

VARIABLE RATES IN RS/KWH

In respect of GGPP, the variable rates have been computed by considering the GCVs, SHR, Auxiliary Consumption and latest actual gas price which is effective from 1st October,2020 (\$1.79/MMBTU) for H2 of FY 2020-21 & Full Year of FY 2021-22.

In respect of M/s Spectrum & Lanco from whom power is being procured on Short Term basis the weighted average Rate for FY 2020-21 works out to Rs 2.58/Unit and Rs 2.52/Unit respectively.

Station	AP Discoms		APEPDCL	
	FY 2020-21	FY 2021-22	FY 2020-21	FY 2021-22
GGPP	2.32	2.1	2.32	2.1
SPGL	2.58	0	2.6	0.0
LANCO	2.52	0	2.5	0.0

3.4.7 NEW GAS BASED IPPs

Fixed and variable costs have not been projected for these plants as there is no generation from these plants.

3.4.8 MARKET

The rates for energy procured from Market sources is taken as per the discovered prices while taking up the actual procurement. For the purpose estimation of power purchase cost in this ARR exercise a weighted average single part price of Rs 3.70 per Unit is considered, basing on a 10% increase to the weighted average price realized for the First Half of the Current Financial Year.

ENERGY REQUIREMENT

The DISCOM wise Energy Requirement are tabulated below.

DISCOM	FY 2020-21	FY 2021-22
APEPDCL	22581.25	25016.18
APCPDCL	15088.41	15956.64
APSPDCL	24850.05	27395.59
Total	62519.72	68368.42

The energy requirement of APDISCOMs has been arrived at by grossing up the sales with appropriate transmission and distribution losses. The external losses (PGCIL losses) on the power purchased from CGS (excluding NTPC Simhadri-I), KSK Mahanadi and Sembcorp Energy India Limited have also been factored for arriving at the above energy requirement.

3.5 PP COST SUMMARY

Based on the availability, requirement and costs for each source, the summary of power purchase cost for APDISCOMs for the Current Financial Year FY 2020-21 is projected as follows:

AS PER REVISED ESTIMATES FOR APDISCOMs

Ownership/Source	Dispatch	Fixed Costs (Rs Crs)	Variable Cost (Rs Crs)	Total Cost (Rs/Crs)	PU FC	PU VC	PU TC
AP Genco-thermal	12237.62	2763.29	4233.50	6996.78	2.26	3.46	5.72
CGS	14186.07	2035.50	4066.29	6101.79	1.43	2.87	4.30
Thermal-IPPs	3547.15	395.37	1034.53	1429.90	1.11	2.92	4.03
Joint Sector- includes APPDCL	9923.50	1786.56	3051.64	4838.20	1.80	3.08	4.88
Hydel	3162.78	601.41	0.00	601.41	1.90	0.00	1.90
NCE/RE	13575.96	0.00	6167.74	6167.74	0.00	4.54	4.54
Market/Short Term	5,886.63	-	1,851.27	1851.27	0.00	3.14	3.14
Total	62519.72	7582.12	20404.97	27987.08	1.21	3.26	4.48

PP COST SUMMARY OF APEPDCL FOR FY 20-21

Ownership/ Source	Dispatch	Fixed Costs (Rs Crs)	Variable Cost (Rs Crs)	Total Cost (Rs/Crs)	PU FC	PU VC	PU TC
AP Genco-thermal	4432.47	1000.86	1533.37	2534.24	2.26	3.46	5.72
CGS	5138.19	737.26	1472.81	2210.07	1.43	2.87	4.30
Thermal-IPPs	1284.78	143.20	374.71	517.91	1.11	2.92	4.03
Joint Sector- includes APPDCL	3594.29	647.09	1105.30	1752.39	1.80	3.08	4.88
Hydel	1145.56	217.83	0.00	217.83	1.90	0.00	1.90
NCE/RE	132.23	0.00	65.48	65.48	0.00	4.95	4.95
Market/Short term	2132.14	0.00	670.53	670.53	0.00	3.14	3.14
D-D	4721.59	0.00	2113.63	2113.63	0.00	4.48	4.48
Total	22581.25	2746.24	7335.83	10082.08	1.22	3.25	4.46

Based on the availability, requirement and costs for each source, the summary of power purchase cost for Andhra Pradesh for FY 2021-22 is projected as follows:

PROJECTIONS FOR FY 2021-22 OF AP DISCOMS

Ownership/Source	Dispatch	Fixed Costs (Rs Crs)	Variable Cost (Rs Crs)	Total Cost (Rs/Crs)	PU FC	PU VC	PU TC
AP Genco-thermal	19246.47	2738.07	6674.01	9412.08	1.42	3.47	4.89
CGS	17241.17	2012.74	5254.34	7267.08	1.17	3.05	4.21
Thermal-IPPs	1687.48	286.14	412.25	698.40	1.70	2.44	4.14
Joint Sector-includes APPDCL	12160.31	1809.02	3712.33	5521.35	1.49	3.05	4.54
Hydel	3212.67	614.26	0.00	614.26	1.91	0.00	1.91
NCE/RE	14427.51	0.00	6547.86	6547.86	0.00	4.54	4.54
Market/Short term	392.81	-	145.18	145.18	0.00	3.70	3.70
Total	68368.42	7460.22	22745.96	30206.19	1.09	3.33	4.42

PP COST SUMMARY OF APEPDCL FOR FY 21-22

Ownership/Source	Dispatch	Fixed Costs (Rs Crs)	Variable Cost (Rs Crs)	Total Cost (Rs/Crs)	PU FC	PU VC	PU TC
AP Genco-thermal	6971.07	991.73	2417.33	3409.05	1.42	3.47	4.89
CGS	6244.75	729.01	1903.12	2632.14	1.17	3.05	4.21
Thermal-IPPs	611.21	103.64	149.32	252.96	1.70	2.44	4.14
Joint Sector-includes APPDCL	4404.46	655.23	1344.61	1999.83	1.49	3.05	4.54
Hydel	1163.63	222.48	0.00	222.48	1.91	0.00	1.91
NCE/RE	180.03	0.00	89.32	89.32	0.00	4.96	4.96
Market/Short term	142.27	0.00	52.58	52.58	0.00	3.70	3.70
D-D	5298.76	0.00	2341.07	2341.07	0.00	4.42	4.42
Total	25016.18	2702.09	8297.35	10999.44	1.08	3.32	4.40

4 LOSSES

4.1 DISCOM losses

The DISCOM losses for H2 FY 2020-21 is taken as per APERC approved values. For FY 2021-22 the losses have been projected as in the Distribution MYT for the third year of the 4th control period is considered. The below table provides the voltage level losses for projecting the energy requirement for H2 FY 2020-21 and FY 2021-22.

APEPDCL - DISCOM Losses		
Voltage Level	H2 FY 2020-21	FY 2021-22
33 KV	2.78%	2.77%
11 KV	3.15%	3.10%
LT	3.99%	3.97%

4.2 Transmission Losses

The Transmission losses including external PGCIL losses for H2 FY 2020-21 and FY 2021-22 have been taken as approved by the Hon'ble Commission for 4th Control period (FY 2019-20 to FY 2023-24) and added 0.4% towards external CTU losses.

Transmission Losses FY 2020-21 H2	Transmission Losses FY 2021-22
3.48%	3.46%

5 Expenditure Projections for APEPDCL

5.1 Power Purchase and Procurement Cost

The Energy dispatch from various generating stations to APEPDCL is estimated to be 22581.25 MU for FY 2020-21 and 25016.18 MU for 2021-22 and the cost of this energy would be Rs.10082.08 Cr. and Rs. 10999.44 Crs. respectively.

Particulars	Units	FY 2020-21	FY 2021-22
Power Purchase from Generators	(in MUs)	22581.25	25016.18
Power Purchase cost from Generators	(in Rs. Crores)	10082.08	10999.44

5.2 AP Transco Transmission Charges

The actual transmission charges for FY 2019-20 is Rs.542.77 Crs. The licensee has considered the Transmission cost for FY 2020-21 as approved in the Transmission Tariff Order for the third year of fourth control period-FY 2019-20 to FY 2023-24.

FY 2020-21

(A) Long Term and Firm Contracts							
Name of Transmission service provider	Load not eligible for Open Access			Load Eligible for Open Access			Total Cost (Rs. Crs)
	MW	Tariff (Rs./kW/month)	Cost (Rs. Crs.)	MW	Tariff (Rs./kW/month)	Cost (Rs. Crs.)	
APTRANSCO	3539.26	138.88	589.84	774.18	138.88	129.02	718.86

FY 2021-22

The licensee has considered the Transmission cost for FY 2021-22 as approved in the Transmission Tariff Order for the third year of fourth control period-FY 2019-20 to FY 2023-24.

(A) Long Term and Firm Contracts							
Name of Transmission service provider	Load not eligible for Open Access			Load Eligible for Open Access			Total Cost (Rs. Crs)
	MW	Tariff (Rs./kW/month)	Cost (Rs. Crs.)	MW	Tariff (Rs./kW/month)	Cost (Rs. Crs.)	
APTRANSCO	3800.13	154.54	704.73	851.60	154.54	157.93	862.65

5.3 SLDC Charges

The actual SLDC charges for 2019-20 are Rs.18.50Cr. and for FYs: 2020-21 and 2021-22 it is estimated at Rs.11.30 Crs. and Rs.12.62Cr. based on the approved SLDC MYT Order for FYs: 2019-20 to 2023-24.

FY 2020-21

2020-21	Annual Fee			Charges			Total Cost (Rs. Crs.)
	MW	Tariff (Rs./MW/year)	Cost (Rs. Crs.)	MW	Tariff (Rs./MW/month)	Cost (Rs. Crs.)	
Load not eligible for Open Access	3327.82	2838.01	0.94	3327.82	2058.18	8.22	9.16
Load Eligible for Open Access	774.18		0.22	774.18		1.91	2.13
Total	4102.00		1.16	4102.00		10.13	11.30

FY 2021-22

2021-22	Annual Fee			Charges			Total Cost (Rs. Crs.)
	MW	Tariff (Rs./MW/year)	Cost (Rs. Crs.)	MW	Tariff (Rs./MW/month)	Cost (Rs. Crs.)	
Load not eligible for Open Access	3526.40	3792.02	1.34	3526.40	2086.32	8.83	10.17
Load Eligible for Open Access	851.60		0.32	851.60		2.13	2.45
Total	4378.00		1.66	4378.00		10.96	12.62

5.4 PGCIL

The PoC rate approved by CERC for the latest quarter i.e. second quarter of FY 2020-21 is Rs.5.44 lakhs/MW/Month which includes PoC slab rate, Reliability support charges rate and HVDC charges rate.

Based on this value, the PoC charges for FY 2020-21 H2 and FY 2021-22 have been computed in the following manner.

PoC charges for FY 2020-21 H2

$$= (5.44) \times (\text{number of months in the second half of FY 2020-21}) \times (\text{interstate capacity in MW APDISCOMs are expected to avail})/100$$

$$= (5.44) \times (6) \times (2625.34)/100 = \text{Rs.856.7Cr.}$$

Total PoC charges for FY 2021-22

$$= (5.44) \times (\text{number of months in the FY 2021-22}) \times (\text{interstate capacity in MW APDISCOMs are expected to avail})/100$$

$$= (5.44) \times (12) \times (2271.65)/100 = \text{Rs.1482.93 Cr.}$$

The above charges include the PoC charges reimbursable to KSK Mahanadi and Sembcorp Energy plants.

Based on the above computations, the PGCIL Charges of APEPDCL are considered for projections in FY 2021-22 as given below:

Particulars(Rs. Crs)	FY 2020-21	FY 2021-22
PGCIL Expenses	518.20	537.01

5.5 ULDC Charges

For FY 2020-21 and FY 21-22, ULDC charges are as shown in the table below:

Particulars(Rs. Crs)	FY 2020-21	FY 2021-22
ULDC Charges	3.21	5.37

5.6 Distribution Costs

The licensee has adopted the Distribution cost for FY 2020-21& 2021-22 as approved in the Wheeling Tariff Order (Distribution Business Tariff Order)for 4th MYT control period (FY 2019-20 to 2023-24).

The distribution costs approved for FY 2020-21 is Rs.2091 Crs. and for FY: 2021-22 is Rs. 2549 Crs.

Financial Year	Cost for Load not eligible for Open Access (Rs. Crs)	Cost for Load Eligible for Open Access	Total Cost (Rs. Crs.)
2020-21	1997.58	93.42	2091.00
2021-22	2432.38	116.62	2549.00

The details of the Distribution cost considered in present retail supply filing for the current year FY 2020-21 and for the ensuing year 2021-22 are as below:

Sl. No.	Particulars	FY 2020-21	FY 2021-22
		(Rs. Crs)	(Rs. Crs)
1	Operation and Maintainance charges	1726	1954
2	Depreciation	308	386
3	Taxes on income	26	37
4	Other Expenditure	16	16
5	Spl. Appropriations	0	0
6	Total Expenditure	2076	2393
7	Expenses capitalized	127	113
8	Net Expenditure(6)-(7)	1949	2280
9	Return on Capital Employed	334	468
10	Gross ARR(8)+(9)	2283	2748
11	Wheeling Revenue from Third Party/Open Access/NTI	192	199
12	Net ARR (10)-11)	2091	2549

5.7 Addl. Interest on Pension Bonds – Payable to APGENCO:

- i. The pension liability of the following was vested in the APGENCO in terms of the statutory First Transfer Scheme dated 30.01.2000 notified by the State Government under the AP Electricity Reform Act, 1998
 - a) The pensioners / family pensioners of the erstwhile APSEB as on 31.01.1999 and
 - b) The employees of the erstwhile APSEB as on 31.01.1999 allocated to APGENCO, APTRANSCO and the DISCOMs as per transfer scheme.
- ii. An exclusive master trust was established for handling the pension liability as stated above. The obligation entrusted to Master Trust is to pay 100% of the pension commitments of pensioners as on 31.01.1999 and 74% of the pension commitment of employees as on 31.01.1999 and working in unbundled utilities who retired after 01.02.1999. The balance 26% is being funded by the separate P&G Trusts of the APGENCO, APTRANSCO and the DISCOMs.
- iii. In this regard, the APGENCO had issued 2 bonds (i.e. Bond I for Rs 1320.43 Cr. towards i.(a) and Bond II for Rs 3066.52 Cr. towards i.(b)) in favour of the Master Trust. Hence APGENCO is required to make the following annual payments as per the bond schedule –

- (a) An amount towards repayment of the principal as per the bonds schedule.
- (b) Interest on the outstanding liability as per the bonds schedule.
- (c) At the end of each financial year, the amount by which the annual cash payment (both principal and interest) to be made by APGENCO to the Board of Trustees as set out above falls short of the actuarial value of the Terminal benefits liability as may be determined from time to time, shall be paid by APGENCO to the board of Trustees.
- iv. The additional interest has been recognized and allowed in the tariff of APGENCO by the Hon'ble APERC in the PPA order dated 24.03.2003, tariff order for FY 2006-09 dated 04.07.2013 and also in its order dated 26.03.2016 in OP 3 of 2016 for the 3rd control period (FY2014-15 to FY2018-2019).
- v. Subsequent to the AP Reorganization Act,2014, by a transfer scheme notified by the State Government in G.O.Ms.29 dated 31.05.2014 under the provisions of the A.P. Electricity Reform Act, 1998, 58.32% of the outstanding pension liability (i.e. bonds issued to the Master Trust) as on 31.03.2014 was vested in the APGENCO.
- vi. The Commission provisionally approved the amounts based on actuals provided by APGENCO Master trust towards additional interest on pension bonds for the fourth control period i.e. FY2019-20 to FY2023-24 and approved addl. Interest on pension bonds for the F.Y 2021-22 is Rs.345.65 Crs to EPDCL in PP Ratio 36.22% (Total approved Rs.954.30 Crs).
- vii. As of now additional interest component is treated as fixed cost for the AP Genco stations, the per unit fixed cost is skewed and misrepresented, when compared to any other plants in Central sector or IPPs. In view of this APEPDCL has addressed to Hon'ble Commission in 5/2020 seeking permission to pay the additional commitment of interest on pension bonds, directly to Master trust in AP Genco without disturbing the structure of Master Trust/Company wise trust set up as part of Tripartite Agreement for the benefit s of the pensions/Employees.
- viii. As per the Minutes of APPCC Meeting Dt.04.09.2020, it was decided to treat the expenditure as part of DISCOMs employee cost for 2019-20 & 2020-21 instead of Power Purchase cost. Hence Additional Interest on Pension Bonds for the F.Y 2021-22 is separated from Power purchase cost and claimed as separate line item in ARR of FY2021-22.
- ix. Additional Interest on Pension Bonds for the F.Y 2021-22 is claimed for Rs.405.10Crs and for 2nd half of FY2020-21 is Rs204.57Crs based on actual expenditure of the F.Y 2019-20 (Rs.339.11 Crs) and F.Y 2020-21 1st half year expenditure of Rs.184.95 Crs.

5.8 Interest on Consumer Security Deposits

The details showing the interest on Consumer Security Deposit is as below.

Revenue Requirement Item (Rs. Crs.)					
		Base Year	FY 2019-20	FY 2020-21	FY 2021-22
A	Opening Balance	1472.58	1682.56	1902.74	2169.16
B	Additions during the Year	281.35	287.95	348.41	383.25
C	Deductions during the Year	71.37	67.77	81.99	90.19
D	Closing Balance	1682.56	1902.74	2169.16	2462.22
E	Average Balance ((A+D)/2)	1577.57	1792.65	2035.95	2315.69
F	Interest @ % p.a. #	6.24	5.32	6.25	6.25
G	Interest Cost (E * F)	98.49	95.39	127.25	144.73

Interest on consumer security deposits are 5.32% in FY 2019-20. Based on the past trend, the licensee has considered the 6.25% rate of interest for estimation of interest on consumer security deposits for FY 2020-21 and 2021-22.

As per APERC Regulation 6 of 2004 stipulates "*Security Deposit amount shall be two months charges in case of monthly billing and 3 months charges for bi-monthly billing*".

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"The interest accruing to the credit of the consumer shall be adjusted annually against the amounts outstanding from the consumer to the Licensee as on 1st May of every year and the amounts becoming due from the consumer to the Licensee immediately thereafter."

5.9 Supply Margin

Supply margin has been projected as per norms approved by Hon'ble Commission based on RRB approved by Hon'ble APERC in Distribution Business Tariff order for 4th Control Period. The Licensees has computed the supply margin at @ of 2% on equity portion of approved Regulated Rate Base (RRB). As per the APERC approved, Regulated Rate Base in the Distribution MYT order dated 15-04-2019 is Rs.4173.07Cr. Accordingly, the licensee has arrived the supply margin at Rs.20.87 Cr.(i.e. 4173.07 x 25% x 2%).

Particulars(in Rs. Crs)	FY 2020-21	FY 2021-22
Supply Margin Amount	14.87	20.87

5.10 Other Costs

The licensee has projected the following expenditure under other costs:

- 1) Amount payable towards AGL solar Pump sets
- 2) Amount payable towards Energy Efficient Pump sets
- 3) Difference of Transmission cost as per G.O Ms No. 13, dt:06.04.2020
- 4) Expenses for Safety Measures
- 5) Grants to APSEEDCO for promotion of Energy Conservation and Efficiency(Proposal from Principal Secretary, Energy, Govt. of AP in letter dated 29.12.2018) as per para No.162, Pg.No.123 of TO No.2020-21.

The details of Other Costs projected by Licensee for FY 2020-21&FY 2021-22 are as follows:

Sl. No	Particulars	Amount (In Rs crores)			
		Base Year	FY 2019-20	FY 2020-21	FY 2021-22
1	Payment AGL Solar pumpsets	92.81	73.18	22.06	22.00
2	Energy Efficient Pump Sets	53.13	23.08	31.90	31.30
3	DELP	29.34	1.58	11.79	0.00
4	Difference of Transmission cost as per G.O Ms No. 13, dt.06.04.2020	0.00	0.00	0.00	38.74
5	Expenses for Safety Measures	0.00	6.72	0.00	10.00
6	Grants to APSEEDCO for promotion of Energy Conservation and Efficiency(Proposal from Principal Secretary,Energy,Govt.of AP in letter dated 29.12.2018) as per para No.162,Pg.No.123 of TO No.2020-21	0.00	0.00	1.00	1.00
7	Other expenses	158.12	534.63	0.00	0.00
	Total	333.40	639.19	66.75	103.04

5.11 Aggregate Revenue Requirement (ARR) for Retail Supply Business

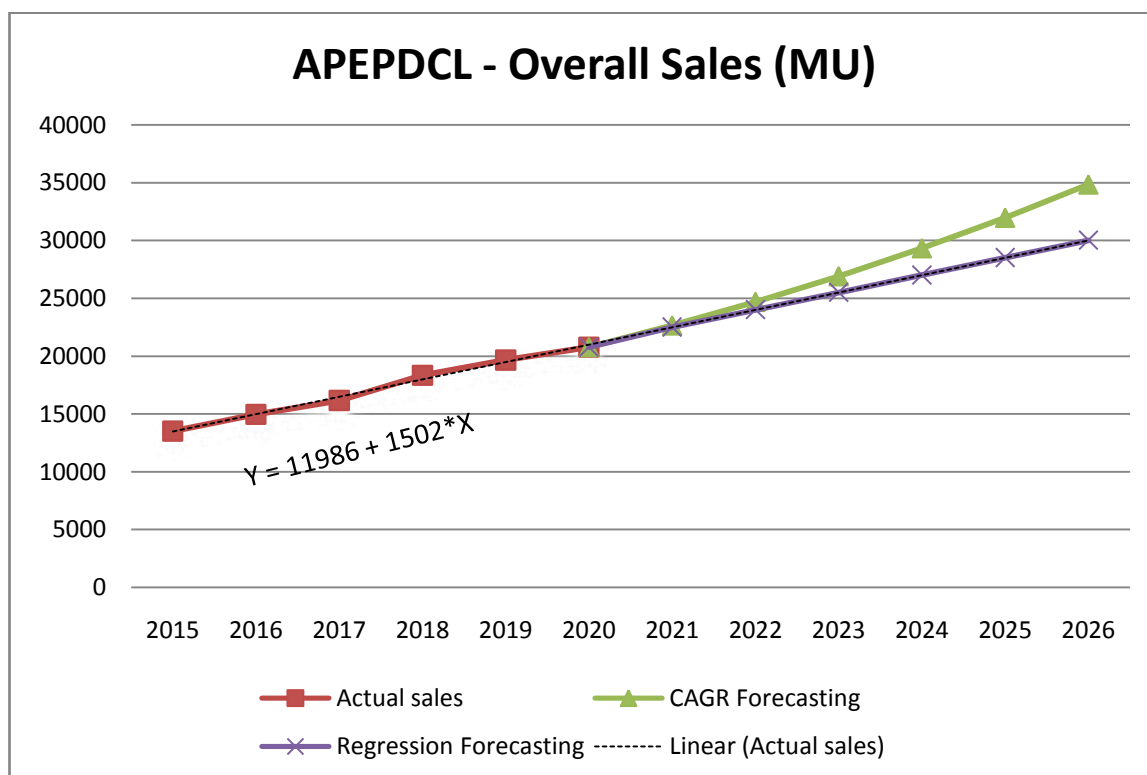
The Aggregate revenue requirement for FY 2020-21(Revised Estimates) and Projections for FY 2021-22 are as shown below:

Sl. No.	EXPENDITURE ITEM	2020-21	2021-22
1	Power Purchase / Procurement Cost	10082.08	10999.44
2	Transmission Cost	718.86	862.65
3	PGCIL & ULDC Expenses	521.42	542.38
4	SLDC Cost	11.30	12.62
5	Distribution Cost	2091.00	2549.00
6	Additional Interest on pension bonds (As approved in APGENCO MYT order)	389.52	405.11
7	Interest on Consumer Security Deposits	127.25	144.73
8	Supply Margin in Retail Supply Business	14.87	20.87
9	Other Costs, if any	66.75	103.04
	Aggregate Revenue Requirement	14023.04	15639.84

6 Revenue Projections

6.1 Sales Forecast (Linear Regression Method)

1. For several years APDISCOMs have been adopting Compounded Annual Growth Rate (CAGR) with adjustments, based approach for Sales forecasting for the purpose of Annual ARR filings for Retail Supply Business (RSB). The CAGR forecast takes into account the first year and the last year of the historical period in the formula and all the observed values in the intermediate years are left un processed. In the past Annual Sales for the ensuing year are forecasted first based on CAGR approach and monthly split of the sales was carried out based on same proportion/ratio of the sales in previous year.
2. The CAGR based approach is observed to forecast the sales in an exponential manner rather than on a linear line. Annual ARR exercise requires sales forecast for a shorter period of one to one & half years unlike for a Multi-Year Tariff Exercise which requires for 5 years. But in linear trend approach which is dependent on regression analysis devising a linear equation, all the values of the observed time period in the history are mathematically involved in the analysis and amply considered.
3. Comparison of CAGR method vis-à-vis liner trend approach based on regression analysis in respect of overall sales of the DISCOM is shown in the following diagram



4. As can be observed from the above graph the gap between CAGR approach and Liner Trend approach is diverging towards forecast horizon and the CAGR approach which underlays exponential trending would result in overstating of sales at a smaller degree.
5. In view of the above, APDISCOMs are attempting to deviate from CAGR approach to Monthly Trend based on Time Series Data approach for forecasting of sales for Annual ARR exercise, in the present filings.

6. **The Monthly Linear Trend** method is a time series model of sales forecasting which assumes that the underlying factors, which drive the demand for electricity, are expected to follow the same monthly /annual trend as in the past and hence the forecast for electricity is also based on the assumption that the past trend in consumption of electricity will continue in the future. The strength of this method, when used with balanced judgment, lies in its ability to reflect recent changes and therefore is probably best suited for a short-term projection as used for the ARR/ Tariff filing.
7. However, the trend-based approach has to be adjusted for judgment on the characteristics of the specific consumer groups/ categories. For example, while this method may provide a better estimate of consumption by the domestic and commercial, Industrial & Institutional categories of consumers, it may not be very suitable for the Agriculture / Lift Irrigation category because of the high dependence of demand on the end-use.
8. In so far as LT Agriculture Consumption is concerned, the GoAP has taken a major decision to implement Direct Beneficiary Transfer (DBT) scheme in Agriculture power supply which is expected to make a paradigm shift in the way the Agriculture Consumption is estimated and the subsidy gets administered. As enshrined in the Agriculture DBT scheme, all the LT Agriculture consumers who are not installed with meters for measurement of their consumption, will be provided with proper meter for measurement of consumption which is a pre-requisite for facilitating DBT. The agriculture consumption which was hitherto being estimated based on metering at sampled Distribution Transformers (DTRs) will now be measured with Meters in similar lines of other consumers. Thus for the ensuing financial year FY 2021-22, even though Agriculture consumption is projected based on sampled DTR meter data, at this juncture, the actual measured consumption will be made available once the meters are installed and made operational.
9. **Impact of Covid-19 pandemic on the Sales Forecast of the DISCOMs:**
 - a) The unprecedented Covid_19 pandemic is tremendously impacting the economy in general and the power sector in particular.
 - b) The Energy Consumption in the first month of outbreak (April 2020) of the pandemic has almost fallen down by 24.57% and is yet to recover to its pre-Covid stage. The pace of recovery is very sluggish.
 - c) The industrial & commercial consumptions has plunged down to almost 38.63% and 19.35 % respectively in the month of April -20 and are yet to recover from the fall. There is a moderate recovery in Industrial Consumption owing to unlock guidelines where as Commercial Consumption is still low at 15.60% down.
 - d) There is not much impact on Domestic & Agriculture consumption, where as all other categories are impacted in one way or the other.
 - e) By the end of first half of the current FY 2020-21, the overall consumption for the month of September 2020 is lesser by 12.65% than the expected level. The economic recovery from the impact is snail paced and is expected to reach to pre Covid-19 level by March- 2022, as per various studies.

10. Factors affecting the Sales Forecast:

In the sales Forecast the factors affecting the actual consumption are numerous and often beyond the control of the licensee due to the following factors.

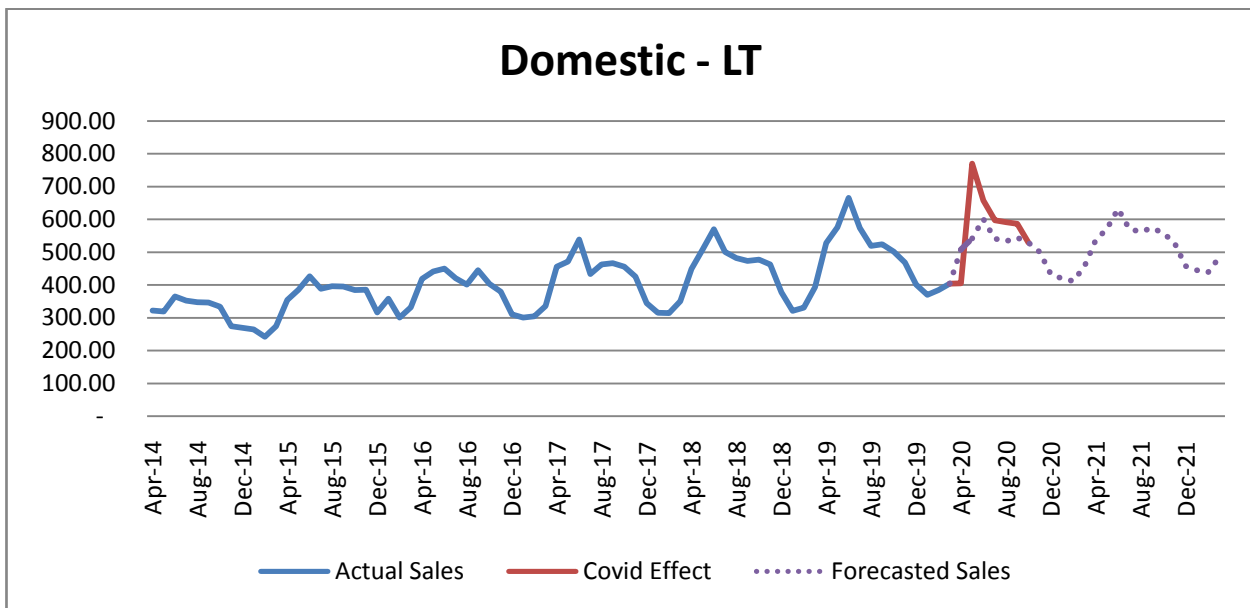
- Economic climate
- Weather conditions,
- Government Policy, and;
- Force majeure events like natural disasters etc.

Therefore, an accurate point-estimate of the consumption (sales by licensee) is not possible. Under such a situation, the monthly trend approach is to look into various factors and estimate the interrelationships to arrive at a reasonably accurate forecast within a range and use a single point-estimate within the range for the limited purpose of estimating future costs / revenues.

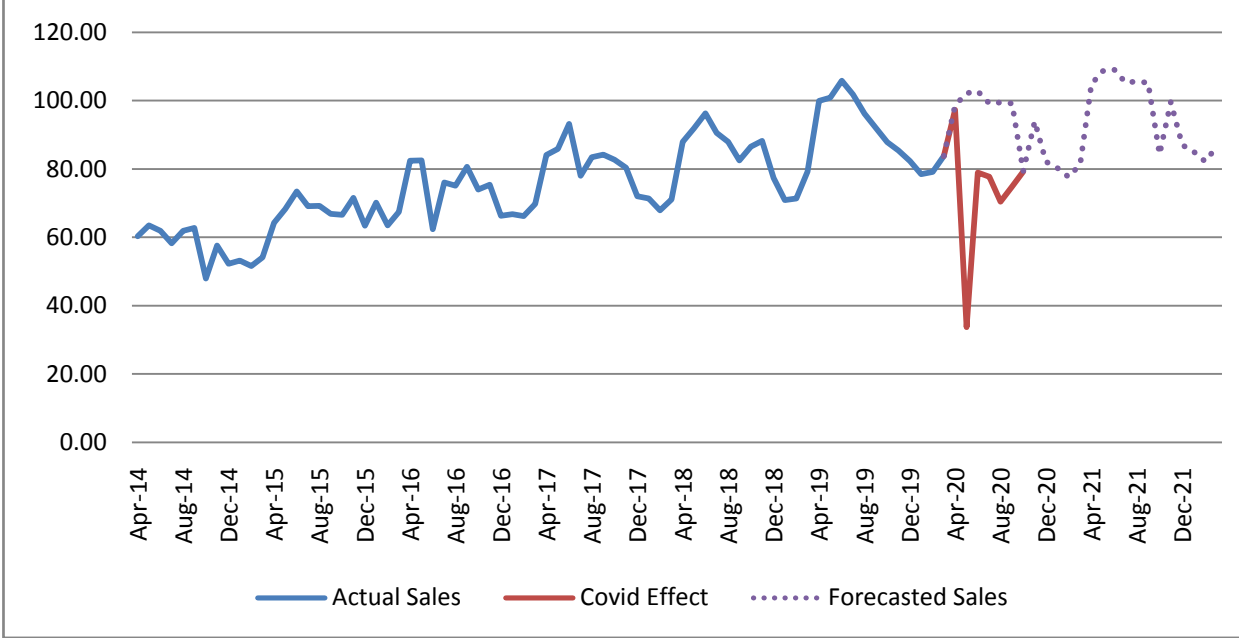
Sales forecast is carried out based on actuals for the period from FY 2014-15 to FY 2019-20. The forecast is carried out based on time series data from April'20 to Mar'22. Actuals for the period April'20 to Sep'20 are captured for studying Covid-19 impact only. If we add Apr'20 to Sep'20 monthly data in the historical data set for the forecast exercise we will get negative trends which are not reflective of the actual trends.

Category wise Actual sales and Projected sales are shown in the following diagrams

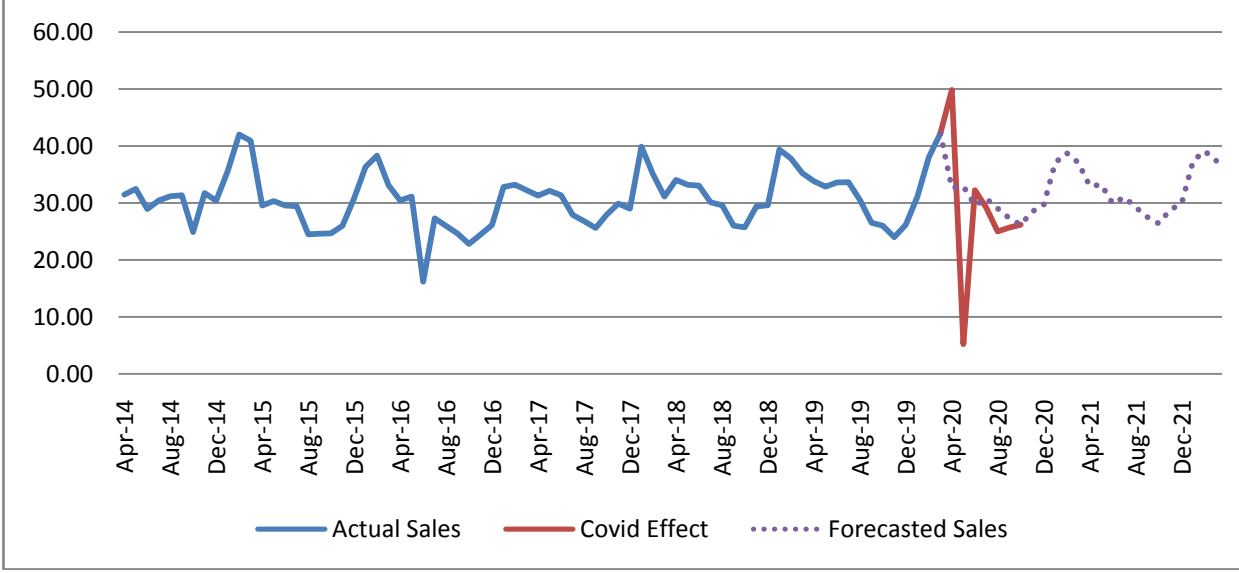
Blue line Indicates the Historical Sales from April 2014 to March 2019, Red line indicates the sales during COVID-19 and the dotted lines indicating the sales forecasted in Linear Regression method



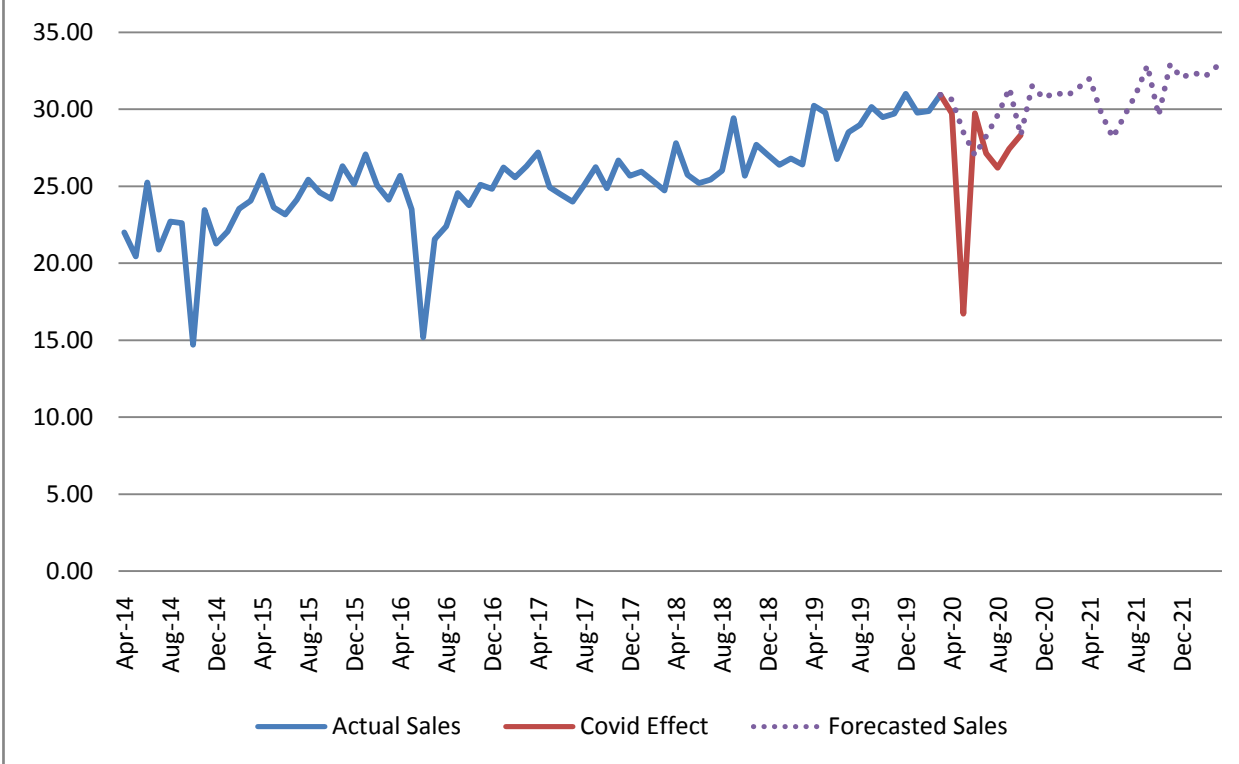
Commercial - LT



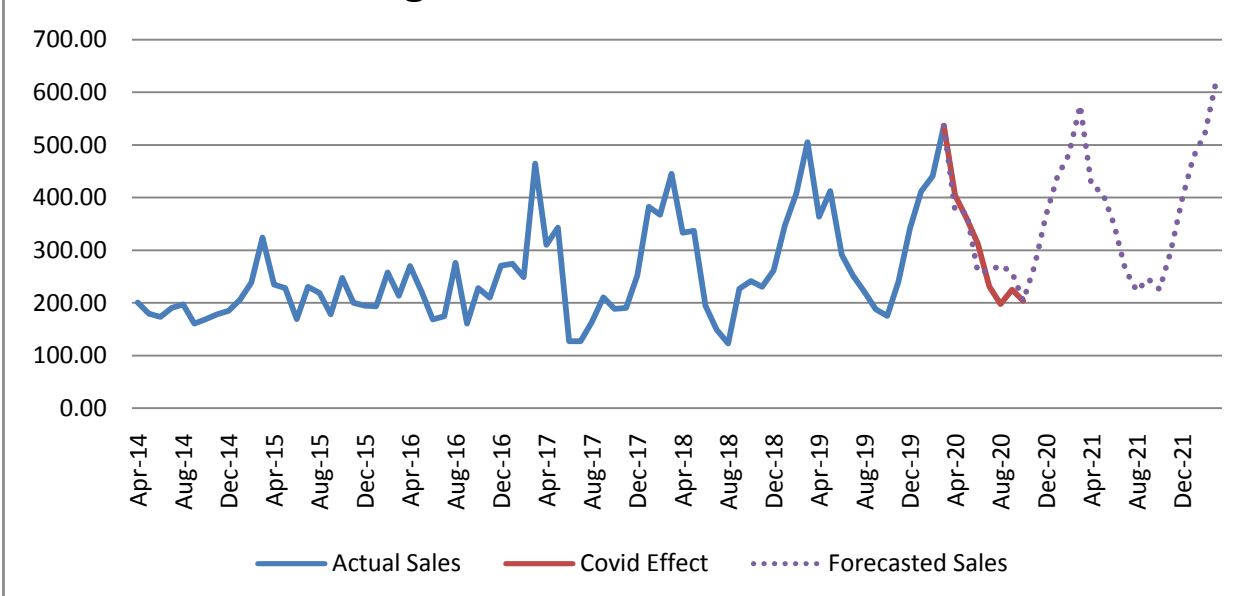
Industrial - LT



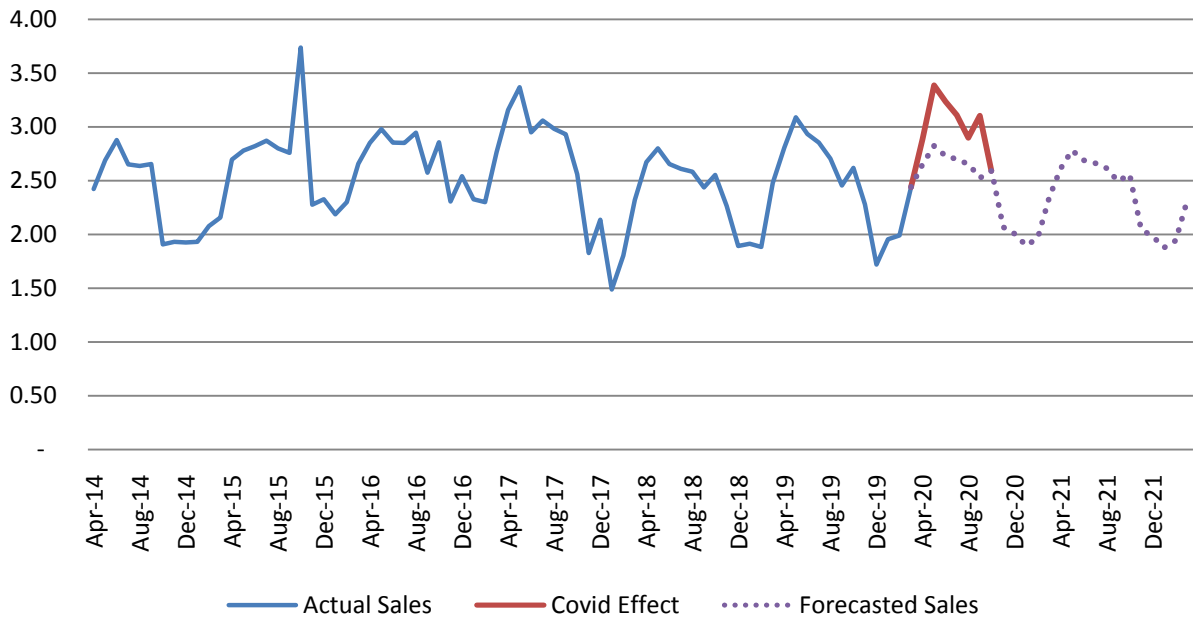
Institutional - LT



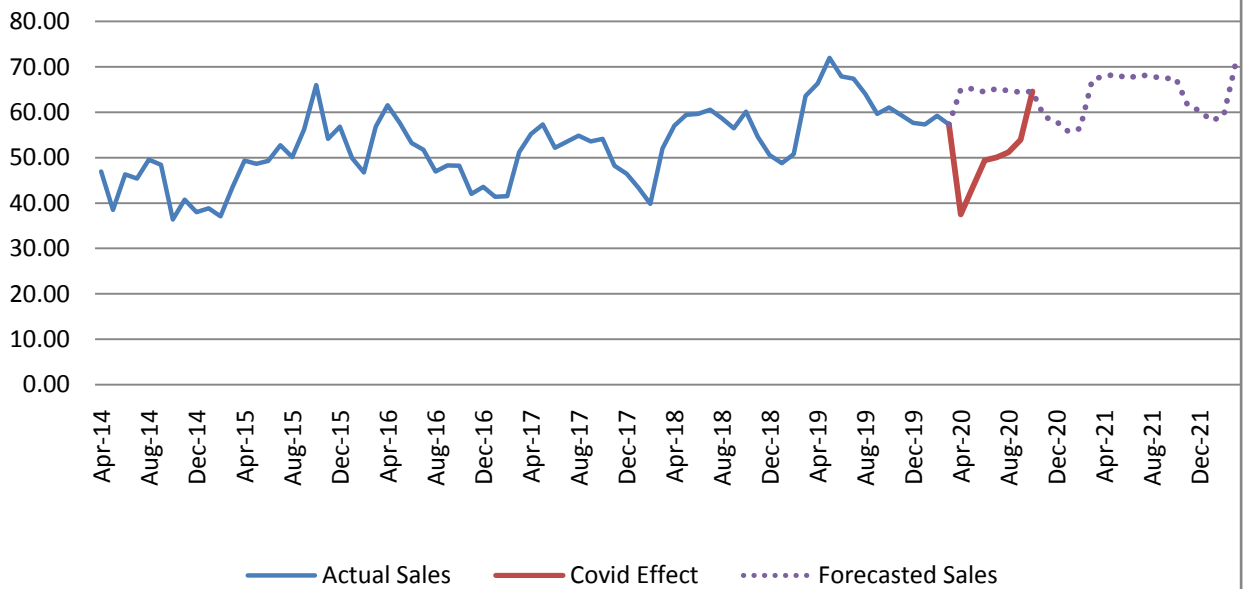
Agriculture & Related - LT



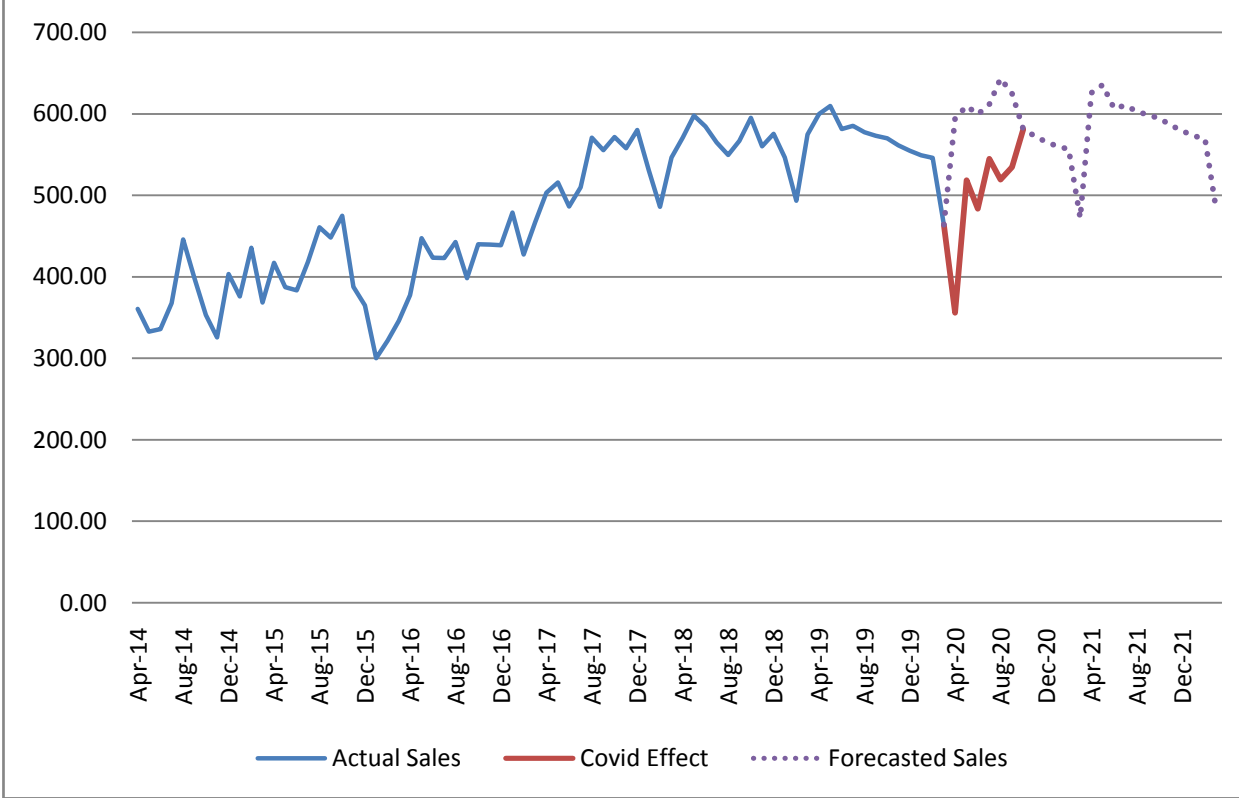
Township Gated Community & Villas Sales- HT



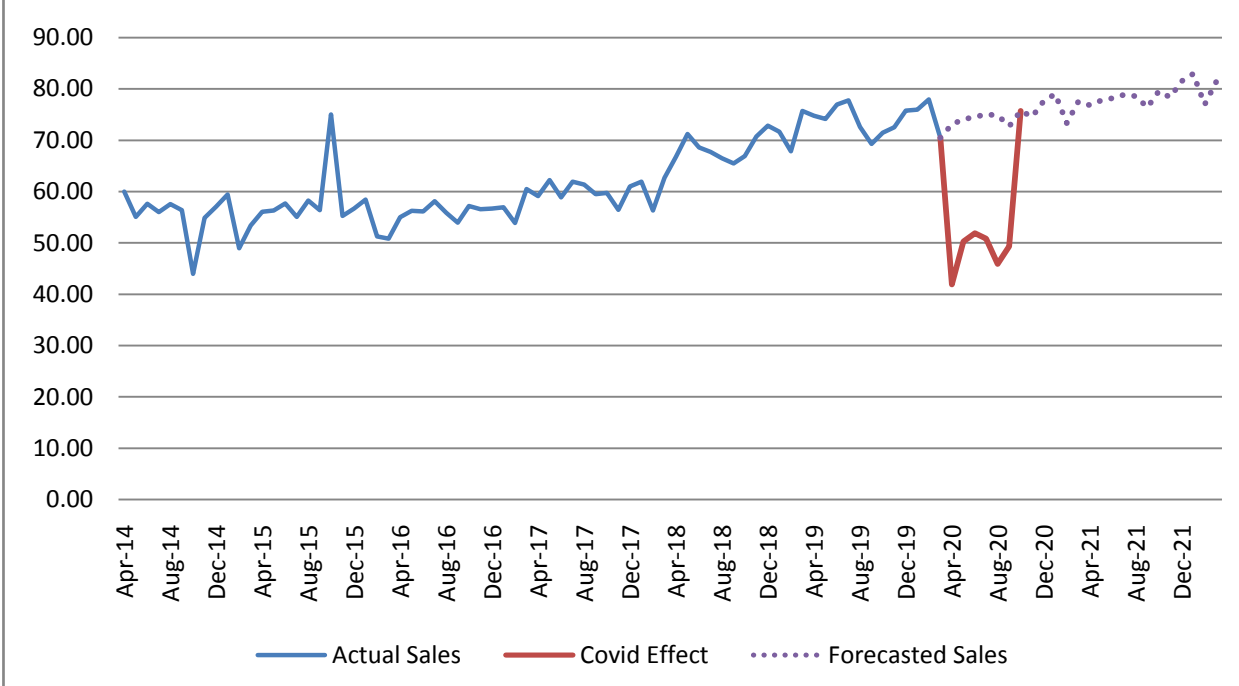
Commercial & Others - HT



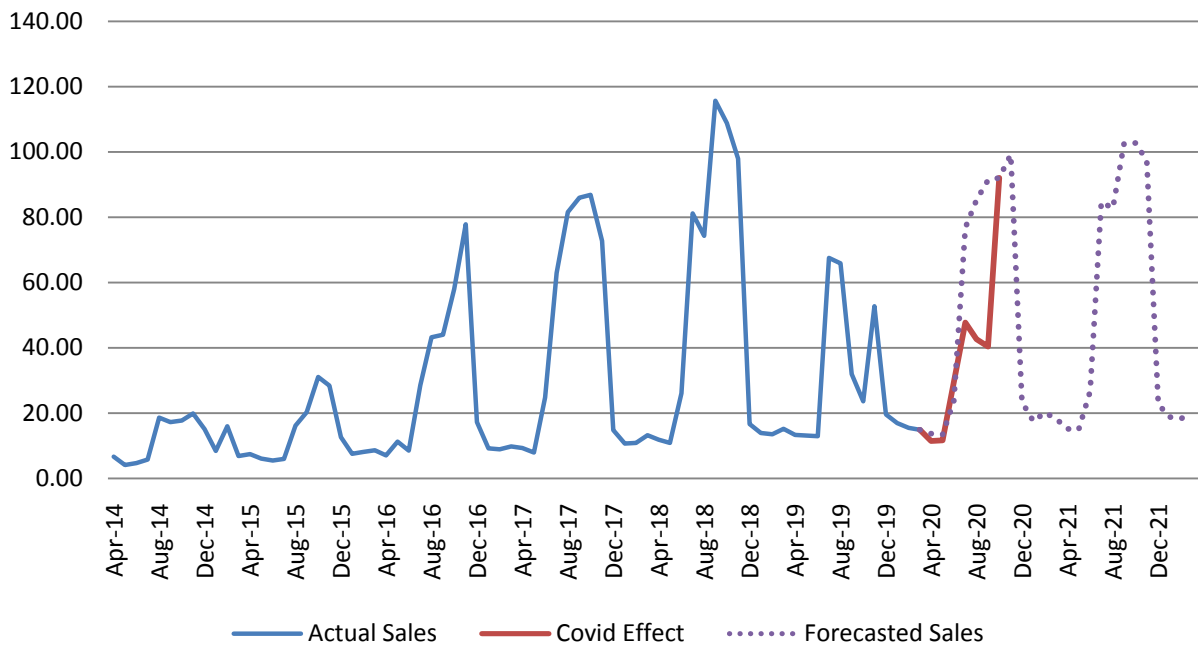
Industrial Sales - HT



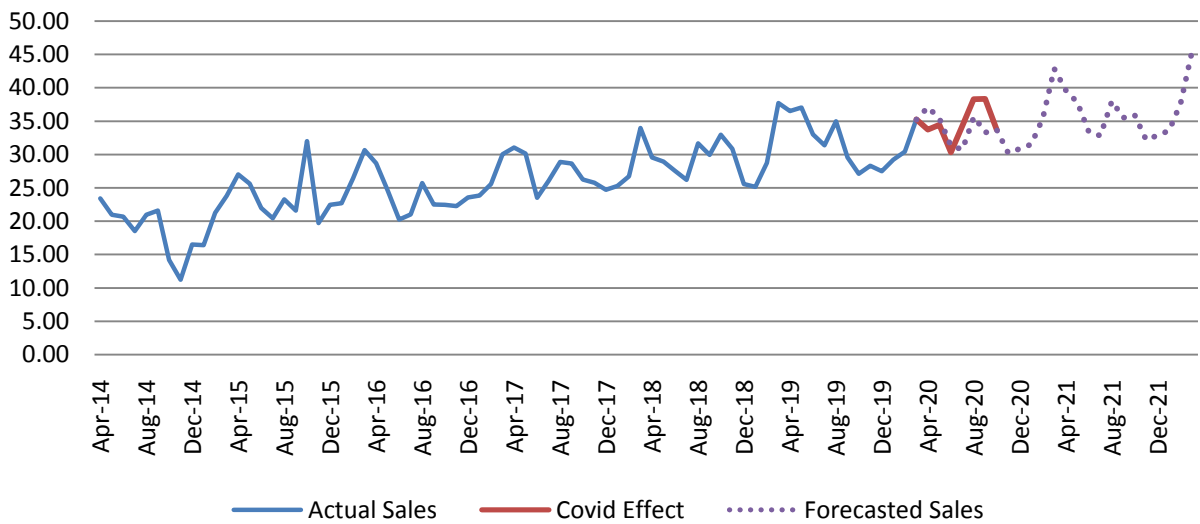
Institutional - HT



Agriculture & Related - HT



RESCO - HT



6.1.1 Sales Estimation for the FY 2020-21

- The licensee has adopted a modified approach by considering the Linear regression method to deviate from CAGR approach to Monthly Trend based on Time Series Data approach for forecasting of sales for Annual ARR exercise, in the present filings including H2 for FY2020-21.
- The Agricultural consumption in FY 2019-20 is at total growth rate of 11.14% with 9 hours supply as per G.O .Ms.No.17 dt 15.02.2019. In FY 2020-21 the no of hours of supply is being continued @ 9 hours/day during day time under NAVARATNALU programme of A.P. Govt. Total growth rate of (-) 0.38% is arrived for FY2020-21 with 1.26% increase in H2 is expected for FY2020-21.
- In respect of category V(E): Lift Irrigation Schemes-HT, the growth rate in FY2019-20 is (-) 54.20% . The estimated growth rate for FY 2020-21 is (-) 10.21% . The negative Growth rate is due to the following major LI Schemes have not been operative during the period.
- Pattiseema LI Scheme: The scheme is not fully operated as expected due to flood water availability in river Krishna.
- Purushottapatnam LI Scheme: The scheme was not operated at all due to pending litigation in Green Tribunal.

The growth rates thus adopted category wise are shown in following table:

Sales Growth from FY 2019-20 to 2020-21 & 2020-21 to 2021-22					
Category	Total Growth	Growth from 19-20 to 20-21		Total Growth	Total Growth
	2019-20/ 2018-19	H1 20-21/ H119-20 Actuals	H2 20-21 (Revised Estimate) / H219-20 Actuals	2020-21/ 2019-20	2021-22/ 2020-21
LT Supply	11.54%	0.35%	7.67%	3.84%	5.62%
I(A): Domestic- LT	10.70%	6.56%	8.77%	7.50%	0.07%
II: Commercial and others- LT	8.21%	-27.45%	-0.53%	-15.22%	25.37%
III: Industry- LT	-1.24%	-12.44%	5.21%	-3.69%	5.04%
IV: Institutional- LT	11.13%	-10.05%	1.72%	-4.06%	10.03%
V: Agriculture & Related- LT	15.37%	0.24%	9.00%	5.09%	9.47%
Agriculture	11.14%	-2.54%	1.26%	-0.38%	5.00%
Aquaculture and animal husbandry	23.22%	4.48%	22.97%	14.24%	16.00%
HT Supply	-1.00%	-17.72%	2.92%	-7.87%	16.79%
I (B): Townships, Colonies, Gated Communities and Villas - HT	3.86%	10.46%	-1.06%	5.44%	2.49%
II: Commercial and others- HT	10.15%	-28.10%	2.53%	-13.71%	21.57%
III: Industry- HT	-0.11%	-16.15%	1.94%	-7.48%	12.64%
Industry other than Energy Intensive Industries	-1.55%	-13.24%	0.50%	-6.62%	8.73%
Energy Intensive Industries	1.99%	-20.21%	4.00%	-8.69%	18.28%
IV: Institutional- HT	6.94%	-34.87%	3.06%	-15.93%	26.62%
Institutional excl.Railway Traction- HT	2.52%	0.98%	15.33%	8.15%	17.06%
Railway Traction- HT	7.67%	-40.42%	1.16%	-19.67%	28.62%
V :Agriculture & Related - HT	-40.67%	-10.52%	10.88%	-1.72%	77.73%
Lift Irrigation- HT	-54.20%	-17.60%	3.60%	-10.21%	128.01%
Agriculture excluding lift irrigation- HT	12.32%	4.57%	18.79%	11.85%	13.24%
RESCOs	7.18%	3.36%	15.09%	8.84%	5.15%
Total	5.64%	-7.62%	5.57%	-1.33%	10.22%

SALES ESTIMATES FY 2020-21

Category	Actual sales 19-20 (MU)			Estimated sales 20-21 (MU)		
	H119-20	H219-20	Total	H1 Actuals	H2 Estimated	Total
LT Supply	6073.17	5537.28	11610.44	6094.23	5962.11	12056.34
I(A): Domestic- LT	3383.89	2528.21	5912.11	3605.91	2749.84	6355.75
II: Commercial and others- LT	596.96	497.03	1093.99	433.12	494.39	927.50
III: Industry- LT	190.81	187.35	378.16	167.08	197.12	364.20
IV: Institutional- LT	174.46	180.81	355.28	156.94	183.91	340.85
V: Agriculture & Related- LT	1727.03	2143.87	3870.90	1731.19	2336.85	4068.04
Agriculture other than Aquaculture	1043.50	1379.27	2422.77	1017.01	1396.64	2413.65
Aquaculture and animal husbandry	683.53	764.60	1448.13	714.18	940.21	1654.38
HT Supply	4792.21	4374.16	9166.37	3943.05	4501.84	8444.89
I(B) : Townships, Colonies, Gated Communities and Villas - HT	16.85	13.01	29.86	18.61	12.88	31.49
II: Commercial and others- HT	397.19	351.91	749.10	285.60	360.80	646.39
III: Industry- HT	3525.85	3244.58	6770.44	2956.55	3307.55	6264.09
Industry other than Energy Intensive Industries	2053.63	1909.08	3962.71	1781.80	1918.63	3700.43
Energy Intensive Industries	1472.22	1335.50	2807.72	1174.74	1388.92	2563.67
IV: Institutional- HT	445.48	444.08	889.57	290.16	457.68	747.84
Institutional excl.Railway Traction	59.79	59.71	119.49	60.37	68.86	129.23
Railway Traction	385.70	384.37	770.07	229.79	388.82	618.61
V :Agriculture & Related - HT	204.38	142.84	347.22	182.89	158.38	341.27
RESCOs	202.45	177.73	380.18	209.25	204.56	413.80
Total	10865.37	9911.44	20776.81	10037.28	10463.95	20501.23

6.1.2 Sales Projections for the year FY 2021-22

- The licensee has worked out Sales projections for FY2021-22 using linear regression method which is a Monthly Trend Based on Time Series data approach for forecasting of sales as against CAGR approach which is observed to be forecast the sales in an exponential manner rather than on a linear line.

- In respect of category V(E): Lift Irrigation Schemes-HT, Sales for existing Major LI Schemes Operating are only included in the projections on par with FY2018-19actuals without considering any of the upcoming LI Schemes sales, as they are not yet started.

6.1.3 Forecasting Sales: Category- V(A): Agriculture -LT

- In respect of Agriculture about 10,416 new connections are anticipated for release in FY 2021-22 based on the actuals and estimations of 2020-21. This also constitutes to about 5% increase on present works. Thus a growth rate of 5% is adopted for FY 2021-22.

6.1.4 Process of Estimation:

In compliance to the directive of the Hon'ble APERC with regard to estimation of Agriculture consumption in the service area of APEPDCL, the Agriculture consumption in all the 5 circles are being worked out. Meters were fixed on LV side of sampled DTRs feeding exclusively agricultural services in each Mandal. In EPDCL, there are about 2,68,655 number of Agricultural services existing at the end of September'2020.

There are 3856Meters existing at the LV side of the DTRs to gauge the agricultural consumption as shown in the following table

Name of the Circle	No. of Mandals having agricultural services	The Mandals having sampled DTRs as per TF-2.10	DTRs Metered
Srikakulam	38	30	180
Vizianagaram	34	30	307
Visakhapatnam	43	25	299
Rajahmundry	59	36	1290
Eluru	46	29	1780
Total	220	150	3856

The monthly meter readings of all the agricultural DTRs are collected from the five circles and the consumptions are arrived. The consumptions recorded at LV side of the DTRs will be netted off by a pre specified percentage to take care of LT network losses. The instruction of the Commission in qualifying a particular type of LT feeder based on Line Length, Loading pattern to a certain percentage pre specified losses is followed. The specific Agriculture consumption per HP is estimated for all the DTRs existing in that Mandal and the same is extrapolated to all other Agriculture Pump sets spread across the Mandal to arrive at Mandal wise estimated consumption.

The unrestricted sales projected for FY 2021-22 for this category is 2534.34MU. The growth rate for FY 2021-22 over FY 2020-21 is 5%.

The agricultural demand met through Off-Grid Solar Pump sets (around 76.85 MUs) is adjusted to the Agricultural demand for the Licensee.

Particulars	FY 2020-21	FY 2021-22
Agricultural Demand met through Grid Power	2,413.65	2,534.34
Agricultural Demand met through Solar Pumpsets	76.85	76.85
Total Agricultural Demand	2,490.50	2,611.19

The licensee has taken 9 hours of supply to agricultural consumers, in its projections, considering the present power supply situation in the State.

The final abstract is given below:

Category -V(A): Agriculture -LT				
Year	H1 (in MU)	H2 (in MU)	TOTAL(in MU)	APERC Target
				(in MU)
2012-13	747.07	781.34	1528.41	1714.02
2013-14	855.61	896.83	1752.45	1714.02
2014-15	989.41	1177.51	2166.92	1714.02
2015-16	1062.27	1087.22	2149.49	1936.33
2016-17	1024.60	1374.81	2399.41	2281.16
2017-18	872.12	1316.17	2188.29	2090.27
2018-19	834.04	1345.81	2179.85	2090.27
2019-20	1043.50	1379.27	2422.77	2090.27
2020-21 (*Estimations)	1017.01	1396.64	2413.65	2399.41
2021-22 (Projections)	1067.87	1466.47	2534.34	

*For the year 2020-21, actual sales are provided for FY 20-21 H1 and estimated sales are provided for FY 2020-21H2.

The table below is a summary of the sales forecast for FY 2020-21 and FY 2021-22. The trend of sales of FY 2014-15 to 2019-20 is also shown below:

Sales(MU)

Category	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 Revised Estimate	2021-22 Projections
LT Category	7448.21	8453.61	9061.63	9764.04	10409.61	11610.44	12056.34	12733.86
I(A): Domestic- LT	3708.53	4419.66	4607.18	5030.73	5340.89	5912.11	6355.75	6360.04
II: Commercial and others- LT	685.32	813.65	877.51	954.25	1011.03	1093.99	927.50	1162.84
III: Industry- LT	391.04	356.93	327.14	367.93	382.89	378.16	364.20	382.56
IV: Institutional- LT	263.07	298.57	284.77	305.24	319.69	355.28	340.85	375.04
V: Agriculture & Related- LT	2400.25	2564.80	2965.03	3105.88	3355.10	3870.90	4068.04	4453.38
Agriculture	2169.22	2151.58	2399.61	2188.35	2179.84	2422.77	2413.65	2534.34
Other than agriculture	231.03	413.22	565.42	917.53	1175.26	1448.13	1654.38	1919.04
HT Category at 11 kv	1689.38	1973.03	1976.61	2178.25	2321.07	2409.58	2367.06	2568.07
I (B): Townships, Colonies, Gated Communities and Villas - HT	20.00	22.43	21.57	18.95	17.71	18.65	19.41	19.60
II COMMERCIAL & OTHERS -HT	294.26	369.38	372.52	397.30	433.07	481.17	403.38	518.45
(A) : (i) Commercial Major HT	231.85	288.06	347.16	370.70	324.96	364.97	322.30	406.88
Time of Day tariff (TOD)- Peak - HT	59.95	81.32	21.70	22.46	102.44	108.85	75.92	102.53
(iv) Function halls / Auditoria -HT	2.46	0.00	3.66	4.15	5.64	7.32	5.12	8.99
(B) : Startup power - HT	0.00	0.00	0.00	0.00	0.03	0.03	0.04	0.04
(C) : Electric Vehicles / Charging Stations - HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(D) : Green Power -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
III INDUSTRY -HT	1065.87	1194.33	1188.41	1318.47	1308.98	1316.18	1299.87	1329.34
(A) : Industry (General)# HT	701.99	782.72	781.26	863.41	441.87	454.80	454.20	459.35
Time of Day tariff (TOD)- Peak - HT	359.18	402.89	402.40	444.58	440.91	438.01	431.74	442.39
Time of Day tariff (TOD) - Off Peak -HT	0.00	0.00	0.00	0.00	414.96	412.11	402.46	416.23
Industrial Colonies -HT	1.44	1.53	2.17	2.76	2.83	2.37	2.14	2.39
(B) : Seasonal Industries (off- season) -HT	3.26	7.18	2.59	7.72	8.41	8.89	9.35	8.98
(C) : Energy Intensive Industries -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IV INSTITUTIONAL -HT	31.90	34.58	41.96	46.47	115.65	118.55	128.06	149.82
(A) : Utilities (Street Lighting, NTR Sujala Pathakam, CPWS and PWS) -HT	10.91	13.85	17.96	20.50	88.75	91.69	103.72	120.31
(B) : General Purpose -HT	18.58	20.72	21.03	23.00	23.46	23.68	21.71	25.38
(C) : Religious Places -HT	2.41	0.00	2.96	2.96	3.43	3.17	2.63	4.13
V AGRICULTURE AND RELATED -HT	48.15	58.67	61.86	66.28	90.93	94.85	102.54	115.76
(B) : Aquaculture and Animal Husbandry -HT	6.62	9.15	9.94	12.27	15.53	17.07	19.64	20.68
(C) : Poultry & Aquaculture-HT	22.69	27.77	32.78	42.63	53.86	57.86	63.62	74.70
(i) Poultry Hatcheries & Poultry Feed mixing plants	5.14	6.70	5.84	6.85	12.54	9.12	10.19	12.68
(ii) Aqua Hatcheries & Aqua Feed mixing plants - HT	17.55	21.07	26.94	35.78	41.32	48.74	53.43	62.02
(E) : Government / Private Lift Irrigation Schemes -HT	18.84	21.76	19.14	11.39	21.53	19.91	19.27	20.39
RESCO	229.20	293.65	290.29	330.77	354.73	380.18	413.80	435.10

HT Category at 33 kv	1235.71	1518.58	1514.06	1793.44	1951.67	1891.88	1807.04	1965.73
I (B):Townships, Colonies, Gated Communities and Villas - HT	7.87	9.79	10.59	11.64	11.05	11.21	12.08	12.67
II COMMERCIAL & OTHERS -HT	140.23	143.99	128.03	136.73	180.21	194.10	179.75	201.94
(A) : ii) Commercial Major HT	117.54	118.41	123.96	132.27	146.05	154.06	139.60	165.40
Time of Day tariff (TOD)- Peak - HT	22.69	25.59	3.97	4.32	33.44	34.72	28.32	31.17
(iv) Function halls / Auditoria -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(B) : Startup power - HT	0.00	0.00	0.09	0.14	0.72	5.32	11.84	5.37
(C) : Electric Vehicles / Charging Stations - HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(D) : Green Power -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
III INDUSTRY -HT	1005.07	1266.42	1279.50	1534.55	1636.15	1565.36	1498.45	1607.65
(A) : Industry (General)# HT	552.26	728.38	699.00	782.12	380.58	296.77	353.76	302.70
Time of Day tariff (TOD)- Peak -HT	312.31	413.63	397.74	444.53	501.45	534.04	481.64	544.72
Time of Day tariff (TOD) - Off Peak -HT	0.00	0.00	0.00	0.00	503.79	543.19	498.12	554.05
Industrial Colonies -HT	0.78	0.97	0.92	0.98	0.96	1.44	1.03	1.46
(B) : Seasonal Industries (off- season) -HT	3.81	6.31	0.00	9.59	9.11	6.88	8.32	7.02
(C) : Energy Intensive Industries -HT	135.91	117.14	181.84	297.33	240.26	183.04	155.58	197.69
IV INSTITUTIONAL -HT	0.01	0.10	0.64	0.67	0.91	0.94	1.17	1.46
(A) : Utilities(Street Lighting, NTR, Sujala Pathakam, CPWS and PWS) -HT	0.00	0.00	0.00	0.00	0.24	0.11	0.15	0.21
(B) : General Purpose	0.01	0.10	0.64	0.67	0.67	0.83	1.02	1.25
(C) : Religious Places -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
V AGRICULTURE AND RELATED -HT	82.53	98.27	95.31	109.85	123.35	120.26	115.58	142.00
(B) : Aquaculture and Animal Husbandry -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(C) : Poultry & Aquaculture -HT	19.10	25.65	37.26	44.59	49.62	58.74	66.26	73.95
(i) Poultry Hactheries & Poultry Feed mixing plants - HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(ii) Aqua Hatcheries & Aqua Feed mixing plants - HT	19.10	25.65	37.26	44.59	49.62	58.74	66.26	73.95
(E) : Government / Private Lift Irrigation Schemes - HT	63.42	72.62	58.06	65.26	73.73	61.51	49.32	68.05

HT Category at 132 kv	3144.25	3024.22	3621.39	4615.04	4985.97	4864.91	4270.79	5328.80
I (B): Townships, Colonies, Gated Communities and Villas - HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
II COMMERCIAL & OTHERS -HT	75.08	123.39	86.72	76.65	66.79	73.83	63.27	65.43
(A) : (i) Commercial Major -HT	62.26	101.40	66.17	57.28	51.90	56.67	47.06	47.55
Time of Day tariff (TOD)- Peak -HT	12.82	21.99	13.16	13.57	13.10	13.95	11.82	12.26
(iv) Function halls / Auditoria -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(B) : Startup power - HT	0.00	0.00	7.39	5.81	1.79	3.22	4.39	5.61
(C) : Electric Vehicles / Charging Stations - HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(D) : Green Power -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
III INDUSTRY -HT	2431.21	2248.39	2734.45	3559.77	3832.99	3888.89	3465.77	4118.96
(A) : Industry (General)# -HT	777.85	928.56	928.69	850.88	347.48	297.29	247.65	303.24
Time of Day tariff (TOD)- Peak -HT	423.44	512.21	518.72	477.23	451.47	446.67	357.99	450.41
Time of Day tariff (TOD) - Off Peak -HT	0.00	0.00	0.00	0.00	457.70	456.11	387.24	465.23
Industrial Colonies -HT	58.79	69.04	51.62	62.18	63.74	64.14	64.80	65.43
(B) : Seasonal Industries (off- season) -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(C) : Energy Intensive Industries -HT	1171.13	738.59	1235.41	2169.48	2512.61	2624.68	2408.09	2834.66
IV INSTITUTIONAL -HT	628.18	652.44	634.34	673.77	715.24	770.07	618.61	795.66
(A) : Utilities(Street Lighting, NTR Sujala Pathakam, CPWS and PWS) -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(B) : General Purpose -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(C) : Religious Places -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(D) : Railway Traction -HT	628.18	652.44	634.34	673.77	715.24	770.07	618.61	795.66
V AGRICULTURE AND RELATED -HT	9.78	0.00	165.88	304.85	370.95	132.12	123.15	348.76
(B) : Aquaculture and Animal Husbandry -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(C) : Poultry & Aquaculture -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i) Poultry Hatcheries & Poultry Feed mixing plants -HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(ii) Aqua Hatcheries & Aqua Feed mixing plants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(E) : Government / Private Lift Irrigation Schemes - HT	9.78	0.00	165.88	304.85	370.95	132.12	123.15	348.76
Total HT	6069.34	6515.83	7112.06	8586.73	9258.70	9166.37	8444.89	9862.60
Total (LT + HT)	13517.55	14969.44	16173.68	18350.77	19668.32	20776.81	20501.23	22596.46

6.2 Gross Revenue

6.2.1 Revenue from Current Tariffs (Excl. Non-Tariff Income)

The computation of revenue at current tariff for FY 2020-21 and FY 2021-22 for each customer category is carried out as follows:

Revenue from Tariffs =

- Energy Estimate * Approved Energy Charges ... (a)
- + Demand Estimate * Approved Demand Charges (b)
- + Incremental Revenue on account of Monthly Minimum Charges ('MMC') ... (c)
- + Customer Charges(d)
- + Other Charges (e)

Energy charges:

For customer categories having telescopic energy tariffs, the energy estimates have been apportioned into the slabs and then have been multiplied with the corresponding slab tariff. The apportionment has been based on the historical break up of telescopic consumption into the various slabs as captured in the billing information database. The energy charges are calculated in KWH parameter for the category and as per the existing tariff rates of that category

Demand/Fixed Charges:

The estimate of demand has been made in "HP/MVA". Billing demand is estimated as per previous year's Trend and including New loads/additional FY 2021-22.

Monthly Minimum charges (MMC):

In respect of LT categories, it is the difference between the cost of units recorded and monthly minimum charges notified in the Tariff Order.

Customer Charges:

Customer charges are as approved in tariff Order for each of the category of consumers. As per the revised regulatory formats income from customer charges is considered as part of revenue from tariffs.

Other Charges:

These are the charges other than the above charges.

The gross revenue from current tariffs (excl. NTI) estimated for FY 2020-21& FY 2021-22are tabulated below:

Gross Revenue from Current Tariffs (Excluding NTI)		
Category	FY 2020-21 estimated	FY 2021-22 projected
LT Category	4,729.04	4,860.26
I(A): Domestic- LT	2,527.73	2,284.61
II: Commercial and others- LT	977.09	1,210.43
III: Industry- LT	280.53	293.13
IV: Institutional- LT	252.10	273.78
V: Agriculture & Related- LT	691.59	798.32
HT Category	5,884.76	6,736.45
I(B): Townships, Colonies, Gated Communities and Villas - HT	23.47	24.02
II: Commercial and others- HT	730.79	840.64
III: Industry- HT	4,278.18	4,719.24
IV: Institutional- HT	571.75	682.28
V :Agriculture & Related - HT	240.84	428.49
RESCOs	39.73	41.77
Total (LT+HT)	10,613.80	11,596.72

6.2.2 Non-Tariff Income at Current Charges Rs. Crs.

Items of Non - Tariff Income	Base Year	FY 2019-20	FY 2020-21	FY 2021-22
Recoveries from theft of power or malpractices	0.00	0.00	0.00	0.00
Interest Income from Bank Deposits / Investments etc.	6.39	1.99	2.07	2.16
Interest income from staff advances and loans	5.39	5.65	5.89	6.14
Power Purchase Rebates earned	49.88	10.57	11.02	11.48
Interest from long term investments	1.64	0.00	0.00	0.00
Miscellaneous / Other Receipts	66.87	32.11	33.47	34.88
R.C.fees	30.48	29.16	30.39	31.68
L.T.Application fees	3.00	3.18	3.31	3.45
Other income	0.00	0.00	0.00	0.00
Delayed Payment Surcharge	252.43	297.54	310.13	323.24
Total Non tariff income	416.08	380.20	396.28	413.05

6.2.3 Revenue from Theft of Power or Malpractices

The licensee would like to state that it is not appropriate to include this item in the ARR. This is because the forecasts are made assuming that there will be no theft or malpractice. The Discom has been provided a distribution loss target under the MYT and this is the basis of ARR computation. Any instances of theft or malpractice will have a bearing on the loss target achievement and since that is not subject to true-up, revenue from theft and malpractice should not be considered.

6.2.4 Interest income from Bank Deposits / investments

Interest income from bank deposits has been estimated at Rs. 2.07 Crs.,Rs.2.16 Crs. for the Financial Years 2020-21 and 2021-22 respectively. The estimate is made considering a nominal increase of 4.23%.

6.2.5 Power Purchase Rebates earned

It is estimated that Power Purchase Rebates will be earned to the extent of Rs.11.02 Crs. For FY: 2020-21 and Rs.11.48 Crs. for FY: 2021-22.

6.2.6 Miscellaneous /Other Receipts

Miscellaneous receipts for retail supply business comprise mainly of the following receipts-

- a) Capacitor Surcharge
- b) Penalties from suppliers
- c) Supervision Charges
- d) Others

Miscellaneous receipts for FY 2020-21 is estimated as Rs.33.47 Crs based on first half of FY 20-21 and for FY 2021-22 as Rs.34.88 Crores considering a nominal increase of 4.23%.

6.2.7 R.C. fees and Application fees

Considering a nominal increase of 4.23%, the R.C. fees and Application fees are projected at Rs. 33.71 Crs and Rs. 35.13 Crs for FY 2020-21 and FY 2021-22.

6.2.8 Delayed Payment Surcharge (DPS)

Considering a nominal increase of 4.23%, the delayed payment surcharge (DPS) are estimated at Rs.310.13 Crs for FY2020-21 and Rs. 323.24 Crs for FY 2021-22.

6.2.9 Cross Subsidy Surcharge

Revenue expected from Cross Subsidy Surcharge for FY 2021-22 is Rs. 65.55 Crores.

6.2.10 Revenue at Current Tariffs and Charges

The revenue from current tariffs estimated for FY 2021-22 is tabulated as under:

Consumer Categories	Net Revenue including NTI (Rs. Crores)
Low Tension	
I(A): Domestic -LT	2,400.86
Group A : Consumption ≤ 75 Units during the billing month	393.74
0-50	311.62
51-75	82.12
Group B: Consumption > 75 and ≤ 225 units during the billing month	1,167.40
0-50	404.18
51-100	396.73
101-200	349.92
201-225	16.58
Group C: Consumption > 225 units during the billing month	839.72
0-50	58.56
51-100	69.69
101-200	220.27
201-300	230.25
301-400	109.89
401-500	55.11
Above 500 units	95.95
Smart Meters (Optional for above 500 units / month	-
Time of Day tariff (ToD) 10 AM to 12 Noon	-
II(A): Commercial -LT	1,231.69
II (A) (i): Commercial(Minor) -LT	72.85
0-50	72.85
II (A) (ii): Commercial(Major) -LT	1,158.80
0-50	131.28
51-100	107.90
101-300	219.02
301-500	112.50
Above 500	566.53
II (A) (iii) Advertising Hoardings -LT	1.89
II (A) (iv) Function halls / Auditoria -LT	19.67
II (B) : Startup power -LT	0.02
II (C) : Electric Vehicles / Charging Stations -LT	0.01
II (D) : Green Power -LT	-

III: Industry -LT	300.12
III (A):Industries (General) -LT	298.23
III (B): Seasonal Industries (off season) -LT	0.63
III(D):Cottage Industries upto 10HP -LT	1.26
IV: INSTITUTIONAL -LT	280.63
IV (A) : Utilites (Street Lighting, NTR Sujala Pathakam, CPWS and PWS) -LT	199.17
IV (B) : General Purpose -LT	71.73
IV (C) : Religious Places -LT	9.73
(i) Religious Places (CL <= 2kW)	7.35
(ii) Religious Places (CL > 2kW)	2.39
V: Agriculture & Related -LT	879.72
V (A) : Agriculture -LT	59.58
V (A) (i) Corporate farmers with DSM	3.05
Corporate farmers without DSM	1.22
V (A) (ii) Non-Corporate farmers with DSM	54.33
Non-Corporate farmers without DSM	0.61
V (A) (iii) Salt farming units upto 15 HP*	0.05
V (A) (iv) Sugarcane crushing	0.00
V (A) (v) Rural Horticulture Nurseries	0.29
V (A) (vi) Floriculture in Green House	0.02
Agl others	820.14
V (B) : Aquaculture and Animal Husbandry -LT	799.34
V (C) : Poultry & Aquaculture -LT	20.64
V (C)(i) Poultry Hatcheries & Poultry Feed mixing plants	11.96
V (C)(ii) Aqua Hatcheries & Aqua Feed mixing plants	8.68
V (D) : Agro Based Cottage Industries upto 10 HP -LT	0.16
Total LT	5,093.03

High Tension	-
Category at 11 kv -HT	2,044.82
I B : Townships, Colonies, Gated Communities and Villas -HT	15.13
II: COMMERCIAL & OTHERS -HT	582.11
II (A): Commercial (ii) Major -HT	480.08
Time of Day tariff (TOD)- Peak	90.56
(iv): Function halls / Auditoria --HT	11.41
II (B) : Startup power -HT	0.06
II (C) : Electric Vehicles / Charging Stations -HT	-
II (D) : Green Power -HT	-
III INDUSTRY -HT	1,170.51
III (A) : Industry (General) -HT	594.51
Time of Day tariff (TOD)- Peak	331.03
Time of Day tariff (TOD) - Off Peak	228.21
Industrial Colonies	1.72
III (B) : Seasonal Industries (off- season) -HT	15.04
III (C) : Energy Intensive Industries -HT	-
IV INSTITUTIONAL -HT	144.50
IV (A) : Utilites (Street Lighting, NTR Sujala Pathakam, CPWS and PWS) -HT	114.04
IV (B) : General Purpose -HT	28.20
IV (C) : Religious Places -HT	2.27
IV (D) : Railway Traction -HT	-
V AGRICULTURE AND RELATED -HT	82.84
V (B) : Aquaculture and Animal Husbandry -HT	8.79
V (C) : Poultry & Aquaculture -HT	58.90
(i) Poultry Hactheries & Poultry Feed mixing plants	9.87
(ii) Aqua Hatcheries & Aqua Feed mixing plants	49.03
V (E) : Government / Private Lift Irrigation Schemes -HT	15.15
RESCO	49.73

Category at 33 kv	1,516.76
I B : Townships, Colonies, Gated Communities and Villas -HT	9.49
II: COMMERCIAL & OTHERS -HT	205.00
II (A): Commercial (ii) Major -HT	172.91
Time of Day tariff (TOD)- Peak	25.35
(iv): Function halls / Auditoria --HT	-
II (B) : Startup power -HT	6.74
II (C) : Electric Vehicles / Charging Stations -HT	-
II (D) : Green Power -HT	-
III INDUSTRY -HT	1,199.84
III (A) : Industry (General) -HT	419.85
Time of Day tariff (TOD)- Peak	383.09
Time of Day tariff (TOD) - Off Peak	278.84
Industrial Colonies	1.05
III (B) : Seasonal Industries (off- season) -HT	7.61
III (C) : Energy Intensive Industries -HT	109.39
IV INSTITUTIONAL -HT	1.44
IV (A) : Utilites (Street Lighting, NTR Sujala Pathakam, CPWS and PWS) -HT	0.37
IV (B) : General Purpose -HT	1.07
IV (C) : Religious Places -HT	-
IV (D) : Railway Traction -HT	-
V AGRICULTURE AND RELATED -HT	100.99
V (B) : Aquaculture and Animal Husbandry -HT	0.12
V (C) : Poultry & Aquaculture -HT	50.91
(i) Poultry Hactcheries & Poultry Feed mixing plants	-
(ii) Aqua Hatcheries & Aqua Feed mixing plants	50.91
V (E) : Government / Private Lift Irrigation Schemes -HT	49.96

HT Category at 132 kv	3,355.15
I B : Townships, Colonies, Gated Communities and Villas -HT	-
II: COMMERCIAL & OTHERS -HT	67.89
II (A): Commercial (ii) Major -HT	51.23
Time of Day tariff (TOD)- Peak	9.66
(iv): Function halls / Auditoria --HT	-
II (B) : Startup power -HT	7.00
II (C) : Electric Vehicles / Charging Stations -HT	-
II (D) : Green Power -HT	-
III INDUSTRY -HT	2,477.86
III (A) : Industry (General) -HT	466.16
Time of Day tariff (TOD)- Peak	296.50
Time of Day tariff (TOD) - Off Peak	213.21
Industrial Colonies	46.99
III (B) : Seasonal Industries (off- season) -HT	-
III (C) : Energy Intensive Industries -HT	1,455.01
IV INSTITUTIONAL -HT	553.65
IV (A) : Utilites (Street Lighting, NTR Sujala Pathakam, CPWS and PWS) -HT	-
IV (B) : General Purpose -HT	-
IV (C) : Religious Places -HT	-
IV (D) : Railway Traction -HT	553.65
V AGRICULTURE AND RELATED -HT	255.75
V (B) : Aquaculture and Animal Husbandry -HT	-
V (C) : Poultry & Aquaculture -HT	-
(i) Poultry Hactcheries & Poultry Feed mixing plants	-
(ii) Aqua Hatcheries & Aqua Feed mixing plants	-
V (E) : Government / Private Lift Irrigation Schemes -HT	255.75
Total HT	6916.73
Total (LT + HT)	12009.76
Revenue from Cross Subsidy Surcharge	65.55
Total Revenue	12075.31

7 Average Revenue Realized vs Average CoS break up for APEPDCL in FY 2021-22

- Average Revenue Realized (ARR) for FY 2021-22 through proposed tariffs is Rs.5.48 /kWh
- Average Cost of Supply (CoS) for APEPDCL - Rs. 6.92/kWh
- Average CoS break-up (per unit of Sales) for APEPDCL is as follows:

ARR Parameters	FY 20-21 Approved (Rs./Unit)	FY 20-21 Estimated (Rs./Unit)	FY 21-22 Projected (Rs./Unit)
Power Purchase cost	4.63	4.44	4.40
T&D Loss Cost	0.47	0.48	0.47
Network cost	1.45	1.63	1.76
Other Cost	0.09	0.10	0.12
Cost of Service	6.61	6.84	6.92

The estimated revenue gap for the licensee for FY 2021-22 is as follows:

Sl. No.	Particulars	FY 2021-22
A	Total Revenue at Current Tariffs(Rs. Crs.)	12,075.31
B	Aggregate Revenue Requirement(Rs. Crs.)	15,639.84
C=A-B	Revenue(Deficit)/Surplus at Current Tariffs(Rs. Crs.)	(3,564.53)
D	Revenue impact through proposed tariff (Rs. Crs.)	306.18
C+D	Total Revenue Deficit (Rs. Crs.)	(3,258.35)

8 Energy Conservation measures taken up by APEPDCL

8.1 Energy Efficiency Initiatives

- APEPDCL comprises 5 districts namely Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari with approximately 62.5 lakhs consumers having an average demand of 2800MW per day.

8.2 Energy Conservation Initiatives taken by APEPDCL

a. Capacity building of DISCOMs:

- “Capacity Building of DISCOMs” is a program launched by Bureau of Energy Efficiency under DSM scheme for providing Man Power consultancy support for the development and implementation of DSM action plan during 2017-2020.
- This scheme is on ‘Strengthening of State Designated Agencies (SDAs), Discoms on the efficient use of Energy and its Conservation.
- A tripartite MoU was signed among Bureau of Energy Efficiency (BEE), State Designated Agency (SDA), APSECM and APEPDCL on “Capacity Building of DISCOMs” programme on 31.08.18.
- BEE has appointed Confederation of Indian Industry (CII) as Project Management Consultant (PMC) for the capacity building programme in APEPDCL. In this context, CII has organized a 5 day training programme to the circle level officers on DSM measures for training of master trainers.
- A 3 day Circle Level Training programme was conducted in Eluru and Rajamahendravaram circles on Demand Side Management and Energy Efficiency under Capacity Building of Discom.

b. Energy Conservation week:

- As part of Energy Conservation week APEPDCL is organizing the following activities every year from 14th December to 20th December to create awareness on Energy Conservation, Energy Efficiency and Renewable Energy Sources i.e. Solar etc.,
- Rallies are being conducted for creating awareness among general public.
- Painting Competitions are being conducted for School going children in Sub Junior, Junior & Senior Categories on the Topic Energy Conservation & Solar Energy.
- Technical quiz is being conducted for school going children to create awareness on Energy Resources and Energy Conservation.
- Workshops are being conducted for creating awareness on Energy Conservation for general public and Engineering College Students.
- Workshops are being conducted for creating awareness on Energy Conservation for farmers.

8.3 Solar Roof Top Project

- APEPDCL has taken up many initiative steps to promote Solar Rooftop (SRT). So far 2177 nos services with a capacity of 52,873KWp Solar Rooftop is synchronized to the Grid.

8.4 IT Initiatives

APEPDCL is exploring various modes to utilise technological developments for improving operational efficiency and customer care. Some of the highlights of the areas in which the basic work is completed and Go-Live or expected to Go-Live by the end of this financial year are as follows:

1) Revamping of APEPDCL website:

The new website is developed internally by the IT-Team of APEPDCL with new features using the latest technologies. The new website is hosted at APEPDCL Data Centre in Visakhapatnam.

Benefits:

- 1) The new website is re-designed and is more informative for the consumers
- 2) The customers can avail all the services available in Meeseva like Online payment of bills, Online application for new services and customer services etc.
- 3) Chatbot facility is also made available in the new website.

2) Providing APEPDCL Services through Grama Sachivalayam and Ward Sachivalayam:

As per the instructions of the Govt. of A.P., APEPDCL is providing all its services to its customers through the GSWS portal <https://gramawardsachivalayam.ap.gov.in/GSWS/Home>. The following services are being rendered from the portal:

- 1) New services
- 2) Load Changes
- 3) Category Changes
- 4) Name Changes
- 5) Billing-related complaints
- 6) Meter-related complaints
- 7) Other services viz Pole shifting, Line shifting, DTR Shifting, 24 hours supply etc

Benefits:

- 1) Since all these services are available at the grama sachivalayams and ward sachivalayams, citizens can experience better service standards.
- 2) The services can be rendered within the service levels specified by the Hon'ble Andhra Pradesh Electricity Regulatory Commission (APEREC).

3) Real-Time Data Acquisition System (RT-DAS):

RT-DAS is a real-time data acquisition system to measure the reliability of power in the form of SAIFI and SAIDI, which requires a solution, based on real-time. The system will be equipped to monitor and help the utility to measure SAIFI/SAIDI.

Scheme proposed for Non-SCADA towns of R-APDRP/IPDS for SAIFI/SAIDI measurement by erecting the FRTU panels/communication equipment in each 33/11KV sub-station to cover the 11KV urban feeders and by adopting the suitably designed software to analyse the interruptions (ie) Scheduled/Unscheduled outages as per standard technical specifications communicated by M/s PFC of India Ltd.

The scheme is sanctioned under IPDS for an amount of Rs.4.80Crores to cover 36Nos. Non-SCADA towns; the works are awarded and scheduled for completion/commissioning in FY2020-21.

4) GIS Survey:

APEPDCL has taken up GIS survey of all its Civil assets and Electrical assets in the entire company using the mobile app developed internally by the I.T. team. This task involved the survey of

- a) 33/11kV Sub-stations
- b) 33kV feeders
- c) 11kV feeders
- d) Distribution Transformers
- e) L.T. feeders

Benefits:

- 1) GIS can be used to improve coordination and operational efficiency in field workforce activities.
- 2) Reduce or even replace reliance on paper by ensuring that both field and office workers use the same data to reduce errors, boost productivity, and save money.
- 3) In case of emergencies such as Cyclones, DISCOM can use the GIS data for planning the procurement and deployment of items such as poles, conductor etc. which can be useful in decreasing the power interruptions.

5) Integrated Power Development Scheme (I.T. Enablement):

A scheme was sanctioned for an amount of Rs. 10.71 Crores for Upgradation of SAP ERP from ECC 6.0 to Suite On HANA under IPDS (I.T. Enablement). The implementation is completed in January-2020.

- 6) **View Bill** : View Bill' feature has been added in the website which enables the customers to view the bill and collection details for the last 5 years. Option has also been enabled to download the e-bill for the selected month and also to download the payment receipt of the selected month.

Also 'Energy Calculator' feature has been enhanced with the following options:

- a) View detailed calculation of energy charges of latest bill
- b) Assess monthly bill (energy charges) based on present reading
- c) Assess monthly bill (energy charges) based on units
- d) Assess monthly bill (energy charges) based on the usage of appliances

9 Performance Reports

Details of Compensation awarded to consumers and penalties imposed and disciplinary action proposed on department staff						
Abstract (2019-20)						(Rs. Lakhs)
Sl. No	Circle	Total No. of Cases	No. of Cases Compensation awarded	Compensation Awarded	No. of cases disciplinary action proposed	No. of cases both Penalty/ DC action proposed
1	Srikakulam	1	1	0.075	0	0
2	Vizianagaram	1	1	0.010	0	0
3	Visakhapatnam	11	11	0.283	0	0
4	Rajamahendravaram	7	7	0.597	0	0
5	Eluru	13	13	0.880	0	0
Total		33	33	1.845	0	0

Details of Compensation awarded to consumers and penalties imposed and disciplinary action proposed on department staff						
Abstract (April-20 to Sept-20)						(Rs. Lakhs)
Sl. No	Circle	Total No. of Cases	No. of Cases Compensation awarded	Penalties imposed/ Compensation Awarded Amount (Rs.)	No. of cases disciplinary action proposed	No. of cases both Penalty/ DC action proposed
1	Srikakulam	2	2	0.020	0	0
2	Vizianagaram	0	0	0.000	0	0
3	Visakhapatnam	0	0	0.000	0	0
4	Rajamahendravaram	2	2	0.040	0	0
5	Eluru	1	1	0.010	0	0
Total		5	5	0.070	0	0

Non Departmental Fatal Electrical Accidents (Human) occurred during 2019-20 and amount of Ex-gratia paid						
Sl. No.	District	No. of accidents occurred			No. of cases for which ex-gratia paid	
		Due to Dept. Faults (Snapping of conductor, defective appliances etc.,)	Not due to Dept. Faults (unauthorized work etc.,)	Total	No. of cases	Amount in Rs Lakhs
1	Srikakulam	6	23	29	13	70
2	Vizianagaram	6	15	21	4	20
3	Visakhapatnam	3	19	22	10	50
4	Rajamahendravaram	4	22	26	11	55
5	Eluru	10	24	34	10	55
EPDCL		29	103	132	48	250

Note: Out of 132 Nos. Accidents, 45 nos proposed for deletion , 48 were sanctioned , remarks called for 16 Nos, 22 Nos proposals were rejected due to no departmental fault..

Non Departmental Fatal Electrical Accidents (Human) occurred during the period from 01-4-2020 to 31-10-2020 and amount of Ex-gratia paid						
Sl. No.	District	No. of accidents occurred			No. of cases for which ex-gratia paid	
		Due to Dept. Faults (Snapping of conductor, defective appliances etc.,)	Not due to Dept. Faults (unauthorized work etc.,)	Total	No. of cases	Amount in Rs Lakhs
1	Srikakulam	8	2	10	2	10
2	Vizianagaram	9	8	17	1	5
3	Visakhapatnam	8	16	24	2	10
4	Rajamahendravaram	23	12	35	10	50
5	Eluru	26	6	32	4	20
EPDCL		74	44	118	19	95

Note : Out of 118 Nos. Accidents, proposals received for 43 Nos of which 19 nos. were sanctioned, remarks called for 8 Nos, 7 Nos proposals were rejected due to no departmental faults and 27 Nos cases were proposed for deletion and 48 nos proposals to be received.

Departmental Fatal Electrical Accidents occurred during 2019-20				
Sl. No.	District	Total	No. of cases for which compensation paid during 2019-20	
			No. of cases	Amount in Rs. Lakhs
1	Srikakulam	0	0	0
2	Vizianagaram	0	0	0
3	Visakhapatnam	1	1	4.84
4	Rajamahendravaram	2	2	15.10
5	Eluru	1	1	12.24
EPDCL TOTAL		4	4	32.18

Departmental Fatal Electrical Accidents occurred during 01-04-2020 TO 31.10.2020				
Sl. No.	District	Total	No. of cases for which compensation paid 2020-21 (Upto Sep.)	
			No. of cases	Amount in Rs in Lakhs
1	Srikakulam	0	0	0
2	Vizianagaram	0	0	0
3	Visakhapatnam	0	0	0
4	Rajamahendravaram	1	1	11.23
5	Eluru	2	2	13.77
EPDCL TOTAL		3	3	25.00

No. of DTRs failed & erected during 2019-20 and 2020-21 (upto 30.09.20)								
Sl. No.	Name of the Circle	No. of DTRs existing as on 31-03-2019	No. of DTRs erected during 2019-20	No. of DTRs failed during 2019-20	No. of DTRs existing as on 31-03-2020	No. of DTRs erected during 2020-21 (upto 30.09.20)	No. of DTRs failed during 2020-21 (upto 30.09.20)	No. of DTRs existing as on 30-09-20
1	SKLM	17099	2588	1848	19687	1844	525	21531
2	VZM	16682	1944	1519	18626	2034	518	20660
3	VSP	33953	1725	1439	35678	4901	455	40579
4	RJY	49707	12661	2842	62368	5236	1288	67604
5	ELR	82800	13806	5224	96606	8102	2212	104708
EPDCL		200241	32724	12872	232965	22117	4998	255082

DTR complaints received during FY: 2019-20, attended and balance at call centers as on 31-03-20									
S. No.	Circle	No. of DTR Complaints to be attended as on 01-04-19		No. of DTR Complaints Received during FY: 2019-20	No. of DTR Complaints attended during FY: 2019-20		No. of Complaints Rejected	Balance No. of DTR complaints to be attended as on 31-03-20	
		WRT	BRT		WRT	BRT		WRT	BRT
1	Srikakulam	0	0	1639	1215	416	0	0	8
2	Vizianagaram	0	0	1441	1133	307	0	1	0
3	Visakhapatnam	0	0	2131	1843	287	0	1	0
4	Rajamahendravaram	1	0	3611	2839	632	0	5	136
5	Eluru	1	1	5407	4801	596	0	9	3
Total		2	1	14229	11831	2238	0	16	147

DTR complaints received during FY: 2020-21, attended and balance at call centers as on 30-09-20									
S.No.	Circle	No. of DTR Complaints to be attended as on 1-04-20		No. of DTR Complaints Received during FY; 2020-21 (upto Sep.)	No. of DTR Complaints attended during FY: 2020-21 (up to Sep.)		No. of Complaints Rejected during FY: 2020-21 (upto Sep.)	Balance No. of DTR complaints to be attended as on 30-09-20	
		WRT	BRT		WRT	BRT		WRT	BRT
1	Srikakulam	0	8	644	493	157	0	1	1
2	Vizianagaram	1	0	570	411	158	0	1	1
3	Visakhapatnam	1	0	1253	1083	165	0	6	0
4	Rajamahendravaram	5	136	1782	1469	447	0	4	3
5	Eluru	9	3	2495	1890	609	0	6	2
Total		16	147	6744	5346	1536	0	18	7

Fuse of calls received during FY: 2019-20, attended and balance at call centers as on 31.03.2020									
S. No.	Circle	No. of FOC complaints to be attended as on 01-04-2019		No. of FOC complaints received during FY 2019-20	No. of FOC complaints attended during FY 2019-20		No. of Complaints Rejected	Balance No. of FOC complaints to be attended as on 31.03.2020	
		WRT	BRT		WRT	BRT		WRT	BRT
1	Srikakulam	52	38	25265	21313	3972	17	42	11
2	Vizianagaram	39	11	13644	12120	1532	9	30	3
3	Visakhapatnam	127	36	134759	119631	15156	58	69	8
4	Rajamahendravaram	101	28	90349	79714	10648	25	71	20
5	Eluru	36	10	37050	33262	3773	20	28	13
Total		355	123	301067	266040	35081	129	240	55

**Fuse of calls received during FY: 2020-21, attended and balance
at call centers as on 30.09.2020**

S. No.	Circle	No. of FOC complaints to be attended as on 01-04-2020		No. of FOC complaints received during FY 2020-21 (upto Sep.)	No. of FOC complaints attended during FY 2020-21 (upto Sep.)		No. of Complaints Rejected during FY 2020-21 (upto Sep.)	Balance No. of FOC complaints to be attended as on 30.09.2020	
		WRT	BRT		WRT	BRT		WRT	BRT
1	Srikakulam	42	11	17952	15921	1976	9	38	61
2	Vizianagaram	30	3	10902	9677	1195	10	21	32
3	Visakhapatnam	69	8	107116	99282	7621	51	220	19
4	Rajamahendravaram	71	20	70425	64055	6283	25	126	27
5	Eluru	28	13	29837	27103	2657	11	88	19
Total		240	55	236232	216038	19732	106	493	158

Details of circle wise and category wise burnt meters as on 30.09.2020

SL. No.	Circle	I	II	III	IV	V	Others	Total
1	Srikakulam	168	35	5	68	2	0	278
2	Vizianagaram	128	22	8	44	3	0	205
3	Visakhapatnam	120	32	7	144	8	0	311
4	Rajamahendravaram	310	75	8	108	18	0	519
5	Eluru	354	96	10	105	48	0	613
Total for APEPDCL		1080	260	38	469	79	0	1926

Break Downs & Interruptions in Power supply to Rural Consumers for FY: 2019-20					
S. No.	Circle	Breakdowns		Interruptions	
		Nos.	Duration (Hrs:min:sec)	Nos.	Duration (Hrs:min:sec)
1	Srikakulam	264	494:35:00	1456	2824:05:00
2	Vizianagaram	228	536:42:00	7889	6331:53:00
3	Visakhapatnam	204	537:28:00	1615	3877:23:00
4	Rajamahendravaram	575	1018:15:00	9349	14229:23:00
5	Eluru	933	1752:55:15	3899	8127:24:15
DISCOM		2204	4339:55:15	24208	35390:08:15

Break Downs & Interruptions in Power supply to Rural Consumers for FY: 2020-21 (upto 30-09-20)					
S. No.	Circle	Breakdowns		Interruptions	
		Nos.	Duration (Hrs:min:sec)	Nos.	Duration (Hrs:min:sec)
1	Srikakulam	8	17:15:00	752	1723:54:00
2	Vizianagaram	23	62:27:00	2128	1007:35:00
3	Visakhapatnam	0	0:00:00	684	1679:43:00
4	Rajamahendravaram	35	76:51:00	9600	14439:00:00
5	Eluru	466.5	876:27:38	1949.5	4063:42:07
DISCOM		533	1033:00:38	15114	8474:54:07

Break Downs & Interruptions in Power supply to Urban Consumers for FY:2019-20					
S. No.	Circle	Breakdowns		Interruptions	
		Nos.	Duration (Hrs:min:sec)	Nos.	Duration (Hrs:min:sec)
1	Srikakulam	25	71:30:00	128	347:50:00
2	Vizianagaram	83	129:15:00	878	930:27:00
3	Visakhapatnam	73	147:21:00	924	2876:09:00
4	Rajamahendravaram	97	143:32:00	1965	4732:38:00
5	Eluru	199	408:22:10	784	2157:22:15
DISCOM		477	900:00:10	4679	11044:26:15

Break Downs & Interruptions in Power supply to Urban Consumers for FY: 2020-21 (upto 30-09-20)					
S. No.	Circle	Breakdowns		Interruptions	
		No.s	Duration (Hrs:min:sec)	No.s	Duration (Hrs:min:sec)
1	Srikakulam	4	6:10:00	102	421:26:00
2	Vizianagaram	7	16:07:00	218	136:23:00
3	Visakhapatnam	2	6:20:00	347	1142:35:00
4	Rajamahendravaram	7	33:19:00	2595	6410:38:00
5	Eluru	100	204:11:05	392	1078:41:08
DISCOM		120	266:07:05	3654	9189:43:08

Services released from 1-APR-2019 TO 31-MAR-2020 in APEPDCL										
Category Name	Cat Type	Opening Balance		Registered	Released		Rejected	Balance	CB_WRT	CB_BRT
		WRT	BRT		WRT	BRT				
Domestic	I	14659	2888	157554	121985	28301	3942	20818	18462	2356
Commercial	II	8703	1171	49977	36548	7338	3616	12326	10820	1506
Industry	III	4494	321	928	110	958	19	4649	4495	154
Institutions	IV	110	10	1824	979	190	56	695	362	333
Agricultural	V	13252	1799	13118	1031	10112	28	17005	15148	1857
Total		41218	6189	223401	160653	46899	7661	55493	49287	6206

Services released from 1-APR-2020 TO 30-SEP-2020 in APEPDCL										
Category Name	Cat Type	Opening Balance		Registered	Released		Rejected	Balance	CB_WRT	CB_BRT
		WRT	BRT		WRT	BRT				
Domestic	I	18462	2356	68475	51992	11590	1733	23968	20884	3084
Commercial	II	10820	1506	18265	11885	2689	1588	14430	13686	744
Industry	III	4495	154	203	18	130	5	4697	4669	28
Institutions	IV	362	333	1406	710	166	126	1102	1072	30
Agricultural	V	15148	1857	5346	318	3711	16	18339	17663	676
Total		49287	6206	93695	64923	18286	3468	62536	57974	4562