ANDHRA PRADESH CENTRAL POWER DISTRIBUTION CORPORATION LIMITED
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From
The Chief General Manager/RAC,
Corporate office,
APCPDCL, Vijayawada

To
Sri M. Thimma Reddy,
Convenor,
People's Monitoring Group on Electricity Regulation,
H. No. 3-4-107/1, (Plot No. 39),
Radha Krishna Nagar, Attapur,
Hyderabad – 500 048.

Lr.No.CGM/RAC/GM/PP&RAC/CP/VJA/F.No.76/D.No. 372 /24, Dt: 18.01.2024

Sir,

Sub: APCPDCL - Replies to objections raised by Sri M. Thimma Reddy, Convenor on ARR & Tariff Proposals of Retail Supply Business for the FY 2024-25 and ARR of Distribution Business for 5th Control Period - Reg.

Ref: Objections raised by Sri M. Thimma Reddy, dt.02.01.2024.

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Referring to the objections raised by Sri M. Thimma Reddy, Convenor on ARR & Tariff Proposals of Retail Supply Business for the FY 2024-25 and ARR of Distribution Business for 5th Control Period, the reply is furnished as hereunder.

Objections & Replies:

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.

Reply: Under the purview of Hon'ble APERC.

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.

Reply: APCPDCL has submitted 4th Control period actuals to Hon'ble APERC as additional information after Resource plan 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.

Reply: Actual category wise and voltage wise sales from FY 2020-21 to FY 2022-23 available in ARR filings vide page No 37 to 39.

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.

Reply: APCPDCL is following the Indian statistical Institute (ISI) methodology approved by Hon'ble APERC for assessing the free Agricultural consumption. In this methodology, per HP consumption is being arrived from the meters fixed on the LV side of the sampled Agl DTRs in different areas and the total agricultural consumption is extrapolated from the per HP Consumption.

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.

Reply: Free Agriculture consumption assessed for first half FY 2022-23 is 811.26 MU and for first half of FY 2023-24 is 954.96 MU and power consumption by Agriculture services increased by 17.71% during this period. Free Agriculture consumption assessed up to the month of October in the FY 2022-23 is 941.95 MU and free Agriculture consumption assessed up to the month of October in the FY 2023-24 is 1293.40 MU and power consumption by Agriculture services increased by 37.31% during this period. Agriculture sales are increased beyond the approved Agriculture sales in FY 2023-24 because of low rain fall on account of El-Nino conditions, which resulted in more Agriculture consumption as the farmer is more dependent on ground water.

The estimated agricultural consumption per KVA per DTR depends on the total connected load, type of crop raised, seasonal variation, geographical conditions and water table. Therefore per kva consumption of sample DTR varies from capacity to capacity and area to area. Hence there may be variations among the other APDiscoms in computation 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.

Reply: APCPDCL submits that, the Energy Department, Government of Andhra Pradesh (GoAP) vide GO.MS. No.22 dt 01.09.2020, has launched an innovative scheme, "YSR Uchita Vyavasaya Vidyut Pathakam", to implement Direct Benefit Transfer (DBT) to all agriculture.

Based on the monthly consumption, agriculture subsidy amount will be credited to the farmer's bank accounts and intern the same amount will be transferred automatically to DISCOM's Account under Direct Beneficiary Transfer (DBT) Scheme. The cost of the project will be borne by the GoAP in the form of subsidy along with electricity bills and there will be no burden on the farmers.

The Government vide G.O.Rt.No.67, dt.21.06.2023, has issued revised Administrative Sanction for Rs. 1,863.54 Crores for installation of Smart Meters and allied materials to the 5 Lakh Agriculture pump sets in APCPDCL. The agriculture service wise actual consumption will be arrived by installing smart meters to agriculture services for retrieving data through online as per the direction of the GoAP.

Agreements were concluded for providing Smart Meters to agriculture services under YSR Uchitha Vyavasaaya Vidyuth Pathakam DBT Scheme in two packages.

- Providing Smart meters along with operational and maintenance for 93 Months
- Providing allied materials for Agriculture services.

Status: Allied materials for 2.5 Lakhs Services are supplied to the Allied agency and the smart meters agency has supplied 60,500 Smart meters and are ready to be installed.

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.

Reply: Pertains to APEPDCL.

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.

Reply: It is to submit that vide Lr.No:APERC/Secy /Tariff/F:35/D. No. 1520/2023, Dt:10.10.2023. Hon'ble APERC has directed the Discoms to assess the unmetered sales to subsidized consumers (free power consumers in Agl category) as per the methodology stipulated in para 2.2 of SOP issued by MoP, GoI from the FY 2024-25. Accordingly, APSPDCL in consultation with APCPDCL has proposed methodology for assessing the free Agricultural consumption based on meters provided to dedicated and mixed Agl feeders.

Measurement of Agriculture sales in case of Dedicated feeders:

Agriculture sales = (Total energy measured under the feeder) *{(100-Normative T&D losses as determined by SERC)}/100

Measurement of Agriculture sales in case of Mixed feeders:

Agriculture sales = {(Total Energy measured under the feeder - energy consumed by non-agl consumers) *(100- Normative T&D losses as determined by SERC)}/100

The normative T&D loss is distribution loss up to the 11KV voltage level (i.e., losses 11 KV and below) approved by Hon'ble APERC.

It is to inform that 100% metering is available for 11KV feeders in the purview of APCPDCL and if Hon'ble APERC approves the above proposed methodology, same will be followed for assessing agriculture consumption from the FY 2024-25.

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

Reply: APCPDCL has been following the ISI methodology approved by Hon'ble APERC for assessing free Agriculture consumption, if Hon'ble APERC approves newly proposed methodology based on feeder metering for assessing free Agriculture consumption, same will be followed from the FY 2024-25.

However APCPDCL has taken initiative as per the GOAP directives to provide meters to every unmetered agriculture consumer for measuring exact consumption and to arrive accurate subsidy amount.

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.

Reply: The sales forecast for FY 2023-24 & FY 2024-25 LT Cat-V Free power agricultural & Non free power agricultural is as follows.

Sl. No	Item	FY 2023-24	FY 2024-25
	Agricultural & Related		
1	Free Agl (in MU) (LT V A (ii), (iv) & (v)	**2095.12**	**2243.83**
2	Other than free Agl (in MU)	**1047.46**	**1132.08**
	Total Sales (in MU)	**3142.58**	**3375.92**

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).

Reply: Hon'ble APERC vide its order dated: 27.12.2023 rejected the petition filed by APEPDCL stating the following.

"During the hearing it could be noticed that no dispute has arisen falling under this Commission's adjudicatory jurisdiction under Section 86(1)(f) of the Electricity Act, 2003. Therefore, in our opinion, this Petition is wholly misconceived. However, if the petitioner seeks the Commission's approvals, it is entitled to approach this Commission through the normal procedure which falls in the realm of this Commission's regulatory jurisdiction and not adjudicatory jurisdiction".

Power procurement

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

DISCOMs	Power Procurement (MU)	Energy sales (MU)	T&D Losses (%)
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 (MU)	Energy sales (MU)	T&D Losses (%)
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.

Reply (5.1 to 5.4): It is to inform that distribution losses of the Discom will depend upon the sales and Input at various voltage levels i.e at 220/132KV, 33KV, 11KV & LT level. If consumption at lower voltage levels are higher, distribution losses will increase accordingly. It is also informed that APCPDCL has been taking measures to minimize technical & commercial losses by strengthening the network in over loaded segments. implementation of HVDS, conversion of LT 3W to 5W and conducting surprise raids in theft prone areas, minimizing the billing errors etc.

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.

Reply (6.1& 6.2): The energy availability of all Thermal Stations except CGS have been considered based on their past three year performances. This is in line with the methodology adopted by the Hon'ble Commission in the current year (FY 2023-24) retail supply tariff order. The fixed costs of the stations also have been reduced in proportionate to the reduced availabilities. In this regard, past experience indicates that these generators were unable to supply the power they have projected on paper. The power purchase projections from these plants are estimates only. If these generating stations can supply the energy over and above the estimates for the FY2024-25, APDISCOMs would certainly utilize this energy provided they fit in the merit order dispatch and accordingly APDISCOMs will admit fixed charges in proportionate to the actual availabilities in accordance with PPA conditions and relevant regulations. However, the admission of fixed charges for FY2024-25 will be limited to the respective generation tariff for 5th control period, i.e, FY2024-29 approved by Hon'ble commission. With reference to the contest of the Ld objector, if the availabilities from the said power stations are projected based on respective station's normative availability irrespective of their actual performance, which would result in higher projections in availability of non-reliable power. With this fictitious estimates, APDISCOMs would not meet the grid demand. Further, there is a lot of uncertainty regarding the availability of power and at reasonable rates in the Exchanges. It is noted that the power demand supply situation across the Country in the near short term is expected to be bleak and the short term market prices would remain at ceiling. If sufficient quantum of power is not available in the Exchanges when required, it would lead to imposition of load reliefs defeating the policy of GoAP to maintain 24x7 uninterrupted power supply, hamper industrial growth and creation of employment generation in the State. Further, Demand /Supply conditions across the Country and Coal constraints & logistics problems anticipated in the near future may leave the power planning of DISCOMs in a stressed condition and fulfilment of the objective of 24X7 power supply in question.

As per the resource plan for the 5th & 6th control periods (FY 2024-34) submitted by the APDISCOMs, the base load (minimum load) on the grid which is presently hovering around 5800 MW is expected to increase at a CAGR of 6% and may reach 7700 MW in five years. APSLDC/ APDISCOMs are of the opinion that the existing base generation capacity from Intra State & Central generating stations, will not be sufficient to meet the minimum load persistent on the system for all time blocks in an year with a stringent requirement to comply to the Hon'ble CERC Regulations such as IEGC, DSM & Ancillary Services.

It is to inform that vide the Common Order dated 30.10.2023, Hon'ble APERC in OP Nos 34 to 44 of 2023 regarding granting consent to the 11 CGS PPAs of APDISCOMs have with Central Generating Stations (CGS) under section 86 (1) (b) of the Electricity Act 2003, the Hon'ble Commission has granted consent to 7 PPAs and

not inclined to grant consent to the four nos PPAs pertaining to NTPC Kudgi, NTECL Vallur, NTPL-Tuticorin & NNTPS-Nyveli.

With due respect and regard to the decision of the Hon'ble Commission in the matter of declining consent to the four CGS PPAs (i.e., from NTPC Kudgi, NTECL Vallur, NTPL-Tuticorin & NNTPS-Nyveli), and the points submitted by APDISCOMs above, anticipated Load Generation Balance in the near future, MoP's mandatory pooling of CGS thermal capacities which completed PPA tenure, the APDISCOMs are seeking the advise of the Central Electricity Authority (CEA) which is the highest technical body in the Country in terms of Electricity Planning and policy matters, on the issue of surrendering of above 500 MW CGS capacity. APDISCOMs are also writing to MoP to allocate equivalent quantum of power from cheaper sources to make good the loss of base generation quantum. In view of this, the Hon'ble Commission is earnestly requested to permit the DISCOMs to continue the procurement of power from these generation sources as per the existing PPAs and the rates determined by the Hon'ble CERC, till such time CEA advise is received or allocation from cheaper sources is made by MoP.

Further, APDISCOMs proposed to procure 570/625MW from Sembcorp Plant-I. The Hon'ble Commission vide their order dated 7th November 2023, after careful examination of the proposal submitted by APCPDCL on behalf of the APDISCOMs, as outlined in the referenced letter from SEIL offering 570 MW capacity for long-term supply to APDISCOMs commencing from April 2024, on mutually agreed terms and conditions, the DISCOMS are permitted to proceed with further steps on SEIL's proposal. However, this permission is contingent upon SEIL's acceptance that the tariff for the supply of 570/625 MW electricity will be determined by APERC under Section 62 of the Electricity Act, 2003.

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.

Reply:

A. As ascertained by APPDCL, the following is submitted.

i. Stage-I Units of SDSTPS are designed for usage of Blended coal with 4800 Kcal/Kg by blending domestic washed coal (4200 Kcal/Kg) with imported coal (6300Kcal/Kg) in the ratio of 70:30. APPDCL is having the FSA for 7.143 MMTPA for 2x800MW Stage-I from MCL for Domestic coal portion and not having long term agreements for imported coal.

ii. Due to high volatile prices of imported coal in the market, APPDCL couldn't able to procure designed coal and units are running with domestic coal and this has led to less availability. However, APPDCL putting all its efforts to arrange for suitable coal for improving generation.

iii. For Stage-II of SDSTPS, APPDCL is having FSA for 3.942 MMTPA for 1x800MW Stage-II. APPDCL is making all the efforts to get the required coal quantities from MCL & washeries and has taken steps to procure imported coal to meet the requirements of Stage-I units.

B. As ascertained by APGENCO, the following is submitted.

i. APGENCO is continuously pursuing with M/s MCL, M/s SCCL and Railways for supplying and loading more no. of rakes to APGENCO plants for day to day needs and for building up stocks in all the stations.

ii. To review coal supply and to look into the issues of critical power houses, a Sub Group was constituted by Infrastructure Constraints Review Committee for allotment of rakes to the power plants as per production of coal at mines. During every sub group meeting, APGENCO has been appraising to increase the supply of rakes from MCL and SCCL to enhance the coal stocks at Dr. NTTPS and RTPP.

iii. As per the directions of MoP, GoI, approval was also obtained from Hon'ble APERC to procure 7.5 lakh Tons of Imported coal. Accordingly, Tenders were floated for procurement 5.0 Lakh Tons of imported coal to meet the ensuing summer peak demand and to buildup required coal stocks.

iv. In addition to the All Rail Route (ARR) Transportation to Dr.NTTPS, Alternate measures for transportation from MCL to Dr NTTPS through Rail-Sea-Rail (RSR) mode was also finalized (Talcher-Paradeep Port-Kakinada Port - Dr. NTTPS) to increase the coal stocks in view of addition of 800 MW Dr.NTTPS-Stage-V.

APGENCO is making all the efforts to get the required coal quantities from MCL SCCL and planning to procure imported coal to run the units at normative capacity.

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 –Thermal	4.95	58.95	53.13
APGENCO – Hydro	21.15	32.92	10.00
Joint Sector	6.86	38.63	29.70

Source: APCPDCL filing, p.25

Reply: The Hon'ble Commission vide their order dated 7th November 2023, after careful examination of the proposal submitted by APCPDCL on behalf of the APDISCOMs, as outlined in the referenced letter from SEIL offering 570 MW capacity for long-term supply to APDISCOMs commencing from April 2024, on mutually agreed terms and conditions, the DISCOMS are permitted to proceed with further steps on SEIL's proposal. However, this permission is contingent upon SEIL's acceptance that the tariff for the supply of 570/625 MW electricity will be determined by APERC under Section 62 of the Electricity Act, 2003. The present tariff applicable to DBFOO PPA of

M/s Sembcorp-p2-625 MW is taken into account for evaluation of fixed and variable costs tentatively till the Hon'ble Commission determines the tariff under section 62.

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 dispatch 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 dispatch 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 dispatch 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.

Reply: Fixed charges proposed in the ARR filings for FY2024-25 in respect of APGENCO stations, is subject to approval of Hon'ble APERC for the APGENCO generation tariff for 5th control period i.e., FY 2024-29.

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.

Reply: As ascertained by APGENCO, the Hon'ble Commission has determined the variable costs of APGENCO stations with the landed cost of coal during 2019. However, the notified coal base price has been increased by several times by the coal companies. Due to this the landed cost of coal has been increased abnormally.

FCA claims for the FY 2019 to 2023 was already filed by APGENCO before the Hon'ble Commission and also requested to revise the base rate of variable costs for the FY 2023-24 with revised coal landed cost.

Considering the above facts, pending finalization of variable cost of APGENCO stations by the Hon'ble Commission, 5% enhancement is considered provisionally in ARR filings.

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.

Reply: Hon'ble APERC has issued Regulation No. 1 of 2022 on 10th February 2022 regarding Terms and Conditions for Procurement / Sale of Power on Short Term basis by the Distribution Licensees. The Distribution Licensees are following and complying to the said Regulation while making the required short-term purchases.

The peculiar situation APDISCOMs face is that AP State is a surplus in terms of energy generation but not in terms of constant and reliable power generation in order to balance the load and generation on real time basis. This is because of larger penetration of RE-generation in the state, which result in wide variation in RE generation pattern on day to day, season to season and even on time block to time block during a day. During real time, the forecasted grid demand varies due to weather conditions and the forecasted generation vary due to outages of Thermal Generation or variation in RE generation. In order to balance the load-generation on real time basis, the APDISCOMs overdraw/under draw from the grid.

Most of the times, APDISCOMs are forced to purchase power in exchanges during peak demand periods due to large demand and supply gap prevailing in the A.P grid. Usually, the market prices are higher during peak load periods. Because of this reason, the short-term power purchase cost of APDISCOMs seems higher than approved ceiling rate of Hon'ble APERC.

The Grid demand year on year is increasing and an example showing the Grid demand pattern for AUGUST month for last 7 years from 2017 to 2023 is submitted below.

1. The Grid consumption/demand particulars for the month of August for the last 6 years is given below for reference.

Grid Consumption in MU							
Date/Year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
01-Aug	159.156	181.167	159.673	161.113	194.619	196.276	208.748
02-Aug	155.851	176.1	148.626	154.978	206.112	191.01	211.384
03-Aug	160.35	177.021	148.368	157.043	209.669	185.22	217.607
04-Aug	165.067	177.293	151.105	148.013	214.068	187.212	226.715
05-Aug	156.003	174.574	152.398	146.04	216.682	182.977	234.028
06-Aug	158.268	174.389	148.833	155.828	216.83	170.652	232.264
07-Aug	162.67	171.421	147.15	167.768	219.394	168.034	238.648
08-Aug	154.644	168.024	149.525	171	214.92	168.976	236.309
09-Aug	155.743	170.46	162.271	168.829	217.162	170.741	235.191
10-Aug	152.882	170.383	168.437	158.818	201.508	181.773	236.603
11-Aug	153.605	153.172	177.546	166.133	206.353	187.884	230.603
12-Aug	147.538	150.273	181.46	163.383	212.387	200.595	226.488

Grid Consumption in MU							
Date/Year	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
13-Aug	145.486	151.961	180.222	160.305	204.599	200.138	229.384
14-Aug	150.388	151.685	180.024	158.002	194.435	192.801	232.452
15-Aug	154.251	144.586	174.466	144.868	187.499	191.747	232.025
16-Aug	156.912	146.35	180.776	142.681	185.401	201.456	235.891
17-Aug	149.716	154.305	171.524	150.938	180.343	209.617	236.933
18-Aug	144.433	156.907	162.144	160.872	188.901	211.228	231.803
19-Aug	139.967	152.42	161.701	164.326	195.75	208.201	224.646
20-Aug	136.541	153.186	160.075	163.427	196.076	211.353	224.784
21-Aug	146.014	158.967	159.156	163.423	188.071	214.767	225.929
22-Aug	150.089	169.428	158.454	163.252	182.638	220.75	232.699
23-Aug	151.416	177.195	161.182	160.344	189.379	228.82	236.128
24-Aug	146.666	176.79	164.505	163.846	196.613	219.094	236.974
25-Aug	135.97	174.169	162.835	171.067	194.273	208.283	243.596
26-Aug	137.486	170.679	171.85	171.723	191.322	200.203	231.721
27-Aug	136.934	168.895	180.832	168.484	191.906	199.736	225.336
28-Aug	137.845	169.291	185.465	176.996	172.534	191.531	237.536
29-Aug	134.243	172.939	191.974	184.582	172.018	191.696	241.407
30-Aug	150.055	179.583	189.722	185.603	173.475	195.162	239.937
31-Aug	153.084	179.816	180.444	183.517	178.356	195.759	231.103
Average MU	**149.654**	**166.240**	**166.863**	**163.136**	**196.558**	**196.248**	**231.125**

The total purchases made through exchanges in DAM/GDAM/TAM/RTM are being submitting to the Hon'ble commission every month.

2. Taking cognizance of the above, the requirement to procure power in the Short-Term market in lieu of the realistic power supply projections from all the committed sources are taken into consideration as briefed under:

   a) The state grid demand, in particular and the nationwide power demand in general, is on an unprecedented 17-20% year on year high when compared to previous financial year and it is expected to continue due to the weather conditions throughout the period till the end of the financial year.

   b) In the Real time markets and DAM segments, the required shortfall power is not getting realized even at higher bid values as there is high demand for power across the country and the situation would further deteriorate with the general elections in the corner.

   c) To maintain reliability and quality in secured uninterrupted power supply to all the category of consumers in accordance with the commitment of the State Govt. and directions from the Hon'ble APERC, purchase of power from Short Term market is inevitable.

3. Despite the efforts of APDISCOMs to achieve power purchase cost optimization so as to procure at tariff of Rs. 5.31/KWh as approved by Commission, APDISCOMs reverted to purchase through Power Markets due to the following reasons:

   i. Real time unexpected power demand growth in AP state due to increase in agricultural load.

ii. Inadequate monsoons in July 23 and Aug 23.

iii. Escalating prices being realized in power markets all over India from the past three years since COVID-19.

iv. Persistent hot and humid conditions even in rainy months of 2023, which is leading to increase in domestic load.

v. Non- availability of power in peak hours and purchasing the shortfall power in Peak hours at higher rates through Power markets so as to ensure uninterrupted power supply to consumers of AP state.

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.

Reply:

1) The Energy transactions purchase/sale of power made through PUShP Portal by APDISCOMs during the FY 2022-23 are **Nil.**

2) The Energy transactions purchases/sale of power made through PUShP Portal by APDISCOMs during the FY 2023-24 are submitted below.

A) The energy transaction purchased through PUShP Portal by APDISCOMs for the month of August -23 are 0.056 MU as shown below.

S.No	Allocation/ for DD on 20.08.23	Energy purchased in MU	AGBPP generator/ Mizoram beneficiary	AGTCCPP generator/ Mizoram beneficiary	Cost in Rs.
1	1 st	0.042	6.698	-	281315.977
2	2 nd	0.014	-	6.531	94611.589
	Total	0.056			3,75,927.566

B) The energy transactions sale of power through PUShP Portal by APDISCOMs is **Nil.**

The surplus power on PushP portal cannot be sold on real time basis and sale can be done on D-2 and above only (where, D-Delivery date).

3) Swap power details for FY 2022-23 & FY2023-24 furnished hereunder.

Financial Year	Swap power import in MU	Swap power export in MU
2022-23	689.67	198.14
2023-24	166.58	845.22

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.

Reply (7.1 to 7.7.2): Pertains to APTransco.

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.

Reply: Not Pertains to APCPDCL

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.

Reply: Suggestion noted. In this connection it is to submit that HVDS Project was implemented for conversion of existing LT distribution network into High Voltage (11KV), HVDS by erecting smaller size Distribution Transformers (viz. 16 KVA, 25KVA) nearer to the consumer agricultural pump sets in place of existing higher capacity DTRs. Thus reducing length of the LT network to the minimum and improvement of energy audit resulting avoiding of overloading of Distribution Transformers, reducing of DTRs failure rate, low voltage problem will be solved, AGL motor burns will be reduced due to improving of quality and reliable power supply to the AGL services. Line losses will be reduced due to conversion of LT network into HT

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.

Reply: Same as 4.2.3

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.

Reply: The government of India has approved the Revamped Distribution Sector Scheme (RDSS) to help DISCOMs improve their operational efficiencies and financial sustainability by providing result-linked financial assistance to DISCOMs to strengthen supply infrastructure based on meeting pre-qualifying criteria and achieving basic minimum benchmarks. The scheme has an outlay of Rs 3,03,758 Crore over 5 years i.e. FY 2021-22 to FY 2025-26. The outlay includes an estimated Government Budgetary Support (GBS) of Rs 97,631 Crore.

PFC is the Nodal Agency for the state of Andhra Pradesh

The scheme aims to meet the following objectives:

- Reduction of AT&C losses to pan-India levels of 12-15% by 2024-25.
- Reduction of ACS-ARR gap to zero by 2024-25.

Improvement in the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient distribution sector.

APCPDCL has been sanctioned a cumulative amount of Rs. 3011.77Cr. on 17.03.2022, towards various power distribution sector enhancing projects

Scheme implementation agreement has been signed on 25.03.2022, between the Government of Andhra Pradesh (GoAP), APCPDCL and PFC (Nodal Agency) pertaining to the RDSS Scheme.

The major work components under this scheme are

Part-A Smart metering Works

- Consumer Metering

  All Domestic Consumer in Amrut Cities with consumption above 200 Units

  All Commercial and Industrial Consumers

- System Metering

Smart Meters to Other than AGL Distribution Transformers of 25 KVA and above
Feeder Metering

Part-B Loss Reduction

- Segregation of Agriculture Feeders
- Bifurcation of Overloaded 11KVG & 33KV Feeders
- Replacement of Old / Frayed Conductor.

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.

Reply (8.6&8.7): The licensee arrived the interest rate for the new loans after due consideration of loan amount and their corresponding interest rate, and weighted average interest rate of all the loans for the year of consideration

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.

Reply: 14% ROE at 25% Equity proportion is considered in the 5TH Control period in line with the approval made in the 4th control period by the Hon'ble APERC.

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.

Reply: As per APERC regulations 4 of 2005, Tax on income is one of the Distribution cost item and is computed on RoE on projection of estimated Regulated Rate Basis for 5th control period. Further, APCPDCL has applied 15% adhoc rate for computation of this item as per the prevailing practice

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.

Reply: The interest during construction is considered on the capital works which are funded from funding agencies. The same is calculated on the projected capital expenditure likely to be incurred from the funds borrowed from the agencies during the construction period. Hence is claimed as IDC under distribution cost.

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.

Reply: As tariff for other categories is largely unchanged, the concession provided to HT Cat-III (C) (b) Energy Intensive industries will go into the revenue gap which is likely to be provided by the Govt. of A.P in the form of subsidy.

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.

Reply: Under the purview of Hon'ble APERC

Table 9: Revenue gap during FY 2024-25

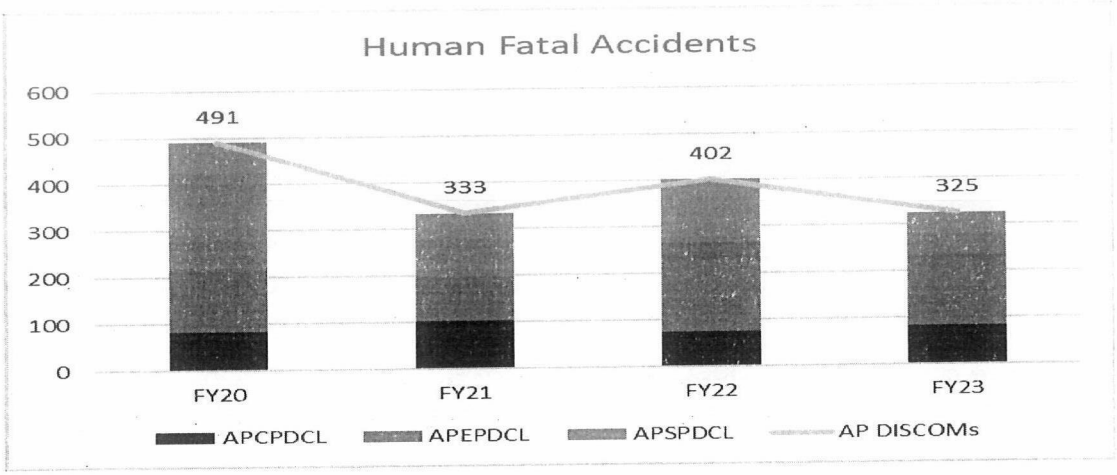
DISCOMs	Revenue at current tariffs	Revenue gap at current tariffs	Additional revenue through proposed tariffs	Remaining revenue gap
APCPDCL	9,504.66	3,047.26	50.73	2,996.53
APEPDCL	17,854.16	3,307.70	100.44	3,207.26
APSPDCL	15,318.21	7,683.49	100.16	7,583.33
Total	**42,677.03**	**14,038.45**	**251.33**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

Reply: The APDISCOMs have filed the ARR & Tariff proposals in accordance with the directions of Government of A.P vide G.O.Rt.No.161, dt.15-11-2021, wherein the DISCOMs have to file the tariff proposals without taking into account any Government Subsidy and the Hon'ble APERC was requested to notify the Government subsidy for different consumer categories as part of Annual Tariff Order from FY 2022-23 onwards. This methodology of filing is being continued in FY2024-25.

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

Reply: There is no substantial increase in no. of human fatal accident cases from FY 20 to FY 23 in APCPDCL. Several steps have been taken in reducing the number of accidents in APCPDCL as follows:

1. Creating public awareness on the possible electrical hazards through print and electronic media, (film, posters, farmers meetings) explaining Do's and Do not's.
2. Providing training to line-men and assistant engineers especially in installation, periodic and preventive operation and maintenance (O&M).
3. Promote distribution related skill development initiatives and conducting training programs regarding use of safety equipment to avoid accidents.
4. Fixing up of responsibility on the concerned for the cause of accident so that every staff member will be ever aware in reducing accidents.
5. During awareness programs conducted regarding Conservation of Energy, special emphasis is also given to the measures to be taken to avoid accidents.

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)

Reply: *APCPDCL has been processing the accident proposals received from the field immediately and compensation is paid to victim's families once the proposal for compensation was approved. Instructions were issued to the field officers to submit all the requisite documents for processing of the accident proposals. Several steps are being taken to reduce the accidents as elucidated in reply of Sl.No.10.1.*

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.

Reply: The compensation to the victim's families is paid as per the recommendations of the accident analysis committee report. The compensation was being paid as per the Regulation 2 of 2017 of APERC. However, as per the new Regulation 9 of 2023 (amendment of Regulation 2 of 2017), compensation will be paid even in cases where there is no wrongful act, omission, rashness, neglect or default on the part of the licensee, and irrespective of the place of the electrical accident, the ex-gratia payment shall be made in the manner specified under Chapter-III of the Principal Regulation.

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.

Reply: While scrutiny of the accident proposals, parameters such as place of accident, location of the accident, cause of accident are analyzed and necessary instructions are given to field officers time to time in reducing the number of accidents. Periodical reviews Division wise are conducted to analyze the nature of

accidents and necessary measures are being in reducing the no. of accidents. It is observed that in most of the cases, accidents are caused due to ignorance and handling the network without authorization and not taking proper safety measures. To minimize the accidents, regular awareness programs are conducted to educate the common public in taking necessary precautions while handling electrical lines and appliances. Also, under RDSS scheme, the existing network is being strengthened which paves to reduction of accidents on account of healthy network. As such, APCPDCL strives for in reducing no. of accidents.

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 operationalized in 2022-23, and if so, provide the details of such cases.

Reply: The APERC regulation for payment of Automatic compensation to the complaining consumers was implemented in APCPDCL from 01.04.2022 and the No. of consumers allowed for payment of compensation during FY 2022-23 is 6910 No's.

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.

Reply: Suggestion noted

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.

Reply: Suggestion noted

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?

Reply: The circle wise, monthly reliability indicators (SAIDI and SAIFI) mentioned in chapter 8.1.12 pertains to all 11KV feeders excluding pure Agl and LI scheme feeders. The circle wise monthly report of SAIDI and SAIFI of FY 2022-23 in respect of agricultural feeders including pure Agl and rural feeders mixed with Agl loads is here with enclosed.

The average value of FY 2022-23 is arrived by taking the average of 12 monthly figures. Yes, the above method of arriving the average value is the correct method.

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.

Reply: The data in excel format is herewith enclosed.

11.7 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.

Reply: As per Regulation the actuals of previous year of the control period i.e FY 2023-24 is provided. However the data submitted to the commission for FY2022-23 will be mailed

12 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?

Reply: 09 Nos of employees were caught red handed by Anti Corruption Bureau (ACB) of AP Police from the date of formation of the APCPDCL to till date. They were placed under suspension. Out of 09 Nos, 02 Nos are reinstated.

It is to inform that, the Honourable APERC is conducting public hearings on Retail and Distribution businesses through video conference from Conference Hall, APEPDCL, Visakapatnam. The hearings will be held in respect of all the three DISCOMs on 29-01-2024 to 31-01-2024, from 10.30 AM to 1.00 PM and from 2.00 PM to 4.30 PM. APCPDCL has facilitated Video Conference at all offices of Superintending Engineer / Operation at district headquarters and at all remaining offices of Executive Engineer / Operation. Specification of the date and time for objector is under the purview of Honourable Commission.

Yours faithfully

Chief General Manager /RAC
APCPDCL::Vijayawada

Copy submitted to
The Secretary, APERC, 11-4-660, 4th Floor, Singareni Bhavan, Red Hills, Hyderabad.