian constitution, hence he has requested to abolish the grouping system in domestic category.

DISCOMs' Response: The grouping proposed by the licensees ensure equal distribution of tariffs among different sections of consumers. Thus, the licensees prepared the proposals judiciously at their best and the matter now is in the purview of the Commission. Further increase of the slab limit to 100 units is not justifiable.

Domestic Tariff

- g) Sri K. Vasudeva Rao, Chief Editor & Publisher, Electronics, Electrical & General Samaacharam, Visakhapatnam has stated that the tariff for the lower slab domestic consumers is less compared to other States. The tariff for the slab of 0-50 units remained fixed at ₹1.45 even though the economic status of many consumers increased significantly.
- h) Sri K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that domestic consumption is growing year after year and the tariff is not increased as per the cost of the service.

DISCOMs' Response: The tariff of 0-50 units is kept at ₹1.45 by considering the economic status of below poverty line consumers.

- i) Sri K. Vasudeva Rao, Chief Editor & Publisher, Electronics, Electrical & General Samaacharam, Visakhapatnam has stated that the cost of supply of a single unit to the domestic consumers is ₹6.48 but the tariff of domestic consumers is far less than their CoS. Who is compensating the balance amount arising out of low tariff?

DISCOMs' Response: The balance (difference) arising out of low tariff to domestic consumers will be compensated by cross-subsidy paid by the subsidizing non-domestic consumers.

- j) Sri A. Punna Rao, Vijayawada has stated that by hiking the domestic tariff from ₹1.45 to ₹2.60 per unit for the consumption slab 0-50 units, from ₹2.60 to ₹3.60 per unit for the consumption slab 51-100 units, from ₹3.60 to ₹4.60 per unit for the consumption slab 101-200 units and for the consumers consuming more than 2700 units per annum, starting tariff of ₹3.60 per unit may get revenue of ₹1500 Cr. to DISCOMs.

DISCOMs Response: The tariff hike from ₹9.05 to ₹9.95 per unit has been proposed in the present filings for the consumption above 500 units per month.

Slabs and rates

- k) Sri S. Suryaprakasha Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad, complimenting APDISCOMs for dispensing with the sub-classification based on previous year consumption of individual consumer, stated that each sub-class contains several slabs which can be reduced to the minimum number in the spirit of proposals circulated by Ministry of Power (MoP) some time back and in line with the Tariff Policy notified by Central Government u/s 3 of the Electricity Act, 2003. The sub-classification of Domestic Consumers may be done in 4 groups as follows, on the basis of socio-economic status which is normally reflected in the level of electricity consumption and charged w.r.t cost of supply.

Sub-Category	Non-telescopic Slabs (units/month)	Tariff Norm	Remarks
Group-A (Poor)	0-50	50% of average cost of supply	Para 8.3 (1) of Revised Tariff Policy of 2016
Group-B (Lower middle)	0-150	20 % < average cost of supply	Para 8.3 (2) of Revised Tariff Policy of 2016
Group-C (Upper middle)	0-300	Average Cost of supply	
Group-D Higher class	0 > 300	20 % > average Cost of supply	Para 8.3 (2) of Revised Tariff Policy of 2016

Any reduction from above levels may be considered by the Commission in terms of the provisions u/s 65 of the Electricity Act, 2003 if so directed by the GoAP.

DISCOMs' Response: Further to the classification mentioned by the objector, the Ministry of Power has proposed a draft amendment to Para 8.3 of NTP vide Lr.No.23/02/2018 – R&R, GoI, Ministry of Power, New Delhi dt.10.09.2018, to have a simplified Tariff structure all over the country and suggested that “The principle adopted is paying a price for use of electricity as a commodity which should not be different for different category of usage like in Domestic/ Commercial/ Industrial etc. but it should be based on Load used and energy consumed”. As the above amendment is in draft stage, the licensees for the present, proposed the sub-classification basing on the current month consumption dispensing with the sub-classification based on previous year consumption of individual consumer.

- l) Sri A. Pullaiah, Secretary, CPI(M), Tirupati and Sri Ch. Babu Rao CPI(M), Vijayawada have stated that the domestic slab limits need reclassification.
- m) Sri Kandregula Venkata Ramana, Anakapalli (V), Visakhapatnam has suggested that the sub-group's units slabs of domestic category in the filing of licensee is improper.

Commission's Decision: The Commission has examined the proposal of the licensees vis-à-vis the views/objections/suggestions received in this regard and the responses of the licensees thereon, and approves the domestic grouping based on the current billing months' consumption, the slabs and tariffs as proposed by the licensees for Category-I(A): Domestic – LT keeping in view many objections on the earlier basis for grouping.

As regards the objection that the grouping of domestic consumers is against Article 14 of Constitution of India, it is to be noted that Section 62 (3) of the Electricity Act, 2003 provides for differentiating the tariff based on consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. Article 14 of the Constitution of India which enjoins on the State equality and non-discrimination cannot be understood as mechanical uniform treatment irrespective of inequality among different classes of persons. The law is well settled that there has to be equality only among the equals and not between the unequals. So long as the consumers who are similarly situated are treated similarly, such action is in conformity with Article 14 of the Constitution of India. Therefore, grouping based on consumption levels is not against the law.

Proposal

- (ii) **Category-I (B): HT – Townships and Colonies** - The licensees propose to rename the existing sub-category of 'Townships and Colonies' as 'Gated communities, Bungalows & Villas' and proposed to increase the energy charges from ₹6.30 per unit to ₹7.00 per unit.

Views/Objections/Suggestions: Nil

Commission's Decision: The proposal of the licensees has been examined and is accepted with minor modification by renaming the sub-category as “**Category – I (B): Townships, Colonies, Gated Communities and Villas - HT**”. The proposal to increase the energy charges from ₹6.30 to ₹7.00 per unit is also accepted.

- 201.** In view of the above discussion and decisions, the slabs and tariffs for “Category-I: Domestic” approved by the Commission for FY2020-21 are given in the Table below:

Category	Consumer Category	LT SUPPLY		↔	HT SUPPLY			
		Fixed / Demand Charges per month (Rs./HP or kW)	Energy Charges (Rs./Unit)		Fixed / Demand Charges per month (Rs./kVA)	Energy Charges (Rs./Unit)		
						11 kV	33 kV	132 kV & above
I	DOMESTIC							
	(A) : Domestic (Telescopic)							
	Group A : Consumption ≤ 75 Units during the billing month							
	0-50	-	1.45	kWh	-	-	-	-
	51-75	-	2.60	kWh	-	-	-	-
	Group B: Consumption > 75 and ≤ 225 units during the billing month							
	0-50	-	2.60	kWh	-	-	-	-
	51-100	-	2.60	kWh	-	-	-	-
	101-200	-	3.60	kWh	-	-	-	-
	201-225	-	6.90	kWh	-	-	-	-
	Group C: Consumption > 225 units during the billing month							
	0-50	-	2.65	kWh	-	-	-	-
	51-100	-	3.35	kWh	-	-	-	-
	101-200	-	5.40	kWh	-	-	-	-
	201-300	-	7.10	kWh	-	-	-	-
	301-400	-	7.95	kWh	-	-	-	-
	401-500	-	8.50	kWh	-	-	-	-
	Above 500 units	-	9.95	kWh	-	-	-	-
	Consumers whose consumption is more than 500 units per month can opt for smart meters and ToD rebate of Rs.1 per unit is applicable for such consumers for the consumption between 10 AM to 12 Noon.							
	(B) : Townships, Colonies, Gated Communities, and Villas	-	-	kVAh	75	7.00	7.00	7.00

202. CATEGORY-II: COMMERCIAL & OTHERS**Proposal**

- (i) Category-II(A): LT Commercial** - The licensees propose to divide the existing sub-category ‘Category-II(A): LT Commercial’ into two (2) sub-categories i.e. ‘Category-II(A): LT Commercial’ for consumption, less than or equal to 50 units per month and ‘Category-II(B): LT Commercial’ for consumption, greater than 50 units per month, without change in the tariffs.
- (ii) Category-II(C) & II(D): LT** - The licensees propose to merge the existing sub-categories of “Category-II(C): LT Advertising Hoardings” and “Category-II(D): LT Function Halls / Auditoria, Startup power and E.V. Charging Stations” into a single sub-category and to name it as “Category-II(C): LT General”, proposing to apply the existing energy charges of ₹12.25 per unit applicable for “Category-II(C): LT Advertising Hoardings” and to increase the Fixed Charges from ₹75 per kW/month to ₹100 per kW/month. Additionally, the Railway stations and Bus stations for whom the “Category-II(A): LT Commercial” is applicable now, are proposed to be brought under the applicability of “Category-II (C) : LT General.”

- (iii) **Category-II(B) & II(E): HT** - The licensees propose to merge the existing 'Category-II(B): HT Public Infrastructure and Tourism' and 'Category-II(E): HT EV Charging Stations' into the existing 'Category-II(A): HT Commercial' and to rename it as 'Category-II(A): HT General'. The existing and proposed tariffs are as given in the table below:

Category	11 kV	33 kV	132 kV and above
Existing Sub-categories & Tariff (₹/Unit):			
Category-II(A): HT Commercial	7.65	6.95	6.70
TOD peak (6PM to 10PM)	8.65	7.95	7.70
Category-II(B): HT Public Infrastructure and Tourism	7.30	6.65	6.35
TOD peak (6PM to 10PM)	8.30	7.65	7.35
Category-II(E): HT EV Charging Stations	5.00	5.00	5.00
Proposed Sub-category & Tariff (₹/Unit):			
Category-II(A): HT General	7.65	7.50	7.35
TOD peak (6PM to 10PM)	8.65	8.50	8.35

- (iv) **Category-II(D) & II (F) : HT** - The licensees propose to merge the existing 'Category-II(D): HT Function Halls/Auditoria, Startup power' & 'Category-II(F): HT Green power' into single sub-category and to name it as 'Category-II(B): HT Occasional'. The existing and proposed tariffs are as given in the table below:

Voltage level	11 Kv	33 kV	132 kV and above
Existing Sub-categories & Tariff (₹/Unit):			
Category-II(D): HT Function Halls / Auditoria, Startup power	11.75	11.75	11.75
Category-II(F): HT Green power	11.30	11.30	11.30
Proposed Sub-category & Tariff (₹/Unit):			
Category-II(B): HT Occasional	12.25	12.25	12.25

Views / Objections / Suggestions

Green Power category

- a) Sri S. Suryaprakasha Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad has stated that the proposal to reduce the sub-categories in HT-Category-II: Commercial & Occasional from 5 to 2 is welcome and deserves to be richly complimented. However, "Green Power" consumer class is a misnomer. It

appears to have been conceived as a measure for promoting RE sources when RE generation cost was high. When RE generation cost came down substantially in the last few years such classification has no nexus with the objective sought to be achieved. Classification of consumers should normally be based on the character of load broadly reflected by the parameters mentioned u/s 62 (3) of EA 2003. Sub-classification of 'Green Power' may please be dispensed with.

APSPDCL Response: Under the purview of the Commission.

APEPDCL Response: The sub classification “Green Power” is envisaged for such consumer units whose power requirement purely dependent on Solar/Wind Energy installed in their premises and occasionally require on Licensee’s supply during maintenance period.

Commission’s view: From the statistics produced before this Commission, it is noticed that only one consumer of APSPDCL is presently in existence. He has not raised any grievance. On the contrary, when this category was done away with during FY2017-18, he approached the Commission with a request to restore this category. Accordingly, from the FY2018-19, this category was restored. Therefore, the Commission sees no reason to remove this category.

- b) Sri Syed Parvez, Karvetinagaram, Chittoor District has requested that the existing tariff for Non-domestic/Commercial consumers upto 50 units has to be reduced to ₹3.00 per unit from the existing tariff of ₹5.40/unit, which is high for such consumers who fell in this category.

APSPDCL Response: The cost of service of LT Category is ₹7.55 per unit. So, it is not justifiable to reduce the charges from ₹5.40 per unit.

- c) Sri C.V. Mohan Rao, Repalle Pattanabivruddi Sangham has requested to implement separate tariff for the commercial services of rural and urban areas, so that the activities in those areas will also develop.
- d) Sri O.L. Kantha Rao, Secretary, A.P. Textile Mills Association, Guntur, Sri R. Shivkumar, A.P. Spinning Mills Association and Smt. P. Vydehi, FAPCCI have stated that the non-domestic (commercial) and HT tariffs are significantly over 120% of the average cost of supply.

Commission’s decision: It appears that the licensees are confused about the classification of categories and sub-categories approved by the Commission in FY2019-20 as can be seen from their proposal in HT Supply compared with the proposal made under LT Supply. After examining the proposal of the licensees, views / objections / suggestions and response of the DISCOMs in this regard, the Commission does not propose to accept the changes as proposed by the licensees and decided to modify the proposed categorisation as detailed below:

- I. The proposal of segregation in Category II(A) is accepted and the sub-categories are named as “Category II (A) (i): Commercial (Minor) - LT” for consumption ≤ 50 units per month and “Category II (A) (ii): Commercial (Major) - LT” for consumption > 50 units per month. The tariffs are kept at the same level as in FY2019-20.
 - II. The need for having a separate sub-category for “Advertising hoardings and Function halls and auditoria” is not felt as the end use of energy is for Commercial activities and accordingly, they are included in Category II (A) – Commercial with clear identity for these activities. Though clubbing of these sub-categories is not accepted, the tariff – Fixed Charges @ ₹100 per kW per month and Energy Charges @ ₹ 12.25 per unit as proposed by the licensees, is accepted.
 - III. The sub-category in respect of “Start-up Power for Captive Generating Plants or Co-Generation Plants or Renewable Energy Generation Plants” was introduced pursuant to the provisions of Regulation No. 3 of 2017 and it has to be continued as a separate sub-category and the tariff of ₹12.25 per unit as proposed by the licensees without any demand charges is accepted.
 - IV. The draft National Tariff Policy suggested to have a separate sub-category for Electric Vehicles (EVs) and hence a separate sub-category for EVs is retained. However, the tariff of ₹12.25 per unit with fixed charges of ₹100 per kW per month proposed by the licensees is not accepted by the Commission but is increased from ₹5.00 per unit to ₹6.70 per unit without any demand charges with a view to promote usage of electric vehicles which are environmental friendly.
 - V. A separate sub-category is not required for Public Infrastructure and Tourism and accordingly as proposed by the licensees the same are included in “Category II (A): Commercial.”
 - VI. A separate sub-category for “Green Power” is retained, for the reasons mentioned supra, under “Category II(D): Green Power”. However, the tariff of ₹12.25 per unit proposed by the licensees is accepted.
 - VII. The proposal of the licensees to adopt the tariff of ₹12.25 per unit with fixed charges of ₹100 per kW per month for Bus stations and Railway Stations is unreasonable as these are service utilities serving general public at large. Hence, the tariff proposed is not accepted and the Bus-stations and Railways are retained in the Category-II (A) – Commercial.
- 203.** In view of the above discussions and decisions, the slabs and tariffs for “Category-II: Commercial and Others” approved by the Commission for FY2020-21 are given in the Table below:

Category	Consumer Category	LT SUPPLY		↔ Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (Rs./HP or kW)	Energy Charges (Rs./Unit)		Fixed / Demand Charges per month (Rs./kVA)	Energy Charges (Rs./Unit)		
						11 kV	33 kV	132 kV & above
II	COMMERCIAL & OTHERS							
	(A) : Commercial							
	(i) Minor 0-50 Units	55/kW	5.40	kWh/kVAh	-	-	-	-
	(ii) Major							
	0-50	75/kW	6.90	kWh/kVAh	475	7.65	6.95	6.70
	51-100		7.65	kWh/kVAh				
	101-300		9.05	kWh/kVAh				
	301-500		9.60	kWh/kVAh				
	Above 500 units		10.15	kWh/kVAh				
	Time of Day tariff (TOD)- Peak (6 PM to 10 PM)	-	-	kWh/kVAh		8.65	7.95	7.70
	(iii) Advertising Hoardings	100/kW	12.25	kWh/kVAh	-	-	-	-
	(iv) Function halls / Auditoriums	100/kW	12.25	kWh/kVAh	-	12.25	12.25	12.25
	(B) : Startup power	-	12.25	kWh/kVAh	-	12.25	12.25	12.25
	(C) : Electric Vehicles / Charging Stations	-	6.70	kWh/kVAh	-	6.70	6.70	6.70
	(D) : Green Power	-	12.25	kWh/kVAh	-	12.25	12.25	12.25

204. CATEGORY-III: INDUSTRY

Proposal

- (i) **Category-III (A): HT Industry General** - The licensees propose to increase energy charges from ₹6.30 / unit to ₹7.00/ unit for industrial colonies consumption and also to withdraw the load factor incentive for Category III(A): HT Industry General.
- (ii) **Category-III (C): HT Energy Intensive Industries** – The licensees propose the following additional condition under specific conditions applicable to Energy Intensive industries:

“If the monthly consumption of Energy Intensive Industries falls below 85% Load utilization factor during any billing month, the consumer shall be billed in Category-III (A): HT Industry General in the billing month”.

Views / Objections / Suggestions

Load Factor Incentive

- a) Sri C.V. Atchut Rao and Sri Bhushan Rastogi, Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI), Vijayawada have stated that Load factor incentive should be provided in the lines of many States like Madhya Pradesh, Chattisgarh etc. to encourage Consumers with higher loads so that it may result in increased sales, higher PLFs for thermal Plants for welfare of all stakeholders.
- b) Sri S. Suryaprakasha Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad has stated that HT- Category-III A: Industrial - General is the main subsidizing category which contributes bulk of the 'cross subsidy' for domestic/agriculture categories. DISCOMs should be complimented for not proposing any increase in Tariffs. However, the proposal of DISCOMs to withdraw load factor incentive is liable to be rejected and the existing high Demand Charge

rate needs review by the Commission. The proposal of DISCOMs to withdraw Load Factor (L/F) incentive is a retrograde step and is against the statutory guidelines on encouraging efficiency in performance (efficient use of energy) u/s 61(c) and (e) of Electricity Act, 2003 and safeguarding of consumer interest u/s 61(d). The proposal therefore deserves to be rejected by the Commission, more so when the DISCOMs have not stated any reasons for such withdrawal. The L/F incentive available even for industries operating at a high load factor of 85 % of is only about 8 paise per unit under para 4.3.1.1 of Tariff Order of FY2019-20.

Further, it would be rational and prudent to specify the L/F incentive as a percentage of the Energy Charge. Hence, this Commission may consider to allow incentive in terms of % reduction in energy charge for the energy consumed over a specified L/F, so that an industry operating at 85% L/F would get at least 10 to 15% relief in the overall energy charge. This would induce Major Industrial sectors to adopt the processes of high load factor which is in the interest of efficient use of energy mandated u/s 61 of EA 2003. Such relief up to 15% in the overall tariff is justified especially when the tariff for this category contains substantial cross subsidy of about 35% which is required to be reduced progressively as per Sec. 61(g) of EA 2003. This will also be in line with the Tariff Policy notified by Central Government u/s 3 of the Act which mandates that tariffs shall be brought within +/- 20% of average cost of supply progressively, vide para 8.3(2).

- c) Sri O.L. Kantha Rao, Secretary, A.P. Textile Mills Association, Guntur, Sri R. Shivkumar, A.P. Spinning Mills Association and Smt. P. Vydehi, FAPCCI has stated that Load Factor of a consumer gives the actual duration of energy drawl by the consumer against the sanctioned demand. An improvement in the load factor entails improved utilization of the power capacity, increased sales for the DISCOMS as well as an improved PLF of the generation sources. Given the power surplus situation as has been repeatedly claimed by DISCOMS, any impetus to increase the system load factor would lead to a win-win situation for everyone. While the sales and corresponding revenue would increase for the DISCOMS, effective per unit Fixed Cost for the consumers would also see a corresponding reduction for the consumers, thereby benefitting the entire power system of the State.

A number of State Electricity Regulatory Commissions in the country currently allow load factor incentive since it is a reward mechanism for promoting efficiency and leads to lowering of cost burden for the consumers as well as aid in improved utilization of surplus generation capacity. Additionally, the rebate will propel more industrial consumers to stay with the DISCOMS for meeting their power requirements and not avail open access route for the same. In view of the above, they have requested to allow load factor rebates.

- d) Sri Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that Load factor incentive was allowed

by the Commission in 2019-20 and is now proposed to be withdrawn without providing any justification. This is one of the best encouragements for maintenance of plant load factor which is useful for the DISCOMs for consistency of the grid loads as well as for the consumers for reduction of average cost to some extent. Load factor incentive to be continued.

- e) Sri K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that Load factor incentive is introduced in the last tariff year for the industrial consumers to divert the industrial consumers from IEX purchases. This is to be continued to encourage the industry to utilize the DISCOM power for consistent load consumption.
- f) Sri Suresh Khandelwal, Sri Srikalahasthi Pipes Limited, Chief Operating Officer, Srikalahasti (M), Chittoor District has stated that in the ARR for 2020-21, the load factor incentive is sought to be withdrawn. In the scenario of surplus power, this step would be counter-productive. It is therefore requested not to withdraw this incentive.
- g) Sri Penumalli Madhu, State Secretary, Communist Party of India (Marxist), Vijayawada, Sri Ch. Narasingarao, CPI (M), A.P. State Secretariat Member, Visakhapatnam, Sri Kandharapu Murali, CPM Secretariat Member, Tirupati, Sri M. Venugopala Rao, Senior Journalist and Convener of Centre for Power Studies, Hyderabad have stated that the proposal of the DISCOMs to withdraw the load factor incentive scheme for the category of HT-III-A industry (general) is welcome. In the past, implementation of the scheme turned out to be manipulatory. They have requested to approve the proposal.

DISCOMs' Response: The Power Purchase cost has increased substantially over a period of time due to increase in Coal cost, Transport charges, Obligation to purchase RE power in view of Renewable Power Purchase Obligation, Market purchases during Exigencies etc. In spite of the same, no increase in charges is proposed to industries and the off-peak incentive is retained. However, it is proposed to withdraw the Load Factor incentive as this is an additional burden to the Licensees in addition to Off-Peak incentive. The suggestion of the objectors supporting the withdrawal of load factor incentive is welcome.

Commission's view: Load Factor Incentive for industry was introduced during the FY2019-20 keeping in view the surplus power available in the State. As the situation of surplus power continues to exist in FY2020-21 also as per the estimations of the Commission for FY2020-21, the Commission finds no merit in the proposal of the DISCOMs to withdraw the load factor incentive for industry in FY2020-21. Therefore, the Commission decides to continue the Load Factor Incentive for "Category-III: Industry (General) – HT", in FY2020-21 also.

Condition of 85% minimum consumption for Energy Intensive Industries

- h) Sri M.S.S. Sarma and Sri P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association have stated that as part of the revival effort, the Group of Ministers recommended to the Government to remove the Deemed Energy Consumption Clause which envisaged 85% minimum Consumption on yearly basis as it had played havoc with the Sector and was a cause of litigation. Several units were forced to pay huge amounts as deemed consumption charges draining their working capital and eroding the net worth. In line with the recommendation of the GOM and after careful study, APERC has kindly repealed Deemed Energy Consumption Clause which envisaged 85% minimum Consumption on yearly basis and replaced it with the Minimum Consumption Clause at 50 kVAh/kVA/month in the year 2017 bringing great relief to the consumers. The intrinsic nature of the Industry is high load factor based and it does not alter in normal operation. It is only because of Operational constraints i.e. interruptions caused by various reasons like maintenance issues, power failures or non-operation for business reasons in times of volatile market conditions prevalent globally that the Load Factor may alter or reduce. Imposing such a stringent condition is highly counterproductive to the interests of both consumers as well as DISCOMs and is totally insensitive and uncalled for in the present economic Slowdown to say the least. It would be analogous to levying unbearable penalties on Thermal Power Plants in the Country for operating at 50-55% PLF while in the past the same units operated at about 80- 90%. Hence, they have requested to defer the proposed changes in these gloomy economic conditions where core sector demand is contracting. A balanced approach may be considered next year after proper appraisal.
- i) Sri Penumalli Madhu, State Secretary, Communist Party of India (Marxist), Vijayawada, Sri Ch. Narasingarao, CPI (M), A.P. State Secretariat Member, Visakhapatnam, Sri Kandharapu Murali, CPM Secretariat Member, Tirupati, Sri M. Venugopala Rao, Senior Journalist and Convener of Centre for Power Studies, Hyderabad have stated that due to slowdown of the economy and demand constraint from the automobile industry, the Ferro Alloy units in Andhra Pradesh are already facing a slump. In such a situation, if the condition proposed by the DISCOMs to bill in HT-III-A category for any billing month if the monthly consumption falls below 85% load utilization factor, it would further weaken the position of the Ferro Alloy industries. In the interest of the survival of these industrial units and protecting jobs of workers, they have requested to consider the proposal of the DISCOMs by reducing load utilization factor from the proposed 85% to 70%.
- j) Sri S. Suryaprakasha Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad has stated that the DISCOMs' proposal that "If the monthly consumption of Energy Intensive Industries falls below 85% Load utilization factor during any billing month, the consumer shall be billed in

HT-1-A Industry General Category in the billing month", is perhaps a draconian proposition. If a consumer availing supply for a CMD of 5000 kVA consumes 30.59 lakhs units instead of 30.60 lakhs units, he will have to shell down ₹39 lakhs extra for that month for a mere short fall of 1000 units. (23.75 lakhs ₹475 / KVA towards Demand Charges and 15.30 lakhs @50 p/unit (5.85-5.35). It would be rational to charge the differential in Energy Charges on the shortfall energy below 85% and Demand Charges may be charged on the Demand corresponding to shortfall energy computed on prorated basis in the ratio of shortfall energy to 85% Load Factor energy.

- k) Sri Suresh Khandelwal, Sri Srikalahasthi Pipes Limited, Chief Operating Officer, Srikalahasthi (M), Chittoor District has stated that Ferro Alloys industry is passing through a demand crisis, as the industry of state of Andhra Pradesh is not able to compete due to very high-power cost. Many units have shut-down or reduced their production level. The units which are operating are also operating at a level of 50-60% only. Thus, to expect 85% load utilization from them in the current scenario is not practical. This would cripple their viability further and those units which are operating at lower levels would also have to shut down their plants. He therefore requested that the condition of 85% should be brought down to 50% at 132 kV. From the proposed ARR, it is not clear whether specific conditions No. i - ii - iii will continue or have been substituted by the above condition of 85% load utilization.

DISCOMs' Response: Ferro Alloy Industries already have the privilege of utilisation of power at a concessional Tariff. The concessional Tariff is extended keeping in view that the Ferro Alloy industries are Power intensive for which the Load factor shall be above 85% and accordingly they are supposed to pay deemed consumption charges calculated with 85% load factor in previous years. Thus, having been availing concessional Tariffs, these Power Intensive Industries are obligated to maintain 85% and above load factor invariably. 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.

Commission's view: Having regard to the volatile market conditions of the Ferro Alloys Industries and the various other problems projected by this sector through the objections noted above, the Commission does not find any reason to vary the existing condition and accordingly, it has decided to reject the proposal of the DISCOMs to prescribe minimum of 85% load factor for "Category III (C): Energy Intensive Industries".

Treating Chloro-Alkali industries and Aluminium Alloy Wheel manufacturing as Energy Intensive Industries

- l) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has requested to consider all the Chloro-Alkali continuous process Industries into Energy Intensive Industrial category on par with Ferro Alloys Industries as 70% of the production cost is towards Electricity Consumption and power is the main raw material. This is a long pending request since so many years. The required inputs were already submitted to the Expert Committee as directed by the Commission long back while issuing Retail Supply Tariff Order for the Financial Year 2019-20, but there are no further developments in this regard and remains unfruitful. So, they have requested to look after on this request and accord suitable proceedings to categorise chloro-alkali industries as Energy Intensive Industries and allow all the benefits on par with Ferro Alloys Industries.
- m) Sri B.S.S.V. Narayana, M/s Synergies Castings Ltd., Visakhapatnam has requested the Commission to declare their Aluminium Alloy Wheel manufacturing unit under Energy Intensive Industry category stating that Power is one of the major factor of their product costs which are higher than other countries from where they are facing competition.

APEPDCL Response: As per directions of the Commission in T.O. FY2019-20, an in-depth analysis was made and report submitted to the Commission to consider the Load factor of 85% on par with Ferro Alloys. Thus, the matter is under the purview of the Commission.

Commission's view: Historically the category of Chloro-Alkali industries and Aluminium Alloy manufacturing units were never included in the category of power intensive consumers. Therefore, the Commission does not find any justifiable reason to accept the requests of the objectors.

Tariff difference between 132 and 33 kV Energy Intensive Industries consumers

- n) Sri M.S.S. Sarma and Sri P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association have stated that while introducing separate category for Ferro Alloys Industry in 2002, the tariff was made common across all voltage levels. Again in 2012, during the hefty upward revision of Tariff from ₹2.65 to ₹3.65, voltage level Tariff was introduced with a difference of 40 paise i.e. Tariff for 33 kV units was raised from ₹2.65 to ₹4.05 in one stroke subjecting the hapless SME Consumers to a Tariff shock. While the Government has been by and large considerate to the Ferro Alloy Industry in general, the 33 kV Consumers who are already at a disadvantage of scale are at a substantial disadvantage and are not able to get any succor despite repeated appeals. Hence, they are the early casualties in times of downturn as in present times. They have requested to bring down the tariff difference between the consumers of 33 kV and 132 kV to a reasonable level as in other States like Gujarat,

West Bengal, Jharkhand, Tamilnadu, Karnataka etc. keeping in view the Power Intensive nature and thereby price sensitivity.

- o) Sri C.V. Atchut Rao and Sri Bhushan Rastogi, Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI), Vijayawada have stated the difference in Tariffs of 132 kV and 33 kV Consumers at 40 paise is glaringly high. In most other states like Gujarat, Madhya Pradesh, Chattisgarh, Karnataka etc. the difference is marginal and mostly less than 10 paise. Hence to facilitate growth of 33 kV Consumption in the present context of need for increased industrial consumption levels to offset the surplus and also the need to provide the basic inputs to industry at an affordable cost to make the manufacturing Sector more competitive, specially the 'Power Intensive Sectors', this anomaly has to be corrected and parity be maintained.
- p) Sri O.L. Kantha Rao, Secretary, A.P.Textile Mills Association, Guntur, Sri R. Shivkumar, A.P. Spinning Mills Association and Smt. P. Vydehi, FAPCCI have stated that the Objector Association comprises different types of industries like Spinning Mills, Ferro Alloys etc., which have a similar product portfolio, but have electricity supply at 33 kV or 132 kV voltage levels. The difference between energy charges approved for the different voltage levels in the retail tariff schedule is significantly higher than the difference in cost of supply for such voltage levels. So effectively, this skewed tariff, disproportionately increases the cost of energy purchased by an industrial consumer who faces a competitive disadvantage for operating at a different voltage level. Although the difference in the approved cost of supply in 2019-20 between the two voltage levels is to the tune of 19 paise (in APSPDCL), the difference in energy charges approved in the schedule is 45 paise; it implies that the 33 kV consumers are levied higher Cross Subsidy of (45-19) 26 paise. This is arbitrary and discriminatory and hence has to be withdrawn at the earliest. Since the output product are similar and have the same markets, the smaller units in 33 kV are put to unreasonable disadvantage rendering them uncompetitive because of the substantially higher input costs.

The Karnataka Electricity Regulatory Commission (KEREC) determines one single rate for HT Industrial category and allows a miniscule rebate of 2-5 paise for different voltage level of supply. Gujarat Electricity Commission allows for a 0.5% - 1% discount for EHT supply, wherein only one single rate for HT Industrial Tariff is determined. Tamil Nadu Electricity Regulatory Commission determines one single rate for HT industrial category irrespective of voltage levels. In light of the above, and to promote a level playing field for industries it is prayed that although the DISCOMs have not sought a tariff revision, the existing retail energy charges may be modified so that the gap between applicable energy charges for 33 kV and 132 kV is reduced to lowest possible levels in proportion to the difference in their cost of supply. Alternatively, in absence of an approved category-wise cost and voltage wise cost of

supply, and till the time the retail tariff schedule is reflective of the cost of supply, the Commission may fix a unified tariff for HT industrial categories and may propose some rebate based on the voltage of supply which will also be in line with the Central Government's suggestions to reduce the no. of tariff categories and will promote ease of doing business in the State.

- q) Sri Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that erratic tariff level difference between the 33 kV and 132 kV consumers i.e. about 45 paise, many of them are in the same line of activity /loosing level equality of the same platform. The difference is to be corrected by considering the Cost of Service. Many States are following tariff for the both categories with minimal negligible difference.

DISCOMs' Response: As there is a difference in CoS of 23 Paise for 33 kV and 132 kV consumers, the request for maintenance of parity in respect of tariff for 33 kV and 132 kV consumers is not justified. The Tariff rates will be differing from State to State based on several factors apart from PP Cost. Licensees have not proposed any increase of Tariffs to Industries in FY2020-21 as an encouragement to the Energy Intensive Industries.

Especially for Energy Intensive Industries the Tariffs at 11/33/132 kV are ₹5.80 / 5.35 / 4.95 per unit respectively and there is a reasonable difference of 0.40p between 33 kV and 132 kV. Unlike other HT consumers, there are no demand charges to Energy Intensive Industries. Besides, the energy charges are at a concessional rate. Further the Tariff of Energy Intensive Industries are far less than the CoS @ ₹1.18 per unit at 11 kV level, ₹1.22 per unit at 33 kV level and ₹1.53 at 132 kV level in APEPDCL and less than the CoS @ ₹1.42 per unit at 11 kV level, ₹1.64 per unit at 33 kV level and ₹1.81 at 132 kV level in respect of APSPDCL. The DISCOMs and GoAP have been supporting Energy Intensive Industries always. Comparison with other States is not correct as the rates will be differing based on conditions including PP Cost. Thus, DISCOMs and AP State are always supporting Ferro Alloy Industries.

The licensees have not proposed any rebate to Industries in the present filings. However, in the event of GoAP proposes to provide rebate, concession etc., if any, u/s 65 of Electricity Act 2003 protecting the revenues of the DISCOM, the same will be obliged.

Commission's view: The difference in cost of service between 33 kV and 132 kV varies from year to year depending upon number of factors. Further, there has been no tariff hike for the last two years and no hike having been proposed for FY2020-21 for all Industries, the Commission doesn't find any reason to reduce the tariff for 33 kV consumers.

Separate category for Micro and Small Industries

r) Sri C.V. Atchut Rao, Sri P. Vijayagopala Reddy and Sri Bhushan Rastogi, Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI), Vijayawada have stated that the Commission removed LT III (B): Industrial category and merged it with HT I(A): 11 kV Industrial category in the Retail Supply Tariff Order for the year 2013-14. FAPCCI, on behalf of MSE Sector, is consistently requesting for creation of a separate category for MSE sector as treating the industrial consumers with a contracted load of 100 HP and above as HT-I Category is detrimental to the growth of the units by putting huge financial burden. They made the following requests:

- To create separate sub-category for MSEs:
- To treat all the industrial units with a Contracted Demand of 100 kVA and above up to 250 kVA as Small Scale Industries and making a separate category of these units for determination of energy and demand charges. (MSE category)
- To fix the Demand and Energy charges for the units under 11 kV with a Contracted Demand of up to 250 KVA at a lower Level.
- To remove the Time of the Day charges for these small scale industrial category.
- To make cross-subsidy Zero for MSE category as Andhra Pradesh State is now power surplus and it helps increasing the power consumption by industry.

Alternatively:

To Consider adoption of a structure on the lines of Gujarat State where in - for instance, Tariffs for HT Consumers for all voltage levels above 3.3 kV are as under:

Up to 500 KVA:

Demand Charges - ₹150/kVA/ Month & Energy Charges - ₹4.00 per unit

For next 500 KVA:

Demand Charges - ₹260/ Month & Energy Charges- ₹4.20 per unit.

For Billing Demand in excess of 1000 kVA:

Demand Charges - ₹475/Month & Energy Charges - ₹4.30 per unit.

DISCOMs' Response:

APSPDCL: As per the ARR & FPT filings for the ensuing year 2020-21, the fixed cost of power purchase is 32.11% of the total Power purchase Cost for APSPDCL. Whereas the fixed charges recovered from the tariffs in the form of Demand charges is 12.86% in the total revenue (excluding Non-Tariff Income) as per the filings.

APEPDCL: Licensee has been providing adequate network, Infrastructure facilities to cater the loads of MSME units also for which necessary Demand charges are payable by MSME units. As per the ARR & FPT filings for the ensuing year 2020-21,

the fixed cost of power purchase is 28.84% of the total Power purchase Cost for APEPDCL. Whereas the fixed charges recovered from the tariffs in the form of Demand charges is 10.31% in the total revenue (excluding Non-Tariff Income) as per the filings.

In spite of recovery of fixed cost being very less when compared to the actual cost incidence, the DISCOMs have not proposed any increase in charges but retained the same Fixed charges of FY2019-20 for FY2020-21 also in order to encourage MSME units.

Commission's view: Taking note of the huge gap between the expected revenue and expenditure for FY2020-21, creation of a separate category for Small Scale Industries with reduction in tariff as requested by the objectors would further widen this gap. Therefore, the Commission is unable to accept this suggestion and the same is accordingly rejected.

Enhancement of load limit to Rice Millers and Pulverisers under LT Supply

- s) Sri K. Madhusudana Reddy, Sri G. Venkata Ramana, Sri Galla Srinivasulu, Sri N. Pavan Kumar, Owners of Pulveriser Mills, Mangampeta (M), Kadapa Dist. have stated that the momentary changes of load causes spikes in Maximum Demand for the short duration, for which they were being levied additional load charges even though there was no physical additional capacity in the site. Paying additional load charges is onerous as the addition of contracted load would make them as HT consumers, for which they ought to pay 80% of the demand charges even during the off season. In this regard, they have requested to enhance the LT load limit to 125 HP, which will be sufficient for the momentary changes of the load.
- t) Sri Vijayabhaskar Gupta, President Rice millers association, Anantapur has stated that in the competition era in order to survive in the industry they have to produce the best quality of rice, for which the need of modern machinery with high load capacity is necessary, as the existing LT load limit of 100 HP would not be sufficient for the technologically up graded rice mills. In this regard, they have requested to enhance the LT load limit of rice mills to 150 HP which is prevailing in the neighboring State, Karnataka. Imposition of additional load for the spikes of CMD due to momentary changes of the load is not justifiable, as they are being levied with ACD charges annually.
- u) Sri Ch.V.R. Prasad and others, Adoni Rice millers Association have stated that the existing LT load limit of 100 HP would not be sufficient for the technologically upgraded rice mills. In this regard, they have requested to enhance the LT load limit of rice mills to 140 HP.
- v) Sri Rama Kumar, Executive Member, District Rice Miller Association, Srikakulam has stated that in the competition era in order that the industry survives they have to produce the best quality rice, for which they need modern machinery with high

load capacity and the existing LT load limit of 100 HP would not be sufficient for the technologically upgraded rice mills. In this regard, they have requested to enhance the LT load limit of rice mills to 150 HP.

- w) Sri A. Doraiah, President, The West Godavari District Rice Millers association, Tadepalligudem has stated that in the competition era for the industry to survive they have to produce the best quality rice and they need modern machinery with high load capacity and the existing LT load limit of 100 HP would not be sufficient for the technologically upgraded rice mills. He has therefore requested to enhance the LT load limit of rice mills to 180 HP.
- x) Sri Ramachandra Reddy, Manager, Rayalaseema Spinner Mills Association has stated that demand charge shall not be levied up to 150 HP of load. The ToD shall not be levied during peak loads and the tariff shall be reduced for the spinning mills.

Commission's view: The requests of the Pulverisers and Rice Millers are examined and the probable financial impact on the licensees if the requests are positively considered has been analysed based on the information subsequently obtained from the licensees. Accordingly, in consideration of these requests, the Commission decided to permit the above class of consumers upto a connected load of 150 HP under "Category III: Industry (General) – LT" with the following tariffs in order to strike a balance between the interests of these consumers and that of the licensees.

Connected Load	Fixed charges (₹/kW/Month)	Energy Charge (₹/kWh or kVAh)
Upto 100 HP	75.00	6.70
101 HP to 150 HP	275.00	6.70
Monthly minimum charges – NIL		

Note:

- The existing consumers whose connected load is more than 100 HP and upto 150 HP and are already availing supply under Category III (A) – HT Industry (General) shall be given option, either to continue to be billed in the same category or to be billed at the tariff as mentioned above, without disturbing the existing metering. The existing consumers shall give such option on or before 30.06.2020 failing which they shall continue to be billed as per Category III (A) – HT Industry (General).
- The new consumers with the contracted load between 100 HP and 150 HP may also opt to be billed as per the above tariff failing which they will be billed as per Category III (A) – HT Industry (General).

Concessional tariff and Separate category for Vishwakarma community activities in urban areas

- y) Sri N. Shanthi Kumar, General Secretary, Akhila Bharateeya Viswakarma Parishat has requested that, the services pertaining to Vishwakarma community activities need to be extended the power for ₹1.00/unit in urban areas. The services pertaining to Vishwakarma community activities need to be separately categorized and be named as Vishwakarma cottage industry category.

APSPDCL Response: The services pertaining to activities of Vishwa Karma community are categorized under cottage industries with applicable energy charges of ₹3.75/unit and Fixed charge ₹20/kW even though the cost of service of LT Category is ₹7.55/unit. Already, the tariff is far less than the cost of service. Hence, providing power for ₹1.00/ unit is not justifiable.

APSPDCL Response: The National Tariff policy has mandated to reduce the number of categories and sub-categories in periodical manner. Hence, creation of separate category for the activities of Vishwakarma community is against the National Tariff policy.

Commission's view: The Commission agrees with the views of the DISCOMs and sees no reason to accept the request.

- z) Sri A. Pullaiah, Secretary, CPI(M), Tirupati and Sri Ch. Babu Rao CPI(M), Vijayawada have stated that tariff benefits should be extended to the smallscale industries.

Reduce Demand and Energy Charges

- aa) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, W.G. District has stated that even though, there is no increase proposed in the Demand and Energy Charges, they are still on higher side due to lopsided policy of the Government to incentivize certain sections of society with free power policy & load. The HT consumers are bearing heavy financial burden leading to huge financial impact. He has requested to decrease the present Demand and Energy Charges for the survival of HT consumers particularly Chloro-Alkali Industry, who come under power intensive type consumers, to survive in the present Global Market.
- bb) Sri S. Suryaprakasha Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad has stated that existing rate of Demand Charge (DC) of ₹475/kVA/month is very high and is perhaps one of the reasons for industrial sickness in AP, especially in Small & Medium sectors. Such high level of DC is not conducive for industrial growth which is the dire need of residual AP. It is also not in the revenue interests of DISCOMs since the bulk of revenues are from energy charges which contain demand charge component also. The contention of DISCOMs that the DC is much less than the Fixed Charge being paid to generators is erroneous. Capacity Charge payable to generators is totally different from DC in retail tariffs

applicable for thousands of retail consumers. Further, the energy charge in retail tariffs is "not capped" at the variable charge of PPAs. As long as the energy charge is in the nature of a composite charge of both DC and VC, there is no need to seek higher DC more so when it proves counterproductive. Further, the consumer agreements do not provide for protection against high DC risk even in Force Majeure situations. It would be in the overall interest of both industrial & power sectors in AP to have a reasonable DC regime. Demand Charge may be reduced and specified in steps of ₹150 /250/ 300 per kVA / month according to Voltage (11 kV, 33 kV and EHT) or CMD (1500/5000/ >5000).

- cc) Sri Suresh Khandelwal, Sri Srikalahasthi Pipes Limited, Chief Operating Officer, Srikalahasti (M), Chittoor District has stated that the average basic cost of power drawn through open access for the calendar year 2019 works out to ₹3.17 per unit and even after adding Cross Subsidy charges and Wheeling charges, the over-all cost of power drawn through IEX would work out to less than ₹5.00 per unit compared to the grid power cost of ₹5.40 per unit. Also, the power cost prevalent in other States is lower than the tariff rate proposed. It is therefore requested that the tariff for HT-III (A) Industry General Category should be brought down from the proposed ₹5.40 per unit to ₹4.50 per unit.
- dd) Sri Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that Industrial Tariff of FY2017-18 gave a big blow to the HT consumers who are with plant load factor of below 50%, by increasing the demand charges from ₹350 to 475 per kVA. This made the consumers to pay ₹10 to 15 per unit, inclusive of fixed charges. Many agro based and casting units are victims of the high Tariff which is to be addressed to reduce the demand charges from ₹475 per kVA to at least ₹400 per kVA, for low plant load factor industries.
- ee) Sri K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that industrial consumers are already burdened in the 2017-18 tariff order by increasing the demand charges to ₹475/- per kVA. So that energy cost of industries now ranges from ₹6.50 to ₹15 per kVAh depending on the load factor. Industrial consumers with lower load factor are to be taken care of MD Charges.

APSPDCL Response: As per the ARR & FPT filings for the ensuing year 2020-21, the fixed cost of power purchase is 32.11% of the total Power purchase Cost for APSPDCL whereas the fixed charges recovered from the tariffs in the form of Demand charges is 12.86% in the total revenue (excluding Non-Tariff Income) as per the filings. In spite of recovery of fixed cost being very less when compared to the actual cost incidence, the DISCOM has not proposed any increase in charges but

retained the same Fixed charges of FY2019-20 for FY2020-21 also in order to encourage industrial consumers.

APEPDCL Response: As per the ARR & FPT filings for the ensuing year 2020-21, the fixed cost of power purchase is 28.84% of the total Power purchase Cost for APEPDCL whereas the fixed charges recovered from the tariffs in the form of Demand charges is 10.31% in the total revenue (excluding Non-Tariff Income) as per the filings. In spite of recovery of fixed cost being very less when compared to the actual cost incidence, the DISCOM has not proposed any increase in charges but retained the same Fixed charges of FY2019-20 for FY2020-21 also in order to encourage industrial consumers.

Commission's view: It is noteworthy that industrial tariff in the State of Andhra Pradesh has not been increased for the past two (2) years. On the contrary, during the previous year, the fractions in the tariffs have been rounded off to the lower side rather than to the higher side, thereby resulting in marginal reduction in tariff. The Commission has taken note of the spiralling prices of fuel and increased O & M expenses on the one side and increased growth in agriculture consumption which is fully subsidized by the Government. In spite of the same, DISCOMs have not proposed increase in industrial tariff for FY2020-21. The Commission has also noticed the huge gap between the expected revenue and expenditure. If the existing tariff is further reduced to the industrial consumers, this gap would further widen. Therefore, the Commission finds no justification in the request for reduction of industrial tariff. Further, a comparison of industrial tariffs approved for FY2020-21 with the respective tariffs of other States as in FY2019-20 is shown in the table below. As can be seen from the table, the Industrial Tariff of AP is very reasonable.

Comparison of Industrial Tariffs at different voltage levels (Rs./Unit) at 50% LF						
S. No.	State	11 KV	State	33 KV	State	≥ 132 KV
1	Gujarat	4.42	Gujarat	4.92	Gujarat	5.62
2	Odisha	5.77	Odisha	5.77	Odisha	6.00
3	Punjab	6.13	Punjab	6.13	Punjab	6.13
4	Tamilnadu	7.32	Andhra Pradesh	7.17	Andhra Pradesh	6.72
5	Maharastra	7.35	Telangana	7.23	Telangana	6.73
6	Andhra Pradesh	7.62	Tamilnadu	7.32	Uttara Pradesh	7.18
7	Karnataka	7.71	Maharastra	7.35	Tamilnadu	7.32
8	Telangana	7.73	Uttara Pradesh	7.61	Maharastra	7.35
9	Rajasthan	7.81	Karnataka	7.71	Karnataka	7.71
10	Uttara Pradesh	7.93	Rajasthan	7.81	Rajasthan	7.81
11	Madhya Pradesh	7.94	Delhi	8.44	Madhya Pradesh	8.3
12	Delhi	8.44	Madhya Pradesh	8.45	Delhi	8.44
13	West Bengal	8.73	West Bengal	8.7	West Bengal	8.65

Minimum 80% CMD charges to Chloro-alkali Industries

- ff) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has requested to direct withdrawal of the concept of 80% Minimum Billing on the Contracted Maximum Demand for at least the power intensive type of Chloro-alkali Industries.

APEPDCL Response: The 80% of minimum billing is envisaged as the DISCOM is obligated to be ready at all times with necessary network and equipment in order to cater to the loads of its HT consumers and accordingly the HT Agreement is concluded in accordance with General Terms and conditions of Supply.

Commission's view: When the DISCOMs are uniformly following the billing demand as the 80% of the CMD in respect of HT categories since the inception, the request for reduction of billing demand for Chloro-alkali has no justification.

TOD Charges

- gg) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has stated that TOD Charges have been introduced in the Tariff year 2012-13 for the consumed units during peak period when there was severe Restrictions & Controls on usage of Electricity due to severe power shortage earlier, prevailed at that point of time to maintain the Grid discipline. But, it is being continued in consequent years also even though there is no power shortage and surplus power is being available, which is totally unnecessary, unjustified and meaningless which will cause another additional burden on HT Consumers, even though it has been offered Incentive for the consumed units during Off-Peak Period @ ₹1.00 Ps. per Unit.

Therefore, he has requested to review the TOD CC charges for Peak Period Consumption for the benefit and survival of all HT consumers.

- hh) Sri Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that levy of TOD charges from 6 AM to 10 AM has no rationale and industry is strongly believing that it is meant for revenue collection from the industries without any logical means and it is to be withdrawn as proactive step. If it continues DISCOMs certainly loose important consumers from their list of premium consumers paying the charges all the time with higher Tariff.
- ii) Sri K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that TOD consideration in the morning from 6 to 10 AM is not rational, it is not intended to manage the load curve and by pass to hike average tariff.

APEPDCL 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. Otherwise there will be severe strain on the Grid during peak time when all loads incidence during that period causing operation of Grid critical. This also avoids

purchase of power if any, at a higher rate for that shorter period to meet the undue demand which in turn increases power purchase cost and is a burden on the consumers. Thus, it may please be noted that TOD is not intended for severe shortage period alone.

Commission's view: The Commission agrees with the views of the DISCOMs. The Commission also notes that by providing supply at reduced tariff during off-peak period, the disadvantage if any suffered by the consumer during ToD peak load period is adequately set-off.

HI-III (A) Category - Industrial Colony CC Charges

- jj) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has stated that tariff hike has been proposed for Industrial Colony CC Charges in present ARR Filings from the present rate @ ₹6.30 to ₹7.00 per unit which is irrational and un-justified since the industry has to look after the welfare of their employees, but the present filing is not like that. So, this proposed increase may be dropped.

APEPDCL Response: The Power Purchase cost has increased substantially over a period of time due to increase in Coal cost, Transport charges, Obligation to purchase RE power in view of Renewable Power Purchase Obligation, Market purchases during Exigencies etc., thus increasing the CoS. In spite of the same, no increase in Demand Charges is proposed to HT industries. The proposed increase is less than the CoS in LT level.

Commission's view: Having regard to the response of APEPDCL, which is sound and rational, the Commission finds no merit in this objection.

Penal charges for exceeding CMD

- kk) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has requested to withdraw levy of penal Energy Charges on exceeded Billed Demand over contracted maximum demand @ 120% and above, which attracts huge financial burden to the bulk consumers.
- ll) Sri S. Suryaprakasha Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad has stated that levy of additional charges both on Demand and on Energy that too on total consumption is irrational in a surplus power scenario and is highly detrimental to the object of improving revenues through H.T. sales promotion. In view of the availability of energy in excess of requirement, DISCOMs have to encourage more energy consumption even by exceeding the CMD and collect penal charges only on excess Demand without any penalty on energy. There should be no concern on safety of T&D networks due to exceeding of CMD by individual consumers in view of substantial diversity in the loads and also as the T & D networks have undergone substantial augmentation under various programs. In fact, excess CMD and corresponding

energy consumption contribute much needed cross subsidy. the Commission may please levy additional charge on excess Demand only. The provision for levy of penal charges on the energy may please be totally omitted.

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 in excess intermittently. This penal provision is meant for bringing in grid discipline as usage of excess demand beyond the sanctioned contracted maximum demand causes damage to the DISCOM's equipment and not permitted as per General Terms and Conditions of Supply.

Further, Sri Suresh Khandelwal, Sri Srikalahasthi Pipes Limited, Chief Operating Officer, Srikalahasthi (M), Chittoor District has stated in the public hearing held at Tirupati that the penalty for exceeding CMD is too steep in Andhra Pradesh in comparison to other States. The penal charges need to be brought down to a reasonable level. The Charges may be reduced as under:

- a. CMD up to 120% - Normal demand charges
- b. CMD above 120% -150% of normal demand charges beyond 120%

Commission's view: The Commission sees justification in the grievance of the objectors and has accordingly decided to prescribe the modified tariff conditions.

Affordable tariff for Ferro Alloys Industry

mm) Sri M.S.S. Sarma and Sri P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association have stated that though the DISCOMs have not proposed any increase in tariff for energy intensive industries, Ferro Alloys Industry requires further support from the DISCOMs & APERC by fixing affordable tariff, as power is the basic input raw material for this industry and in light of contraction of the Core Industries in difficult macroeconomic situation prevailing nationally as well as internationally. Though the Govt. of A.P. has sanctioned power rebate of 75 paise per unit for the FY 2017-18, the same is still not yet implemented. Thus, again the Ferro Alloys Industry is at brink of collapse. Most of the Ferro alloy units in the Country are located in the State of Andhra Pradesh and West Bengal (DVC area) where the power price is lesser than in AP and these units are having logistic advantage for transportation of reductants and ores. In the international scenario, the power tariff in China who is one of the largest ferro alloy producers in the world is at ₹3.50 per unit and countries like Malaysia are offering power at ₹ 2/- per unit for 10 years to attract investments. Considering the above, they have requested to fix affordable tariff to Ferro Alloys Industry for its survival as more than 60% of units are at the verge of closure if there is no support from the Govt. and the present tariff is totally unworkable in present market scenario.

DISCOMs' Response: Licensees are continuing the same lower Tariff far less than CoS for Ferro Alloys over a period without Demand charges and also supported Ferro Alloys as per Govt directions by implementing the power subsidy of ₹1.50 per unit in 2017-18 so that all Ferro Alloy units come into Full Operation. Accordingly, Ferro Alloy units availed the benefits and have come into full operations presently, as can be seen from the consumption pattern from 2016-17. Thus, extending any further benefits without GoAP support will affect the financial health of Licensees.

- nn) Further, Sri Suresh Khandelwal, Sri Srikalahasthi Pipes Limited, Chief Operating Officer, Srikalahasthi (M), Chittoor District has stated in the public hearing held at Tirupati that the Ferro Alloys units are struggling for survival owing to its in-competitiveness, due to high power cost in the State of Andhra Pradesh. It is therefore requested that the tariff for energy intensive industry should be brought down from the proposed ₹4.95 per unit to ₹3.50 per unit.

Commission's view: Commission does not find any merit in the request of the objectors.

Concessions to Plastic Recycling Units

- oo) Sri C.V. Atchut Rao and Sri Bhushan Rastogi, Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI), Vijayawada have stated that plastic recycling is really vital due to the environmental pollution caused by this non-biodegradable material. In the last few years, AP is attracting lot of industrial units in Plastic Industry and is slowly turning into one of the major 'Hubs' of plastic industry. Government must incentivize the plastic recycling units to offset the adverse effects of plastic usage and also encourage them to increase their number. Therefore, they have requested to provide special incentives to this industry by creating a special sub-category as is done for Ferro alloys industry keeping in view the social obligation towards environmental protection.

DISCOMs' Response: Licensees have not proposed any kind of incentives to the Plastic recycling Industries in the ARR Filings for FY2020-21. The licensees will oblige any concession as may be considered if any, by the GoAP u/s 65 of the Electricity Act protecting the revenues of the Licensees.

Commission's view: The Commission agrees with the stand taken by the DISCOMs.

Separate tariff for 132 kV, 220 kV and 400 kV Consumers

- pp) Sri M.R. Samanta Ray, Chief General Manager (Power), Visakhapatnam Steel Plant, Visakhapatnam has stated that APEPDCL has not proposed separate tariffs for consumers receiving power at a voltage more than 132 kV i.e. at 220 kV and 400kV, for the FY2020-21. It is a known fact that the system losses are reduced with increase in voltage, for the same quantum of power handled. Thus, the cost of supply at higher voltage levels shall be less compared to that at lower voltages. This cost advantage shall naturally be passed on to such category of consumers who are availing power

at higher voltages. DISCOMs in other States have voltage wise tariffs related to EHT consumers, having been approved by their respective State Electricity Regulatory Commissions (SERCs). RINL had requested to look into matter and requested for a separate tariff for 220 kV class consumers, while filing the suggestions/ objections on the ARR of FY2017-18, the ARR of FY2018-19 & on ARR of FY2019-2020. It is once again requested to fix a separate tariff for consumers availing power at 220 kV potential.

APEPDCL Response: Previously, as per the directions of the Commission, a committee was constituted on this matter and after a detailed study of other States' Tariffs and cases and directions of APTEL on such issues, the committee submitted a report to the commission concluding that determination of voltage wise tariff at EHT level is not technically possible. If at all it is assessed, it will be arbitrary and is not supported by any technical and commercial principles and methodology. Exploring the option of allowing a rebate doesn't arise at all (as done in the most of the States), even as a matter of encouragement, as it leads to discretion, as the decision is not based on scientific study.

For the reasons stated above, the request of the objector to extend some rebate/concession is not justified just because other States are extending rebate /concession.

Commission's view: The response of the APEPDCL as stated above in view of the findings of the committee seems reasonable. Hence, the request of the objector is not accepted.

- 205.** In view of the above discussions and decisions, the Commission has approved the tariffs for the "Category III: Industry" at the same level as in FY2019-20 and the details are given below:

Category	Consumer Category	LT SUPPLY		↔ Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (Rs./HP or kW)	Energy Charges (Rs./Unit)		Fixed / Demand Charges per month (Rs./kVA)	Energy Charges (Rs./Unit)		
						11 kV	33 kV	132 kV & above
III	INDUSTRY							
	(A) : Industry (General)#	75/kW	6.70	kWh/kVAh	475	6.30	5.85	5.40
	Time of Day tariff (TOD)- Peak (6 AM to 10 AM & 6 PM to 10 PM)	-	-			7.30	6.85	6.40
	Time of Day tariff (TOD) - Off Peak (10 PM to 6 AM)	-	-			5.30	4.85	4.40
	Industrial Colonies	-	-	kWh/kVAh	-	7.00	7.00	7.00
	(B) : Seasonal Industries (off- season)	75/kW	7.45	kWh/kVAh	475	7.65	6.95	6.70
	(C) : Energy Intensive Industries	-	-	kWh/kVAh	-	5.80	5.35	4.95
	(D) : Cottage Industries upto 10HP *	20/kW	3.75	kWh	-	-	-	-
	# - Rice mills and Pulverising units are permitted upto 150 HP in LT and as per the tariff mentioned in the terms and conditions.							
	* - Dhobighats shall be extended free power supply as per G.O.Rt.No.75, dt. 27-06-2018							

206. CATEGORY-IV: INSTITUTIONAL**Proposal**

- (i) **Category-IV (A), (B) and (C): LT** - The licensees propose to merge the existing sub-categories of “Category-IV(A): LT Street lighting”, “Category-IV(B): LT CPWS/PWS schemes” and “Category-IV(C): LT NTR Sujala Pathakam” into one subcategory as “Category-IV(A): LT Utilities”. The existing sub-categories & tariffs and proposed sub-category & tariffs are as given in the table below:

Category	Fixed Charges per month (₹/HP or KW)	Energy Charges (₹/Unit)
Existing:		
Category-IV(A): LT Street lighting		
(i) Panchayats	75	5.95
(ii) Municipalities	75	6.50
(iii) Municipal Corporations	75	7.05
Category-IV(B): LT CPWS/PWS schemes		
(i) Panchayats	75	4.85
(ii) Municipalities	75	5.95
(iii) Municipal Corporations	75	6.50
Category-IV(C): LT NTR Sujala Pathakam	10	4.00
Proposed:		
Category-IV(A): LT Utilities		
Panchayats	75	7.00
Urban Local bodies	75	7.00

- (ii) **Category-IV (B): HT** - The licensees propose to rename the existing “Category-IV(B): HT CPWS/PWS Schemes”, as “Category-IV(A): HT Utilities”. The existing sub-category & tariffs and proposed sub-category & tariffs are as given in the table below:

Category	Demand Charges (₹/kVA)	Energy Charges (₹/Unit)		
		11 kV	33 kV	132 kV and Above
Existing:				
Category-IV(B): HT CPWS/PWS Schemes	475	4.85	4.85	4.85
Proposed:				
Category-IV(A): HT Utilities	475	7.95	7.25	7.00

Views/Objections/Suggestions - Nil

Commission’s Decision: As the licensees’ proposal reduces the number of sub-categories; the proposal is justifiable and therefore the Commission merged these sub-

categories and named as “Category IV (A): Utilities (Street lighting, CPWS / PWS and NTR Sujala Pathakam)” with the tariffs as proposed by the licensees.

- (iii) **Category-IV (D): LT General Purpose** - The licensees propose to rename this category as ‘Category-IV (B): LT General’ and also propose to include Government offices under this category. The existing sub-category & tariffs and proposed sub-category & tariff are as given in the table below:

Category	Fixed Charges per month (₹/HP or kW)	Energy Charges (₹ / Unit)
Existing:		
Category-IV (D): LT General Purpose	30	7.25
Proposed:		
Category-IV (B): LT General	75	7.00

- (iv) **Category-IV (D): HT General Purpose** – At present applicability is not defined in HT Supply for this category. The licensees propose to bring Govt. offices, Govt. educational institutions / Hostels, Govt. Hospitals & Charitable institutions (for whom Category-II (A): HT Commercial is applicable hitherto) now under this category and to rename it as “Category-IV (B): HT General”. The existing and the proposed tariff are as given below:

Applicability	Fixed Charges per month (₹/HP or kW)	Energy Charges (₹ / Unit)
Existing - Category-II (A): HT Commercial		
11 kV	475	7.65
33 kV	475	6.95
132 kV	475	6.70
Proposed - Category-IV (B): HT General		
11 kV	475	7.95
33 kV	475	7.25
132 kV	475	7.00

Views/Objections/Suggestions - Nil

Commission’s Decision:

As proposed by the licensees, the General Purpose sub-category is also defined under HT Supply classification as in LT Supply classification. The tariffs as proposed by the licensees are approved for both HT and LT supplies.

- (v) **Category-IV (F): HT Railway traction** - The licensees propose to rename this category as “Category-IV (D): HT Railway traction” and to increase the energy charges from ₹3.75 to ₹6.50 per unit without any change in Demand Charges.

Views / Objections / Suggestions

Tariff is unreasonable

- a) Sri G.V. Mallikarjuna Rao, Chief Electrical Distribution Engineer SC 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. If the fare for passengers & Goods are increased to offset fuel (energy) cost, it will add to overall Inflation. Indian Railway avails traction power through 51 TSSs at 220/ 132 kV (36 Traction sub-stations of SC Railway, 2 of Southern Railway and 11 of East Coast Railways & 2 of South Western Railways) in Andhra Pradesh, The total connected load is 716 MVA and total consumption of Railway traction is 1527 million units projected for the year 2019-20 and paying a substantial amount of ₹810 Cr. to various DISCOMs in Andhra Pradesh. The increase in tariff by ₹2.75 per unit will result in to additional burden of ₹420 Cr./Annum to Railways. The Railways are a bulk consumer and pay major revenues to DISCOMs. Hence, the grievances of Railways are to be considered while fixing the tariff for HT-IV (D) 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 industries coming up in the area of coastal region and backward region like Rayalaseema in the newly formed Andhra Pradesh. Due to reasonable traction tariff for the last three years many Electrification projects could be justified and successfully completed in Andhra Pradesh State. Further, many new electrification projects are still under progress which can be sanctioned only if the traction tariff remains reasonable. Any increase in traction tariff will affect badly and not viable for the upcoming electrification projects and will slow down the existing projects also in A.P. and effects the development in infrastructure.

Traction Tariff Proposed for FY2020-21:

Year	Demand Charges (₹/kVA)	Energy Charges (₹/kVAh)	Average Unit Cost (₹/kVAh) @ 35% LF	% Increase
2019-20 (Present)	350	3.75	5.14	₹2.75 & 53.5%
2020-21 (Proposed)	350	6.50	7.89	

The increase in railway traction tariff of ₹2.75 /Unit (53.5%) is very high, highly unreasonable and unjustified. Higher traction tariff slashes Rate of Return (ROR) for the new electrification projects and existing electrification projects which are under progress which are making them non-viable. The tariff under category HT-IV (D) Railway traction is to be fixed reasonably or retain the existing tariff to encourage electrification projects in Andhra Pradesh.

He has further stated 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. Thus, Railways are improving base loads of DISCOMs and supporting the grid stability. Apart from this, Railways is maintaining higher power factor.

DISCOMs' Response: The Railways are purchasing power from DISCOMs to run the railways carriages for arranging transport to public and transportation of various goods duly collecting charges in various forms for the service rendered to the public. The DISCOMs are purchasing power from the generating stations and supplying power to the various sector of consumers with different tariffs duly considering subsidized tariffs with an intention to serve the public at large including Railways at a reduced tariff of ₹3.75 per unit of Energy charges and nominal demand charges of ₹350 per KVA in FY2019-20, without any profit motive. The fixed cost obligation to the generating stations was projected to be around ₹6882 Cr. for FY 2020-21 in case of APSPDCL. At the current tariffs, the APSPDCL is projected to recover only 32% of fixed charges paid to the generators and in case of APEPDCL the Fixed cost obligation of power purchase is 28.84% of the total Power purchase Cost whereas, the fixed charges recovery from the consumers in the form of Demand charges is 10.31% only out of the expected total revenue (excluding Non-Tariff Income). In spite of the above, the DISCOMs have not envisaged any increase in Demand charges though there is an obligation to the DISCOMs to pay fixed charges to the Generators. It may also be noted that the Indian Railways has various mechanisms to charge higher tariffs from the users depending on the Demand/Rush owing to Seasons/Festivals and they are also having the mechanism of charging higher price by virtue of dynamic pricing as and when required, whereas DISCOMs are obligated to supply power at any point of time but at a constant rate only to its consumers as determined by the Commission. Further, it may also be noted that this HT category should have been a subsidizing category on par with other HT categories but still the Licensees are supplying power at a lower Tariff when compared to other HT categories. The proposed increase in energy charges would support the DISCOM which is also a Govt. entity. Thus, the increase in energy charges is reasonable and fair.

The Power Purchase cost has increased substantially over a period of time due to increase in Coal cost, Transport charges, Obligation to purchase RE power in view

of Renewable Power Purchase Obligation, Market purchases during Exigencies etc., In spite of the same, no increase in Demand Charges is proposed but increase in energy charges has become inevitable.

There is no TOD tariff to this category unlike for other HT categories, but still licensees are obligated to supply power uninterruptedly meeting the demands of traction in spite of the loads of Railways is of varying nature incident intermittently on the grid.

Commission's view: Upon examination of the proposal of the licensees vis-à-vis the objections put forth by the Railways and the response of the licencees thereon, the Commission decides to fix the Railway tariff at ₹5.50 per unit against the proposal of ₹6.50 per unit without any increase in demand charges to balance the interests of both the parties. Even with the tariff of ₹5.50 per unit, the tariff for Railways in A.P. is less than some of the major States when compared at the rates applicable for FY2019-20 as can be seen from the table below:

S. No	State	Demand Charges Rs./kVA/ month	Energy Charges Rs./kWh	Effective Rate @50% Load Factor Rs./kWh
1	Uttarpradesh	400	8.50	9.61
2	Maharastra	391	7.00	8.09
3	Bihar	280	6.80	7.58
4	Punjab	230	6.87	7.51
5	Assam	300	6.45	7.28
6	Tamilnadu	300	6.35	7.18
7	Delhi	250	6.25	6.94
8	Karnataka	220	6.20	6.81
9	Madhya Pradesh	310	5.90	6.76
10	Haryana	160	6.35	6.79
11	Jharkhand	350	5.50	6.47
12	Andhra Pradesh (FY 2020-21)	350	5.50	6.47
13	Orissa	250	5.30	5.99
14	Kerala	300	5.10	5.93
15	Himachal Pradesh(FY 18-19)	400	4.70	5.81
16	Gujarath	180	5.00	5.50
17	Chattisgarh	350	4.20	5.17
18	Telangana	390	4.05	5.13
19	Uttarakhand	250	4.40	5.09

- 207.** Incorporating the changes in the proposals of the DISCOMs as discussed above, the approved schedule of tariffs for the “Category IV: Institutional” is as given below:

Category	Consumer Category	LT SUPPLY		↔ Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (Rs./HP or kW)	Energy Charges (Rs./Unit)		Fixed / Demand Charges per month (Rs./kVA)	Energy Charges (Rs./Unit)		
						11 kV	33 kV	132 kV & above
IV	INSTITUTIONAL							
	(A) : Utilites(Street Lighting, NTR Sujala Pathakam, CPWS and PWS)	75/kW	7.00	kWh	475	7.65	6.95	7.70
	(B) : General Purpose	75/kW	7.00	kWh/kVAh	475	7.95	7.25	7.00
	(C) : Religious Places							
	(i) ≤ 2 kW	30/kW	4.80	kWh	-	-	-	-
	(ii) > 2 kW	30/kW	5.00	kWh/kVAh	30	5.00	5.00	5.00
	(D) : Railway Traction	-	-	kVAh	350	5.50	5.50	5.50

208. CATEGORY-V: AGRICULTURE AND RELATED

Proposals

- (i) Category-V(A): LT** - The licensees propose a flat rate Tariff of ₹200/HP/month in place of energy charges of ₹2.50 per unit in respect of corporate farmers and also to make the DSM measures mandatory.
- (ii) Category-V(B): LT** - The licensees propose to make the DSM measures mandatory in respect of non-corporate farmers.
- (iii) Category-V(D): LT** – Poultry hatcheries & Poultry feed mixing plants, Aqua hatcheries & Aqua feed mixing plants, Floriculture in green houses - The licensees propose to increase the Energy Charges from ₹3.85 to ₹4.50 per unit without any change in Fixed Charges.
- (iv) Category-V(D): HT** - Poultry hatcheries & Poultry feed mixing plants, Aqua hatcheries & Aqua feed mixing plants, Floriculture in green houses - The licensees propose to increase the Energy Charges from ₹4.85 to ₹5.25 per unit without any change in Demand Charges.
- (v) Category-V(F): HT** – Govt. / Private lift irrigation schemes - The licensees propose to increase the energy charges from ₹5.80 to ₹7.15 per unit.

Views / Objections / Suggestions

Free power to corporate farmers

- a) Sri Katuru Hari Kishore Kumar Reddy, Sri Yellapu Suryanarayana, Sri Rasamsetty Raja Babu, Sri Balle Nageswara Rao, Sri Karisetti Ganga Prasad, Sri Kavuluri Pathi Raju, Sri Gandham Gopala Krishna, Sri Thirumulasetty Murali Nagendra Babu,

Sri Kanumuri Seetharamaraju, Sri Ramisetty Sathibabu, Sri Sarnala Rathnam, Sri Ghanta Naga Raju, Sri Cheti Venkata Swamy, Sri Cheti Nagasrinu, Sri Polyreddy Rammohan Reddy, Sri Pundla Srinivasulu Reddy, Sri Chintapalli Narayana Reddy, Sri Alturu Hari Sarvotham Reddy, Sri Thunduru Srinivasa Rao, Sri Maddipati Kasi Viswanadham, Sri Ravuri Raja Rao, Sri Parimi Venkata Raghavulu, Sri R. Rama Rao, Sri Eedu Gangadhara Rao, Sri Mullapudi Subbarao, Smt. Katuru Sobha Rani, Sri Jalagam Kumara Swamy, Sri Medasani Vijay Bhaskar, Sri G. Sri Krishna Kumar, Sri V. Asha Kiran, Sri Kakanuru Venkata Maheswara Reddy, Sri Bogalu Sri Hari Reddy, Sri Kanda Gopala Krishna, Sri Addagada Satish Kumar, Sri Tammanaboyina Nageswara Rao, Sri Bathina Perraju, Sri Gopu Narayana Murthy, Sri Gadagottu Srirambabu, Sri Vadlapudi Nageswara Rao, Sri D. Gangadhara Rao, Sri Kandru Venkata Ratnam, Sri Vemareddy Surendranath Reddy, Sri Indukuru Uday Kumar Reddy, Sri Dandu Abhilash Reddy of Bharatiya Kisan Sangh have stated that 9 hours free power supply shall be extended to agriculture bore wells in FY2020-21 without any restrictions based on income-tax assessment. That LT and HT Lift irrigation scheme agriculturists are being supplied free power without any restrictions with regard to income tax assessment. Likewise, LT-V(A) farmers should be supplied free power without any restrictions with regard to payment of income-tax. The restrictions are against Section 45(4) of the Electricity Act, 2003 according to which distribution licensee shall not show undue preference to any person or class of persons or discrimination against any person or class of persons. It would lead to undue practices.

APSPDCL Response: “Corporate farmer” means any person who is an Income Tax assessee within the meaning of Section 2(7) of the Income Tax Act, 1961, who is liable to pay taxes for the income which he earned from various sources during the assessment year and also does agriculture activities. A flat rate tariff of ₹200/HP/ Month is proposed in place of the present energy charges of ₹2.50 per unit. Lift irrigation service is issued for group of farmers. Hence, the request to provide free power to Category-V(A) (Corporate farmers) consumers on par with Category-V(B) consumers (Non-Corporate farmers) is not justifiable.

APEPDCL Response: A corporate farmer is an IT assesses as per the section 2(7) Income Tax Act, 1961. Corporate farmer directly involves in farming activities and is liable to pay taxes for the income which he earned from various. The Flat rate tariff ₹200/- per HP per month was proposed in place of present energy charges ₹2.50 per unit in this category.

- b) Sri Kandregula Venkata Ramana, Anakapalli(v), Visakhapatnam has suggested that the present proposal of removing the energy charges and incorporation of monthly fixed charges is beneficial to the corporate consumers.

Commission’s view: Among farmers, there being income tax assesseees on oneside and non-income tax assesseees on the other, they stand on a totally different footing

from each other. Therefore, fixing tariff for corporate farmers is not against Section 45(4) of the Electricity Act, 2003. Thus, the request for extending free power supply to corporate farmers on par with non-corporate farmers does not merit acceptance, more so when the licensees themselves proposed a flat rate tariff of ₹200 / HP for the corporate farmers instead of the earlier unit rate @ ₹2.50 which is stated to be beneficial to the corporate farmers as opined by the other objector.

- c) Sri K. Harikishorekumar Reddy and others as above have stated that the Cost of Service (CoS) for agriculture which was ₹4.28 per unit in FY2016-17 has increased to ₹7.15 per unit. Because of increase in CoS for agriculture, the lift irrigation farmers with 16 hours supply have to pay ₹7.15 per unit beyond the consumption of 1500 units per HP per annum, which is a burden to them. The tariff for LT Lift Irrigation schemes should be fixed at less than Cost of Service.

Sri D. Nageswara Rao, Gangalakurru Agraharam (V), Sri. M. Jamilu, Machavaram (V) Ambajipeta (M), Sri, Dr. Uppuganti Bhaskara Rao, Bandarulanka(V), Sri Thikkireddy Gopala Krishna, Batlapalem (V) Amalapuram (M) East Godavari Dist. have requested to charge the consumption above 1,200 units per year per HP at the rate of ₹3.75 paise per unit for L.T. LI schemes.

DISCOMs' Response: The Power purchase cost per unit in FY2016-17 was ₹3.72 and the energy charge for Lift irrigation in the year was ₹5.60 per unit. In the proposed tariff the energy charge for Lift Irrigation is ₹7.15 which has increased by 27.6% from that of FY2016-17 and the corresponding Power purchase cost per unit is ₹4.84 which has increased by 30.1% from FY2016-17. The increase of power purchase cost necessitates increase in tariff for Lift irrigation to ₹7.15, which is justifiable. Further, the charges are being levied for LT Lift Irrigation schemes, only for the consumption over and above 1500 units/HP/Annum.

Commission's view: The average consumption per HP per annum approved by the Commission is in the order of 1200 units whereas the LT Lift Irrigation schemes are given free power supply upto 1500 units per HP per annum. This category of consumers who are already conferred with a highly favorable treatment cannot therefore justifiably complain of levy of tariff on par with the cost of service for the consumption in excess of 1500 units/HP/annum.

Aquaculture and feed mixing plants' tariffs

- d) Sri T.V. Surya Prakash, DISCOM Secretary, APSEB Engineers' Association, Visakhapatnam has stated that the tariff fixed for aquaculture i.e. ₹3.85 per unit and fixed charges of ₹30/- per kW is very low. This requires upward revision. Further, the same tariff fixed for aquaculture-HT is not justified. He has requested to fix separate tariff for HT Aqua consumers on par with HT Industrial consumers as was done previously. That, there is an ambiguity regarding the tariff fixed for aqua feed mixing plants. Feed mixing plants shall mean plants run by farmers with 10 to 20 HP motors

for mixing of various ingredients but many multinational companies and corporate entities who manufacture aqua feed using high technology and export their feed to other countries and other States are clubbed into this category causing huge revenue loss to the Company. He has requested to make a distinction between aqua feed mixing plants and aqua feed manufacturing plants. If they are to be brought under the same category they may be treated on par with the industrial consumers and tariff may be fixed accordingly.

Commission's view: Tariffs for Aqua hatcheries and Aqua feed mixing plants are increased by ₹0.50 per unit over and above the tariff proposed by the DISCOMs duly creating separate categories for Aqua hatcheries and Aqua feed mixing plants and Poultry hatcheries and poultry feed mixing plants.

Extend free power to sugar cane crushing

- e) Free supply shall be extended to sugar cane crushing farmers, as Sugar cane crushing is an agricultural activity but not an industry.

APEPDCL Response: Free supply to sugar cane crushing is being extended as per Tariff Order for FY2019-20 of the Commission.

Commission's view: This issue was already addressed in Retail Supply Tariff Order for FY2019-20.

- f) Sri Kandregula Venkata Ramana, Anakapalli(v), Visakhapatnam has stated that it is not justifiable to provide free power to nurseries as they are doing crores of business.

Commission's view: The State government has issued G.O.Rt.No.39 dated 14.03.2018 extending the benefit of free power to this category on par with Agriculture consumers (Free Category). As the cost of power is fully reimbursed through subsidy, the same is factored in the revenue calculations and therefore, this would not affect the interests of any other consumer category.

Reduce Tariff to Poultry Hatcheries and Feed mixing Plants

- g) Dr. V. Sundar Naidu, President, Andhra Pradesh Poultry Federation, Vijayawada has stated that keeping in view the high electricity charges, the poultry farmers are struggling to pay the electricity bills every month. Therefore, he has requested not to increase the electricity charges and to slash the Demand Charges for FY2020-21 to help survival of the poultry sector.

DISCOMs' Response: There is a separate dispensation for poultry farms and feed mixing plants in view of the line of activity & purpose of usage between feed mixing plant & poultry farms. Further, as the line of activity is related to Agriculture, the classification is done under Agriculture & Related in Tariff Order FY2019-20 and the DISCOMs proposed to continue the same classification in FY2020-21 as follows:

Poultry Farms comes under		Poultry Hatcheries and Poultry Feed Mixing Plants come under	
Category-V(C): Aqua Culture, Animal Husbandry		Category-V(D): Poultry Hatcheries and Poultry Feed Mixing Plants/Aqua Hatcheries & Aqua Feed Mixing Plants/Floriculture in Green House.	
LT	HT	LT	HT
Existing Charges:			
<u>Fixed Charges:</u> ₹ 30 per kW per Month	<u>Fixed Charges:</u> ₹ 30 per kW per Month	<u>Fixed Charges:</u> ₹ 75 per kW per Month	<u>Fixed Charges:</u> ₹ 475 per kW per Month
<u>Energy Charges:</u> ₹ 3.85 per kWh/kVAh Monthly Minimum	<u>Energy Charges:</u> ₹ 3.85 per KVAh	<u>Energy Charges:</u> ₹ 3.85 per kwh/kVAh Monthly Minimum Charges: Nil	<u>Energy Charges:</u> ₹ 4.85 per kVAh
Charges: Nil			
Proposed Charges:			
<u>Fixed Charges:</u> ₹ 30 per kW per Month	<u>Fixed Charges:</u> ₹ 30 per kVAh per Month	<u>Fixed Charges:</u> ₹ 75per kW per Month	<u>Fixed Charges:</u> ₹ 475 per kVAh per Month
<u>Energy Charges:</u> ₹ 3.85 per/ kWh/kVAh Monthly Minimum Charges: Nil	<u>Energy Charges:</u> ₹ 3.85 per kVAh	<u>Energy Charges:</u> ₹ 4.50 per kWh/kVAh Monthly Minimum Charges: Nil	<u>Energy Charges:</u> ₹ 5.25 per kVAh

Considering the Commission's noting in Tariff Order for FY2019-20, no increase in Tariff to Poultry Farms is proposed in FY2020-21.

If there are certain Poultry Farming units in the same premises of Poultry hatcheries, separate service has to be availed duly following the provisions of all relevant regulations and General Terms & Conditions of Supply (GTCS).

As per the ARR & FPT filings for the ensuing year 2020-21, the fixed cost obligation of power purchase is 32.11% and 28.84% of the total Power purchase Cost for SPDCL and EPDCL respectively. At the current tariffs, it is projected to recover only 32% and of fixed charges paid to the generators in respect of SPDCL. In respect of EPDCL, the fixed charges recovery from the consumers in the form of Demand charges is 10.31% only out of the expected total revenue (excluding Non-Tariff Income). Hence, the request for reduction in Demand charges is not acceptable.

The increase in energy charges proposed is very small in respect of Poultry Hatcheries and Poultry Feed Mixing Plants, even though the CoS is ₹7.55 / 7.22 / 6.99/6.76 per unit at LT/11/33/132 kV level respectively in APSPDCL and it is ₹7.06 / 6.78 / 6.57/ 6.78 per unit at LT/11/33/132 kV level respectively in APEPDCL.

In the event GoAP intends to provide concessions if any, u/s 65 of Electricity Act, the DISCOM will oblige the same.

Commission's view: The Commission agrees with the stand taken by the DISCOMs and approves tariffs as proposed by the licensees for poultry hatcheries and feed mixing plants.

- 209.** Incorporating the changes as discussed above, the schedule approved by the Commission for “Catgory V: Agriculture & Related” is as given below.

Category	Consumer Category	LT SUPPLY		↔ Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (₹/HP or kW)	Energy Charges (₹/Unit)		Energy Charges (₹/Unit)			
					Fixed / Demand Charges per month (₹/kVA)	11 kV	33 kV	132 kV & above
V	AGRICULTURE & RELATED							
	(A) : Agriculture							
	(i) Corporate farmers	200/HP	-	-	-	-	-	-
	(ii) Non-Corporate farmers	-	-	-	-	-	-	-
	(iii) Salt farming units upto 15 HP	-	2.50	kWh	-	-	-	-
	(iv) Sugarcane crushing	-	-	-	-	-	-	-
	(v) Rural Horticulture Nurseries	-	-	-	-	-	-	-
	(vi) Floriculture in Green House	75/kW	4.50	kWh/kVAh	-	-	-	-
	(B) : Aquaculture and Animal Husbandry	30/kW	3.85	kWh/kVAh	30	3.85	3.85	3.85
	(C) : Poultry & Aquaculture							
	(i) Poultry Hatchingeries & Poultry Feed mixing plants	75/kW	4.50	kWh/kVAh	475	5.25	5.25	5.25
	(ii) Aqua Hatcheries & Aqua Feed mixing plants	75/kW	5.00	kWh/kVAh	475	5.75	5.75	5.75
	(D) : Agro Based Cottage Industries upto 10 HP	20/kW	3.75	kWh	-	-	-	-
	(E) : Government / Private Lift Irrigation Schemes	-	-	kVAh	-	7.15	7.15	7.15

RESCOs

- 210.** The licensees stated that the activities of RESCOs are similar to those of the licensees in implementing similar tariffs as approved by the Commission. RESCOs draw power from licensees at the rate approved by the Commission. In order to encourage competitive spirit on par with DISCOMs, the licensees propose a tariff of ₹3.50 per unit for the RESCOs.

Commission’s Decsion: 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 drawal by them from the licensees during FY2020-21. Pending finalization of the bulk supply rate, the Commission has adopted the bulk supply rate as approved by it for FY2019-20 provisionally in this order duly rejecting the proposal of the DISCOMs to charge at ₹3.50 per unit for the RESCOs which has no justifiable reason. Appropriate adjustments will be carried out on determination of bulk supply rate for RESCOs for FY2020-21.

Reference Tariff Schedule (RTS)

- 211.** The Commission, incorporating the changes as enumerated in this Chapter, has accordingly prepared a Reference Tariff Schedule (RTS) for FY2020-21. This tariff schedule reflects the well-considered views of the Commission with regard to charges / rates for all consumer categories after considering the views/objections/ suggestions of all stakeholders and GoAP’s willingness to provide subsidies under section 65 of the Electricity Act, 2003. The complete Reference Tariff Schedule for FY2020-21 is given below:

Table 59 : Reference Tariff Schedule (RTS) for FY2020-21**(Rates / Charges as fixed by APERC)**

Category	Consumer Category	LT SUPPLY		↔ Billing Unit	HT SUPPLY				
		Fixed / Demand Charges per month (₹/HP or kW)	Energy Charges (₹/Unit)		Fixed / Demand Charges per month (₹/kVA)	Energy Charges (₹/Unit)			
						11 kV	33 kV	132 kV & above	
I	DOMESTIC								
	(A) : Domestic (Telescopic)								
	Group A : Consumption ≤ 75 Units during the billing month								
	0-50	-	1.45	kWh	-	-	-	-	
	51-75	-	2.60	kWh	-	-	-	-	
	Group B: Consumption > 75 and ≤ 225 units during the billing month								
	0-50	-	2.60	kWh	-	-	-	-	
	51-100	-	2.60	kWh	-	-	-	-	
	101-200	-	3.60	kWh	-	-	-	-	
	201-225	-	6.90	kWh	-	-	-	-	
	Group C: Consumption > 225 units during the billing month								
	0-50	-	2.65	kWh	-	-	-	-	
	51-100	-	3.35	kWh	-	-	-	-	
	101-200	-	5.40	kWh	-	-	-	-	
	201-300	-	7.10	kWh	-	-	-	-	
	301-400	-	7.95	kWh	-	-	-	-	
	401-500	-	8.50	kWh	-	-	-	-	
	Above 500 units	-	9.95	kWh	-	-	-	-	
	Consumers whose consumption is more than 500 units per month can opt for smart meters and ToD rebate of ₹ 1 per unit is applicable for such consumers for the consumption between 10 AM to 12 Noon.								
	(B) : Townships, Colonies, Gated Communities, and Villas		-	-	kVAh	75	7.00	7.00	7.00
II	COMMERCIAL & OTHERS								
	(A) : Commercial								
	(i) Minor 0-50 Units		55/kW	5.40	kWh/kVAh	-	-	-	-
	(ii) Major								
	0-50	75/kW	6.90	kWh/kVAh	475	7.65	6.95	6.70	
	51-100		7.65	kWh/kVAh					
	101-300		9.05	kWh/kVAh					
	301-500		9.60	kWh/kVAh					
	Above 500 units		10.15	kWh/kVAh					
	Time of Day tariff (TOD)- Peak (6 PM to 10 PM)		-	-	kWh/kVAh	-	8.65	7.95	7.70
	(iii) Advertising Hoardings		100/kW	12.25	kWh/kVAh	-	-	-	-
	(iv) Function halls / Auditoria		100/kW	12.25	kWh/kVAh	-	12.25	12.25	12.25
	(B) : Startup power		-	12.25	kWh/kVAh	-	12.25	12.25	12.25
	(C) : Electric Vehicles/Charging Stations		-	6.70	kWh/kVAh	-	6.70	6.70	6.70
(D) : Green Power		-	12.25	kWh/kVAh	-	12.25	12.25	12.25	
III	INDUSTRY								
	(A) : Industry (General)#		75/kW	6.70	kWh/kVAh	475	6.30	5.85	5.40
	Time of Day tariff (TOD)- Peak (6 AM to 10 AM & 6 PM to 10 PM)		-	-			7.30	6.85	6.40
	Time of Day tariff (TOD) - Off Peak (10 PM to 6 AM)		-	-			5.30	4.85	4.40
	Industrial Colonies		-	-	kWh/kVAh	-	7.00	7.00	7.00
	(B) : Seasonal Industries (off- season)		75/kW	7.45	kWh/kVAh	475	7.65	6.95	6.70
	(C) : Energy Intensive Industries		-	-	kWh/kVAh	-	5.80	5.35	4.95
	(D) : Cottage Industries upto 10HP *		20/kW	3.75	kWh	-	-	-	-
	# - Rice mills and Pulverising units are permitted upto 150 HP in LT and as per the tariff mentioned in the terms and conditions.								
	* - Dhobighats shall be extended free power supply as per G.O.Rt.No.75, dt. 27-06-2018								
IV	INSTITUTIONAL								
	(A) : Utilites(Street Lighting, NTR Sujala Pathakam, CPWS and PWS)		75/kW	7.00	kWh	475	7.65	6.95	6.70
	(B) : General Purpose		75/kW	7.00	kWh/kVAh	475	7.95	7.25	7.00
	(C) : Religious Places								
	(i) ≤ 2 kW		30/kW	4.80	kWh	-	-	-	-
	(ii) > 2 Kw		30/kW	5.00	kWh/kVAh	30	5.00	5.00	5.00

Category	Consumer Category	LT SUPPLY		↔ Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (₹/HP or kW)	Energy Charges (₹/Unit)		Fixed / Demand Charges per month (₹/kVA)	Energy Charges (₹/Unit)		
						11 kV	33 kV	132 kV & above
	(D) : Railway Traction	-	-	kVAh	350	5.50	5.50	5.50
V	AGRICULTURE & RELATED							
	(A) : Agriculture							
	(i) Corporate farmers	200/HP	-	-	-	-	-	-
	(ii) Non-Corporate farmers	-	-	-	-	-	-	-
	(iii) Salt farming units upto 15 HP	-	2.50	kWh	-	-	-	-
	(iv) Sugarcane crushing	-	-	-	-	-	-	-
	(v) Rural Horticulture Nurseries	-	-	-	-	-	-	-
	(vi) Floriculture in Green House	75/kW	4.50	kWh/kVAh	-	-	-	-
	(B) : Aquaculture and Animal Husbandry	30/kW	3.85	kWh/kVAh	30	3.85	3.85	3.85
	(C) : Poultry & Aquaculture							
	(i) Poultry Hactcheries & Poultry Feed mixing plants	75/kW	4.50	kWh/kVAh	475	5.25	5.25	5.25
	(ii) Aqua Hatcheries & Aqua Feed mixing plants	75/kW	5.00	kWh/kVAh	475	5.75	5.75	5.75
	(D) : Agro Based Cottage Industries upto 10 HP	20/kW	3.75	kWh	-	-	-	-
	(E) : Government / Private Lift Irrigation Schemes	-	-	kVAh	-	7.15	7.15	7.15
	Note:	(i) Temporary Supply: There is no separate category for temporary supply. However, Temporary supply can be released against each category with respective terms and conditions applicable and it shall be billed at the rate and other conditions specified in this order.						
(ii) Categories not defined in either HT-Supply or LT-Supply shall be billed at the rates specified in Category - II (A) (ii) Commerical – Major								

CHAPTER – IX

FULL COST RECOVERY TARIFF DETERMINATION

Introduction

- 212.** At the Reference Tariff Schedule (RTS) (as determined in Chapter – VIII of this Order), the licensees will not be able to recover ₹10060.63 Cr. of the total approved ARR of ₹42493.55Cr during FY2020-21. 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 FY2020-21 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 ₹10060.63 Cr.

Classification of Consumer Categories

- 213.** 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 FY2020-21.

Subsidized: Consumer categories for whom the revenues at RTS are less than allocated costs during FY2020-21.

Allocation of Available Surplus

- 214.** In Stage-1, the surplus available from the estimated revenue of all subsidizing consumer categories has been used to meet the deficit of subsidized consumers in full excluding the deficit of “Category-I: Domestic – LT” and “Category V (A): Agriculture - LT”, i.e. (i) Corporate farmers, (ii) Non-corporate farmers, (iii) Salt farming units upto 15 HP, (iv) Sugarcane Crushing, (v) Rural Horticulture Nurseries and (vi) Floriculture in Green Houses.
- 215.** In Stage-II, the remaining surplus and other income has been allocated in full to Category-I (A): Domestic-LT. Even after allocation of the available surplus to this consumer category, there remains a deficit of ₹1707.07 Cr. comprising ₹473.61 Cr for SPDCL and ₹1233.46 Cr. for APEPDCL besides the deficit of ₹8353.58 Cr. comprising ₹6773.60 Cr. for SPDCL and ₹1579.98 Cr. for EPDCL in respect of “Category V (A): Agriculture – LT”. Therefore, there is a total deficit of ₹10063.63 Cr., comprising ₹7247.21 Cr. for SPDCL and ₹2813.44 Cr. for EPDCL during FY2020-21 for the consumers of “Category-I: Domestic – LT” and “Category V (A): Agriculture - LT”.

Charges for Full Cost Recovery

- 216.** To recover the deficit of ₹1707.07 Cr. comprising ₹473.61 Cr for SPDCL and ₹1233.46 Cr. for APEPDCL in respect of “Category I (A): Domestic – LT”, the energy charges/rates for this sub-category have been revised as given below:

Category	Consumer Category	LT SUPPLY	Energy Charges (₹/Unit)		↔ Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (₹/HP or kW)				Fixed / Demand Charges per month (₹/kVA)	Energy Charges (₹/Unit)		
			SPDCL	EPDCL			11 kV	33 kV	132 kV & above
I	DOMESTIC								
	(A) : Domestic (Telescopic)								
	Group A : Consumption ≤ 75 Units during the billing month								
	0-50	-	2.10	2.95	kWh	-	-	-	-
	51-75	-	3.15	3.75	kWh	-	-	-	-
	Group B: Consumption > 75 and ≤ 225 units during the billing month								
	0-50	-	3.20	3.75	kWh	-	-	-	-
	51-100	-	3.20	5.00	kWh	-	-	-	-
	101-200	-	4.00	6.50	kWh	-	-	-	-
	201-225	-	7.20	8.50	kWh	-	-	-	-
	Group C: Consumption > 225 units during the billing month								
	0-50	-	3.50	5.25	kWh	-	-	-	-
	51-100	-	4.00	6.25	kWh	-	-	-	-
	101-200	-	5.60	7.25	kWh	-	-	-	-
	201-300	-	7.20	8.50	kWh	-	-	-	-
	301-400	-	8.00	9.50	kWh	-	-	-	-
	401-500	-	8.55	10.50	kWh	-	-	-	-
	Above 500 units	-	10.00	12.00	kWh	-	-	-	-
	Consumers whose consumption is more than 500 units per month can opt for smart meters and ToD rebate of Rs.1 per unit is applicable for such consumers for the consumption between 10 AM to 12 Noon.								

- 217.** To recover the deficit of ₹8353.58 Cr. comprising ₹6773.60 Cr. for SPDCL and ₹1579.98 Cr. for EPDCL in respect of “Category V (A): Agriculture – LT”, the energy charges/rates for this sub-category have been revised as given below:

Category	Consumer Category	LT SUPPLY	Energy Charges		↔ Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (₹/HP or kW)	₹/Unit)			Fixed / Demand Charges per month (₹/kVA)	Energy Charges		
			₹/Unit)				11 kV	33 kV	132 kV & above
			SPDCL	EPDCL					
V	AGRICULTURE & RELATED								
	(A) : Agriculture								
	(i) Corporate farmers	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(ii) Non-Corporate farmers	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(iii) Salt farming units upto 15 HP	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(iv) Sugarcane crushing	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(v) Rural Horticulture Nurseries	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(vi) Floriculture in Green House	75/kW	6.88	6.58	kWh/kVAh	-	-	-	-

- 218.** With the above charges / rates, the licensees will be able to recover the Aggregate Revenue Requirement (ARR) in full during FY2020-21.
- 219.** These revised rates for “Category I (A): Domestic – LT” and “Category V(A): Agriculture – LT” have been substituted in the “Reference Tariff Schedule” (RTS) to make it as “Full Cost Recovery Tariff Schedule” (FCRTS) for FY2020-21.
- 220.** The FCRTS determined by the Commission for FY2020-21 is given in the table below:

Table 60: Full Cost Recovery Tariff Schedule (FCRTS) for FY2020-21
(Rates / Charges as determined by APERC)

Category	Consumer Category	LT SUPPLY	Energy Charges (₹/Unit)		Billing Unit	HT SUPPLY			
		Fixed / Demand Charges per month (₹/HP or kW)	SPDCL	EPDCL		Fixed / Demand Charges per month (₹/kVA)	11 kV	33 kV	132 kV & above
I DOMESTIC	(A) : Domestic (Telescopic)								
	Group A : Consumption ≤ 75 Units during the billing month								
	0-50	-	2.10	2.95	kWh	-	-	-	-
	51-75	-	3.15	3.75	kWh	-	-	-	-
	Group B: Consumption > 75 and ≤ 225 units during the billing month								
	0-50	-	3.20	3.75	kWh	-	-	-	-
	51-100	-	3.20	5.00	kWh	-	-	-	-
	101-200	-	4.00	6.50	kWh	-	-	-	-
	201-225	-	7.20	8.50	kWh	-	-	-	-
	Group C: Consumption > 225 units during the billing month								
	0-50	-	3.50	5.25	kWh	-	-	-	-
	51-100	-	4.00	6.25	kWh	-	-	-	-
	101-200	-	5.60	7.25	kWh	-	-	-	-
	201-300	-	7.20	8.50	kWh	-	-	-	-
	301-400	-	8.00	9.50	kWh	-	-	-	-
	401-500	-	8.55	10.50	kWh	-	-	-	-
	Above 500 units	-	10.00	12.00	kWh	-	-	-	-
	Consumers whose consumption is more than 500 units per month can opt for smart meters and ToD rebate of ₹1 per unit is applicable for such consumers for the consumption between 10 AM to 12 Noon.								
	(B) : Townships, Colonies, Gated Communities, and Villas	-	-	-	kVAh	75	7.00	7.00	7.00
II COMMERCIAL & OTHERS	(A) : Commercial								
	(i) Minor 0-50 Units	55/kW	5.40	5.40	kWh/kVAh	-	-	-	-
	(ii) Major								
	0-50	75/kW	6.90	6.90	kWh/kVAh	475	7.65	6.95	6.70
	51-100		7.65	7.65	kWh/kVAh				
	101-300		9.05	9.05	kWh/kVAh				
	301-500		9.60	9.60	kWh/kVAh				
	Above 500 units		10.15	10.15	kWh/kVAh				
	Time of Day tariff (TOD)- Peak (6 PM to 10 PM)	-	-	-	kWh/kVAh		8.65	7.95	7.70
	(iii) Advertising Hoardings	100/kW	12.25	12.25	kWh/kVAh	-	-	-	-
	(iv) Function halls / Auditoriums	100/kW	12.25	12.25	kWh/kVAh	-	12.25	12.25	12.25
	(B) : Startup power	-	12.25	12.25	kWh/kVAh	-	12.25	12.25	12.25
	(C) : Electric Vehicles / Charging Stations	-	6.70	6.70	kWh/kVAh	-	6.70	6.70	6.70
	(D) : Green Power	-	12.25	12.25	kWh/kVAh	-	12.25	12.25	12.25
III INDUSTRY	(A) : Industry (General)#	75/kW	6.70	6.70	kWh/kVAh	475	6.30	5.85	5.40
	Time of Day tariff (TOD)- Peak (6 AM to 10 AM & 6 PM to 10 PM)	-	-	-			7.30	6.85	6.40
	Time of Day tariff (TOD) - Off Peak (10 PM to 6 AM)	-	-	-			5.30	4.85	4.40
	Industrial Colonies	-	-	-	kWh/kVAh	-	7.00	7.00	7.00
	(B) : Seasonal Industries (off- season)	75/kW	7.45	7.45	kWh/kVAh	475	7.65	6.95	6.70
	(C) : Energy Intensive Industries	-	-	-	kWh/kVAh	-	5.80	5.35	4.95
	(D) : Cottage Industries upto 10HP *	20/kW	3.75	3.75	kWh	-	-	-	-
	# - Rice mills and Pulverising units are permitted upto 150 HP in LT and as per the tariff mentioned in the terms and conditions.								
	* - Dhobighats shall be extended free power supply as per G.O.Rt.No.75, dt. 27-06-2018								
IV INSTITUTIONAL	(A) : Utilities (Street Lighting, NTR Sujala Pathakam, CPWS and PWS)	75/kW	7.00	7.00	kWh/kVAh	475	7.65	6.95	6.70
	(B) : General Purpose	75/kW	7.00	7.00	kWh/kVAh	475	7.95	7.25	7.00
	(C) : Religious Places								
	(i) ≤ 2 kW	30/kW	4.80	4.80	kWh/kVAh	-	-	-	-
	(ii) > 2 kW	30/kW	5.00	5.00	kWh/kVAh	30	5.00	5.00	5.00
	(D) : Railway Traction	-	-	-	kVAh	350	5.50	5.50	5.50
V AGRICULTURE & RELATED	(A) : Agriculture								
	(i) Corporate farmers	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(ii) Non-Corporate farmers	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(iii) Salt farming units upto 15 HP	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(iv) Sugarcane crushing	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(v) Rural Horticulture Nurseries	-	6.88	6.58	kWh/kVAh	-	-	-	-
	(vi) Floriculture in Green House	75/kW	6.88	6.58	kWh/kVAh	-	-	-	-
	(B) : Aquaculture and Animal Husbandry	30/kW	3.85	3.85	kWh/kVAh	30	3.85	3.85	3.85
	(C) : Poultry & Aquaculture								
	(i) Poultry Hatcheries & Poultry Feed mixing plants	75/kW	4.50	4.50	kWh/kVAh	475	5.25	5.25	5.25
	(ii) Aqua Hatcheries & Aqua Feed mixing plants	75/kW	5.00	5.00	kWh/kVAh	475	5.75	5.75	5.75
	(D) : Agro Based Cottage Industries upto 10 HP	20/kW	3.75	3.75	kWh	-	-	-	-
	(E) : Government / Private Lift Irrigation Schemes	-	-	-	kVAh	-	7.15	7.15	7.15
Note:	(i) Temporary Supply :There is no separate category for temporary supply. However, Temporary supply can be released against each category with respective terms and conditions applicable and it shall be billed at the rate and other conditions specified in this order.								
	(ii) Categories not defined in either HT-Supply or LT-Supply shall be billed at the rates specified in Category - II (A) (ii) Commercial - Major								

- 221.** In the absence of any external subsidization u/s 65 of the Electricity Act, 2003 for the total revenue gap of ₹10,060.63 Cr. (₹7247.18 Cr. for APSPDCL and ₹2813.44 Cr. for APEPDCL) as determined by the Commission in this order, the licensees will have to charge the rates contained in the above Full Cost Recovery Tariff Schedule during FY2020-21 for retail sale of electricity to generate the revenue to meet the approved ARR for FY2020-21.

CHAPTER – X

RETAIL SUPPLY TARIFF SCHEDULE

Communication to Government of Andhra Pradesh

222. The Commission has informed the Government of Andhra Pradesh (GoAP) on 27.01.2020 with regard to requirement of external subsidy of ₹10060.63 Cr for FY2020-21 towards subsidy to “Category I (A): Domestic – LT” and “Category V(A): Agriculture – LT” to maintain the rates as mentioned in the “Reference Tariff Schedule (RTS) for FY2020-21” with all relevant calculations including the details of “Full Cost Recovery Tariff Schedule for FY2020-21.” The Government of Andhra Pradesh vide G.O.Ms.No.17 dated 15.02.2019 extended free power supply to all agricultural consumers for 9 hours in a day (Annexure-08), vide G.O.Rt.No.39 dated 14.03.2018 provided free power to horticultural nurseries(Annexure-09), and vide G.O.Rt.No. 75 dated 27.06.2018 provided free power to Dhobighats(Annexure-10). The financial impact on account of the decision of the government in the said G.O.s is factored by the Commission in arriving at the subsidy requirement from the Government.

Provision of subsidy by Government of Andhra Pradesh

223. In response to the letter dated 27.01.2020 of the Commission, the Government of Andhra Pradesh has communicated, vide Letter No. ENE01-APER/1/2020, dated 08.02.2020 of the Energy (Power.I) Department (Annexure No.18), that it undertakes to provide the agriculture subsidy and the domestic tariff subsidy proposed by the Commission. Out of the subsidy amount of ₹10,060.63 Cr. agreed to be provided by the State Government, the APSPDCL shall get ₹7,247.18 Cr. and the APEPDCL shall get ₹2,813.45 Cr.

GoAP orders on subsidies / concessions

224. The Commission has not factored the decisions of the Government in the G.O.s mentioned infra, while arriving the subsidy requirement. (i) G.O.Rt.No.70 dated 2.07.2019 - tariff concession to the Aquaculture farmers (Annexure-11), (ii) G.O.Ms.No.91 dated 24.07.2019 - free power under Jagjeevan Jyothi Scheme to the eligible Scheduled Caste households(Annexure-12), (iii) G.O.Rt.No.24 dated 15.02.2019 - free power to laundries run by BPL Rajaka community and to shops of Gold Smiths and most backward class house holds below poverty line (Annexure-13), (iv) G.O.Rt.No.128, dt. 29.11.2019 - tariff concession to rolled gold covering industry in Machilipatnam (Annexure-14), (v) G.O.Rt.No.15 dated 06.02.2019 - free power supply upto 150 units per month to hair cutting saloons (Annexure-15), and (vi) G.O. Rt.No.291 dated 25.09.2018 - free power upto 100 units per month to handloom weavers (Annexure-16) as such a proposal has not been made by the licensees.

Determination of Tariff for Retail Sale of Electricity for FY2020-21

- 225.** The Commission, in accordance with the decisions enumerated in earlier chapters and in accordance with the undertaking of GoAP for providing subsidy, hereby determines the Tariff for Retail Sale of Electricity with the terms and conditions applicable with effect from 01-04-2020 to 31-03-2021 in respect of the two distribution licensees (SPDCL and EPDCL) and three Rural Electricity Supply Co-operative Societies (RESCOs) in the State of Andhra Pradesh, as hereunder:

Table 61:TARIFF FOR RETAIL SALE OF ELECTRICITY DURING FY2020-21
(Applicable with effect from 01.04.2020 to 31.03.2021 in the areas of APSPDCL and
APEPDCL and three RESCOs in the State of Andhra Pradesh)

Category	Consumer Category	LT SUPPLY		Billing Unit	HT SUPPLY						
		Fixed / Demand Charges per month (₹/HP or kW)	Energy Charges (₹/Unit)		Fixed / Demand Charges per month (₹/kVA)	Energy Charges (₹/Unit)					
						11 kV	33 kV	132 kV & above			
I	DOMESTIC										
	(A) : Domestic (Telescopic)										
	Group A : Consumption ≤ 75 Units during the billing month										
	0-50	-	1.45	kWh	-	-	-	-			
	51-75	-	2.60	kWh	-	-	-	-			
	Group B: Consumption > 75 and ≤ 225 units during the billing month										
	0-50	-	2.60	kWh	-	-	-	-			
	51-100	-	2.60	kWh	-	-	-	-			
	101-200	-	3.60	kWh	-	-	-	-			
	201-225	-	6.90	kWh	-	-	-	-			
	Group C: Consumption > 225 units during the billing month										
	0-50	-	2.65	kWh	-	-	-	-			
	51-100	-	3.35	kWh	-	-	-	-			
	101-200	-	5.40	kWh	-	-	-	-			
	201-300	-	7.10	kWh	-	-	-	-			
	301-400	-	7.95	kWh	-	-	-	-			
	401-500	-	8.50	kWh	-	-	-	-			
	Above 500 units	-	9.95	kWh	-	-	-	-			
	Consumers whose consumption is more than 500 units per month can opt for smart meters and ToD rebate of ₹1 per unit is applicable for such consumers for the consumption between 10 AM to 12 Noon.										
	(B) : Townships, Colonies, Gated Communities, and Villas	-	-	kVAh	75	7.00	7.00	7.00			
	II	COMMERCIAL & OTHERS									
		(A) : Commercial									
		(i) Minor 0-50 Units	55/kW	5.40	kWh/kVAh	-	-	-	-		
		(ii) Major									
		0-50	75/kW	6.90	kWh/kVAh	475	7.65	6.95	6.70		
		51-100		7.65	kWh/kVAh						
		101-300		9.05	kWh/kVAh						
301-500		9.60		kWh/kVAh							
Above 500 units		10.15		kWh/kVAh							
Time of Day tariff (TOD)- Peak (6 PM to 10 PM)		-	-	kWh/kVAh	-	8.65	7.95	7.70			
(iii) Advertising Hoardings		100/kW	12.25	kWh/kVAh	-	-	-	-			
(iv) Function halls / Auditoria		100/kW	12.25	kWh/kVAh	-	12.25	12.25	12.25			
(B) : Startup power		-	12.25	kWh/kVAh	-	12.25	12.25	12.25			
(C) : Electric Vehicles / Charging Stations		-	6.70	kWh/kVAh	-	6.70	6.70	6.70			
(D) : Green Power		-	12.25	kWh/kVAh	-	12.25	12.25	12.25			
III		INDUSTRY									
		(A) : Industry (General)#	75/kW	6.70	kWh/kVAh	475	6.30	5.85	5.40		
		Time of Day tariff (TOD)- Peak (6 AM to 10 AM & 6 PM to 10 PM)	-	-			7.30	6.85	6.40		
		Time of Day tariff (TOD) - Off Peak (10 PM to 6 AM)	-	-			5.30	4.85	4.40		
		Industrial Colonies	-	-	kWh/kVAh	-	7.00	7.00	7.00		
		(B) : Seasonal Industries (off- season)	75/kW	7.45	kWh/kVAh	475	7.65	6.95	6.70		
		(C) : Energy Intensive Industries	-	-	kWh/kVAh	-	5.80	5.35	4.95		
		(D) : Cottage Industries upto 10HP *	20/kW	3.75	kWh	-	-	-	-		
		# - Rice mills and Pulverising units are permitted upto 150 HP in LT and as per the tariff mentioned in the terms and conditions.									
		* - Dhobighats shall be extended free power supply as per G.O.Rt.No.75, dt. 27-06-2018									
		IV	INSTITUTIONAL								
			(A) : Utilities(Street Lighting, NTR Sujala Pathakam, CPWS and PWS)	75/kW	7.00	kWh	475	7.65	6.95	6.70	
	(B) : General Purpose		75/kW	7.00	kWh/kVAh	475	7.95	7.25	7.00		
(C) : Religious Places											
(i) ≤ 2 kW	30/kW		4.80	kWh	-	-	-	-			
(ii) > 2 kW	30/kW		5.00	kWh/kVAh	30	5.00	5.00	5.00			
(D) : Railway Traction	-		-	kVAh	350	5.50	5.50	5.50			
V	AGRICULTURE & RELATED										
	(A) : Agriculture										
	(i) Corporate farmers	200/HP	-	-	-	-	-	-			
	(ii) Non-Corporate farmers	-	-	-	-	-	-	-			
	(iii) Salt farming units upto 15 HP	-	2.50	kWh	-	-	-	-			
	(iv) Sugarcane crushing	-	-	-	-	-	-	-			
	(v) Rural Horticulture Nurseries	-	-	-	-	-	-	-			
	(vi) Floriculture in Green House	75/kW	4.50	kWh/kVAh	-	-	-	-			
	(B) : Aquaculture and Animal Husbandry	30/kW	3.85	kWh/kVAh	30	3.85	3.85	3.85			
	(C) : Poultry & Aquaculture										
	(i) Poultry Hatcheries & Poultry Feed mixing plants	75/kW	4.50	kWh/kVAh	475	5.25	5.25	5.25			
	(ii) Aqua Hatcheries & Aqua Feed mixing plants	75/kW	5.00	kWh/kVAh	475	5.75	5.75	5.75			
	(D) : Agro Based Cottage Industries upto 10 HP	20/kW	3.75	kWh	-	-	-	-			
	(E) : Government / Private Lift Irrigation Schemes	-	-	kVAh	-	7.15	7.15	7.15			
	Note:	(i) Temporary Supply :There is no separate category for temporary supply. However, Temporary supply can be released against each category with respective terms and conditions applicable and it shall be billed at the rate and other conditions specified in this order.									
		(ii) Categories not defined in either HT-Supply or LT-Supply shall be billed at the rates specified in Category - II (A) (ii) Commercial - Major									

TERMS AND CONDITIONS

(Applicable with effect from 01-04-2020 to 31-3-2021 in respect of the two Distribution Licensees and three RESCOs in the State of Andhra Pradesh)

The Tariffs determined in PART 'A' and 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'

LOW TENSION (LT) SUPPLY

1. LT TARIFFS – TERMS AND CONDITIONS

- (i) **System of Supply:** Low Tension A.C., 50 Cycles, Three Phase Supply at 415 Volts and Single-Phase supply at 240 Volts.
- (ii) These tariffs are applicable for supply of Electricity to LT consumers with a contracted load of 75kW/100 HP and below. However, Ricemills & Pulverising units are permitted upto 150 HP in LT Supply.

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 ₹/kW will be applied as ₹/kVA. As and when a consumer is billed on kVAh basis no capacitor surcharge shall be levied.

- (iii) Supply shall be extended on single phase for a contracted load upto 5 kW only.
- (iv) The Licensees shall have the right to correct the category of supply of energy to any premises to an appropriate category of LT Tariff, in the event of any error or mistake in extending the supply to such premises under an inappropriate category.
- (v) The applicability of the respective categories as enumerated is only illustrative but not exhaustive.

1.1 CATEGORY-I (A): DOMESTIC - LT

GROUP: (A), (B) & (C): DOMESTIC - LT (TELESCOPIC)

Applicability

This tariff is applicable for supply of electricity for lights, fans and other domestic electrical appliances for 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 at the consumer's choice.

Based on the consumption during the billing month, 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 monthly consumption of less than or equal to 75 units. Group B shall be applicable to the consumers having monthly consumption of above 75 units and up to 225 units. Group C shall be applicable to the consumers having monthly consumption of above 225 units. Energy charges shall be levied based on Telescopic method (Groupwise).

CATEGORY-I (A): DOMESTIC – LT (TELESCOPIC)	Energy Charges ₹/kWh
Group A: Consumption ≤75 Units during the billing month	
0-50	1.45
51-75	2.60
Group B: Consumption (>75 and ≤225 units) during the billing month	
0-50	2.60
51-100	2.60
101-200	3.60
201-225	6.90
Group C: Consumption >225 units during the billing month	
0-50	2.65
51-100	3.35
101-200	5.40
201-300	7.10
301-400	7.95
401-500	8.50
Above 500 units	9.95
Consumers whose consumption is more than 500 units per month can opt for smart meters and ToD rebate of ₹1 per unit is applicable for such consumers for the consumption between 10 AM to 12 Noon. The cost of the smart meter with modem along with the installation has to be borne by the consumer, who can opt to pay in lumpsum or in equal monthly instalments subject to a maximum of 24 months.	
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

SPECIFIC CONDITIONS

- (i) If electricity supplied to domestic premises is required to be used for non-domestic or commercial purposes, a separate connection should be taken for such loads under Category-II: Commercial & Others - LT, failing which the entire supply shall be charged under Category-II: Commercial & Others – LT, tariff, apart from liability for penal charges as per the General Terms and Conditions of Supply.
- (ii) For common services like Water supply, common lights in corridors and supply for lifts in multi-storied buildings, billing shall be done as follows:

- a) At Category – I (A): Domestic - LT (Group-B)/ Category-I (A): Domestic - LT (Group-C), if the plinth area occupied by the domestic consumers is 50% or more of the total plinth area.
 - b) At Category - II (A): Commercial - LT, if the plinth area occupied by the domestic consumers is less than 50% of the total plinth area.
- (iii) 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 Category-I (A): Domestic - LT 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:

- a) Orders are applicable to Police Quarters and other State/Central Government residential complexes specifically sanctioned by the Licensees.
 - b) 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.
 - c) The consumers shall be billed at the appropriate slab rate in tariff based on the average monthly consumption per dwelling unit in the complex.
 - d) Meter reading shall be taken monthly in all such cases.
 - e) Customer charges calculated at corresponding rate applicable, slab-wise per month for each dwelling unit shall be billed.
- (iv) 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.
- a) The metering shall be provided by the DISCOMs on HT side of the distribution transformer.
 - b) Meter reading shall be done monthly and the energy recorded in the HT metering shall be billed at tariff rates under Category-I(A): Domestic - LT (Group-C).

1.2 CATEGORY-II: COMMERCIAL & OTHERS - LT

In this category, the consumers are divided into four groups viz. Category-II(A), Category-II(B), Category-II(C) and Category-II(D).

1.2.1 CATEGORY-II(A): COMMERCIAL - LT**1.2.1.1 CATEGORY- II (A): COMMERCIAL – (i) MINOR & (ii) MAJOR -LT****Applicability**

This tariff is applicable to:

- (1) Consumers who undertake non-domestic activity.
- (2) Consumers who undertake commercial activity.
- (3) Consumers who do not fall in any other Category i.e. Category-I(A):LT, Category-II(B):LT, Category-II(C):LT, Category-II(D):LT, Category-III:LT to Category-V: LT.
- (4) Consumers who avail supply of energy for lighting, fans, heating, air conditioning and other electric appliances in any 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.
- (6) This tariff is also applicable to Airports, Resorts, Amusement Parks, MICE Centers, Golf Courses, Botanical Gardens, Urban/Rural Haats, Tourism and Hospitality Training Institutes, Wayside Amenities, Spiritual/Wellness centres and Museums etc.

Description	Fixed Charges ₹/ kW/Month	Energy Charges (₹/kWh or kVAh)
II (A) (i): Commercial (Minor) – LT		
0-50	55	5.40
II (A) (ii): Commercial (Major) – LT		
0-50	75	6.90
51-100	75	7.65
101-300	75	9.05
301-500	75	9.60
Above 500	75	10.15
Monthly minimum charges:		
Single Phase Supply		₹65 /month
Three Phase Supply		₹200/month

SPECIFIC CONDITIONS:

- (i) For loads of 10 kW and above, LT tri-vector meter shall be provided and energy charges shall be billed on kVAh.
- (ii) 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.
- (iii) The fixed charges shall be computed based on contracted load or actual Recorded Demand whichever is higher.
- (iv) For the purpose of billing, 1 kVA shall be treated as 1kW.
- (v) 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 Category-II(A) (ii):Commercial Major - LT. The energy shall be measured on the High-Tension side of the transformer. In case, where energy is 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.

1.2.1.2 CATEGORY- II (A) COMMERCIAL - (iii): ADVERTISING HOARDINGS – LT

(Category-II(C) - LT Advertising Hoardings in the tariff order for FY2019-20)

Applicability

This tariff is applicable for 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 etc.

Fixed Charges (₹/kW/month)	Energy Charges (₹/kWh or kVAh)
100	12.25
Monthly minimum charges: ₹300 / month	

1.2.1.3 CATEGORY- II (A) COMMERCIAL - (iv): FUNCTION HALLS / AUDITORIA – LT

(Category-II(D) -LT – Function Halls / Auditoriums, Startup Power for Captive Generating Plants or Co-Generation Plants or Renewable Energy Generation Plants in the tariff order for FY2019-20)

Applicability

This tariff is applicable to Function Halls, Auditoria, Marriage Halls, Convention Centers, and the like.

Fixed Charges (₹/kW/month)	Energy Charges (₹/kWh or kVAh)
100	12.25
Monthly minimum charges: ₹300 / month	

1.2.2 CATEGORY- II (B): STARTUP POWER – LT

(Category-II(D) - LT – Function Halls / Auditoriums, Startup Power for Captive Generating Plants or Co-Generation Plants or Renewable Energy Generation Plants in the tariff order for FY2019-20)

Applicability

This tariff is applicable for supply of electricity to startup power for Captive Generating Plants, Co-Generation Plants and Renewable Energy Generation Plants.

The startup power is intended for those generators who require occasional and intermittent supply for startup operations of the generating unit(s) alone. However, the Captive and Cogeneration 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.

The Specific Conditions applicable for start-up power are as follows:

- Supply is to be used strictly for generator start-up operations, maintenance and lighting purpose only.
- This Category is also applicable to all the Wind and Solar plants who have PPAs with licensees.

Fixed Charges (₹/kW/month)	Energy Charges (₹/kWh or kVAh)
NIL	12.25

1.2.3 CATEGORY- II (C): ELECTRIC VEHICLES / CHARGING STATIONS – LT

(Category-II(E) – LT – Electric Vehicles (EVs) / Charging Stations in the tariff order for FY2019-20)

Applicability

This tariff is applicable for supply of electricity to Electric Vehicles and charging Stations that will provide electricity for charging such vehicles.

Fixed Charges (₹/kW/month)	Energy Charges (₹/kWh or kVAh)
NIL	6.70
Monthly minimum charges: NIL	

1.2.4 CATEGORY- II (D): GREEN POWER – LT

(Category-II(F) - LT – Green Power in the tariff order for FY2019-20)

Applicability

This tariff is applicable to all consumers other than those covered under Category II (A) (iii) & Category II (A) (iv) who wish to avail power from Non-conventional sources of energy voluntarily and show their support to an environmental cause.

Fixed Charges (₹/kW/month)	Energy Charges (₹/kWh or kVAh)
NIL	12.25
Monthly minimum charges: NIL	

Note:

- (i) The Tariff shall be optional and can be extended to any consumer without reference to end use purpose.
- (ii) A consumer shall be entitled to Renewable Energy Certificates (RECs) as may be admissible.

1.3 CATEGORY-III: INDUSTRY – LT**1.3.1 CATEGORY-III (A): INDUSTRY (GENERAL) – LT****Applicability**

This tariff is 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 primarily for the 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 of 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.

Fixed charges (₹/kW/Month)	Energy Charge (₹/kWh or kVAh)
75.00	6.70
Monthly minimum charges – NIL	

- (5) Rice Mills and Pulverising units are permitted upto 150HP in this category. The tariff applicable is as follows:

Connected Load	Fixed charges (₹/kW/Month)	Energy Charge (₹/kWh or kVAh)
Upto 100 HP	75.00	6.70
101 HP to 150 HP	275.00	6.70
Monthly minimum charges – NIL		

Note:

- (i) The existing consumers whose connected load is more than 100 HP and upto 150 HP and are already availing supply under Category III (A) – HT Industry (General) shall be given option, either to continue to be billed in the same category or to be billed at the tariff as mentioned above, without disturbing the existing metering. The existing consumers shall give such option on or before 30.06.2020 failing which they shall continue to be billed as per Category III (A) – HT Industry (General).

- (ii) The new consumers with the contracted load between 100 HP and 150 HP may also opt to be billed as per the above tariff failing which they will be billed as per Category III (A) – HT Industry (General).

1.3.2 CATEGORY-III (B): SEASONAL INDUSTRIES (OFF SEASON) – LT

Applicability

This tariff is applicable to consumers who avail supply of energy under Category–III: Industry – LT for manufacture of sugar or ice or salt, decortivating, seed processing, fruit processing, ginning and pressing, cotton seed oil mills, tobacco processing, re-drying and **Rice Mills** 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 the main plant is regularly closed down during certain months in a year, they 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 or kVAh)
75	7.45
Monthly minimum charges – NIL	

Note: During seasonal period, the consumer shall be billed under Category III(A): Industry (General) - LT. If the metering is on HT side, 1% of total energy consumed shall be deducted from recorded energy for the purpose of billing.

Specific conditions for Seasonal Industries:

- 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.
- The period of season shall not be less than 3 (three) continuous months. However, the consumer can declare longer seasonal period as per actuals.
- 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.
- 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.
- The off-season tariff is not available to composite units having seasonal and other categories of loads.

- (vi) 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 already paid the development charges as regular consumers need not pay the development charges.
- (vii) 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.

Other Conditions applicable to Category- III (A): Industry (General) – LT and Category III (B): Seasonal Industries (Off-season) – LT

- (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.
- (2) **Metering and Billing**
 - (i) For the purpose of billing, 1 kVA shall be equal to 1 kW and 1 HP = 0.75 kW
 - (ii) LT Trivector meter shall be provided for the consumers with contracted load of 15 kW/20 HP to 37.5 kW/50 HP.
 - (iii) 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.
 - (iv) Energy charges shall be billed on kVAh basis for all consumers with contracted load of 15kW/20HP and above. For loads below 15kW/20 HP, billing shall be done based on kWh.
 - (v) If the recorded demand of any service connection under this category exceeds the 75 kVA, such excess demand shall be billed at the demand charges prescribed under Category-III(A): Industry (General) - HT.
 - (vi) 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.
 - (vii) If the metering is on HT side, 1% of total energy consumed shall be deducted from recorded energy for the purpose of billing.

1.3.3 CATEGORY-III (D): COTTAGE INDUSTRIES UPTO 10 HP – LT

COTTAGE INDUSTRIES

Applicability

This tariff is applicable for supply of energy to Dhobighats & bonafide (as certified by Divisional Engineer, Operation) Small Cottage Industries specifically power looms, Carpentry, Blacksmithy, Kanchari, Goldsmithy, Shilpi, Pottery, Mochy, Phenoylproduction 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 etc. 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
Monthly minimum charges – NIL	
Note: i) Units which exceed a connected load of 10 HP shall be billed at tariff specified for Category III(A): Industry (General) - LT. ii) Dhobighats shall be extended free power supply as per G.O.Rt.No.75, dt:27-06-2018	

1.4 CATEGORY-IV: INSTITUTIONAL – LT

1.4.1 CATEGORY-IV (A): UTILITIES – LT

(Street Lighting, NTR Sujala Pathakam, CPWS and PWS)

(Category-IV (A): LT Street Lighting, Category – IV (B): LT CPWS / PWS Schemes, Category-IV (C): LT NTR SujalaPathakam in the tariff order for FY2019-20)

Applicability

This tariff is applicable for:

- (i) Supply of energy for lighting on public roads, streets, thoroughfare including parks, markets, car-stands, taxi stands, bridges, PWS schemes in the Local Bodies viz., Panchayats / Municipalities / Municipal Corporations.
- (ii) Supply of energy to the Composite Water Supply Schemes (CWSS) / PWS Schemes operated and / or maintained by Local Bodies viz., (Panchayats, Municipalities, Municipal Corporations) etc.
- (iii) Supply of energy to NTR Sujala Pathakam (Drinking water schemes notified by the Government of AP and / or concerned statutory authority)

Metering is compulsory irrespective of tariff structure.

Description	Fixed Charges (₹/kW/month)	Energy Charges (₹/kWh or kVAh)
Street Lighting, CPWS / PWS Schemes and NTR Sujala pathakam	75	7.00

Specific Condition applicable to Street Lighting:

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.

1.4.2 CATEGORY-IV (B): GENERAL PURPOSE – LT

(Category-IV (D): LT General Purpose in the tariff order for FY2019-20)

Applicability

This tariff is applicable for supply of energy to places of Crematoria, Govt. Educational institutions and Student Hostels run by Govt. agencies, Charitable institutions i.e. Public charitable trusts and societies registered under the Societies Registration Act running educational institutions on no profit basis, recognized service institutions and registered old age homes, orphanages and the like rendering gratuitous service to the public at large without any profit. Government Offices and Government Hospitals shall also be billed under this category.

Fixed Charges (₹/kW/month)	Energy Charges (₹/kWh or kVAh)
75	7.00
Monthly Minimum Energy charges:	
Single Phase Supply	₹ 50 per month
Three Phase Supply	₹150 per month

Note:

- (i) Trivector 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.
- (ii) 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.

1.4.3 CATEGORY-IV (C): RELIGIOUS PLACES – LT

(Category-IV (E): LT Religious Places in the tariff order for FY2019-20)

Applicability

This tariff is 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 (₹/kWh or kVAh)
Upto 2 kW contracted load	30.00	4.80
Above 2 kW contracted load	30.00	5.00
Monthly minimum charges – NIL		

1.5. CATEGORY-V: AGRICULTURE & RELATED – LT**1.5.1 CATEGORY-V (A): AGRICULTURE – LT****1.5.1.1 CATEGORY-V (A) AGRICULTURE (i): CORPORATE FARMERS – LT**

(Category-V (A): LT Corporate Farmers / Salt Farming units upto 15HP in the tariff order for FY2019-20)

Applicability

This tariff is applicable to Corporate farmers. “Corporate Farmer” means / includes any person who is an “assessee” within the meaning of Section 2(7) of the Income Tax Act, 1961.

The word “person” has the same meaning as defined in Section (2)(31) of IT Act, 1961.

Description	Fixed charges (₹/HP / Month)	Energy Charges (₹/kWh)
Corporate Farmers (DSM Measures mandatory)	200	-NIL-
Monthly minimum charges – NIL		

Note:

- (i) *Any consumption of energy / electricity in any Agricultural land for purposes other than agriculture shall be charged / billed in accordance with the applicable tariff.*
- (ii) *Farmers without DSM Measures shall be billed @ ₹3.50/kWh. 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.*
- (iii) **As per the Income Tax Act, 1961 -**

S.2 (7): “Assessee” means a person by whom [any tax] or any other sum of money is payable under this Act, and includes -

- (a) *Every person in respect of whom any proceeding under this Act has been taken for the assessment of his income [or assessment of fringe benefits] or of the income of any other person in respect of which he is assessable, or of the loss sustained by him or by such other person, or of the amount of refund due to him or to such other person;*
- (b) *Every person who is deemed to be an assessee under any provision of this Act;*
- (c) *Every person who is deemed to be an assessee in default under any provision of this Act;*

S.2 (31): “person” includes -

- (i) *An individual*
- (ii) *A Hindu undivided family,*

- (iii) A company
- (iv) A firm
- (v) An association of persons or a body of individuals, whether incorporated or not,
- (vi) A local authority, and
- (vii) Every artificial juridical person, not falling within any of the preceding sub-clauses

[Explanation - For the purposes of this clause, an association of persons or a body of individuals or a local authority or an artificial juridical person shall be deemed to be a person, whether or not such person or body or authority or juridical person was formed or established or incorporated with the object of deriving income, profits or gains;]

1.5.1.2 CATEGORY-V (A) AGRICULTURE (ii): NON-CORPORATE FARMERS – LT

(Category-V (B): LT Non-Corporate Farmers / Sugarcane Crushing / Rural Horticulture Nurseries in the tariff order for FY2019-20)

Applicability

This tariff is applicable for all non-corporate farmers.

Fixed charges (₹/Month)	Energy Charge (₹/kWh)
NIL	NIL
Monthly minimum charges – NIL	

Note:

- (i) 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 1500 units per HP per annum on annual basis and issue bills for the consumption above 1500 units per HP per annum and charge at the rate of ₹7.06/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 ₹7.09 per unit whereas the licensees have estimated the cost of service for LT-V category is ₹7.55 per unit in respect of SPDCL and ₹7.06 per unit in respect of EPDCL. The lowest out of the three being ₹7.06, 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.*
- (ii) In case of LT Lift Irrigation schemes which are in the paying category hitherto, the DISCOMs shall extend free power supply upto 1500 units per HP per annum on annual basis and shall issue bills for payment of additional units consumed

over and above 1500 units per HP per annum at the rate of ₹7.06/ 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 ₹7.09 per unit whereas the licensees have estimated the cost of service for LT-V category at ₹7.55 per unit in respect of SPDCL and ₹7.06 per unit in respect of EPDCL. The lowest out of the three being ₹7.06, 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)

SPECIFIC CONDITIONS APPLICABLE FOR NON-CORPORATE FARMERS:

- (i) 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.
- (ii) Supply to the L.T. Agricultural services will be suitably regulated as notified by Licensees from time to time.
- (iii) The farmers eligible for free supply 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. Non-corporate farmers without DSM measures shall be provided with meters and billed at the tariff applicable to Category-V (A) (i): LT.
- (iv) 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.

All new connections shall be given only with DSM measures implemented and with meters.

1.5.1.3 CATEGORY-V (A) AGRICULTURE (iii): SALT FARMING UNITS UPTO 15HP* – LT
(Category-V (A): LT Corporate Farmers / Salt farming units upto 15HP in the tariff order FY2019-20)

Applicability

This tariff is applicable for Salt Farming units upto 15 HP.

Fixed charges (₹/HP/Month)	Energy Charge (₹/kWh)
-NIL-	2.50
Monthly minimum charges – NIL	

* - Units with connected load more than 15 HP shall be billed under Category III (A): Industry (General) – LT tariff.

1.5.1.4 CATEGORY-V (A) AGRICULTURE (iv): SUGARCANE CRUSHING – LT

(Category-V (B): LT Non-Corporate Farmers / Sugarcane Crushing / Rural Horticulture Nurseries in the tariff order for FY2019-20)

Applicability

This tariff is applicable for all sugar cane crushing units connected to agricultural / rural feeders.

Fixed charges (₹/Month)	Energy Charge (₹/kWh)
NIL	NIL
Monthly minimum charges – NIL	

1.5.1.5 CATEGORY-V (A) (v): RURAL HORTICULTURE NURSERIES – LT

(Category-V (B): LT Non-Corporate Farmers / Sugarcane Crushing / Rural Horticulture Nurseries in the tariff order for FY2019-20)

Applicability

This tariff is applicable for Horticulture Nurseries in rural areas.

Fixed charges (₹/HP/Month)	Energy Charge (₹/kWh)
NIL	NIL
Monthly minimum charges – NIL	

1.5.1.6 CATEGORY-V (A) AGRICULTURE (vi): FLORICULTURE IN GREEN HOUSE – LT

(Category-V(D): LT Poultry Hatcheries & Poultry Feed Mixing Plants / Aqua Hatcheries & Aqua Feed Mixing Plants / Floriculture in Green House in tariff order for FY2019-20)

Applicability

This tariff is applicable for Floriculture in Green Houses.

Fixed charges (₹/KW/Month)	Energy Charge (₹/kWh or kVAh)
75	4.50
Monthly minimum charges – NIL	

1.5.2 CATEGORY-V (B): AQUA CULTURE& ANIMAL HUSBANDRY – LT

(Category-V(C): LT Aqua Culture&Animal Husbandry in the tariff order for FY2019-20)

Applicability

This tariff is applicable to Aqua Culture and Animal Husbandry, such as Poultry Farms, Pisciculture, Prawn Culture and Dairy Farms.

Fixed Charges (₹/ kW/Month)	Energy Charges (₹ / kWh or kVAh)
30	3.85
Monthly minimum charges – NIL	

Note: Poultry Farms are exempted from the condition of 5kW minimum load for releasing three phase supply.

1.5.3 CATEGORY – V (C): POULTRY & AQUA CULTURE – LT**1.5.3.1 CATEGORY-V(C) (i): POULTRY HATCHERIES & POULTRY FEED MIXING PLANTS – LT**

(Category-V(D): LT Poultry Hatcheries & Poultry Feed Mixing Plants / Aqua Hatcheries & Aqua Feed Mixing Plants / Floriculture in Green House in the tariff order for FY2019-20)

Applicability

This tariff is applicable to Poultry Hatcheries and Poultry Feed Mixing Plants.

Fixed Charges (₹/kW/Month)	Energy Charges (₹/kWh or kVAh)
75	4.50
Monthly minimum charges – NIL	

1.5.3.2 CATEGORY – V(C) (ii): AQUA HATCHERIES & AQUA FEED MIXING PLANTS – LT

(Category-V(D): LT Poultry Hatcheries & Poultry Feed Mixing Plants / Aqua Hatcheries & Aqua Feed Mixing Plants / Floriculture in Green House in the tariff order for FY2019-20)

Applicability

This tariff is applicable to Aqua Hatcheries and Aqua Feed Mixing Plants.

Fixed Charges (₹/kW/Month)	Energy Charges (₹/kWh or kVAh)
75	5.00
Monthly minimum charges – NIL	

1.5.4 CATEGORY – V (D): AGRO BASED COTTAGE INDUSTRIES UPTO 10HP* – LT

(Category-V(E): LT Agro Based Cottage Industries Upto 10HP in the tariff order for FY2019-20)

Applicability

This tariff is applicable to small agro based industrial units covering Sisal fiber extraction co-operative units, Vermiculture, Sericulture, Mushroom growing / farming, 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 Charges (₹/ kWh)
20	3.75
Monthly minimum energy charges – Nil	

* Agro based activities with connected load exceeding 10 HP shall be billed at Tariff specified for Category V (C) (ii): Aqua Hatcheries & Aqua Feed Mixing Plants– LT

In so far as sericulture is concerned, connected load exceeding 15 HP shall be billed at Tariff specified for Category V (C) (ii): Aqua Hatcheries & Aqua Feed Mixing Plants – LT.

2 TEMPORARY SUPPLY – LT**THERE IS NO SEPARATE CATEGORY FOR TEMPORARY SUPPLY.**

Temporary supply can be released to any category of consumers with respective applicable terms and conditions in addition to the specific conditions mentioned hereunder:

Temporary supply shall not ordinarily be given for a period exceeding 6 (six) months and can be renewed upto a maximum of another six months. In any case, the total period shall not exceed one year beyond which permanent connection shall be extended.

The charges for temporary supply to any category of consumers except those entitled to fully subsidized and free supply of electricity under this Order shall be as follows:

Fixed Charges (₹/kW/Month)	Energy Charges (₹/kWh or kVAh)
30	10.50

The charges for temporary supply to consumers who are entitled to fully subsidized and free supply of electricity under this Order shall be as follows:

Fixed Charges (₹/kW/Month)	Energy Charges (₹/kWh or kVAh)
NIL	3.75

Specific conditions for release of LT Temporary Supply

- (i)
 - (a) Tri-vector 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.
- (ii) 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 3.8 is also to be paid.
- (iii) 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.
- (iv)
 - (a) Estimated cost of the works as mentioned in para (iii) 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.
- (v)
 - (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 iv(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 iv(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.

(vi) 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.

(vii) 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.

3 OTHER CHARGES FOR LT SUPPLY

3.1 Additional Charges for delayed payment

- i) 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.
- ii) In case of all sub-groups of Category-I(A) : LT, Category-II(A) (i): LT, Category-III(D) : LT and Category-V(D): LT, 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.

Description	DPS (₹/Month)
Category-I (A): LT Group –A	10
Category-I (A): LT Group - B, Group - C, Category-II(A) (i): LT, Category-III(D): LT, Category IV (C) (i) LT and Category-V(D) : LT	25

- iii) In case of Category-II(A)(ii, iii & iv) : LT,Category-II (B to D): LT,Category-III (A to C): LT and Category-IV(A, B& C (ii)):LT, Category-V (B, C & E): LT the licensees shall levy Delayed Payment Surcharge (DPS) on monthly consumption charges only at the rate of 5 paise per ₹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 instalments, 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.
- iv) If the C.C. bill amount is not paid within 15 days from the due date, the power supply is liable for disconnection.
- v) 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.

3.2 Service Connection Charges

The service connection charges shall be collected as per the Regulations issued by the Commission from time to time.

3.3 Reconnections

(a) Low Tension Services.	
Category-I (Group-A) (Overhead)	₹50
Other Category Services (Overhead)	₹100
Services with Under Ground cable	₹300

3.4 Testing

(a) Installations	
The first test and inspection of a new installation or of an extension to an existing installation	Nil
Charges payable by the consumer in advance for each subsequent test and / or inspection if found necessary owing to any fault in the installation or to non-compliance of the conditions of supply	₹20
(b) Meters	
A.C. Single Phase Energy meter	₹200
A.C. Three Phase Energy meter	₹500
Trivector meter	₹2500

3.5 Service calls

(a) Charges for attendance of LM/ALM/JLM for Low Tension Consumers	
i) Replacing of Licensees' cut out fuses	Nil
ii) Replacing of consumer's fuses	₹ 5/-
(b) Charges for attendance of LM/ALM/JLM at the consumer's premises during any function or temporary illumination provided a LM/ALM/JLM can be spared for such work	₹100/- for each day or part thereof.
(c) Charges for infructuous visit of Licensee employees to the consumer's premises	₹25/- for each visit when there is no defect in Licensee's equipment

3.6 Miscellaneous Charges

(a) Application Registration Fees:	
(i) For Agricultural & Domestic categories	₹ 50
(ii) For all other Categories	₹100
(b) Revision of estimates	₹ 50
(c) Fee for re-rating of consumer's installation at the request of the consumer. (This does not include the additional 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).	Same as Application Registration Fee
(d) Resealing of	
(i) whole current meter	₹ 25
(ii) CT operated meters and other apparatus in the consumer's premises for all other 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 (where it is not necessitated by increase in demand permanently)	₹50 for Single phase meter ₹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

3.7 Customer Charges:

Consumer Category:	₹ / month
Category – I (A): Domestic	
Consumption ≤75 Units during the billing month	
0 – 50	25
51 – 75	30
Group (B): Consumption (>75 and ≤225 units) during the billing month	
0 – 50	35
51 – 100	40
101 – 200	45
201-225	50
Group (C): Consumption >225 units during the billing month	
0 – 50	35
51 – 100	40
101 – 200	45
201-300	50
Above 300	55
Category-II: COMMERCIAL & OTHERS:	
Category-II(A) (i): < 50 units per month	30
Category-II(A) (ii): between 50 units to 100 units per month	40
Category-II(A) (ii) More than 100 units	45
Category-II(A)(iii): Advertising Hoardings	50
Category-II(A)(iv): Function Halls / Auditoriums	50
Category-II(B): Start up power	500
Category-II(C): Electric Vehicles / Charging Stations	250
Category-III: INDUSTRY & Category-V(B), (C) & (D)	
upto 20 HP	63
21 – 50 HP	250
51 – 100 HP	938
Category-IV: INSTITUTIONAL	
Category-IV(A): Utilities	35
Category-IV(B): General Purpose	45
All other Categories	30
Temporary Supply	50

3.8 Urgency charges for temporary supply at short notice -- ₹200

3.9 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.

3.10 Supervision/Inspection & checking Charges for all Categories -- ₹100

3.11 Miscellaneous works

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.

3.12 Power factor apparatus and capacitor surcharge

- (1) Every consumer not provided with trivector meters, except Category-I(A): Domestic – LT, 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 consumers except Category-I(A):LT, Category-III(D):LT, Category-IV(A&C):LT, Category-V(A&D):LT 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 @10% of the monthly bill amount, as per the terms and conditions of supply notified by the Licensees.
- (4) Consumers, except Category-I(A): LT and Category-V(A) (i to vi): LT, 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 failure on the part of the consumer with the above requirement shall entail payment of capacitor surcharge @ 10% of the monthly bill amount.

The consumer 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.

PART 'B'**HIGH TENSION (HT) SUPPLY****4 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 **75kW/100 HP**.

The applicability of the respective categories as enumerated is only illustrative but not exhaustive.

4.1 CATEGORY-I (B): TOWNSHIPS, COLONIES, GATED COMMUNITIES & VILLAS – HT
(Category-I(B): HT Townships and Colonies in the tariff order for FY2019-20)

Applicability

This tariff is applicable exclusively for

- (1) Townships and Residential Colonies of Cooperative Group Housing Societies, Gated Communities and Villas who avail supply at single point for making electricity available to the members of such Society residing in the same premises.
- (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	7.00

SPECIFIC CONDITIONS:

- (i) The billing demand shall be the recorded maximum demand during the month.
- (ii) Energy Charges will be billed on the basis of actual consumption or 25 kVAh per kVA of Contracted Demand, whichever is higher.

- (iii) 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.

4.2 CATEGORY-II: COMMERCIAL & OTHERS – HT

4.2.1.1 CATEGORY-II (A): COMMERCIAL (ii) MAJOR – HT

(Category-II(A): HT Commercial & Category-II(B): HT Public Infrastructure & Tourism in the tariff order for FY2019-20)

Applicability

This tariff is applicable to:

- (1) Consumers who undertake non-domestic activity.
- (2) Consumers who undertake commercial activity.
- (3) Consumers who do not fall in any other Category i.e. Category I(B): HT, Category II (B): HT, Category II (C) HT, Category II (D) HT, Category III: HT, Category IV: HT, Category V: HT.
- (4) Consumers who avail supply of energy for lighting, fans, heating, air conditioning and other electric appliances in any 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.
- (6) This tariff is also applicable to Airports, Resorts, Amusement Parks, MICE Centers, Golf Courses, Botanical Gardens, Urban / Rural Haats, Tourism and Hospitality Training Institutes, Wayside Amenities, Spiritual / Wellness centres and Museums etc,

Voltage of Supply	Demand Charges (₹/ kVA/month of Billing Demand)	Energy Charges (₹/kVAh)*
132 kV and above	475	6.70
33 kV	475	6.95
11 kV	475	7.65
* ₹ 1 / 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.		

SPECIFIC CONDITIONS

- (i) The billing demand shall be the Maximum Demand Recorded during the month or 80% of the contracted demand, whichever is higher.
- (ii) Energy charges will be billed on the basis of actual Energy consumption or 25 kVAh per kVA of Billing Demand, whichever is higher.

4.2.1.2 CATEGORY-II (A) (iv): FUNCTION HALLS / AUDITORIA – HT

(Category-II (D): HT Function Halls / Auditoriums, Startup Power for Captive Generating Plants or Co-Generations Plants or Renewable Energy Generation in the tariff order for FY2019-20)

Applicability

The tariff is applicable for supply of electricity to function halls& auditoriums, marriage halls, convention centers and the like.

Voltage of Supply	Demand Charges (₹/kVA/month)	Energy Charges (₹/kVAh)
All Voltages	Nil	12.25
Monthly minimum charges – NIL		

4.2.2 CATEGORY-II (B): STARTUP POWER – HT

(Category-II (D): HT Function Halls / Auditoriums, Startup Power for Captive Generating Plants or Co-Generations Plants or Renewable Energy Generation in the tariff order for FY2019-20)

Applicability

The tariff is applicable for supply of electricity to startup power for Captive Generating Plants or Co-Generation Plants or Renewable Energy Generation Plants.

The Startup Power is intended for those generators who require occasional and intermittent supply for startup operations of the generating unit(s) alone. However, the Captive and Cogeneration 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.

The conditions applicable for Startup Power are as follows:

- (i) Supply is to be used strictly for generator start-up operations, maintenance and lighting purposes only.
- (ii) 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%
- (iii) 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.
- (iv) All other conditions applicable to Category II: Commercial & Others– HT shall also apply to the Category II(B): Startup Power– HT 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.

Voltage of Supply	Demand Charges (₹/kVA/month)	Energy Charges (₹/kVAh)
All Voltages	Nil	12.25
Monthly minimum charges – NIL		

****In respect of co-generation Sugar plants,***

The Gross Energy and Recorded Maximum Demand (RMD) as per the applicable tariffs of AP Transco shall alone be billed as per the Power Purchase Agreements between the Co-generation Sugar plants and the utilities then existing, subject to other specified conditions. The introduction of HT-II(F) category in FY2018-19 applicable to supply of electricity to start-up power for Captive Generating Plants, Co-generation Plants and Renewable Generation Plants was in consequence to the Andhra Pradesh Electricity Regulatory Commission Power Evacuation from Captive Generation, Co-generation and Renewable Energy Source Power Plants Regulation No.3 of 2017 which came into force from 6.06.2017. In the Order on Tariff for Retail sale of Electricity during FY2018-19 dated 27.03.2018, it was clarified at pages 317 and 318 that an option is given to such generators either to continue in their present category or to be included in the new category. It was directed to give an opportunity to all such generators to exercise option in this regard, without which the category change shall not be effected. It is now found from the representations of the concerned stake holders that even when they exercise the option to continue in their present category i.e. HT-I(A), they were subjected to the specific conditions at page 325 of the said Order that the billing demand shall be the maximum demand recorded during the month or 80% of the Contracted Demand,

whichever is higher and Energy Charges will be billed on the basis of actual energy consumption or 50 kVAh/kVA of billing demand, whichever is higher, which deprived them of the condition agreed to under the respective power purchase agreements that the Gross Energy and Recorded Maximum Demand (RMD) as per the applicable tariffs of AP Transco shall alone be billed. Any generator coming under HT Category-II(F) since the creation of such category, of course, is not entitled to any option under the Tariff Order dated 27.03.2018 and will be governed by the terms and conditions prescribed for such category. It is only such generators who were existing by the date of creation of such category and who answer such description that have to be protected from any prejudice to their pre-existing rights. If an appropriate clarification is not given, such generators are claimed to be adversely affected due to the rights under the pre-existing power purchase agreements being opposed to the specific terms and conditions of supply to HT-I(A) category consumers, even after the exercise of any option to remain and continue in the then existing category. **Therefore, in the interests of justice and to respect the contractual rights and obligations arising under valid and legal power purchase agreements in force, the power given to the Commission under clause 19 of Regulation 3 of 2017 has to be invoked to remove the difficulties. Therefore, the Commission by the specific order hereunder considers it necessary and expedient to continue the billing for drawl of power by such generators in accordance with the specific clauses of the power purchase agreements with effect from 1.04.2019, while not disturbing the billing already done and payments already made towards such charges from the date of introduction of HT-II(F) category upto date.**

4.2.3 CATEGORY-II (C): ELECTRIC VEHICLES / CHARGING STATIONS – HT

(Category-II (E): HT Electric Vehicles (EVs) / Charging Stations in the tariff order for FY2019-20)

Applicability

The tariff is applicable for supply of electricity to Electric Vehicles and Charging Stations that will provide electricity for charging.

Voltage of Supply	Energy Charges (₹/kVAh)
All Voltages	6.70
Monthly minimum charges – Nil	

4.2.4 CATEGORY-II (D): GREEN POWER – HT

(Category-II (F): HT Green Power in the tariff order for FY2019-20)

Applicability

This tariff is applicable to all consumers other than those covered under Category II (A) (iv): HT - who wish to avail power from Non-conventional sources of energy voluntarily and show their support to an environmental cause.

Voltage of Supply	Energy Charges (₹/kVAh)
All Voltages	12.25
Monthly minimum charges – Nil	

Note:

- (i) The tariff shall be optional and can be extended to any consumer without reference to end use purpose.
- (ii) A consumer shall be entitled to Renewable Energy Certificates (RECs) as may be admissible.

4.3 CATEGORY – III: INDUSTRY – HT**4.3.1 CATEGORY-III (A): INDUSTRY (GENERAL) – HT****Applicability**

This tariff is applicable for supply to all 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, 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.

Voltage of Supply	Demand Charges (₹/ kVA/month of Billing Demand)	Energy Charges (₹/kVAh) *
132 kV & Above	475	5.40
33 Kv	475	5.85
11 Kv	475	6.30
Industrial Colonies		
All Voltages	NIL	7.00
* ₹ 1/ 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.		

Note:

- 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 ₹7.00/kVAh.
- In case segregation of colony consumption has not been done, 15% of the total energy consumption shall be billed at ₹7.00/kVAh and the balance kVAh shall be charged at the corresponding energy tariff under Category-III(A): HT.
- Wherever possible, colonies of industry shall be given a separate HT service under Category-I(B): Townships, Colonies, Gated Communities and Villas– HT.

Specific Conditions

- The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher.
- Energy charges will be billed on the basis of actual energy consumption or 50 kVAh per kVA of billing demand, whichever is higher.

4.3.1.1 LOAD FACTOR INCENTIVE

This incentive is applicable only to Category –III(A): Industry (General)– HT as below:

LOAD FACTOR INCENTIVE (TELESCOPIC)

S. No.	Load factor	Concession in Energy Charge (Paise/unit)
1	More than 50% and upto 60%	10
2	More than 60% and upto 70%	20
3	More than 70% and upto 80%	30
4	More than 80% and upto 85%	40
5	More than 85%	50

The concession shall be applicable on the consumption in excess of the threshold level of load factor of 50%, on a Telescopic basis with the rates mentioned above.

The load factor shall be calculated as per the following formula:

$$\text{Load Factor (\%)} = \frac{\text{Monthly consumption in kVAh} \times 100}{\text{No. of hours in the billing month} \times \text{Demand (kVA)}}$$

Note:

- i. Monthly consumption shall be the units (kVAh) consumed in a billing month excluding colony consumption and the units (kWh/kVAh) received from sources other than the Licensee.

(For the purpose of the above calculation, 1 kWh from Open Access sources shall be treated as 1 kVAh)
- ii. Demand (kVA) shall be the Recorded Maximum Demand (RMD) or the Contracted Maximum Demand (CMD) whichever is high, in kVA, after setting off the demand from other sources, if any.

(For the purpose of the above calculation, 1 kW from Open Access sources shall be treated as 1 kVA)
- iii. The load factor (%) shall be rounded off to the nearest lower integer.
- iv. The billing month shall be the period in number of days between two consecutive dates of meter readings taken for the purpose of billing.

4.3.2 CATEGORY-III (B): SEASONAL INDUSTRIES (OFF-SEASON) – HT

Applicability

This tariff is applicable to a consumer who avails energy for manufacture of sugar or ice or salt, decorticating, ginning and pressing, cotton seed oil mills, seed processing, fruit processing, tobacco processing, re-drying and **Rice Mills** 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 Demand*)	Energy Charges (₹/kVAh)
132 kV and above	475	6.70
33 kV	475	6.95
11 kV	475	7.65
* Based on the Recorded Maximum Demand or 30% of the Contracted Demand whichever is higher.		
Monthly minimum charges – NIL		

During season period, billing shall be done as per Category-III(A): HT Industry - General tariffs.

Specific Conditions

- (i) 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.
- (ii) 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.
- (iii) 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.
- (iv) 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.
- (v) The off-season tariff is not available to composite units having seasonal and other categories of loads.
- (vi) 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.
- (vii) 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.

4.3.3 CATEGORY-III (C): ENERGY INTENSIVE INDUSTRIES – HT**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	5.35
11 kV	Nil	5.80

Specific Conditions

- Energy charges will be billed on the basis of actual energy consumption or 50 kVAh/ kVA/month of contracted demand, whichever is higher.
- A Ferro Alloy industry consumer shall draw his entire power requirement from DISCOMs only.
- The consumer depending on captive generation in whole or in part does not fall within the condition (ii) mentioned above to the extent of captive generation.

4.4 CATEGORY-IV: INSTITUTIONAL – HT**4.4.1 CATEGORY-IV (A): Utilities – HT**

(Category-IV (B): HT CPWS/PWS Schemes in the tariff order for FY2019-20)

Applicability

The tariff is applicable to energy consumption by H.T. services pertaining to Composite Protected Water Supply (PWS) Schemes operated and / or maintained by local bodies (Panchayats, Municipalities and Municipal Corporations). 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)
132 kV and above	475	6.70
33 kV	475	6.95
11Kv	475	7.65
Minimum charges: ₹300/kVA/Year		

Note: Metering is mandatory.

4.4.2 CATEGORY-IV (B): GENERAL PURPOSE – HT**Applicability**

This tariff is applicable for supply of energy to places of Crematoriums, Govt Educational institutions and Student Hostels run by Govt agencies, Charitable institutions i.e. Public charitable trusts and societies registered under the Societies Registration Act running educational and medical institutions on no profit basis, recognized service institutions and registered old age homes, orphanages and the like rendering gratuitous service to the public at large without any profit. Government Offices and Government Hospitals shall also be billed under this category.

Voltage of Supply	Demand Charges (₹/kVA/month)	Energy Charges (₹/kVAh)
132 kV and above	475	7.00
33 kV	475	7.25
11kV	475	7.95
Minimum charges: ₹300/kVA/Year		

Note:

Government controlled Auditoria and Theatres run by Public Charitable Institutions for the purpose of propagation of art and culture which are not used with a profit motive and other Public Charitable Institutions rendering totally free service to the general public shall also to be billed under this category.

4.4.3 CATEGORY-IV (C): RELIGIOUS PLACES – HT

(Category-IV (E): HT Religious Places in the tariff order for FY2019-20)

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	5.00

Specific Conditions

- The billing demand shall be the Maximum Demand Recorded during the month or 80% of the contracted demand, whichever is higher.
- Energy charges will be billed on the basis of actual Energy consumption or 25kVAh per kVA of Billing Demand, whichever is higher.

4.4.4 CATEGORY-IV (D): RAILWAY TRACTION – HT

(Category- IV(F): HT Railway Traction in the tariff order for FY2019-20)

Applicability

This tariff is applicable to H.T. Railway Traction Loads.

Demand Charges (₹ /kVA/month)	Energy Charges (₹ /kVAh)
350	5.50

Specific Conditions

- (i) The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher.
- (ii) 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.

4.5 AGRICULTURE & RELATED**4.5.1 CATEGORY-V (B): AQUA CULTURE & ANIMAL HUSBANDRY – HT**

(Category- V(C): HT Aqua Culture & Animal Husbandry in the tariff order for FY2019-20)

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	3.85

Specific Conditions

Energy charges will be billed on the basis of actual energy consumption or 40kVAh/ kVA per Month of Contracted Demand, whichever is higher.

4.5.2 CATEGORY-V (C): POULTRY & AQUA CULTURE – HT**4.5.2.1 CATEGORY-V (C)(i): POULTRY HATCHERIES & POULTRY FEED MIXING PLANTS – HT**

(Category- V(D) HT – Poultry Hatcheries & Poultry Feed Mixing Plants, Aqua Hatcheries & Aqua Feed Mixing Plants / Floriculture in Green House in the tariff order for FY2019-20)

Applicability

This tariff is applicable to Poultry Hatcheries and Poultry Feed Mixing Plants.

Voltage of Supply	Demand Charges (₹/kVA/month)	Energy Charges (₹/kVAh)
All Voltages	475	5.25
Monthly minimum charges – NIL		

Specific Conditions

Energy charges will be billed on the basis of actual energy consumption or 40kVAh/ kVA per Month of Contracted Demand, whichever is higher.

4.5.2.2 CATEGORY-V(C) (ii): AQUA HATCHERIES & AQUA FEED MIXING PLANTS – HT

Applicability

(Category- V(D) HT – Poultry Hatcheries & Poultry Feed Mixing Plants, Aqua Hatcheries & Aqua Feed Mixing Plants / Floriculture in Green House in the tariff order for FY2019-20)

This tariff is applicable to Aqua Hatcheries and Aqua Feed Mixing Plants.

Voltage of Supply	Demand Charges (₹/kVA/month)	Energy Charges (₹/kVAh)
All Voltages	475	5.75
Monthly minimum charges – NIL		

Specific Conditions

Energy charges will be billed on the basis of actual energy consumption or 40kVAh/ kVA per Month of Contracted Demand, whichever is higher.

4.5.3 CATEGORY-V (E): GOVERNMENT / PRIVATE LIFT IRRIGATION SCHEMES – HT

(Category-V(F): HT Government / Private Lift Irrigation Schemes in the tariff order for FY2019-20)

Applicability

This tariff is applicable to Lift Irrigation Schemes managed by Government of A.P. and for consumers availing HT supply for irrigation.

Voltage of Supply	Demand Charges (₹/kVA/month)	Energy Charges (₹/kVAh)
All Voltages	NIL	7.15
Monthly minimum charges – NIL		

Note: Metering is mandatory

5. TEMPORARY SUPPLY – HT

There is no separate category for temporary supply. However, Temporary supply can be released against each category with respective terms and conditions applicable and it shall be billed energy charges @ 1.5 times and same fixed charges of corresponding category.

Voltage of Supply	Demand Charges (₹/kVA/month)	Energy Charges (₹/kVAh)
All Voltages	1.5 times of the corresponding HT consumer Category	

Specific Conditions for release of HT Temporary Supply

- (i) Requests for temporary supply of energy cannot normally be considered unless there is a clear notice of three months.
- (ii) 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.
 - (iii) (a) Estimated cost of the works as mentioned in para (ii) 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.
 - (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.
 - (iv) (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 para (iii) (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 para (iii) (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 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.

(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.

- (v) For new connections: 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.

- (vi) 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 subject to the following conditions.

- a) 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.
- b) 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.

6. GENERAL CONDITIONS FOR HT SUPPLY

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	At 11 kV
1501 kVA to 2500 kVA	At 11kV subject to technical feasibility or at 33 kV
2501 kVA to 5000 kVA	At 33 kV
5001 kVA to 10000 kVA	At 33 kV [#] subject to technical feasibility or at 132 kV
Above 10000 kVA	At 132 kV [#] or above, as may be decided by the licensee

Note:

- (i) While extending power supply at 33 kV for smaller demands, proper CT ratio has to be selected.
 - (ii) The DISCOMs will extend the above power supply capacities subject to technical feasibility.
 - (iii) The Licensee shall ensure adequate conductor capacity and if augmentation of conducted capacity is required, the necessary augmentation charges may be collected from the consumer.
 - (iv) The Licensee shall ensure voltage regulation within the specified limits.
 - (v) (#) Power supply at 132 kV and above shall be through an independent (Dedicated) feeder or through Loop in Loop out (LILO) arrangement as decided by APTRANSCO.
- (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	132kV or 220 kV as may be decided by the licensee

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 Category-II and Category-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 sub-station where transformation to required voltage takes place shall be:

For total contracted 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 20000kVA	33 kV

Note: The sum total of individual 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. No.	Contracted Demand with Licensee	Voltage at which supply should be availed (in kV)	Voltage at which consumer is availing supply (in kV)	Rates % extra over the normal rates	
				Demand Charges	Energy Charges
(A) HT consumers availing supply through common feeders:					
1.	2501 kVA to 5000 kVA	33	11	12%	10%
2.	5000 kVA to 10000 kVA	33	11	12%	10%
3.	Above 10000kVA	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 kVA	132 or 220	33	12%	10%
Note: 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. 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 Category-I(B):HT i.e. Townships, Colonies, Gated Communities and Villas. For Category-I(B): HT 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 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 on energy calculated in proportion to the excess demand:

RMD	Demand Charges on Excess Demand	Energy Charges on Excess Energy
100 to 120% of CMD	2 times of normal charge	Normal
Above 120% and up to 200% of CMD	2 times of normal charge	1.5 times of normal charge
More than 200% of CMD	2 times of normal charge	2 times of normal charge
Excess demand and energy charges shall be computed as follows: Excess Demand = (RMD-CMD) if RMD is more than CMD with Licensee. Excess Energy = (Excess Demand / RMD) X Recorded Energy		

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/ ₹100/day or ₹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 Lead. 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 ± 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.

7 OTHER CHARGES FOR HT SUPPLY

7.1 Service Connection Charges

The service connection charges shall be collected as per the Regulations issued by the Commission from time to time.

7.2 Reconnection

All Categories	Charges
11 kV	₹2000
33 kV	₹4000
132/220 kV	₹6000

7.3 Testing

(a) Installations:	Charges
The first test and inspection of a new installation or of an extension to an existing installation.	Nil
Charges payable by the consumer in advance for each subsequent test and/or inspection if found necessary owing to any fault in the installation or to non-compliance of the conditions of supply	₹ 300
(b) Meter	₹5000
(c) Transformer Oil:	
First sample of oil	₹ 200
Additional sample of oil of the same equipment received at the same time	₹ 300

7.4 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)	₹ 1000
(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:	
All categories - 11 kV	₹ 1406/month
All 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
(g) Supervision/Inspection&checking charges	₹ 1000

7.5 Miscellaneous works (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.

- 226.** 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.
- 227.** The above determined rates for “Category I (A): Domestic – LT” and “Category V(A): Agriculture – LT” consumers are contingent on payment of subsidy as undertaken by the GoAP, failing which, the rates contained in the “Full Cost Recovery Tariff Schedule” as determined in Chapter-IX will become operative.

- 228.** The rates indicated in the Retail Supply Tariff Schedule for FY2020-21 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.01-04-2020 to 31-03-2021.

CHAPTER – XI

CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE

Introduction

- 229.** 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 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.
- 230.** 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.
- 231.** Both the distribution licensees i.e. Southern Power Distribution Company of A.P. Ltd. (APSPDCL) and Eastern Power Distribution Company of A.P. Ltd (APEPDCL) have made the proposals for determination of CSS(Cross Subsidy Surcharge) along with ARR/FPT filings for determination of tariff for retail sale of electricity for FY2020-21 based on the formula specified (for CSS) in the National Tariff Policy, 2016. The details of the CSS filed by the Licensees are indicated below:

Table 62: Filing - APSPDCL - Cross Subsidy Surcharges for FY2020-21

Category	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	Applicable CSS (Rs./Unit)
HT I (B): Townships & Residential Colonies								
11 KV	7.42	4.91	1.37	9.41%	0	0.81	1.48	0.81
33 KV	7.42	4.91	0.60	6.32%	0	1.91	1.48	1.48
HT Cat-II : Commercial								
A) General								
11 KV	9.21	4.91	1.37	9.41%	0	2.60	1.84	1.84
33 KV	10.30	4.91	0.60	6.32%	0	4.63	2.06	2.06
132 KV	9.32	4.91	0.49	3.17%	0	3.92	1.86	1.86
B) Occasional								
11 KV	12.25	4.91	1.37	9.41%	0	5.64	2.45	2.45
33 KV	12.25	4.91	0.60	6.32%	0	6.58	2.45	2.45
132 KV	12.25	4.91	0.49	3.17%	0	6.85	2.45	2.45
HT Cat-III : Industry								
A) Industrial General								
11 KV	9.37	4.91	1.37	9.41%	0	2.76	1.87	1.87
33 KV	7.42	4.91	0.60	6.32%	0	1.75	1.48	1.48
132 KV	6.77	4.91	0.49	3.17%	0	1.37	1.35	1.35
B) Industrial Seasonal					0			
11 KV	7.65	4.91	1.37	9.41%	0	1.04	1.53	1.04
33 KV	6.95	4.91	0.60	6.32%	0	1.44	1.39	1.39
C) Energy Intensive					0			
11 KV	5.80	4.91	1.37	9.41%	0	0.00	1.16	0.00
33 KV	5.35	4.91	0.60	6.32%	0	0.00	1.07	0.00
132 KV	4.95	4.91	0.49	3.17%	0	0.00	0.99	0.00
HT Cat-IV : Institutions					0			
A) Utilities								
11 KV	10.42	4.91	1.37	9.41%	0	3.82	2.08	2.08
33 KV	9.22	4.91	0.60	6.32%	0	3.71	1.84	1.84
B) General Purpose								
11 KV	10.26	4.91	1.37	9.41%	0	3.66	2.05	2.05
33 KV	9.98	4.91	0.60	6.32%	0	4.47	2.00	2.00
C) Railway Traction								
132 KV	8.23	4.91	0.49	3.17%	0	2.83	1.65	1.65
D) Religious Places								
11 KV	5.39	4.91	1.37	9.41%	0	0.00	1.08	0.00
33 KV	5.39	4.91	0.60	6.32%	0	0.00	1.08	0.00
132 KV	5.39	4.91	0.49	3.17%	0	0.00	1.08	0.00
HT Cat-V : Agriculture & Related								
A) Animal husbandry & Aqua								
11 KV	4.07	4.91	1.37	9.41%	0	0.00	0.81	0.00
33 KV	4.07	4.91	0.60	6.32%	0	0.00	0.81	0.00
B) Hatcheries, Feed Mixing Plants & Flori culture								
11 KV	7.96	4.91	1.37	9.41%	0	1.35	1.59	1.35
33 KV	7.96	4.91	0.60	6.32%	0	2.45	1.59	1.59
C) Lift Irrigation Schemes								
11 KV	7.15	4.91	1.37	9.41%	0	0.54	1.43	0.54
33 KV	7.15	4.91	0.60	6.32%	0	1.48	1.43	1.43
132 KV	7.15	4.91	0.49	3.17%	0	1.75	1.43	1.43

Table 63: Filing - APEPDCL - Cross Subsidy Surcharges for FY2020-21

Consumer Category			T	C	D	L	R	S=T-(C/(1-L/100))+D+R)	A = 0.2*T	CSS= min (S,A)
			Average Realization (Excluding customer charges,Minimum charges,NTI)(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 (Rs./Unit)
Category	HT SUPPLY									
		At 11 kv								
I		Gated communities, Villas and Bungalows	7.43	4.72	1.14	9.51%	0.00	1.08	1.49	1.08
II	A	General :Offices,Hotels,Private Hospitals,Private Educational Institutions,Railway Stations,Bus Stations,Airports,EV Charging Stations & Others not covered elsewhere.	10.78	4.72	1.14	9.51%	0.00	4.43	2.16	2.16
	B	Function Halls/MICE/Start up power/Green Power	12.25	4.72	1.14	9.51%	0.00	5.90	2.45	2.45
III	A	Industry(General)	8.21	4.72	1.14	9.51%	0.00	1.85	1.64	1.64
	B	Seasonal Industries(off season)	15.08	4.72	1.14	9.51%	0.00	8.73	3.02	3.02
IV	A	Utilities	10.07	4.72	1.14	9.51%	0.00	3.72	2.01	2.01
	B	General(Govt. offices,Govt Educational Institutions,Govt.Hostels,Govt.Hospitals,Charitable Institutions)	10.29	4.72	1.14	9.51%	0.00	3.93	2.06	2.06
	C	Religious Places	5.27							
V	A	Aquaculture and Animal Husbandry	3.96	4.72	1.14	9.51%	0.00	-	0.79	-
	B	Poultry Hactcheries & Poultry Feed mixing plants, Aqua Hatcheries & Aqua Feed mixing plants / Floriculture in Green House	7.16	4.72	1.14	9.51%	0.00	0.81	1.43	0.81
	C	Government / Private Lift Irrigation Schemes	7.15	4.72	1.14	9.51%	0.00	0.80	1.43	0.80
		At 33 KV								
I		Gated communities, Villas and Bungalows	7.28	4.72	0.58	6.57%	0.00	1.66	1.46	1.46
II	A	General :Offices,Hotels,Private Hospitals,Private Educational Institutions,Railway Stations,Bus Stations,Airports,EV Charging Stations & Others not covered elsewhere.	9.95	4.72	0.58	6.57%	0.00	4.33	1.99	1.99
	B	Function Halls/MICE/Start up power/Green Power	12.25	4.72	0.58	6.57%	0.00	6.62	2.45	2.45
III	A	Industry (General)	7.28	4.72	0.58	6.57%	0.00	1.65	1.46	1.46
	B	Seasonal Industries(off season)	11.48	4.72	0.58	6.57%	0.00	5.85	2.30	2.30
	C	Energy Intensive Industries(Mandatory Load Factor >=85%)	5.35	4.72	0.58	6.57%	0.00	-	1.07	-
IV	A	Utilities	7.25	4.72	0.58	6.57%	0.00	1.62	1.45	1.45
V	B	Poultry Hactcheries & Poultry Feed mixing plants, Aqua Hatcheries & Aqua Feed mixing plants / Floriculture in Green House	6.18	4.72	0.58	6.57%	0.00	0.55	1.24	0.55
	C	Government / Private Lift Irrigation Schemes	7.15	4.72	0.58	6.57%	0.00	1.52	1.43	1.43
		At 132KV								
II	A	General :Offices,Hotels,Private Hospitals,Private Educational Institutions,Railway Stations,Bus Stations,Airports,EV Charging Stations & Others not covered elsewhere.	9.39	4.72	0.49	3.90%	0.00	3.99	1.88	1.88
	B	Function Halls/MICE/Start up power/Green Power	12.25	4.72	0.49	3.90%	0.00	6.85	2.45	2.45
III	A	Industry (General)	7.36	4.72	0.49	3.90%	0.00	1.96	1.47	1.47
	B	Seasonal Industries(off season)	-							
	C	Energy Intensive Industries(Mandatory Load Factor >=85%)	4.95	4.72	0.49	3.90%	0.00	-	0.99	-
IV	D	Railway Traction	7.60	4.72	0.49	3.90%	0.00	2.20	1.52	1.52
V	C	Government / Private Lift Irrigation Schemes	7.15	4.72	0.49	3.90%	0.00	1.75	1.43	1.43

232. Views / Objections / Suggestions

- a) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has stated that there is no wisdom in imposing cross subsidy surcharge which makes Open Access impossible, makes Open Access illusory, inflicts wholly unjustified and unwarranted costs in complying with RPPO obligations by obligated entities and the licensee's obligation to supply. That there is also variation between the two DISCOMs on the proposals made by them in this regard. He therefore, requested to review the present cross subsidy surcharge with respect to the potential category of the EHT Consumers since the proposed CSC is on higher side for 132 kV EHT Consumers.
- b) Sri M.R. Samantaray, Chief General Manager (Power), Visakhapatnam Steel Plant, Visakhapatnam has stated that APEPDCL has proposed to charge ₹1.47 per unit against the existing ₹1.33 per unit, that such levy of CSS will eliminate the competition which is intended to be fostered in generation and supply of power directly to the open access consumers. Hence, increase of CSS to ₹1.47 may not be accepted.
- c) Smt. P. Vydehi, Secretary (i/c), Federation of Andhra Pradesh Chambers of Commerce and Industry, Vijayawada has stated that the amount of CSS levied by the DISCOMs has become onerous to open access consumers and the same is in deviation from the spirit of the open access.
- d) Sri Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that Cost of service of ₹7.36 arrived at by the DISCOMs is abnormally high, that too year after year this cost of service to be progressively decreased but it is being increased which is causing a big blow to the DISCOMs' consumers and which is unbearable in this global environment of industrialization and that out of total 38793 MU industry is consuming 8706 MU which constitutes 22% of the total energy bearing the burden of cross subsidy of other consumers. He therefore requested to reduce cross subsidy progressively so as to reach +/-20% in future.
- e) Sri Suresh Khandelwal, Sri Srikalahasthi Pipes Limited, Chief Operating Officer, Srikalahasthi (M), Chittoor District has stated during the public hearing at Tirupati that as per the formula specified in the Tariff Policy, the value of 'T' is the "tariff applicable" for the relevant category customer in ₹ per unit, that it is observed that instead of "tariff payable" by the relevant category, the APSPDCL has taken "average realization (Demand charges + Energy charges)" from the consumers of a particular category, that too the demand charges are fixed cost and is being paid by the consumer on contracted demand irrespective of whether he is drawing power from DISCOM or not that when a consumer draws power through open access, he

continues to pay the demand charges as before and that therefore, building the demand charges into CSS would result in recovery of demand charges twice – One, through direct billing by APSPDCL and the second time, through CSS. He therefore requested that the element of demand charges should be removed from the calculation of value of 'T' while working out CSS value and the value of 'T' be substituted by ₹5.40 per unit as against ₹ 6.77 per unit considered by the APSPDCL that even when demand charges are added, the value of 'T' would be ₹ 6.09 per unit (Energy charges ₹ 5.40 per unit and demand charges of ₹ 0.69 per unit) and not ₹6.77 as considered by APSPDCL. That tariff specified is based on peak hour, non-peak hour and off-peak hour and he requested that in all fairness, the CSS should also be worked out separately for peak, non-peak and off-peak hours.

DISCOMs' Response:Proposals on Cross Subsidy Surcharge (CSS) for FY2020-21 are filed before the Commission in accordance with the National Tariff Policy (NTP) issued by the Ministry of Power, Govt. of India with a capping of 20% only as per NTP, though the actual recovery cost would be more, without burdening the consumers.

Commission's view: The limitations imposed by the statute and the Tariff Policy are strictly observed in letter and spirit in determining the CSS.

Regarding the objection of Sri Suresh Khandelwal, as per Section 8.5 of National Tariff Policy, 2016 cross subsidy surcharge formula is as follows:

$$S = T - [C / (1 - L / 100) + D + R]$$

As per the above formula, 'T' is the tariff payable by the relevant category of consumers, including the Renewable Purchase Obligation. Indubitably tariff consists of two parts, namely, demand and energy. The formula has not excluded the demand part for calculating the Cross-Subsidy Surcharge. Therefore, the Cross-Subsidy Surcharge calculated by the DISCOMs strictly in accordance with the NTP-2016 formula does not suffer from any error requiring the Commission's intervention.

- f) Sri G.V. Mallikarjuna Rao, Chief Electrical Distribution Engineer SC Railway, Secunderabad has requested the Commission to exempt Railways from levy of cross subsidy surcharge on electricity purchased for its own consumption as Railways is a deemed licensee.

DISCOMs' Response: Cross subsidy surcharge is levied as per National Tariff Policy. Any exemption on levy of Cross subsidy surcharge to Railways will largely affect the Licensee's finances.

Commission's view: In its tariff order for FY2019-20, the Commission desired to know the views of the State of Government and the licensees in this regard. So far, the State Government has not expressed its view. The Commission is of the view that till the State Government expresses its views, it is not possible to exempt Railways from Cross Subsidy Surcharge.

Commission's Decision:

- 233.** 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 for FY2020-21 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 applicable for different categories of consumers availing open access for the FY2020-21, as described hereinafter in this Chapter.

Determination of CSS

- 234.** For determination of CSS for FY2020-21, the Commission has decided to follow the same methodology that was followed for FY2019-20 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 Cross subsidy Surcharge is to be computed as per the following formula;

$$S = T - [C / (1 - L / 100)] + D + R$$

Where, 'S' is the Cross-Subsidy Surcharge (₹/unit),

'T' is the tariff payable by the relevant category of consumers (₹/unit), including reflecting the Renewable Purchase Obligation,

'C' is the per unit weighted average cost of power purchase by the Licensee (₹/unit), including meeting the Renewable Purchase Obligation,

'D' is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level (₹/unit),

'L' is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level, and

'R' is the per unit cost of carrying regulatory assets (₹/unit).

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

- 235.** The values of 'T', 'C', 'L' and 'D' have been computed/adopted from this Order (Retail Supply Tariff Order for FY2020-21). The value of 'R' is taken as zero as there are no Regulatory assets created by the Commission.
- 236.** The CSS computations done by the Commission for FY2020-21 as per the above para are indicated below:

Table 64: Approved - APSPDCL - Cross Subsidy Surcharges for FY2020-21

Consumer Category			Average Realization (Excluding Customer Charges, Minimum Charges, NTL, DPS)	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)
Category	HT-Supply		T	C	D	L	R	$S=T \cdot [C / (1 - L / 100) + D + R]$	$A=0.2 \cdot T$	$CSS=\text{Lesser of S and A}$
	At 11kV									
I	B	Town Ships and Colonies	7.37	4.71	1.23	9.24%	0	0.95	1.47	0.95
II	A	Commercial	10.64	4.71	1.23	9.24%	0	4.22	2.13	2.13
III	A	Industrial General	9.37	4.71	1.23	9.24%	0	2.94	1.87	1.87
	B	Seasonal Industries	7.65	4.71	1.23	9.24%	0	1.23	1.53	1.23
IV	A	Utilities	10.12	4.71	1.23	9.24%	0	3.70	2.02	2.02
	B	General Purpose	10.18	4.71	1.23	9.24%	0	3.75	2.04	2.04
V	E	Government / Private Lift Irrigation Scheme	7.15	4.71	1.23	9.24%	0	0.73	1.43	0.73
	At 33kV									
I	B	Town Ships and Colonies	7.71	4.71	0.61	6.22%	0	2.07	1.54	1.54
II	A	Commercial	9.75	4.71	0.61	6.22%	0	4.12	1.95	1.95
	B	Start up power	12.25	4.71	0.61	6.22%	0	6.62	2.45	2.45
	D	Green Power	12.25	4.71	0.61	6.22%	0	6.62	2.45	2.45
III	A	Industrial General	7.42	4.71	0.61	6.22%	0	1.79	1.48	1.48
	B	Seasonal Industries	6.95	4.71	0.61	6.22%	0	1.32	1.39	1.32
IV	A	Utilities	8.92	4.71	0.61	6.22%	0	3.29	1.78	1.78
	B	General Purpose	9.98	4.71	0.61	6.22%	0	4.35	2.00	2.00
V	E	Government / Private Lift Irrigation Scheme	7.15	4.71	0.61	6.22%	0	1.52	1.43	1.43
	At 132kV									
II	A	Commercial	8.67	4.71	0.52	3.17%	0	3.28	1.73	1.73
	B	Start up power	12.25	4.71	0.52	3.17%	0	6.87	2.45	2.45
III	A	Industrial General	6.77	4.71	0.52	3.17%	0	1.39	1.35	1.35
IV	D	Railway Traction	7.23	4.71	0.52	3.17%	0	1.84	1.45	1.45
V	E	Government / Private Lift Irrigation Scheme	7.15	4.71	0.52	3.17%	0	1.77	1.43	1.43

Table 65: Approved - APEPDCL - Cross Subsidy Surcharges for FY2020-21

Consumer Category			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)
Category		HT-Supply	T	C	D	L	R	$S=T-[C/(1-L/100)+D+R]$	$A=0.2*T$	CSS=Lesser of S and A
		At 11kV								
I	B	Town Ships and Colonies	7.43	4.63	1.11	8.83%	0	1.24	1.49	1.24
II	A	Commercial	10.88	4.63	1.11	8.83%	0	4.69	2.18	2.18
III	A	Industrial General	8.21	4.63	1.11	8.83%	0	2.01	1.64	1.64
	B	Seasonal Industries	15.08	4.63	1.11	8.83%	0	8.89	3.02	3.02
IV	A	Utilities	9.77	4.63	1.11	8.83%	0	3.58	1.95	1.95
	B	General Purpose	10.49	4.63	1.11	8.83%		4.30	2.10	2.10
V	E	Government / Private Lift Irrigation Scheme	7.15	4.63	1.11	8.83%	0	0.96	1.43	0.96
		At 33kV								
I	B	Town Ships and Colonies	7.28	4.63	0.59	5.86%	0	1.77	1.46	1.46
II	A	Commercial	9.40	4.63	0.59	5.86%	0	3.90	1.88	1.88
	B	Start up power	12.25	4.63	0.59	5.86%	0	6.74	2.45	2.45
III	A	Industrial General	7.28	4.63	0.59	5.86%	0	1.77	1.46	1.46
	B	Seasonal Industries	11.48	4.63	0.59	5.86%	0	5.97	2.30	2.30
IV	A	Utilities	6.95	4.63	0.59	5.86%	0	1.44	1.39	1.39
V	E	Government / Private Lift Irrigation Scheme	7.15	4.63	0.59	5.86%	0	1.64	1.43	1.43
		At 132kV								
II	A	Commercial	8.74	4.63	0.52	3.17%	0	3.43	1.75	1.75
	B	Start up power	12.25	4.63	0.52	3.17%	0	6.95	2.45	2.45
III	A	Industrial General	7.36	4.63	0.52	3.17%	0	2.06	1.47	1.47
IV	D	Railway Traction	6.60	4.63	0.52	3.17%	0	1.30	1.32	1.30
V	E	Government / Private Lift Irrigation Scheme	7.15	4.63	0.52	3.17%	0	1.85	1.43	1.43

Determination of Additional Surcharge**Licensees' filings**

237. The APSPDCL, referring to the comments of this Commission on their filings for Additional Surcharge in FY2018-19, requested the Commission to determine the methodology for determination of Additional Surcharge based on which supplementary filings will be filed.

238. The APEPDCL stated that as per the directions of this Commission in the Tariff Order for FY2019-20, they will file the Additional Surcharge in supplementary filing.

239. Views / Objections / Suggestions

- a) Sri M.R. Samantaray, Chief General Manager (Power), Visakhapatnam Steel Plant, Visakhapatnam has stated that APEPDCL has made the provision to file Additional surcharge in supplementary filings citing directions given by the Commission in the tariff order for FY2019-20. The Additional Surcharge may not be considered at all in the Tariff Order.

APEPDCL Response: DISCOMs requested the Commission for permission to file the Additional Surcharge in supplementary filings.

Commission's Decision:

240. In view of the request of the DISCOMs vis-à-vis objection in this regard, the Commission reiterates that Section 42(4) of the Electricity Act, 2003 read with Clause 8.5.4 of the National Tariff Policy, 2016 are self-explanatory with no need to prescribe any methodology. Section 42(4) is explicit and clear that an Additional Surcharge is to be paid on the specified charges of wheeling, to meet the fixed cost arising out of the obligation to supply. Clause 8.5.4 of the National Tariff Policy, 2016 is equally unambiguous in making it obligatory for the distribution licensee to conclusively demonstrate that his obligation in terms of existing power purchase commitments has been and continues to be stranded or that there is an unavoidable obligation and incidence to bear fixed costs in consequence to such a contract and that fixed cost related to network assets will be recovered through wheeling charges.

241. Therefore, the licensees are at liberty to file supplementary filings for determination of Additional Surcharge for FY2020-21 through appropriate petitions or applications accordingly, if otherwise they are entitled for the same. Such petitions / applications, if filed, will be determined independently on merits in accordance with law as per the prescribed procedure.

Restrictions on Intra-day OA procurement by Bulk consumers

242. APEPDCL in their filings has stated that certain bulk consumers who are eligible for Inter State Open Access are obtaining the necessary permissions from SLDC for short term OA and are procuring power during day time & off-peak hours (Time of day basis as per their convenience) from the power exchanges (IEX & PXL). Short term OA transactions allow the

consumers to opportunistically switch between the DISCOM supply and market procurement during the day. The Bulk consumers are availing STOA for very shorter periods, depending upon daily and intra-day variations of power availability on market prices. The DISCOMs cannot requisition Power as and when needed to cater to the variable / switchable demand of short-term open access consumers and the deviations accrue on account of this are burdening other consumers of the DISCOMs. Stating the above, APEPDCL requested the Commission to issue necessary permission to impose a condition for the short-term open access consumers to go for only day-long block bidding (procuring power for entire day without intermittent usage of grid power) instead of the existing provision for intra-day procurement for certain time blocks and to give prior intimation to the territorial DISCOM, to enable the DISCOMs plan for the day ahead procurement.

Commission's Decision: The Regulations in vogue do not provide for imposing any conditions on short term open access consumers to direct them to procure for entire day.

CHAPTER - XII

VIEWS/OBJECTIONS/SUGGESTIONS (GENERAL)

243. The Commission, during the public consultation process on ARR and tariff determination for Retail Sale of Electricity for FY2020-21, has received many general views/objections/suggestions in addition to those specifically related to the ARR and Tariff determination. The Commission, having discussed the specific views/ objections / suggestions at relevant place appropriately in this order, deals with the remaining objections which are general in nature in this Chapter as detailed hereunder:

244. ISSUES IN GENERAL

- a) Sri S. Suryaprakash Rao, Former Secretary, Andhra Pradesh Electricity Regulatory Commission, Hyderabad, stating that the voltage surcharge condition needs to be omitted, has referred to the Commission's view on the requests on different issues in para 138 of the Tariff Order dt.27-03-2018 that, "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". As no progress appears to have been made in this matter, he has requested to take this matter forward and make appropriate changes in the General Conditions (GTCS) of LT and HT supply after due consultation process.

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: The concept of Voltage Surcharge is introduced in recognition of the proven fact that lower the voltages, higher the line losses. Therefore, this long-standing practice is required to be continued to achieve the twin objectives of recovering line losses and also to encourage the consumers to receive power supply at the prescribed voltages. However, the suggestion of the objector is noted to make appropriate changes in the General Conditions of LT and HT supply after due consultation process.

- b) Sri M.S.S. Sarma and Sri P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association requested to take into consideration the hardships posed by various conditions on single furnace units facing operational distress either for technical or business reasons and provide for an easy exit option i.e. facilitating deration of Load at short notice of say 24 hours to bailout the consumers.

DISCOMs' Response: DISCOMs are entering into Long Term PPAs (up to 25 Years) for procurement of committed power from various generating sources. DISCOM is expecting

the same degree of certainty from the Power Supply Contracts with the Consumers. Further, the Commission has already reduced the minimum period of Supply Agreements to One year. In view of the existing business conditions, the request of the consumer “to consider Deration of Load within 24 Hrs.” cannot be accepted as it affects the management of power procurement and Grid Stability due to fluctuation on account of frequent deration and restoration of CMD.

Commission’s view: The Commission accepts the response of the DISCOMs as highly rational and reasonable and rejects the request of the objector as wholly unreasonable.

- c) Sri M.S.S. Sarma and Sri P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association has stated that though in general any consumer with a connected load of 1 MW is eligible to seek open access supply, the Ferro Alloy Sector has been excluded from the facility since last year. In fact, the National Steel Policy envisages that Power at Affordable rates should be made available to Steel Sector including providing free market access to keep it competitive in these aggressive and competitive times. Hence, they requested to restore Open Access option.

Further, Sri Suresh Khandelwal, Sri Srikalahasthi Pipes Limited, Chief Operating Officer, Srikalahasti (M), Chittoor District has stated in the public hearing held at Tirupati that the Ferro Alloys units should be given permission to draw power through Open Access whenever they have the opportunity to reduce their power cost. With this relaxation, the Ferro Alloys units can improve their financial viability to some extent and may contribute to the economic development of the State by providing employment and contribution to Government's exchequer through taxes.

DISCOMs’ Response: Considering the continuous encouragement, as well as considering the licensees’ universal supply obligation and despite the obligation of licensees to pay fixed charges to the committed PPAs, the licensees are committed to continuing supply at a lower Tariff, in particular to Ferro Alloys, the licensees are expecting them to draw their entire requirement of power from DISCOMs only by availing the benefit of lower Tariff with No demand Charges. Thus, the claim of the Ferro Alloy Industries who are benefitting with such privileges for being given option to avail open access is unreasonable.

Commission’s view: The Commission accepts the view of DISCOMs and finds no reason to accept the request of the objectors.

- d) Sri M.R. Samanta Ray, Chief General Manager (Power), Visakhapatnam Steel Plant, Visakhapatnam has stated that RINL, VSP is maintaining its own captive power generators and their township is fed from its generation. The Average generation during 2018-19 is 358.50 MW and till December 2019 is 336.21 MW. The average Colony Consumption during 2018-19 is 5.36 MW and till December 2019 is 5.48 MW. It may be concluded that the colony consumption is met from the CPP generation. RINL, VSP is availing power supply from APEPDCL at 220 kV potential. The transformation of voltage

from 220 kV to 440 /220 V for use in Township/ Colony is done by VSP by its own equipment/ network, established and maintained by VSP. In view of the above, the colony consumption charges shall not be levied on RINL, VSP.

APEPDCL Response: NIL

Commission's view: Since APEPDCL has not given specific response to the grievance of the representationist, the Commission is disabled from expressing its views on merits. However, if an appropriate application is brought before it, the Commission will decide the same in accordance with law.

- e) Sri P. Narendranath Chowdary, Chairman & Managing Director, M/s The Andhra Sugars Ltd., Kovvuru, West Godavari District has stated that, when Open Access Power is being purchased, the Demand attributable to Open Access Power 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 AP DISCOM.

APEPDCL Response: Even if consumer opts for Open Access, the consumer has the obligation to fulfill the requirement as per Agreement in accordance with General Terms and Conditions of supply as the DISCOM is obligated to maintain network and equipment to cater the loads of consumers at all times.

Commission's view: Clause 8 of Interim Balancing and Settlement Code (Regulation 2006) envisages settlement of energy at exit point in respect of Scheduled consumers. This clause reads as under:

"8. SETTLEMENT OF ENERGY/DEMAND AT EXIT POINT IN RESPECT OF SCHEDULED CONSUMER

8.1 The Scheduled energy (in kWh) at exit point shall be calculated for each time block from the scheduled capacity (kW) at the Exit point, as provided in the wheeling schedule, by multiplying it with the period of time block in hours.

8.2 The Scheduled demand at exit point shall be calculated by dividing the scheduled capacity (kW) at exit point by the power factor for the time block, for which purpose the Power factor shall be equal to the recorded kWh divided by kVAh.

8.3 The Scheduled energy of a Scheduled Consumer from an OA Generator for each time-block shall be deducted from the recorded energy (in the inter-se order of such Generators, as and if intimated by the consumer, in case the consumer is availing of energy from more than one Generator) as a first charge. The balance energy shall be deemed to have been supplied by the DISCOM and shall have to be paid for as per the terms of the supply agreement with the DISCOM: Provided that where there is a deviation between the scheduled capacity and actual capacity being injected at an Entry point in a time block, the shortfall, if any, in the capacity allocated to the Scheduled Consumer shall be deemed to have been drawn by the Scheduled Consumer from the DISCOM and the energy corresponding to such shortfall shall be paid for by the party which has contracted for the

Open Access capacity with the Licensee to the DISCOM as per the energy tariff applicable for the same consumer category of DISCOM under which the Scheduled Consumer would normally fall.

8.4 The Scheduled demand at Exit point or the actual demand made available to a consumer from each OA Generator at that Exit point in a time-block whichever is less, shall be deducted from the recorded demand (in the inter-se order of such Generators, as confirmed by the SLDC while finalising the day-ahead schedule, in case the consumer is availing of energy from more than one Generator). The balance demand for each time-block shall be deemed to have been consumed from the DISCOM and shall be paid for as per the terms of the supply agreement with the DISCOM.

8.5 The Scheduled consumers sourcing power from such Solar Power Projects as mentioned in the Andhra Pradesh Solar Power Policy, 2015 issued vide G.O.Ms.No.8, dated 12-02-2015 shall be entitled to avail reduction in contracted demand with Discom for a period of five (5) years from the date of commissioning of such projects. The reduction in contracted demand shall be computed based on the average Solar Power consumption during hourly time block period (s) in a billing month i.e. total solar power consumption (kVAh) in a billing month divided by the number of hours in the billing month.”

Since the above clause segregates billing between licensees' CMD and that of other sources including Open Access demand, the licensee is under obligation to exclude open access demand while issuing its bill. If the objector has any grievance in this regard, he is entitled to avail appropriate remedies.

- f) Sri G.V. Mallikarjuna Rao, Chief Electrical Distribution Engineer, SC Railway, Secunderabad has stated that due to discriminative policy of DISCOMs, Railways, being authorized by IE Act (Sec 14) as a Distribution licensee, have planned to avail power through "open access" in Andhra Pradesh and Telangana states, and may insist for it as 12 other States have already agreed. Due to kind consideration of the Commission, the tariff has been fixed for Railway traction at par with Open access tariff in Andhra Pradesh and Telangana States for the last two years. In view of reasonable traction tariff most of the routes in A.P got sanctioned for electrification. Proposed increase in traction tariff for Railways will affect all the electrification projects which are under progress in A.P and slow down the existing projects. This will have a detrimental effect on the electrification projects in A.P. Indian Railways are already availing power through "Open access" in 12 States. As a distribution licensee, cross subsidy charges are also not applicable. In the circumstances, proposed tariff by APDISCOMs' equivalent charges of Rs 7.89/kVAh (with average load factor 35%) is very high and unreasonable. Higher tariff compared to "Open Access" tariff, overburdens the Railways bulk consumer. The proposed higher tariff is forcing Railway to go for open access to meet its consumption. Already Railways have paid substantial amount of ₹27.30 Crs towards provision of ABT meters in all the traction substations to avail power through "Open Access". Though eighteen months have elapsed, there is no progress in provision of ABT

meters. AP Transco is either not providing ABT meters or not issuing NOC for availing power through "Open Access" probably due to non-availability of ABT meters, in spite of huge payments made for it by Railways.

DISCOMs' Response: APTRANSCO has already initiated taking up of works related to fixing of ABT meters in substations as well as procuring of ABT meters. It may be noted that the Power Purchase cost has increased substantially over a period of time due to increase in Coal cost, Transport charges, Obligation to purchase RE power in view of Renewable Power Purchase Obligation, Market purchases during Exigencies etc., In spite of the same, no increase in Demand Charges is proposed but increase in energy charges has become inevitable. Though the consumers are at liberty to avail power through open access as per prevailing regulation, it is requested continue to avail supply from licensee only considering reliable, consistent and uninterrupted supply is extending to Railways in large volumes.

Commission's view: Since installation of ABT meters is purely a matter between AP TRANSCO and the Railways, the Commission has no role on the issue. If AP TRANSCO is failing in its obligation to install ABT meters, the Railways is free to avail appropriate legal remedies.

- g) Sri Anjaneya Sarma, Kurnool vide e-mail dated 13.01.2020 has stated that the DISCOMs are not accepting payment of bills in cash for the bills over and above ₹5000/- and requested that consumers shall be permitted for paying the bills as per their choice upto the limit permitted by Indian Government.

Commission's view: The relevant clause of APERC (Electricity Supply Code) Regulation, 2004 is produced below:

“4.3.5 The billed amount shall be paid by the consumer as under:

- i. Up to ₹10,000/- - By cash:

Provided that the licensee may accept higher amounts up to the limit(s) specified by him in rural areas, wherever the availability of banking facilities is considered to be inadequate.

- ii. Any amount by NEFT/ RTGS or by Cheque/Banker's Cheque/Demand Draft payable at par of any Scheduled Bank as indicated on the Electricity Bill.
- iii. Any consumer who wants to pay by way of crossed Cheque shall present the Cheque to the Licensee at least three working days before the due date of payment.
- iv. Where specifically allowed by the Licensee, the amount can also be paid by credit cards, Internet payment and through “E-seva” centers”

As the Regulation is specific with regard to the monetary limit for receiving cash payments, it is not possible for the Commission to direct the DISCOMs to receive cash payment in excess of the limit specified by the Regulation. The DISCOMs are directed to follow the above Regulation in its letter and spirit. If not, the objector may move the Commission for appropriate action.

Objections of Bharatiya Kisan Sangh and others

- h) Sri Katuru Hari Kishore Kumar Reddy, Sri Yellapu Suryanarayana, Sri Rasamsetty Raja Babu, Sri Balle Nageswara Rao, Sri Karisetti Ganga Prasad, Sri Kavuluri Pathi Raju, Gandham Gopala Krishna, Sri Thirumulasetty Murali Nagendra Babu, Sri Kanumuri Seetharamaraju, Sri Ramisetty Sathibabu, Sri Sarnala Rathnam, Sri Ghanta Naga Raju, Sri Cheti Venkata Swamy, Sri Cheti Nagasrinu, Sri Polyreddy Rammohan Reddy, Sri Pundla Srinivasulu Reddy, Sri Chintapalli Narayana Reddy, Sri Alturu Hari Sarvotham Reddy, Sri Thunduru Srinivasa Rao, Sri Maddipati Kasi Viswanadham, Sri Ravuri Raja Rao, Sri Parimi Venkata Raghavulu, Sri R. Rama Rao, Sri Eedu Gangadhara Rao, Sri Mullapudi Subbarao, Smt. KaturuSobha Rani, Sri Jalagam Kumara Swamy, Sri Medasani Vijay Bhaskar, Sri G. Sri Krishna Kumar, Sri V. Asha Kiran, Sri Kakanuru Venkata Maheswara Reddy, Sri Bogalu Sri Hari Reddy, Sri Kanda Gopala Krishna, Sri Addagada Satish Kumar, Sri Tammanaboyina Nageswara Rao, Sri BathinaPerraju, Sri Gopu Narayana Murthy, Sri GadagottuSrirambabu, Sri Vadlapudi Nageswara Rao, Sri D. Gangadhara Rao, Sri Kandru Venkata Ratnam, Sri VemareddySurendranath Reddy, Sri Indukuru Uday Kumar Reddy, Sri Dandu Abhilash Reddy of BharatiyaKisan Sangh have stated the following:

(i)Cancel the present practice of quota system for release of agriculture connections and removal of the condition that three farmers should jointly apply for agriculture connection.

Quota system of releasing agriculture connections is against Section 43 (1) of the Electricity Act, 2003 according to which service connection must be released within a period of one month from the date of application. Quota system would lead to undue practices. All pending agriculture connections shall be immediately released. Further, the condition that three farmers shall apply together for agriculture connections, which is against Section 43(1) of the Electricity Act, 2003 and APERC Regulation 4 of 2013, shall be removed. Such condition would lead to undue practices.

Sri U. Bhaskara Rao, Sri M. Jameel, Sri T. Gopala Krishna and Sri D. Nageswara Rao from East Godavari District have also raised similar objections.

APSPDCL Response: Even though Section 43(1) of the Electricity Act, 2003 stipulates release of service connection for all the applicants, connections are being released in accordance with Section 4(1) of APERC Regulation 4 of 2013 within the targets set by the Government. There is no condition that three farmers should jointly apply for agricultural connections.

APEPDCL Response: The licensee is providing the services to the agriculture consumers in accordance with Section 4(1) of Regulation 4 of 2013 duly abiding by Section 43(1) of Electricity Act 2003. During the current financial year 6205 services were released till the end of November 2019 and for 2292 Nos., work is in progress against the target of 15603 services. Applications registered are 54.5% against the target and there are no restrictions for registration of Agricultural applications.

S. No.	District	Services released during FY2018-19	Target for FY 2019-20	Services released from 4/19 to 11/19	Balance applications to end of November'19
1	Srikakulam	1186	1654	577	202
2	Vizainagaram	1724	2277	1135	351
3	Visakhapatnam	2085	4936	1688	824
4	Rajamahendravaram	1833	2621	974	268
5	Eluru	1440	4115	1831	647
APEPDCL Total		8268	15603	6205	2292

At present there is no rule to restrict the farmers by saying that at least three farmers should jointly apply for services.

Commission's view: DISCOMs' replies are self-explanatory.

(ii) Refund the amounts collected against APERC Regulation 4 of 2013.

The Cost of DTR and AB Switch were collected from 45 consumers in APEPDCL in Chebrolu Section of Tadepalligudem Division in Eluru Circle against APERC Regulation 4 of 2013. Both the Cost of DTR and development charges were collected from 12 consumers. The amounts collected shall be refunded.

APEPDCL Response: The request will be examined and necessary action will be taken.

Commission's view: DISCOM should expedite action and submit compliance within 3 months.

(iii) HVDS

DISCOMs have to reveal the capital expenditure along with the reduction of losses for the systems which turned from LVDS to HVDS. DISCOMs need to reveal whether they have obtained the approval of APERC for the implementation of HVDS system or not.

APSPDCL Response: Because of HVDS, the losses which were 10.33 % in the year 2014-15 have been reduced to 8.18% in the year 2019-20. Works in this regard were approved in DISCOMs MYT proposals. At present there are works worth ₹900 Cr. under pipeline.

APEPDCL Response: HVDS works are taken up in APEPDCL from 2003 in a phased manner. So far, 2,03,856 Agricultural services out of total 2,34,509 were converted to

HVDS. The distribution loss in FY2002-03 was 16.80% and after converting to HVDS and other related improvements works the losses are reduced to 6.68%. The details of funds related to these works have been submitted to the Commission in the MYT filings. So far ₹509.16 Cr. was spent on these works.

Commission's view: The DISCOMs' response does not indicate that they have been taking approvals from the Commission for undertaking the conversion works. As per the Commission's Guidelines for Investment Approval (February 2016), every licensee has to take the Commission's approval for all the works whose value is above ₹5 Cr. The licensees are therefore directed to scrupulously follow these guidelines in future.

(iv) Fix meters for IDC LT and HT Lift Irrigation Schemes

Meters shall be fixed for AP Irrigation Development Corporation (APIDC) LT and HT Lift irrigation schemes for which 9 hours supply is extended.

APSPDCL Response: Meters are fixed for the lift irrigation schemes that use 16 hours supply. Fixing of meters for IDC schemes which use 9 hours supply, will be examined.

APEPDCL Response: All the 96 Nos. LT and 133 Nos. HT Lift Irrigation schemes available in APEPDCL are metered.

Commission's view: DISCOMs' response is self-explanatory.

(v) Why Regulation 1 of 2015 is curtailed?

The reasons for curtailing of Regulation 1 of 2015 with effect from 01.04.2017 may be given.

DISCOMs' Response: As the wind tariffs determined through Regulation 1 of 2015 are higher than the tariffs realized through bidding in other States, in order to benefit the consumers and to reduce the power purchase cost, the DISCOMs have prayed the Commission through O.P.No.5 of 2017 to curtail the Regulation 1 of 2015 of APERC, by 2017. The Commission, by its order issued in 2018, has accordingly curtailed the Regulation by 2017.

Commission's view: The response is self-explanatory.

(vi) Reporting on accidents:

According to Section 18 of Regulation 2 of 2017, the Assistant Engineer, DISCOM has to submit report within 24 hrs. to Divisional Engineer on the accident occurred in his jurisdiction, whether the accident occurred due to departmental fault or non-departmental fault. An accident had occurred on 20-06-2017 in Jadagogula (v) of Bogolu (M) and till now the accident report has not reached the concerned DE/Operation. The term compensation may be replaced with ex gratia in the Regulation 2 of 2017. Compensation need to be paid to all deceased irrespective of departmental or non-departmental fault. Safety methods shall be properly followed to prevent accidents.

APSPDCL Response: The detailed report pertaining to Bogolu section of Kavali Division was already been furnished by the AE/Operation to DE/operation. Licensee has been paying compensation in accordance with Regulation 2 of 2017 of APERC Regulation. DISCOM is taking all necessary steps needed for safety of personnel.

APEPDCL Response: As per Regulation 2 of 2017, immediately upon happening of an electrical accident, the local AEE/DEE is visiting the accident spot and submitting reports to the Executive Engineer within 24 hrs. As per the Commission's Regulation, ex-gratia is being paid to the affected persons in APEPDCL. In FY2019-20 out of 96 accidents occurred, an amount of ₹4.29 Cr. was paid as ex gratia to 87 persons. In FY2019-20 an amount of ₹30.285 Cr. has been spent towards LT and HT line repair works carried out as a part of accident preventive measures. The height of DTRs and Fuse boxes was also raised. In addition to the above an amount of ₹ 0.762 Cr. has been spent towards purchasing safety kits to the Staff.

Commission's view: The responses of the DISCOMs reveal reasonably prompt action on their part in the matter of prompt reporting of accidents and settlement of ex gratia / compensation. If any specific instances of negligence on the part of the licensees on these aspects arise, the aggrieved party shall be free to approach CGRF and Vidyut Ombudsman for appropriate relief. As regards the suggestion to change the nomenclature 'Compensation', as 'ex gratia', the Commission will consider the same and take appropriate decision in due course.

(vii) Provide neutral wire from sub-station to DTR

For the HVDS DTRs, the neutral wire shall be laid till sub-station earth, as was being done earlier but given up due to cost involvement. This is against CEA Regulation, 2010.

DISCOMs' Response: As per the REC standards earthing of DTR neutral and transformer is being done by providing 2 earth pipes of 40 MM and 80 MM dia, 1.5 and 2.5 mtrs long connected with 4 MM GI wire. Thus, separate earth from Sub-station is not required.

Commission's view: DISCOMs' response is in accordance with the prescribed technical requirement and therefore no specific directions need be issued.

Objections of Bharatiya Kisan Sangh and others

- i) Sri Polyreddy Rammohan Reddy, Sri Pundla Srinivasulu Reddy, Sri Alturu Hari Sarvotham Reddy, Smt. Katuru Sobha Rani, Bogalu Sri Hari Reddy, Sri Vemareddy Surendranath Reddy, Sri Indukuru Uday Kumar Reddy and Sri Dandu Abhilash Reddy, Bharatiya Kisan Sangh have stated the following:

(i) Extension of 16 hours supply to agriculturists having dedicated power line

In the urban areas where 24 hours supply is available to the farmers, the consumption exceeding 1500 units/HP/Annum being charged based on CoS. In the same manner,

for the farmers who intended to avail 16 hours supply using dedicated feeder must be provided with free power up to 1500 units/HP/Annum and consumption exceeding 1500 units/HP/Annum should be charged based on CoS.

Sri D. Nageswara Rao, Gangalakurru Agraharam (V), Sri. M. Jamilu, Machavaram (V) Ambajipeta (M), Dr. Uppuganti Bhaskara Rao, Bandarulanka (V), Sri Tikkireddy Gopala Krishna, Batlapalem (V) Amalapuram (M) East Godavari Dist. have stated that farmers existing in dedicated power (DP) line shall be supplied with 16 Hrs. power supply in a day for which it is requested to supply free power upto 1200 units per HP and thereafter @ ₹3.75 per unit.

DISCOMs' Response: Under purview of the Commission.

Commission's view: Free Power is extended to the farmers as per the policy of the Government under Section 65 of the Electricity Act, 2003. Therefore, extending free power to the requested class of consumers for 16 hours is a matter concerning the Government's policy, in the absence of which no direction can be issued by the Commission as suggested by the representationists.

(ii) Call centers need to be restarted

There are enormous benefits with call centres to both DISCOMs and consumers. Categories were changed in FY2019-20 and it took 6 months to update the changes through e-seva and the consumers had to face many troubles. As such, the call centres have to be restarted.

APSPDCL Response: As per the instruction given by the Govt. of AP all the services pertaining to DISCOMs were transferred to Mee-seva w.e.f. 20.09.19.

APEPDCL Response: For giving better services to consumers and to increase more customer delivery points, the services are provided through 5523 Mee-seva Centers. The services available at customer service centers are also provided in Meseva Centres.

For providing more services to consumers, the GoAP is opening Praja Sachivalayam portal through Praja Sachivalayam shortly. About 56 services pertaining to electricity department are to be made available through this portal.

Commission's view: The issue raised falls exclusively in the administration of the licensees. If the consumers' grievances are not redressed on their complaints, they are entitled to approach CGRF and Vidyut Ombudsman created for redressal of consumer grievances.

(iii) Details of PPA with LVS

In which year DISCOMs have entered PPA with LVS? What is the duration of PPA? What was the amount paid to LVS under fixed charges by the end of the PPA term?

APEPDCL Response: AP Transco entered into an adhoc agreement dt 17.12.2002 with M/s LVS Power Pvt. Ltd. The regular PPA was entered on 03.01.2009 by APEPDCL to be effective from 08.10.2002, and the period of PPA is 15 Years from the date of COD of the Project. The date of COD is 07.10.2002 and the PPA has expired on 07.10.2017. The total fixed charges paid to M/s LVS Power Pvt. Ltd are ₹344.74 Cr. until 2012-13 and the matter is sub-judice thereafter.

Commission's view: The required information has been furnished by the licensee.

(iv) Details of PPA with M/s Simhapuri

Whether DISCOMs have PPA with Simhapuri power? If so, are the DISCOMs purchasing power from it? Are the DISCOMs imposing penalty on Simhapuri power for non-supply of power, if not why?

DISCOMs' Response: AP DISCOMs have entered a draft power supply agreement with Simhapuri energy on 23.11.2016. The amendments to the draft PPA were not approved by the Commission and as such there is no permanent PPA entered with Simhapuri Energy Limited. As the final PPA was not entered with Simhapuri Energy, imposition of penalty for not supplying the power does not arise.

Commission's view: The DISCOMs' response is self explanatory.

(v) Details of PPA with M/s Hinduja

In which year DISCOMs had entered into PPA with Hinduja Power? On what basis the DISCOMs have been procuring power from Hinduja?

DISCOMs' Response: After bifurcation of the erstwhile Andhra Pradesh an agreement was entered into by the APDISCOMs with Hinduja Power on 28th April, 2016. APDISCOMs are procuring power from M/s Hinduja based on the interim orders passed by APTEL on the appeal filed by M/s Hinduja and on the consequential tariff order of APERC.

Commission's view: The query is answered by the DISCOMs.

(vi) APDISCOMs are not implementing APERC Regulations and provisions of some Sections of the Electricity Act, 2003.

DISCOMs are not following the provisions of some regulations of the Commission and of some Sections of the Electricity Act, 2003 which are beneficial to the consumers on the reason that they are not beneficial to the DISCOMs. For example, Sections 45(4) and 43(1) of the Electricity Act, 2003 are not followed and Regulation 4 of 2013 was not implemented till 19.09.2018.

APSPDCL Response: SOPs are being implemented to resolve the complaints in time. As the corporate farmer being an Income Tax assessee as per the section 2(7) of Income tax act 1961, providing free power to them is not justifiable. At present there is no restriction in providing services.

APEPDCL Response: The Commission's instructions dated 09.09.2016 are being implemented and consumers are being given the necessary exemption in respect of DTR, development charges and service line charges. In APEPDCL, the transportation of failed DTRs is being done through department vehicles only.

Commission's view: The DISCOMs' responses are appropriate and acceptable.

(vii) Provide booklets and create awareness on tariffs

DISCOMs shall print and supply sufficient number of booklets on tariffs and distribute them up to JLM level and shall create awareness to the staff on the Tariff Order. The booklets may be sold to the consumers at reasonable prices to create awareness.

APSPDCL Response: Small tariff books were distributed up to AE level and training was given on the tariff order up to JAO/ERO level. Actions will be taken for creating awareness to the field staff.

APEPDCL Response: Awareness programs on Tariff orders are being conducted from FY2018-19 & FY2019-20 in each district upto AE and JAO level. Small booklets containing Tariff Schedule & Cross Subsidy Charges as in Tariff Order are being printed and made available to AE & AAO level officers.

Commission's view: The Commission is of the view that awareness on the tariffs needs to be created not only in the staff of the licensees but also in the consumers. Therefore, small booklets containing tariff schedules and other relevant aspects useful for the consumers must be printed in vernacular language in adequate quantities and be made available in all the offices of the licensees for sale to the consumers on collecting reasonable cost. Such availability shall be properly publicized for the consumers to be aware of the same. This exercise shall be completed by both the DISCOMs within two months of publication of tariff order and submit compliance report to the Commission.

(viii) Provide account copy on request

E.R.O.s of DISCOMS shall provide an account copy to the consumer, on request.

APSPDCL Response: Necessary orders will be issued to all the concerned JAOs and AAOs to provide account copy to the consumers on request.

APEPDCL Response: In APEPDCL, upon request of consumers the required information is being furnished to the consumers as and when required with the permission of AAO/ERO only.

Commission's view: The queries are adequately answered.

- j) Sri D. Nageswara Rao, Gangalakurru Agraharam (V), Sri. M. Jamilu, Machavaram (V) Ambajipeta (M), Dr. Uppuganti Bhaskara Rao, Bandarulanka (V), Sri Tikkireddy Gopala Krishna, Batlapalem (V) Amalapuram (M) East Godavari Dist. have stated the following:

(i) Bill temporary supply at HT-IV rates

The electricity charges shall be collected as per HT-IV Tariff per unit to those farmers who avail Temporary supply to protect their crops.

APEPDCL Response: There are no applications registered in EPDCL by farmers requiring Temporary supply.

Commission's view: In view of APEPDCL's response, no further action is needed.

(ii) Extend 24 hrs. three phase supply in villages

For industrial development in villages, 24 hrs., 3 phase supply is a must. Presently 9 hrs. supply is only being extended due to which no one is coming forward to setup Rice mills. At present Rice Mills are running at 30% LF.

APEPDCL Response: In order to extend 24 hrs. supply in a day except for agriculture consumers, a proposal in this regard for segregation of existing 1212 nos. feeders with an estimated amount of ₹1311Cr. has been submitted to M/s REC for funding.

Commission's view: So far, the DISCOMs have not approached the Commission for approval of investment schemes for segregation of agriculture feeders. Prima facie such approvals are necessary. The Commission will examine this aspect and issue appropriate directions to the DISCOMs in this regard.

(iii) Provide details of pumpsets

DISCOMs are providing 5 H.P. Solar Motor @ ₹3,12,200/- and in Jalasiri @ ₹25,000/- per motor. DISCOMs shall create awareness at ground level on these matters e.g. in some areas, mono block pump sets are enough, submersible pumps are not required and the rates should be compared.

APEPDCL Response: The following are the rates of pump sets under phase-8:

5 H.P. Submersible – ₹2,64,230.60 (with GST)

5 H.P. Mono block – ₹2,84,788.75 (with GST)

3 H.P. Submersible – ₹2,09,420.15 (with GST)

3 H.P. Mono block - ₹2,01,142.66 (with GST)

The installation of submersible or mono block pumps is being done as per the requirement. The farmers' share under the Jalasiri scheme is only ₹25,000/-. Presently the scheme is not in operation.

Commission's view: Details in full as sought have been furnished by APEPDCL.

(iv) Allow shifting of poles

The agricultural bores work only for a few years in some areas. They should be allowed to be shifted from one place to another duly providing necessary lines and poles by the DISCOMS.

APEPDCL Response: Shifting of bores is being done as per rules only and upon payment of estimated charges for shifting.

Commission's view: The response of APEPDCL warrants no further action.

(v) Educate farmers on selling power

Farmers shall be educated on selling surplus power to DISCOMs from Solar pumps.

APEPDCL Response: In APEPDCL's jurisdiction 16,409 Solar agricultural pumpsets are installed as on 30.11.2019 which are not connected to Grid. And hence DISCOMs cannot draw surplus power from these Solar agriculture pump sets.

Commission's view: The response of APEPDCL is inappropriate. Wherever the Solar pumpsets are connected to the grid, the licensee must create awareness in the farmers about their entitlement to sale surplus power. Action taken report in this regard shall be submitted by the licensee to the Commission within three months.

(vi) Implementation of DSM measures is not taken seriously

Implementation of DSM measures is not being taken seriously by DISCOMs and providing of new pump sets in place of old pump sets was also ignored.

APEPDCL Response: In the 5 Districts of APEPDCL 18,273 energy efficient pump sets were replaced with regular pump sets as on 30.06.2019.

Commission's view: APSPDCL has not responded on this issue. Both DISCOMs should take prompt action in this matter and send action taken report within 3 months.

(vii) Extend 24 hrs. free supply to dairy farms

Sri D. Nageswara Rao, Gangalakurru Agraharam (V), East Godavari Dist. stated that dairy farms shall also be extended with 24 hrs. free supply on par with agriculture consumers.

APEPDCL Response: The electricity used for dairy farming is identified as agriculture related and accordingly the electricity tariff is charged as follows.

Fixed Charges for month ₹/kW	Electricity Charges ₹/kWh or kVAh
30	3.85

However, providing free power to Dairy Farms is not in the purview of DISCOM.

Commission's view: As dairy farming contains an element of profiteering, it cannot be treated on par with agriculture which is subject to vagaries of weather and other imponderables which the dairy farming is not subjected to. However, this is an issue which squarely falls in the realm of government policy.

Review PPAs for reduction of tariff

- k) K. Guruswamy Naidu, Pakala, Chittoor District has stated that in order to reduce the tariffs there is a need to review the PPAs which were entered prior to State bifurcation.

APSPDCL Response: APDISCOMs had filed petition O.P.No.17 of 2019 before the Commission to renegotiate the PPAs entered between 2015-16 to 2019-20.

Commission's view: Since the matter is sub-judice, the Commission refrains from expressing any view.

Develop NCE projects

- l) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that non-conventional sources energy projects like Solar and Wind shall be developed and such energy shall be made available to consumers.

Sri K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, Vijayawada has stated that by considering the location diversity of agriculture loads it is better to encourage individual solar power to the farmers which is more advantageous to the DISCOM in line losses point of view.

APSPDCL Response: As per the G.O.Nos.1,2 and 3 of GoAP, dated 03.01.19 and G.O.No.35 Dt:18.11.19, the Government issued policies for the development of renewable energy through solar, wind and hybrid sources.

Commission's view: In view of the APSPDCL's response, the Commission has nothing to add.

Procure cheaper power from exchanges

- m) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that DISCOMs need to procure sufficient power through exchanges during night times for the irrigation projects and heavy industries of the State, as the unit rate in the exchange in early hours of the day in any season is below ₹1.19/-.

APSPDCL Response: Suggestion is noted.

Commission's view: The licensee shall endeavour to procure power at reasonable prices as and when necessary.

Batteries for storing electricity

- n) K. Guru Swamy Naidu, Pakala, Chittoor District has stated that DISCOMs shall acquire large size batteries available at reasonable prices for storing electricity as used in developed countries like Europe, Germany, USA and China etc.

APSPDCL Response: Suggestion is noted.

Commission's view: Commission has nothing to add.

Take action for release of subsidy

- o) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that the Commission shall take action for immediate release of subsidy of ₹5857.08 Cr. due to APSPDCL from the Government for the years from 2015-16 to 2019-20.

APSPDCL Response: Out of the subsidy of ₹5902 Cr. due from the Government as in 2018-19, the dues are reduced to ₹4419 Cr. due to release of subsidies from the Government.

Commission's view: This matter is being regularly taken up with the Government.

Non-compliance of Commission's orders

- p) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that Standards of Performance, Regulation No.3 of 2016 and Regulation No.2 of 2017 are life line of consumers. Based on experience these regulations should be updated from time to time. The Commission accepted revision of standards of performance vide para 149 of retail tariff order of FY2018-19. But till now it has not materialized. The licensee has not submitted its report to the Commission as ordered. Even the Commission never bothered to take action on non-compliance of its orders and as a result ultimately the consumers are the victims. EPDCL promptly submitted its version of standards of performance to the Commission and Transco said that it has nothing to do with the said orders.

APSPDCL Response: The APSPDCL has submitted committee report on revision of standards of performance vide Lr.No.CMD/ED/OPN/GM/CS/AE/CSC/ D.No.1056/ 2019, dt.11-12-2019 to the Commission.

Commission's view: The objector's comment on the Commission's inaction is not justified. As stated by APSPDCL, they have submitted committee's report on the SoP and the same is under Commission's examination.

Provide roof top grid connected solar systems and energy efficient fans at subsidized rates

- q) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that roof top grid connected solar system should be supplied to consumers at subsidized rates. Energy efficient fans may also be supplied to consumers at subsidized rates.

APSPDCL Response: Grid connected Solar PV rooftop systems of 1934 Nos. with 71.74 MW capacity have been installed so far in APSPDCL. At present Central Finance Assistance (CFA) of 40% is being given by MNRE for residential sector up to 3.0 KW capacity and CFA of 20% is being given up to 10.0 KW capacity under implementation of Phase-II of grid connected rooftop solar programme for achieving 40 GW by the year 2022. The State government is examining the guidelines for implementation of the scheme in the State.

2,03,117 Nos. of Energy Efficient fans have been distributed in Krishna district. The cost of the fan supplied by M/s EESL under upfront @ ₹1100/- & under EMI @ ₹1250 /-

(₹52.10 per month per 24 months) under subsidized rates. APSPDCL has requested M/s EESL for implementation of the same programme in the remaining districts.

Commission's view: The progress achieved will be reviewed and necessary directions will be issued in this regard.

Indication of subsidy in CC bill & advertisements on back of CC bill

- r) Sri B. Hume Sastry, Visakhapatnam has stated that the cost to serve at LT terminals is ₹6.71 per unit. Consumers who consume upto 500 units are paying bills less than this rate and thus availing subsidy from DISCOMs. The owners of cars, air conditioners etc. are in this category. In other cases, the Govt. is limiting subsidy to those whose income is less than ₹12,000 per month. Recently the Govt. has limited this subsidy to individuals who are consuming less than 300 units per month. It was brought to notice of DISCOMs earlier that Telangana Govt. is indicating the amount of subsidy extended by the DISCOMs to each consumer on the monthly current bill. If this is adopted, the wealthy consumers will also be aware that they are availing subsidy from the govt.

Similarly, advertisement printed on the bills will earn revenue to DISCOMs. This system is not being adopted in spite of repeated requests. At least from now onwards this may be adopted.

DISCOMs' Response:

APSPDCL: Indication of subsidy amount on CC Bill will be examined. Necessary action is being taken for printing of advertisements on the bill.

APEPDCL: Indication of subsidy amount on CC Bill will be examined. Advertisement printing is not feasible on LT bills reverse side as the place has been utilised by printing details of LT Tariffs and conditions, contact Nos. etc., for awareness of the consumers. However, Advertisement printing is being done on all LT High Value service bills in APEPDCL.

Commission's view: Though the objector has not projected the correct facts regarding the tariff applicable to the consumers of below 500 units of power, his suggestion however to print the details of subsidy etc. is worth considering as this is in consonance with the second part of clause 4.2 s) of the Andhra Pradesh Electricity Regulatory Commission (Electricity Supply Code) Regulation, 2004, which reads as under:

"s) Address / details of concerned local collection centers and electricity revenue offices of licensee with working hours where payment of electricity bill shall be made.

Details of cost to serve for the category, Cross Subsidy & Government Subsidy per unit, slabwise, and information ---- may be printed on the reverse of the bill".

Both the DISCOMs are therefore directed to follow the above mentioned clause and submit compliance report to the Commission within three (3) months.

Supply to Rural Industries

- s) Sri B. Hume Sastry, Visakhapatnam has stated that supply to industrial services on 11 kV agricultural feeders is restricted to only seven hours or 9 hrs. per day for no fault of them while industries on a non-agricultural feeder are extended 24 hrs. supply. But both consumers are paying fixed charges of ₹ 75/kW/month. Industries on agricultural feeders are over burdened by ₹ 53/kW and are denied power for nearly 15-17 hrs. Not even 10-15% of such industries are given 24 hrs. supply in the last 10 yrs. Such consumers are closing their industries as they are getting supply only for 7 or 9 hrs. a day in rural areas and that too at inconvenient times. Similarly, new industries in rural areas are not coming up due to such restrictions though they are paying to the board at above the cost to serve i.e. ₹6.71. It is pertinent to note that the industrial growth is 1.9% per year which is lowest whereas agricultural growth is 10.7%.

DISCOMs' Response:

APSPDCL: A proposal to segregate such 4564 Nos. feeders with an estimated cost of ₹5493.30 Cr. along with DPR has been submitted to M/s REC for funding. However, consumers who ever requests 24x7 supply will be provided duly following the rules.

APEPDCL: A proposal to segregate such 1212 Nos. feeders with an estimated cost of ₹1311 Cr. along with DPR has been submitted to M/s RECs for funding. However, consumers who ever requests 24x7 supply will be provided duly following the rules.

Commission's view: The Commission will examine and follow the due procedure to process it, if any such proposal is received from the DISCOMs.

Energy Efficient Appliances are not used in Govt. Offices & Energy Audits are not done

- t) Sri B. Hume Sastry, Visakhapatnam has stated that when much propaganda is given to the public for energy conservation, Govt. depts and large no. of electricity offices themselves have not gone for LED lights and Energy Efficient Fans and State Govt. has issued a G.O. 133 dt.22-08-2011, directing installation whose connected load is 100 kW to get their installation audited every year by energy auditors. Even after 8 years not even a single installation has carried out this audit, including installation owned by AP Electricity board. Installation of roof top solar panels is encouraged costing crores of rupees but not even 20% of this amount is invested in installation of energy efficient appliances. The amount of energy saved by this small amount will be equal to energy supplied by solar panels costing 5 times this amount. A concrete example is Govt. offices are installing 100/150 kW Solar panels on their buildings but none of them attempted to replace inefficient tube lights etc. supplied surprisingly by EESL, a Govt. organisation.

Sri M. Krishna Murty, Chief Engineer (Retd.), Vizianagaram has stated that as per the reports of TERI, New Delhi, it is possible to save 30% power by adopting the available saving methods. The power saving in houses, shops offices help to reduce the line current and hence reduction in line losses. The energy saving methods are also intended to reduce carbon emission, the prime cause of global warming and also for saving the planet.

In this connection, it is suggested that offices, fuse of call centers, substations of DISCOMS which are now presently provided with 60 W choke type tube lights and 80 W ceiling fans shall be replaced with EESL 20 W led tube lights and 50 W energy efficiency fans. Energy saving programs which are conducted by DISCOMS in December every year with high school students and college students, shall also be taken up seriously with public participation at mandal headquarters, at villages and district headquarters duly explaining the necessity of energy saving. All the employees of DISCOMS shall submit thier own energy saving report with details of energy saved with details of adopted methods which are followed at their houses. This shall be propagated in newspapers and TV. Further, DISCOMs shall arrange stocks of EESL make LED 20W tube lights, LED bulbs 9W, energy efficient fans of 50 Watt in district stores. The section officers shall arrange to sell these items to the public at their offices duly giving vide publicity. Central Govt. has already replaced the tube lights and fans at all its offices and Rly. Stations with EESL make. The energy saving will benefit DISCOMS which are purchasing the power at about ₹ 6.50 per unit.

DISCOMs' Response: As a part of energy conservation measures, the DELP, (DSM Based Efficient Lighting Programme) scheme, DEFP (DSM Based Efficient Fan Programme), EETL (Energy Efficient LED Tube Lights) Scheme, EEPS (Energy Efficient Pumpsets) Scheme were implemented. The details are as follows.

S. No.	Scheme	Quantity in nos. APSPDCL	Quantity in nos. APEPDCL
1	DELP	10977087	7540961
2	DEFP	203117	66104
3	EETL	58402	91139
4	EEPS	51877	18273

Further, APSPDCL and APEPDCL have taken energy savings campaign as a big movement by spending substantial amount of about ₹303.53 Cr. and ₹160 Cr. respectively towards implementation of energy efficiency measures i.e. DELP Scheme, EEPS Scheme etc.

Further, in order to boost up awareness among consumers on Energy Savings as a part of Energy conservation, DISCOMs are conducting National Energy Conservation Week every year by conducting rallies, workshops to Farmers and Industrialists and as well as awareness program to school and college students by conducting quiz, painting competitions and participation on elocutions by spending substantial amount every year by the Licensee. It is not out of place to mention that the responsibility also rests with consumers, individuals, students, farmers industries etc., to take up implementation of energy efficiency measures on their own as one of their primary Civic / Social responsibilities.

Commission's view: Energy Conservation being one of the essential measures of improving internal efficiency of the licensees, the same shall be taken up on a war footing. As represented, by using LED appliances and other modern gadgets not only energy could be conserved, but also environment could be protected. The State Energy Conservation Mission should therefore take up all such measures as are necessary including conducting of education / awareness programs regularly in coordination with DISCOMs. On their part the DISCOMs shall take the necessary action to ensure deployment of modern appliances by all its consumers. They shall prepare a roadmap towards this end and submit the same before the Commission for its consideration within three months.

Data provided is not correct

- u) Sri K. Vasudeva Rao, Chief Editor & Publisher, Electronics, Electrical & General Samaacharam, Visakhapatnam has stated that there are mistakes in the MU calculations in Form-7 and Form-12 submitted by the DISCOMs. Changing of grouping is not correct as per the details.

APEPDCL Response: For calculating the Revenue at the existing tariffs the present categories units are shown in Form-7 and for calculating the revenue at the proposed tariffs, the proposed categories units are shown in Form-12. Difference in units is observed due to change of some categories and merging of certain categories.

Commission's view: DISCOM has clarified the matter.

High salaries to employees causing burden to consumers

- v) Sri P.V.Raghavulu, Naryanapuram (V), Unguturu (M) W.G. District. has stated that due to increase of employee salaries, the consumers are being burdened.

APEPDCL Response: Since formation of DISCOM, the salaries of employees are not exceeded 9% of the total expenditure incurred by the DISCOM. The salaries paid to the employees from the total expenditure incurred by the DISCOM over last 5 years is as follows:

S. No.	Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
1	Employees Salaries (₹ Cr.)	971.61	790.06	772.02	802.86	1362.22
2	Total Expenditure (₹ Cr.)	8682.95	9268.27	9170.56	10627.8	16364.63
3	Percentage (%)	11.19	8.52	8.42	7.55	8.32

Commission's view: The subject is not within the control & purview of the Commission.

- w) Sri Delli China Raghavulu, Sri Delli Balaraju, Sri Yadala Sambaiah, Sri Dasari Ramanjamma, Sri K. Pothu raju and Sri N. Venkateswara Rao have stated that even though the Orders of the Commission dated 17.03.2018 in O.P.Nos. 53, 54, 55, 56, 58 and 63 are submitted to the District Collector, Krishna District, no action was taken and requested for necessary action by the Commission.

Commission's view: Under Works of Licensees Rules, 2007, the Commission's jurisdiction is limited to exercising its appellate powers against the orders passed by the District Magistrates (Collectors). However, the Commission is not vested with the supervisory jurisdiction over the Collectors in case of inaction on their part in finalizing the compensation claims. Despite this, the Commission is contemplating to undertake the task of sensitizing the District Magistrates for a prompt action on the claims of compensation.

Other objections (Miscellaneous)

- x) Dr. Narasimha Reddy Donthi, Member, SAC, APERC, Hyderabad has stated that the capex loan was at ₹2998 Cr., working capital loan was at ₹7698 Cr. and total loan was at ₹10696 Cr. when the State was divided. The total loan has been increased to ₹16534 Cr. as on March 2019 and indicates that ₹5838 Cr. new loan was made during the last five years. There was tariff burden on public on account of these loans and the same is not mentioned in their filings.

APSPDCL Response: Till Nov 30, 2019, APSPDCL has borrowed ₹10989.25 crores for which an interest of ₹1999.66 Cr. was paid.

APEPDCL Response: APEPDCL borrowed Loan ₹7226.55 Cr., and paid ₹344.24 Cr. towards interest.

- y) Dr. Narasimha Reddy Donthi, Member, SAC, APERC, Hyderabad has stated that the Annual Revenue Requirement (ARR) filings does not mention the steps taken to control corruption. Sri Eshwaraiah CPI, Kadapa has stated that the Corruption is rampant in the DISCOM.

APSPDCL Response: For controlling corruption, as per the instructions of the Commission, the Complaints Boxes have been placed right from section office to corporate office in APSPDCL. The complaint boxes will be opened on every Monday in the presence of the authorized officials as mentioned in the following table and the report on the complaints will be submitted to the CMD.

Office	Box Opening Officer
AAE/AEE/DEEs	Superintending Engineer/Operation
EEs	Chief Engineer/Zone
SE's and CE's of Circle, Zone and Corporate office	Officer appointed from the Corporate officer

APEPDCL Response: For controlling corruption, as per the instructions of the Commission, the Complaints Boxes have been placed right from section office to corporate office in APSPDCL. The complaint boxes will be opened on every Monday in the presence of the authorized officials as mentioned in the following table and the report on the complaints will be submitted to the CMD.

Office	Box Opening Officer
Section and ERO	Executive Engineer concerned
Sub-division and Division	Superintending Officer concerned
Circle and Corporate office	Chief General Manager /O&CS

- z) Sri K. Ramakrishnam Raju, President, Resident Welfare Association, Visakhapatnam has stated that the concerned distribution companies may be directed to adhere to the Electricity Act, 2003 as amended from time to time before providing electricity connections and discourage unauthorized, encroached constructions.

APEPDCL Response: Licensee is discharging the duties under the frame work of Electricity Act and regulations issued by the Commission from time to time and providing electricity connections as per rules.

- aa) Sri K. Ramakrishnam Raju, President, Resident Welfare Association, Visakhapatnam has stated that the Roof Top Solar plants shall be encouraged in view of its advantages over large scale plants and requested that the State Govt. may be informed to establish Roof Top units for all its offices, schools, and other buildings.

APEPDCL Response: EPDCL is making all efforts to encourage consumers to install Solar Roof Top panels.

- 43.649MW capacity Solar Rooftop is installed in APEPDCL as on 30.11.19
 - Under Solar Rooftop Program Phase-II, MNRE, GoI has announced CFA (Central finance assistance) @ 40% upto 3KWp and @ 20% beyond 3KWp and upto 10KWp for Residential sector.
 - Accordingly, tender was floated by APEPDCL for empanelment of suppliers. The tender is under process.
 - Solar Rooftop systems were installed on all 5 Districts collectorates and APEPDCL offices of capacity 1236KWp.
- bb) Sri K. Ramakrishnam Raju, President, Resident Welfare Association, Visakhapatnam has stated that there is plenty of possibility for storage from the Solar and Wind power due to the advent of research in power storage system with LITHIUM-ION battery and the same may be exploited.

APEPDCL Response: The study of the objector is informative and can be used in energy savings campaigns.

- cc) Dr. Narasimha Reddy Donthi, Member, SAC, APERC, Hyderabad has stated that
- (i) There are many issues between the two states (Andhra Pradesh & Telangana) power companies. The ARR filings does not include the following main issues:

- After joint audit an amount of Rs 10,160 Cr. is transferred from AP to Telangana and ₹12,650 Cr. from Telangana to AP.
- Dues of ₹4,600 Cr. associated with the division of electricity employees.
- The issues regarding pensions
- Distribution of assets
- Comptroller and Accountant General Opinion on Debts
- Audit relating to inter-corporate deposits

DISCOMs' Response: The bifurcation problems of the two states Power Companies have yet to be resolved. Upon completion of the bifurcation, the full information about Assets incurred liabilities, income, expenses and profit & Loss will be intimated to the Commission and Consumers.

- (ii) There is no discussion in the ARR proposals on possible burden on distribution companies due to the implementation of Letter of credit system to the Generating Stations as per the directions Ministry of Power, Govt of India.

DISCOMs' Response: LCs have been given to Generating Companies for the power being supplied by them as per the direction of the Ministry of Power, GOI making internal financial adjustments to ensure uninterrupted power to consumers.

- (iii) The two DISCOMs have not shown any information in their ARR filings on the losses on account of incentives granted by the Government for Wind and Solar developers and also due to the purchases from these plants over and above the RPO targets.

DISCOMs' Response: The amendments made by the state government in 2018 for solar and wind power are not directly related to the annual revenue requirements and the proposed charges. The indirect loss due to power purchases from solar and wind power companies was estimated and submitted for special subsidy.

Tariff for the excess energy injected into Grid by Farmers owning Solar Brushless DC (BLDC) agricultural pump sets

- dd) Sri BendiTulasidas, Vijayawada has stated that with reference to the purchase of excess energy injected into Grid from Grid connected Solar Brushless DC (BLDC) agricultural pumpsets in Savaravilli (R) agricultural feeder of Bhogapuram Section, Vizianagaram Circle, Andhra Pradesh, the proposals of the AP Eastern Power Distribution Company O.P.No. 47 of 2019, the Commission issued an order on 3rd August 2019 to pay ₹1.50 per kWh to the farmers as assured by the DISCOM and also to reconsider for any reasonable enhancement. The poor farmers have not been paid a single rupee, though four months have elapsed since the Commission's order. They have requested to instruct the APEPDCL to implement the order and to pay the farmers for the power they supplied to the grid immediately. The DISCOMs were purchasing solar power from big companies at an exorbitant rate of about ₹4.88 to ₹6.00, but the farmers were offered a meagre ₹1.50 per kWh. This is the sheer

discrimination towards the farming community. One may argue that the capital investment was provided by the DISCOM and Govt. Of AP and so the rate shall be less. The industrialists also lend the capital from Public sector Banks and other State-run financial organisations. The IPPs were paid highest rate for the power purchased from them in addition to the concessions and exemptions by the governments. The farmers are in dire distress and they have to be supported by the society and the Government. Hence, they have to be given a higher amount than the IPPs for the power generated in farms.

APEPDCL Response: The Commission has issued order dated 17.08.2019 approving tariff for excess energy injected into the grid by farmers who were provided grid Connected solar Brushless DC (BLDC) agricultural pump-sets under pilot project @ 1.50 per unit. Bills for ₹73,816/- (Rupees seventy-three thousand eight hundred and sixteen only) for arranging payments to 72 Nos consumers towards exported energy charges as on 30.09.2019 are under process. The payments will be made shortly.

Further, for the balance 144 Nos. BLDC Solar Agricultural pump set consumers, the payments would be delayed as the consumers have not furnished bank accounts of the concerned services, the beneficiary name and owner of the land should be one and should be as per the pattadar pass books. Efforts are being made to obtain beneficiary accounts and they will be processed soon after receipt of the same.

- ee) Sri K. Ramakrishnam Raju, President, Resident Welfare Association, Visakhapatnam has stated that if all the agricultural services are provided with grid connected solar pumps, DISCOMs can derive huge benefits.

APEPDCL Response: A pilot project was executed by APEPDCL, wherein 216 Nos. existing conventional pump sets were replaced with Grid connected Solar PV Brushless DC motors on 11 kV Savaravilli Feeder of Bhogapuram section in Vizianagaram District. Further, 16,409 Nos. stand alone solar Agricultural Pumpsets were also installed.

- ff) Sri P.E. Jagadeesan, Sri K.S. Vasu, Sri M.R. Nakkiran and Sri E.S. Perumal of Power Loom Weaving Workers Union, Nagari, Chittoor District have requested to increase the power subsidy to the power looms from the existing 50% to 80%.

APSPDCL Response: Enhancing the subsidy from existing 50% to 80% is under the purview of Government of Andhra Pradesh.

- gg) Sri Raj, Visakhapatnam has requested for different tariffs for joint families and not to equate them with nuclear families in the interests of justice and fairness and that concessional or reasonable tariff be provided to joint families.

APEPDCL Response: Each separate establishment will be given a separate point of supply. Relevant Clauses in General terms and Conditions of Supply approved by Hon'ble APERC are reproduced here under for ready reference.

“3.5 Definition of Separate Establishment

3.5.1 For the purpose of the GTCS, Separate establishments shall include the following types of establishments:

- i. Having distinct set-up and staff;
- ii. Owned or leased by different persons;
- iii. Covered by different licenses or registrations under any law where such procedures are applicable; and
- iv. For domestic category, the households having a separate kitchen.

3.5.2 Each separate establishment will be given a separate point of supply.

3.5.3 Notwithstanding the above provisions, the Company reserves the right, where it is reasonably established, that the consumers of the same group or family or firm or company who are availing supply under different service connections situated within a single premises by splitting the units, the Company may treat such multiple connections existing in the single premises as a single service connection and charge the total consumption of all the consumers at the appropriate tariffs applicable for a single service connection. Any officer authorized by the Company shall issue notices to the concerned consumers asking them to furnish a single application for all such services and to pay required charges for merging the services into a single service.”

Commission’s view: From the suggestions made and objections raised by the objectors and the replies / information furnished by the licensees, the Commission is of the view that the licensees need to conduct their future activities by duly keeping in mind these suggestions and objections. If in respect of any suggestions / objections, the objectors feel that the licensees are failing to follow the same, they shall be free to avail appropriate remedies including moving this Commission, if the law so permits.

245. ISSUES WHICH REQUIRE ACTION/ATTENTION OF THE DISCOMS

- a) Sri P.S. Sampath, Karvetinagaram, Chittoor District has requested not to collect charges by the DISCOMs for erection of lines and poles in the agriculture fields for extension of supply to residences in agricultural fields, and to provide LT supply to the sheds or ware houses in farm fields, as the farmers have to reside in these sheds during the night time of the peak season to protect their crops.

APSPDCL Response: New services in the field are being provided as per the regulation 4 of 2013. In order to recover the cost incurred by the licensee in providing, the tariff being recovered from the consumers as per the tariff order issued by the Commission. Service connection to the sheds or ware houses present in the farms will be provided as per rules and regulations.

- b) Sri Palakuru Subramanyam, Surinenivaripalle, Chittoor District has stated that the agriculture service connection was not released even after the payment of charges of ₹3200, requested for early release of the service.

APSPDCL Response: Agriculture connections are being released on priority basis based on the seniority of their payment as per quota released by the Government.

- c) Sri Shaik Saifulla, Pallinanivarypalli, Chittoor District has requested to release all new agriculture connection to all the farmers from whom all the charges are already collected.

APSPDCL Response: Agriculture connections are being released on priority basis as per quota released by the Government.

- d) Sri Syed Parvez, Karvetinagaram, Chittoor District has requested to release the domestic connection to the houses in farm fields.

APSPDCL Response: House service connection will be issued to the consumer based on the request duly considering field conditions and relevant regulations.

- e) Sri S. Changalraya Reddy, Cherlopalle, Chittoor District has requested for 9 Hrs free supply to the farmers during the day time.

APSPDCL Response: 9 hrs. free supply during day time is being provided to 4000 feeders where sufficient ground water is available. In the places where the sufficient ground water is not available, as per the request of the consumers the power supply is being provided in two spells. Necessary steps are under the process to provide 9hrs day time free power to the balance 1187 feeders.

- f) Sri N. Venkatesh and Padma Sarassu Pathaindlu, Chittoor District have requested laying of line up to 10 poles at free of cost for extension of supply to agricultural services in Mango fields.

APSPDCL Response: Charges are being collected towards the release of services as per Regulation No. 4 of 2013.

- g) Sri K. Ramakrishnam Raju, President, Resident Welfare Association, Visakhapatnam stated that the Convent Junction to Hindustan Zinc Limited gate highway is very sensitive where defense establishments, HPCL, HSL, Make in India establishments are located. At the entrance of INS EKSILA, an internationally prestigious defense installation, HT line feeders are crossing temple roof with THATCHED LEAVES on foot path. Another temple at the entrance gate of SRIHARIPURAM SUBSTATION WITH SHEETS, unauthorized construction made recently and substation authorities have not taken any action and failed to ensure their social responsibility.

APEPDCL Response: Removing of unauthorized constructions is not in the purview of APEPDCL. However, the concerned of GVMC will be informed.

Alignment of line items in the electricity bills

- h) Sri K. Guruswamy Naidu, Sri Nachukuru Muniratnam Reddy, Pakala, Chittoor District have stated that alignment of line items in the electricity bill is not proper due to which the consumers are not able to understand the bill. The above said issue was brought to the notice of the Commission during last *year public hearings*, but the issue is not resolved. He has requested to issue necessary orders to the concerned.

APSPDCL Response: Necessary steps are being taken by the concerned authorities of DISCOM to resolve the problem of alignment of line items.

Issues of burnt meters

- i) Sri K. Guruswamy Naidu, Sri Palakuru Subramanyam, Sri Nachukuru Muniratnam Reddy, Pakala, Sri Syed Parvez, Sri Tothu Tara Singh, Karvetinagaram, Sri S. Changalraya Reddy, Cherlopalle, Chittoor District have stated that burnt meters replaced only after depositing charges of ₹1050 through mee-seva irrespective of the reason for burning as to whether it is happened due to departmental fault or consumer fault. As the meters are provided by the department and the warranty period of the meters being in the purview of the department, it is not known how the consumer is responsible. The meters may get burnt even with manufacturing defect also. They have requested to examine the matter and issue appropriate orders.

APSPDCL Response: The departmental people are visiting the premises prior to declaring the cause of damage. Meters are being procured duly after testing them in accordance with IS standards.

Replace low lying lines and damaged poles

- j) Sri K. Guruswamy Naidu, Sri Nachukuru Muniratnam Reddy, Pakala, Chittoor District have stated that in the rural areas there are many feeders with low lying lines with loose spans and damaged poles, which are prone to accidents being without proper supervision. Damaged poles shall be replaced to prevent accidents.

APSPDCL Response: Departmental staff are replacing the damaged poles from time to time and the loose spans are also strung. Any specific cases may be brought to the notice of field officers for timely rectification.

Provide AB Switches

- k) Sri K. Guruswamy Naidu, Sri Palakuru Subramanyam, Sri Nachukuru Muniratnam Reddy, Pakala, Chittoor District have stated that AB switches ought to be placed near DTRs for ON/OFF purpose in order to protect the farmers from the electrical accidents.

APSPDCL Response: AB switches are being placed in the place of mother DTRs for ON/OFF purpose, which controls 6 to 8 newly erected DTRs (25 kVA/16 kVA).

Replacement of failed DTRs

- l) Sri K. Guruswamy Naidu, Sri Nachukuru Muniratnam Reddy, Pakala, Chittoor District have stated that in the rural areas failed DTRs are not replaced in time even though various

standards for time bound replacement are in place. Farmers are facing lot of problems in lifting DTRs due to lack of availability of chain blocks with department people. They have requested to procure mini cranes for lifting DTRs in timely manner as per the standards.

Sri K. Rajendra Reddy, Pakala, Chittoor District has stated that replacement of failed/damaged transformers should be done in-time and transportation should be done by the licensee and accessories like chain pully should be provided by the licensee itself. Issues like FIR with police should be dealt by the licensee only and it has nothing to do with consumers.

APSPDCL Response: Failed DTRs are being replaced in time. Sufficient men & materials are available at Section / Sub-division with Vehicle Tracking system. In case of theft of DTRs, the concerned section officers are lodging complaints and pursuing with station house officers regarding FIR.

Replace damaged insulators

- m) Sri K. Guruswamy Naidu, Pakala, Chittoor district has stated that in the rural areas supply being interrupted by the damage of 11 kV insulators and discs. The departmental personnel are wasting the time in identifying the damaged insulator and disc. In this regard, they have requested to take suggestions from experts and ISRO in rectifying the supply in timely manner.

APSPDCL Response: Insulators and discs are being replaced in timely manner. New substations are being constructed to improve the voltage level and to reduce the feeder length.

Provide compensation commensurate with damage

- n) Sri K. Guruswamy Naidu, Sri Nandhyalam Satyanarayana Setty, Sri Nachukuru Muniratnam Reddy, Pakala, Sri S. Chengalraya Reddy, Cherlopalle, Chittoor District have stated that when the consumer is injured and died due to electrical accidents, they need to be paid compensation depending upon the damage but not uniformly.

APSPDCL Response: Ex-gratia being given by the department to the injured and died personnel or animal in accordance with the Regulation 2 of 2017 of APERC.

Enhance the limit of solar pump set capacity

- o) Sri K. Guruswamy Naidu, Sri Nachukuru Muniratnam Reddy, Pakala, Chittoor District have stated that has requested to enhance the existing limit of solar pump-set from 5 HP to 10 HP.

APSPDCL Response: In the jurisdiction of APSPDCL 113 Nos. of 3 HP pump-sets and 20023 Nos. of 5 HP pump-sets are replaced with solar pump sets. Surface pump-sets are provided when the ground water lever is 10 meters and below and submerged pump-sets are provided when the ground water level is between 10 to 15 meters. MNRE has increased the existing limit of the solar pump set from 5 HP to 7.5 HP and accordingly the same will be provided after issuance of guidelines by the State Government.

Lift ban on release of agriculture connections in dark areas

- p) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that the ground water level pertaining to dark areas has increased enormously in the jurisdiction of APSPDCL. As such, he has requested to lift the ban on the revenue villages where the water level increased and to release agriculture connections to the farmers.

APSPDCL Response: Lifting of the ban on the revenue villages is not under the purview of DISCOM.

Provide sufficient men and material

- q) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that sufficient equipment, staff and vehicles shall be provided for immediate restoration of power supply when any disaster or natural calamities happen.

APSPDCL Response: APSPDCL has sufficient men and material for fast restoration of electricity during the occurrence of any disaster or natural calamity.

Increase penalty for non-compliance of citizen charter standards

- r) Sri K. Guruswamy Naidu, Pakala, Chittoor District has stated that in order to improve the accountability and to ensure timely service to the consumers, the penalty of ₹200 for default in repair of transformers within 24 hours in rural areas and within 48 hours in urban areas, as at S.No.4 of citizen charter of APERC, shall be increased to ₹ 500/- Likewise, compensation to consumer needs to be increased to ₹300/- from the existing ₹100/-. That compensation for the services published in citizen charter shall be increased and wide range of publicity is needed for citizen charter. Lr. No. APERC/E-202/DD-Dist./2016, dt. 11.01.2016, Proceedings No. Secy., 10/2015, dt. 29.05.2015 of APERC shall be displayed in office notice boards.

APSPDCL Response: As the licensee is facing acute shortage of staff, at this instant the objector's request to increase compensation is not justifiable. Citizen charter details are provided in all Sub-Division office notice boards.

Billing issues

- s) Sri K. Guruswamy Naidu, Sri Nandhyalam Satyanarayana Setty, Pakala, Chittoor District have stated that meter readers are not taking the reading within due date because of which the bills are increasing due to higher slab rates. He has requested to issue bills within the due date.

Sri C.V. Mohan Rao, Repalle Pattanabhivruddi Sangham has stated that meter readers are not taking the readings of the replaced meters for 4 to 5 months. As the bills of 4 to 5 months consumption are issued at once, consumers are financially burdened to pay such bills. Necessary actions shall be taken to scan the readings from the first month of fixing the meters and to serve the bills immediately.

APSPDCL Response: Readings are being taken by the meter readers within the due date as per the schedule provided to them prior to taking the readings.

In the cases of meter change, reading will be taken in the subsequent billing schedule. Any specific complaint may be reported and get resolved by the concerned AAO.

Domestic category during construction of house

- t) Sri C.V. Mohan Rao, Repalle Pattanabhivruddi Sangham has stated that DISCOMs' are releasing new services for construction of houses under commercial category because of which the consumers are put to financial loss. Such services may be released under domestic category.

APSPDCL Response: Request will be examined.

Increase meter reading period for covering door lock services

- u) Sri C.V. Mohan Rao, Repalle, Pattanabhivruddi Sangham has stated that as per the present practice meter readers are required to take the readings within 11 days for the town, the door lock service readings are not being taken 2nd time. Meter reading programme may be increased to 15 days and the meter reading program must be made available to the meter readers from the 1st day of the month to enable them take the readings of door lock services.

APSPDCL Response: Suggestion will be examined and necessary actions will be taken.

Issue spot bills for cases of non-generation of bills

- v) Sri C.V. Mohan Rao, Repalle Pattanabhivruddi Sangham has stated that in the Repalle town, in every month nearly 1500 meters are not being scanned due to various reasons and for some meters the bill is not generated even after successful scan and as such bills are not served. The consumers are being asked to visit the nearby EROs and even after several visits the bills are not being given and being told to pay the bills in bill collections Centres. For commercial establishments, bill with details of other charges is needed. Software shall be developed so that manual bill is generated on the spot when the scanning failed and the reader details are sent to AE login.

APSPDCL Response: Necessary actions will be taken to issue bills at the consumer premises for the services whose reading could not be scanned.

Show consumer deposit in bills

- w) Sri C.V. Mohan Rao, Repalle Pattanabhivruddi Sangham has stated that the consumer deposit shall be shown in the monthly bill as there are apprehensions whether the amount paid towards additional consumption deposit is accounted for in the consumer deposit or not.

APSPDCL Response: Actions are initiated to print the details of deposit in the bills after consumer pays the additional consumer deposit.

Consumers are penalized with reconnection charges

- x) Sri K. Vasudeva Rao, Chief Editor & Publisher, Electronics, Electrical & General Samaacharam, Visakhapatnam has stated that consumers are being penalized with reconnection charges for the non-payment of bill within due date even though the respective

services were not disconnected physically and collection of such charges is evident in the Form-7 of ARR proposals.

Sri Ravuri Raja Rao, Naryanapuram (V), Unguturu (M) W.G.District has stated that in the event of non-payment of electricity bill for any reason within the time by the consumer, an amount of ₹100/- as RC fee is being collected in the next month which is a burden to the consumer.

Sri P.V. Raghavulu, Naryanapuram (V), Unguturu (M) W.G. District has stated that penalty for non-payment of electrical bills within the due date shall be ₹10/- instead of ₹100/-

APSPDCL Response: Reconnection charges are being collected according to tariff regulations.

APEPDCL Response: Reconnection charges are being collected from those disconnected services only requiring reconnection. If the electricity bill not paid in full by the consumer within 15 days after the due date, supply will be disconnected. RC fee is being collected for restoration of supply to the disconnected services only. Category-I (Group-A)-₹50/-, Other Category services ₹100/-.

Streamline release of agriculture services and provide meters

- y) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that unlike in any other category there is annual quota system subject to sanction by the GoAP for the agricultural services. Procedure of release of agricultural services is confusing and seniority of registration is being ignored. Releases of agriculture services should be streamlined and transparent procedure should be evolved.

APSPDCL Response: As per Section 4 (1) of Regulation No.4 of 2013, agricultural services are to be released subject to the quota issued by the GoAP. Priority is being followed in releasing of services.

Carryout periodic inspection at regular intervals

- z) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that rural supply is most disturbed. Interruptions are common. Periodic inspection should be carried out at regular intervals at all levels and uninterrupted supply should be provided.

APSPDCL Response: Pre-monsoon inspections are carried out regularly to avoid interruptions as a precautionary measure.

Conduct Phone-in program

- aa) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that phone in program should be conducted by operation DEs and SEs on every Monday for one hour for redressal of consumer grievances and wide publicity should be given regarding this.

APSPDCL Response: The suggestion will be examined.

Switch to prepaid meters

bb) Sri K. Rajendra Reddy, P. Kothakota, Chittoor District has stated that huge amounts of arrears of consumption charges are mounting year by year. Why not the licensee consider switching over to prepaid meters to check evasion of consumption charges.

APSPDCL Response: Arrears are being collected regularly by effectively operating DC lists. Fixing of prepaid meters is to be examined by considering the financial involvement and benefits.

Farmers are facing problems due to poor quality of supply

cc) Sri Vadlapudi Nageswara Rao, Goplapuram (V), Unguturu (M), W.G. District has stated that the electricity supply being extended to agriculture pumps from the sub-stations is not of good quality, due to which farmers are facing lot of problems.

APEPDCL Response: Many improvement works are being carried out continuously for extending quality and reliable electricity supply to all consumers. If any specific problem is brought to the notice, the same will be addressed.

Consumers are facing problems due to errors in meter reading

dd) Sri Vadlapudi Nageswara Rao, Goplapuram (V), Unguturu (M) W.G. District has stated that there are lot of errors in the process of taking electrical readings to domestic consumers in villages viz. wrong entry of service numbers, consumer paying someone's consumer bill etc. Consumers are facing problems since they are unable to pay huge charges even though they have not consumed that much of electricity.

APEPDCL Response: At present domestic meter readings are taken with the spot billing machines through scanners. The electricity bill generated through spot billing machines are issued to the consumers in their premises and as such there is no possibility for taking wrong readings and issuing of some one's bill to the actual consumer.

Periodical Reports on Energy efficient pump-sets

ee) Sri M. Thimma Reddy, Kakatiya Nagar, Hyderabad, Dr. K. Kranthi Kumar Reddy and Sri JettiGurunadha Rao, West Godavari District & Ch. Diwakara Babu, Secretary, Consumers' Guidance Society, Vijayawada have stated that both EPDCL and SPDCL have shown substantial increase in agricultural consumption even in the presence of programs related to energy efficient irrigation pump sets and solar irrigation pump sets. The Commission has directed the DISCOMs to file periodical reports on implementation of energy efficient pump sets. But the DISCOMs have not placed these reports on their websites.

DISCOMs' Response: Taking necessary action to comply with the directions of the Commission.

Safety Issues

ff) Sri B. Hume Sastry, Visakhapatnam has stated that the systems of vertical formation of distribution lines and lines guarding which were not prone to accidents are no longer in vogue and scope for occurrence of fatal accidents is given when public come in contact with

snapped conductor which have potential. 90% of fatal electrical accidents can be avoided if these practices are restored. Similarly, the system of providing guarding between lines of different potential existing on the same support / pole is given up, giving scope for accidents and damage to consumer installation in case of higher voltage conductors falling on lower voltage conductors. The system of providing guarding between lines of different potentials may be restored. Another method of avoiding electrocution is fixing MCBs of suitable capacity on each transformer before fuse box. So that in case of fault by snapping of conductors the power supply to LT line is cut off and the staff can restore the supply by resetting the MCB after clearing the fault. Several thousands of village line man were recruited recently and they can attend to these works very quickly.

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.

The suggestion of installation of MCBs is examined and it is not economical to DISCOM as it would in turn burden the consumers. However, the fault conditions are being taken care of and fuses of appropriate rating are provided.

Ground clearances are not as per IE rules

gg) Sri B. Hume Sastry, Visakhapatnam has stated that as per I.E. Rules minimum ground clearance of 6 feet should be maintained from live LT points. But in case of all LT distribution transformers this clearance is not maintained and LT distribution boxes are at height of 4 feet ground level and even in case of some transformers 11 kV bushing is at height of less than 6 feet. Such installation needs immediate rectification.

DISCOMs' Response: The licensee is taking every care to maintain clearances. All field staff are being educated from time to time on maintaining safety measures and standards.

Dispense Individual DTRs for Apartments

hh) Sri B. Hume Sastry, Visakhapatnam has stated that individual distribution transformers installed at multi storied apartments are nearly 90% under loaded half the day (12 Hrs.) thus contributing huge amount of losses. It is desirable to remove individual transformers at such locations and release supply to consumers directly through LT system to such losses.

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 90% under loading for 12 hours is taking place in these transformers is hypothetical. If apartment complexes are extended supply from public DTRs, the connected LT lines and the DTR get overloaded and cause more losses than the system adopted in apartments. Hence, dedicated DTRs to apartment complexes are necessary to reduce the interruptions, SAIFI, SAIDI parameters and improve reliability.

- ii) Sri Nandhyalam Satyanarayana Setty, Pakala, Chittoor District has requested for implementation of the “Citizen Charter”.

APSPDCL Response: The Citizen Charter is being implemented by APSPDCL.

- jj) Sri S. Changalraya Reddy, Cherlopalle, Chittoor District has stated that DISCOM line is passing close to the house of Sri Naga Ratnam Reddy, 10th cross, Bharatham mitta, Pakala and requested for rectification of the same.

APSPDCL Response: Necessary action will be taken by considering the request.

- kk) Sri Tothu Tara Singh, Sri Syed Pervaz & Sri N. Venkatesh, Karvetinagaram mandalam, Chittoor District have requested that the charges should not be collected from farmers to enhance the capacity of DTRs and replacing old conductors while applications are made for additional load.

APSPDCL Response: As per Regulation No. 4 of 2013 Charges are being collected from farmers for releasing additional loads. Further, new transformers will be erected as per rules and regulations of DISCOM.

- ll) Sri J.T. Ramarao, Visakhapatnam has stated that the licensees are disconnecting the unpaid services without giving 15 days’ notice.

EPDCL Response: On the reverse side of the bill 15 days’ notice period is already mentioned.

- mm) Sri Jagga Apparao, has stated that 50% concession in power bill shall be given to small farmers and workers.

EPDCL Response: No such concessions are proposed in the present filings.

- nn) Sri B.V. Satyanarayana, Eluru has requested to permit installation of Solar Roof Top panels for aqua culture.

EPDCL Response: Roof Top Solar is permitted to all categories of consumers under net metering policy. However central financial assistance from MNRE, GoI is allowed only to Domestic consumers.

- oo) Sri S. Abdul Mujeeb, Karvetinagaram, Chittoor, District has sought information whether APSPDCL is conducting consumer awareness programs.

APSPDCL Response: Consumer awareness programs are being conducted regularly with the participation of consumers, public representatives and others upto the Mandal level.

Commission’s view: The various grievances / suggestions of the objectors are largely responded to by the DISCOMs concerned. The DISCOMs shall prepare an action program for implementation of the assurances given by them on the various grievances expressed by the objectors and submit a report to this Commission within three months. Wherever the DISCOMs have not responded positively, the objectors may avail legal remedies such as approaching the CGRF and Vidyut Ombudsman.

Objections raised during Public hearings as well as received after due date

- pp) Sri Kandregula Venkata Ramana, Anakapalli(v), Visakhapatnam has stated that DISCOMs have been erecting the poles in the fields of the consumers and for the removal of the said poles, estimation charges are demanded.
- qq) Sri D. Mathya Raju, Veeranarayana (V), Visakapatnam (Dt) has stated that his motor was burnt due to the overloading of existing 25 kVA DTR. In this regard, justice was not done in spite of the favourable verdict by the CGRF.
- rr) Sri Balaji Prasad Pandey, Rajahmundry, East Godavari District during the public hearing held at Visakhapatnam has stated that unauthorized dwellings in Panchayats, Municipalities shall not be denied for electricity connection as per the Electricity Act, 2003.
- ss) Sri K. Ramachandra Murthy, Visakhapatnam, during the public hearing held at Visakhapatnam, has orally stated that many of the digital meters installed for consumers are defective and that proper compensation shall be paid to the victims of electrical accidents.
- tt) Sri P. Venkanna Babu, Advocate, Eluru, during the public hearing held at Eluru, has orally stated that the CGRF orders shall be implemented by the DISCOMs.
- uu) Sri Poola Peddireddy, A.P. Rythu Sangam, Tadepalli, Guntur, during the public hearing at Vijayawada has stated that DISCOMs are not maintaining 9 hours quality supply to Agriculture, that compensation is not paid to the victims of electrical accidents, that DISCOMs are not releasing pending agricultural connections etc.
- vv) Sri G. Eswaraiah, District Secretary, CPI, Kadapa during the public hearing at Kadapa has stated that DISCOMs are not maintaining 9 hours supply to Agriculture and that compensation is not paid to the victims of electrical accidents.
- ww) Sri P. Venkateswara Rao of Guntur has stated that low lying 3-phase line (Pole No.38E/15 to 38E/16) is passing near the house bearing House No: 5/17-18, Brodipet, Guntur which is dangerous and requested for rectification.
- xx) Sri P.K. Hari, Smt. P.E. Sandhya and Sri P. Ellappan, Pudupet, Nagari have stated that the APSPDCL levied capacitor surcharge even after maintaining Power Factor of 0.948 which is not justifiable.
- yy) Sri K. Bhujanga Rao, Veravalli (V), Krishna (Dt.) has stated that his son who was a shift operator got electrocuted and died during the Hud-Hud cyclone rectification works in Vijayanagarm (Dt). He has requested for employment to his another son.
- zz) Sri A. Simhachalam and Sri T. Devudu, Visakapatnam have stated that the supply was not extended to 50 families residing in Veeranagar colony though poles for street lights are in place.
- aaa) Smt. G. Santakumari and Smt. M. Narayanamma, Visakapatnam have stated that 10 families of their colony had applied for new service connections and the 8 Nos were released.

The remaining 2 Nos services were not released due to the wrong address noted in the Call Centres.

- bbb) Sri Ch. Venkataiah, Chittoor (Dt) has stated that people are suffering due to frequent power cuts and failure of DTRs in west part of Chittoor district during January to May of every year and hence requested for necessary action
- ccc) Sri P. Mutya Reddy of Yerraguntapalli(v), W.G. District has stated that DISCOM officials are claiming the bills for the works done by the farmers with respect to their works in extension of supply or complaints on supply of power.
- ddd) Sri Eshwaraiah CPI, Kadapa has stated that the substations are constructed by the DISCOMs without any assessment on requirement.
- eee) Sri N. Subramanyam Naidu, Kambalamitta (V), Pakala (M), Chittoor District during the public hearing held at Tirupati has stated that AB Switches shall be provided, 9 hours supply power shall be maintained and responses shall be properly given in Spandana Program.
- fff) Sri V. Gangaraju, Dist. president, CITU, Chittoor (Dt) has stated that there is a large pendency in releasing the agricultural service connections in the west part of the district in spite of farmers have paid all the charges.
- ggg) Sri S. Jayachandra, Democratic Youth Federation of India, Chittoor (Dt) has stated that 4700 Nos. vacant posts present in the jurisdiction of APSPDCL need to be filled immediately with the 75% of local candidates. Roaster and Reservation shall need to be extended to the outsourcing employees also.
- hhh) Sri Ananda Kumar Dasi, Eluru has stated that the DPE wing shall be strengthened and enquiry shall be conducted on procurement of AVNIER Meters which are of poor quality.
- iii) Sri Eshwaraiah CPI, Kadapa has stated that the fatal electrical accidents are increasing year on year due to the negligence of the licensees in maintain safety standards and requested to enhance the compensation for deaths to 10 lakhs.
- jjj) Sri A. Rammohan Reddy and Sri T.R. Subramanyam, Tirupati during the public hearing at Tirupati have orally stated that bill adjustments are not done for the energy injection from their Roof top Solar Plants.
- kkk) Sri G. Sambasiva Rao of Guntupalli (V), Ibrahimpatnam (M), Krishna (Dt) has stated that the PGCIL 400-kV line is passing through his Plot present in the Thumapalli (V) and received an amount of ₹12,725 towards compensation. He has requested for enhancement of the compensation.
- lll) Sri G. Satish, Sri G. Srinivasa Rao, Sri G. Rambabu, Sri M. Koteswara Rao, Sri M. Sitaram, Sri T. Venkateswara Rao, Sri S.V. Krishna Reddy, Sri P. Nageswara Rao of Chandralapadu (v), Krishna (Dt) have stated that the PGCIL 765 kV DC line is passing through their lands in Verlapadu, Nandigama, Chandralapadu mandals, and received compensation at the

market value in 2016. They have requested enhancement of compensation as per the market value in 2018.

- mmm) Sri J. Samba Siva Rao, Sri N. Samba Siva Rao, Sri N. Ramarao, Sri V. Venkateswara Rao, Sri J. Venkateswara Rao, Sri D. Narasimha Rao, Sri P. Narayana Rao, Sri Ch. Kumara Swamy, Sri N. Ramesh, Sri B. Nagaraju, Sri A. Padma Rao, Sri M. Mallaiah Swamy, Sri B. Rama Rao, Sri B. Subba Rao of Federation of farmers Association, AP, Krsihna (Dt.), have stated that the 132 kV line of APTRANSCO is passing through their fields and requested for the compensation as per the Electricity Act, 2003.
- nnn) Sri C.G. Sujjeswara Rao, Visakhapatnam has requested to reinstate to his job as a security guard stating that he was removed from duties for trivial reasons.

Commission's view: As the Commission did not have the benefit of the DISCOMs' responses due to the fact that the objections were raised either during public hearings or sent after due date, it is not possible to express its views. However, the respective DISCOMs are directed to consider the above noted grievances of the objectors and take appropriate action under intimation to the objectors within three months. If any grievance is not redressed, the aggrieved party may avail appropriate legal remedies.

246. INFORMATION SOUGHT FROM THE DISCOMs

Certain information was sought by some of the objectors and the DISCOMs have accordingly furnished the requested information the details of which are as given hereunder:

- a) Sri Gandham Srinivasa Rao, Advisor, Consortium of Indian Farmers Associations (CIFA), Hyderabad has sought certain details and the DISCOMs submitted their responses as under:

- (i) Interest on Consumer Security Deposits

DISCOMs' Response:

APSPDCL: The APSPDCL estimated the Interest payable on Consumer Security Deposits in FY2020-21 as ₹184.56 Cr. The interest will be credited to the account of consumer as per the Bank rate notified by RBI.

APEPDCL: The EPDCL estimated the Interest payable on Consumer Security Deposits in FY2020-21 as ₹115.54 Cr. Normally, the interest will be credited to the account of consumer as per the Bank rate notified by RBI.

- (ii) Multiple slabs in Domestic LT (0-75, 75-225 & >225)

DISCOMs' Response: The details of slabs in LT domestic consumers, estimated sales, estimated revenue for FY 2020-21 is shown in the Form-12 of the Retail Supply Formats in the ARR.

- (iii) Government subsidy details on free power to agriculture and Domestic LT communities

DISCOMs' Response:

APSPDCL: Subsidy details for FY2019-20 (upto Nov'19): Approved / Received / Balance: ₹3857.78/₹2035.71/₹1822.07 Cr. Total subsidy to be received from GoAP as on Nov'19 is ₹4418.96 Cr.

Subsidy to be received from GoAP for providing free units upto 200 Units free for 15,64,594 Nos. SC / ST Consumers by end of November' 2019: ₹ 256.05 Cr.

APEPDCL: Subsidy details FY2018-19: Approved/Received/Balance: ₹1093.17/ ₹518.10/₹ 575.07 Cr.

Subsidy details FY2019-20: Approved/Received/Balance: ₹1286.59 / ₹521.12 / ₹765.47 Cr.

Subsidy to be received from GoAP for providing free units upto 200 Units free for 764460 Nos. SCST Consumers by end of Nov 2019: ₹138.34 Cr.

- (iv) Rooftop Solar Housing Panels

DISCOMs' Response:

APSPDCL: APSPDCL is making all efforts to encourage consumers to install Solar Roof Top panels. Total 71.75 MW capacity Solar Rooftop is installed in APSPDCL as on 30.11.19.

APEPDCL: EPDCL is making all efforts to encourage consumers to install Solar Roof Top panels. Total 43.649 MW capacity Solar Rooftop is installed in APEPDCL as on 30.11.19.

- (v) Agricultural Solar Pumps

DISCOMs' Response:

APSPDCL: 20,136 Nos. standalone solar Agricultural Pump sets were installed as on Nov' 2019.

APEPDCL: 16,409 Nos standalone solar Agricultural Pump sets were installed.

- (vi) Section 164 of Electricity Act, 2003

DISCOMs' Response: Section 164 of Electricity Act 2003 reads as follows:

"The Appropriate Government may, by order in writing, for the placing of electric lines or electrical plant for the transmission of electricity or for the purpose of telephonic or telegraphic communications necessary for the proper co-ordination of works, confer upon any public officer, licensee or any other person engaged in the business of supplying electricity under this Act, subject to such conditions and restrictions, if any, as the Appropriate Government may think fit to impose and to the provisions of the Indian Telegraph Act, 1885, any of the powers which the telegraph authority possesses under that Act with respect to the placing of telegraph lines and posts for the purposes

of a telegraph established or maintained, by the Government or to be so established or maintained.”

Licensees will abide by the directions of GoAP and the Commission as may be specified u/s 164 of the Electricity Act 2003.

- b) Sri A. Punna Rao, Chartered Engineer, Vijayawada has sought certain information and the same is provided by the DISCOMs as given below:

- (i) Details of Agricultural pump sets district wise.

APSPDCL Response:

District	No of pump under in HVDS program	Energy Efficient pump sets	solar pump sets
Krishna	40026	9430	2804
Guntur	32299	5424	2221
Prakasam	101868	5722	7762
Nellore	102512	9664	3438
Chittoor	227043	4178	1229
Kadapa	132622	701	468
Anantapur	104770	9176	831
Kurnool	79935	7582	1383
Total	821075	51877	20136

APEPDCL Response: The information is furnished in the following table:

Name of the District	Agricultural Services	Services under HVDS	Energy Efficient Pumps	Solar AGL Pumpsets
Srikakulam	25770	18404	2558	2957
Vizianagaram	31392	23225	5207	4933
Visakhapatnam	30080	27518	4663	2887
Rajahmundry	48734	44694	2973	3940
Eluru	98533	90013	2872	1692
Total	234509	203856	18273	16409

- (ii) Agricultural services covered under HVDS and no of EE Pumps & Solar pumps proposed to be replaced in FY2020-21 & FY2021-22?

APSPDCL Response: 152400 Nos. pump sets will be covered for the FY 2020-21 & FY 2021-22 and there is no proposal to replace the old pump sets with solar and energy efficient pump sets.

APEPDCL Response: There are no proposals on the points raised by the objector.

- (iii) No. of Fish ponds and Prawn ponds

APEPDCL Response: There are 22,489 Nos aqua services are available in EPDCL area, which consumed 1150.97 MU during the FY 2018-19.

- (iv) Power consumption for Prawn ponds

APEPDCL Response: Consumption recorded based on the utilization of connected load by the consumer.

- (v) Power consumption for Fish ponds

APSPDCL Response for 1 to 3: There are 31,132 Nos services prawn culture services available in APSPDCL area. The consumption pertaining to those services for the period from Nov-2018 to Oct-19 is 2631.39 MU.

APEPDCL Response: Consumption recorded based on the utilization of connected load by the consumer.

(vi) Malpractices by Fish & Prawn pond consumers

APSPDCL Response: For the year FY 2018-19, there were 1277 Nos cases booked on aquaculture consumers with the assessed amount of ₹ 4.30Cr. For the FY 2019-20, till November, 284 cases were booked with the assessed amount of ₹ 64 lakhs. In order to curb the theft of electricity, inspections are being done during the night times also.

APEPDCL Response: For the FY 2018-19, 61 Nos. cases were booked on Aqua culture consumers with assessment amount of ₹ 53.58 Lakhs.

(vii) Quality of Bulbs supplied under DELP scheme:

APSPDCL Response: The bulbs which distributed under UJALA scheme by the EESL and failed within guaranty period are being replaced. The special counters were set up constituency wise for attending all such complaints. Big publicity was being given to the consumers on special counters.

APEPDCL Response: 75,40,961 Nos LED bulbs were distributed in 5 Districts of APEPDCL area under DELP Scheme. Out of which 6,41,820 failed LED bulbs were replaced.

(viii) Amount of loans taken by the DISCOMs for the LED bulbs distribution:

APSPDCL Response: Under DELP scheme, an amount of ₹151.93 cr. was paid till Febraury 2019. An amount of ₹28.76 cr. is yet to be paid for the period from March-19 to Febraury -20.

APEPDCL Response: An amount of ₹112 Cr. is to be paid to M/s EESL under SOP mode. An amount of ₹101 Cr. was paid to M/s EESL as on October 2019 so far.

(ix) Energy savings on account of LED bulbs distribution:

APSPDCL Response: As per the energy audit reports, 65.15 MUs energy was being saved every month after the replacement of normal bulbs with LED bulbs.

APEPDCL Response: As per the 3rd party survey reports, each bulb can save 74 units per annum. Based on this, the energy savings were calculated at 558 M.U per annum in APEPDCL.

(x) Power purchase Dues to APGENCO by DISCOMs.

APSPDCL Response: It owes an amount ₹ 3543.54 cr.to APGENCO.

APEPDCL Response: It owes an amount ₹ 1847.52 cr. to APGENCO.

(xi) Power purchase Dues to private power plants by DISCOMs.

APSPDCL Response: It owes to private power plants an amount ₹529.46 Cr.

APEPDCL Response: It owes to private power plants an amount ₹276.05 Cr.

(xii) Power purchase Dues to Solar and Wind developers by DISCOMs.

APSPDCL Response: It owes to solar and wind power plants an amount ₹3919.51 Cr.

APEPDCL Response: It owes to solar and wind power plants an amount ₹250.50 Cr.

(xiii) Power purchase Dues to CGS by DISCOMs.

APSPDCL Response: It owes to CGS an amount ₹2635.85 Cr.

APEPDCL Response: It owes to CGS an amount ₹1374.28 Cr.

(xiv) Power purchase Dues to Bio-mass plants by DISCOMs.

APSPDCL Response: It owes to Bio-mass power plants an amount ₹22.12 Cr.

APEPDCL Response: It owes to Bio-mass power plants an amount ₹11.53 Cr.

(xv) No of Bio-mass plants and their capacity

APSPDCL Response: There are 22 Nos. Bio-mass plants in APSPDCL area and the corresponding capacity of them is 125 MW.

APEPDCL Response: There are 6 Nos. Bio-mass plants in APEPDCL area and the corresponding capacity of them is 31.5 MW.

(xvi) Subsidy dues from GoAP to DISCOMs for FY2018-19:

APSPDCL Response: The amount to be received from the GoAP in the form of subsidy is ₹2596.89 crores for FY2018-19.

APEPDCL Response: The amount received from the GoAP in the form of subsidy is ₹518.10 crores as against ₹1093.17 crores approved in Tariff Order.

(xvii) Subsidy dues from GoAP to DISCOMs for FY2019-20:

APSPDCL Response: For the year FY2019-20, till November, GoAP has paid an amount of ₹2035.71 crores as against ₹3857.78 crores.

APEPDCL Response: An amount of ₹ 521.12 Crs was received from GoAP as against ₹1286.59 Cr. approved in Tariff order.

(xviii) Loans from financial institutions:

APSPDCL Response: The government is not paying any interest on the subsidy amount owed to APSPDCL.

APEPDCL Response: Bearing the interests itself on the loans taken by it.

(xix) Consumption dues from government offices for FY2018-19?

APSPDCL Response: Total consumption dues from government offices is ₹1638.75 crores for FY2018-19.

APEPDCL Response: Total consumption dues from government offices is ₹744.57 crores by the end of FY2018-19.

(xx) Consumption dues from the government offices in FY2019-20:

APSPDCL Response: Total consumption dues from government offices is ₹746.42 crores till the November 2019.

APEPDCL Response: Total consumption dues from government offices is ₹944.77 crores till the November 2019.

(xxi) Consumptions dues from the local bodies:

APSPDCL Response: An amount of ₹2126 crores and ₹536.28 crores are to be received from the local bodies for the year FY 2018-19 and FY 2019-20 respectively. DPS is being levied for delay in payment by local bodies.

APEPDCL Response: ₹ 727.84 Cr. and ₹ 834.10 Cr. are to be received from local bodies by the end of FY2018-19 and by the end of November 2019 respectively. DPS is being levied for delay in payment by local bodies.

(xxii) Consumption dues from Domestic, Commercial and Industrial consumers:

APSPDCL Response:

Category	Amount in Cr. for FY 2018-19	Amount in Cr. till November 2019
Domestic	276.49	230.64
Commercial	103.14	240.68
Industrial	981.61	1047.8

APEPDCL Response:

Category	Dues as on 31.03.2019 (₹ Cr.)	Dues as on 30.11.2019 (₹ Cr.)
Domestic	92.70	145.38
Commercial	80.19	103.45
Industrial	658.01	684.38

(xxiii) Interest on Loans:

APSPDCL Response:

Loan amount of ₹12821.04 crores was taken from the banks and other financial institutions as on 30.11.2019. An amount of ₹717.04 Cr. has been paid in the form of interest for the period from April-19 to Nav-19.

APEPDCL Response:

Loan amount of ₹ 7226.56 crores was taken from the banks and other financial institutions as on 30.11.2019. An amount of ₹ 344.24 Cr. has been paid in the form of interest for the period from April-19 to Nav-19.

(xxiv) Consumption dues involving Court cases:

APSPDCL Response: Till September 30, 2019, an amount of ₹595.08 crores have been pending due to 524 Nos court cases. It will follow the guide lines issued by the Commissions in this regard.

APEPDCL Response: Court cases are in the purview of DISCOMs only and taking all necessary measures for early disposal by the Courts.

(xxv) APGENCO thermal power availability:

APSPDCL Response: 4949 MUs shown in the ARR's power procurement plan was not from solar and wind power. The market purchases will be from the energy exchanges and DEEP e-bidding portal.

APEPDCL Response: The market purchases of 4949 MUs are not from solar and wind power plants.

c) Federation of Farmers Association, Guntapalli (V), Krishna District has requested certain information from the DISCOMs and the same was provided by them as given below:

(i) Details of Agricultural Solar pump sets and details of Solar pump sets in Rajanagarm

APEPDCL Response: As on 30.11.2019, 1254 Nos. Agricultural Solar pump sets of 3 HP capacity and 15,155 Nos. Agricultural Solar pump sets of 5 HP capacity were installed in APEPDCL. 9 Nos Solar pump sets under Jalasiri scheme and 20 Nos Solar pump sets under normal scheme, a total of 29 Nos Solar pump sets were installed in Rajanagaram Mandal and meters are not provided to these services.

(ii) ARR books sold both in both Telugu and English versions?

APSPDCL Response: 5 Nos ARR books each of ₹100 in English version, 10 Nos ARR brief notes of each of ₹10 in Telugu version and 10 Nos ARR brief notes of each in English version of ₹10 were sold.

(iii) Waival of Surcharge amount of ₹3.5 crores with respect to the service connection no: HT 122, of Krishna district.

APSPDCL Response: As per the account copy for the service HT 122 of Vijayawada circle, the surcharge was not waived. As on Dec-2019, arrears of an amount ₹3.64 crores are existing in records.

(iv) Solar roof top service details, district wise

APSPDCL Response:

S. No.	Circle	SRT Nos.	Total capacity in kilowatts
1	Vijayawada	465	9431
2	Guntur	290	6741.31
3	CRDA	91	3308.48
4	Ongole	119	5404.15
5	Nellore	85	5057.17
6	Tirupati	417	17910.4
7	Kadapa	125	7796.2
8	Kurnool	145	6237.7
9	Anantapur	197	9860.13
Total		1984	71746.5

APEPDCL Response: So far 1749 Solar Roof Top connections with 43,649 KWP capacity were connected to Grid. Under phase –II MNRE, sanction has been accorded to set up 8 MW Solar Roof Top in APEPDCL and the same is under Tenders stage.

Commission's view:

(v) Details of solar pump sets

APSPDCL Response: The data pertaining to Solar pump sets as on 30-11-2019 is as follows:

S. NO.	Circle	Charged Nos
1	Vijayawada	2804
2	Guntur	2221
3	Ongole	7762
4	Nellore	3438
5	Tirupati	1229
6	Kadapa	468
7	Kurnool	1383
8	Anantapur	831
Total		20136

d) Sri Syed Parvez, Karvetinagaram, Chittoor District has requested information on penalty paid by APSPDCL to the consumers for not complying the citizen charter during the year FY2018-19

APSPDCL Response: During the FY2018-19, APSPDCL had paid ₹ 4000/- to the consumers towards the penalty for not meeting the conditions mentioned in the citizen charter.

Commission's view: As the information sought for by the objectors appear to have been furnished, the Commission feels that its intervention in this regard is not necessary. If any piece of information sought by the objectors is not furnished, they may approach the licensees and in such case the licensees shall promptly furnish the information unless the same is barred under the Right to Information Act.

I. SUGGESTIONS

- a) Sri Ch. Koti Reddy, State Secretary, Rythu Sanghala Samaakhya, Nellore (Dt) has stated that,
 - (i) The DISCOMs shall not increase the tariff.
 - (ii) Stringent action needs to be taken for the reduction of energy loss and theft of power
 - (iii) Officers and Staff shall reside at their respective headquarters
 - (iv) Tariff shall be the same for all the agricultural consumers
 - (v) Sufficient compensation shall be paid to the farmers in whose lands the transmission lines are laid.
- b) Sri Ch. Babu Rao, CPI(M), Vijayawada has stated that,
 - (i) The department shall provide the compensation for the damages caused due to low voltage.
 - (ii) Sufficient compensation shall be provided to the farmers before the lines being laid in their lands.
 - (iii) Citizen charter shall be implemented strictly.
 - (iv) Tariff and all the utility charges shall be reduced in view of the technological developments and the power surplus scenario.
- c) Sri A. Pullaiah, Secretary, CPI (M), Tirupati and Sri Ch. Babu Rao CPI(M), Vijayawada have stated that,
 - (i) The Departmental lands shall not be given to private parties,
 - (ii) Bills shall be issued in correct format
 - (iii) Regularize the contract employees
 - (iv) Equal pay for equal work shall be ensured for contract employees / outsourced employees
 - (v) Old pension scheme shall be restored for the employees.
 - (vi) The pollution from the Genco plants shall be reduced
 - (vii) New connections to be released in stipulated time
 - (viii) Tariff for Religious places, NGOs, offices of political parties, etc. shall be fixed on par with the domestic tariff.

- (ix) the renewable PPAs shall be limited to 5 years and due diligence is needed for entering new PPAs. There shall not be any procurement of power from the sources which are not having PPA with DISCOMs.
 - (x) Public hearing needs to be conducted on the load forecast and power procurement.
 - (xi) Power shall not be purchased from the plants whose PPAs were expired,
 - (xii) to review the PPAs with Wind and Solar developers.
 - (xiii) Government should bear the revenue gap arising out of the filings of DISCOMs and the true-up claims of DISCOMs of ₹24980 Cr.
 - (xiv) 200 units free power shall be extended to the BCs, who have white card.
- d) Sri Kandregula Venkata Ramana, Anakapalli (v), Visakhapatnam has stated that,
- (i) “May I Help” desks shall be established by the DISCOMs in all the divisions.
 - (ii) DISCOMs are not paying the charges for the units injected into the Grid by the Solar Pump Set farmers.
 - (iii) DISCOMs are not taking action on the physical disconnection of the services, in respect of unpaid consumers in West Godavari District.
 - (iv) Cases were booked on petty commercial activities like household tailoring, sale of milk in the houses etc. particularly in Srikakulam and West Godavari district treating them as Malpractices and same may be avoided.
 - (v) DISCOMs are not placing the orders issued by CGRF and also not implementing CGRF orders.
 - (vi) There are many unions in AP Electricity Department. Union leaders are not doing their duties taking the advantage of the leader status.
 - (vii) Thermal stations are not complying with the pollution norms.
 - (viii) There is no alignment in the line items of the electricity bills issued.
 - (ix) Pre-paid shall be installed in a fast pace.
 - (x) DISCOMs shall strictly implement the Citizen Charter and formation of a committee is needed with various consumer organisations to look into the issues in the implementation of Citizen Charter.
 - (xi) Awareness programs should be held on the rights of the consumers by engaging NGOs etc.
 - (xii) District and Constituency advisory Committee shall be constituted
 - (xiii) DISCOMs shall implement the RTI act strictly.
 - (xiv) DISCOMs shall comply the Regulation No 4 of 2013.
- e) Sri P.H. Janaki Ram, Company Secretary, APSEB Engineers’ Association, Tirupati has stated that,
- (i) Many a time it has been requested to furnish the trend analysis since beginning for the various components of ARR filings in per unit quantities. But such information is not

furnished in ARR filling of every year by the DISCOMs. In the absence of such trend analysis it is very difficult to understand the ARR fillings.

- (ii) The Government is not reimbursing the loss caused on account of must run status granted to Wind and Solar developers by the government.
 - (iii) The Commission has to fix up the bench mark for per unit power purchase cost, transmission cost, distribution cost and target should be given to the Electricity companies to reduce the said cost on yearly basis like given for RPPO targets. Incentives should be given for the Managements as well as employees for better performance as a token of encouragement.
 - (iv) Separating retail supply business from the Distribution companies shall be avoided.
 - (v) The subjects such as energy audit, energy conservation, interruptions and transformer failures etc., should be studied and carried out more scientifically and conceptually.
 - (vi) The Roof Top Solar, wind and hybrid projects should be encouraged more rigorously as it has no T&D losses and no network requirements.
 - (vii) The Proposal to segregate the rural supply feeders into one for farmers and another for general supply of consumers at a cost of ₹10,000 Cr. shall be dispensed with.
 - (viii) More scientific approach is needed for estimation of agricultural consumption for which APSEB EA (APSPDCL Unit) already submitted a report
- f) Sri G. Srinivasa Rao, Chandarlapadu, Krishna (Dt.) has stated that
- (i) local staff are not involving in preventing in the theft of energy in spite of the clear information available to them due to local pressures.
 - (ii) All the vacancies in vigilance wing shall be filled.
 - (iii) Steps shall be taken to arrest theft of electricity during the festival periods.
 - (iv) Power lines shall not be laid in the Subabul and Jamail fields and lines with insulated wires shall be laid if necessary.
 - (v) awareness shall be created regarding the measures to curtail theft of power. Rewards need to be given to the informers of the theft of energy on the assessment amount.
 - (vi) leaned and broken poles need to be replaced and loose spans shall be rectified.
 - (vii) Energy audits shall be conducted sub-station-wise to identify the losses and to arrange the vigilance inspections.
- g) Sri Chand Basha, District Secretary, APSEB Engineers' Association, Kadapa has stated that exempting the wheeling and transmission charges and the line losses for the renewable plants under Open Access will be loss of revenue to the DISCOMs, and that segregating the rural supply feeders into one for farmers and another for general supply of consumers will be onerous to DISCOMs hence requested for due diligence on the project.

- h) Sri G. Eswaraiah, District Secretary, CPI, Kadapa during the public hearing at Kadapa has stated that reverse tendering shall be followed for DISCOMs' procurement activities.
- i) Sri Cherukuri Venugopal, Federation of farmers Association, Guntupalli (V), Krishna (Dt.) has requested for encouragement of roof top solar plants in view of its advantages over large scale solar plants
- j) Sri K. Lokanatham, District Secretary, CPI(M), Visakapatnam has requested for DISCOMs grid supply for agency villages where these villages are electrified by the Solar systems in view of the problems associated with maintenance and other issues in this regard.
- k) Sri V. Nagaraju, General Secretary, AIAWU, Chittoor (Dt) has stated that free power up to 200 units shall be extended to daily labourers and migrated labourers on par with SC/ST consumers.
- l) Sri Pydikondala Shivaji, District President, Bharatiya Kisan Sangh, Eluru, during the public hearing has orally stated that subsidy to aqua culture shall be continued.

Commission's view: These suggestions which are general in nature and mostly addressed to the licensees shall be considered by the licensees and appropriate action thereon shall be taken and communicate the same to the respective objectors.

247. MISCELLANEOUS

- a) Sri D. Babu Rao, Sri Ch. Murali, Sri A. Mutayala Rao, Sri N. Ravindra Babu, Sri G. Venkaiah, Sri K. Veladri, Sri G. Gopinath, Sri G. Edukondalu, Sri B. Subbaiahamma, Sri B. Mahesh, Sri K. Papa Rao, Sri N. Sivaji, Sri R. Chinappa, S. Yesubabu, Sri P. Babu Rao, Sri N. Satyanarayana, Sri R. Srinu, Sri Ch. Janakiramaiah, Sri Ch. Venkata Rao, Sri J. Surendara Rao, Sri Jasti Venkateswara Rao, Sri Jonnalagadda Venkateswara Rao, Sri J. Savitri, Sri V. Ramakrishna, Sri Jonnalagadda Venkateswara Rao(LTI), Sri B. Rama Rao of Trilochanapuram, Krishna (Dt) have stated that AP Genco had issued land acquisition notices for the expansion of Dr. NTTPS Stage-V ash pond of Ibrahimpatnam and later the same was withdrawn and informed that the land would be acquired after the completion of 800 MW unit work. They requested AP Genco to acquire the land as per their earlier notification as no buyers are coming forward to purchase the said lands in view of the earlier land acquisition notification issued.

Commission's view: As APGENCO is not a licensee, this Commission has no jurisdiction over the issues raised. If so advised, the objectors may avail appropriate legal remedies.

Allocation of posts of GGPP (erstwhile GVK) to APDISCOMs

- b) Sri T.V. Surya Prakash, DISCOM Secretary, APSEB Engineers' Association, Visakhapatnam has stated that the GVK Gas Power Plant at Vemagiri near Rajahmundry was purchased by the DISCOM as per the terms and conditions of the PPA. All the Operation and Maintenance costs including salaries of the staff are being borne by the APDISCOMS but surprisingly about 38 Nos. of posts from the cadre of Chief Engineer to Assistant Executive Engineer were given to AP Genco. Due to this EPDCL lost 38 Nos. of posts and consequential promotional

amenities. There is a vast stagnation in EPDCL and engineers are working for more than 15 to 16 years in the same cadre. He has requested to kindly consider the above and arrange for allocation of those posts to DISCOMs.

Commission's view: The issue pertains to service disputes. Therefore, this Commission has no jurisdiction to deal with the same. If any employee is aggrieved, he shall be free to avail appropriate legal remedies.

This order is signed on this 10th day of February, 2020.

Sd/-
(P. RAMA MOHAN)
MEMBER

Sd/-
(JUSTICE C.V. NAGARJUNA REDDY)
CHAIRMAN

Sd/-
(Dr. P. RAGHU)
MEMBER

CHAIRMAN's MUSINGS

The two months long efforts are culminating in the issue of the Retail Supply Tariff Order for FY2020-21. While I have newly entered the office as Chairman of this Commission, the two Members, Dr. P. Raghu and Sri P. Rama Mohan are on the verge of completing their prescribed term. However, their exit is not before achieving a rare distinction of being part of Retail Supply Tariff Orders for six consecutive years. Both the Members were a great source of strength and support to me in preparing and delivering this Tariff Order.

The expectations and demands of the electricity consumers at large are on the rise year after year. Needless to say, this has been putting the licensees and the executive government under great pressure. As for the Regulator, the competing interests of the licensees, consumers and the State Government on the one side and the compulsion to follow the governing laws in their letter and spirit on the other side are throwing great challenges in discharging its functions and performing its duties, especially in framing the tariffs. I have no doubt in my mind that with the cooperation of my colleague Members and some of the officers and members of the staff of the Commission, we could succeed in bringing out this Tariff Order to match the expectations of all the stakeholders.

I would like to place on record the Commission's appreciation for the fullest cooperation extended by the Government of Andhra Pradesh in general and in readily agreeing to make good the entire gap of Rs. 10060.63 Cr. between the revenue and expenditure of the licensees by agreeing to subsidize the two categories of consumers namely, the Agriculture and Domestic, in particular. I would also like to acknowledge the selfless efforts of some of the objectors such as Sri M. Venugopala Rao, Sri G. Narasinga Rao, Sri Penumalli Madhu, Sri Kandharapu Murali, Sri A. Punna Rao, Sri B. Hume Sastry, Sri K. Hari Kishore Kumar Reddy, Sri Kandregula Venkata Ramana and various other individuals and organisations whose names I am unable to refer due to paucity of space. They have indeed thrown a lot of light on various relevant issues concerning the tariffs apart from various other non-tariff issues, which though not relevant for the purpose of tariff determination, would guide the Commission in setting the tone for due performance of its functions in future. By and large the public hearings were conducted in a decent, dignified and peaceful manner befitting the reputation of the gentle nature of the people of the State of Andhra Pradesh.

Being the debut effort, it was really a challenging task for me to come out with this Tariff Order. Apart from my colleague Members, Sri D. Ramanaiah Setty, Deputy Director (Tariff Engineering), Sri M.S.Vidyasagar, Deputy Director (Planning and Power Procurement) and Smt. P.V. Padmaja, Private Secretary have strained every nerve by

burning mid night oil and also working on public holidays and without whose efforts it would not have been possible for issuing this Tariff Order in a short span of about two months after filing of ARRs by the licensees. The contribution of Sri C. Kannaiah Naidu, Deputy Director (Transmission) in assisting the above two named Deputy Directors is also worth mentioning. It would also not be out of place to record my appreciation for the cooperation extended by the Chairman and Managing Director and Joint Managing Director of AP Transco and the two CMDs of APSPDCL and APEPDCL and their officers and staff in the conduct of public hearings through efficient management of logistics and extension of hospitalities. The CMDs of the two DISCOMs have also actively participated in the public hearings and gave appropriate and suitable replies to the various queries and objections raised by the consumers and their representatives. The members of the State Advisory Committee (SAC) have also contributed by giving valuable suggestions during the SAC meeting held in Tirupati on 13.01.2020. Sri C. Ramakrishna, the Secretary of the Commission also made relentless efforts for smooth conduct of public hearings by coordinating between the Commission and the officers of the licensees. I must also place on record my appreciation for Sri V.M.V.R.S. Sridhar, JPO (officiating Personal Assistant) for taking care of my personal needs during public hearings and for Sri M. Sudarsan, Receptionist for his assistance to the Commission during the public hearings. I also acknowledge the support extended by all the officers and staff of the Commission who were always willing to contribute in whichever way the Commission required them to do.

This year we have changed the pattern of the Tariff Order for ensuring cohesion and clarity. The Commission has many goals to achieve and a humble beginning is made by issuing the following directions to the licensees.

1. To obtain the permission of the Commission for their investment proposals as per the Commission's investment guidelines.
2. To prepare a roadmap for implementation of energy conservation and energy efficiency measures by themselves and by the consumers in a big way.
3. To print small booklets containing tariff schedules and other relevant aspects useful for the consumers in vernacular language in adequate quantities and to make them available in all their offices for sale to the consumers on collecting reasonable cost and to properly publicize such availability for the consumers to be aware of the same.
4. To indicate the details of Cost of Service, Cross-subsidy and Government Subsidy of the backside of electricity bills to the subsidized consumers.

I would like to mention that this is only a beginning and sustained efforts will be made for ushering in better management of electricity sector in the State of Andhra Pradesh. The Commission has also spared no efforts to protect the interests of all the consumers in general and the consumers of below poverty line in particular.

Before parting, I would like to state that all the positives if any in the Tariff Order are to the credit of the Commission as a whole and the short comings, if any, are to my personal account. I would however assure you that with the experience I have gained in bringing out this Tariff Order, I will be able to serve the Power sector better in coming years.

Sd/-

(JUSTICE C.V. NAGARJUNA REDDY)

CHAIRMAN

ANNEXURE – 01(A)**Public Notice of ARR & FPT and Hearing Schedule for FY2020-21 in English****BEFORE THE HONOURABLE ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION (APERC)**D.No. 11-4-660, 4th Floor, Singareni Bhavan, Red Hills, Hyderabad- 500 004.**EASTERN POWER DISTRIBUTION COMPANY OF
ANDHRA PRADESH LIMITED (APEPDCL)****PUBLIC NOTICE**

1. Notice is hereby given to all that the Distribution Licensee Eastern Power Distribution Company of A.P. Limited (APEPDCL) holding a Distribution and Retail Supply License No.12/2000, has on 02.12.2019, filed before the Andhra Pradesh Electricity Regulatory Commission (APERC) the Aggregate Revenue Requirement (ARR) and Filing for Proposed Tariff (FPT) along with Cross Subsidy Proposals for its Retail Supply Business for the FY2020-21. These filings have been taken on record by the Hon'ble Commission in O.P.No.69 of 2019.
2. Copies of the filings are available in the Office of the Chief General Manager (PPA & RA) of the Eastern Power Distribution Company's head quarters at P&T Colony, Seethammadhara, Visakhapatnam - 530013 and the Superintending Engineer, Operation circle of the Distribution Company at Srikakulam, Vizianagaram, Visakhapatnam, Rajamahendravaram and Eluru. Interested persons may inspect/peruse the said ARR & FPT and take note thereof during office hours at any of the said offices at free of charge. These proposals are also available on www.apepdcl.com and the same may also be accessed at www.aperc.gov.in. A copy of these filings, can be obtained from the above offices from the date of publication on payment of Rs.100/- (by way of cash in person/D.D. drawn in favour of the Pay Officer/APEPDCL/Visakhapatnam). Also a summary of ARR and FPT in English or Telugu can be separately obtained on payment of Rs.10/- (by way of cash in person / D.D. drawn in favour of the Pay Officer / APEPDCL / Visakhapatnam).
3. Views/objections/suggestions if any, on the ARR&FPT filings proposed by the Distribution Company, together with supporting material may be sent to the Chief General Manager (PPA & RA) of the Eastern Power Distribution Company's head quarters at P&T Colony, Seethammadhara, Visakhapatnam - 530013 in person or through Registered Post so as to reach on or before 26-12-2019 by 5 PM. A copy of the same must also be filed with the Commission Secretary, APERC at the address mentioned above. The views/objections/suggestions should be duly signed and should carry full name and postal address of the persons(s) sending the views/objections/suggestions. If the views/objections/suggestions are filed on behalf of any organization or any category of consumers, it should be so mentioned. If the objector also wants to be heard in person, it may also be specifically mentioned accordingly. The views / objections / suggestions should accompany the following statement as an overleaf.

Name & full address of the Objector with contact number	Brief details of View(s) / Objection(s) / Suggestion(s)	Objections against Proposals of APEPDCL	Whether the copy of objection & proof of delivery at Licensee's office enclosed (Yes/No)	Whether Objector wants to be heard in person (Yes/No)

4. The ARR and FPT schedule for Retail Supply Business proposed by the Licensee for FY2020-21 is given below :

ARR SCHEDULE OF APEPDCL

Sl. No.	Particulars	2020-21 Projections (Rs.Crs)	Sl. No.	Particulars	2020-21 Projections (Rs.Crs)
1	Transmission Cost	680.12	10	Other Costs, if any	284.05
2	SLDC Cost	20.27	11	Supply Cost (7+8+9+10)	12,891.49
3	Distribution Cost	2,091.00	12	Aggregate Revenue Requirement (6+11)	16,292.45
4	PGCIL Expenses	607.97	13	Total Revenue (14+15+16)	12,704.30
5	ULDC Charges	1.60	14	Revenue from proposed Tariff	12,220.52
6	Network and SLDC Cost (1+2+3+4+5)	3,400.96	15	Non - Tariff Income	431.11
7	Power Purchase / Procurement Cost	12,439.33	16	Revenue from cross subsidy surcharge	52.67
8	Interest on Consumer Security Deposits	115.54	17	Net Deficit / Surplus (13)-(12)	-3,588.15
9	Supply Margin in Retail Supply Business	52.57			

**SOUTHERN POWER DISTRIBUTION COMPANY OF
ANDHRA PRADESH LIMITED (APSPDCL)****PUBLIC NOTICE**

1. Notice is hereby given to all that the Distribution Licensee Southern Power Distribution Company of A.P. Limited (APSPDCL) holding a Distribution and Retail Supply License No.15/2000, has on 02.12.2019, filed before the Andhra Pradesh Electricity Regulatory Commission (APERC) the Aggregate Revenue Requirement (ARR) and Filing for Proposed Tariff (FPT) along with Cross Subsidy Proposals for its Retail Supply Business for the FY2020-21. These filings have been taken on record by the Hon'ble Commission in O.P.No. 68 of 2019.
2. Copies of the filings are available in the Office of the Chief General Manager (RAC) of the Southern Power Distribution Company's head quarters at 19-13-65/A, Vidyut Nilayam, Srinivasapuram, Tirupathi - 517503 and the Superintending Engineer, Operation circle of the Distribution Company at Vijayawada, Guntur, Ongole, Nellore, Tirupathi, Kadapa, Ananthapur and Kurnool. Interested persons may inspect/peruse the said ARR & FPT and take note thereof during office hours at any of the said offices at free of charge. These proposals are also available on www.apspdcl.in and the same may also be accessed at www.aperc.gov.in. A copy of these filings, can be obtained from the above offices from the date of publication on payment of Rs.100/- (by way of cash in person/D.D. drawn in favour of the Accounts Officer/CPR/APSPDCL/Tirupathi). Also a summary of ARR and FPT in English or Telugu can be separately obtained on payment of Rs.10/- (by way of cash in person / D.D. drawn in favour of the Accounts Officer / CPR / APSPDCL / Tirupathi).
3. Views/objections/suggestions if any, on the ARR&FPT filings proposed by the Distribution Company, together with supporting material may be sent to the Chief General Manager (RAC) of the Southern Power Distribution Company's head quarters at 19-13-65/A, Vidyut Nilayam, Srinivasapuram, Tirupathi - 517503 in person or through Registered Post so as to reach on or before 26-12-2019 by 5 PM. A copy of the same must also be filed with the Commission Secretary, APERC at the address mentioned above. The views/objections/suggestions should be duly signed and should carry full name and postal address of the persons(s) sending the views/objections/suggestions. If the views/objections/suggestions are filed on behalf of any organization or any category of consumers, it should be so mentioned. If the objector also wants to be heard in person, it may also be specifically mentioned accordingly. The views / objections / suggestions should accompany the following statement as an overleaf.

Name & full address of the Objector with contact number	Brief details of View(s) / Objection(s) / Suggestion(s)	Objections against Proposals of APSPDCL	Whether the copy of objection & proof of delivery at Licensee's office enclosed (Yes/No)	Whether Objector wants to be heard in person (Yes/No)

4. The ARR and FPT schedule for Retail Supply Business proposed by the Licensee for FY2020-21 is given below :

ARR SCHEDULE OF APSPDCL

Sl. No.	Particulars	2020-21 Projections (Rs.Crs)	Sl. No.	Particulars	2020-21 Projections (Rs.Crs)
1	Transmission Cost	1,304.58	10	Other Costs, if any	182.07
2	SLDC Cost	21.56	11	Supply Cost (7+8+9+10)	21,875.12
3	Distribution Cost	4,178.00	12	Aggregate Revenue Requirement (6+11)	28,548.51
4	PGCIL Expenses	1,166.31	13	Total Revenue (14+15+16)	19,182.58
5	ULDC Charges	2.94	14	Revenue from proposed Tariff	18,099.77
6	Network and SLDC Cost (1+2+3+4+5)	6,673.39	15	Non - Tariff Income	990.62
7	Power Purchase / Procurement Cost	21,430.91	16	Revenue from cross subsidy surcharge	92.18
8	Interest on Consumer Security Deposits	184.56	17	Net Deficit / Surplus (13)-(12)	-9,365.94
9	Supply Margin in Retail Supply Business	77.59			

Proposed Retail Supply Tariff Schedule for FY 2020-21									
Category	Sub - Category	Slab	LT -Fixed/Demand Charges per month (Rs./HP or KW)	LT- Energy charges (Rs./Unit)	Billing Unit	HT-Fixed Charges (Rs. per KW / KVA)	HT- 11 KV Energy Charges (Rs./Unit)	HT -33 KV Energy Charges (Rs./Unit)	EHT- 132 KV and above Energy Charges (Rs./Unit)
I Domestic -LT	A: <= 75 units per month	0-50	-	1.45	kWh				
		51-75		2.60	kWh	-	-	-	
	B: > 75 <= 225 Units per month	0-50		2.60	kWh	-	-	-	
		51-100		2.60	kWh	-	-	-	
		101-200		3.60	kWh	-	-	-	
		201-225		6.90	kWh	-	-	-	
	C: > 225 Units per month	0-50		2.65	kWh	-	-	-	
		51-100		3.35	kWh				
		101-200		5.40	kWh				
		201-300		7.10	kWh				
		301-400		7.95	kWh				
		401-500		8.50	kWh				
	Above 500 units		9.95	kWh					
I Domestic -HT	Gated communities, Bungalows & Villas	All Units		-	kVAh	75	7.00	7.00	7.00
II Commercial & Non-Domestic - LT	A: <=50 Units per month	0-50	55	5.40	kWh/kVAh				
	B: >50 Units per month	0-50	75	6.90	kWh/kVAh				
		51-100	75	7.65	kWh/kVAh				
		101-300	75	9.05	kWh/kVAh				
		301-500	75	9.60	kWh/kVAh				
		>500	75	10.15	kWh/kVAh				
	C: General	Hoardings, Function Halls, Start up power, Railway Stations, Bus Stations & EV Charging stations	100	12.25	kWh/kVAh				
	II Commercial - HT	A: General	Offices, Hotels, Private Hospitals, Private Educational Institutions, Railway Stations, Bus Stations, Airports, EV Charging Stations & others not covered elsewhere			kVAh	475	7.65	7.50
		Time of Day Tariff(ToD)- Peak (6PM to 10PM)			kVAh		8.65	8.50	8.35
B: Occasional		Function Halls, MICE, Start Up Power, Green Power			kVAh		12.25	12.25	12.25
III Industry- LT	A: Industry - General		75	6.70	kWh/kVAh				
	B: Seasonal Industries (Off Season)		75	7.45	kWh/kVAh				
	C: Cottage Industries (upto 10 HP)		20	3.75	kWh/kVAh				
III Industry-HT	A: Industry General	Industry General			kVAh	475	6.30	5.85	5.40
		Time of Day Tariff(ToD)- Peak (6AM to 10AM & 6PM to 10PM)			kVAh		7.30	6.85	6.40
		Time of Day Tariff(ToD)- Off Peak (10PM to 6AM)			kVAh		5.30	4.85	4.40
		Industrial Colonies			kVAh		7.00	7.00	7.00
	B: Seasonal Industries (Off Season)				kVAh	475	7.65	6.95	6.70
	C: Energy Intensive Industries	Mandatory Load Factor >=85%			kVAh		5.80	5.35	4.95
	A: Utilities	Panchayats	75	7.00	kWh/kVAh				
		Urban local bodies	75	7.00	kWh/kVAh				
IV Institutional - LT	B: General	Govt. offices, Govt Educational Institutions / Hostels, Govt.Hospitals,Charitable Institutions	75	7.00	kWh/kVAh				
	C: Religious (<= 2KW / >2KW)	Religious places	30	4.80 / 5.00	kWh/kVAh				
IV Institutional - HT	A: Utilities	CPWS/PWS			kVAh	475	7.95	7.25	7.00
	B: General	Govt. offices, Govt Educational Institutions / Hostels, Govt.Hospitals,Charitable Institutions			kVAh	475	7.95	7.25	7.00
		Religious places			kVAh	30	5.00	5.00	5.00
	C: Religious	Religious places			kVAh	350	6.50	6.50	6.50
	D: Railway Traction				kVAh				
V Agriculture & related- LT	A: Corporate Farmers	Corporate Farmers / Salt Farming Units upto 15 HP		200/HP/ Month	HP				
	B: Non-Corporate Farmers	Non-Corporate Farmers, Sugar cane crushing, Rural Horticulture Nurseries	0	0	kWh/kVAh				
		Aqua Culture & Animal husbandry	30	3.85	kWh/kVAh				
	D: Hatcheries, Feed Mixing plants, Floriculture	Poultry Hatcheries & Feed Mixing Plants, Aqua hatcheries & Feed mixing plants, Flouriculture in Green Houses	75	4.50	kWh/kVAh				
		E: Agro based Cottage Industries	Cottage Industries Up to 10 HP	20	3.75	kWh/kVAh			
	V- Agriculture & related - HT	A: Aqua Culture & Animal husbandry	Aqua Culture & Animal Husbandry			kVAh	30	3.85	3.85
B: Hatcheries, Feed Mixing plants, Floriculture		Poultry Hatcheries & Feed Mixing Plants, Aqua hatcheries & Feed mixing plants, Flouriculture in Green Houses			kVAh	475	5.25	5.25	5.25
		C: Lift Irrigation Schemes	Govt & Private Lift Irrigation Schemes			kVAh	0	7.15	7.15

ANNEXURE – 01(B)

Public Notice of ARR & FPT and Hearing Schedule for FY2020-21 in Telugu

గౌరవనీయ ఆంధ్రప్రదేశ్ ఎలక్ట్రిసిటీ రెగ్యులేటరీ కమిషన్ (APERC) వారి సమక్షములో

డోర్ నెం.11-4-660, 4వ అంతస్తు, సింగరేణి భవన్, రెడ్ హిల్స్, హైదరాబాద్ - 500 004.



ఈస్టర్న్ పవర్ డిస్ట్రిబ్యూషన్ కంపెనీ ఆఫ్ ఆంధ్రప్రదేశ్ లిమిటెడ్

బహిరంగ ప్రకటన

- [illegible]

అభ్యంతర దారుని పేరు, పూర్తి లింగనామ & ఫోన్ నెంబరు	సూచనలు/ అభ్యంతరాలు/నలభాయి నక్షత్ర వివరాలు	నివాసినియర్ ప్రతిపాదనల మీద అభ్యంతరాలు	నివాసినియర్ కార్పొరేట్ కార్యాలయంనకు అభ్యంతర ప్రతిని & సంబంధ బ్రాంచును జతపరచవచ్చునది (అవును/కాదు)	అభ్యంతరదారు వ్యక్తిగతంగా విన్నపించదల్గుకున్నారా (అవును/కాదు)

4. 2020-21 ఆర్థిక సంవత్సరమునకు వినియోగదారులకు రిటైల్ పంపిణీ కోసం ప్రతిపాదించిన ఎలెక్ట్రానిక్ మరియు డార్లిన్ ప్రతిపాదనలను ఈ శ్రీంధి షేడ్యూల్లో పొందుపరచడమైనది.

క్రమ సంఖ్య	వివరాలు	2020-21 (అంచనాలు) (రూ.కోట్లు)	క్రమ సంఖ్య	వివరాలు	2020-21 (అంచనాలు) (రూ.కోట్లు)
1	ట్రాన్స్ మీషన్ ఖర్చు	680.12	10	ఇతర ఖర్చులు	284.05
2	ఎస్.ఎల్.డి.సి. ఖర్చు	20.27	11	సరఫరా వ్యయం (7+8+9+10)	12,891.49
3	పంచినీ ఖర్చు	2,091.00	12	సమగ్ర ఆదాయ ఆవశ్యకత (6+11)	16,292.45
4	పి.జి.సి.బి.ఎల్. ఖర్చు	607.97	13	మొత్తం రాబడి (14+15+16)	12,704.30
5	యు.ఎల్.డి.సి. ఛార్జీలు	1.60	14	ప్రతిపాదిత ధరల వస్తు రాబడి	12,220.52
6	నెట్ వర్క్ మరియు ఎస్.ఎల్.డి.సి. వ్యయం (1+2+3+4+5)	3,400.96	15	టారిఫీకేషన్ రాబడి	431.11
7	విద్యుత్ కొనుగోలు ఖర్చు	12,439.33	16	క్రాస్ సబ్సిడీ సరే ఛార్జీల నుండి రాబడి	52.67
8	వినియోగదారుల ధరావత్తు మీద వడ్డీ	115.54	17	నికర లోటు (13-12)	(-) 3,588.15
9	రిటైలు సరఫరా వ్యాపారంలో సరఫరా మార్జిన్	52.57			



SD సదరన్ పవర్ డిస్ట్రిబ్యూషన్ కంపెనీ ఆఫ్ ఆంధ్రప్రదేశ్ లిమిటెడ్

బహిరంగ ప్రకటన

- [illegible]

అభ్యంతర దారుని పేరు, పూర్వ చిరునామా & ఫోన్ నెంబరు	సూచనలు/ అభ్యంతరాలు/సలహాలు సంక్షిప్త వివరాలు	ఏమియినఏమినివల్ ప్రతిపాదనలు మీద అభ్యంతరాలు	ఏమియినఏమినివల్ కార్యరేఖ కార్యాలయమునకు అభ్యంతర ప్రతిని & పంపిన ఋజువును జతపరచదలమిని (అవును/కాదు)	అభ్యంతరదారు వ్యక్తిగతంగా విన్నవించదలయున్నారా (అవును/కాదు)

4. 2020-21 ఆర్థిక సంవత్సరమునకు వినియోగదారులకు రిటైల్ పంపిణీ కోసం ప్రతిపాదించిన ఎఆర్ఆర్ మరియు టార్గెట్ ప్రతిపాదనలను ఈ శ్రీంధి పెన్షన్యూలో పొందుపరచడమైనది

క్రమ సంఖ్య	వివరాలు	2020-21 (అంచనాలు) (రూ.కోట్లు)	క్రమ సంఖ్య	వివరాలు	2020-21 (అంచనాలు) (రూ.కోట్లు)
1	ట్రాన్స్ మిషన్ ఖర్చు	1,304.58	10	ఇతర ఖర్చులు	182.07
2	ఎస్.ఎల్.డి.సి. ఖర్చు	21.56	11	సరఫరా వ్యయం (7+8+9+10)	21,875.12
3	పంచీణీ ఖర్చు	4,178.00	12	సమగ్ర ఆదాయ ఆవశ్యకత (6+11)	28,548.51
4	పి.జి.సి.ఐ.ఎల్. ఖర్చు	1,166.31	13	మొత్తం రాబడి (14+15+16)	19,182.58
5	యు.ఎల్.డి.సి. ఛార్జీలు	2.94	14	ప్రతిపాదిత ధరల వద్ద రాబడి	18,099.77
6	నెట్ వర్క్ మరియు ఎస్.ఎల్.డి.సి. వ్యయం (1+2+3+4+5)	6,673.39	15	టారిఫేషన్ రాబడి	990.62
7	విద్యుత్ కొనుగోలు ఖర్చు	21,430.91	16	క్రాన్ సబ్సిడీ నర ఛార్జీల నుండి రాబడి	92.18
8	వినియోగదారుల ధరావత్తు మీద వడ్డీ	184.56	17	నికర లోటు (13-12)	(-)9,365.94
9	రిటైలు సరఫరా వ్యాపారంలో సరఫరా మార్జిన్	77.59			

ఆర్థిక సంవత్సరం 2020-21 కొరకు తైన్స్/సెన్సార్లు ఉద్దేశించిన రిటైల్ వ్యాపారం కొరకు ఎఫ్.పి.టి. షెడ్యూలులు దిగువ తెలుపబడినవి									
వినియోగదారుని కేటగిరి	సబ్ కేటగిరి	స్లాబు	ఎలెక్ట్రిక్-స్టర/డిమాండ్ ఛార్జీలు నెలకు (రూ./హెచ్ఎం లేక కెడబ్ల్యు)	ఎలెక్ట్రిక్-ఎనర్జీ ఛార్జీలు (రూ./యూనిట్)	విల్లింగ్ యూనిట్	హెచ్ఎం-స్టర/డిమాండ్ ఛార్జీలు నెలకు (రూ./కెడబ్ల్యు కెపిఎ)	హెచ్ఎం 11 కెపి ఎనర్జీ ఛార్జీలు (రూ./యూనిట్)	హెచ్ఎం 33 కెపి ఎనర్జీ ఛార్జీలు (రూ./యూనిట్)	హెచ్ఎం 132 కెపి అప్రెస్ ఎనర్జీ ఛార్జీలు (రూ./యూనిట్)
I గృహవినియోగం - ఎలెక్ట్రిక్	A: < = 75 యూనిట్లు / నెలకు	0-50		1.45	kWh				
		51-75		2.60	kWh				
		0-50		2.60	kWh				
		51-100		2.60	kWh				
		101-200		3.60	kWh				
	B: > 75 < = 225 యూనిట్లు / నెలకు	201-225		6.90	kWh				
		0-50		2.65	kWh				
		51-100		3.35	kWh				
		101-200		5.40	kWh				
		201-300		7.10	kWh				
I గృహవినియోగం - హెచ్ఎం	A: < = 50 యూనిట్లు/నెలకు	301-400		7.95	kWh				
		401-500		8.50	kWh				
		500 యూనిట్లు అప్రెస్		9.95	kWh				
		అన్ని యూనిట్లు	-	-	kVAh	75	7.00	7.00	7.00
		0-50	55	5.40	kWh/kVAh	-	-	-	-
II వాణిజ్యము మరియు గృహీతరములు - ఎలెక్ట్రిక్	B: > 50 యూనిట్లు/నెలకు	0-50	75	6.90	kWh/kVAh	-	-	-	-
		51-100	75	7.65	kWh/kVAh	-	-	-	-
		101-300	75	9.05	kWh/kVAh	-	-	-	-
		301-500	75	9.60	kWh/kVAh	-	-	-	-
		>500	75	10.15	kWh/kVAh	-	-	-	-
	C: సాధారణ	హోర్లింగులు, ఫంక్షన్ హాల్లు, స్టాల్స్ అవ్ పవర్, రైల్వే స్టేషన్లు, టెన్ టెన్షన్లు, ఈ.వి. ఛార్జింగ్ స్టేషన్లు	100	12.25	kWh/kVAh	-	-	-	-
		అఫీసులు, హోటళ్లు, ప్రైవేటు హాస్పిటల్లు, ప్రైవేటు విద్యాసంస్థలు, రైల్వే స్టేషన్లు, టెన్ టెన్షన్లు, విమానాశ్రయములు, ఈ.వి. ఛార్జింగ్ స్టేషన్లు మరియు ఇతర కేటగిరిలో చూపించబడనివి.			kVAh	475	7.65	7.50	7.35
		బ్రిమ్ ఆఫ్ డే టారిఫ్ - పీక్ (సా. 6 నుండి సా. 10 వరకు)			kVAh		8.65	8.50	8.35
		ఫంక్షన్ హాల్లు, ఎంబెస్సీలు, స్టాల్స్ అవ్ పవర్, డ్రిన్ వనర్స్			kVAh	-	12.25	12.25	12.25
		B: సంధ్యాసంసారంగా వాడకం			kVAh				
III పరిశ్రమలు- ఎలెక్ట్రిక్	A: పరిశ్రమలు (సాధారణ)	అఫీసులు, హోటళ్లు, ప్రైవేటు హాస్పిటల్లు, ప్రైవేటు విద్యాసంస్థలు, రైల్వే స్టేషన్లు, టెన్ టెన్షన్లు, విమానాశ్రయములు, ఈ.వి. ఛార్జింగ్ స్టేషన్లు మరియు ఇతర కేటగిరిలో చూపించబడనివి.	75	6.70	kWh/kVAh				
		B: సీజనల్ పరిశ్రమలు (సీజనల్ కానల్)	75	7.45	kWh/kVAh				
		C: కుటీర పరిశ్రమలు (10 హెచ్ఎం వరకు)	20	3.75	kWh/kVAh				
III పరిశ్రమలు- హెచ్ఎం	A: పరిశ్రమలు (సాధారణ)	పరిశ్రమలు (సాధారణ)			kVAh	475	6.30	5.85	5.40
		బ్రిమ్ ఆఫ్ డే టారిఫ్ - పీక్ (సా. 6 నుండి సా. 10 వరకు)			kVAh		7.30	6.85	6.40
		మరియు సా. 6 నుండి సా. 10 వరకు			kVAh		5.30	4.85	4.40
	B: సీజనల్ పరిశ్రమలు (సీజనల్ కానల్)	బ్రిమ్ ఆఫ్ డే టారిఫ్ - అఫ్ పీక్ (సా. 10 నుండి సా. 6 వరకు)			kVAh		7.00	7.00	7.00
		పరిశ్రమల కాలరీలు			kVAh	475	7.65	6.95	6.70
		C: విద్యుత్ ప్రోత్సాహక పరిశ్రమలు			kVAh	0	5.80	5.35	4.95
IV ఇన్స్ట్రూమెంట్ - ఎలెక్ట్రిక్	A: యుటిలిటీస్ (వినియోగాలు)	లోడు ఫ్యాక్టరీ => 85 % తప్పనిసరి			kVAh				
		పంచాయతీలు	75	7.00	kWh/kVAh				
		అర్బన్ లోకల్ బాడీస్	75	7.00	kWh/kVAh	-	-	-	-
		గవర్నమెంట్ అఫీసులు, గవర్నమెంట్ విద్యాసంస్థలు/హాల్లు, గవర్నమెంట్ హాస్పిటల్లు, చారిటబుల్ సంస్థలు	75	7.00	kWh/kVAh	-	-	-	-
IV ఇన్స్ట్రూమెంట్ - హెచ్ఎం	C: మతసంబంధమైన (<=2KW/>2KW)	మతసంబంధమైన ప్రదేశాలు	30	4.80/5.00	kWh/kVAh				
		A: యుటిలిటీస్ (వినియోగాలు)			kVAh	475	7.95	7.25	7.00
		B: సాధారణ			kVAh	475	7.95	7.25	7.00
		C: మతసంబంధమైన			kVAh	30	5.00	5.00	5.00
V వ్యవసాయము మరియు సంబంధిత - ఎలెక్ట్రిక్	D: రైల్వే ట్రాక్టర్లు	మతసంబంధమైన ప్రదేశాలు			kVAh	350	6.50	6.50	6.50
		A: కార్పొరేట్ రైతులు		200/HP/ Month	HP	-	-	-	-
		B: కార్పొరేట్ రైతులు కానివారు, చిరక గానుక/ గ్రామీణ ఉద్యానవనాలు	0	0	kWh/kVAh	-	-	-	-
		C: అక్వాకల్చర్ & పశుసంపదన	30	3.85	kWh/kVAh	-	-	-	-
V వ్యవసాయము మరియు సంబంధిత - హెచ్ఎం	D: హేచరీలు, ఫీడ్ మిక్సింగ్ ప్లాంట్లు, షేరింగ్ కల్చర్	అక్వాకల్చర్, పశుసంపదన			kVAh				
		హెచ్ఎం హేచరీలు & ఫ్యాక్టరీ హేచరీలు & అక్వా ఫీడ్ మిక్సింగ్ ప్లాంట్లు/షేరింగ్ కల్చర్ అన్ గ్రీన్ హౌస్	75	4.50	kWh/kVAh				
		E: వ్యవసాయ ఆధారిత కుటీర పరిశ్రమలు	20	3.75	kWh/kVAh	-	-	-	-
		కుటీర పరిశ్రమలు 10 హెచ్ఎం వరకు			kVAh	30	3.85	3.85	3.85
V వ్యవసాయము మరియు సంబంధిత - హెచ్ఎం	A: అక్వాకల్చర్, పశుసంపదన	అక్వాకల్చర్, పశుసంపదన			kVAh	475	5.25	5.25	5.25
		హెచ్ఎం హేచరీలు & ఫ్యాక్టరీ హేచరీలు & అక్వా ఫీడ్ మిక్సింగ్ ప్లాంట్లు/షేరింగ్ కల్చర్ అన్ గ్రీన్ హౌస్			kVAh				
		ప్రభుత్వ మరియు ప్రైవేటు ఎత్తిపోతల పథకాలు			kVAh	0	7.15	7.15	7.15

ANNEXURE – 02**List of persons who submitted Views / Objections / Suggestions**

S. No.	Name of the Objector & Address	DISCOMS
1	Katuru Hari Kishore Kumar Reddy, S/o. Rama Krishna Reddy, Bharatiya Kisan Sangh, Paturu Village, Kovuru Mandal, S.P.S.R. Nellore District, 524137	APSPDCL & APEPDCL
2	P. Narendranath Chowdary, Chairman & Managing Director, M/s. The Andhra Sugars Limited, Kovvur - 534 350, West Godavari District, Andhra Pradesh.	APEPDCL
3	Dr. V. Sundar Naidu, President, Andhra Pradesh Poultry Federation, #8-103A, Enikepadu - 521 106, Vijayawada Rural, Krishna District.	APSPDCL & APEPDCL
4	Yellapu Suryanarayana, S/o. Veeraswamy, Bharatiya Kisan Sangh, Chinnam Peta, H/O Siripuram, Eleswaram(M), East Godavari District.	APEPDCL
5	Rasamsetty Raja Babu, S/o. Krishna, Bharatiya Kisan Sangh, Prattipadu, East Godavari District.	APEPDCL
6	Balle Nageswara Rao, S/o. Dharma Rao, Bharatiya Kisan Sangh, Kethavaram Village, Jangareddygudem (M), West Godavari District.	APEPDCL
7	Karisetty Ganga Prasad, S/o. Durga Rao, Bharatiya Kisan Sangh, Kethavaram Village, Jangareddygudem (M), West Godavari District.	APEPDCL
8	Kavuluri Pathi Raju, S/o. Satyanarayana, Bharatiya Kisan Sangh, Kethavaram Village, Jangareddygudem (M), West Godavari District.	APEPDCL
9	Gandham Gopala Krishna, Bharatiya Kisan Sangh, Akkampeta Village, Jangareddygudem (M), West Godavari District.	APEPDCL
10	Thirumulasetty Murali Nagendra Babu, S/o. Satyanarayana, Bharatiya Kisan Sangh, Kethavaram Village, Jangareddygudem (M), West Godavari District.	APEPDCL
11	Kanumuri Seetharamaraju, S/o. Padmanabha Raju, Bharatiya Kisan Sangh, Dharmaraopeta Village, Koyyalagudem (M), West Godavari District.	APEPDCL
12	Ramisetty Sathibabu, S/o. Penta Rao, Bharatiya Kisan Sangh, Pattennapalem, Jangareddygudem (M), West Godavari District.	APEPDCL
13	Sarnala Rathnam, Bharatiya Kisan Sangh, Thirumalapuram Village, Jangareddygudem (M), West Godavari District.	APEPDCL
14	Ghanta Naga Raju, Bharatiya Kisan Sangh, H.No.372, Hanuman Colony, Near GDM Church, Palakollu (V&M), West Godavari Dist.	APEPDCL
15	Cheti Venkata Swamy, S/o. Krishna Rao, Bharatiya Kisan Sangh, Kethavaram Village, Jangareddygudem (M), West Godavari District.	APEPDCL
16	Cheti Naga Srinu, S/o. Lakshmana Swamy, Bharatiya Kisan Sangh, Kethavaram Village, Jangareddygudem (M), West Godavari District.	APEPDCL
17	Nandhyalam Satyanarayana Chetty, S/o. Krishnaiah Chetty, D.No 15-159, New Colony, Pakala - 517112, Chittoor District, A.P.	APSPDCL
18	Polyreddy Rammohan Reddy, S/o. Penchala Reddy, Penuballi (P), Butchireddypalem (M), SPSR Nellore District.	APSPDCL
19	Pundla Srinivasulu Reddy, S/o. Ramana Reddy, Bharatiya Kisan Sangh, Damaramadugu Post, Butchi (M), SPSR Nellore District.	APSPDCL
20	Chintapalli Narayana Reddy, S/o. Manga Reddy, Bharatiya Kisan Sangh, Rachuru Village, Unguturu (M), West Godavari District.	APEPDCL

S. No.	Name of the Objector & Address	DISCOMS
21	Alturu Hari Sarvotham Reddy, S/o. Bakthavathsala Reddy, Bharatiya Kisan Sangh, Damaramadugu Post, Butchireddypalem (M), SPSR Nellore District.	APSPDCL
22	Thunduru Srinivasa Rao, S/o. Subba Rao, Bharatiya Kisan Sangh, Chebrolu-534406, Unguturu (M), West Godavari District.	APEPDCL
23	Maddipati Kasi Viswanadham, S/o. Apparao, Bharatiya Kisan Sangh, Marellamudi-534112, Unguturu (M), West Godavari District.	APEPDCL
24	Ravuri Raja Rao, S/o. Surya Rao, Bharatiya Kisan Sangh, Narayanapuram Post, Unguturu (M), West Godavari District.	APEPDCL
25	Parimi Venkata Raghavulu, S/o. Subbarao, Bharatiya Kisan Sangh, Narayanapuram Post, Unguturu (M), West Godavari District.	APEPDCL
26	R. Rama Rao, S/o. Seshagiri Rao, Bharatiya Kisan Sangh, Narayanapuram Post, Unguturu (M), West Godavari District.	APEPDCL
27	E. Gangadhara Rao, S/o. Rama Rao, Bharatiya Kisan Sangh, Gollagudem Post, Unguturu (M), West Godavari District.	APEPDCL
28	Mullapudi Subba Rao, S/o. Sobhanadri, Bharatiya Kisan Sangh, Chebrolu-534406, Unguturu (M), West Godavari District.	APEPDCL
29	Kondapalli Vasudeva Rao, Chief Editor & Publisher, EEG Samacharam, Akkayyapalem, Visakhapatnam-16.	APSPDCL & APEPDCL
30	Katuru Sobha Rani, W/o. Hari Kishore Kumar Reddy, Bharatiya Kisan Sangh, Paturu Post, Kovuru (M), SPSR Nellore District-524137.	APSPDCL & APEPDCL
31	Jalagam Kumara Swamy, S/o. Kannaiah, Bharatiya Kisan Sangh, D.No.62-2-18, Opposite G K Towers, Farmers Training Center, Padamatalanka, Vijayawada-520007.	APSPDCL & APEPDCL
32	Medasani Vijay Bhaskar, S/o. Jagan Mohan Rao, Bharatiya Kisan Sangh, D.No.1-24, Near Vinayaka Temple, Tadigadapa, Penamaluru (M), Krishna District-521137.	APSPDCL & APEPDCL
33	G. Sri Krishna Kumar, Advocate, S/o. Ramachandra Murthy, Bharatiya Kisan Sangh, D.No.3-94, Behind Vishnalayam, Vuyyuru (M)-521165, Krishna District.	APSPDCL & APEPDCL
34	V. Asha Kiran, S/o. Krishna Murthy, Bharatiya Kisan Sangh, D.No.59-5-10, 1B, Mohan Towers, Ashok Nagar, Vijayawada, Krishna District.	APSPDCL & APEPDCL
35	Kakanuru Venkata Maheshwara Reddy, S/o. Venkata Siva Reddy, Bharatiya Kisan Sangh, Karimaddela Village, Gadivemula (M), Kurnool District.	APSPDCL & APEPDCL
36	B. Sri Hari Reddy, S/o. Chandra Reddy, Bharatiya Kisan Sangh, Paturu Post, Kovuru (M), SPSR Nellore District-524137.	APSPDCL
37	Sidhartha Das, Vice President - Commercial, Hinduja National Power Corporation Ltd. Regd. Office: C/o. Gulf Oil Corporation Ltd. Post Bag No.1, Kukatpally, Sanath Nagar I.E., Hyderabad - 500 018.	APSPDCL & APEPDCL
38	Kakarla Guruswamy Naidu, S/o Ramaiah Naidu, D.No. 2-33/1, Surinenivaripalle, Pakala Sub Division Limit, Pakala (M)-517 112, Chittoor District.	APSPDCL
39	Palakuru Subramanyam, S/o Chengaiah, D.No. 48-23, Surinenivaripalle, Pakala Sub Division, Pakala-517 112, Pakala (M), Chittoor District.	APSPDCL

S. No.	Name of the Objector & Address	DISCOMS
40	C.V. Mohan Rao, Secretary, Repalle Pattanabhivrudhi Sangham, Regd No 6/83, Repalle - 522 265, Guntur District.	APSPDCL
41	C.V. Atchut Rao, President, Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI), Regd. Office: 54-16-1/2-A, Central Excise Colony, 3rd Floor, Road No.1, Gunadala, Vijayawada-520 008.	APSPDCL & APEPDCL
42	N. Venkatesh, S/o Veera Raghava Mandadi, 10-183, Padma Sarassu Pathaindlu, Karvetinagaram (M), Chittoor District.	APSPDCL
43	P.S. Sampath, S/o Late P.S. Srinivasulu, 7-18, Sampath Street, Karvetinagaram (P& M), Chittoor District.	APSPDCL
44	Tothu Tara Singh, S/o Tothu Ram Singh, 5/71A, East Street, Karvetinagaram (P& M), Chittoor District-517 582.	APSPDCL
45	S. Abdul Mujeeb, S/o S. Abdul Khadar, 7-19, Sampath Street, Karvetinagaram (P& M), Chittoor District.	APSPDCL
46	Syed Parvez, S/o Syed Saabjan Saheb, 5-39/2, Bazar Street, Karvetinagaram (P& M), Chittoor District.	APSPDCL
47	S. Chengalraya Reddy, S/o S. Anand Reddy, Cherlopalle, P. Kothakota Post, Puthalapattu (M), Chittoor District-517112.	APSPDCL
48	Kanda Gopala Krishna, S/o Naga Raju, Bharatiya Kisan Sangh, Simhadripuram Village, Kirlampudi (M), East Godavari District.	APEPDCL
49	Addagada Satish Kumar, S/o. Venkat Rao, Bharatiya Kisan Sangh, Nagulapalem Post, Parchuru (M), Prakasam District.	APSPDCL
50	Tammanaboyina Nageswara Rao, S/o. Bapannadora, Bharatiya Kisan Sangh, Virava Post, Pithapuram (M), East Godavari District.	APEPDCL
51	Bathina Perraju, S/o. China Kameswara Rao, Bharatiya Kisan Sangh, Jalluru Post, Pithapuram (M), East Godavari District.	APEPDCL
52	Gopu Narayana Murthy, S/o. Satyanarayana, Bharatiya Kisan Sangh, Tatiparthi Via Divili Post, Peddapuram Mandal, East Godavari District.	APEPDCL
53	K. Rajendra Reddy, P. Kothakota B.P.O. Pakala SO, Chittoor District - 517 112	APSPDCL
54	Gadagottu Sri Rambabu, S/o. Kotaiah, Bharatiya Kisan Sangh, Paturu Post, Yaddanapudi (M), Prakasham District.	APSPDCL
55	Er. A. Punna Rao, Chartered Engineer, 59-2-1, 1st Lane, Ashok Nagar, Vijayawada - 520 010.	APSPDCL & APEPDCL
56	B. Hume Sastry, 1 RA, JK Modern Homes, Visakhapatnam - 530 002	APSPDCL & APEPDCL
57	Axis Wind Farms (Anantapur) Private Limited, Regd. Office: H.No.6-3-680/8/3, PMR Plaza, Plot No.3, 2 nd Floor, Thakur Mansion Lane, Somajiguda, Hyderabad - 500082.	APSPDCL
58	Axis Wind Farms (Rayalaseema) Private Limited, Regd. Office: H.No.6-3-680/8/3, PMR Plaza, Plot No.3, 2 nd Floor, Thakur Mansion Lane, Somajiguda, Hyderabad - 500082.	APSPDCL
59	Penumalli Madhu, S/o. Dasarada Rami Reddy, State Secretary, Communist Party of India (Marxist), Andhra Pradesh State Committee, H.No.27-28-12, Yamalavari Street, Governorpet, Vijayawada - 2.	APSPDCL & APEPDCL

S. No.	Name of the Objector & Address	DISCOMS
60	Dr. Narasimha Reddy Donthi, 201, Aarthi Residency, Laxminagar Colony, Saidabad, Hyderabad-500059	APSPDCL & APEPDCL
61	Ch. Narasingarao, S/o. Kotayya, CPI (M), A.P. State Secretariat Member, H.No.28-6-8, NPR Bhavan, Jagadamba Junction, Visakhapatnam-530020.	APSPDCL & APEPDCL
62	Deepak Gupta, Renew Power Private Limited, Regd.Office 138, Ansal Chambers-II, Bhikaji Cama Place, Delhi-110066.	APSPDCL
63	Bendi Tulasidas, S/o. Sriramamurty Naidu, H.No. S4, Devi Towers, Sambamurty Road, Durgapuram, Vijayawada-520003.	APSPDCL & APEPDCL
64	P. Vijaya Gopal Reddy, A.P. Ferro Alloys Producers' Association, Flat No.FF6, Gitanjali Apartments, Tikkle Road, Mogalrajpuram, Vijayawada-520010	APSPDCL & APEPDCL
65	M. Venugopala Rao, S/o M. Venkatrayudu, Senior Journalist and Convener of Centre for Power Studies, H.No.1-100/MP/101, Monarch Prestige, Journalists' Colony, Gopanpally, Serilingampally Mandal, Hyderabad-500032.	APSPDCL & APEPDCL
66	Dr. K. Kranthi Kumar Reddy, Pragadavaram, Chintalapudi (M), West Godavari District-534461	APSPDCL & APEPDCL
67	Ashwin Gambhir, Ann Josey and Sreekumar Nhalur, Prayas (Energy Group), Amrita Clinic, Athawale Corner, Karve Road Corner, Deccan Gymkhana, Pune-411 004	APSPDCL & APEPDCL
68	Jetti Gurunadha Rao, Chairman, Andhra Pradesh Congress Kisan Cell, 4-5-351, Bade Vari Street, Old Bus Stand, Jangareddigudem, West Godavari District-534447.	APSPDCL & APEPDCL
69	G.V. Mallikarjuna Rao, Chief Electrical Distribution Engineer, South Central Railway, 4th Floor, 'C' Block, Rail Nilayam, Secunderabad-500025.	APSPDCL & APEPDCL
70	Vadlapudi Nageswara Rao, S/o. Palla Rao, Bharatiya Kisan Sangh, Gopalapuram Village, Unguturu (M), West Godavari District.	APEPDCL
71	D. Gangadhara Rao, S/o. Pothu Raju, Bharatiya Kisan Sangh, Gollagudem Post, Unguturu (M), West Godavari District.	APEPDCL
72	Kandru Venkata Ratnam, S/o. Sri Ramamurthy, Bharatiya Kisan Sangh, Gollagudem Post, Unguturu (M), West Godavari District.	APEPDCL
73	Er. Kothapalli Ramakrishnam Raju, President, Srinivasanagar (West) Residents Welfare Association, D.No.65-1-126/4, Sinivasa Nagar(West), Near Coromandal Gate, 46th ward, Visakhapatnam-530011.	APEPDCL
74	M. Krishna Murthy, Chief Engineer (Retd.), 20-23-6 Plot No.72, Padmavatinagar, Vizianagaram-535002	APEPDCL
75	M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation, 139, Kakatiya Nagar, Hyderabad-500008.	APSPDCL & APEPDCL
76	Vemareddy Surendranath Reddy, S/o. Sundara Rami Reddy, Bharatiya Kisan Sangh, Chennuru Post, Guduru (M), SPSR Nellore District.	APSPDCL

S. No.	Name of the Objector & Address	DISCOMS
77	Indukuru Uday Kumar Reddy, S/o. Srinivasulu Reddy, Bharatiya Kisan Sangh, Balajinagar, Guduru, SPSR Nellore District.	APSPDCL
78	Nachukuru Muniratnam Reddy, S/o. Annareddy, Ganugapenta, Peddaramavaram (SO), Pakala Subdivision Limit, Pakala Mandal, Chittoor District.	APSPDCL
79	Dandu Abhilash Reddy, S/o. Dayakar Reddy, Bharatiya Kisan Sangh, Chennur Post, Guduru (M), SPSR Nellore District.	APSPDCL
80	Gandham Srinivasa Rao, Advisor, Consortium of Indian Farmers Associations (CIFA), #209, Vijaya Towers, Shanthi Nagar, Hyderabad-500028	APSPDCL & APEPDCL
81	Federation of Farmers Associations, Andhra Pradesh, H.No.1-191, Railway Wagon Work Shop Road, Guntupalli-521241, Ibrahimpatnam Mandal, Krishna District.	APSPDCL & APEPDCL
82	S. Surya Prakasa Rao, Former Director (Commercial), erstwhile APCPDCL and Former Secretary, erstwhile APERC, composite AP 105, Ashok Chandra Enclave, 11-4-660, Red Hills, Hyderabad -500004	APSPDCL & APEPDCL
83	Dr. Uppuganti Bhaskara Rao, S/o. Butchi Raju, Bandarulanka Village, Amalapuram (M), East Godavari District.	APEPDCL
84	M. Jamil, S/o. Pullaiah Naidu, Machavaram Village, Ambajipeta (M), East Godavari District.	APEPDCL
85	P.K. Hari, Pudupet, Nagari, Chittoor District.	APSPDCL
86	P.E. Sandhya, 2-47, Sandhya Flour Mill, Pudupet, Nagari, Chittoor District.	APSPDCL
87	Sailendra V, Coordinator, AP State Council, IWPA, 1st Floor, H.No.6-3-680/8/3, PMR Plaza, Plot No.3, Thakur Mansion Lane, Somajiguda, Hyderabad - 500 082.	APSPDCL
88	Kapil Sharma, Lead-CRM, Axis Wind Farms (Anantapur) Private Limited and Axis Wind Farms (Rayalaseema) Private, Suit No 702, 7th floor, Tower No 3, Equinox Business Park, Kurla (West), Mumbai-400070.	APSPDCL
89	N. Shanthi kumar, General Secretary, Akhila Bharateeya Viswakarma Parishat, Door No.11-33-616/8, 19th Ward, Vengalraonagar, Kavali - 524 201, SPSR Nellore District.	APSPDCL
90	P.E. Jagadeesan, Chittoor District Power Loom Weaving Workers Union, 6/11C, Kotha Veedhi, Kotha Peta, Nagari, Chittoor District.	APSPDCL
91	K.S. Vasu, President, Chittoor District Power Loom Weaving Workers Union, 8-15, Kama raja Street, Kothapeta, Nagari, Chittoor District.	APSPDCL
92	M.R. Nakkiran, Chittoor District Power Loom Weaving Workers Union, 4/104, DRK Street, Chintala patteda, Nagari, Chittoor District.	APSPDCL
93	A.S. Perumal, General Secretary, Chittoor District Power Loom Weaving Workers Union, 6/128, Kotha Veedhi, Kotha Peta, Nagari, Chittoor District.	APSPDCL
94	Kandharapu Murali, S/o. K. Siddaiah, CPM Secretariat Member, Madhura Nagar, Tirupati.	APSPDCL & APEPDCL
95	Shaik Saifulla, S/o. Shaik Moula Shahib, Pallinanivarypalli, D.No. 13/16, Pakala (Post), Pakala-517112, Chittoor District.	APSPDCL

S. No.	Name of the Objector & Address	DISCOMS
96	Thikkireddy Gopala Krishna, S/o. Satyanaryana Murthy, 4-97/2, Batlapalem Village, Amalapuram (M), East Godavari District.	APEPDCL
97	D. Nageswara Rao, S/o. Sriramulu, Gangalakurru Agraharam, Ambajipeta (M), East Godavari Dist.	APEPDCL
98	K Satyanarayana, Company Secretary, Lanco Kondapalli Power Limited, Plot No 4, Software Units Layout, HITEC City, Madhapur, Hyderabad-500081.	APSPDCL & APEPDCL
99	Dr. Chennupati Diwakar Babu, Secretary, Consumers Guidance Society, D.No.57-14-16, New Postal Colony, Patamata, 2nd Line, Church Street, Vijayawada-520010.	APSPDCL & APEPDCL
100	K.V.S. Prakash Rao, President, AP Chambers of Commerce & Industry Federation, 40-1-144, 3rd Floor, Corporate Building, Beside Chandana Grand, Fortune Hotel Junction, M.G. Road, Vijayawada-520 010.	APSPDCL
101	K. Mahesh Kumar, Mytrah Energy (India) Private Limited, (Formerly known as Mytrah Energy (India) Limited), #8001, Survey No.109, Q-City, Nanakramguda, Gachibowli, Hyderabad - 500 032	APSPDCL & APEPDCL
102	Suresh Khandelwal, Chief Operating Officer (Commercial & Services), Sri kalahasthi Pipes Limited, Rachagunneri-517 641, Sri kalahasthi Mandal, Chittoor District.	APSPDCL
103	Raj, Flat #501, VietlaVantage, Pedda Waltair, Near Visakha Eye Hospital, Visakhapatnam-530017.	APEPDCL
104	M.R. Samantaray, Chief General Manager (Power), Visakhapatnam Steel Plant, Rashtriya Ispat Nigam Limited, Administrative Building, Visakhapatnam-530031.	APEPDCL
105	O.L. Kantha Rao, Secretary, AP Textile Mills Association, Sai Plaza, 1st Floor, Above Bank of India, 1st Line, Chandramouli Nagar, Guntur-522007.	APSPDCL & APEPDCL
106	Kandregula Venkata Ramana, President, Consumer Organization Federation, #14-23-15/3, Near Sri Sathemmathalli Temple, Anakapalli-531002.	APEPDCL
107	T.V. Surya Prakash, SE/Operation, APEPECL, DISCOM Secretary, APSEB Engineers' Association, Opp: Green Park Hotel, Maharani-peta, Visakhapatnam.	APEPDCL
108	Balaji Prasad Pandey, H.No.9-8-4, Upstairs, Pentapativari Lane, Chanda Choultry Street, Rajahmundry, East Godavari District-533 101.	APEPDCL
109	J.T. Rama Rao, A.P. Praja Sanghala JAC Leader, Visakhapatnam.	APEPDCL
110	M.S.S. Sarma, CEO, FACOR Alloys Ltd. Garividi, Vizianagaram District-535101.	APEPDCL
111	B. Jagga Appa Rao, Joint Secretary, Munakapaka Mandala Viniyogadarulu, D.No.5-99, Near Ramalayam, Gavarla Anakapalli Village, Thotada (Post), Munagapaka (M), Visakhapatnam District.	APEPDCL
112	K. Ramachandra Murthy, GVMC 29th ward Ex-Ward Committee Member, 27-32-100, 75 Feet Road, Dolphin Hotel Junction, Visakhapatnam-530001.	APEPDCL

S. No.	Name of the Objector & Address	DISCOMS
113	Pidaparathi Mutya Reddy, West Godavari District APCLC, Yerraguntapalli, Chintalapudi (M), West Godavari District.	APEPDCL
114	Dadi Mathya Raju, S/o Late Apparao, Veeranarayanam Village, Madugula (M), Visakhapatnam – 531028	APEPDCL
115	P. Rama Kumar, Executive Member, Srikakulam District Rice Miller Association, Charanadasupuram, Santhabommali (M), Srikakulam District.	APEPDCL
116	K. Lokanadham, District Secretary, Bharatiya Communist Party (MARXIST), NPR Bhavan, 28-6-8, Yellamathota, Near Jagadamba Junction, Visakhapatnam-20.	APEPDCL
117	Allam Simhachalam, 70th Ward, Veera Naga Colony, Sujatha Nagar, Pendurthi(M), Visakhapatnam.	APEPDCL
118	Thondangi Devudu, 70th Ward, Veera Naga Colony, Sujatha Nagar, Pendurthi(M), Visakhapatnam.	APEPDCL
119	G.G. Sujjeswara Rao, S/o Styannarayana, Visakhapatnam.	APEPDCL
120	G. shanti Kumari, W/o Ramana murthy, D.No. 18-1/26, Radha Krishna Layout, North Extension Road, Seethammadhara, Viskhapatnam.	APEPDCL
121	M. Narayanamma, W/o Ramana, D.No. 18-1/27, Radha Krishna Layout, North Extension Road, Seethammadhara, Viskhapatnam.	APEPDCL
122	Cherukuri Venu Gopala Rao, Federation of Farmers Associations, Andhra Pradesh, H.No.1-191, Railway Wagon Work Shop Road, Guntupalli-521241, Ibrahimpatnam Mandal, Krishna District.	APSPDCL & APEPDCL
123	Anand Kumar Dasi, Secretary General, Eastren Discom Power Engineers Association.	APEPDCL
124	B.V. Satyanaryana, Uma Kiran Industries, Teeparru Village, Peravali (M)-534 331, West Godavari District.	APEPDCL
125	Atukuri Doraiah, Vice President, Rice Millers Association, Tadepalligudem, West Godavari District.	APEPDCL
126	P. Venkanna Babu, Advocate, Santinagar, Nidadavolu - 534 301, W.G. District.	APEPDCL
127	Pydikondala Sivaji, Adavipolanam, Vidamaru, West Godavari District.	APEPDCL
128	Ch. Babu Rao, State Committee Member, CPI(M), H.No. 27-28-12, CPI(M) State Committee Office, Yamalavari Street, Governorpeta, Vijayawada-2.	APSPDCL
129	Poola Peddireddy, A.P. Rythu Sangam, 3/4B, Bypass Road, Vaddeswaram (P), Tadepalli (M), Guntur District-522 502.	APSPDCL
130	Bhushan Rastogi, FAPCII	APSPDCL
131	S. Sundaramorthy, Vice President (Operations), Lanco Kondapalli Power Limited, Flat No 4, Software Units Layout, HITEC City, Madhapur, Hyderabad-081.	APSPDCL & APEPDCL
132	R. Shiv Kumar, Secretary, AP Spinning Mills Association, Sai Plaza, 1st Floor, Above Bank of India, 1st Line, Chandramouli Nagar, Guntur-522007.	APSPDCL & APEPDCL

S. No.	Name of the Objector & Address	DISCOMS
133	Peravali Koti Rao, Chairman, Power Sub Committee, AP Chambers of Commerce & Industry Federation, D.No. 40-1-144, 3rd floor, Corporate Building, Hotel Fortune Murali Junction, M.G Road, Vijayawada.	APSPDCL & APEPDCL
134	G. Sambasiva Rao, 1-56, Bank Nagar, Guntupalli, Ibrahimpatnam(M), Krishna District.	APSPDCL
135	J. Durga Prasad, Vijayawada	APSPDCL
136	P. Venkateswara Rao, Guntur	APSPDCL
137	G. Srinivasa Rao, S/o Veera Raghavaiah, Chandralapadu (P&M), Krishna District.	APSPDCL
138	K. Bhujanga Rao, Veeravalli(P), Bapulapadu(M), Krishna District.	APSPDCL
139	D. Babu Rao, Trilochanapuram, Ibrahimpatnam(M), Krishna District.	APSPDCL
140	Ch. Koti Reddy, State Secretary, Rythu Sanghala Samkaya, Nellore Branch, Flat NO 301, Surya Block, Highway Avenue, Near NH-5, Nellore-524003.	APSPDCL
141	J. Samba Siva Rao, Federation of Farmers Associations, Andhra Pradesh, H.No.1-191, Railway Wagon Work Shop Road, Guntupalli-521241, Ibrahimpatnam Mandal, Krishna District.	APSPDCL
142	G. Satish, Chandralapadu(V&M), Krishna (Dt)	APSPDCL
143	Delli China Raghavulu, S/o D. Kottaiah, 1-79, Gollagudem, Adivinekkalam panchayat, Agiripalli (M), Krishna District.	APSPDCL
144	Delli Bala Raju, S/o China Venkateswara Rao, Gollagudem, Adivinekkalam panchayat, Agiripalli (M), Krishna District.	APSPDCL
145	Yadala Samba, W/o Sambaiah, Gollagudem, Adivinekkalam panchayat, Agiripalli (M), Krishna District.	APSPDCL
146	Dasari Ramanjamma, W/o D. Pedda Ganga Devi, Gollagudem, Adivinekkalam panchayat, Agiripalli (M), Krishna District.	APSPDCL
147	K. Pothu Raju, S/o Venkata Subbaiah, 3-91, Gollagudem, Adivinekkalam Panchayat, Agiripalli (M), Krishna District.	APSPDCL
148	N. Venkateswara Rao, S/o Venkaiah, G. Konduru(V&M), Krishna District.	APSPDCL
149	Ch.V.R. Prasad, Adoni Rice Mills Association, 6-305-61, TGL Colony, Adoni, Kurnool District.	APSPDCL
150	K. Madhusudan Reddy, Mangampet (Post & Village), Obulavaripalli (M), YSR Kadapa District.	APSPDCL
151	G. Venkata Ramana, Mangampet (P) & Village, Obulavariipalli (M), YSR Kadapa District.	APSPDCL
152	Galla Sreenivasulu, Mangampet (P) & Village, Obulavariipalli (M), YSR Kadapa District.	APSPDCL
153	P.A. Vijaya Bhaskar Gupta, President, The Anantapur District Rural Rice Millers Association, Rural Farmers Warehouse, Kalluru R.S, Anantapur District.	APSPDCL
154	N. Pavan Kumar, Lakshmi Likita Minirals, Mangampeta, Govindampalli (V), Obulavaripalli (M), Kodur, YSR Kadapa District.	APSPDCL

S. No.	Name of the Objector & Address	DISCOMS
155	Er. SK Chand Basha, District Secretary, APSEB Engineers' Association, Kadapa.	APSPDCL
156	L. Ramachandra Reddy, Manager, Rayalaseema Spinners, E-7 to E-10, Industrial Estate, Kadapa - 516 004	APSPDCL
157	G. Eswaraiah, District Secretary, CPI, Kadapa, 9/708, Ho Chi minh Bhavan, Kasirao Garden, Kadapa.	APSPDCL
158	Ellappan, 2-47, Sandhya Flour Mill, Pudupet, Nagari, Chittoor District.	APSPDCL
159	A. Rammohan Reddy, 6-8-1237, NGO's Colony, KT Road, Tirupati.	APSPDCL
160	T.R. Subramanyam, 6-9-1369/2, Adithya Mansion, Defence Colony, Tirupati.	APSPDCL
161	N. Subramanyam Naidu, Kambalamitta (V), Pakala (M), Chittoor District.	APSPDCL
162	Angari Pullaiah, Secretary, CPI (M), Tirupati Dist Committee, 18-1-90/9/12/H-12, MB Bhavan, Yasoda Nagar, Tirupati.	APSPDCL
163	Vandavasi Nagaraju, District General Secretary, AIAWU, 23-8-66/6, Arjun Electrical Complex, 2 nd Floor, Rayalacheruvu Road, Tirupati.	APSPDCL
164	S. Jayachandra, District Secretary, Democratic Youth Federation of India (DYFI), MB Bhavan, Yashoda Nagar, Tirupati.	APSPDCL
165	P.H. Janakiram, DISCOM Secretary, APSPDCL, APSEB Engineers' Association, Corporate Office, Tiruchanoor Road, Tirupati.	APSPDCL & APEPDCL
166	V. Ganga Raju, District President, Centre of Indian Trade Unions (CITU), Omkar Buildings, Near Vishnubhavan, Chittoor.	APSPDCL
167	Ch. Venkataiah, District Secretary, Communist Party Of India (MARXIST), Chittoor District Committee, 10-822, Omkar Building (Upstairs), Seshapeeran Street (Near Indian Bank), Chittoor.	APSPDCL
168	Sukomal Satyen, Deputy Manager, Legal, M/S Vayu Urja Bharat Private Limited, Regd Office: Unit No.408, 4 th Floor, Ashoka Bhoopal Chambers, H.No. 1-8-271 to 273 & 301, Sardar Patel Road, Secundrabad-500003.	APSPDCL
169	Sukomal Satyen, Deputy Manager, Legal, M/S. Waaneep Solar Private Limited, 201, 1st Floor, Okhla Industrial Estate, Phase-III, New Delhi-110020.	APSPDCL
170	S. Prathap, Technical Secretary, APSEB Assistant Executive Engineers' Association, Quarter No.JE:533, A colony, Ibrahimpatnam, Vijayawada-521456	APSPDCL & APEPDCL
171	Anjaneya Sarma, H.No. 24/6, Kurnool.	APSPDCL
172	P. Vydehi, W/o P. Bhaskar Narayana, The Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI), #54-16-1/2, Central Excise Colony, 3 rd Floor, Gunadala, Vijayawada - 520008	APSPDCL
173	B.S.S.V. Narayana, Sr. Manager (Finance & Accounts), M/s Synergies Castings Ltd., #3, VSEZ, Duvvada, Visakhapatnam - 530049	APEPDCL

ANNEXURE – 03 (A)**FILING: STATION-WISE, MONTH-WISE AVAILABILITY OF ENERGY (MU) FOR FY 2020-21 - APSPDCL**

Generating Station	Gross Energy Availability (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
APGENCO-THERMAL													
VTPS I	151.12	156.16	151.12	115.80	156.16	151.12	156.16	151.12	118.43	156.16	141.05	156.16	1760.55
VTPS II	151.12	156.16	151.12	118.55	156.16	151.12	115.80	151.12	156.16	156.16	141.05	156.16	1760.67
VTPS III	150.69	155.71	150.69	155.71	155.71	150.69	155.71	113.07	155.71	125.62	135.63	155.71	1760.66
VTPS IV	190.79	197.15	0.00	197.15	197.15	190.79	197.15	190.79	197.15	197.15	178.07	197.15	2130.44
VTPS V	0.00	0.00	0.00	0.00	0.00	0.00	177.94	183.88	177.94	312.59	312.59	302.51	1467.45
RTPP I	150.90	155.93	150.90	155.93	118.21	113.18	155.93	150.90	155.93	155.93	140.84	155.93	1760.55
RTPP Stage-II	158.24	163.51	158.24	77.97	122.12	158.24	163.51	158.24	125.79	163.51	147.69	163.51	1760.55
RTPP Stage-III	72.35	78.06	75.55	78.06	78.06	75.55	40.26	75.55	78.06	78.06	72.97	78.06	880.56
RTPP IV	232.66	240.41	232.66	240.41	240.41	232.66	240.41	0.00	240.41	240.41	217.15	240.41	2597.99
Damodaram Sanjeevaiah Thermal power plant – I	580.55	610.88	594.71	614.54	614.54	580.55	607.22	451.34	469.52	614.54	541.85	614.54	6894.77
Damodaram Sanjeevaiah Thermal power plant – II	0.00	0.00	0.00	0.00	0.00	0.00	177.00	292.64	292.64	283.20	292.64	283.20	1621.30
TOTAL THERMAL	1838.42	1913.97	1664.98	1754.11	1838.51	1803.88	2187.09	1918.64	2167.73	2483.31	2321.51	2503.33	24395.48
APGENCO-HYDEL													
MACHKUND PH AP Share	16.14	16.99	14.24	16.30	17.14	15.43	16.16	15.19	15.58	16.98	16.24	17.16	193.54
TUNGBHADRA PH AP Share	1.73	0.32	0.02	3.25	12.13	13.63	11.82	10.54	7.27	8.22	5.95	5.87	80.75
Upper Sileru Power House (AP)	25.59	19.28	16.10	20.54	17.72	19.22	21.98	17.30	18.31	30.86	33.09	41.44	281.45
Lower Sileru Power House (AP)	60.84	44.18	37.61	54.96	56.24	58.06	60.41	50.37	54.77	67.76	70.16	78.99	694.34
DONKARAYI (AP)	4.72	4.06	2.64	4.37	4.24	5.55	6.52	5.27	5.54	6.28	6.62	7.28	63.11
Srisailem Right Bank Power House (AP)	29.26	10.01	8.50	13.55	149.22	154.94	75.54	27.34	15.05	31.06	45.72	50.76	610.95
Nagarjunasagar Right Bank Power House (AP)	1.19	0.00	0.00	0.05	6.07	14.46	15.92	14.88	9.94	6.99	2.73	1.91	74.15
Penna Ahobilam (AP)	0.02	0.02	0.00	0.05	0.65	0.63	0.79	0.46	0.44	0.27	0.20	0.16	3.70
MINI HYDEL(Chettipeta)-AP	0.08	0.00	0.04	0.25	0.20	0.21	0.05	0.03	0.18	0.25	0.18	0.24	1.72
Nagarjunasagar Tail Pond Dam Power House	0.65	0.65	0.65	2.60	5.21	8.46	8.46	10.41	10.41	5.86	2.60	2.60	58.57
TOTAL HYDRO	140.23	95.51	79.81	115.91	268.82	290.60	217.65	151.78	137.50	174.53	183.51	206.43	2062.28

Generating Station	Gross Energy Availability (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
TOTAL APGENCO	1978.65	2009.47	1744.80	1870.03	2107.33	2094.48	2404.74	2070.42	2305.23	2657.84	2505.02	2709.75	26457.76
CGS-THERMAL													
NTPC – Simhadri													
NTPC Simhadri Stage I	201.25	207.91	201.25	207.91	207.91	201.25	207.91	201.25	106.68	207.91	187.61	207.91	2346.76
NTPC Simhadri Stage II	82.53	85.27	82.53	75.45	42.38	72.34	85.27	82.53	85.27	85.27	76.94	85.27	941.04
Total NTPC- Simhadri	283.78	293.18	283.78	283.36	250.30	273.59	293.18	283.78	191.95	293.18	264.55	293.18	3287.80
NTPC (SR)													
NTPC (SR)-Ramagundam Stage1&2	107.21	110.79	97.62	109.47	110.79	107.21	106.08	96.49	122.45	122.45	114.55	122.45	1327.56
NTPC (SR)-Ramagundam Stage 3	30.10	31.10	30.10	31.10	31.10	30.10	31.10	30.10	26.09	31.10	29.10	31.10	362.18
Total NTPC(SR)	137.31	141.89	127.72	140.57	141.89	137.31	137.19	126.59	148.53	153.55	143.64	153.55	1689.74
NTPC (ER)													
Talcher Stage 2	71.03	69.62	55.26	67.99	67.99	48.93	58.20	70.28	72.62	72.62	65.60	72.62	792.77
Total NTPC(ER)	71.03	69.62	55.26	67.99	67.99	48.93	58.20	70.28	72.62	72.62	65.60	72.62	792.77
Total NTPC	492.12	504.69	466.76	491.92	460.18	459.82	488.57	480.65	413.11	519.36	473.79	519.36	5770.31
NLC TS-II													
Stage-I	14.60	15.07	14.60	15.07	15.07	14.60	15.07	14.60	15.07	15.07	14.08	15.07	177.95
Stage-II	26.81	27.72	26.81	27.72	27.72	26.81	27.72	26.81	27.72	27.72	25.90	27.72	327.17
Total NLC	41.41	42.78	41.41	42.78	42.78	41.41	42.78	41.41	42.78	42.78	39.99	42.78	505.12
NPC													
NPC-MAPS	2.61	2.72	2.61	2.72	2.72	2.61	2.72	2.61	2.72	0.00	0.96	2.72	27.74
NPC-Kaiga unit I&ii	22.69	23.37	22.69	23.37	23.37	22.69	23.37	22.69	23.37	23.37	10.51	16.89	258.37
NPC-Kaiga unit III&IV	24.18	24.90	24.18	24.90	24.90	24.18	24.90	24.18	24.90	12.45	11.19	18.45	263.30
Total NPC	49.49	50.98	49.49	50.98	50.98	49.49	50.98	49.49	50.98	35.81	22.66	38.06	549.40
CGS – New													
Bundled power under JVNSM	15.82	16.25	15.02	13.87	14.00	14.97	15.77	15.34	14.64	15.93	15.40	16.82	183.84
Vallur Thermal Power Plant	39.03	40.35	33.80	26.60	34.01	38.41	37.51	38.62	39.90	39.90	37.34	39.90	445.35
Kudigi	103.55	107.00	103.55	71.33	90.89	103.55	107.00	103.55	71.33	90.89	96.65	107.00	1156.30
Tuticorin	52.84	54.59	52.84	40.46	51.08	33.44	42.97	52.59	54.34	54.59	49.33	54.59	593.66
JNNSM Phase-II	247.29	254.52	238.66	228.85	230.17	237.99	249.30	242.15	237.10	251.04	237.70	260.69	2915.46
NNTPS	19.89	20.55	19.89	20.55	20.55	19.89	20.55	19.89	20.55	20.55	18.56	20.55	241.99

Generating Station	Gross Energy Availability (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
TOTAL CGS	1061.43	1091.72	1021.42	987.36	994.65	998.97	1055.44	1043.68	944.74	1070.86	991.41	1099.75	12361.43
IPPS-COAL													
KSK Mahanadi (MT)	160.91	166.27	160.91	166.27	166.27	160.91	166.27	160.91	166.27	166.27	150.18	166.27	1957.70
Thermal Power Tech	109.11	112.75	78.99	75.10	112.75	109.11	112.75	109.11	112.75	112.75	101.84	112.75	1259.74
TOTAL IPPS-COAL	270.02	279.02	239.90	241.37	279.02	270.02	279.02	270.02	279.02	279.02	252.02	279.02	3217.44
IPPS-GAS													
GGPP	49.17	50.81	49.17	50.81	50.81	49.17	0.00	24.59	50.81	50.81	45.89	50.81	522.87
Spectrum Power Generation Limited	62.70	62.96	63.03	18.08	63.47	63.44	75.34	74.49	75.19	75.46	69.85	75.27	779.29
APGPCL-I	1.14	1.16	1.12	1.16	1.12	1.12	1.12	1.16	1.16	1.16	1.05	1.14	13.62
APGPCL-II	3.64	3.70	3.58	3.70	3.70	3.58	3.58	3.58	3.70	3.70	3.34	3.64	43.42
TOTAL IPPS	116.65	118.63	116.90	73.75	119.10	117.31	80.04	103.81	130.86	131.13	120.13	130.87	1359.20
Other RE	17.79	16.22	16.50	14.50	22.48	20.64	18.52	20.27	25.49	29.04	25.50	21.75	248.70
TOTAL (From All Sources)	3444.53	3515.06	3139.52	3187.01	3522.58	3501.42	3837.76	3508.21	3685.33	4167.89	3894.08	4241.14	43644.53

ANNEXURE – 03 (B)**FILING: STATION WISE, MONTH WISE AVAILABILITY OF ENERGY (MU) FOR FY 2020-21 - APEPDCL**

Generating Station	Gross Energy Availability (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
APGENCO-THERMAL													
VTPS I	78.79	81.42	78.79	60.38	81.42	78.79	81.42	78.79	61.75	81.42	73.54	81.42	917.91
VTPS II	78.79	81.42	78.79	61.81	81.42	78.79	60.38	78.79	81.42	81.42	73.54	81.42	917.97
VTPS III	78.57	81.18	78.57	81.18	81.18	78.57	81.18	58.95	81.18	65.49	70.71	81.18	917.96
VTPS IV	99.47	102.79	0.00	102.79	102.79	99.47	102.79	99.47	102.79	102.79	92.84	102.79	1110.76
VTPS V	0.00	0.00	0.00	0.00	0.00	0.00	92.78	95.87	92.78	162.98	162.98	157.72	765.09
RTPP I	78.68	81.30	78.68	81.30	61.63	59.01	81.30	78.68	81.30	81.30	73.43	81.30	917.91
RTPP Stage-II	82.50	85.25	82.50	40.65	63.67	82.50	85.25	82.50	65.58	85.25	77.00	85.25	917.91
RTPP Stage-III	37.72	40.70	39.39	40.70	40.70	39.39	20.99	39.39	40.70	40.70	38.05	40.70	459.10
RTPP IV	121.30	125.34	121.30	125.34	125.34	121.30	125.34	0.00	125.34	125.34	113.21	125.34	1354.53
Damodaram Sanjeevaiah Thermal power plant - I	302.69	318.50	310.07	320.40	320.40	302.69	316.59	235.32	244.79	320.40	282.51	320.40	3594.76
Damodaram Sanjeevaiah Thermal power plant - II	0.00	0.00	0.00	0.00	0.00	0.00	92.28	152.57	152.57	147.65	152.57	147.65	845.31
TOTAL THERMAL	958.50	997.89	868.08	914.55	958.55	940.50	1140.29	1000.33	1130.20	1294.74	1210.38	1305.17	12719.20
APGENCO-HYDEL													
MACHKUND PH AP Share	8.41	8.86	7.42	8.50	8.94	8.04	8.42	7.92	8.12	8.86	8.47	8.95	100.91
TUNGBHADRA PH AP Share	0.90	0.16	0.01	1.69	6.33	7.11	6.16	5.50	3.79	4.28	3.10	3.06	42.10
Upper Sileru Power House (AP)	13.34	10.05	8.39	10.71	9.24	10.02	11.46	9.02	9.55	16.09	17.25	21.61	146.74
Lower Sileru Power House (AP)	31.72	23.03	19.61	28.65	29.32	30.27	31.49	26.26	28.56	35.33	36.58	41.19	362.01
DONKARAYI (AP)	2.46	2.12	1.38	2.28	2.21	2.89	3.40	2.75	2.89	3.27	3.45	3.80	32.90
Srisaillam Right Bank Power House (AP)	15.26	5.22	4.43	7.06	77.80	80.78	39.39	14.25	7.85	16.19	23.84	26.46	318.54
Nagarjunasagar Right Bank Power House (AP)	0.62	0.00	0.00	0.02	3.17	7.54	8.30	7.76	5.18	3.64	1.42	1.00	38.66
Penna Ahobilam (AP)	0.01	0.01	0.00	0.03	0.34	0.33	0.41	0.24	0.23	0.14	0.10	0.08	1.93
MINI HYDEL(Chettipeta)-AP	0.04	0.00	0.02	0.13	0.10	0.11	0.02	0.02	0.09	0.13	0.09	0.13	0.90
Nagarjunasagar Tail Pond Dam Power House	0.34	0.34	0.34	1.36	2.71	4.41	4.41	5.43	5.43	3.05	1.36	1.36	30.53
TOTAL HYDRO	73.11	49.79	41.61	60.44	140.16	151.51	113.48	79.14	71.69	91.00	95.68	107.63	1075.22
TOTAL APGENCO	1031.62	1047.69	909.69	974.99	1098.71	1092.01	1253.77	1079.47	1201.89	1385.73	1306.05	1412.80	13794.42
CGS-THERMAL													
NTPC – Simhadri													

Generating Station	Gross Energy Availability (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
NTPC Simhadri Stage I	104.92	108.40	104.92	108.40	108.40	104.92	108.40	104.92	55.62	108.40	97.81	108.40	1223.54
NTPC Simhadri Stage II	43.03	44.46	43.03	39.34	22.10	37.72	44.46	43.03	44.46	44.46	40.11	44.46	490.64
Total NTPC- Simhadri	147.95	152.86	147.95	147.74	130.50	142.64	152.86	147.95	100.08	152.86	137.93	152.86	1714.18
NTPC (SR)													
NTPC (SR)-Ramagundam Stage1&2	55.90	57.76	50.90	57.07	57.76	55.90	55.31	50.31	63.84	63.84	59.72	63.84	692.16
NTPC (SR)-Ramagundam Stage 3	15.69	16.22	15.69	16.22	16.22	15.69	16.22	15.69	13.60	16.22	15.17	16.22	188.83
Total NTPC(SR)	71.59	73.98	66.59	73.29	73.98	71.59	71.53	66.00	77.44	80.06	74.89	80.06	880.99
NTPC (ER)													
Talcher Stage 2	37.03	36.30	28.81	35.45	35.45	25.51	30.34	36.64	37.86	37.86	34.20	37.86	413.33
Total NTPC(ER)	37.03	36.30	28.81	35.45	35.45	25.51	30.34	36.64	37.86	37.86	34.20	37.86	413.33
Total NTPC	256.58	263.13	243.36	256.48	239.92	239.74	254.73	250.60	215.39	270.78	247.02	270.78	3008.50
NLC TS-II													
Stage-I	7.61	7.86	7.61	7.86	7.86	7.61	7.86	7.61	7.86	7.86	7.34	7.86	92.78
Stage-II	13.98	14.45	13.98	14.45	14.45	13.98	14.45	13.98	14.45	14.45	13.50	14.45	170.58
Total NLC	21.59	22.31	21.59	22.31	22.31	21.59	22.31	21.59	22.31	22.31	20.85	22.31	263.36
NPC													
NPC-MAPS	1.36	1.42	1.36	1.42	1.42	1.36	1.42	1.36	1.42	0.00	0.50	1.42	14.46
NPC-Kaiga unit I&ii	11.83	12.18	11.83	12.18	12.18	11.83	12.18	11.83	12.18	12.18	5.48	8.81	134.71
NPC-Kaiga unit III&IV	12.61	12.98	12.61	12.98	12.98	12.61	12.98	12.61	12.98	6.49	5.84	9.62	137.28
Total NPC	25.80	26.58	25.80	26.58	26.58	25.80	26.58	25.80	26.58	18.67	11.82	19.85	286.44
CGS – New													
Bundled power under JVNSM	8.25	8.47	7.83	7.23	7.30	7.80	8.22	8.00	7.63	8.30	8.03	8.77	95.85

Generating Station	Gross Energy Availability (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Vallur Thermal Power Plant	20.35	21.04	17.62	13.87	17.73	20.03	19.56	20.13	20.80	20.80	19.47	20.80	232.20
Kudigi	53.99	55.79	53.99	37.19	47.39	53.99	55.79	53.99	37.19	47.39	50.39	55.79	602.86
Tuticorin	27.55	28.46	27.55	21.10	26.63	17.44	22.40	27.42	28.33	28.46	25.72	28.46	309.52
JNNSM Phase-II	128.93	132.70	124.43	119.32	120.01	124.08	129.98	126.25	123.62	130.89	123.93	135.92	1520.05
NNTPS	10.37	10.72	10.37	10.72	10.72	10.37	10.72	10.37	10.72	10.72	9.68	10.72	126.17
TOTAL CGS	553.40	569.20	532.54	514.79	518.59	520.84	550.28	544.15	492.56	558.32	516.90	573.39	6444.95
IPPS-COAL													
KSK Mahanadi (MT)	83.89	86.69	83.89	86.69	86.69	83.89	86.69	83.89	86.69	86.69	78.30	86.69	1020.70
Thermal Power Tech	56.89	58.78	41.19	39.15	58.78	56.89	58.78	56.89	58.78	58.78	53.09	58.78	656.80
TOTAL IPPS-COAL	140.78	145.47	125.08	125.84	145.47	140.78	145.47	140.78	145.47	145.47	131.39	145.47	1677.50
IPPS-GAS													
GGPP	25.64	26.49	25.64	26.49	26.49	25.64	0.00	12.82	26.49	26.49	23.93	26.49	272.61
Spectrum Power Generation Limited	32.69	32.83	32.86	9.43	33.09	33.07	39.28	38.84	39.20	39.34	36.42	39.25	406.30
APGPCL-I	0.60	0.60	0.59	0.60	0.59	0.59	0.59	0.60	0.60	0.60	0.55	0.60	7.10
APGPCL-II	1.90	1.93	1.87	1.93	1.93	1.87	1.87	1.87	1.93	1.93	1.74	1.90	22.64
TOTAL IPPS	60.82	61.85	60.95	38.45	62.10	61.16	41.73	54.13	68.23	68.37	62.63	68.23	708.65
Other RE	8.11	5.9	6.06	5.82	8.16	7.5	8.12	3.76	4.47	9.92	9.92	11.59	89.33
TOTAL (From All Sources)	1794.73	1830.11	1634.32	1659.89	1833.03	1822.29	1999.38	1822.29	1912.62	2167.82	2026.90	2211.48	22714.85

ANNEXURE – 03 (C)**FILING: STATION WISE, MONTH WISE AVAILABILITY OF ENERGY (MU) FOR FY2020-21 – DISCOMS (TOTAL)**

Generating Station	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
APGENCO													
Thermal													
VTPS I	229.91	237.57	229.91	176.18	237.57	229.91	237.57	229.91	180.18	237.57	214.58	237.57	2678.46
VTPS II	229.91	237.57	229.91	180.35	237.57	229.91	176.18	229.91	237.57	237.57	214.58	237.57	2678.63
VTPS III	229.26	236.90	229.26	236.90	236.90	229.26	236.90	172.02	236.90	191.11	206.34	236.90	2678.62
VTPS IV	290.26	299.93	0.00	299.93	299.93	290.26	299.93	290.26	299.93	299.93	270.91	299.93	3241.20
VTPS V	0.00	0.00	0.00	0.00	0.00	0.00	270.72	279.74	270.72	475.56	475.56	460.22	2232.54
RTPP I	229.58	237.23	229.58	237.23	179.84	172.19	237.23	229.58	237.23	237.23	214.28	237.23	2678.46
RTPP Stage-II	240.74	248.76	240.74	118.62	185.79	240.74	248.76	240.74	191.37	248.76	224.69	248.76	2678.46
RTPP Stage-III	110.07	118.76	114.93	118.76	118.76	114.93	61.24	114.93	118.76	118.76	111.02	118.76	1339.67
RTPP Stage-IV	353.96	365.75	353.96	365.75	365.75	353.96	365.75	0.00	365.75	365.75	330.36	365.75	3952.51
Damodaram Sanjeevaiah Thermal power plant – I	883.24	929.38	904.78	934.94	934.94	883.24	923.81	686.66	714.31	934.94	824.36	934.94	10489.53
Damodaram Sanjeevaiah Thermal power plant – II	0.00	0.00	0.00	0.00	0.00	0.00	269.28	445.21	445.21	430.85	445.21	430.85	2466.60
TOTAL THERMAL	2796.92	2911.86	2533.07	2668.66	2797.06	2744.39	3327.39	2918.97	3297.93	3778.05	3531.89	3808.50	37114.68
MACHKUND PH AP Share	24.55	25.85	21.66	24.80	26.08	23.47	24.58	23.10	23.70	25.84	24.71	26.11	294.45
TUNGBHADRA PH AP Share	2.64	0.48	0.03	4.94	18.46	20.73	17.98	16.04	11.06	12.50	9.06	8.93	122.86
Upper Sileru Power House (AP)	38.93	29.33	24.49	31.26	26.95	29.25	33.44	26.32	27.85	46.96	50.35	63.05	428.18
Lower Sileru Power House (AP)	92.56	67.21	57.21	83.61	85.56	88.33	91.90	76.63	83.33	103.09	106.73	120.18	1056.35
DONKARAYI (AP)	7.19	6.18	4.02	6.64	6.46	8.44	9.92	8.02	8.43	9.55	10.08	11.08	96.01
Srisailem Right Bank Power House (AP)	44.52	15.22	12.93	20.61	227.02	235.73	114.93	41.59	22.90	47.25	69.56	77.22	929.49
Nagarjunasagar Right Bank Power House (AP)	1.81	0.00	0.00	0.07	9.24	22.00	24.22	22.63	15.13	10.63	4.16	2.91	112.81
Penna Ahobilam (AP)	0.03	0.04	0.01	0.08	1.00	0.97	1.20	0.70	0.67	0.41	0.30	0.24	5.63
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	3.96	7.92	12.87	12.87	15.84	15.84	8.91	3.96	3.96	89.10
TOTAL HYDRO	213.34	145.30	121.42	176.35	408.98	442.11	331.12	230.92	209.18	265.53	279.18	314.06	3137.50
TOTAL APGENCO	3010.26	3057.16	2654.49	2845.01	3206.04	3186.49	3658.51	3149.89	3507.12	4043.58	3811.07	4122.55	40252.18

Generating Station	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Central Generating Stations													
NTPC													
NTPC (SR)													
NTPC (SR)-Ramagundam Stage1&2	163.11	168.55	148.52	166.54	168.55	163.11	161.39	146.80	186.29	186.29	174.27	186.29	2019.71
NTPC (SR)-Ramagundam Stage 3	45.79	47.32	45.79	47.32	47.32	45.79	47.32	45.79	39.69	47.32	44.26	47.32	551.02
Total NTPC (SR)	208.90	215.87	194.31	213.86	215.87	208.90	208.71	192.59	225.98	233.61	218.54	233.61	2570.73
NTPC (ER)													
Talcher Stage 2	108.06	105.92	84.08	103.44	103.44	74.43	88.54	106.93	110.49	110.49	99.80	110.49	1206.10
Total NTPC (ER)	108.06	105.92	84.08	103.44	103.44	74.43	88.54	106.93	110.49	110.49	99.80	110.49	1206.10
Total NTPC	316.96	321.79	278.39	317.30	319.30	283.34	297.26	299.52	336.46	344.10	318.33	344.10	3776.84
NLC TS-II													
Stage-I	22.21	22.92	22.21	22.92	22.92	22.21	22.92	22.21	22.92	22.92	21.43	22.92	270.73
Stage-II	40.79	42.17	40.79	42.17	42.17	40.79	42.17	40.79	42.17	42.17	39.41	42.17	497.75
Total NLC	63.00	65.09	63.00	65.09	65.09	63.00	65.09	63.00	65.09	65.09	60.83	65.09	768.48
NPC													
NPC-MAPS	3.97	4.14	3.97	4.14	4.14	3.97	4.14	3.97	4.14	0.00	1.46	4.14	42.20
NPC-Kaiga unit I&II	34.52	35.55	34.52	35.55	35.55	34.52	35.55	34.52	35.55	35.55	15.98	25.70	393.07
NPC-Kaiga unit III&IV	36.79	37.88	36.79	37.88	37.88	36.79	37.88	36.79	37.88	18.94	17.03	28.07	400.58
Total NPC	75.29	77.57	75.29	77.57	77.57	75.29	77.57	75.29	77.57	54.49	34.48	57.91	835.84
NTPC - Simhadri													
NTPC Simhadri Stage I	306.17	316.31	306.17	316.31	316.31	306.17	316.31	306.17	162.31	316.31	285.42	316.31	3570.30
NTPC Simhadri Stage II	125.56	129.72	125.56	114.78	64.48	110.06	129.72	125.56	129.72	129.72	117.05	129.72	1431.68
Total NTPC- Simhadri	431.73	446.04	431.73	431.10	380.80	416.23	446.04	431.73	292.03	446.04	402.47	446.04	5001.97
CGS - New													
Bundled power under JVNSM	24.06	24.73	22.86	21.11	21.30	22.77	24.00	23.34	22.27	24.23	23.43	25.59	279.69
Vallur Thermal Power Plant	59.38	61.38	51.43	40.46	51.74	58.44	57.06	58.75	60.70	60.70	56.81	60.70	677.55
Kudigi	157.54	162.79	157.54	108.53	138.28	157.54	162.79	157.54	108.53	138.28	147.03	162.79	1759.16
Tuticorin	80.38	83.06	80.38	61.56	77.71	50.88	65.38	80.00	82.67	83.06	75.04	83.06	903.18
JNNSM Phase-II	376.22	387.22	363.09	348.17	350.18	362.07	379.28	368.41	360.72	381.93	361.63	396.60	4435.52
NNTPS	30.26	31.27	30.26	31.27	31.27	30.26	31.27	30.26	31.27	31.27	28.24	31.27	368.16
Total CGS New	727.84	750.44	705.55	611.09	670.48	681.96	719.77	718.30	666.15	719.46	692.19	760.01	8423.25
Total CGS	1614.83	1660.92	1553.96	1502.15	1513.24	1519.81	1605.72	1587.84	1437.30	1629.18	1508.31	1673.14	18806.38

Generating Station	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
IPPS-COAL													
KSK Mahanadi (MT)	244.80	252.96	244.80	252.96	252.96	244.80	252.96	244.80	252.96	252.96	228.48	252.96	2978.40
Thermal Power Tech	166.00	171.53	120.18	114.25	171.53	166.00	171.53	166.00	171.53	171.53	154.93	171.53	1916.54
TOTAL IPPS-COAL	410.80	424.49	364.98	367.21	424.49	410.80	424.49	410.80	424.49	424.49	383.41	424.49	4894.94
IPPS-GAS													
GGPP	74.81	77.30	74.81	77.30	77.30	74.81	0.00	37.41	77.30	77.30	69.82	77.30	795.48
Spectrum Power Generation Limited	95.39	95.79	95.89	27.51	96.56	96.51	114.62	113.32	114.39	114.81	106.27	114.52	1185.59
APGPCL I - Allocated capacity	1.74	1.76	1.71	1.76	1.71	1.71	1.71	1.76	1.76	1.76	1.59	1.74	20.72
APGPCL II - Allocated capacity	5.54	5.63	5.44	5.63	5.63	5.44	5.44	5.44	5.63	5.63	5.08	5.54	66.06
TOTAL IPPS-GAS	177.47	180.48	177.85	112.21	181.20	178.47	121.78	157.94	199.08	199.50	182.77	199.10	2067.85
TOTAL IPPS	588.27	604.97	542.83	479.42	605.69	589.27	546.27	568.74	623.57	623.99	566.18	623.59	6962.79
Other RE	25.90	22.12	22.56	20.32	30.64	28.14	26.64	24.03	29.96	38.96	35.42	33.34	338.03
TOTAL (From All Sources)	5239.26	5345.17	4773.84	4846.90	5355.61	5323.71	5837.14	5330.50	5597.95	6335.71	5920.98	6452.62	66359.38

ANNEXURE – 04(A)**APPROVED: STATION WISE, MONTH WISE AVAILABILITY OF ENERGY (MU) FOR FY2020-21 – APSPDCL**

S. No.	Generating Station / Stage	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
1	NTTPS I	151.54	156.59	151.54	116.12	156.59	151.54	156.59	151.54	118.76	156.59	141.43	156.59	1765.39
2	NTTPS II	151.54	156.59	151.54	118.76	156.59	151.54	116.12	151.54	156.59	156.59	141.43	156.59	1765.39
3	NTTPS III	151.10	156.14	151.10	156.14	156.14	151.10	156.14	113.27	156.14	125.96	136.00	156.14	1765.39
4	NTTPS IV	190.79	197.15	0.00	197.15	197.15	190.79	197.15	190.79	197.15	197.15	178.07	197.15	2130.44
5	NTTPS V	0.00	0.00	0.00	0.00	0.00	0.00	244.57	244.57	244.57	244.57	244.57	244.57	1467.45
6	RTPP Stage-I	151.32	156.36	151.32	156.36	118.53	113.49	156.36	151.32	156.36	156.36	141.23	156.36	1765.39
7	RTPP Stage-II	158.67	163.96	158.67	78.18	122.45	158.67	163.96	158.67	126.13	163.96	148.09	163.96	1765.39
8	RTPP Stage-III	75.66	78.18	75.66	78.18	78.18	75.66	40.35	75.66	78.18	78.18	70.62	78.18	882.69
9	RTPP Stage-IV	228.94	236.57	228.94	236.57	236.57	228.94	236.57	0.00	236.57	236.57	213.68	236.57	2556.53
10	SDSTPS Stage I - Unit I	295.33	305.18	295.33	305.18	305.18	295.33	157.51	295.33	305.18	305.18	275.64	305.18	3445.56
11	SDSTPS - Stage I - Unit I	295.33	305.18	295.33	305.18	305.18	295.33	305.18	295.33	157.51	305.18	275.64	305.18	3445.56
12	SDSTPS - Stage II - Unit II	0.00	0.00	0.00	0.00	0.00	0.00	270.22	270.22	270.22	270.22	270.22	270.22	1621.30
13	Godavari Gas Power Ltd. (GGPL)	49.24	50.94	49.24	50.94	50.94	49.24	0.00	23.68	50.94	50.94	45.83	50.94	522.88
14	NTPC (SR)-Ramagundam Stage1&2	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	1298.74
15	NTPC (SR)-Ramagundam Stage 3	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	352.88
16	Talcher Stage 2	67.90	67.90	59.16	67.90	67.90	52.58	67.90	67.90	67.90	67.90	67.90	67.90	790.74
17	NLC Stage-I	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	174.18
18	NLC Stage-II	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	320.33
19	NTPC Simhadri Stage I	204.45	204.45	204.45	204.45	204.45	204.45	204.45	204.45	97.78	204.45	204.45	204.45	2346.76
20	NTPC Simhadri Stage II	80.51	80.51	80.51	80.51	38.51	80.51	80.51	80.51	80.51	80.51	80.51	80.51	924.12
21	Vallur Thermal Power Plant	39.61	39.61	29.58	30.24	30.24	39.61	39.61	39.61	39.61	39.61	39.61	39.61	446.55
22	Kudigi	98.90	102.22	98.90	68.10	86.83	98.90	102.22	98.90	68.10	86.83	92.32	102.22	1104.46
23	Tuticorin	51.07	51.07	51.07	46.69	46.69	46.69	51.07	51.07	51.07	51.07	51.07	51.07	599.75

S. No.	Generating Station / Stage	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
24	NNTPS	19.54	20.19	19.54	20.19	20.19	19.54	20.19	19.54	20.19	20.19	18.23	20.19	237.68
25	JNNSM Phase-I Thermal	14.58	15.07	14.58	15.07	15.07	14.58	15.07	14.58	15.07	15.07	13.61	15.07	177.44
26	JNNSM Phase-II Thermal	232.56	240.31	232.56	240.31	240.31	232.56	240.31	232.56	240.31	240.31	217.06	240.31	2829.49
27	APGPCL I - Allocated capacity	1.14	1.16	1.12	1.16	1.12	1.12	1.12	1.16	1.16	1.16	1.04	1.14	13.62
28	APGPCL II - Allocated capacity	3.64	3.70	3.58	3.70	3.70	3.58	3.58	3.58	3.70	3.70	3.33	3.64	43.42
29	MACHKUND PH AP Share	16.30	17.16	14.38	16.47	17.31	15.58	16.32	15.34	15.74	17.16	16.40	17.34	195.50
30	TUNGBHADRA PH AP Share	1.75	0.32	0.02	3.28	12.26	13.77	11.94	10.65	7.34	8.30	6.02	5.93	81.57
31	Upper Sileru Power House (AP)	25.85	19.48	16.26	20.75	17.90	19.42	22.20	17.47	18.49	31.18	33.43	41.86	284.29
32	Lower Sileru Power House (AP)	61.45	44.62	37.99	55.51	56.81	58.64	61.02	50.87	55.33	68.45	70.87	79.79	701.35
33	DONKARAYI (AP)	4.77	4.10	2.67	4.41	4.29	5.60	6.59	5.32	5.59	6.34	6.69	7.36	63.74
34	Srisaillam Right Bank Power House (AP)	29.56	10.11	8.59	13.68	150.73	156.51	76.31	27.61	15.20	31.37	46.19	51.27	617.12
35	Nagarjunasagar Right Bank Power House (AP)	1.20	0.00	0.00	0.05	6.14	14.61	16.08	15.03	10.04	7.06	2.76	1.93	74.90
36	Penna Ahobilam (AP)	0.02	0.02	0.00	0.05	0.66	0.64	0.80	0.46	0.45	0.27	0.20	0.16	3.74
37	MINI HYDEL(Chettipeta)-AP	0.09	0.00	0.04	0.25	0.20	0.22	0.05	0.03	0.18	0.26	0.18	0.24	1.74
38	Nagarjunasagar Tail Pond Dam Power House	0.66	0.66	0.66	2.63	5.26	8.54	8.54	10.52	10.52	5.92	2.63	2.63	59.16
39	Bundled Power -SOLAR	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	42.84
40	NPC – MAPS	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	0.00	1.59	2.56	27.23
41	NPC - Kaiga unit I & II	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	10.51	16.81	258.43
42	NPC - Kaiga unit III & IV	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	12.45	11.19	18.46	263.40
43	KSK Mahanadi	150.40	155.41	150.40	155.41	155.41	150.40	155.41	150.40	155.41	155.41	140.37	155.41	1829.82
44	Sembcorp Energy (Formerly Thermal Powertech)	90.08	90.08	78.99	75.10	90.08	90.08	90.08	90.08	90.08	90.08	90.08	90.09	1054.87
45	NCE - Wind Power	331.71	423.58	1222.71	1728.71	1728.19	485.94	315.13	315.88	315.07	297.63	398.80	331.50	7894.85
46	NCE – Others	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	240.18
47	NCE - Solar Projects (SPD)	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	931.14
48	NCE- Solar Parks	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	4988.21
Total		4173.17	4300.54	4782.41	5399.36	5629.69	4421.67	4553.19	4391.43	4385.13	4708.94	4605.21	4822.80	56173.55

ANNEXURE – 04 (B)**APPROVED: STATION WISE, MONTH WISE AVAILABILITY OF ENERGY (MU) FOR FY2020-21 - APEPDCL**

S. No.	Generating Station / Stage	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
1	NTTPS-I	79.01	81.64	79.01	60.54	81.64	79.01	81.64	79.01	61.92	81.64	73.74	81.64	920.43
2	NTTPS-II	79.01	81.64	79.01	61.92	81.64	79.01	60.54	79.01	81.64	81.64	73.74	81.64	920.43
3	NTTPS-III	78.78	81.41	78.78	81.41	81.41	78.78	81.41	59.06	81.41	65.67	70.91	81.41	920.43
4	NTTPS-IV	99.47	102.79	0.00	102.79	102.79	99.47	102.79	99.47	102.79	102.79	92.84	102.79	1110.76
5	NTTPS-V	0.00	0.00	0.00	0.00	0.00	0.00	127.52	127.52	127.52	127.52	127.52	127.52	765.09
6	RTPP Stage-I	78.89	81.52	78.89	81.52	61.80	59.17	81.52	78.89	81.52	81.52	73.63	81.52	920.43
7	RTPP Stage-II	82.73	85.48	82.73	40.76	63.84	82.73	85.48	82.73	65.76	85.48	77.21	85.48	920.43
8	RTPP Stage-III	39.45	40.76	39.45	40.76	40.76	39.45	21.04	39.45	40.76	40.76	36.82	40.76	460.21
9	RTPP Stage-IV	119.37	123.34	119.37	123.34	123.34	119.37	123.34	0.00	123.34	123.34	111.41	123.34	1332.91
10	SDSTPS Stage-I - Unit 1	153.98	159.11	153.98	159.11	159.11	153.98	82.12	153.98	159.11	159.11	143.71	159.11	1796.43
11	SDSTPS - Stage-I - Unit 2	153.98	159.11	153.98	159.11	159.11	153.98	159.11	153.98	82.12	159.11	143.71	159.11	1796.43
12	SDSTPS - Stage II	0.00	0.00	0.00	0.00	0.00	0.00	140.88	140.88	140.88	140.88	140.88	140.88	845.30
13	Godavari Gas Power Ltd. (GGPL)	25.67	26.56	25.67	26.56	26.56	25.67	0.00	12.35	26.56	26.56	23.90	26.56	272.61
14	NTPC(SR)-Ramagundam Stage-1 & 2	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	677.13
15	NTPC(SR)-Ramagundam Stage -3	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	183.98
16	Talcher Stage-2	35.40	35.40	30.84	35.40	35.40	27.42	35.40	35.40	35.40	35.40	35.40	35.40	412.27
17	NLC Stage-I	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	90.81
18	NLC Stage-II	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	167.01
19	NTPC Simhadri Stage-I	106.60	106.60	106.60	106.60	106.60	106.60	106.60	106.60	50.98	106.60	106.60	106.60	1223.54
20	NTPC Simhadri Stage-II	41.98	41.98	41.98	41.98	20.08	41.98	41.98	41.98	41.98	41.98	41.98	41.98	481.81
21	Vallur Thermal Power Plant	20.65	20.65	15.42	15.76	15.76	20.65	20.65	20.65	20.65	20.65	20.65	20.65	232.82
22	Kudigi	51.56	53.30	51.56	35.51	45.27	51.56	53.30	51.56	35.51	45.27	48.13	53.30	575.84
23	Tuticorin	26.63	26.63	26.63	24.35	24.35	24.35	26.63	26.63	26.63	26.63	26.63	26.63	312.70
24	NNTPS	10.19	10.52	10.19	10.52	10.52	10.19	10.52	10.19	10.52	10.52	9.51	10.52	123.92
25	JNNSM Phase-I Thermal	7.60	7.86	7.60	7.86	7.86	7.60	7.86	7.60	7.86	7.86	7.10	7.86	92.51
26	JNNSM Phase-II Thermal	121.25	125.29	121.25	125.29	125.29	121.25	125.29	121.25	125.29	125.29	113.17	125.29	1475.23

S. No.	Generating Station / Stage	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
27	APGPCL I - Allocated capacity	0.60	0.61	0.58	0.61	0.58	0.58	0.58	0.61	0.61	0.61	0.54	0.60	7.10
28	APGPCL II - Allocated capacity	1.90	1.93	1.86	1.93	1.93	1.86	1.86	1.86	1.93	1.93	1.74	1.90	22.64
29	MACHKUND PH AP Share	8.50	8.95	7.50	8.58	9.03	8.12	8.51	8.00	8.20	8.94	8.55	9.04	101.93
30	TUNGBHADRA PH AP Share	0.91	0.17	0.01	1.71	6.39	7.18	6.22	5.55	3.83	4.33	3.14	3.09	42.53
31	Upper Sileru Power House	13.48	10.15	8.48	10.82	9.33	10.12	11.58	9.11	9.64	16.25	17.43	21.82	148.22
32	Lower Sileru Power House	32.04	23.27	19.80	28.94	29.62	30.58	31.81	26.52	28.85	35.69	36.95	41.60	365.67
33	DONKARAYI	2.49	2.14	1.39	2.30	2.23	2.92	3.44	2.78	2.92	3.31	3.49	3.84	33.23
34	Srisaillam Right Bank Power House	15.41	5.27	4.48	7.13	78.59	81.60	39.78	14.40	7.93	16.36	24.08	26.73	321.75
35	Nagarjunasagar Right Bank Power House	0.63	0.00	0.00	0.03	3.20	7.62	8.38	7.84	5.24	3.68	1.44	1.01	39.05
36	Penna Ahobilam	0.01	0.01	0.00	0.03	0.34	0.33	0.41	0.24	0.23	0.14	0.10	0.08	1.95
37	MINI HYDEL(Chettipeta)	0.04	0.00	0.02	0.13	0.10	0.11	0.02	0.02	0.10	0.13	0.10	0.13	0.91
38	Nagarjunasagar Tail Pond Dam Power House	0.34	0.34	0.34	1.37	2.74	4.46	4.46	5.48	5.48	3.08	1.37	1.37	30.84
39	Bundled Power -SOLAR	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	22.33
40	NPC – MAPS	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	0.00	0.83	1.34	14.19
41	NPC - Kaiga unit-I & II	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	5.48	8.77	134.74
42	NPC - Kaiga unit-III & IV	12.82	12.82	12.82	12.82	12.82	12.82	12.82	12.82	12.82	6.49	5.83	9.62	137.33
43	KSK Mahanadi	78.41	81.03	78.41	81.03	81.03	78.41	81.03	78.41	81.03	81.03	73.19	81.03	954.02
44	Sembcorp Energy (Formerly Thermal Powertech)	46.96	46.96	41.19	39.15	46.96	46.96	46.96	46.96	46.96	46.96	46.96	46.97	549.98
45	NCE - Wind Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	NCE – Others	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	97.84
47	NCE - Solar Projects (SPD)	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	174.58
48	NCE- Solar Parks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		1757.93	1776.44	1611.02	1668.87	1789.23	1807.08	1964.70	1879.97	1877.11	2055.03	1948.20	2096.74	22232.32

ANNEXURE – 04 (C)**APPROVED: STATION WISE, MONTH WISE AVAILABILITY OF ENERGY (MU) FOR FY2020-21 – DISCOMS (TOTAL)**

S. No.	Generating Station / Stage	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
1	NTTPS I	230.54	238.23	230.54	176.66	238.23	230.54	238.23	230.54	180.67	238.23	215.17	238.23	2685.82
2	NTTPS II	230.54	238.23	230.54	180.67	238.23	230.54	176.66	230.54	238.23	238.23	215.17	238.23	2685.82
3	NTTPS III	229.88	237.55	229.88	237.55	237.55	229.88	237.55	172.33	237.55	191.64	206.91	237.55	2685.82
4	NTTPS IV	290.26	299.93	0.00	299.93	299.93	290.26	299.93	290.26	299.93	299.93	270.91	299.93	3241.20
5	NTTPS V	0.00	0.00	0.00	0.00	0.00	0.00	372.09	372.09	372.09	372.09	372.09	372.09	2232.54
6	RTPP Stage-I	230.21	237.89	230.21	237.89	180.33	172.66	237.89	230.21	237.89	237.89	214.87	237.89	2685.82
7	RTPP Stage-II	241.40	249.45	241.40	118.94	186.30	241.40	249.45	241.40	191.89	249.45	225.31	249.45	2685.82
8	RTPP Stage-III	115.11	118.94	115.11	118.94	118.94	115.11	61.39	115.11	118.94	118.94	107.43	118.94	1342.91
9	RTPP Stage-IV	348.31	359.92	348.31	359.92	359.92	348.31	359.92	0.00	359.92	359.92	325.09	359.92	3889.44
10	SDSTPS Stage I - Unit 1	449.31	464.29	449.31	464.29	464.29	449.31	239.63	449.31	464.29	464.29	419.36	464.29	5241.98
11	SDSTPS - Stage I - Unit 2	449.31	464.29	449.31	464.29	464.29	449.31	464.29	449.31	239.63	464.29	419.36	464.29	5241.98
12	SDSTPS - Stage II	0.00	0.00	0.00	0.00	0.00	0.00	411.10	411.10	411.10	411.10	411.10	411.10	2466.60
13	Godavari Gas Power Ltd. (GGPL)	74.91	77.50	74.91	77.50	77.50	74.91	0.00	36.03	77.50	77.50	69.73	77.50	795.49
14	NTPC (SR)-Ramagundam Stage1&2	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	1975.87
15	NTPC (SR)-Ramagundam Stage 3	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	536.86
16	Talcher Stage 2	103.30	103.30	90.00	103.30	103.30	80.00	103.30	103.30	103.30	103.30	103.30	103.30	1203.01
17	NLC Stage-I	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	264.99
18	NLC Stage-II	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	487.34
19	NTPC Simhadri Stage I	311.05	311.05	311.05	311.05	311.05	311.05	311.05	311.05	148.76	311.05	311.05	311.05	3570.30
20	NTPC Simhadri Stage II	122.49	122.49	122.49	122.49	58.58	122.49	122.49	122.49	122.49	122.49	122.49	122.49	1405.93
21	Vallur Thermal Power Plant	60.26	60.26	45.00	46.00	46.00	60.26	60.26	60.26	60.26	60.26	60.26	60.26	679.37
22	Kudigi	150.47	155.52	150.47	103.61	132.10	150.47	155.52	150.47	103.61	132.10	140.46	155.52	1680.30
23	Tuticorin	77.70	77.70	77.70	71.04	71.04	71.04	77.70	77.70	77.70	77.70	77.70	77.70	912.45
24	NNTPS	29.72	30.71	29.72	30.71	30.71	29.72	30.71	29.72	30.71	30.71	27.74	30.71	361.60

S. No.	Generating Station / Stage	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
25	JNNSM Phase-I Thermal	22.19	22.93	22.19	22.93	22.93	22.19	22.93	22.19	22.93	22.93	20.71	22.93	269.95
26	JNNSM Phase-II Thermal	353.81	365.61	353.81	365.61	365.61	353.81	365.61	353.81	365.61	365.61	330.23	365.61	4304.72
27	APGPCL I - Allocated capacity	1.74	1.77	1.71	1.77	1.71	1.71	1.71	1.77	1.77	1.77	1.59	1.74	20.72
28	APGPCL II - Allocated capacity	5.54	5.63	5.44	5.63	5.63	5.44	5.44	5.44	5.63	5.63	5.07	5.54	66.06
29	MACHKUND PH AP Share	24.80	26.11	21.88	25.05	26.34	23.71	24.83	23.34	23.94	26.10	24.96	26.38	297.42
30	TUNGBHADRA PH AP Share	2.66	0.48	0.03	4.99	18.64	20.94	18.16	16.20	11.17	12.63	9.15	9.02	124.10
31	Upper Sileru Power House	39.33	29.63	24.74	31.57	27.23	29.54	33.78	26.58	28.13	47.43	50.86	63.69	432.51
32	Lower Sileru Power House	93.50	67.89	57.79	84.46	86.43	89.22	92.83	77.40	84.17	104.13	107.81	121.39	1067.02
33	DONKARAYI	7.26	6.24	4.06	6.71	6.52	8.53	10.02	8.10	8.51	9.65	10.18	11.19	96.98
34	Srisaillam Right Bank Power House (AP)	44.97	15.38	13.06	20.82	229.32	238.11	116.09	42.01	23.13	47.73	70.27	78.00	938.88
35	Nagarjunasagar Right Bank Power House	1.83	0.00	0.00	0.07	9.33	22.22	24.47	22.86	15.28	10.74	4.20	2.94	113.95
36	Penna Ahobilam	0.03	0.04	0.01	0.08	1.01	0.98	1.21	0.70	0.68	0.42	0.30	0.24	5.69
37	MINI HYDEL (Chettipeta)	0.13	0.00	0.07	0.38	0.30	0.33	0.07	0.05	0.28	0.39	0.28	0.37	2.65
38	Nagarjunasagar Tail Pond Dam Power House	1.00	1.00	1.00	4.00	8.00	13.00	13.00	16.00	16.00	9.00	4.00	4.00	90.00
39	Bundled Power -SOLAR	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	65.17
40	NPC - MAPS	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	0.00	2.42	3.90	41.42
41	NPC - Kaiga unit I & II	35.16	35.16	35.16	35.16	35.16	35.16	35.16	35.16	35.16	35.16	15.99	25.58	393.17
42	NPC - Kaiga unit III & IV	37.41	37.41	37.41	37.41	37.41	37.41	37.41	37.41	37.41	18.95	17.02	28.08	400.73
43	KSK Mahanadi	228.81	236.44	228.81	236.44	236.44	228.81	236.44	228.81	236.44	236.44	213.56	236.44	2783.84
44	Sembcorp Energy (Formerly Thermal Powertech)	137.04	137.04	120.18	114.25	137.04	137.04	137.04	137.04	137.04	137.04	137.04	137.06	1604.85
45	NCE - Wind Power	331.71	423.58	1222.71	1728.71	1728.19	485.94	315.13	315.88	315.07	297.63	398.80	331.50	7894.85
46	NCE - Others	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	338.02
47	NCE - Solar Projects (SPD)	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	1105.72
48	NCE- Solar Parks	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	4988.21
Total		5931.10	6176.98	6393.43	7018.23	7368.92	6228.75	6517.90	6271.40	6262.24	6763.97	6553.42	6919.54	78405.87

ANNEXURE – 05 (A)
FILING: ENERGY DESPATCH (MU) FOR FY2020-21 - APSPDCL

Generating Station	Energy Dispatch (MU)												
	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Spectrum Power Generation Limited	62.70	62.96	63.03	18.08	63.47	63.44	75.34	74.49	75.19	75.46	69.85	75.27	779.29
Thermal Power Tech	109.11	112.75	78.99	75.10	112.75	109.11	112.75	109.11	112.75	112.75	101.84	112.75	1259.74
NNTPS	19.89	20.55	19.89	20.55	20.55	19.89	20.55	19.89	20.55	20.55	18.56	20.55	241.99
Talcher Stage 2	71.03	69.62	55.26	67.99	67.99	48.93	58.20	70.28	72.62	72.62	65.60	72.62	792.77
Godavari Gas Power Plant	49.17	50.81	49.17	50.81	50.81	49.17	0.00	24.59	50.81	50.81	45.89	50.81	522.87
APGPCL-I	1.14	1.16	1.12	1.16	1.12	1.12	1.12	1.16	1.16	1.16	1.05	1.14	13.62
APGPCL-II	3.64	3.70	3.58	3.70	3.70	3.58	3.58	3.58	3.70	3.70	3.34	3.64	43.42
NLC Stage-II	26.81	27.72	26.81	27.72	27.72	26.81	27.72	26.81	27.72	27.72	25.90	27.72	327.17
NLC Stage-I	14.60	15.07	14.60	15.07	15.07	14.60	15.07	14.60	15.07	15.07	14.08	15.07	177.95
KSK Mahanadi (MT)	160.91	166.27	160.91	166.27	166.27	160.91	166.27	160.91	166.27	166.27	150.18	166.27	1957.70
NTPC (SR)-Ramagundam Stage 3	30.10	31.10	30.10	31.10	31.10	30.10	31.10	30.10	26.09	31.10	29.10	31.10	362.18
NTPC (SR)-Ramagundam Stage1&2	107.21	110.79	97.62	109.47	110.79	107.21	106.08	96.49	122.45	122.45	114.55	122.45	1327.56
NPC-MAPS	2.61	2.72	2.61	2.72	2.72	2.61	2.72	2.61	2.72	0.00	0.96	2.72	27.74
Damodaram Sanjeevaiah Thermal power plant - I	580.55	610.88	594.71	614.54	614.54	580.55	607.22	451.34	469.52	614.54	541.85	614.54	6894.77
Damodaram Sanjeevaiah Thermal power plant - II	0.00	0.00	0.00	0.00	0.00	0.00	177.00	292.64	292.64	283.20	292.64	283.20	1621.30
VTPS-V	0.00	0.00	0.00	0.00	0.00	0.00	177.94	183.88	177.94	312.59	312.59	302.51	1467.45
VTPS IV	190.79	197.15	0.00	197.15	197.15	190.79	197.15	190.79	197.15	197.15	178.07	197.15	2130.44
NTPL- Tuticorin	52.84	54.59	52.84	40.46	51.08	33.44	42.97	52.59	54.34	54.59	49.33	54.59	593.66
NTPC Simhadri Stage II	82.53	85.27	82.53	75.45	42.38	72.34	85.27	82.53	85.27	85.27	76.94	85.27	941.04
VTPS I	151.12	156.16	151.12	115.80	156.16	151.12	156.16	151.12	118.43	156.16	141.05	156.16	1760.55
VTPS II	151.12	156.16	151.12	118.55	156.16	151.12	115.80	151.12	156.16	156.16	141.05	156.16	1760.67
VTPS III	150.69	155.71	150.69	155.71	155.71	150.69	155.71	113.07	155.71	125.62	135.63	155.71	1760.66
NTPC Simhadri Stage I	201.25	207.91	201.25	207.91	207.91	201.25	207.91	201.25	106.68	207.91	187.61	207.91	2346.76
RTPP IV	232.66	240.41	232.66	240.41	240.41	232.66	240.41	0.00	240.41	240.41	217.15	240.41	2597.99
NPC-Kaiga unit I&II	22.69	23.37	22.69	23.37	23.37	22.69	23.37	22.69	23.37	23.37	10.51	16.89	258.37

Generating Station	Energy Dispatch (MU)												
	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
NPC-Kaiga unit III&IV	24.18	24.90	24.18	24.90	24.90	24.18	24.90	24.18	24.90	12.45	11.19	18.45	263.30
NTPC NSM Phase-II, Bundled Power (COAL)	247.29	254.52	238.66	228.85	230.17	237.99	249.30	242.15	193.98	227.45	237.70	260.69	2848.75
NTPC NVVNL Bundled Power (Only COAL)	15.82	16.25	15.02	13.87	14.00	14.97	15.77	15.34	14.64	15.93	15.40	16.82	183.84
Vallur Thermal Power Plant	39.03	40.35	33.80	26.60	34.01	38.41	37.51	38.62	39.90	0.00	37.34	39.90	405.46
RTPP I	150.90	155.93	150.90	155.93	118.21	113.18	155.93	150.90	155.93	0.00	140.84	155.93	1604.62
RTPP Stage-II	158.24	163.51	158.24	77.97	122.12	158.24	163.51	158.24	125.79	0.00	37.13	163.51	1486.48
RTPP Stage-III	72.35	78.06	75.55	78.06	78.06	75.55	40.26	75.55	78.06	0.00	0.00	78.06	729.53
Kudigi	103.55	107.00	103.55	71.33	90.89	103.55	107.00	103.55	71.33	0.00	0.00	107.00	968.76
MACHKUND PH AP Share	16.14	16.99	14.24	16.30	17.14	15.43	16.16	15.19	15.58	16.98	16.24	17.16	193.54
TUNGBHADRA PH AP Share	1.73	0.32	0.02	3.25	12.13	13.63	11.82	10.54	7.27	8.22	5.95	5.87	80.75
Upper Sileru Power House (AP)	25.59	19.28	16.10	20.54	17.72	19.22	21.98	17.30	18.31	30.86	33.09	41.44	281.45
Lower Sileru Power House (AP)	60.84	44.18	37.61	54.96	56.24	58.06	60.41	50.37	54.77	67.76	70.16	78.99	694.34
DONKARAYI (AP)	4.72	4.06	2.64	4.37	4.24	5.55	6.52	5.27	5.54	6.28	6.62	7.28	63.11
Srisailem Right Bank Power House (AP)	29.26	10.01	8.50	13.55	149.22	154.94	75.54	27.34	15.05	31.06	45.72	50.76	610.95
Nagarjunasagar Right Bank Power House (AP)	1.19	0.00	0.00	0.05	6.07	14.46	15.92	14.88	9.94	6.99	2.73	1.91	74.15
Penna Ahobilam (AP)	0.02	0.02	0.00	0.05	0.65	0.63	0.79	0.46	0.44	0.27	0.20	0.16	3.70
MINI HYDEL(Chettipeta)-AP	0.08	0.00	0.04	0.25	0.20	0.21	0.05	0.03	0.18	0.25	0.18	0.24	1.72
Nagarjunasagar Tail Pond Dam Power House	0.65	0.65	0.65	2.60	5.21	8.46	8.46	10.41	10.41	5.86	2.60	2.60	58.57
Other RE	17.79	16.22	16.50	14.50	22.48	20.64	18.52	20.27	25.49	29.04	25.50	21.75	248.70
Market	373.6	562.2	732.2	499.4	97.1	51.5	369.6	400.2	-	-	-	167.5	3,253.2
D<>D Transaction	(214.2)	(207.6)	(263.3)	(296.7)	(269.4)	(258.8)	(145.1)	(193.1)	(115.2)	(138.0)	(177.4)	(125.1)	(2,403.8)
Total	3603.94	3869.63	3608.43	3389.73	3350.29	3294.11	4062.26	3715.27	3527.02	3478.01	3436.50	4283.54	43,618.72

ANNEXURE – 05 (B)
FILING: ENERGY DESPATCH (MU) FOR FY2020-21 - APEPDCL

Generating Station	Energy Dispatch (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Spectrum Power Generation Limited	32.69	32.83	32.86	9.43	33.09	33.07	39.28	38.84	39.20	39.34	36.42	39.25	406.30
Thermal Power Tech	56.89	58.78	41.19	39.15	58.78	56.89	58.78	56.89	58.78	58.78	53.09	58.78	656.80
NNTPS	10.37	10.72	10.37	10.72	10.72	10.37	10.72	10.37	10.72	10.72	9.68	10.72	126.17
Talcher Stage 2	37.03	36.30	28.81	35.45	35.45	25.51	30.34	36.64	37.86	37.86	34.20	37.86	413.33
Godavari Gas Power Plant	25.64	26.49	25.64	26.49	26.49	25.64	0.00	12.82	26.49	26.49	23.93	26.49	272.61
APGPCL-I	0.60	0.60	0.59	0.60	0.59	0.59	0.59	0.60	0.60	0.60	0.55	0.60	7.10
APGPCL-II	1.90	1.93	1.87	1.93	1.93	1.87	1.87	1.87	1.93	1.93	1.74	1.90	22.64
NLC Stage-II	13.98	14.45	13.98	14.45	14.45	13.98	14.45	13.98	14.45	14.45	13.50	14.45	170.58
NLC Stage-I	7.61	7.86	7.61	7.86	7.86	7.61	7.86	7.61	7.86	7.86	7.34	7.86	92.78
KSK Mahanadi (MT)	83.89	86.69	83.89	86.69	86.69	83.89	86.69	83.89	86.69	86.69	78.30	86.69	1,020.70
NTPC (SR)-Ramagundam Stage 3	15.69	16.22	15.69	16.22	16.22	15.69	16.22	15.69	13.60	16.22	15.17	16.22	188.83
NTPC (SR)-Ramagundam Stage1&2	55.90	57.76	50.90	57.07	57.76	55.90	55.31	50.31	63.84	63.84	59.72	63.84	692.16
NPC-MAPS	1.36	1.42	1.36	1.42	1.42	1.36	1.42	1.36	1.42	0.00	0.50	1.42	14.46
Damodaram Sanjeevaiah Thermal power plant – I	302.69	318.50	310.07	320.40	320.40	302.69	316.59	235.32	244.79	320.40	282.51	320.40	3,594.76
Damodaram Sanjeevaiah Thermal power plant - II	0.00	0.00	0.00	0.00	0.00	0.00	92.28	152.57	152.57	147.65	152.57	147.65	845.31
VTPS-V	0.00	0.00	0.00	0.00	0.00	0.00	92.78	95.87	92.78	162.98	162.98	157.72	765.09
VTPS IV	99.47	102.79	0.00	102.79	102.79	99.47	102.79	99.47	102.79	102.79	92.84	102.79	1,110.76
NTPL- Tuticorin	27.55	28.46	27.55	21.10	26.63	17.44	22.40	27.42	28.33	28.46	25.72	28.46	309.52
NTPC Simhadri Stage II	43.03	44.46	43.03	39.34	22.10	37.72	44.46	43.03	44.46	44.46	40.11	44.46	490.64
VTPS I	78.79	81.42	78.79	60.38	81.42	78.79	81.42	78.79	61.75	81.42	73.54	81.42	917.91
VTPS II	78.79	81.42	78.79	61.81	81.42	78.79	60.38	78.79	81.42	81.42	73.54	81.42	917.97
VTPS III	78.57	81.18	78.57	81.18	81.18	78.57	81.18	58.95	81.18	65.49	70.71	81.18	917.96
NTPC Simhadri Stage I	104.92	108.40	104.92	108.40	108.40	104.92	108.40	104.92	55.62	108.40	97.81	108.40	1,223.54
RTPP IV	121.30	125.34	121.30	125.34	125.34	121.30	125.34	0.00	125.34	125.34	113.21	125.34	1,354.53

Generating Station	Energy Dispatch (MU)												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
NPC-Kaiga unit I&II	11.83	12.18	11.83	12.18	12.18	11.83	12.18	11.83	12.18	12.18	5.48	8.81	134.71
NPC-Kaiga unit III&IV	12.61	12.98	12.61	12.98	12.98	12.61	12.98	12.61	12.98	6.49	5.84	9.62	137.28
NTPC NSM Phase-II, Bundled Power (COAL)	128.93	132.70	124.43	119.32	120.01	124.08	129.98	126.25	101.14	118.58	123.93	135.92	1,485.27
NTPC NVVNL Bundled Power (Only COAL)	8.25	8.47	7.83	7.23	7.30	7.80	8.22	8.00	7.63	8.30	8.03	8.77	95.85
Vallur Thermal Power Plant	20.35	21.04	17.62	13.87	17.73	20.03	19.56	20.13	20.80	0.00	19.47	20.80	211.40
RTPP I	78.68	81.30	78.68	81.30	61.63	59.01	81.30	78.68	81.30	0.00	73.43	81.30	836.61
RTPP Stage-II	82.50	85.25	82.50	40.65	63.67	82.50	85.25	82.50	65.58	0.00	19.36	85.25	775.01
RTPP Stage-III	37.72	40.70	39.39	40.70	40.70	39.39	20.99	39.39	40.70	0.00	0.00	40.70	380.36
Kudigi	53.99	55.79	53.99	37.19	47.39	53.99	55.79	53.99	37.19	0.00	0.00	55.79	505.09
MACHKUND PH AP Share	8.41	8.86	7.42	8.50	8.94	8.04	8.42	7.92	8.12	8.86	8.47	8.95	100.91
TUNGBHADRA PH AP Share	0.90	0.16	0.01	1.69	6.33	7.11	6.16	5.50	3.79	4.28	3.10	3.06	42.10
Upper Sileru Power House (AP)	13.34	10.05	8.39	10.71	9.24	10.02	11.46	9.02	9.55	16.09	17.25	21.61	146.74
Lower Sileru Power House (AP)	31.72	23.03	19.61	28.65	29.32	30.27	31.49	26.26	28.56	35.33	36.58	41.19	362.01
DONKARAYI (AP)	2.46	2.12	1.38	2.28	2.21	2.89	3.40	2.75	2.89	3.27	3.45	3.80	32.90
Srisailem Right Bank Power House (AP)	15.26	5.22	4.43	7.06	77.80	80.78	39.39	14.25	7.85	16.19	23.84	26.46	318.54
Nagarjunaasagar Right Bank Power House (AP)	0.62	0.00	0.00	0.02	3.17	7.54	8.30	7.76	5.18	3.64	1.42	1.00	38.66
Penna Ahobilam (AP)	0.01	0.01	0.00	0.03	0.34	0.33	0.41	0.24	0.23	0.14	0.10	0.08	1.93
MINI HYDEL(Chettipeta)-AP	0.04	0.00	0.02	0.13	0.10	0.11	0.02	0.02	0.09	0.13	0.09	0.13	0.90
Nagarjunaasagar Tail Pond Dam Power House	0.34	0.34	0.34	1.36	2.71	4.41	4.41	5.43	5.43	3.05	1.36	1.36	30.53
Other RE (ORE)	8.11	5.90	6.06	5.82	8.16	7.50	8.12	3.76	4.47	9.92	9.92	11.59	89.33
Market	194.77	293.12	381.75	260.38	50.61	26.86	192.69	208.64	0.00	0.00	0.00	87.31	1696.14
D<>D Transaction	214.16	207.64	263.29	296.70	269.37	258.83	145.08	193.11	115.19	138.00	177.41	125.07	2403.84
Total	2203.66	2330.87	2279.37	2216.97	2153.01	2107.99	2337.14	2224.03	2005.33	2018.07	2058.23	2423.86	26358.53

ANNEXURE – 05 (C)
FILING: ENERGY DESPATCH (MU) FOR FY2020-21 - DISCOMS (TOTAL)

Generating Station	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Base Stations													
Spectrum Power Generation Limited	95.39	95.79	95.89	27.51	96.56	96.51	114.62	113.32	114.39	114.81	106.27	114.52	1185.59
Thermal Power Tech	166.00	171.53	120.18	114.25	171.53	166.00	171.53	166.00	171.53	171.53	154.93	171.53	1916.54
NNTPS	30.26	31.27	30.26	31.27	31.27	30.26	31.27	30.26	31.27	31.27	28.24	31.27	368.16
Talcher Stage 2	108.06	105.92	84.08	103.44	103.44	74.43	88.54	106.93	110.49	110.49	99.80	110.49	1,206.10
Godavari Gas Power Plant	74.81	77.30	74.81	77.30	77.30	74.81	0.00	37.41	77.30	77.30	69.82	77.30	795.48
APGPCL-I	1.74	1.76	1.71	1.76	1.71	1.71	1.71	1.76	1.76	1.76	1.59	1.74	20.72
APGPCL-II	5.54	5.63	5.44	5.63	5.63	5.44	5.44	5.44	5.63	5.63	5.08	5.54	66.06
NLC Stage-II	40.79	42.17	40.79	42.17	42.17	40.79	42.17	40.79	42.17	42.17	39.41	42.17	497.75
NLC Stage-I	22.21	22.92	22.21	22.92	22.92	22.21	22.92	22.21	22.92	22.92	21.43	22.92	270.73
KSK Mahanadi (MT)	244.80	252.96	244.80	252.96	252.96	244.80	252.96	244.80	252.96	252.96	228.48	252.96	2,978.40
NTPC (SR)-Ramagundam Stage 3	45.79	47.32	45.79	47.32	47.32	45.79	47.32	45.79	39.69	47.32	44.26	47.32	551.02
NTPC (SR)-Ramagundam Stage1&2	163.11	168.55	148.52	166.54	168.55	163.11	161.39	146.80	186.29	186.29	174.27	186.29	2,019.71
NPC-MAPS	3.97	4.14	3.97	4.14	4.14	3.97	4.14	3.97	4.14	0.00	1.46	4.14	42.20
Damodaram Sanjeevaiah Thermal power plant - I	883.24	929.38	904.78	934.94	934.94	883.24	923.81	686.66	714.31	934.94	824.36	934.94	10,489.53
Damodaram Sanjeevaiah Thermal power plant - II	0.00	0.00	0.00	0.00	0.00	0.00	269.28	445.21	445.21	430.85	445.21	430.85	2,466.60
VTPS-V	0.00	0.00	0.00	0.00	0.00	0.00	270.72	279.74	270.72	475.56	475.56	460.22	2,232.54
VTPS IV	290.26	299.93	0.00	299.93	299.93	290.26	299.93	290.26	299.93	299.93	270.91	299.93	3,241.20
NTPL- Tuticorin	80.38	83.06	80.38	61.56	77.71	50.88	65.38	80.00	82.67	83.06	75.04	83.06	903.18
NTPC Simhadri Stage II	125.56	129.72	125.56	114.78	64.48	110.06	129.72	125.56	129.72	129.72	117.05	129.72	1,431.68
VTPS I	229.91	237.57	229.91	176.18	237.57	229.91	237.57	229.91	180.18	237.57	214.58	237.57	2,678.46
VTPS II	229.91	237.57	229.91	180.35	237.57	229.91	176.18	229.91	237.57	237.57	214.58	237.57	2,678.63
VTPS III	229.26	236.90	229.26	236.90	236.90	229.26	236.90	172.02	236.90	191.11	206.34	236.90	2,678.62
NTPC Simhadri Stage I	306.17	316.31	306.17	316.31	316.31	306.17	316.31	306.17	162.31	316.31	285.42	316.31	3,570.30
RTPP IV	353.96	365.75	353.96	365.75	365.75	353.96	365.75	0.00	365.75	365.75	330.36	365.75	3,952.51
NPC-Kaiga unit I&II	34.52	35.55	34.52	35.55	35.55	34.52	35.55	34.52	35.55	35.55	15.98	25.70	393.07

Generating Station	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
NPC-Kaiga unit III&IV	36.79	37.88	36.79	37.88	37.88	36.79	37.88	36.79	37.88	18.94	17.03	28.07	400.58
NTPC NSM Phase-II, Bundled Power (COAL)	376.22	387.22	363.09	348.17	350.18	362.07	379.28	368.41	295.12	346.03	361.63	396.60	4,334.02
NTPC NVVNL Bundled Power (Only COAL)	24.06	24.73	22.86	21.11	21.30	22.77	24.00	23.34	22.27	24.23	23.43	25.59	279.69
Intermediate Stations													
Vallur Thermal Power Plant	59.38	61.38	51.43	40.46	51.74	58.44	57.06	58.75	60.70	0.00	56.81	60.70	616.85
RTPP I	229.58	237.23	229.58	237.23	179.84	172.19	237.23	229.58	237.23	0.00	214.28	237.23	2,441.22
RTPP Stage-II	240.74	248.76	240.74	118.62	185.79	240.74	248.76	240.74	191.37	0.00	56.49	248.76	2,261.50
RTPP Stage-III	110.07	118.76	114.93	118.76	118.76	114.93	61.24	114.93	118.76	0.00	0.00	118.76	1,109.89
Kudigi	157.54	162.79	157.54	108.53	138.28	157.54	162.79	157.54	108.53	0.00	0.00	162.79	1,473.85
Peak Stations													
MACHKUND PH AP Share	24.55	25.85	21.66	24.80	26.08	23.47	24.58	23.10	23.70	25.84	24.71	26.11	294.45
TUNGBHADRA PH AP Share	2.64	0.48	0.03	4.94	18.46	20.73	17.98	16.04	11.06	12.50	9.06	8.93	122.86
Upper Sileru Power House (AP)	38.93	29.33	24.49	31.26	26.95	29.25	33.44	26.32	27.85	46.96	50.35	63.05	428.18
Lower Sileru Power House (AP)	92.56	67.21	57.21	83.61	85.56	88.33	91.90	76.63	83.33	103.09	106.73	120.18	1056.35
DONKARAYI (AP)	7.19	6.18	4.02	6.64	6.46	8.44	9.92	8.02	8.43	9.55	10.08	11.08	96.01
Srisaillam Right Bank Power House (AP)	44.52	15.22	12.93	20.61	227.02	235.73	114.93	41.59	22.90	47.25	69.56	77.22	929.49
Nagarjunasagar Right Bank Power House (AP)	1.81	0.00	0.00	0.07	9.24	22.00	24.22	22.63	15.13	10.63	4.16	2.91	112.81
Penna Ahobilam (AP)	0.03	0.04	0.01	0.08	1.00	0.97	1.20	0.70	0.67	0.41	0.30	0.24	5.63
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	3.96	7.92	12.87	12.87	15.84	15.84	8.91	3.96	3.96	89.10
Other RE (ORE)	25.90	22.12	22.56	20.32	30.64	28.14	26.64	24.03	29.96	38.96	35.42	33.34	338.03
Market Sources													
Market	568.34	855.33	1,113.96	759.80	147.69	78.39	562.26	608.80	0.00	0.00	0.00	254.78	4,949.36
D<>D Transaction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	5807.60	6200.50	5887.80	5606.70	5503.30	5402.10	6399.40	5939.30	5532.35	5496.08	5494.73	6707.40	69977.25

ANNEXURE – 06 (A)
APPROVED: ENERGY DESPATCH (MU) FOR FY2020-21 - APSPDCL

S. No.	Generating Station / Stage	Variable Cost (₹/ kWh)	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
1	MACHKUND PH AP Share	0.00	16.30	17.16	14.38	16.47	17.31	15.58	16.32	15.34	15.74	17.16	16.40	17.34	195.50
2	TUNGBHADRA PH AP Share	0.00	1.75	0.32	0.02	3.28	12.26	13.77	11.94	10.65	7.34	8.30	6.02	5.93	81.57
3	Upper Sileru Power House	0.00	25.85	19.48	16.26	20.75	17.90	19.42	22.20	17.47	18.49	31.18	33.43	41.86	284.29
4	Lower Sileru Power House	0.00	61.45	44.62	37.99	55.51	56.81	58.64	61.02	50.87	55.33	68.45	70.87	79.79	701.35
5	DONKARAYI	0.00	4.77	4.10	2.67	4.41	4.29	5.60	6.59	5.32	5.59	6.34	6.69	7.36	63.74
6	Srisaillam Right Bank Power House	0.00	29.56	10.11	8.59	13.68	150.73	156.51	76.31	27.61	15.20	31.37	46.19	51.27	617.12
7	Nagarjunasagar Right Bank Power House	0.00	1.20	0.00	0.00	0.05	6.14	14.61	16.08	15.03	10.04	7.06	2.76	1.93	74.90
8	Penna Ahobilam	0.00	0.02	0.02	0.00	0.05	0.66	0.64	0.80	0.46	0.45	0.27	0.20	0.16	3.74
9	MINI HYDEL (Chettipeta)	0.00	0.09	0.00	0.04	0.25	0.20	0.22	0.05	0.03	0.18	0.26	0.18	0.24	1.74
10	Nagarjunasagar Tail Pond Dam Power House	0.00	0.66	0.66	0.66	2.63	5.26	8.54	8.54	10.52	10.52	5.92	2.63	2.63	59.16
11	NPC – MAPS	2.23	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	0.00	1.59	2.56	27.23
12	NPC - Kaiga unit-I & II	3.22	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	10.51	16.81	258.43
13	NPC - Kaiga unit-III & IV	3.22	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	12.45	11.19	18.46	263.40
14	NCE- Solar Parks	4.10	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	4988.21
15	NCE - Wind Power	4.63	331.71	423.58	1222.71	1728.71	1728.19	485.94	315.13	315.88	315.07	297.63	398.80	331.50	7894.85
16	NCE – Others	5.17	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.02	240.18
17	NCE - Solar Projects (SPD)	5.90	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	77.59	931.14
18	Bundled Power -SOLAR	10.67	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	42.84
19	APGPCL II - Allocated capacity	2.15	3.64	3.70	3.58	3.70	3.70	3.58	3.58	3.58	3.70	3.70	3.33	3.64	43.42
20	Godavari Gas Power Ltd. (GGPL)	2.20	49.24	50.94	49.24	50.94	50.94	49.24	0.00	23.68	50.94	50.94	45.83	50.94	522.88
21	Sembcorp Energy (Formerly Thermal Powertech)	2.25	90.08	90.08	78.99	75.10	90.08	90.08	90.08	90.08	90.08	90.08	90.08	90.09	1054.87
22	NNTPS	2.31	19.54	20.19	19.54	20.19	20.19	19.54	20.19	19.54	20.19	20.19	18.23	20.19	237.68
23	Talcher Stage-2	2.39	67.90	67.90	59.16	67.90	67.90	52.58	67.90	67.90	67.90	67.90	67.90	67.90	790.74
24	APGPCL-I - Allocated capacity	2.41	1.14	1.16	1.12	1.16	1.12	1.12	1.12	1.16	1.16	1.16	1.04	1.14	13.62

S. No.	Generating Station / Stage	Variable Cost (₹/ kWh)	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
25	NLC Stage-I	2.64	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	14.51	174.18
26	NLC Stage-II	2.64	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	26.69	320.33
27	NTPC (SR)-Ramagundam Stage-3	2.73	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	29.41	352.88
28	NTPC (SR)-Ramagundam Stage-1&2	2.77	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	108.23	1298.74
29	KSK Mahanadi	2.77	150.40	155.41	150.40	155.41	155.41	150.40	155.41	150.40	155.41	155.41	140.37	155.41	1829.82
30	JNNM Phase-II Thermal	3.04	232.56	240.31	232.56	240.31	240.31	232.56	240.31	232.56	240.31	240.31	217.06	240.31	2829.49
31	NTTPS V	3.14	0.00	0.00	0.00	0.00	0.00	0.00	244.57	244.57	244.57	244.57	244.57	244.57	1467.45
32	SDSTPS - Stage-I Unit-1	3.14	295.33	305.18	295.33	305.18	284.44	295.33	157.51	295.33	305.18	305.18	275.64	305.18	3424.82
33	SDSTPS - Stage I Unit-2	3.14	295.33	305.18	295.33	305.18	0.00	295.33	305.18	295.33	157.51	305.18	275.64	305.18	3140.38
34	SDSTPS - Stage II	3.14	0.00	0.00	0.00	0.00	0.00	0.00	270.22	270.22	270.22	270.22	270.22	270.22	1621.30
35	NTTPS-IV	3.15	190.79	197.15	0.00	6.54	0.00	190.79	197.15	190.79	197.15	197.15	178.07	197.15	1742.69
36	Tuticorin	3.16	51.07	51.07	51.07	0.00	0.00	46.69	51.07	51.07	51.07	51.07	51.07	51.07	506.36
37	NTTPS-I	3.34	151.54	156.59	151.54	0.00	0.00	151.54	156.59	151.54	118.76	156.59	141.43	156.59	1492.68
38	NTTPS-II	3.34	151.54	156.59	151.53	0.00	0.00	151.54	116.12	151.54	156.59	87.75	81.18	156.59	1360.95
39	NTTPS-III	3.34	151.10	156.14	151.10	0.00	0.00	151.10	156.14	113.27	156.14	0.00	0.00	156.14	1191.14
40	NTPC Simhadri Stage-II	3.34	80.51	80.51	80.51	0.00	0.00	80.51	80.51	80.51	80.51	0.00	0.00	80.51	644.08
41	NTPC Simhadri Stage-I	3.38	204.45	204.45	204.45	0.00	0.00	54.84	204.45	204.45	44.05	0.00	0.00	204.45	1325.60
42	RTPP Stage-IV	3.66	228.94	236.57	79.34	0.00	0.00	0.00	236.57	0.00	0.00	0.00	0.00	236.57	1018.00
43	Vallur Thermal Power Plant	3.78	39.61	39.61	0.00	0.00	0.00	0.00	39.61	39.61	0.00	0.00	0.00	39.61	198.05
44	RTPP Stage-I	3.86	151.32	156.36	0.00	0.00	0.00	0.00	156.36	112.54	0.00	0.00	0.00	156.36	732.95
45	RTPP Stage-II	3.86	100.81	163.96	0.00	0.00	0.00	0.00	163.96	0.00	0.00	0.00	0.00	36.88	465.61
46	RTPP Stage-III	3.86	0.00	78.18	0.00	0.00	0.00	0.00	40.35	0.00	0.00	0.00	0.00	0.00	118.53
47	JNNM Phase-I Thermal	3.93	0.00	15.07	0.00	0.00	0.00	0.00	6.67	0.00	0.00	0.00	0.00	0.00	21.74
48	Kudigi	3.98	0.00	84.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.48
Total Despatch			3926.17	4282.80	4104.09	3823.37	3659.79	3542.20	4442.57	4004.83	3611.36	3452.59	3404.83	4500.25	46754.84
Sale to EPDCL			-370.29	-472.06	-549.98	-479.28	-342.00	-270.76	-406.09	-313.37	-100.16	0.00	0.00	-268.90	-3572.90
Net Despatch for SPDCL			3555.88	3810.74	3554.10	3344.09	3317.79	3271.44	4036.48	3691.46	3511.20	3452.59	3404.83	4231.34	43181.94

ANNEXURE – 06 (B)
APPROVED: ENERGY DESPATCH (MU) FOR FY2020-21 – APEPDCL

S. No.	Generating Station / Stage	Variable Cost (₹/ kWh)	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
1	MACHKUND PH AP Share	0.00	8.50	8.95	7.50	8.58	9.03	8.12	8.51	8.00	8.20	8.94	8.55	9.04	101.93
2	TUNGBHADRA PH AP Share	0.00	0.91	0.17	0.01	1.71	6.39	7.18	6.22	5.55	3.83	4.33	3.14	3.09	42.53
3	Upper Sileru Power House	0.00	13.48	10.15	8.48	10.82	9.33	10.12	11.58	9.11	9.64	16.25	17.43	21.82	148.22
4	Lower Sileru Power House	0.00	32.04	23.27	19.80	28.94	29.62	30.58	31.81	26.52	28.85	35.69	36.95	41.60	365.67
5	DONKARAYI	0.00	2.49	2.14	1.39	2.30	2.23	2.92	3.44	2.78	2.92	3.31	3.49	3.84	33.23
6	Srisaillam Right Bank Power House	0.00	15.41	5.27	4.48	7.13	78.59	81.60	39.78	14.40	7.93	16.36	24.08	26.73	321.75
7	Nagarjunasagar Right Bank Power House	0.00	0.63	0.00	0.00	0.03	3.20	7.62	8.38	7.84	5.24	3.68	1.44	1.01	39.05
8	Penna Ahobilam	0.00	0.01	0.01	0.00	0.03	0.34	0.33	0.41	0.24	0.23	0.14	0.10	0.08	1.95
9	MINI HYDEL(Chettipeta)	0.00	0.04	0.00	0.02	0.13	0.10	0.11	0.02	0.02	0.10	0.13	0.10	0.13	0.91
10	Nagarjunasagar Tail Pond Dam Power House	0.00	0.34	0.34	0.34	1.37	2.74	4.46	4.46	5.48	5.48	3.08	1.37	1.37	30.84
11	NPC - MAPS	2.23	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	0.00	0.83	1.34	14.19
12	NPC - Kaiga unit-I & II	3.22	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	5.48	8.77	134.74
13	NPC - Kaiga unit -III & IV	3.22	12.82	12.82	12.82	12.82	12.82	12.82	12.82	12.82	12.82	6.49	5.83	9.62	137.33
14	NCE - Others	5.17	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	97.84
15	NCE - Solar Projects (SPD)	5.90	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	14.55	174.58
16	Bundled Power -SOLAR	10.67	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	22.33
17	APGPCL II - Allocated capacity	2.15	1.90	1.93	1.86	1.93	1.93	1.86	1.86	1.86	1.93	1.93	1.74	1.90	22.64
18	Godavari Gas Power Ltd. (GGPL)	2.20	25.67	26.56	25.67	26.56	26.56	25.67	0.00	12.35	26.56	26.56	23.90	26.56	272.61
19	Sembcorp Energy (Formerly Thermal Powertech)	2.25	46.96	46.96	41.19	39.15	46.96	46.96	46.96	46.96	46.96	46.96	46.96	46.97	549.98
20	NNTPS	2.31	10.19	10.52	10.19	10.52	10.52	10.19	10.52	10.19	10.52	10.52	9.51	10.52	123.92
21	Talcher Stage-2	2.39	35.40	35.40	30.84	35.40	35.40	27.42	35.40	35.40	35.40	35.40	35.40	35.40	412.27

S. No.	Generating Station / Stage	Variable Cost (₹/ kWh)	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
22	APGPCL-I - Allocated capacity	2.41	0.60	0.61	0.58	0.61	0.58	0.58	0.58	0.61	0.61	0.61	0.54	0.60	7.10
23	NLC Stage-I	2.64	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	90.81
24	NLC Stage-II	2.64	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	13.92	167.01
25	NTPC (SR)-Ramagundam Stage-3	2.73	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	15.33	183.98
26	NTPC (SR)-Ramagundam Stage-1&2	2.77	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	56.43	677.13
27	KSK Mahanadi	2.77	78.41	81.03	78.41	81.03	81.03	78.41	81.03	78.41	81.03	81.03	73.19	81.03	954.02
28	JNNSM Phase-II Thermal	3.04	121.25	125.29	121.25	125.29	125.29	121.25	125.29	121.25	125.29	125.29	113.17	125.29	1475.23
29	NTTPS-V	3.14	0.00	0.00	0.00	0.00	0.00	0.00	127.52	127.52	127.52	127.52	127.52	127.52	765.09
30	SDSTPS Stage-I Unit-1	3.14	153.98	159.11	153.98	159.11	159.11	153.98	82.12	153.98	159.11	159.11	143.71	159.11	1796.43
31	SDSTPS Stage-II Unit -II	3.14	153.98	159.11	153.98	159.11	159.11	153.98	159.11	153.98	82.12	159.11	143.71	159.11	1796.43
32	SDSTPS Stage-II	3.14	0.00	0.00	0.00	0.00	0.00	0.00	140.88	140.88	140.88	140.88	140.88	140.88	845.30
33	NTTPS-IV	3.15	99.47	102.79	0.00	102.79	102.79	99.47	102.79	99.47	102.79	102.79	92.84	102.79	1110.76
34	Tuticorin	3.16	26.63	26.63	26.63	24.35	24.35	24.35	26.63	26.63	26.63	26.63	26.63	26.63	312.70
35	NTTPS-I	3.34	79.01	81.64	79.01	60.54	81.64	79.01	81.64	79.01	61.92	81.64	73.74	81.64	920.43
36	NTTPS-II	3.34	79.01	81.64	79.01	61.92	81.64	79.01	60.54	79.01	81.64	81.64	73.74	81.64	920.43
37	NTTPS-III	3.34	78.78	81.41	78.78	81.41	81.41	78.78	81.41	59.06	81.41	65.67	70.91	81.41	920.43
38	NTPC Simhadri Stage-II	3.34	41.98	41.98	41.98	41.98	20.08	41.98	41.98	41.98	41.98	41.98	41.98	41.98	481.81
39	NTPC Simhadri Stage-I	3.38	106.60	106.60	106.60	106.60	106.60	106.60	106.60	106.60	50.98	106.60	106.60	106.60	1223.54
40	RTPP Stage-IV	3.66	119.37	123.34	119.37	123.34	123.34	119.37	123.34	0.00	123.34	123.34	111.41	123.34	1332.91
41	Vallur Thermal Power Plant	3.78	20.65	20.65	15.42	15.76	15.76	20.65	20.65	20.65	20.65	20.65	20.65	20.65	232.82
42	RTPP Stage-I	3.86	78.89	81.52	78.89	81.52	61.80	59.17	81.52	78.89	81.52	81.52	73.63	81.52	920.43
43	RTPP Stage-II	3.86	82.73	85.48	82.73	40.76	63.84	82.73	85.48	82.73	65.76	85.48	77.21	85.48	920.43
44	RTPP Stage-III	3.86	39.45	40.76	39.45	40.76	40.76	39.45	21.04	39.45	40.76	14.38	36.82	40.76	433.83
45	JNNSM Phase-I Thermal	3.93	7.60	7.86	7.60	7.86	7.86	7.60	7.86	7.60	7.86	0.00	7.10	7.86	84.65
46	Kudigi	3.98	51.56	53.30	51.56	35.51	45.27	51.56	53.30	51.56	35.51	0.00	42.09	53.30	524.53
Total			1757.93	1776.44	1611.02	1668.87	1789.23	1807.08	1964.70	1879.97	1877.11	1975.52	1942.16	2096.74	22146.76
Purchase from APSPDCL			370.29	472.06	549.98	479.28	342.00	270.76	406.09	313.37	100.16	0.00	0.00	268.90	3572.90
Grand Total			2128.22	2248.49	2161.01	2148.15	2131.23	2077.84	2370.79	2193.34	1977.27	1975.52	1942.16	2365.64	25719.66

ANNEXURE – 06 (C)
APPROVED: ENERGY DESPATCH (MU) FOR FY2020-21– DISCOMS (TOTAL)

S. No.	Generating Station / Stage	Variable Cost (₹/ kWh)	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
1	MACHKUND PH AP Share	0.00	24.80	26.11	21.88	25.05	26.34	23.71	24.83	23.34	23.94	26.10	24.96	26.38	297.42
2	TUNGBHADRA PH AP Share	0.00	2.66	0.48	0.03	4.99	18.64	20.94	18.16	16.20	11.17	12.63	9.15	9.02	124.10
3	Upper Sileru Power House	0.00	39.33	29.63	24.74	31.57	27.23	29.54	33.78	26.58	28.13	47.43	50.86	63.69	432.51
4	Lower Sileru Power House	0.00	93.50	67.89	57.79	84.46	86.43	89.22	92.83	77.40	84.17	104.13	107.81	121.39	1067.02
5	DONKARAYI	0.00	7.26	6.24	4.06	6.71	6.52	8.53	10.02	8.10	8.51	9.65	10.18	11.19	96.98
6	Srisailem Right Bank Power House	0.00	44.97	15.38	13.06	20.82	229.32	238.11	116.09	42.01	23.13	47.73	70.27	78.00	938.88
7	Nagarjunasagar Right Bank Power House	0.00	1.83	0.00	0.00	0.07	9.33	22.22	24.47	22.86	15.28	10.74	4.20	2.94	113.95
8	Penna Ahobilam	0.00	0.03	0.04	0.01	0.08	1.01	0.98	1.21	0.70	0.68	0.42	0.30	0.24	5.69
9	MINI HYDEL(Chettipeta)	0.00	0.13	0.00	0.07	0.38	0.30	0.33	0.07	0.05	0.28	0.39	0.28	0.37	2.65
10	Nagarjunasagar Tail Pond Dam Power House	0.00	1.00	1.00	1.00	4.00	8.00	13.00	13.00	16.00	16.00	9.00	4.00	4.00	90.00
11	NPC - MAPS	2.23	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	0.00	2.42	3.90	41.42
12	NPC - Kaiga unit-I& II	3.22	35.16	35.16	35.16	35.16	35.16	35.16	35.16	35.16	35.16	35.16	15.99	25.58	393.17
13	NPC - Kaiga unit-III & IV	3.22	37.41	37.41	37.41	37.41	37.41	37.41	37.41	37.41	37.41	18.95	17.02	28.08	400.73
14	NCE- Solar Parks	4.10	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	415.68	4988.21
15	NCE - Wind Power	4.63	331.71	423.58	1222.71	1728.71	1728.19	485.94	315.13	315.88	315.07	297.63	398.80	331.50	7894.85
16	NCE - Others	5.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	28.17	338.02
17	NCE - Solar Projects (SPD)	5.90	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	92.14	1105.72
18	Bundled Power -SOLAR	10.67	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	65.17
19	APGPCL-II - Allocated capacity	2.15	5.54	5.63	5.44	5.63	5.63	5.44	5.44	5.44	5.63	5.63	5.07	5.54	66.06
20	Godavari Gas Power Ltd. (GGPL)	2.20	74.91	77.50	74.91	77.50	77.50	74.91	0.00	36.03	77.50	77.50	69.73	77.50	795.49
21	Sembcorp Energy (Formerly Thermal Powertech)	2.25	137.04	137.04	120.18	114.25	137.04	137.04	137.04	137.04	137.04	137.04	137.04	137.06	1604.85
22	NNTPS	2.31	29.72	30.71	29.72	30.71	30.71	29.72	30.71	29.72	30.71	30.71	27.74	30.71	361.60
23	Talcher Stage-2	2.39	103.30	103.30	90.00	103.30	103.30	80.00	103.30	103.30	103.30	103.30	103.30	103.30	1203.01
24	APGPCL I - Allocated capacity	2.41	1.74	1.77	1.71	1.77	1.71	1.71	1.71	1.77	1.77	1.77	1.59	1.74	20.72
25	NLC Stage-I	2.64	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	22.08	264.99
26	NLC Stage-II	2.64	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	40.61	487.34

S. No.	Generating Station / Stage	Variable Cost (₹/ kWh)	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	TOTAL
27	NTPC (SR)-Ramagundam Stage-3	2.73	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	44.74	536.86
28	NTPC (SR)-Ramagundam Stage-1&2	2.77	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	164.66	1975.87
29	KSK Mahanadi	2.77	228.81	236.44	228.81	236.44	236.44	228.81	236.44	228.81	236.44	236.44	213.56	236.44	2783.84
30	JNNSM Phase-II Thermal	3.04	353.81	365.61	353.81	365.61	365.61	353.81	365.61	353.81	365.61	365.61	330.23	365.61	4304.72
31	NTPS-V	3.14	0.00	0.00	0.00	0.00	0.00	0.00	372.09	372.09	372.09	372.09	372.09	372.09	2232.54
32	SDSTPS Stage-I Unit-1	3.14	449.31	464.29	449.31	464.29	443.55	449.31	239.63	449.31	464.29	464.29	419.36	464.29	5221.25
33	SDSTPS Stage-I Unit-2	3.14	449.31	464.29	449.31	464.29	159.11	449.31	464.29	449.31	239.63	464.29	419.36	464.29	4936.81
34	SDSTPS Stage-II	3.14	0.00	0.00	0.00	0.00	0.00	0.00	411.10	411.10	411.10	411.10	411.10	411.10	2466.60
35	NTPS-IV	3.15	290.26	299.93	0.00	109.33	102.79	290.26	299.93	290.26	299.93	299.93	270.91	299.93	2853.45
36	Tuticorin	3.16	77.70	77.70	77.70	24.35	24.35	71.04	77.70	77.70	77.70	77.70	77.70	77.70	819.06
37	NTPS-I	3.34	230.54	238.23	230.54	60.54	81.64	230.54	238.23	230.54	180.67	238.23	215.17	238.23	2413.11
38	NTPS-II	3.34	230.54	238.23	230.54	61.92	81.64	230.54	176.66	230.54	238.23	169.39	154.92	238.23	2281.38
39	NTPS-III	3.34	229.88	237.55	229.88	81.41	81.41	229.88	237.55	172.33	237.55	65.67	70.91	237.55	2111.57
40	NTPC Simhadri Stage-II	3.34	122.49	122.49	122.49	41.98	20.08	122.49	122.49	122.49	122.49	41.98	41.98	122.49	1125.90
41	NTPC Simhadri Stage-I	3.38	311.05	311.05	311.05	106.60	106.60	161.44	311.05	311.05	95.03	106.60	106.60	311.05	2549.14
42	RTPP Stage-IV	3.66	348.31	359.92	198.71	123.34	123.34	119.37	359.92	0.00	123.34	123.34	111.41	359.92	2350.91
43	Vallur Thermal Power Plant	3.78	60.26	60.26	15.42	15.76	15.76	20.65	60.26	60.26	20.65	20.65	20.65	60.26	430.87
44	RTPP Stage-I	3.86	230.21	237.89	78.89	81.52	61.80	59.17	237.89	191.43	81.52	81.52	73.63	237.89	1653.38
45	RTPP Stage-II	3.86	183.54	249.45	82.73	40.76	63.84	82.73	249.45	82.73	65.76	85.48	77.21	122.36	1386.04
46	RTPP Stage-III	3.86	39.45	118.94	39.45	40.76	40.76	39.45	61.39	39.45	40.76	14.38	36.82	40.76	552.37
47	JNNSM Phase-I Thermal	3.93	7.60	22.93	7.60	7.86	7.86	7.60	14.53	7.60	7.86	0.00	7.10	7.86	106.39
48	Kudigi	3.98	51.56	137.78	51.56	35.51	45.27	51.56	53.30	51.56	35.51	0.00	42.09	53.30	609.01
49	APEPDCL Purchase from APSPDCL	-	370.29	472.06	549.98	479.28	342.00	270.76	406.09	313.37	100.16	0.00	0.00	268.90	3572.90
50	APSPDCL Sale to APEPDCL	-	-370.29	-472.06	-549.98	-479.28	-342.00	-270.76	-406.09	-313.37	-100.16	0.00	0.00	-268.90	-3572.90
Grand Total			5684.09	6059.24	5715.11	5492.24	5449.02	5349.27	6407.27	5884.80	5488.47	5428.11	5346.99	6596.98	68901.61

ANNEXURE – 07

APPROVED STATION / SOURCE WISE POWER PURCHASE COST FOR FY2020-21

S. No.	Generating Station / Stage	Variable Cost (Rs./kWh)	Dispatch (MU)			Fixed Cost (Rs. Cr.)			Fixed Cost (Rs./kWh)			Variable Cost (Rs.Cr.)			Variable Cost (Rs./kWh)			Total Power Purchase Cost (Rs. Cr.)			Power Purchase Cost per Unit (Rs./kWh)		
			EPDCL	SPDCL	TOTAL (STATE)	EPDCL	SPDCL	TOTAL (STATE)	EPDCL	SPDCL	TOTAL (STATE)	EPDCL	SPDCL	TOTAL (STATE)	EPDCL	SPDCL	TOTAL (STATE)	EPDCL	SPDCL	TOTAL (STATE)	EPDCL	SPDCL	TOTAL (STATE)
1	MACHKUND PH AP Share	0.00	101.93	195.50	297.42	20.22	38.79	59.01	1.40	1.40	1.40	0.00	0.00	0.00	0.00	0.00	0.00	20.22	38.79	59.01	1.40	1.40	1.40
2	TUNGBHADRA PH AP Share	0.00	42.53	81.57	124.10																		
3	Upper Sileru Power House (AP)	0.00	148.22	284.29	432.51	26.23	50.32	76.55	1.77	1.77	1.77	0.00	0.00	0.00	0.00	0.00	0.00	26.23	50.32	76.55	1.77	1.77	1.77
4	Lower Sileru Power House (AP)	0.00	365.67	701.35	1067.02	50.28	96.44	146.72	1.38	1.38	1.38	0.00	0.00	0.00	0.00	0.00	0.00	50.28	96.44	146.72	1.38	1.38	1.38
5	DONKARAYI (AP)	0.00	33.23	63.74	96.98	2.73	5.24	7.97	0.82	0.82	0.82	0.00	0.00	0.00	0.00	0.00	0.00	2.73	5.24	7.97	0.82	0.82	0.82
6	Srisailem Right Bank Power House (AP)	0.00	321.75	617.12	938.88	75.31	144.45	219.76	2.34	2.34	2.34	0.00	0.00	0.00	0.00	0.00	0.00	75.31	144.45	219.76	2.34	2.34	2.34
7	Nagarjunasagar Right Bank Power House (AP)	0.00	39.05	74.90	113.95	8.63	16.56	25.19	2.21	2.21	2.21	0.00	0.00	0.00	0.00	0.00	0.00	8.63	16.56	25.19	2.21	2.21	2.21
8	Penna Ahobilam (AP)	0.00	1.95	3.74	5.69	4.48	8.59	13.07	22.98	22.98	22.98	0.00	0.00	0.00	0.00	0.00	0.00	4.48	8.59	13.07	22.98	22.98	22.98
9	MINI HYDEL(Chettipeta)-AP	0.00	0.91	1.74	2.65	0.58	1.12	1.70	6.42	6.42	6.42	0.00	0.00	0.00	0.00	0.00	0.00	0.58	1.12	1.70	6.42	6.42	6.42
10	Nagarjunasagar Tail Pond Dam Power House	0.00	30.84	59.16	90.00	17.63	33.81	51.44	5.72	5.72	5.72	0.00	0.00	0.00	0.00	0.00	0.00	17.63	33.81	51.44	5.72	5.72	5.72
11	NPC - MAPS	2.23	14.19	27.23	41.42	0.00	0.00	0.00	0.00	0.00	0.00	3.17	6.07	9.24	2.23	2.23	2.23	3.17	6.07	9.24	2.23	2.23	2.23
12	NPC - Kaiga unit I & II	3.22	134.74	258.43	393.17	0.00	0.00	0.00	0.00	0.00	0.00	43.39	83.21	126.60	3.22	3.22	3.22	43.39	83.21	126.60	3.22	3.22	3.22
13	NPC - Kaiga unit III & IV	3.22	137.33	263.40	400.73	0.00	0.00	0.00	0.00	0.00	0.00	44.22	84.82	129.04	3.22	3.22	3.22	44.22	84.82	129.04	3.22	3.22	3.22
14	NCE- Solar Parks	4.10	0	4988.21	4988.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2045.16	2045.16	0.00	4.10	4.10	0.00	2045.16	2045.16	-	4.10	4.10
15	NCE - Wind Power	4.63	0	7894.85	7894.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3655.32	3655.32	0.00	4.63	4.63	0.00	3655.32	3655.32	-	4.63	4.63
16	NCE - Others	5.17	97.84	240.18	338.02	0.00	0.00	0.00	0.00	0.00	0.00	50.58	124.17	174.76	5.17	5.17	5.17	50.58	124.17	174.76	5.17	5.17	5.17
17	NCE - Solar Projects (SPD)	5.90	174.58	931.14	1105.72	0.00	0.00	0.00	0.00	0.00	0.00	103.00	549.37	652.37	5.90	5.90	5.90	103.00	549.37	652.37	5.90	5.90	5.90
18	Bundled Power- SOLAR	10.67	22.33	42.84	65.17	0.00	0.00	0.00	0.00	0.00	0.00	23.83	45.71	69.53	10.67	10.67	10.67	23.83	45.71	69.53	10.67	10.67	10.67
19	APGPCI II - Allocated capacity	2.15	22.64	43.42	66.06	1.47	2.81	4.28	0.65	0.65	0.65	4.87	9.34	14.20	2.15	2.15	2.15	6.33	12.15	18.48	2.80	2.80	2.80
20	Godavari Gas Power Ltd. (GGPL)	2.20	272.61	522.88	795.49	21.54	41.31	62.84	0.79	0.79	0.79	59.98	115.03	175.01	2.20	2.20	2.20	81.51	156.34	237.85	2.99	2.99	2.99
21	Semboor Energy (Formerly Thermal Powertech)	2.25	549.98	1054.87	1604.85	90.75	174.05	264.80	1.65	1.65	1.65	123.75	237.35	361.09	2.25	2.25	2.25	214.49	411.40	625.89	3.90	3.90	3.90
22	NNTPS	2.31	123.92	237.68	361.60	26.62	51.06	77.68	2.15	2.15	2.15	28.63	54.90	83.53	2.31	2.31	2.31	55.25	105.96	161.21	4.46	4.46	4.46
23	Talcher Stage 2	2.39	412.27	790.74	1203.01	29.99	57.52	87.51	0.73	0.73	0.73	98.53	188.99	287.52	2.39	2.39	2.39	128.52	246.51	375.03	3.12	3.12	3.12
24	APGPCI I - Allocated capacity	2.41	7.10	13.62	20.72	1.47	2.83	4.30	2.08	2.08	2.08	1.71	3.28	4.99	2.41	2.41	2.41	3.18	6.11	9.29	4.49	4.49	4.49
25	NLC Stage-I	2.64	90.81	174.18	264.99	8.09	15.53	23.62	0.89	0.89	0.89	23.97	45.98	69.96	2.64	2.64	2.64	32.07	61.51	93.58	3.53	3.53	3.53
26	NLC Stage-II	2.64	167.01	320.33	487.34	15.08	28.93	44.01	0.90	0.90	0.90	44.09	84.57	128.66	2.64	2.64	2.64	59.17	113.50	172.67	3.54	3.54	3.54
27	NTPC (SR)-Ramagundam Stage 3	2.73	183.98	352.88	536.86	13.19	25.31	38.50	0.72	0.72	0.72	50.23	96.34	146.56	2.73	2.73	2.73	63.42	121.64	185.06	3.45	3.45	3.45
28	NTPC (SR)-Ramagundam Stage 1&2	2.77	677.13	1298.74	1975.87	48.91	93.81	142.72	0.72	0.72	0.72	187.57	359.75	547.32	2.77	2.77	2.77	236.48	453.56	690.04	3.49	3.49	3.49
29	KSK Mahanadi	2.77	954.02	1829.82	2783.84	143.10	274.47	417.58	1.50	1.50	1.50	264.26	506.86	771.12	2.77	2.77	2.77	407.37	781.33	1188.70	4.27	4.27	4.27
30	JNNSM Phase-II Thermal	3.04	1475.23	2829.49	4304.72	249.31	478.18	727.50	1.69	1.69	1.69	448.47	860.17	1308.63	3.04	3.04	3.04	697.78	1338.35	2036.13	4.73	4.73	4.73
31	NNTPS V	3.14	765.09	1467.45	2232.54	137.72	264.14	401.86	1.80	1.80	1.80	240.24	460.78	701.02	3.14	3.14	3.14	377.96	724.92	1102.87	4.94	4.94	4.94
32	Damodaram Sanjeevaiah Thermal power plant - I	3.14	1796.43	3424.82	5221.25	686.15	1316.03	2002.18	1.91	2.00	1.97	564.08	1075.39	1639.47	3.14	3.14	3.14	907.15	1761.92	2669.07	5.05	5.14	5.11
33	Damodaram Sanjeevaiah Thermal power plant - I	3.14	1796.43	3140.38	4936.81							564.08	986.08	1550.16	3.14	3.14	3.14	907.15	1615.59	2522.74	5.05	5.14	5.11
34	Damodaram Sanjeevaiah Thermal power plant - II	3.14	845.30	1621.30	2466.60	152.15	291.83	443.99	1.80	1.80	1.80	265.43	509.09	774.51	3.14	3.14	3.14	417.58	800.92	1218.50	4.94	4.94	4.94
35	NNTPS IV	3.15	1110.76	1742.69	2853.45	96.96	185.96	282.92	0.87	1.07	0.99	349.89	548.95	898.84	3.15	3.15	3.15	446.85	734.91	1181.76	4.02	4.22	4.14
36	Tuticorin	3.16	312.70	506.36	819.06	47.52	91.14	138.66	1.52	1.80	1.69	98.81	160.01	258.82	3.16	3.16	3.16	146.33	251.15	397.48	4.68	4.96	4.85
37	NNTPS I	3.34	920.43	1492.68	2413.11							307.42	498.56	805.98	3.34	3.34	3.34	385.04	663.37	1048.42	4.18	4.44	4.34
38	NNTPS II	3.34	920.43	1360.95	2281.38	232.85	446.62	679.47	0.84	1.10	1.00	307.42	454.56	761.98	3.34	3.34	3.34	385.04	604.83	989.87	4.18	4.44	4.34
39	NNTPS III	3.34	920.43	1191.14	2111.57							307.42	397.84	705.27	3.34	3.34	3.34	385.04	529.37	914.41	4.18	4.44	4.33
40	NTPC Simhadri Stage II	3.34	481.81	644.08	1125.90	70.10	134.45	204.55	1.45	2.09	1.82	160.93	215.12	376.05	3.34	3.34	3.34	231.03	349.57	580.60	4.79	5.43	5.16
41	NTPC Simhadri Stage I	3.38	1223.54	1325.60	2549.14	106.05	203.41	309.46	0.87	1.53	1.21	413.56	448.05	861.61	3.38	3.38	3.38	519.61	651.46	1171.07	4.25	4.91	4.59
42	RTPP Stage-IV	3.66	1332.91	1018.00	2350.91	239.92	183.24	423.16	1.80	1.80	1.80	487.85	372.59	860.43	3.66	3.66	3.66	727.77	555.83	1283.60	5.46	5.46	5.46</

ANNEXURE – 08
GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Energy Infrastructure & Investment Department – Extending of free power supply to all Agricultural consumers from seven hours per day to Nine hours per day – Orders Issued.

ENERGY, INFRASTRUCTURE & INVESTMENT (POWER.I) DEPARTMENT

G.O.MS.No. 17

Dated: 15-02-2019

ORDER:

Government of Andhra Pradesh as a part of its policy have issued directions for providing seven hours of free power supply to the agricultural consumers in the state. Government have also directed the Discoms to extend additional hours of free power supply to Agricultural consumers wherever necessary, based on the requests from public representatives duly recommended by District administration to save the standing crops. There are more than 17.85 lakh pumpsets in the state and the average annual consumption by these consumers in the current scenario is around 12,574 MU's. Necessary subsidy is being provided by the Govt. of AP towards free power supply to the DISCOMs.

2. In pursuance of the announcement made during Sankranti festival (13.01.2019) by the Hon'ble Chief Minister, Government have decided to increase the present seven hours of free power supply to nine hours for the farming community.

3. Additional subsidy towards supply of 9 hours of power from the present 7 hours of power supply to agricultural consumers will be paid to Discoms by the Government.

4. This order issues with the approval of Finance department vide their U.O.No.FIN01-FMU0ASD(IIE)/9/2019-FMU-IIE5, dated.15.02.2019.

5. The CMD APTRANSCO, CMD APSPDCL, CMD APEPDCL shall take further necessary action accordingly.

(BY ORDER AND IN THE NAME OF GOVERNOR OF ANDHRAPRADESH)

AJAY JAIN
PRINCIPAL SECRETARY TO GOVERNMENT

To:

The Chairman & Managing Director, APTRANSCO, Vijayawada.

The Chairman & Managing Director, APSPDCL, Tirupati.

The Chairman & Managing Director, APEPDCL, Visakhapatnam.

Copy to:

The Secretary, APERC, Hyderabad.

The P.S. to Minister(Power)

The P.S. to Chief Secretary to Government.

ANNEXURE – 09

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).

2) The Government after careful consideration decided to extend all the benefits 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.

3) Government has also decided for waiver of all the pending dues payable 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.

5) The CMD, APTRANSCO, CMD/APEPDCL and CMD/APSPDCL shall take 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.
- 2) The Chairman & Managing Director, APSPDCL, Tirupati.
- 3) The Chairman & Managing Director, APEPDCL, Visakhapatnam.
- 4) The Secretary, APERC, Hyderabad.

Copy to:

The P.S., to Hon'ble Minister for Energy
The P.S., to Prl. Secretary, Energy, I&I Dept.

// Forwarded:: By Order //

SECTION OFFICER

ANNEXURE – 10

GOVERNMENT OF ANDHRA PRADESH ABSTRACT

Energy, I&I Department – Providing of free power to Dhobighats (691) on par with Agricultural connections (free category) - Orders – Issued.

ENERGY, INFRASTRUCTURE & INVESTMENT (POWER.I) DEPARTMENT

G.O.Rt.No.75

Dated 27.06.2018
Read the following:

- 1) From the Chairman, AP Washermen Co-Op, Societies Federation Ltd., dated 06.11.2017.
- 2) Letter No.110/Minister (Energy)/2018, dated 16.05.2018.

@@@@@

ORDER:

In the reference 1st read above, the Washerman Association have represented (1) for waiver of all pending dues payable towards power supply made to the Dhobighats and (2) to extending all the benefits to the Dhobighats on par with beneficiaries getting Agriculture connections (Free category).

2) The Government after careful examination of the matter decide and here by extend all the benefits to the Dhobighats (691) on par with agriculture connections (free category) to extend helping hand and as an encouragement to the Washerman in the state.

3) The CMD, APTRANSCO, CMD/APEPDCL and CMD/APSPDCL shall take further necessary action accordingly.

4) This order issue with the approval of Finance Department vide their U.O. No.45027/165/FMU-Rev, I&C & Energy/2018, dated 30.05.2018.

(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.
- 2) The Chairman & Managing Director, APSPDCL, Tirupati.
- 3) The Chairman & Managing Director, APEPDCL, Visakhapatnam.
- 4) The Secretary, APERC, Hyderabad.

Copy to:

The P.S., to Hon'ble Minister for Energy.

The P.S., to Prl. Secretary, Energy, I&I Dept.

ANNEXURE – 11
GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Energy Department – Power tariff concession for supply of power to the Aquaculture farmers by reducing the current unit rate to Rs.1.50ps per Unit - Orders – Issued.

ENERGY (POWER.I) DEPARTMENT

G.O.Rt.No.70

Dated:02.7.2019
Read the following:

1. G.O.Rt.No.119, Energy,I&I(Power.I) Dept., dated: 5-9-2018.
2. G.O.Rt.No.136, Energy,I&I(Power.I) Dept., dated: 10-10-2018

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ORDER:

In the G.O.1st and 2nd read above Government have issued orders for power tariff concession for supply of Power to the Aquaculture farmers by reducing the current unit rate from Rs.3.86ps to 2.00ps for a period of one year.

2. Government according to its policy intends to reduce the unit rates for power for aquaculture to Rs.1.5 per unit from APERC notified rates.
3. The CMDs of DISCOMS informed that if aqua farms are supplied power at Rs.1.50ps per unit, the additional subsidy requirement for one year would be around Rs.720 Crores.
4. Government after careful examination of the matter announces power tariff concession to aqua farmers by reducing the current unit rate from the rate notified by APERC to Rs.1.50ps per unit with immediate effect.
5. DISCOMs will collect the power charges from Aquaculture farmers at the rate of Rs.1.50 per unit and the Energy Department would transfer the subsidy amount to the DISCOMs on the basis of details submitted by them.
6. The expenditure shall be met from the following Head of Account:-
 - 2801- Power
 - 05-Transmission and Distribution
 - 800-Other Expenditure
 - SH(16) - Assistance to Transmission Corporation of Andhra Pradesh for Providing subsidy to Aquaculture farmers.
 - 330-Subsidies/332-Subsidies to Organisations.
7. The CMD., APTRANSCO, CMD., APEPDCL and CMD., APSPDCL, shall take further necessary action accordingly.

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8. This order issues with the concurrence of Finance Department vide U.O.Note No.FIN01-FMU0BES(IIE/1/2019-IIE,dated:1-7-2019.

(BY ORDER IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

SRIKANT NAGULAPALLI
SECRETARY TO GOVERNMENT

To

The Chairman & Managing Director, APTRANSCO, Vijayawada.

The Managing Director, APGENCO,Vijayawada.

The Chairman & Managing Director, APSPDCL, Tirupati.

The Chairman & Managing Director, APEPDCL, Visakhapatnam.

The Secretary, APERC, Hyderabad.

The Managing Director, AFCOF&EO Commissioner of Fisheries, Vijayawada

(Shall take further necessary action accordingly.)

The Special Chief Secretary to Govt, Animal Husbandry, Dairy Development
& Fisheries Department, AP Secretariat

Copy to:

The Prl., Advisor to Chief Minister

The P.S., to Hon'ble Chief Minister.

The P.S., to Hon'ble Minister for Energy.

The OSD to Chief Secretary.

The P.S., to Secretary, Energy, I&I Dept.

// Forwarded:: By Order //

SECTION OFFICER

ANNEXURE – 12**GOVERNMENT OF ANDHRA PRADESH
ABSTRACT**

Social Welfare Department - Scheduled Castes Component 2019-20 - 'Jagjeevan Jyothi' - Enhancement of benefit under the Free Power Scheme from (100) units to (200) units to the eligible SC households as per the announcement in MANIFESTO - Orders -Issued.

SOCIALWELFARE (SCP.A2) DEPARTMENT**G.O.Ms.No.91****Dated: 24.07.2019
Read the following.**

- 1.G.O.Ms.No.58,Social Welfare (SCP.1) Department, Dt.2.07.2013.
- 2.G.O.Ms.No.80; Social Welfare (TW.Bud.1) Department, Dt.28.09.2013.
- 3.G.O.Ms.No.32, Social Welfare (SCP.A2) Department, Dt.28.04.2017.
- 4.CMP No.9218/Secy(MGS)/2018, Dt.25.07.2018.
- 5.Lr.Rc.No.S/1353/2018, Dt.01.08.2018, of D.S.W., A.P.,Amaravati.
6. G.O.Ms.No.143, Social Welfare (SCP.A2) Department, Dt. 29.08.2018.
7. U.O.No.1/Cabinet.I/2019-28, Dt.02.07.2019.
8. Lr.Rc.No.S/1086/2019, Dt.04.07.2019, D.S.W., A.P., Amaravati.

ORDER:

In the G.O.s 1st & 2nd read above, the Government have issued orders for the payment of electricity charges to benefit the SC & ST households, living in SC & ST colonies with monthly consumption of 0-50 units per month, provided that the DISCOMS concerned give detailed consumption particulars of each beneficiary.

2. In the G.O. 3rd read above, Government have launched the 'Jagjeevan Jyothi' scheme, duly enhancing the benefit of Free Power up to (75) Units from the existing (50) units in respect of the SC & ST households, consuming power up to (100) Units per month.

3. In the G.O. 6th read above, Government have issued orders for enhancing the benefit of Free Power Scheme from (75) units to (100) units in respect of the SC & ST households, consuming power up to (125) Units per month.

4. During the Cabinet meeting held on 10-6-2019, the Hon'ble Chief Minister has instructed to extend the benefit of Free Power up to (200) units from the existing (100) units to the eligible Scheduled Castes Households in the State, as per the announcement in MANIFESTO in order to ensure that the benefit the larger number of eligible poor SC families. The Director Social Welfare vide reference 8th read above has submitted proposals accordingly.

5. Government after careful examination of the above proposal, hereby enhance the benefit for providing Free Power from 100 units to 200 Units to SC Eligible Households consuming power up-to 200 units per month in the State under the Hon'ble Chief Minister, Assurance in MANIFESTO, duly covering an additional 2.82 lakh SC families (with an additional subsidy amount of Rs 107.24 crores per annum).

6. The Director of Social Welfare is permitted to incur the expenditure for the above purpose under Head of Account "2225-01-800-11-08-330-000" and he is permitted to meet the additional amount required for the purpose by reallocation within Scheduled Castes Component 2019-20, at the appropriate time.

(P.T.O.)

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7. In order to ensure the proper implementation of the scheme and in order to ensure that the benefits under the scheme are availed all the eligible SC beneficiaries, Government further orders that:

- a) The concerned DISCOMs & RESCOs shall mandatorily obtain and the enter in the scheme database the (a) Aadhar Number (b) Mobile Number (c) Caste Certificate (Mee Seva certificate or Certification by the DISCOMs) of all the Scheduled Castes consumers availing the benefit under the scheme, by 31st October, 2019.
- b) The DISCOMs & RESCOs shall issue (a) Distinct electricity bill to the consumers benefitting under this scheme (b) Dispatch SMS & Voice message, every month, to the consumers. (c) Take up a widespread awareness campaign under the scheme, along with the Social Welfare Department.

8. These enhanced benefit under the scheme shall come into force w.e.f. August bills payable in September 2019, as per the bill cycle of the DISCOMS & RESCOs.

9. This order is issued with the concurrence of the Finance (FMU-Welfare.I) Dept., vide their U.O.No.FIN01-FMU0PC(WEL.I)/55/2019; Dt.8.9.2019(Com No.927359).

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

MUDDADA RAVI CHANDRA
SECRETARY TO GOVERNMENT

To
The Secretary to Government,
Energy & Infrastructure Department, A.P.Secretariat, Velagapudi.
The Director of Social Welfare, A.P., Amaravati.
The Director of Tribal Welfare, A.P., Amaravati.
The CMDs of DISCOMS/RESCOs.
All the District Collectors in the State.

Copy to:

The CEO, A.P. CFSS, Finance Department.
The Pay and Accounts Officer, A.P., Amaravati.
The Director of Treasuries & Accounts, A.P., Amaravati.
All JDs / DDs (SW) in the State.
All Project Officers, ITDAs in the State.
All the DDs of Tribal Welfare/ DTWOs in the State.
P.S. to Chief Secretary
P.S. to Minister for SW.
P.S. to Secretary to C.M.
SF/SC.

//FORWARDED::BY ORDER//

SECTION OFFICER

ANNEXURE - 13
GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Energy Infrastructure & Investment Department - Providing of free power to Laundries run by BPL Rajaka community, free power to shops of Goldsmith, free power to MBC households - Orders - Issued.

ENERGY, INFRASTRUCTURE & INVESTMENT (POWER.I) DEPARTMENT

G.O.RT.No. 24

Dated: 15-02-2019
Read the following:

1. From the Principal Secretary to Government, BC Welfare Department. U.O. Note. No: BCW01-BCCODBCW (MISC)/9/ 2019, dated: 05.02.2019.
2. G.O.RT. No.15, Energy, I&I(Power. I) Department, dt.06-02-2019.

ORDER:

In the reference 1st read above, the Principal Secretary to Government, BC Welfare Department, while communicating a copy of the proceedings of the Council of Ministers held on 31.1.2019, has requested the Energy, I&I Department to provide free power to the following communities as detailed below:

- 1) The Council of Ministers have agreed to provide free power up to (150) units to laundries run by BPL Rajaka Community.
- 2) The Council of Ministers have agreed to provide free power up to (100) units to the shops of professional Goldsmith who belongs to BPL Category.
- 3) The Council of Ministers have agreed to provide free power up to (100) units to the house hold of Below Poverty Line MBC communities considering the request of the Community.
- 4) The Council of Ministers have agreed to provide free power up to (150) units to saloons run by BPL Nayee Brahmin Communities.

2. The Energy, I&I Department, vide ref.2 read above, has already been issued orders in respect of point.4 i.e., providing free power up to (150) units to Hair Cutting Saloons.

3. Government, after careful examination of the rest of the three categories, mentioned at points-1 to 3 in para.1 above, have decided and hereby approved the following:

- i. Providing free power up to (150) units to laundries run by BPL Rajaka Community.
- ii. Providing free power up to (100) units to the shops of professional Goldsmith who belong to BPL Category.
- iii. Provide free power up to (100) units to the house hold of Below Poverty Line MBC communities.

4. The BC welfare department will provide necessary budget to the Energy I&I Department for implementation of the Schemes. The Department is advised to implement the scheme under DBT mode.

5. The CMD APTRANSCO, CMD APSPDCL, CMD APEPDCL shall take further necessary action accordingly.

(P.T.O.)

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6. This order issues with the approval of Finance department vide their U.O No.FIN01-FMU0ASD(IIE)/8/2019-FMU-IIE dt.15.02.2019.

(BY ORDER AND IN THE NAME OF GOVERNOR OF ANDHRAPRADESH)

AJAY JAIN
PRINCIPAL SECRETARY TO GOVERNMENT

To:

- 1) The Chairman & Managing Director, APTRANSCO, Vijayawada.
- 2) The Chairman & Managing Director, APSPDCL, Tirupati.
- 3) The Chairman & Managing Director, APEPDCL, Visakhapatnam.
- 4) The P.S to Prl. Secretary, to B.C Welfare Dept.

Copy To:

The P.S., to Hon'ble Chief Minister.

The P.S., to Hon'ble Minister for Energy.

The P.S., to Prl. Secretary, Energy, I&I Dept.

// FORWARDED :: BY ORDER //

SECTION OFFICER

ANNEXURE - 14**GOVERNMENT OF ANDHRA PRADESH
ABSTRACT**

Power Tariff - Concession - Rolled Gold Covering Industry in Machilipatnam Division, Krishna District - Reduction to Rs.3.75 per Unit - Orders -issued.

ENERGY (POWER.I) DEPARTMENT

G.O.RT.No. 128

Dated: 29-11-2019

Read:

ORDER:

It is learnt that in Machilipatnam there is a Gold Covering hub i.e Jewellery Park with around 250 Gold Covering units/imitation jewellery units. The families dependent on these units are very poor and unable to bear energy charges of Rs.9/- per unit. It was requested to reduce the power charges from Rs.9/- to Rs.3.75 per unit for total energy consumption irrespective of slabs in the Jewellery Park.

2. Government, after careful examination of the entire matter hereby grant a tariff subsidy for Rolled Gold Industry in Machilipatnam division by reducing the energy unit rate from Rs.9.20 to Rs.3.75 with immediate effect.

3. Discoms will collect the power charges from Rolled Gold Industry at the rate of Rs.3.75 per unit and the Energy Department would transfer the subsidy amount to the DISCOM.

4. The CMDs of DISCOMS shall take further necessary action accordingly.

5. This Order issues with the Concurrence of Finance Dept Vide U.O. No. FIN01-FIITOMGMT(IE)/1/2019-FMU-IIEIC, Computer No: 1043025.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

**SRIKANT NAGULAPALLI
SECRETARY TO GOVERNMENT**

To

The CMD, APSPDCL/APEPDCL, Tirupati/Visakhapatnam.

The CMD, APTRANSCO, Vijayawada.

The Secretary, APERC, Vijayawada.

The Principal Secretary to Govt, Industries & Commerce Dept.

Copy to:

The P.S to Hon'ble Chief Minister

The P.S to Minister, Energy, EFS&T.

The P.S to Secretary, Energy Dept.

The P.S to Principal Secretary to C.M.

The P.S to Chief Secretary to Government.

The P.S to Minister, Transport, Information & Public Relations.

SF/SC.

//FORWARDED BY ORDER//

SECTION OFFICER

ANNEXURE – 15
GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Energy, I&I Department – Providing of free power supply upto 150 units per month to Hair Cutting Saloons - Orders – Issued.

 ENERGY, INFRASTRUCTURE & INVESTMENT (POWER.I) DEPARTMENT

G.O.RT.No. 15

Dated: 06-02-2019
 Read:

- 1) Letter No.149/Minister (Energy)/2018, dated 14.06.2018.
- 2) From the Managing Director, AP Nayee Brahmins Co-Op, Societies Federation Ltd., dated 22.10.2018.

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ORDER:

In the reference 1st read above, the leaders belonging to Barber Community have represented to Government to extend free power supply to the hair cutting saloons/shops, as the Hon'ble Chief Minister has formally agreed in a public meeting held at Vijayawada to provide free power supply to hair cutting saloons.

2) The above proposal has been examined in consultation with the Backward Classes Welfare Department. As per the details obtained from the BCW Department, there is a total number of 17,748 barber shops registered having service connections under category-II upto the Financial Year 2017-2018. The financial commitment to Government for providing 150 units per month for free power supply to the hair cutting saloons/shops, per annum would be around Rs.32.00crores.

3) After careful examination of the matter, Government hereby approved for extending free power supply upto 150 units per month to the Hair Cutting Saloons/shops. The BC welfare Department will provide necessary budget to the Energy, I & I Department for implementation of the scheme.

3) The CMD, APTRANSCO, CMD/APEPDCL and CMD/APSPDCL shall take further necessary action accordingly.

4) This order issues with the approval of Finance Department vide their U.O. No.FIN01-64030/24/2018-FMU-Energy-Fin, dated 01.01.2018.

(BY ORDER IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

AJAY JAIN
 PRINCIPAL SECRETARY TO GOVERNMENT

P.T.O

// 2 //

To

- 1) The Chairman & Managing Director, APTRANSCO, Vijayawada.
- 2) The Chairman & Managing Director, APSPDCL, Tirupati.
- 3) The Chairman & Managing Director, APEPDCL, Visakhapatnam.
- 4) The Secretary, APERC, Hyderabad.
- 5) Principal Secretary to Govt., BC Welfare Department, AP Secretariat.

Copy to:

The P.S., to Hon'ble Minister for Energy.

The P.S., to Pri. Secretary, Energy, 1&I Dept.

//Forwarded: By Order //

SECTION OFFICER

ANNEXURE – 16**GOVERNMENT OF ANDHRA PRADESH
ABSTRACT**

Industries & Commerce Department – Handlooms & Textiles -Free Power upto 100 Units per month per connection to Handloom Weavers in the State - Orders – Issued.

INDUSTRIES & COMMERCE (PROGRAMME-II) DEPARTMENT

G.O.Rt.No.291

Dated:25.09.2018

Read:

From the CH&T, Mangalagiri ,Guntur District , LR. Rc.No.2554/2018-H1, Dt: 05.06.2018.

ORDER:

The Commissioner of Handlooms & Textiles, Mangalagiri, has informed that the Hon'ble Minister for Transport, B.C. welfare and Empowerment, Handlooms and Textiles, Government of Andhra Pradesh has directed to submit a proposal on Hon'ble Chief Minister's Assurance for providing free Power upto 75 Units Per Month per service connection to Handloom Weavers in the State.

2. He has also informed that the Handloom Sector has a unique place in our economy and plays a vital role in the economic development of the rural poor. It is one of the largest economic activities providing direct employment to over 65 lakhs persons across the country after agriculture and more than 40 percent are women and majority of them are low caste and extremely poor, working in small family units. This sector contributes nearly 19 percent of the total production of the cloth produced in the country and also adds substantially to the export earnings. Most of the looms located in rural areas and primarily household activity, with mainly men involved in weaving and women involved in preparatory work. Handloom Industry is the most important ancient, traditional cottage industry in India, which is providing employment to large number of masses in rural areas and semi-urban areas. Andhra Pradesh has occupied prominent place in Indian Handloom Sector. There are about 90,765 Weavers Households in cooperative and outside cooperative fold. In respect of Cooperative fold there are 599 Weavers Cooperative Societies working in the State and one State Level Apex society i.e. Andhra Pradesh State Handloom Weavers Cooperative Society Ltd (APCO) for marketing the Handloom products.

3. The CH&T, has also informed that the tradition of weaving fabrics is age old in this State and it is in the stage of shrinking from past few decades. The glory of Handloom Industry is now fading away. The Handloom sector in Andhra Pradesh has been facing various problems. The handloom weavers are striving hard for their survival. In spite of several measures taken up by the Government by providing institutional support they have been in miserable state and migrating to other occupations due to several problems like hike in essential commodities, hike in raw Material cost, Low Wages, lack of Financial support and Marketing facility are sustaining continuous losses.

(P.T.O)

-2-

4. The CH&T has further informed that after bifurcation of the State, Government is implementing various Developmental and Welfare schemes for the benefit of Handloom weavers in the State. He has, therefore, requested the Government to issue necessary orders for according free power for 90,765 Households (as per praja saadikara survey data) in the state.

5. Government have examined the matter and hereby decided to accord free electricity up to 100 Units per month per connection for Handloom Weavers in the state. The amount shall be given as direct debit to the beneficiary to avoid leakages and ensure better satisfaction to the beneficiary.

6. The Commissioner of Handlooms & Textiles, A.P.Yerrabalem shall take necessary action accordingly.

7. This order issues with the concurrence of the Fin. (FMU. Rev.-I&C) Dept., vide their U.O.No. 58025/1/FMU.I&C/2018, Dt.10 /09/2018.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

I.SRINIVAS SRINARESH
SECRETARY TO GOVERNMENT

To
The Director of Handlooms & Textiles,
A.P.Mangalagiri, Guntur District.
All District Collectors in the state
All District Treasury Officers
The Chief Executive Officer Comprehensive
Financial management Society, Ibrahimpatnam, Vijayawada.
The Energy, Infrastructure and Investment Department.
The A.G.AP., Vijayawada
Copy to the PS to Secy. to CM/PS to M(Handlooms & Textiles)
SC/SF

//FORWARDED :: BY ORDER//

SECTION OFFICER

ANNEXURE – 17



ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

11-4-660, 4th Floor, Singareni Bhavan, Red Hills, Khairatabad, Hyderabad 500 004

Phones: 040-23397381/7399/7556, 23307381 Fax: 040-23397378

Minutes of the 14th State Advisory Committee (SAC) meeting held on 13-Jan-2020 at 10:00 AM in the Conference Hall, APSPDCL Corporate Office, Tirupati

Present: Hon'ble Sri Justice C.V. Nagarjuna Reddy, Chairman, APERC
Dr. Pervela Raghu, Hon'ble Member, APERC
Er. P. Rama Mohan, Hon'ble Member, APERC
Dr. Srikant Nagulapalli, I.A.S, Secretary (Energy), GoAP & CMD,
APTRANSCO
Er. H. Haranatha Rao, CMD, APSPDCL
Ms. Nagalaxmi Selvarajan, I.A.S., CMD, APEPDCL
Sri C. Ramakrishna, Director (Admn.) & Commission Secretary (i/c)
Smt. G. Vijayalakshmi, CEIG
Sri A. Chandrasekhar Reddy, MD, APSEEDCO
Sri Kandregula Venkata Ramana
Sri Katuru Hari Kishore Kumar Reddy
Sri M. Gopal Reddy
Sri Ch. Divakar Babu
Sri N. Sreekumar

The meeting was convened to hear the views of the SAC Members on the ARR & FPT filings made by the DISCOMs for the FY2020-21.

The Hon'ble Chairman in his opening remarks welcomed all the Members present to the meeting and said that the purpose of the meeting is to advise the Commission on various aspects including Tariff fixation. He further said that the meeting is timed in such a way that the Members would have had access to the various suggestions / objections / comments received from the Public on the proposals made by the DISCOMs. He requested each Member to express his views in a frank manner.

Agenda Item 1: ARR & FPT Filings of DISCOMs: The issues that were raised concerning this agenda item are:

- a) **Method & Manner of ARR & FPT Filings:** Almost all the Members present voiced concern that the ARRs should be filed in a standardized format and that there should be a glossary of terms explaining sector specific terms which are usually found in the filings. The participants also were unanimous that the ARRs should be filed in Telugu also from next year onwards; that the figures and tables in the filings should be made available in Excel format for easy analysis; that there should be a separate chapter on the subsidies expected from the Government which would help bridge the gap between Revenue and Expenditure; that there should be an Action Taken Report showing what action was taken on the directives issued by the Commission in the previous years' tariff orders and what could be done and could not be done in compliance with them.
- b) **Grid Integration costs:** Detailed calculations and methodology as to how these costs are computed are not disclosed in the ARR. The CMD, APEDPCL responding to this said that the details will be shared.
- c) **Reduction of power purchase costs by reviewing power purchase from Spectrum, GMR, HNPCL, Simhapuri etc.:** Members voiced concerns that in order to bring the Cost of Service down, the one course of action that needs to be adopted is either not renewing the PPAs or reviewing the PPAs with some of the generators. Hon'ble Chairman said that matters which are in the purview of the Courts or pending adjudication before the Commission can only be decided in the quasi-judicial proceedings but not through a forum like SAC.
- d) **Metering agricultural consumption:** Many members felt that metering at agricultural DTR level would give more accurate consumption of agriculture and that would consequently be beneficial in a realistic assessment of the agriculture consumption. After due deliberations, based on Energy Secretary's opinion also, it was felt that metering the approximate number of 5 lakh agricultural DTRs can be easily taken up with about Rs. 150 Cr cost and can be done in a time bound manner.

- e) **Additional Security Deposit demands, Capacitor Surcharge demands and Penalties for additional loads:** Members opined that such charges are being levied either directly in the bills being raised, without following prescribed procedure. Hon'ble Chairman directed that DISCOMs shall strictly follow the procedure of issuing show cause notices, giving an opportunity to the consumers to explain their stand and then only after considering the consumer's point of view can such charges be levied and collected from them. CMDs of both DISCOMS agreed to follow this procedure suggested by the Hon'ble Chairman.
- f) **Complaints redressal mechanism:** Members felt that DISCOMs should undertake an independent audit of the complaint redressals done and disclose the results in the ARR. The Hon'ble Chairman directed the DISCOMs to establish complaint boxes at each and every field officer's level i.e., from AE all the way up to the CMDs. He further directed that the DISCOMs should periodically submit the action taken report on the complaints received and attended to by them in the quarterly regulatory review meetings that will be conducted every quarter by the Hon'ble Commission.
- g) **Compensation for loss of land to transmission projects:** Members were near unanimous in voicing their concern that the APTRANSCO and PGCIL are using force to dispossess the farmers of their land for laying transmission lines. The Secretary, Energy said that on the part of APTRANSCO there is no such force being used and that the projects underway also are very few and far between. The Secretary of the Commission said that the Works of Licensees Rules, 2006 will cover cases concerning PGCIL projects and if the affected farmers are not happy with the compensation fixed by the Collectors, they will have to approach the CERC and that in case of APTRANSCO transmission projects, if they are unhappy with the compensation fixed by the Collectors, they can approach the APERC and are in fact approaching accordingly. The Hon'ble Chairman said that this is a vexatious issue that is dominating the public hearings on ARR & FPT and that the Secretary, Energy should ensure that a meeting is arranged to sensitize the Collectors about the seriousness of issues involved. The Secretary, Energy said that he will use his good offices to ensure that such a meeting is organized. The Hon'ble

Chairman said that the Commission's jurisdiction in the matter is rather limited to intervening only if and when the compensation fixed by the Collectors is challenged before it and that the grievances about the provisions of the Indian Telegraph Act being invoked to facilitate a forcible entry or laying down of lines can only be questioned before the constitutional courts and not before the Commission.

- h) **Accommodation and sitting fees for Members of SAC:** Members unanimously pointed out that the accommodation charges and sitting fee being paid to them is very low. The Hon'ble Chairman on getting to know the amounts being paid said that these will be revised upwards to reasonable levels.
- i) **Category-V(A) Agriculture Connections:** Some of the Members voiced concern that denying free agricultural power to IT paying consumers is iniquitous in as much as IT paying consumers under Horticulture are given free power. Responding to this, the CMD, APSPDCL said that this is in the purview of the GoAP.
- j) **Electrical Accidents & Safety:** Members felt that DISCOMs are still not paying compensation in a majority of accident cases on the ground that they are not at fault or that the fault lies with the consumer. This is despite the fact that the APERC Regulation laid down a no fault liability. Some Members felt that the Regulation needs to give clarity about power cables going just above the buildings causing accidents. Hon'ble Chairman directed the DISCOMs that where a building is proposed to be erected below an existing power line, the DISCOMs should not allow electric supply to such buildings.
- k) **GoAP's decisions on RPOs during the last couple of years:** Some of the Members expressed the feeling that the impact of these decisions on the health of the DISCOMs needs to be assessed. The Hon'ble Chairman said that in matters like this, since the courts are already seized of the matter, it will not be proper to discuss them in a forum like the SAC and that even if the Courts remit the matter to the APERC, still that would keep discussion of the issues beyond the remit of the SAC as they have to be decided in a quasi-judicial setting and not in a meeting like this.

- l) **Release of agricultural connections:** Almost all the members present voiced concern that the agricultural connections pendency is huge and unacceptable. Some even suggested that the quota system should be done away with. Responding to this, the CMD, APEPDCL said that they have very less pendency and informed that the company is having more bandwidth left to accommodate more agricultural connections. The Hon'ble Chairman drew the attention of all the Members present to the GoAP's announcement that 50,000 connections would be released before March, 2020.
- m) **Balance Sheet to be there along with ARR:** Members felt that the figures mentioned in the ARRs should be audited figures and preferably audit reports should be enclosed to the ARR filings. Responding to this, the CMD, APSDPCL said that they would hereafter enclose Annual Audit Reports.
- n) **Mee Vidyut Bill booklet / pamphlet:** Sri D. Narsimha Reddy stated that understanding and deciphering an electricity bill has become a huge task in itself and suggested that the DISCOMs can consider coming out with a detailed booklet / pamphlet explaining as to how the bill can be easily understood.
- o) **Comments on present filings:**

Sri D. Narsimha Reddy suggested that on the applicability of GST across the sector, the Commission should take a view taking more inputs from the stakeholders; that the Financial Principles based on which the ARR is being prepared should be mentioned; that Demand forecast as per a suitably modified CEA format should be mentioned; that category-wise projections only are being given but not the basis on which they are made; and that the manner in which GoAP budget data is presented should be adopted in ARR filings also. He further wondered as to why certain figures like the subsidy given by the Government to the sector, the assistance given under UDAY scheme, non-released allocations, poultry farmer subsidies, savings made through programmes like DELP, the GoAP investments in the sector that are finding a place in CAG reports etc., are not found in the ARR. He suggested that the figures mentioned in the ARR should be pre-audited at least through an internal audit process before they are filed. He

further suggested that the Commission should uphold its independence. He wondered why the Commission is holding the SAC meeting in a DISCOM's office. He further felt that the employee costs per hour and their Pay and Allowances also should be reflected in the ARR. He wondered why there was no information on UDAY at all. There were about 32 actions that the DISCOMs have to take under UDAY. Nothing about them was mentioned in the ARRs. Finally, he suggested that alternative scenarios on bridging the projected gap in the ARR should be presented. **Sri Hari Kishore Kumar Reddy:** suggested that free power facility for private Lift Irrigation Schemes which are now being given free power up to a ceiling of 1500 units per HP per month shall have to be extended up to a ceiling of 1540 units in view of the extension of free power to agriculturists from 7 hours to 9 hours; that EPDCL is not implementing Regulation 4/2013 inasmuch as cost of DTR is still being collected from Domestic and Agricultural consumers against the APERC directives; that feed mixing plants, salt industries are being shown unduly in agriculture; that consumers are not able to have their category changes consequent to changes in the Tariff Order; that base production from thermal stations should be encouraged; that lot of money is unnecessarily being spent on HVDS schemes; that separating agricultural feeders is an unnecessary exercise; that the field level AE should report whenever an accident occurs within his jurisdiction whether or not compensation is payable; that CEIG certification for LT consumers should be done away with and only for HT consumers such certification can be prescribed; that despite the cure (i.e., paying compensation of about Rs. 5 lakhs than undertaking preventive measures) being relatively cheap in accident cases, this is still not being done in a majority of cases hiding behind consumer's fault or DISCOM being not at fault; and that power purchase cost should be brought down to 50% according to international standards.

Sri Ch. Divakar Babu: He wondered whether the basic purpose of ARR i.e., promoting or fostering informal choice of consumers is being served; method and data based on which ARR is prepared is authentic or not; that the gist of Standards that a DISCOM should maintain in respect of common areas of service should be available in the bills

themselves; and that a small booklet in vernacular language detailing as to where the consumer can approach to have his grievances redressed can be got published and made available to consumers.

Sri M. Gopal Reddy said that laying HT lines through the landed property without consent is causing lot of heart burn; that compensation also is not being paid properly; that Collectors are remaining unresponsive; that if farmers have to approach APTEL for redressal of their grievance, it is costly as a fee of Rs. 25,000/- has to be paid; and that in a particular case in Alur, Kurnool a substation was erected by orally promising that shift operator jobs would be given to the people whose lands are taken but was not done.

Sri N. Sreekumar said that power purchase cost has become high despite the quantity of power not going up commensurately; that saying RE cannot be forecast with certainty at this time and stage in the light of a decent Regulation existing on the subject is not correct; that if the prescribed penalties for variations are low, they can be revisited by the Commission by undertaking an amendment to the Regulation; that tightening the implementation of the Regulation will give confidence to the RE generators on one side and the DISCOMs on the other that the forecasts can be met; that PPAs that are already entered into with the various RE generators cannot be reneged on and one possible step that the DISCOMs can take is to consider disposing of the surplus power through markets like IEX, the DEEP Portal or bilateral contracts; that in fact there are some GENCO stations whose power is much costlier than the RE sources; that there is no choice except integrating RE for economic and ecological reasons; that the purpose of true-up is getting lost as the claims are delayed, not detailed and have accumulated to such humungous figures that allowing them appears a remote possibility; that fuel surcharge adjustments which were being done earlier periodically should better be brought back so that DISCOMs are able to realize more revenue under regulatory supervision; that it is essential that marginal tariff hikes are there every year as the alternative scenarios are proving to be more costly and impractical; that decentralized small RE should be encouraged; that instead of losing large consumers like Railways to Open Access, it may be better to give a committed low subsidy to retain them; that the

ARRs should speak about the DISCOMs' performance on QoS front with a detailed periodic analysis over the years; and that EE projects should be studied before and after their implementation and the results of the studies filed along with ARRs.

Sri Chandrasekhar Reddy made a strong plea about some committing to Energy Efficiency projects, despite the fact that the dent being made by them may appear to be insignificant at the present juncture, as a beginning has to be made somewhere. The Hon'ble Chairman said that SEEDCO should do all it can and bring out suitable plan of action to ensure that the G.O Ms No 132 is implemented.

Sri Kandregula Venkataramana made a strong plea to raise the domestic slab from 75 units to 100; and not to subject small time weavers, dairy farmers etc., to commercial tariff.

Agenda item 2: Merger of RESCOs:

Mr. Kandregula Venkata Ramana strongly urged that RESCOs should be merged with DISCOMs. When the Hon'ble Chairman asked whether any member has a different opinion, no member has opposed the view of Mr. Venkata Ramana. The Hon'ble Chairman referred to the report of Special Commissioner and Registrar of Cooperative Societies recommending their merger with the DISCOMs.

The meeting concluded with thanks to the Chair for enabling a detailed discussion on various issues concerning the ARR & FPT filings. Members felt that the SAC meetings can be held at least once in a quarter. Responding to this, the Hon'ble Chairman said that the frequency should be dictated by the issues that need to be considered and said he will see whether a meeting once in four months can be convened. The Hon'ble Chairman also thanked all the Members present for making it convenient to attend the meeting. While all the Members present thanked both the Members who are going to lay down their office shortly in the month of February, Dr. P. Raghu also thanked all the Members for the cooperation extended by them.


22/11/2020
Commission Secretary (i/c)

ANNEXURE – 18

File No.ENE01-APER/1/2020-MLO-ENE

GOVERNMENT OF ANDHRA PRADESH
ENERGY(POWER.I) DEPARTMENT

Letter No. ENE01-APER/1/2020 , dated: 08-02-2020.

From

The Secretary to Government
Energy Department
AP Secretariat
Amaravati

To

The Commission Secretary
Andhra Pradesh Electricity Regulatory Commission
Singareni Bhavan
Redhills,
Hyderabad.

Sir,

Sub:-APERC – ARR and Tariff proposals for Retail Supply for the
Financial Year 2020-21 – Subsidy proposals – Reg.

Ref:-From the Commission Secretary, APERC, Hyderabad, letter
No.APERC/Secy/Tariff/F.T-83/D.No.61/2020, dated:27-01-2020.

I am directed to inform that Government undertakes to provide the
agriculture subsidy and the domestic tariff subsidy proposed by the Commission.

Yours faithfully,

File No.ENE01-APER/1/2020-MLO-ENE

Secretary to Government

Signature valid

Digitally signed by
NAGULAPALLI SRINANT
Date: 2020.02.08 15:17:02 IST
Reason: Approved

AC R O N Y M S

ABR	Average Billing Rate
ACoS	Average Cost of Service
AgI	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
CEA	Central electricity Authority
CC	Current Consumption
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Station
CL	Connected Load/Contracted Load
CMD	Contracted Maximum Demand/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
CUF	Capacity Utilisation Factor
D-D	Discom to Discom
DISCOMs	Distribution Companies, Distribution Licensees, Licensees
DPS	Delayed Payment Surcharge

DSM	Demand Side Management
DTR	Distribution Transformer
EVs	Electric Vehicles
EHT	Extra High Tension
ERC	Expected Revenue from Charges
FAPCCI	Federation of Andhra Pradesh Chamber of Commerce and Industry
FCRTS	Full Cost Recovery Tariff Schedule
FPT	Filing for Proposed Tariff
FRP	Financial Restructuring
Plan FY	Financial Year
GoAP	Government of Andhra Pradesh
GoI	Government of India
GTCS	General Terms & Conditions of Supply
GGPP	Godavari Gas Power Plant
HDPE	High-Density Polyethylene
HNPCL	Hinduja National Power Corporation Limited
HP	Horse Power
HT/HV	High Tension/High Voltage
HVDS	High Voltage Distribution System
IEGC	Indian Electricity Grid Code
IT	Information Technology
ISTS	Inter State Transmission
IPPs	Independent Power Producers
ISI	Indian Standards Institute / Indian Statistical Institute
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
LKPL	LANCO Kondapalli Power Limited
LILO	Loop in Loop out
MoP	Ministry of Power
MoU	Memorandum of Understanding
MUs	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
MOD	Merit Order Dispatch
NCE	Non-Conventional Energy
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
PPC	Power Purchase Cost
PV	Photo Voltaic
PWS	Protected Water Supply
R&C	Restriction and Control
REC	Renewable Energy Certificate/Rural Electrification Corporation
RESCOs	Rural Electricity Cooperative Societies
RMD	Recorded Maximum Demand
RoR	Rate of Return
RTS	Reference Tariff Schedule
RTC	Round the Clock
RTPP	Royalaseema Thermal Power Project
REMC	Renewable Energy Management Centres
RPPO	Renewable Power Purchase Obligations
RSM	Retail Supply Margin
SAC	State Advisory Committee
SCADA	Supervisory Control and Data Acquisition System
SLDC	State Load Despatch Centre
SECI	Solar Energy Corporation of India Limited
SRLDC	Southern Regional Load Dispatch Center
SPGL	Spectrum Power Generation Limited
SDSTPS	Sri Damodaram Sanjeevaiah Thermal Power Station
SoP	Standards of Performance
T&D	Transmission and Distribution
ULDC	Unified Load Despatch Centre
UMPP	Ultra Mega Power Project
VTPS	Vijayawada Thermal Power Station.
WSPL	Waneep Solar Pvt. Ltd.

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