The Secretary,
A.P. Electricity Regulatory Commission,
4th Floor, Singareni Bhavan,
Red Hills, Lakdikapool,
Hyderabad – 500 004

Regulation,
H. No. 3-4-107/1, (Plot No. 39),
Radha Krishna Nagar, Attapur,
Hyderabad – 500 048

Date: 02-01-2024

Dear Sir;

Sub: - Comments on APDISCOMs' filings related to retail supply business for FY 2024-25 and distribution business for the 5th control period, and APTRANSCO's filing related to transmission business for the 5th control period.

Ref: - Public Notices dated 10-12-2023 in O. P. Nos. 71, 72, 73, 74, 75, 76, 77 and 78 of 2023.

- 1. In response to the above Public Notices, we are submitting the following Comments on APDISCOMs' filings related to retail supply business for FY 2024-25 and distribution business for the 5th control period, and APTRANSCO's filing related to transmission business for the 5th control period for the consideration of the Commission.
- 2. Submission of Load Forecast, Business Plan and Resource Plan by Licensees in Andhra Pradesh for 5th control period preceded APDISCOMs' and APTRANSCO's filing of ARR and tariff proposals for the same period. The Commission also conducted public hearings on these load forecasts and plans. During this process APDISCOMs and APTRANSCO also submitted additional information. But the Commission has yet to come out with the Order on these load forecasts and plans of all these Licensees. APDISCOMs and APTRANSCO based their ARR and tariff filings on these load forecasts. An earlier order of the Commission on these load forecasts and plans would help to throw light on APDISCOMs' and APTRANSCO's ARR and tariff proposals for the 5th control period.
- 3. Multi year tariff (MYT) exercise is expected to provide, apart from regulatory/tariff certainty, the grounds to assess the functioning of the licensees over the period and learnings to be carried over to the next control period. In this context review of the previous control period 4th control period is very important. This 4th control period encompassing FYs 2020 to FY 2024 had seen many important changes in power sector policy at the national level. Apart from increasing penetration of renewable energy this period had also seen market openings in the form of captive consumption and open access. During this period electricity exchanges also had become important platforms to procure power. During this period Ministry of Power of GoI also issued a series of Rules impacting the power sector in the country. These developments had impacted the functioning of the Licensees in the State. A review of APDISCOMs' and APTRANSCO's performance in the background of these developments during the 4th control period should have been made part of the 5th control period filings.

Estimating energy sales and procurement:

- 4.1 Over the period APDISCOMs have become very miserly in sharing information on estimation of energy sales as part of annual ARR and Tariff filings before the Commission. Earlier apart from explaining the methodology adopted for computation of energy sales during the ensuing year APDISCOMs used explain the growth rates adopted in the case of each consumer category. As a part of the present filings along with stating the methodology adopted APDISCOMs have provided only electricity consumption growth rates over the period and the growth rate adopted for the ensuing year. For a few years category wise consumption figures were given. With this truncated information nothing can be verified. In most cases growth rates recorded in preceding years and the growth rate adopted to estimate power consumption during the ensuing year seems to have no relationship. For example, in the case of APSPDCL during the FY 2023-24 total power consumption is projected to increase by 11.94% and during the FY 2024-25 it is estimated to increase by 4.12%; and there is no explanation for this wide variation in power consumption growth rates.
- **4.2.1** When estimation of power consumption by metered services is riddled with problems one can imagine the difficulties in estimating power consumption by electrified irrigation wells which services are not metered. While estimating agriculture consumption APDISCOMs have stated that they have followed the sample method approved by the Commission. Apart from this they have provided the number of sample DTRs, number of mandals with sample DTRs and total number of mandals under each operation Circle. No other information is provided. It seems one is expected to believe these numbers and not to question them! In the past Circle wise information on number of agriculture services, number of agriculture services covered by the sample DTRs, HP wise power consumption under the sample DTRs and estimated consumption by all agriculture services used to be provided.
- **4.2.2** Power consumption estimate for agriculture services for first half of 2023-24 raises doubts. APSPDCL's filings show that compared to first half of FY 2022-23 during the first half of 2023-24 power consumption by agriculture services increased by 49.52%. If we take the complete year of 2023-24 it increased by 22.26%. According to APSPDCL submission, "Due to low rainfall coupled with extremely dry weather on account of El-Nino conditions, the agriculture sales are projected to increase much beyond the approved sales for FY 2023-24." (p.31) Even under such harsh conditions facing the agriculture sector, given that number of hours of supply is limited to 9 hours in a day, can power consumption increase be so high? According to APEPDCL's filings compared to first half of FY 2022-23 during the first half of 2023-24 power consumption by agriculture services increased by 23.97%. According to APCPDCL's filings compared to first half of FY 2022-23 during the first half of 2023-24 power consumption by agriculture services increased by 8.02%. This wide variation among APDISCOMs in computation of power consumption by agriculture services during a particular period raises doubts about the whole exercise of estimation of power consumption by agriculture services.
- **4.2.3** In their present filings all the three APDISCOMs mentioned GoAP's policy to implement Direct Beneficiary Transfer (DBT) scheme in agriculture power supply. According to APCPDCL's filing, "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 metering arrangement 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 2024-25, 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." (p.33) Apart from such statements no additional information is available on the status of implementation of this DBT scheme. We request the Commission to direct the APDISCOMs to provide information on current status of this DBT scheme as well as metering of agriculture services.

- **4.2.4** APEPDCL in its filing reported that it had provided IrDA meters to all agricultural services in Srikakulam circle, and in this Circle actual agricultural consumption was being arrived by means of metered consumption of all AGL services (p.48). Apart from these statements APEPDCL did not provide any additional information on power consumption by agriculture services in this Circle. As this is the first circle in the State to meter all agriculture services a comparison of its consumption estimate with other circles will help to throw light on issues involved in estimating power consumption by agriculture services. We request the Commission to direct APEPDCL to provide complete information on number of agriculture services metered and power consumed by them over the period.
- **4.2.5** APSPDCL in its filing stated as follows, "From FY 2023-24 onwards, new procedure is going to be followed as per the directions of Ministry of Power, Government of India. As per the new procedure, the AGL sales will be calculated based on the feeder meter consumption as explained below.
 - a. In case of dedicated agriculture feeder supplying energy to agriculture consumers, energy measured at feeder level through proper metering shall be considered. (The consumption reflected in feeder shall be adjusted for normative T&D losses as determined by SERC for determination of subsidy).
 - b. For mixed feeder, till such time feeders are segregated, total energy shall be measured at feeder level and energy consumed by non-agricultural consumers shall be deducted to arrive at energy consumption of agricultural consumers. (The consumption shall be adjusted for normative T&D losses as determined by SERC for determination of subsidy)." (p.33)

All feeders in the State must have been metered by now. We request the Commission to direct APDISCOMs to provide information on number of feeders exclusively catering to agriculture services, number of services under each feeder and their total HP capacity, and power consumed by these services during first half of FY 2023-24.

4.2.6 As per the ARR filings, the three DISCOMs mentioned three methods for estimation of agriculture consumption. One of these methods is the ISI methodology based on sample DT meter reading and extrapolating based on DT kVA or HP capacity. Other method is feeder meter reading combined with SERC approved losses to arrive at agriculture consumption. The third method is pumpset meter based estimate. We request APERC to direct the DISCOMs to follow a uniform method till agriculture meters are fixed and stabilised. The best option

as of now, is feeder meter reading based method. We also request APERC to direct the DISCOMs not to discontinue the sample DT based estimation till an alternate method (feeder meter based or pumpset meter based) stabilises. Since Agriculture DT based approach is being used now, we request all DISCOMs to provide the total number of agriculture DTs and agriculture DTs with valid meter readings. We request the Commission to direct EPDCL to provide the details of IRDA meter based estimate in Srikakulam circle as per the format in Table and also to clarify if DT meter based estimation is being continued. We also request the Commission to direct all DISCOMs to furnish the circle-wise status of pumpset metering in their DISCOM.

Table 1: IRDA metering data for Srikakulam for 2022-23

| Month | No of | No of | No of | Total | Metered | Estimate of |
|-------|-----------|----------|-------------|----------|-------------------|--|
| | meters | meter | replacement | valid | consumption | consumption |
| | installed | failures | | meter | based on valid | based on valid |
| | | | | readings | readings (kWh) | meter readings and estimates (kWh) |
| Apr | | | | | | (K W II) |
| May | | | | | | |
| June | | | | | | |
| Jul | | | | | | |
| Aug | | | | | | |
| Sep | | | | | | |
| Oct | | | | | | |
| Nov | | | | | | |
| Dec | | | | | | |
| Jan | | | | | | |
| Feb | | | | | | |
| Mar | | | | | | |

- 4.2.7 LT agriculture has many sub-categories. LT V (A) Agriculture (ii) non-corporate farmers receive free power for pumpsets, while V(A) (i), (iii), (iv), (v), (vi), LT V(B) and LT V (D) have separate tariff, with some of them (iv and v) having free power. EPDCL categorises these into two parts Free power and Others, whereas other DISCOMs report one number for LT Agriculture and Related in ARR filings and RSF formats. From available data, it appears that free power to pumpsets is 50-65% of the total sale to LT V Agriculture. Since free power to agriculture pumpsets is a crucial parameter with links to rural livelihood and state subsidy, we request all the DISCOMs to provide a break up of LT V(A) Agriculture (ii), free power to other LT V Agriculture categories and non-free consumers in LT V Agriculture.
- **4.3** Many issues related to smart metering (of non agriculture consumers) were raised during the regulatory process on Load Forecast and Resource plan for the 5th control period. In this context, we wish to understand the details and status of the petition filed by APDISCOMs on smart metering in November 2023, as mentioned in the ARR: "APEPDCL on behalf of three DISCOMs filed a petition before Hon'ble APERC Vide Lr.No.CGM/RA&PP/EPDCL/D.No.134, dt:25.11.2023, seeking approval of the Hon'ble Commission towards

prepaid smart meters procedure along with tariff determination to be followed by DISCOMs" (page 73 of APCPDCL ARR)

Power procurement

Table 2: Power procurement, Energy sales and T&D losses during 2024-25

| DISCOMs | Power Procurement | Energy sales (MU) | T&D Losses (%) |
|---------|-------------------|-------------------|----------------|
| | (MU) | | |
| APCPDCL | 18,005.48 | 15,981.86 | 11.24 |
| APEPDCL | 32,945.65 | 29,854.06 | 9.38 |
| APSPDCL | 32,167.00 | 28,686.75 | 10.82 |
| Total | 83,118.13 | 74,522.67 | 10.34 |

Table 3: Power procurement, Energy sales and T&D losses during 2023-24

| DISCOMs | Power Procurement | Energy sales (MU) | T&D Losses (%) |
|---------|-------------------|-------------------|----------------|
| | (MU) | | |
| APCPDCL | 16,904.52 | 15,074.99 | 10.83 |
| APEPDCL | 30,635.04 | 27,864.33 | 9.05 |
| APSPDCL | 30,865.56 | 27,552.60 | 10.73 |
| Total | 78,405.12 | 70,491.92 | 10.09 |

- 5.1 APDISCOMs' ARR and tariff proposal filings for the FY 2024-25 shows that during the FY 2024-25 T&D losses will be higher compared to FY 2023-24. Over the period T&D losses shall come down due increasing investments in T&D network. But APDISOMs' filings show a reverse trend. This anomaly demands a close examination of power procurement as well as supply by APDISCOMs.
- 5.2 Among the three DISCOMs in the State APEPDCL is recording lower T&D losses compared to APCPDCL and APSPDCL. By improving functioning of these two DISCOMs and bringing down T&D losses to the level of APEPDCL total quantum of power procurement in the State can be reduced and this will lead to reduction in ARR as well as revenue gap.
- 5.3 While energy sales will be growing by 5.72% in FY 2024-25 compared to FY 2023-24, total power procurement will be higher by 6.01% in FY 2024-25 compared to FY 2023-24. During the FY 2024-25 growth in power procurement will be higher than growth in energy sales indicating higher leakages between power procurement and consumption, indicating higher inefficiencies in transmission, distribution, and retail supply of electricity.
- **5.4** We request the Commission to critically examine procurement and supply of electricity by APDISCOMs during the FY 2024-25.

Power procurement cost:

Difference between availability and dispatch:

- 6.1 According to APDISCOMs' filings 88,507.20 MU of electricity will be available in AP during FY 2024-25. Out of this 83,118.13 MU will be dispatched leaving a surplus of 5,389.07 MU which is equal to 6% of the total available electricity in the State. According to these filings RTPP units and APPDCL units will be working at 60% or less than 60% PLF though their target PLF is 80%. Hinduja plant is also projected to operate at 60% PLF. If these units operate at 80% PLF quantum of electricity available in the State will increase and consequently quantum of surplus electricity will also increase. If these plants operate at 80% PLF 9,106 MU of additional electricity will be available and total surplus electricity in the State during FY 2024-25 will be 14,495 MU.
- 6.2 Total installed capacity of these plants is 4,930 MW. Because of the low PLF at which these plants are projected to operate they will be utilising only 75% (60% PLF out of 80% PLF) of their capacity and the remaining 25% capacity will be rendered idle. Even when such capacity is not being used APDISCOMs are urging the Commission not to disallow about 500 MW capacity from some Central Generating Stations. APDISCOMs are also proposing to procure 570 MW additional power from Sembcorp Plant-1 at a cost of Rs. 5.73 per Unit. APDISCOMs need to reconsider these proposals.
- **6.3** One of the important reasons for low PLF of these plants, particularly APPDCL's units, is inadequate coal linkages and supplies. It is a matter of serious concern that even after more than a decade, arrangements for adequate coal linkages and supplies are not made. Instead of scouting for new sources APDISCOMs and APGENCO shall make efforts towards running these plants at their full capacity. This will help to bring down over all power purchase cost.
- 6.4 In the context of APDISCOMs' proposal to procure 570 MW from Sembcorp Plant 1 it has to be stressed that any new capacity addition has to be done through transparent, open and competitive bidding. There are also other issues with this proposal: Per unit cost of power from this plant (Rs.5.73 per unit the price being paid by TSDSCOMs as of September 2023) is higher than the unit cost of power from NNTPS and NTPL two CGS units disallowed by the Commission. Variable cost being paid by TSDISCOMs for power from this plant is Rs. 3.24 per unit while according to the present filing APDISCOMs are paying Rs. 2.47 per unit towards variable cost for power from this plant. [At present Sembcorp is supplying power from this plant to AP as well as Telangana]

Table 4: Increase in fixed cost burden during FY 2024-25 compared to FY 2023-24

| | Despatch (%) | Total Fixed Cost (%) | Unit Fixed Cost (%) |
|-----------------|--------------|----------------------|---------------------|
| APGENCO – | 4.95 | 58.95 | 53.13 |
| Thermal | | | |
| APGENCO – Hydro | 21.15 | 32.92 | 10.00 |
| Joint Sector | 6.86 | 38.63 | 29.70 |

Source: APCPDCL filing, p.25

6.5 ARR filings for the FY 2024-25 show higher fixed cost burden of APGENCO units. In the case of APGENCO Thermal units while despatch of electricity is projected to increase by

- 4.95% during FY 2024-25 compared to FY 2023-24 total fixed cost payments for these units will be increasing by 58.95% and unit fixed cost will be increasing by 53.13%. In the case of APGENCO Hydro units while despatch of electricity is projected to increase by 21.15% total fixed cost payments for these units will be increasing by 32.92% and unit fixed cost will be increasing by 10%. In the case of APGENCO Hydro units there is no new capacity addition. Even then total fixed costs of these units is projected to increase by nearly 33%. In the case of Joint Sector while despatch of electricity is projected to increase by 6.86% total fixed cost payments for these units will be increasing by 38.63% and unit fixed cost will be increasing by 29.70%. Fixed cost claims of these APGENCO and Joint Sector units need to be subjected to close scrutiny.
- 6.6 According to these ARR filings the Variable Cost of all APGENCO Stations and APPDCL Stage I & II for the FY 2023-24 H2 & FY 2024-25 is increased by 5% over and above the approved VC rates in RST Order for the FY 2023-24. No explanation is provided for adopting this 5% hike in variable cost of these units. We request the Commission not to allow 5% hike in variable cost of these units as proposed by APDISCOMs. Any changes in variable cost during the year need to be dealt with under FCA mechanism.
- 6.7 APDISCOMs' present filings show that they have procured more power from market than approved by the Commission during the FY 2023-24. They have also purchased this power at higher price than approved by the Commission. For example, in the case of APEPDCL while the Commission approved less than 3% of its total procurement to be sourced from market it procured 7.40% of its requirement from the market during the FY 2023-24. While the Commission approved market purchases at Rs. 5.31 per unit APEPDCL spent Rs. 7.96 per unit nearly 50% higher than the price approved by the Commission. No proper justification is provided by APDISCOMs for this costly deviation. They have merely stated that they have followed relevant regulations while procuring power from the market "If any shortage is observed in Day ahead, Real Time or Weak ahead / Month ahead, the same is procured from the Short Term market duly following the procedures specified in the relevant regulations." (p.21, APEPDCL) We request the Commission to direct the DISCOMs to provide information on periods and time blocks during which these market purchases were made and reasons for deviation from the Commission's Order.
- 6.8 APDISCOMs in their filings stated that PUShP portal and swap arrangement had been used to sell surplus power, and that these details were submitted to APERC (page 99 of APEPDCL ARR). We request the Commission to direct the DISCOMs to provide the details of power transactions through PUShP portal and swapping arrangement for the years 2022-23 and 2023-24.

Transmission cost:

7.1 A few months back APTRANSCO submitted before the commission Load forecast, Resource plan and Business plan for 5th Control period. The Commission has already subjected these filings to public hearing. As the transmission tariff petition filed by APTRANSCO corresponds to this period the outcome of the public process related to load forecast will have impact on the transmission tariff exercise. One of the issues raised during the public hearings on load forecasts for 5th control period was lack of clear basis for calculating forecasts. For

example, high HT industry consumption growth rate was projected but no details were provided for this.

- 7.2 APTRANSCO estimates the transmission cost on the basis of the projected energy input in the State. The estimates of energy input in the state adopted by APTRANSCO are on higher side. These estimates need to be toned down. According to APTRANSCO filing during the FY 2024-25 APDISCOMs would require 83,275 MU. According to APDISCOMs' filings total power procurement by them during FY 2024-25 would be 83,118 MU. As electricity sales projected by APDISCOMs are on lower side APTRANSCO has to reduce its projection of energy input considerably. Proportionately, transmission costs also need to be brought down.
- 7.3 According to its filings APTRANSCO will be incurring an expenditure of Rs. 1,105 Crore towards interest during construction (IDC) during the 5th control period. This accounts for 6% of the capital investment during the period. It has to be seen that projects are executed efficiently and in time and see that burden in the form of IDC is eliminated or brought down to the minimum. IDC towards delay in execution of the project beyond the set limits shall not be allowed.
- **7.4** APTRANSCO adopted weighted average cost of capital (WACC) in the range of 11.77% to 12.14%. This includes cost of debt (rate of interest) in the range of 11.02% to 11.52% and return on equity (RoE) of 14%.
- 7.5 Over the period rates of interest have come down considerably reflecting developments in the financial markets. Following these developments APTRANSCO need to adopt lower rates of interest.
- 7.6 RoE shall be linked to the rate of interest. RoE shall be equal to rate of interest plus 2% to account for the risk premium. APERC Order dated 26-08-2016 in R.P. No. 2 of 2016 in O.P. No. 13 of 2015 mentions the following, "Accordingly, AP Transco computed the Return on Capital at 12.5 percent using 75:25 debt equity ratio with cost of debt and return on equity at 12 percent and 14 percent respectively." (Para 1) This difference of 2% between RoE and rate of interest reflects risk premium. Accordingly, as interest rates have come down considerably RoE shall reflect this decline in interest rates. Instead of 14% the Commission shall adopt lower RoE reflecting declining interest rates and 2% towards risk premium.
- **7.7.1** APTRANSCO has arrived at Rs. 770 Crore towards tax on income during the 5th control period on the basis of the given regulated rate base (RRB) and income tax rate of 34.944% (Table 20). But under ARR (Table 25) APTRANSCO is claiming Rs. 1,465.28 Crore towards income tax during the 5th control period. The difference between these two tables needs to be examined.
- 7.7.2 Regarding treatment of tax on income APTRANSCO stated as follows: "The taxes have been estimated based on the current tax rate of 34.944%. The taxes have been estimated such that the Post Tax return on equity is equivalent to 14% of RRB for each year." (Para 3.7) This implies that along with RoE/profit income tax to be paid on this RoE/profit also becomes part of ARR that needs to be recovered through tariffs. Under normal course income tax is paid out of the profits earned by the entities. But under the present treatment income tax on the profits earned by the entities will be paid by electricity consumers through tariffs. In other words, electricity consumers will be reimbursing the income tax paid by APTRANSCO. It implies that consumers are paying the same thing twice once in the form of RoE/Profit and another time

in the form of income tax on this RoE/profit. This defeats the very purpose of levying of income tax and is regressive. As such this APTRANSCO proposal for provision towards tax on income shall not be allowed.

Distribution cost:

Table 5: Distribution Cost 2024-25

| DISCOM | Distribution cost | | |
|--------|-------------------|--|--|
| | (Rs/Cr) | | |
| CPDCL | 2,161.32 | | |
| EPDCL | 2,862.77 | | |
| SPDCL | 4,490.33 | | |
| Total | 9,514.42 | | |

- **8.1** Three DISCOMs in the State together projected distribution cost to be Rs. 9,514.42 Crore during the FY 2024-25. This is based on their load forecasts, resource plans and business plans for the 5th control period. As the load forecasts done by APDISCOMs are beset with problems their projections of distribution costs need to be critically examined.
- **8.2** While APSPDCL is projected to procure less power compared to APEPDCL during the FY 2024-25 its estimated distribution cost during the year is 56.85% higher than APEPDCL. The same needs to be examined.
- **8.3** A large part of loans contracted by APDISCOMs was and is being spent on HVDS programmes. HVDS programme was brought in to plug leakages in power supply to agriculture services and improve quality of supply in rural areas. It is time to take a stock of this programme and evaluate to what extent it has delivered.
- 8.4 APDISCOMs have taken up installation of Smart Meters to agricultural services along with Auxiliary Materials such as SMC Box to House the meter and other materials, i.e. JMCCB, Capacitor, Weather Proof PVC wire and Earthing for Protection and prevention of accidents under YSR Uchita Vyavasaaya Vidyut Pathakam as per GO.MS.No.22 Energy [Power-I] Department dated.01.09.2020, the Government of AP. But, except in the case of APSPDCL to some extent, this does not find mention in APDISCOMs' filings on distribution business. We request the Commission to direct the APDISCOMs to provide information on status of installation of smart meters to agriculture services including funds spent so far and funds to be spent during the 5th control period.
- **8.5** APDISCOMs are also reported to have taken up works under Revamped Distribution Sector Scheme (RDSS). This also does not find mention in their filings on distribution business. We request the Commission to direct APDISCOMs to provide information on RDSS related works implemented until now and the works to be taken up during the 5th control periods including their financial implications.

Table 6: Calculation of Debt rate – APCPDCL (%)

| Particulars | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 |
|-------------------------------|-------|-------|-------|-------|-------|
| Debt rate of ongoing loans | 10.4 | 10.5 | 10.5 | 10.6 | 10.6 |
| Debt rate of new loans | 11.6 | 11.6 | 12.00 | 12.00 | 12.00 |
| Weighted average of debt rate | 10.8 | 11.2 | 11.5 | 11.6 | 11.7 |

Table 7: Calculation of Debt rate – APEPDCL (%)

| Particulars | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 |
|-------------------------------|-------|-------|-------|-------|-------|
| Debt rate of ongoing loans | 7.44 | 7.27 | 7.09 | 6.89 | 6.68 |
| Debt rate of new loans | 10.00 | 10.00 | 11.69 | 11.70 | 11.73 |
| Weighted average of debt rate | 9.05 | 9.46 | 11.10 | 11.17 | 11.24 |

Table 8: Calculation of Debt rate – APSPDCL (%)

| Particulars | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 |
|-------------------------------|-------|-------|-------|-------|-------|
| Debt rate of ongoing loans | 7.9 | 9.2 | 9.0 | 8.9 | 8.7 |
| Debt rate of new loans | 10.9 | 10.9 | 10.9 | 11.0 | 11.0 |
| Weighted average of debt rate | 8.67 | 9.89 | 10.01 | 10.12 | 10.13 |

- **8.6** APDISCOMs, though individually draw loans from similar financial/lending agencies and face similar financial/debt market, are quoting different interest rates. At times difference between interest rates quoted by individual DISCOMs is 3% or more. This sort of difference has huge financial implications. Some times DISCOMs may face different interest rates depending on their financial health. As regulator and monitoring agency of the sector the Commission has to see that APDISCOMs are in good financial health.
- 8.7 All the three APDSCOMs show higher interest rates against new loans compared to old loans. No explanation is provided for this difference in treatment. What is more each year the rate of interest is shown to be increasing during the 5th control period. For this also there is no explanation. Over the last few quarters the RBI has not changed the Repo rate. Indications are that if there has to be change in the Repo rate then it will be southward only. In such circumstances there shall be lower rates of interest in the coming days. Accordingly, the Commission is requested to adopt lower rates of interest than those shown by APDISCOMs.
- **8.8** All the three APDSCOMs claim return of equity (RoE) of 14%. As mentioned above RoE shall be linked to interest rate. RoE shall be equal to rate of interest plus 2% towards risk premium.
- **8.9** Three APDISCOMs together claimed Rs. 1,301 Crore towards tax on income. Income tax shall be paid by APDISCOMs from the profits earned by them and electricity consumers in the state shall not be burdened with this expenditure.
- **8.10** According to the submission of APCPDCL and APEPDCL, "Interest during Construction (IDC) has been calculated as a percentage of the average Capital Works-in Progress for the year." According to the submission of APSPDCL, "Interest during

Construction (IDC) has been calculated as a weighted average interest cost of previous year average Capital Works-in-Progress for the year." (para 1.1.1). APDISCOMs in their filings did not specify the rate of interest adopted by them in computing IDC. Three APDISCOMs together claimed Rs. 4,201 Crore towards IDC during the 5th control period. As most of the works taken up under distribution business are of short gestation period there shall be no need for IDC. Through efficient execution of projects the need for IDC shall be removed. Following this we request the Commission not to allow expenditure towards IDC under distribution business.

Tariff proposals:

- 9.1 APDISCOMs requested the Commission to create a sub-category under HT III (C) for Energy Intensive Industries specifically to vertically integrated PV Solar modules manufacturing industries allocated under PLI scheme and adopt fixed tariff of Rs. 4.00 per unit from the commencement of production, on the power consumed from DISCOMs. This fixed tariff includes demand charges, energy charges, and Time of Day (ToD) charges. APDISCOMs proposed this change in response to Government Orders issued by the Government of AP. The suggested tariff is less than the average cost of service. As APDISCOMs proposed this change in response to Government Orders issued by the Government of AP we would like to know whether GoAP will provide subsidy for electricity consumption by consumers from this proposed category.
- 9.2 APDISCOMs proposed to hike railway traction tariff by Rs.1/per unit. Railway traction tariff may be made equal to the cost of service. Indian Railways is asking for lower tariff on the grounds that they subsidise some consumers. Though they subsidise some they also charge some quite heavily! In fact, their charges for coal transport are quite high and because of this power plants located away from coal mines are placed lower in the merit order list. This is the reason RTPP units are operating at lower PLFs.

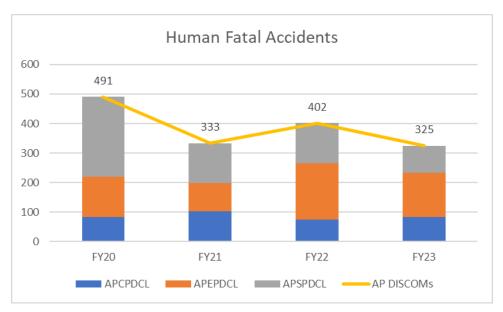
Table 9: Revenue gap during FY 2024-25

| DISCOMs | Revenue at | Revenue gap at | Additional | Remaining |
|---------|-----------------|-----------------|------------------|-------------|
| | current tariffs | current tariffs | revenue through | revenue gap |
| | | | proposed tariffs | |
| APCPDCL | 9,504.66 | 3,047.26 | 50.73 | 2,996.53 |
| APEPDCL | 17,854.16 | 3,307.70 | 100.44 | 3,207.26 |
| APSPDCL | 15,318.21 | 7,683.49 | 100.16 | 7,583.33 |
| Total | 42,677.03 | 14,038.45 | 251.33 | 13,787.12 |

9.3 Even after accrual of additional revenue through the proposed tariffs APDISCOMs will be facing aggregate revenue gap of Rs. 13,787.12 Crore which is equal to 32.31% of the revenue at current tariffs. This indicates that to fill the revenue gap tariffs further have to be hiked by 32.31%. For the FY 2023-24 GoAP agreed to provide subsidy of Rs. 10,135 Crore. If the GoAP provides this level of subsidy during the ensuing year still there will be a gap Rs. 3,652 Crore which demands a tariff hike of 8.56%.

Electricity safety

10.1 As indicated by the data provided in performance parameters in the annual ARR filings of DISCOMs, it appears that there is no significant reduction in the number of accidents. This can be seen in the Figure, which shows DISCOM -wise fatal human accidents from FY20 to FY23.



Source: Compiled from ARR filing for DISCOMs

10.2 The Hon'ble Commission has been giving directives in Tariff orders to reduce accidents and improve the ex-gratia process. For example, in the RST order for FY24 the Commission has observed,

"As regards the safety aspects, the Commission reiterates its earlier statement that it is regularly reviewing the safety audit reports submitted by the DISCOMS periodically and is issuing appropriate directions to them in this regard. Regarding the enhancement of compensation to the victims of fatal accidents, the compensation is intended to provide an immediate relief to the victims' families and the main aim is to reduce the accidents to nil. The DISCOMS have furnished the data regarding accidents and status of payments to victims, in their filings." (Para 306, page 264)

10.3 As for compensation, the current filings show that ex-gratia was paid to only half the non-departmental human fatal accidents in FY23, as indicated in Table.

Table 10: Accidents and ex-gratia payments in 2022-23

| Detail/DISCOM | CP | EP | SP | AP |
|------------------------------|-----|-----|-----|-----|
| Non Dept Fatal Accidents | | | | |
| Nos | 82 | 142 | 93 | 317 |
| Ex gratia paid Nos | 35 | 50 | 93 | 178 |
| Ex gratia paid Rs Lakh | 175 | 270 | 465 | 910 |
| Ex Gratia % of total | 43 | 35 | 100 | 56 |
| Ex Gratia/fatality (Rs lakh) | 5.0 | 5.4 | 5.0 | 5.1 |

It can also be noted that SPDCL paid ex-gratia in all cases. Only EPDCL ARR provides data on departmental accidents and as per this, all the 6 cases of human fatal accidents were paid Rs. 93.8 lakhs. We hope that with the recent amendment (dated 27/12/2023) to Regulation of 2 of 2017 (Compensation for Electrical accidents), DISCOMs will ensure that ex-gratia is promptly paid in all human fatal accident cases.

- **10.4** As for accident reduction, the impact of actions by DISCOMs to reduce accident is not clear. As a first step, we request APERC to direct DISCOMs to analyse all the accidents in the past three years to identify the following:
 - Geographical location division wise and rural & urban break-ups
 - Electrical location of accidents line, cable, service wire, substation, DT, consumer location etc
 - Consumer category wise break-up
 - Cause wise analysis line snapping, line sagging, cable rupture, accidental contact, appliance failure, earthing failure, fire due to electrical fault etc

Such an analysis will help to prepare an accident reduction action plan with division-wise targets for accident reduction. Support from CEIG and professional safety auditors could be taken if needed.

Performance parameters:

- 11.1 Chapter on performance parameters provide important data for FY23 and H1 of FY24 on various parameters like consumer compensation, accidents, DT failure, meter failure reliability indicators etc. It is surprising that while there are many reported complaints, the compensation paid by CGRF is NIL in CPDCL and SPDCL, while it is very low at Rs. 0.335 lakhs in EPDCL. From data available from the annual report of APERC, it appears that the CGRFs are handling only about 10 complaints a month, which is very low (382 complaints disposed by three CGRFs in 2021-22). We request the Commission to examine why the number of complaints with CGRF is very low.
- 11.2 APERC amended the Standards of Performance Regulation in 2021 to introduce automatic compensation to complaining consumers, for some parameters. We would like to know from DISCOMs whether this has been operationalised in 2022-23, and if so, provide the details of such cases.
- 11.3 The formats used by DISCOMs in reporting performance parameters are slightly different. For example, EPDCL reports departmental and non-departmental electrical accidents, while other DISCOMs do not. SPDCL does not report number of DTs in March 2022, whereas other two DISCOMs do. We request the APERC to direct the APDISCOMs to ensure that data is provided by all DISCOMs in the same format.
- 11.4 For any analysis of performance, it is important to prepare some performance indicators and compare the trends across years. These could be % DT failure in a year, % meter failure in a year, fatal accidents/mid-year population, minimum, average and maximum time taken to attend to a DT failure complaint etc. We request the DISCOMs to prepare and provide them as part of performance parameters. DISCOMs should also give a commentary on the

trend of these parameters — why they are increasing/reducing/not changing etc. In addition to pdf format, performance parameter tables should be provided in spreadsheet format also.

- 11.5 DISCOMs report circle-wise, monthly reliability indicators (SAIDI and SAIFI) in the Performance parameters chapter (8.1.12 in CPDCL). We would like to know whether these are calculated based only on non agriculture feeder outage data. We request the DISCOMs to also report these indicators separately for agriculture feeders. We also would like know how the average for 2022-23 is calculated. Is calculating the average value of 12 monthly figures the correct method to arrive at the annual figure?
- 11.6 Data on subsidy and arrears are provided as a part of the ARR filing documents, but they are provided in pdf format. We request the DISCOMs to make these data also available in spreadsheet format.
- FY 2024-25 (FY25) is the beginning of the 5th control period with FY24 as the base year. Under the existing practice the RSF forms give data for base year (FY24 – actuals for the first half and estimates for the second half year data) and forecast for FY25. But no data is given for the previous year – FY 23. In the RSF filings during last year i.e., FY 24, yearly estimates for FY23 and forecasts for FY24 along with actuals for FY22 are given. While filing ARR and tariff proposals for the first year of the Control period information related to current year and ensuing year is provided but no information is provided for the previous year. Usually while information related to previous year are actuals, information elated to current and ensuing years will be estimates. While filing ARR and tariff proposals for the remaining four years of the Control period information related to previous year, current year and ensuing year will be provided. As a result of the current practice actuals of the previous year of the first year of the control period will not be available. This leaves a gap in the information related to actuals of the previous year of the first year of the control period – FY 23 in the case of the 5th control period. Thus, we note that actuals for FY23 is not available in the RSF forms related to first year (FY 25) of the 5th control period. We request the Commission to direct APDISCOMs to provide actuals data for FY23 is in the RSF files in filings related FY 25. We also request APERC to modify the RSF formats so that actuals for the previous year of the first year of the control period is made publicly available when the control period changes.
- We would like to know the number of employees of the Licensees caught red handed by Anti Corruption Bureau (ACB) of AP Police during the 4th Control Period. What was the action taken by APDISCOMs against them? How many of them were reinstated?

Prayer to the Commission:

- 13 Petition requesting the Commission
 - 1. To review power consumption estimates.
 - 2. To review power purchase costs.
 - 3. To review transmission and distribution costs.
 - 4. To direct DISCOMs to improve safety and avoid deaths due to shocks.

| 5. To allow the objector to be heard in person before the Commission takes any decision on this application of the APDISCOMs and APTRANSCO. |
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| We request the Commission to take our above submission on record. |
| Thanking you. |
| Sincerely yours, M. Thimma Reddy |
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